

## CATALOG OF LICHENS, LICHENICOLES AND ALLIED FUNGI IN CALIFORNIA (second revision)

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### ABSTRACT

This second revision of the California lichen catalog reports 1,869 taxa at species level and below (of which 58 are recognized at the level of variety, subspecies, or forma) for the state, an increase of about 295 taxa since 2006, and 565 taxa since the 1979 catalog. The number of genera is 340, an increase of 43 since 2006. The lichen flora of California includes about 35% of the 5,246 species and 52% of the 646 genera reported for the continental United States and Canada. All known references are given that cite each species as occurring in California. Synonyms are cross-referenced to the current names. Accepted names are listed first, followed by names of taxa that are either excluded or not confirmed. The bibliography includes 1158 publications pertaining to California lichens (citations through 2011, and some from 2012).

Key words: California; Flora; Lichens; Lichenicoles

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The 34 years since publication of the first catalog of California lichens (Tucker & Jordan 1979) have seen enormous changes in accepted names of lichens, particularly an increase in generic names. The Tucker & Jordan catalog was originally based on literature records assembled by William A. Weber that were contributed to the cryptogamic herbarium at the University of California, Berkeley, CA, where they are deposited. Since then, California lichen material has been examined critically in many genera, resulting in recognition of many new taxa and necessitating many name changes. The need for a revised lichen checklist for California became markedly apparent, particularly because of an increased interest in lichen collecting in California. An online revised catalog was published in 2006 in *Constancea*. Now, seven years later, so many changes have occurred that it is considered best to publish the entire revised catalog. The catalog is intended to provide a current, comprehensive picture of the species known to occur in California. I consider it a working document that is subject to change. Although a catalog is never complete, the current version should be made easily available to lichenologists and collectors in California and elsewhere. The great geographic diversity in the state of California is responsible for the relatively large number of lichens found here.

The state includes 158,297 square miles (409,990 km<sup>2</sup>) and extends from 32°32' to 42° north latitude. Climates vary greatly according to elevation and other factors. Yearly precipitation ranges from under 2 inches (5 cm) in the deserts to over 65 inches (165 cm) in the north coastal counties. Elevations range from

282 feet (86m) below sea level in Death Valley to 14,494 ft. (4,419 m) at the summit of Mt. Whitney. The state includes a wide range of habitats for lichens: deserts, sand dunes, mountain ranges, rain forests, montane forests, oak savanna, chaparral, and seacoast. The Mojave, Colorado, and Sonoran deserts are represented in the southern part. Mountain ranges include the Sierra Nevada along most of the eastern boundary, the coast ranges, and desert ranges. In the south, the San Gabriel, Santa Monica, Santa Ynez, Tehachapi, and other ranges have been explored for lichens since the 1870's. Yosemite National Park, in the central part of the Sierra Nevada, was one of the earliest sites collected by Bolander and others. Records from Tucker & Jordan (1979) are included for completeness for accepted names, and in some cases for synonyms or lists of references where useful.

The continuing literature search for state reports since 1979 was begun independently by the author and B.D. Ryan, and was eventually combined. Publications (1158) include monographs, lichen floras, field trip reports, and other articles, plus some unpublished theses and government reports. References from the 1979 publication are included that reported the species under its present name or some additional synonyms, or that represent scarce reports for a species. The references to specific collections include initials of the herbaria (Holmgren et al. 1990) where they are housed. If no herbarium is indicated, the collections are presumed to be held by the collector. Unfortunately, most large holdings of California lichen collections are located in institutions out of the state. A study of literature citations for the state shows how frequently a species has been collected, and thereby suggests the level of abundance or rarity.

The literature citations also provide a means of locating particular lichen collections for comparison, and for determining geographic locations where a species has been found. While distributions in California are not included in the catalog, some information on distribution can be gleaned from a review of the authors of papers cited.

Central and northern California collections have been reported by Baltzo, Bourell, Doell, Cooke, Hammer, Herre, Jordan, Jovan, Lindsay, Malachowski, McGee, E. Peterson, Pinelli, Robertson, Shevock, Sigal, D. Smith, Sweet, Tavares, Thiers, Toren, and Wright. Authors who collected primarily in southern California (or reported on southern collections, including the CA Channel Is.) include Bowler, Bratt, Eckfeldt, Hasse, Howe, Hue, Knudsen, McClatchie, Merrill, Moxley, Nash, Orcutt, Parish, and Zahlbruckner. Collectors who have collected and reported from throughout California include Arup, Bolander, Hale, Magney, Printzen, Riefner, Ryan, Sanders, Thomson, Timdal, Tucker, Weber, and Wetmore.

The total number of lichen taxa reported here for California is 1,868, compared to 999 (1060 including subspecific taxa) in the first catalog (Tucker & Jordan 1979) and 1,575 species in the 2006 version. The species number known has more than doubled since 1945, when Herre (1945) reported 794 species and varieties known in California. The lichen flora of California includes about 35% of the 5246 spp. in 646 genera in the Esslinger list, (version 17) species reported for the continental United States and Canada by Esslinger (2011). The number of genera represented in California has increased from 170 in 1979, to 339 in 2012, about 52% of the genera found in the United States and Canada.

I follow approximately the format used in the Esslinger list. Taxa are arranged alphabetically, with accepted taxa first (in **boldface**), followed by names in *italics* that are either synonyms, possible misidentifications, or names of taxa erroneously attributed to the state. Generic names are in caps the first time they occur. Some generic synonyms are included, if they have been cited for California. Synonymy is not intended to be comprehensive, but includes those names under which the taxa have been reported for California. The source for synonyms, if not given in the text, is usually Esslinger and Egan (1995) or Esslinger's online list (2011). For full citations of older names, Tucker & Jordan (1979) should be consulted. Names have been checked against the Esslinger (#17, posted 6 May 2011) online updated checklist for the continental United States and Canada (URL is given in References). [Authorities follow those in Esslinger (2011) except where discrepancies with *Index Fungorum* or Zahlbruckner's *Catalogus Lichenum Universalis* could not be resolved

in Esslinger's favor.] For species having few or no published reports in California, collection data of verified representative collections from California are included.

Where a choice of several collections was available, I selected records that show the broadest geographic range within the state, or that have not been published previously. In some cases, I cite the opinions of experts about problematical reports of species. Some entries are reported based only on a report from a secondary source, such as Fink (1935), Tucker & Jordan (1979), Hale & Cole (1988), or Brodo et al. (2001). Because Tucker & Jordan is cited so frequently, it is referred to as "TJ" in the text.

Knowledge concerning lichenicolous fungi has increased greatly since the first lichen catalog for California was published. These are fungi that are either gall-forming or commensals, and live on other lichens (Hawksworth et al. 1995). 212 of the accepted taxa in this list are lichenicolous, saprophytic, or related fungi of uncertain status.

The identifications by specialists such as P. Diederich, D. Triebel, J. Kocourková, and K. Knudsen are responsible for 200 species in 82 genera reported in the current work, compared to seven species in five genera in 1979. Many more lichenicoles are likely to be found and identified for the state, as collectors become familiar with them. Much of California remains to be explored lichenologically. Most collectors have concentrated on coastal areas and around major centers of population. The profound influence of individual collectors can be seen in the work of two early collectors, Hermann E. Hasse (Los Angeles area, published 1895–1915), and Albert W. C. T. Herre (around Santa Cruz, published 1906–1963).

Of the lichens in early reports for California (primarily by Hasse or Herre), 86 species have not been collected for 100 years, since 1913; another 15 species have not been re-collected for over 75 years (since 1935); and another 27 have not been collected for over 60 years (since 1950). Encouraging evidence of renewed enthusiasm for collecting shows that 42 species have recently been re-collected by Kocourková & Knudsen that had not been collected for at least 50 years. 111 species of lichens currently appear to be endemic to California and are so labeled in the text. An additional 47 species are endemic to California plus Baja California, Mexico. Status as an endemic can change with an altered concept of a particular species or by discovery of the species outside the known geographic range. Some putative endemics await a detailed study of their genus; for example seven species of *Arthonia* are considered endemics, but their status may change when the genus undergoes a monographic study. Recently named taxa may appear endemic due to a lack of recognition by collectors as distinct species; an example is in the eight CA endemics in the genus *Lecania*, most described as new by Ryan & van den Boom (2004). Publications with descriptions of newly recognized species generally stimulate extension of the known range of such species. Many that were once considered endemic, such as *Dirina catalinariae* Hasse, *Lecanora phryganitis* Tuck., and *Schizopelte californica* Th. Fr., have been found in either Arizona or Mexico, due to the diligent collecting and systematic work of the Sonoran Desert Project headed by T. H. Nash (Nash, Ryan et al. 2002, 2004; Nash, Gries & Bungartz 2008). The lichens of California still present numerous problems in identification of numerous species, so that future changes are to be expected in the status of many taxa.

#### ACKNOWLEDGMENTS.

Eighteen years of work have gone into preparation of this catalog. Starting in 1995 when I moved back to California after my retirement, Bruce Ryan and I combined our individual lichen catalogs, and worked to update the earlier catalog by Tucker and Jordan (1979). The devastating death of Bruce Ryan on 23 January 2004 cut short the many years of collegial sharing of his first-hand knowledge of the California lichen flora. Since then, I have continued work on the catalogue, with the help of numerous friends. I want to thank several colleagues especially for their contributions. Bruce Ryan's discerning eyes and multitudinous collections were responsible for a major improvement in our understanding of the California lichen flora. Tom Nash at Arizona State University has been a major knowledgeable collector and student of the California flora. Not only has he collected in many parts of CA, but his many publications are major

contributions to the state flora. His comprehensive project on the Sonoran Desert lichen flora has funded visits to CA and Arizona by numerous lichen specialists, and has resulted in publication of the results in three volumes of a major compendium on lichens of the Sonoran region including southern California (Vol. 1), edited by Nash, Ryan, Gries & Bungartz, 2002;

Vol. 2, edited by Nash, Ryan, Diederich, Gries & Bungartz, 2004;

Vol. 3, edited by T. H. Nash III, C. Gries & F. Bungartz, 2008. Isabelle Tavares, outstanding mycologist and lichenologist at the University of California, Berkeley, is also especially commended for her contributions. Isabelle served as reviewer for the catalog after it was submitted to *Constancea*. She was a meticulous and severe critic, but the catalog would have far more errors had it not been for her sharp eyes reviewing every word. She spent most of a year on the review, sacrificing time she would prefer to have spent on her own research. Her dedication and high standards for the journal *Constancea* are a model to be admired.

Unfortunately, Isabelle died recently, after a long illness that prevented her from completing some favorite longterm projects. The author also is grateful to Richard L. Moe, editor of *Constancea*, who has spent countless hours on the two versions of the online catalog. With his computer expertise, he has made it easy to use and vastly reduced the number of errors. His endless patience and tolerance have made the transition to electronic publication relatively painless, and a much appreciated learning experience for this author. The catalog has benefited from the cooperation of many individuals in preparation of this catalog. Specialists who have provided identifications and other expertise include

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Abbreviations and symbols:

"TJ" =previously reported by references in the California lichen catalog by Tucker & Jordan (1979);

\* =lichenicolous fungi;

† =saprophytes related to lichens or to lichenicolous fungi;

# =various related fungi of uncertain status.

Use of the latter three symbols follows usage in Esslinger & Egan (1995). Symbols for herbaria follow usage in Holmgren et al. (1990).

Other abbreviations include:

CA, California;

Cpgd, Campground;

Co., County;

Cyn, Canyon;

Hwy, Highway;

Isl., isls., Island(s);

mi., miles;

Mtn, Mts, mountain(s);

Nat., National;

N. F., National Forest;  
N. P., National Park;  
pr. p., pro parte;  
Rd, Road;  
S. P., State Park;  
Syn., Synonym[s];  
Univ., university;  
also months and directions of the compass are abbreviated.

NOTES ON THE ELECTRONIC VERSION. Accepted names and synonyms are mutually linked. References pertinent to an entry may be retrieved by clicking on the folder icon (📁). Most names are linked to *Index Fungorum* (🌿), where additional information about nomenclature and taxonomy may be found..

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

## ABROTHALLUS De Not.

### **Abrothallus acetabuli** Diederich 📁 🌿

(Kocourková et al. 2012 [citing *S. Tucker 35126*, San Luis Obispo Co.: Santa Margarita Lake Recreation Area, on *Parmelina coleae*, SBBG])

### \***Abrothallus caerulescens** Kotte 📁 🌿

(Diederich 2003, 2004, on *Xanthoparmelia* spp. near Soledad, San Benito Co.; Kocourková et al. 2012)

### \***Abrothallus microspermus** Tul. 📁 🌿

(Diederich 2003, 2004; *S. Tucker 37640*, LaVeaga Park, Santa Cruz, Santa Cruz Co., on *Flavoparmelia caperata*, SBBG, det. P. Diederich; Kocourková et al. 2012)

### \***Abrothallus parmeliarum** (Sommerf.) Arnold 📁 🌿

(TJ; Kocourková et al. 2012; *J. Lendemer 5832*, Mt. Tamalpais S. P., Marin Co., UCR; earlier collections on *Parmelia saxatilis*)

**Synonyms:** [Buellia parmeliarum](#), [Buelliella parmeliarum](#), [Lecidea parmeliarum](#) (Hasse 1898a)

**Note:** Kocourková et al. (2012) doubted the identifications of Hasse's collections (recorded under *Buellia*, *Buelliella*, and *Lecidea*), because they were on *Melanelia* rather than *Parmelia* spp., the usual substrate. They did not see the Hasse specimens.

### \***Abrothallus prodiens** (Harm.) Diederich & Hafellner 📁 🌿

(Triebel et al. 1991; Diederich 2003, 2004; Kocourková et al. 2012; *S. Tucker 34655, 35088A* pr. p., Los Osos, San Luis Obispo Co., SBBG, det. P. Diederich; on *Hypogymnia* and *Cavernularia*)

### \***Abrothallus suecicus** (Kirschst.) Nordin 📁 🌿

(Diederich 2003, 2004; Kocourková et al. 2012; *S. Tucker 34509A* pr. p., Hastings Natural History Reserve, Monterey Co., det. P. Diederich; on apothecia of *Ramalina* spp.)

### \***Abrothallus tulasnei** M. S. Cole & D. Hawksw. 📁 🌿

(Knudsen & Kocourková 2009b, on *Xanthoparmelia* sp.; Kocourková et al. 2012)

### \***Abrothallus usneae** Rabenh. 📁 🌿

(Diederich 2003, 2004; Kocourková et al. 2012; *S. Tucker 37794*, Sugarloaf Ridge S. P., Sonoma Co., on *Usnea quasirigida*, SBBG; *S. Tucker 31706A*, Clear Lake S. P., Lake Co., SBBG, both det. P. Diederich)

### \***Abrothallus welwitschii** Mont. ex Tul. 📁 🌿

(Kocourková et al. 2012; McGee 2003 [based on McGee collection from Santa Cruz Mts, San Mateo Co., det. P. Diederich]; Diederich 2004; on *Sticta* spp.)

## ACAROCONIUM Kocourk. & D. Hawksw.

### \***Acaroconium punctiforme** Kocourk. & D. Hawksw. 📁 🌿

(Kocourková & Hawksworth 2008, citing *K. Knudsen 7973*, lichenicolous on *Acarospora robiniae*,

Riverside Co.; Kocourková et al. 2012)

**Note:** This species is also known on other *Acarospora* spp. and *Sarcogyne*.

## ACAROSPORA A. Massal.

### *Acarospora americana* H. Magn. 📖 🌿

(Magnusson 1929b; TJ; Knudsen 2004b; Knudsen et al. 2011; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [A. superfusa](#)

### *Acarospora badiofusca* (Nyl.) Th. Fr. 📖 🌿

(Knudsen 2004b, 2006a, 2007b; Knudsen & Kramer 2007; Knudsen 2008; Knudsen & Kocourková 2009c; Knudsen et al. 2009; *B. Ryan 13672*, Eastern Brook Lakes watershed, Sierra Nevada, 15 km S of Tom's Place, Inyo Co., ASU)

**Note:** K. Knudsen (personal communication) says that the type of *A. californica* Zahlbr. includes two specimens: *A. badiofusca*, the species that Magnusson and Zahlbruckner described, and one of *A. strigata*, which Hasse thought was what Zahlbruckner described. In 2012, Knudsen decided that most (all?) *A. badiofusca* in CA is really *A. californica*, and that *A. badiofusca* is very rare.

### *Acarospora brattiae* K. Knudsen 📖 🌿

(Knudsen 2008; *C. Bratt 6521*, on soil, Los Alamos, Santa Barbara Co. (type), ASU, UCR)

**Note:** This species is endemic, known only from type locality.

### *Acarospora californica* Zahlbr. 📖 🌿

(Hasse 1914; Magnusson 1929b; Fink 1935; Magnusson 1956; TJ; Doell et al. 1999)

**Misapplied names:** [A. badiofusca](#); [A. strigata](#) sensu Hasse, *vide* Knudsen 2008

### \**Acarospora elevata* H. Magn. 📖 🌿

(Magnusson 1929b, 1953; TJ; Knudsen 2006a; Tucker et al. 2006; Knudsen 2007b, 2008; Knudsen et al. 2009; Knudsen & Kocourková 2012a)

**Misapplied names:** [A. albomarginata](#), [A. nitida](#) [Hasse collections from San Gabriel Mts in herbaria], [A. washingtonensis](#), [Thelocarpon albomarginatum](#) (*vide* K. Knudsen)

### *Acarospora epilutescens* Zahlbr. 📖 🌿

(Zahlbruckner 1902; Hasse 1913b; Magnusson 1929b; Fink 1935; Weber 1968; Knudsen 2008)

**Synonyms:** *Acarospora albida* H. Magn., non *Lecanora epilutescens* (Hasse 1903e)

**Note:** Knudsen (2005a) explained that this yellow *Acarospora*, known only from Palm Springs and a location in Texas, was confused by Hasse with a pruinose *A. strigata* in collections identified by Zahlbruckner. Magnusson's descriptions of *A. epilutescens* [as having pruinose brown thalli, based on *H. Hasse* specimens] were accepted by Weber, who continued the confusion. *Acarospora epilutescens* has nothing to do with *Lecanora epilutescens*.

### *Acarospora fuscata* (Schrad.) Arnold 📖 🌿

(Herre 1910; Hasse 1913b; Merrill 1923; Magnusson 1929b; Herre 1950a; Sigal 1975; Weber et al. 1987; TJ; Baltzo 1989; Sigal 1989; Tucker & Bratt 1995; Bowler et al. 1996; Hill 1997; Thomson 1997; Doell et al. 1999; Brodo et al. 2001 [p. 146, with color photograph]; Knight et al. 2002; Knudsen 2004b, 2007b; Knudsen & Kramer 2007; Knudsen 2008; Knudsen et al. 2009; Knudsen & Kocourková 2009c, 2012a)

**Synonyms:** [Lecanora fuscata](#)


### *Acarospora glaucocarpa* (Wahlenb.) Körb. 📖 🌿

(Herre 1950a; TJ; Brodo et al. 2001 [p. 147, with color photograph]; Robertson 2001; Benson 2005; Knudsen 2008; *K. Knudsen 1240*, San Bernardino Mts, San Bernardino Co., UCR; *B. Ryan 24889*, road to Etna Summit, Siskiyou Co., ASU)

**Synonyms:** [Lecanora glaucocarpa](#), [A. cervina](#) var. [glaucocarpa](#), [L. glaucocarpa](#) var. [depauperata](#), [L. glaucocarpa](#) f. [pruinifera](#)

### *Acarospora macrospora* (Hepp) A. Massal. *ex* Bagl. 📖 🌿

(Knudsen 2008; Knudsen & Werth 2008; Knudsen et al. 2012)

**Acarospora molybdina** (Wahlenb.) Trevis.   
(*T. Weier* collections, Sierra Nevada, UC)

**Acarospora nashii** K. Knudsen   
(Knudsen et al. 2011 [p. 74])

**Note:** This species was first reported under the name *A. succedens* by Knudsen 2007b.

**Acarospora nevadensis** H. Magn.   
(Knudsen 2008; *K. Knudsen 4386*, Mojave Desert, Granite Mts, San Bernardino Co., UCR)

**Note:** Knudsen says this is a chemotype of *A. interspersa*.


**Acarospora nodulosa** (Dufour) Hue   
(Knudsen 2008; Rosentreter et al. 2007 [has description and photograph, but does not include CA in distribution])

**Synonyms:** [Acarospora geogena](#), [A. nodulosa var. reagens](#), [A. reagens](#), [Lecanora reagens](#)

**Misapplied names:** *A. geophila*, [Lecanora reagens](#) (Hasse 1903e)

**Acarospora novomexicana** H. Magn.   
(Knudsen 2008; *C. Bratt 10314*, Bridle Ridge, Santa Barbara, Santa Barbara Co., ASU, SBBG)

**Acarospora obnubila** H. Magn.   
(Knudsen & La Doux 2005, 2006; Tucker et al. 2006; Knudsen 2007b, 2008; Knudsen & Kocourková 2009c, 2012a)

**Acarospora obpallens** (Nyl.) Zahlbr.   
(Zahlbruckner 1902; Herre 1910; Hasse 1913b; Merrill 1923; Magnusson 1929b; Fink 1935;

Magnusson 1956; TJ; Knudsen 2003c, 2004b, 2005c; Benson 2005; Knudsen 2006b, 2007a, 2007b, 2008; Knudsen & Kocourková 2009a, 2009c, 2012a; *B. Ryan 31465a*, Cherry Cyn, Santa Rosa Isl., Santa Barbara Co., ASU)

**Synonyms:** [A. carnegiei](#), [Lecanora obpallens](#)

**Misapplied names:** [A. geogena](#)

**Acarospora oligospora** (Nyl.) Arnold   
(Magnusson 1929b, 1953, 1956; TJ; Knudsen 2007b, 2008; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *K. Knudsen 2341*, Royce Cyn, Griffith Park, Santa Monica Mts, Los Angeles Co., UCR)

**Synonyms:** [A. glebosa](#), [Lecanora fuscata var. oligocarpa](#), [L. oligospora](#)

**Acarospora orcuttii** K. Knudsen   
(Knudsen 2010b; Villella 2012)

**Acarospora oreophila** K. Knudsen   
(Knudsen 2007b, 2008; type is *K. Knudsen 3459*, Idyllwild, San Jacinto Mts, Riverside Co., UCR)

**Acarospora peliscypha** Th. Fr.   
(TJ; Knudsen & Kramer 2007; Knudsen 2008; *S. Tucker 37972*, Bristlecone Pine Forest, Mono Co., SBBG)

**Synonyms:** [Lecanora peliscypha](#)

**Acarospora robiniae** K. Knudsen   
(Knudsen 2007b, 2008; Knudsen & Kocourková 2009a, 2009c, 2012a; *K. Knudsen 4059.I*, Conejo Grade, W end of Santa Monica Mts, Santa Cruz Isl., ASU; Kocourková & Hawksworth 2008 [reported it as host for a new lichenicole])

**Acarospora rosulata** H. Magn.   
(Knudsen & Kocourková 2009c; Knudsen, Reeb et al. 2010)

**Misapplied names:** *A. bullata* (Magnusson 1929a, 1956; TJ; Ryan & Nash 1991; Tucker & Bratt 1995; Knudsen & La Doux 2006; Knudsen 2006a, 2007b, 2008; Knudsen et al. 2009; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Acarospora schleicheri** (Ach.) A. Massal.   
(Herre 1910; Hasse 1913b; Magnusson 1929b; Fink 1935; Sigal 1975; TJ; Weber et al. 1987; Baltzo 1989; Sigal 1989; Bowler et al. 1996; Tucker & Bratt 1996; Thomson 1997; Robertson et al. 1998; Robertson 2001; Knudsen 2003c; Riefner et al. 2003; Knudsen 2004b [including color photograph on

back cover of CALS Bulletin 11(1)]; Benson 2005; Knudsen 2006d, 2007b, 2008; Rosentreter et al. 2007; Knudsen & Kocourková 2009a, 2009b, 2009c, 2012a)



**Synonyms:** [Lecanora schleicheri](#)

**Misapplied names:** *A. rhabarbarina*

**Note:** Several synonyms were suggested by Weber (1968).

**Acarospora scotica** Hue  

(Knudsen 2008; *K. Knudsen 2926*, Palomar S. P., San Diego Co.)

**Acarospora sinopica** (Wahlenb.) Körb.  

(Lendemer et al. 2010; Knudsen 2012a)

**Acarospora socialis** H. Magn.  

(Magnusson 1929a; Wheeler 1938; Weber 1968; TJ; Benson 2005; Knudsen 2005c; Knudsen & Lendemer 2005b; Knudsen & La Doux 2006; Carlberg et al. 2007; Knudsen 2007b, 2008; Knudsen & Werth 2008; Doell et al. 2009; Knudsen 2009; Knudsen et al. 2009; Knudsen & Kocourková 2009a, 2009c, 2010f; Glacy et al. 2011; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *C. Bratt 3711*, Santa Barbara Isl., Santa Barbara Co., SBBG; *S. Tucker 35708*, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Synonyms:** [A. bella](#), [A. evoluta](#), [A. intercedens](#), [A. radicata](#), [A. subalbida](#), [A. terrestris](#)

**Misapplied names:** [A. xanthophana](#), [Lecanora xanthophana](#)

\***Acarospora stapfiana** (Müll. Arg.) Hue  

(Knudsen & Kocourková 2010g; Kocourková et al. 2012)

**Note:** This species is a juvenile parasite on *Caloplaca trachyphylla* on silicate rock, Clark Mts, San Bernardino Co.

**Acarospora strigata** (Nyl.) Jatta  

(Magnusson 1929b; TJ; Brodo et al. 2001 [p. 148, with color photograph]; Knight et al. 2002; Robertson 2003b; Knudsen 2006a; Knudsen & La Doux 2006; Knudsen & Werth 2008)

**Synonyms:** [A. californica](#) Zahlbr. sensu Hasse, [A. epilutescens](#) sensu H. Magn. and sensu Hasse non Zahlbr., [A. peltasticta](#), [A. peltata](#), [A. strigata](#) var. [peltata](#), [Lecanora epilutescens](#), [L. peltasticta](#)

**Acarospora terricola** H. Magn.  

(Magnusson 1929a, 1929b, 1956; TJ; Ryan & Nash 1991; Knudsen 2007b, 2008; Knudsen & Kocourková 2009a, 2009c, 2012a; *K. Knudsen 1108*, fertile specimen, Torrey Pines S. P., San Diego Co., ASU, NY, det. K. Knudsen, compared with holotype)

**Note:** This species is not a CA endemic, since it also occurs in Nevada and Washington, *vide* Knudsen 2008.

**Acarospora thamnina** (Tuck.) Herre  

(Magnusson 1929b; Fink 1935; Herre 1945; Magnusson 1956; TJ; Robertson 2003b; Robertson & Beyer 2005; Knudsen 2008; Knudsen et al. 2009; Glacy et al. 2011; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan 26145*, Chilao Cpgd, San Gabriel Mts, Angeles N. F., Los Angeles Co., ASU)

**Synonyms:** [Acarospora interposita](#) var. [nitidella](#) H. Magn., [A. thermophila](#), [Lecanora cervina](#) var. [thamnina](#) Tuck.

**Acarospora thelococcoides** (Nyl.) Zahlbr.  

(Magnusson 1929b; Fink 1935; Magnusson 1956; TJ; Riefner, Bowler, & Ryan 1995; Knudsen 2003a, 2003c [color photograph on front and back covers of CALS Bull. 10(1,2)]; Riefner et al. 2003; Robertson 2003b; Riefner & Rosentreter 2004; Benson 2005; Knudsen 2007b, 2008; Knudsen & Kocourková 2009c; not a CA endemic since it occurs also in Baja California)

**Synonyms:** [A. pleiospora](#), [A. pleistospora](#), [Lecanora pleiospora](#), [L. pleistospora](#), [L. thelococcoides](#)

**Acarospora veronensis** A. Massal.  

(Magnusson 1929b, 1956; TJ; Knudsen 2004b, 2005c; Tucker et al. 2006; Knudsen 2007b; Knudsen & Kramer 2007; Knudsen 2008; Knudsen et al. 2009; Knudsen & Kocourková 2009c, 2012a; Tucker 2010)



- Synonyms:** [A. cinereoalba](#), [A. obscura](#)
- Acarospora aeruginosa* Hasse 📖 🌿  
(Hasse 1913b; Fink 1935; Herre 1944c; TJ)  
=[Caeruleum heppii](#)
- Acarospora albomarginata* (Herre) G. Salisb. 📖 🌿  
(Salisbury 1966; TJ)  
=name misapplied to [Acarospora elevata](#)  
**Note:** *A. albomarginata* (Herre) G. Salisb. is illegitimate because it is a later homonym of a Tunisian species, *Acarospora albomarginata* B. de Lesd.
- Acarospora arenacea* H. Magn. 📖 🌿  
(Knudsen & Werth 2008)  
=[Polysporina arenacea](#) (Knudsen & Kocourková 2008a)
- Acarospora arenosa* Herre 📖 🌿  
(Herre 1910; Fink 1935; TJ; Knudsen 2004b, 2005c)  
=[Sarcogyne arenosa](#)
- Acarospora bella* (Nyl.) Herre 📖 🌿  
(Herre 1910; Magnusson 1929b; Volk 1963; TJ; Clauzade et al. 1981; Knudsen 2004b)  
=[A. socialis](#)
- Acarospora bullata* Anzi 📖 🌿  
(Magnusson 1929a, 1956; TJ; Ryan & Nash 1991; Tucker & Bratt 1995; Knudsen & La Doux 2006; Knudsen 2006a, 2007b, 2008; Knudsen et al. 2009)  
**Note:** Not in N. Amer., *fide* K. Knudsen (Knudsen & Kocourková 2009c). Specimens keyed here previously are now *A. rosulata* (Knudsen et al. 2010).
- Acarospora carnegiei* Zahlbr. 📖 🌿  
(Magnusson 1929b, 1956; TJ; Bratt 1999)  
=[A. obpallens](#) (synonymy *fide* Knudsen 2005c)
- Acarospora cervina* A. Massal. 📖 🌿  
(TJ)  
**Synonyms:** [Lecanora cervina](#), but misidentifications for CA
- Acarospora cervina* var. *glaucocarpa* (Wahlenb.) Körb. 📖 🌿  
(Magnusson 1929a, 1929b; TJ)  
=[A. glaucocarpa](#)
- Acarospora chlorophana* (Wahlenb.) A. Massal. 📖 🌿  
(Hasse 1908b, 1913b; Herre 1910; TJ; von Reis 1991; Knudsen 2004b)  
=[Pleopsidium chlorophanum](#)  
**Note:** Most N. Amer. records (see TJ) are other species of *Acarospora*, *fide* B. Ryan.
- Acarospora cinereoalba* (Fink) H. Magn. 📖 🌿  
(Knudsen 2005c)  
=[A. veronensis](#) (synonymy *fide* Knudsen 2008)
- Acarospora citrina* (Taylor) Zahlbr. 📖 🌿  
(Herre 1945)  
**Note:** The Herre report was incorrect *fide* K. Knudsen, since this species is strictly Australian.
- Acarospora dispersa* H. Magn. 📖 🌿  
(Knudsen 2007b, 2008; J. & R. Robertson 8326B, on sandstone, Mt. Diablo S. P., Contra Costa Co., UC)  
**Misapplied names:** *A. smaragdula* var. *smaragdula* (Knudsen 2007d)  
=[Myriospora hassei](#)
- Acarospora evoluta* H. Magn. 📖 🌿  
(Magnusson 1929a, 1929b, 1956; Weber 1968; color photograph in CALS Bulletin 11(1), back cover)  
=[A. socialis](#)

*Acarospora flava* (Bellardi) Ach. 📖 🌿

(Fink 1935; Herre 1942a, 1945, 1950a; TJ)

=[\*Pleopsidium flavum\*](#); misidentifications *fide* B. Ryan

*Acarospora geogena* H. Magn. 📖 🌿

(Bratt 1987, 1997, based on *C. Bratt* 8656, Point Loma, San Diego Co., SBBG)

=name misapplied to [\*Acarospora obpallens\*](#)

**Note:** The Bratt specimen, which is K-, unlike *A. geogena*, has been re-identified by K. Knudsen as *A. obpallens*.

*Acarospora glaucocarpa* f. *arenacea* H. Magn. 📖 🌿

(Magnusson 1929b)

=[\*Sarcogyne arenosa\*](#)

*Acarospora glebosa* (Flot.) Körb. 📖 🌿

(Tuckerman 1872; Hasse 1909, 1913b; Fink 1935)

=[\*A. oligospora\*](#)

*Acarospora hassei* Herre 📖 🌿

(Herre 1910; Magnusson 1929b; Fink 1935; TJ; Thomson 1997; Knudsen 2004b; Knudsen 2008; Knudsen & Kocourková 2009a, 2009c; Glacy et al. 2011)

=[\*Myriospora hassei\*](#)

*Acarospora heppii* Nägeli *ex* Körb. 📖 🌿

(Magnusson 1929a; TJ; Doell et al. 1999 [as “cf.”])

=[\*Caeruleum heppii\*](#)

*Acarospora impressula* Th. Fr. 🌿

(*T. Weier* collections, central Sierra Nevada, UC were misidentifications, *fide* K. Knudsen)

*Acarospora intercedens* H. Magn. 📖 🌿

(Magnusson 1956; Weber 1968 [who merged it with *A. schleicheri* s. l.]

=[\*A. socialis\*](#) (Knudsen & Lendemer 2005b, based on a reduced specimen *fide* K. Knudsen [personal communication])

*Acarospora interposita* H. Magn. var. *nitidella* H. Magn. 📖 🌿

(Magnusson 1929b; TJ)

=[\*A. thamnina\*](#) (synonymy *fide* K. Knudsen, personal communication)

*Acarospora interspersa* H. Magn. 📖 🌿

(Knudsen 2008, reported *C. Wetmore* 73806 from Santa Rosa Isl.)

**Note:** Knudsen later said *A. succedens* H. Magn. is the older name for this, and that it does not occur in CA (Knudsen et al. 2011, p. 74).

*Acarospora nitida* H. Magn. 📖 🌿

(Ryan & Nash 1991)

=[\*A. elevata\*](#) for N. Amer. records

**Note:** This name was incorrectly applied by Hasse to collections of *A. elevata* from San Gabriel Mts, *fide* K. Knudsen.

*Acarospora nodulosa* var. *reagens* (Zahlbr.) Clauz. & Cl. Roux 📖 🌿

(St. Clair & Warrick 1987)

=[\*A. nodulosa\*](#)

*Acarospora obscura* H. Magn. 📖 🌿

(Magnusson 1956; TJ)

=[\*A. veronensis\*](#), *fide* Knudsen (2008)

*Acarospora oxytona* (Ach.) A. Massal. 📖 🌿

(Magnusson 1929b; TJ; Ryan & Nash 1991)

=[\*Pleopsidium flavum\*](#)

*Acarospora particularis* H. Magn. 📖 🌿

(Magnusson 1929a, 1956; TJ; Knudsen 2004a)

- =[Myriospora hassei](#)  
*Acarospora peltasticta* Zahlbr. 📖 🌿  
(Zahlbruckner 1902, 1903–1907; Herre 1911a; Magnusson 1929b; Fink 1935; Magnusson 1956; TJ; von Reis 1991; Doell et al. 1999; Knight et al. 2002)  
=[A. strigata](#) (synonymy *fide* Knudsen & Lendemer 2005b)
- Acarospora peltata* Hasse 📖 🌿  
(Hasse 1911a)  
=[A. strigata](#)
- Acarospora pleiospora* (Nyl.) Hasse 📖 🌿  
(Hasse 1897, 1913b; Lendemer 2004)  
=[A. thelococcoides](#)
- Acarospora pleistospora* (Nyl.) Hasse 📖 🌿  
(Hasse 1897, 1913b; Lendemer 2004)  
=[A. thelococcoides](#)
- Acarospora radicata* H. Magn. 📖 🌿  
(Wetmore 1985)  
=[A. socialis](#) (Knudsen & Lendemer 2005b; Knudsen 2008)
- Acarospora reagens* Zahlbr. 📖 🌿  
(Zahlbruckner 1902 [isotype is *H. Hasse 201*, Palm Springs, Riverside Co., 1903–1907, ASU]; Hasse 1913b; Magnusson 1929b; Fink 1935; Magnusson 1956; TJ; Knudsen 2003c [color photograph on back cover of CALS Bulletin 10(2)]; *T. Nash 8456*, 3 km SW of Parker Dam on Colorado River, San Bernardino Co., ASU)  
=[A. nodulosa](#)
- Acarospora rhabarbarina* Hue 📖 🌿  
(Fink 1935; Knudsen 2008; Bull. Cal. Lichen Soc. 11(1), 2004 has photo, unnamed, on back cover)  
**Note:** Knudsen & Kocourková (2012a) state this species does not occur in North America.
- Acarospora rufescens* (Ach.) Bausch 📖 🌿  
(Herre 1910; Hasse 1913b; Herre 1942a, 1950a; Thomson & Ketchledge 1958; TJ; Knudsen 2004b)  
**Synonyms:** [Lecanora rufescens](#)  
**Note:** This name was applied incorrectly to collections of several other species *fide* K. Knudsen, personal communication.
- Acarospora saxicola* Fink 📖 🌿  
(Fink 1935)  
=[Glypholecia scabra](#)
- Acarospora scabrida* (Hedl. ex H. Magn.) K. Knudsen & L. Arcadia 📖 🌿  
(Knudsen 2005d, 2007b; Knudsen & Kramer 2007; Knudsen 2008)  
=[Myriospora scabrida](#) (Arcadia & Knudsen 2012)
- Acarospora simplex* (Taylor) Jatta f. *complicata* Cromb. 📖 🌿  
(Hasse 1903e, 1906)  
=[Polysporina simplex](#), but Hasse's material is *Sarcogyne californica*, at least in part, *fide* Magnusson (1935a)
- Acarospora smaragdula* (Wahlenb. ex Ach.) A. Massal. 📖 🌿  
(TJ; Bowler et al. 1996; Tucker & Bratt 1996; Knight et al. 2002; Knudsen 2005c [as var. *smaragdula*, corrected to *A. dispersa* in Knudsen 2007a]; Knudsen 2007b, 2007d)  
**Note:** According to Knudsen (2007d), *A. smaragdula* s. str. is only in Canada and on the East Coast of the U. S.
- Acarospora smaragdula* var. *lesdainii* (Harm. ex A. L. Sm.) H. Magn. 📖 🌿  
(Magnusson 1929a; Robertson 2003b; Knudsen 2004a, 2004b, 2005c, 2007b)  
=[Myriospora hassei](#)
- Acarospora squamulosa* (Schrad.) Trevis. 📖 🌿

(Hasse 1913b; Fink 1935; Herre 1950a)

**Synonyms:** *Lecanora cervina* var. *squamulosa* (Tuckerman 1872), [\*L. squamulosa\*](#) (Hasse 1898a)

**Note:** This name was misapplied to collections of several other species *fide* K. Knudsen, personal communication.

*Acarospora stenospora* (Stizenb. ex Hasse) Hue 📖 🌿

(Magnusson 1929b; TJ; Knudsen 2006d)

=[\*Pleopsidium stenosporum\*](#)

*Acarospora strigata* var. *peltata* (Hasse) H. Magn. 📖 🌿

(Magnusson 1929b)

=[\*A. strigata\*](#)

*Acarospora subalbida* H. Magn. 📖 🌿

(Magnusson 1929a, 1956; Thomson & Ketchledge 1958; TJ)

=[\*A. socialis\*](#) (an ecological modification with white pruina, *fide* K. Knudsen, personal communication)

*Acarospora succedens* H. Magn. 📖 🌿

(Knudsen 2008)

=name misapplied to [\*Acarospora nashii\*](#)

*Acarospora superfusa* H. Magn. 📖 🌿

(Lendemer & Knudsen 2011)

=[\*A. americana\*](#)

*Acarospora terrestris* H. Magn. 🌿

(*R. Schoeninger* 392, Santa Cruz Isl., Santa Barbara Co., UCR)

=[\*A. socialis\*](#)

*Acarospora thermophila* Herre 📖 🌿

(Magnusson 1929b; Herre 1945; TJ)

=[\*A. thamnina\*](#) (synonymy *fide* Magnusson)

*Acarospora washingtonensis* H. Magn. 📖 🌿

(Knudsen & Lendemer 2005b)

=name misapplied to [\*Acarospora elevata\*](#)

*Acarospora xanthophana* (Nyl.) Jatta 📖 🌿

(Hasse 1913b; Moxley 1921; Merrill 1923; TJ)

=name misapplied to [\*Acarospora socialis\*](#)

*ACOLIUM* (Ach.) Gray

*Acolium bolanderi* Tuck. 📖 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Orcutt 1885; Tuckerman 1888; Hasse 1895, 1896; Orcutt 1903, 1907; Hasse 1913b)

=[\*Thelomma mammosum\*](#)

*Acolium californicum* Tuck. 📖 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; TJ)

=[\*Thelomma californicum\*](#)

*Acolium chloroconium* Tuck. 📖 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1888; TJ)

=[\*Cyphelium chloroconium\*](#)

*Acolium sancti-jacobi* Tuck. 📖 🌿

(Tuckerman 1883a; Orcutt 1903, 1907)

=[\*Texosporium sancti-jacobi\*](#)

*Acolium tigillare* (Ach.) De Not. 📖 🌿

(Bolander 1870; Hasse 1906)

=[\*Cyphelium tigillare\*](#)

*Acolium tympanellum* (Ach.) De Not. 📖 🌿

(Tuckerman 1872; Willey 1873a)

=[\*Cyphelium inquinans\*](#)

**ACROCORDIA** A. Massal.

**Acrocordia conoidea** (Fr.) Körb. 📖 🌿

(Aptroot 2002; *S. Tucker* 33725, on shale, San Nicolas Isl., Ventura Co., ASU, SBBG, det. A. Aptroot)

**ACTINOGYRA** Schol. = [UMBILICARIA](#)

**Actinogyra polyrhiza** (L.) Schol. 📖 🌿

(Llano 1950; Baltzo 1970; TJ)

=[\*Umbilicaria polyrhiza\*](#)

**ADELOCOCCUS** Theiss. & Syd.

\***Adelococcus alpestris** (Zopf) Theiss. & Syd. 📖 🌿

(Kocourková et al. 2012; *C. Bratt* 5586, Lion's Head, Vandenberg Air Force Base, Santa Barbara Co., SBBG; collection not located.)

**ADELOLECIA** Hertel & Hafellner

**Adelolecia sonorae** Hertel 📖 🌿

(Hertel 2004 [cited *T. Nash* 41422 from San Miguel Isl., Santa Barbara Co., ASU]; Knudsen & Kocourková 2012a; Knudsen 2009 cites his Santa Rosa Isl. collection; holotype is from Baja California)

**AHTIANA** Goward

**Ahtiana pallidula** (Tuck. ex Riddle) Goward & A. Thell 📖 🌿

(Thell et al. 1995; Brodo et al. 2001 [p. 149, with color photograph])

**Synonyms:** [\*Cetraria pallidula\*](#), [\*Tuckermannopsis pallidula\*](#)

**Ahtiana sphaerosporella** (Müll. Arg.) Goward 📖 🌿

(Goward et al. 1994; Thell et al. 1995; Tucker & Bratt 1995; McCune & Geiser 1997; Brodo et al. 2001 [p. 150, with color photograph]; Ryan 2002; Jovan & McCune 2004)

**Synonyms:** [\*Parmelia sphaerosporella\*](#)

**ALECTORIA** Ach.

**Alectoria imshaugii** Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; TJ; McCune & Geiser 1997; Goward 1999; Brodo et al. 2001 [p. 152, with color photograph]; Jovan & McCune 2004; Williams & Sillett 2007; McCune & Geiser 2009, citing Siskiyou Range; Glacy et al. 2011)

**Note:** “*A. montana*” is an herbarium name occasionally used for *A. imshaugii*, *fide* I. Brodo (personal communication).

**Alectoria lata** (Taylor) Linds. 📖 🌿

(Brodo & Hawksworth 1977; TJ; Brodo et al. 2001 [p. 152, with color photograph]; Carlberg 2003; McCune & Geiser 2009; Weber 1981 [Univ. Colo. Lich. Exs. 417])

**Alectoria sarmentosa** (Ach.) Ach. 📖 🌿

(Howe 1911; Fink 1935; Herre 1945; Ahti & Henssen 1965; Lindsay 1973; Tucker 1973; Malachowski 1975; Brodo & Hawksworth 1977; Pinelli & Jordan 1978; TJ; McCune & Geiser 2009)

**Alectoria sarmentosa** (Ach.) Ach. subsp. **sarmentosa** 📖 🌿

(Weber 1981 [Univ. Colo. Lich. Exs. 132]; Wright 1997; Goward 1999; Bourell 2000; Brodo et al. 2001; Ryan 2002; Robertson 2002a; Jovan & McCune 2004; Williams & Sillett 2007)

**Note:** Ryan (2002) suggested that it is probably extinct in southern CA.

**Alectoria vancouverensis** (Gyeln.) Gyeln. ex Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; TJ; Goward 1999; Brodo et al. 2001 [p. 154]; Jovan & McCune 2004;

Williams & Sillett 2007; McCune & Geiser 2009)

*Alectoria bicolor* (Ehrh.) Nyl. 📖 🌿

(Hale 1969 [map])

=[\*Bryoria bicolor\*](#)

**Note:** Hale's assertion that this species is in CA is incorrect; it occurs on the West Coast from Vancouver Isl. N to Alaska, *fide* Brodo & Hawksworth 1977.

*Alectoria californica* (Tuck.) G. Merr. 📖 🌿

(Merrill 1910)

=[\*Kaernefeltia californica\*](#)

*Alectoria canariensis* (Ach.) Mont. 📖 🌿

(Eckfeldt 1893; Orcutt 1903, 1907)

=[\*Usnea canariensis\*](#) (misidentifications for CA)

*Alectoria chalybeiformis* (L.) S. Gray 📖 🌿

(Howe 1914–1915; Herre 1945)

=[\*Bryoria chalybeiformis\*](#)

**Note:** CA reports are misidentifications; this is an arctic/alpine species found in the Rocky Mountains and Canada. No collections are known from CA.

*Alectoria fremontii* Tuck. 📖 🌿

(Tuckerman 1858; Nylander 1858, 1858–1860; Tuckerman 1866; Willey 1873a; Tuckerman 1882; Hue 1890; McClatchie 1897; Hasse 1898a, 1905; Herre 1906; Orcutt 1909; Herre 1910; Howe 1911; Du Rietz 1926; Fink 1935; Herre 1945; Thomson & Ketchledge 1958; Motyka 1964; Lindsay 1973)

=[\*Bryoria fremontii\*](#)

*Alectoria implexa* (Hoffm.) Nyl. 📖 🌿

=[\*Bryoria implexa\*](#) (Motyka 1964; Jordan 1968)

**Note:** Baltzo (2002) suggested that Jordan's material might rather have been *Bryoria capillaris*, based on the reported C- chemical reaction and the absence of *B. implexa* from further south than Idaho in western U. S.; no correctly identified specimens of this species from CA are known to us.

*Alectoria jubata* (L.) Ach. 📖 🌿

(TJ)

**Note:** Misidentifications; this name has been applied to numerous pendent species of *Bryoria*, *fide* Brodo & Hawksworth (1977, p. 150).

*Alectoria minuscula* (Nyl. ex Arnold) Degel. 📖 🌿

(Imshaug 1957; Sigal & Toren 1974)

=[\*Pseudephebe minuscula\*](#)

*Alectoria montana* Brodo & D. Hawksw. ined. 📖

(Malachowski 1975; Robertson 2002a; herbarium name for *A. imshaugii*, *fide* I. Brodo [personal communication])

*Alectoria nidulifera* Norrl. 📖 🌿

(Ahti & Henssen 1965; Jordan 1968; Lindsay 1973; Malachowski 1975)

=[\*Bryoria furcellata\*](#)

*Alectoria ochroleuca* (Hoffm.) A. Massal. 📖 🌿

(Hasse 1913b; Fink 1935)

**Note:** CA reports are based on misidentifications, although the species occurs in Oregon.

*Alectoria oregana* Tuck. 📖 🌿

(Hasse 1905, 1908b; Howe 1911; Herre 1912a; Hasse 1913b; Gyelnik 1931; Fink 1935; Herre 1942a, 1945, 1950a; Motyka 1964; Ahti & Henssen 1965; Baltzo 1970)

=[\*Nodobryoria oregana\*](#)

*Alectoria pseudofuscescens* Gyeln. 📖 🌿

(Lindsay 1973)

=[\*Bryoria pseudofuscescens\*](#)

*Alectoria tortuosa* G. Merr. 📖 🌿

(Lindsay 1973; Tucker 1973; Brodo & Hawksworth 1977)

=[\*Bryoria fremontii\*](#)

**ALLARTHONIA** (Nyl.) Zahlbr. =**ARTHONIA**

*Allarthonia patellulata* (Nyl.) Zahlbr. 📖 🌿

(Hasse 1913b) misidentifications for unidentified non-lichenized species of *Arthonia*

*Allarthonia patellulata* var. *caesiocarpa* (Zahlbr.) Hasse 📖 🌿

(Hasse 1913b)

=name misapplied to [\*Arthonia pinastri\*](#) in depauperate condition, *fide* Grube 2008

**ALYXORIA** Ach.

**Alyxoria ochrocheila** (Nyl.) Ertz & Tehler 📖 🌿

(Ertz & Tehler 2011)

**Synonyms:** [\*Opegrapha ochrocheila\*](#) Nyl.

**Alyxoria varia** (Pers.) Ertz & Tehler 📖 🌿

(Ertz & Tehler 2011)

**Synonyms:** [\*Opegrapha atra\*](#) f. [\*chlorina\*](#), [\*O. diaphora\*](#), [\*O. lichenoides\*](#), [\*O. pulicaris\*](#), [\*O. rimalis\*](#), [\*O. varia\*](#), [\*O. varia\*](#) f. [\*chlorina\*](#)

**Note:** Ertz & Egea 2008 saw only one specimen, from Santa Barbara Co.

**AMANDINEA** M. Choisy *ex* Scheid. & H. Mayrhofer

*Amandinea punctata* (Hoffm.) Coppins & Scheid. 📖 🌿

(Bowler et al. 1996; Bratt 1997; Thomson 1997; Doell et al. 1999; Bourell 2000; Brodo et al. 2001 [p. 158, with color photograph]; Baltzo 2002; Riefner et al. 2003; Tucker et al. 2004; Glacy et al. 2011; Knudsen & Kocourková 2012a)

=[\*Buellia punctata\*](#)

*Amandinea subduplicata* (Vain.) Marbach 📖 🌿

(Marbach 2000)

=name misapplied to [\*Buellia chloroleuca\*](#), *fide* Bungartz et al. 2008

*Amandinea submontana* Marbach 📖 🌿

(Marbach 2000)

=name misapplied to [\*Buellia chloroleuca\*](#), *fide* Bungartz et al. 2008

*Amandinea turgescens* (Tuck.) Marbach 📖 🌿

(Bratt 1999; Marbach 2000 [reported it only from eastern N. Amer.])

=[\*Buellia badia\*](#) (synonymy *fide* Bungartz & Nash 2004a)

**ANAPTYCHIA** Körb.

**Anaptychia elbursiana** (Szatala) Poelt 📖 🌿

(Esslinger 2007; Brodo et al. 2001 [p. 566, color photograph but no CA report, as *Physconia thomsonii*]; B. Ryan 14871, 6 km NE of Scotty's Castle, Inyo Co., ASU)

**Synonyms:** [\*Physconia thomsonii\*](#)

**Anaptychia setifera** Räsänen 📖 🌿

(Robertson & Robertson 2002 [based on *J. & R. Robertson 5702*, rocky headlands along Hwy 1, Mt. Tamalpais S. P., Marin Co., ! T. Esslinger])

**Anaptychia ulotricoides** (Vain.) Vain. 📖 🌿

(Knudsen & Kocourková 2012c; *K. Knudsen s.n.*, San Jacinto Mts, Riverside Co., UCR)

*Anaptychia ciliaris* (L.) Körb. 📖 🌿

(Herre 1910; Thomson & Ketchledge 1958; TJ; misidentifications for CA)

*Anaptychia comosa* (Eschw.) A. Massal. 📖 🌿

(Herre 1910)

=[Heterodermia comosa](#)

**Note:** Herre collections should be verified. This species occurs in Mexico outside the Sonoran area, *fide* Moberg & Nash (2002).

*Anaptychia erinacea* (Ach.) Trevis. 🍄 🌿

(Herre 1910; Hasse 1913b; Fink 1935; Wheeler 1938; Herre 1945; Kurokawa 1973; TJ)

=[Heterodermia erinacea](#)

*Anaptychia leucomela* (L.) A. Massal. 🍄 🌿

(Herre 1910; Hasse 1913b; Fink 1935; Malachowski 1975)

=[Heterodermia leucomela](#)

*Anaptychia leucomelaena* (L.) A. Massal. 🍄 🌿

(Merrill 1923; Thomson & Ketchledge 1958; Kurokawa 1962; Jordan 1968)

=[Heterodermia leucomela](#)

*ANEMA* Nyl. *ex* Forss.

*Anema dodgei* Herre 🍄 🌿

(Herre 1944a; TJ; Schultz 2007)

=[Heppia despreauxii](#), *fide* Schultz (2007)

**ANISOMERIDIUM** (Müll. Arg.) M. Choisy

**Anisomeridium biforme** (Borrer) R. C. Harris 🍄 🌿

(R. Harris 1975; TJ; von Reis 1991; Kocourková 2000; Aptroot 2002; Baltzo 2002; Tucker et al. 2004; Knudsen & Kocourková 2010a, citing Hasse collections)

**Synonyms:** [Arthopyrenia biformis](#), [A. parvula](#), [Leiophloea parvula](#)

**Misapplied names:** [Arthopyrenia conformis](#) (Herre 1910; Fink 1935), [Trimmatothele umbellulariae](#) (*fide* Lendemer & Knudsen [2007])

**Note:** *A. biforme* was considered synonymous with *A. polypori* by some authors (Hawksworth 1985, p. 157; Kocourková 2000, p. 142) but more recently they are considered distinct entities (Kocourková et al. 2008; Smith et al. 2009).

**Anisomeridium carinthiacum** (J. Steiner) R. C. Harris 🍄 🌿

(Stone & Vilella 2010)

**Synonyms:** [Arthopyrenia carinthiaca](#)

**Anisomeridium polypori** (Ellis & Everh.) M. E. Barr 🍄 🌿

(Kocourková et al. 2008; K. Knudsen 9955.2, Limekiln S. P., Santa Lucia Mts, Monterey Co., UCR)

**Misapplied names:** [Microthelia micula](#)

**Anisomeridium subprostans** (Nyl.) R. C. Harris 🍄 🌿

(Aptroot 2002; S. Tucker 34375 pr. p., Montecito, Santa Barbara Co., SBBG, det. A. Aptroot)

*Anisomeridium finkii* (R. C. Harris) R. C. Harris 🍄 🌿

(von Reis 1991; misidentification for CA, *fide* Tucker [1999])

**ANTHRACOTHECIUM** Hampe *ex* A. Massal.

*Anthracothecium pyrenuloides* (Mont.) Müll. Arg. 🍄 🌿

(TJ)

=[Pyrenula pyrenuloides](#)

*Anthracothecium thelemorphum* (Tuck.) Zahlbr. 🍄 🌿

(TJ)

=[Pyrenula thelemorpha](#)

**ARTHONIA** Ach.

**Arthonia albopulverea** Nyl. 🍄 🌿



(Sundin 1999; Grube 2008; Knudsen & Kocourková 2010a, citing Hasse collections; Tucker 2010; *S. Tucker 39051*, Santa Barbara Co.; *C. Bratt 12087*, NE of Escondido, San Diego Co., SBBG)

**Synonyms:** [A. crozalsiana](#), [A. stictella](#)

**Misapplied names:** [Arthothelium anastomosans](#)

**Arthonia atra** (Pers.) A. Schneid. 📖 🌿

(Knudsen & Kocourková 2012a)

**Synonyms:** [Opegrapha atra](#)

**Arthonia beccariana** (Bagl.) Stizenb. 📖 🌿

(Sundin 1999; Grube 2008; Knudsen & Kocourková 2009b; Tucker 2010; Knudsen & Kocourková 2012a; *S. Tucker 35661B*, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Misapplied names:** [Arthonia orbilifera](#), [A. pruinasces](#), [A. taediosa](#), [Arthothelium subcyrtodes](#), [A. taediosum](#)

**Arthonia brucei** Grube 🌿

(*K. Knudsen 8001*, Santa Cruz Isl., UCR, PRM)

**Note:** This is a new report for N. Amer.

**Arthonia cinnabarina** (DC.) Wallr. 📖 🌿

(TJ; Brodo et al. 2001 [p. 164, with color photograph]; Tucker et al. 2004; Grube 2008 for northern central CA; Stone & Villella 2010)

**Synonyms:** *A. gregaria*, [A. tumidula](#)

\***Arthonia clemens** (Tul.) Th. Fr. 📖 🌿

(Diederich 2003 [as “s. str.”, citing *K. Knudsen 13706*, Joshua Tree N. P. on *Rhizoplaca chrysoleuca*]; Grube 2008 [cites for Arizona and New Mexico on same]; Kocourková et al. 2012)

\***Arthonia diploiciae** Calat. & Diederich 📖 🌿

(Lendemer, Knudsen, & Coppins 2009; Knudsen & Kocourková 2010f, 2012a; Kocourková et al. 2012; Anacapa Isl., Ventura Co. on *Diploicia canescens*)

\***Arthonia epiphyscia** Nyl. 📖 🌿

(Kocourková et al. 2009; Kocourková et al. 2012; on *Physcia* spp., esp. *P. adscendens*, San Diego Co.)

**Arthonia excedens** Nyl. 📖 🌿

(Jordan 1968; TJ; Baltzo 2002)

\***Arthonia excentrica** Th. Fr. 📖 🌿

(Lendemer et al. 2010 [on *Lepraria elobata*, *L. neglecta* s. l., and *Leprocaulon*]; Kocourková et al. 2012)

\***Arthonia farinacea** (H. Olivier) R. Sant. 📖 🌿

(Diederich 2003; Grube 2008; Kocourková et al. 2012; *S. Tucker 36515*, *36516*, San Simeon S. P., San Luis Obispo Co., on soralia of *Ramalina*, SBBG, det. P. Diederich)

**Arthonia gerhardii** Egea & Torrente 📖 🌿

(Grube 2008, from Santa Rosa Isl.; Knudsen & Kocourková 2012a)

**Arthonia glaucella** Nyl. 📖 🌿

(Sundin 1999; Grube 2008; Knudsen & Kocourková 2010a, citing Hasse collections)

**Misapplied names:** [Arthonia epipastoides](#), [A. leucopellaea](#), [A. galactitella](#) [possibly also *A. galactites*, similar but a European species], [A. punctiformis](#).

**Arthonia glebosa** Tuck. 📖 🌿

(Tuckerman 1872, 1888; Willey 1873a, 1890; Orcutt 1903 [as “*A. globosa*”]; Zahlbruckner 1903–1907, p. 90; Orcutt 1907; Fink 1935; TJ; Grube 2008; Knudsen & Kocourková 2012a)

**Arthonia granosa** B. de Lesd. 📖 🌿

(Sundin 1999; Grube 2008; Knudsen & Kocourková 2010a, citing *H. Hasse s.n.*, Santa Monica Mts, Los Angeles Co., on willow, ASU)

**Arthonia ilicina** Taylor 📖 🌿

(Grube 2008, for Humboldt and Monterey counties; Williams & Sillett 2007; Tucker 2009a; *S. Tucker 35259*, Caspar Point, S of Fort Bragg; *S. Tucker 35278*, Pygmy Forest off Mitchell Creek Drive, 1.6

mi. S of Simpson Lane, near Fort Bragg, Mendocino Co., SBBG, ! B. Ryan)

**Misapplied names:** [A. caudata](#), [A. complanata](#), [A. quintaria](#)

\***Arthonia infectans** Egea & Torrente 📖 🌿

(Egea & Torrente 1995b; Grube 2008, citing a Monterey Co. report; Knudsen & Kocourková 2009b, 2012a; Kocourková et al. 2012 [as juvenile parasite on *Lecanographa*]; *K. Knudsen 11207*, Santa Monica Mts, Los Angeles Co., UCR; also known from Santa Rosa Isl.; CA endemic)

\***Arthonia intexta** Almq. 📖 🌿

(Hertel 1969 [cited "California", 1897, Hasse, herb. Nyl. 19986], 1971b; TJ; Triebel et al. 1991; Thomson 1997 [p. 46]; Grube 2008, on apothecia of *Lecidella* spp. from Inyo Co.; Kocourková et al. 2012; *T. Nash 8086*, near Westgard Pass, Inyo Co., ASU)

**Synonyms:** [Lecidea arthoniza](#)

**Arthonia lecanactidea** Zahlbr. 📖 🌿

(Zahlbruckner 1902; Hasse 1903f, 1913b; Merrill 1923; Fink 1935; TJ; Grube 2008 [from San Nicolas and Catalina isls. (Hasse 128, ASU, SBBG)]; Knudsen & Kocourková 2009a; Tucker 2009a; Knudsen & Kocourková 2010f, 2012a; *H. Hasse*, beach bluffs near San Pedro, 1897, on *Lycium californicum*. *Lichenes Exsiccati, Sullivant Moss Soc. 1316*, MIN, ! S. Tucker; CA endemic)

**Arthonia macounii** G. Merr. 📖 🌿

(Kocourková et al. 2008; *K. Knudsen 9960*, Limekiln S. P., Santa Lucia Mts, Monterey Co., UCR)

**Arthonia madreana** Egea & Torrente 📖 🌿

(Egea & Torrente 1995b; Grube 2008; Knudsen & Kocourková 2012a; *K. Knudsen 11397*, Santa Rosa Isl., Santa Barbara Co., UCR; CA endemic)

\***Arthonia molendoi** (Heufl. ex Frauenf.) R. Sant. 📖 🌿

(Cole & Hawksworth 2001 [p. 312], based in part on *C. Bratt 7864*, on *Caloplaca luteominia*, San Nicolas Isl., Ventura Co., SBBG, det. M. Cole; Grube 2008, for San Nicolas Isl.; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *K. Knudsen 11708*, San Jacinto Mts, Riverside Co.; also on *Xanthoria elegans* and various *Caloplaca* species)

**Arthonia muscigena** Th. Fr. 📖 🌿

(Villella & Carlberg 2012, foliicolous on Sitka spruce & Evergreen huckleberry *Vaccinium ovatum*; also reported from Oregon and British Columbia.)

**Arthonia patellulata** Nyl. 📖 🌿

(McClatchie 1897; Hasse 1898a; Fink 1935; TJ; Thomson 1997 [p. 47]; *H. Hasse 1188*, Santa Monica Mts, Los Angeles Co., ASU; *S. Tucker 38515*, Sugar Pine Point S. P., El Dorado Co., SBBG)

**Note:** Grube (2008) said that CA reports of this species by Hasse for S CA are incorrect, although (under discussion of *A. apatetica*) *A. patellulata* occurs in cool-temperate to boreal-montane habitats. Thomson's report and The El Dorado Co. collection are from montane regions, well north of the Sonoran area.

\***Arthonia phaeophysciae** Grube & Matzer 📖 🌿

(Hafellner et al. 2002; on *Phaeophyscia* spp.; Knudsen & Kocourková 2012a, on Santa Cruz Isl.; Kocourková et al. 2012)

**Arthonia phlyctiformis** subsp. **californica** Grube 📖 🌿

(Grube 2008; *S. Tucker 38638*, Pinnacles Nat. Monument, San Benito Co., SBBG [=type]; CA endemic)

**Arthonia pinastri** Anzi 📖 🌿

(Grube 2008; Knudsen & Kocourková 2009b; Tucker 2009a, 2010)

**Misapplied names:** [A. patellulata var. caesiocarpa](#), [A. arthonioides](#) (Williams & Sillett 2007)

**Arthonia pruinascens** (Zahlbr.) Grube 📖 🌿

(Grube 2008; Knudsen & Kocourková 2010a, citing Hasse collections; *H. Hasse Exs. 51*, Santa Monica Mts, Los Angeles Co., ASU; CA endemic)

**Synonyms:** [Arthothelium pruinascens](#)

**Note:** The type locality for this species is in the Santa Monica Range.

**Arthonia pruinata** (Pers.) Steud. *ex* A. L. Sm. 📖 🌿

(Grube 2008; Tucker 2009a; Knudsen & Kocourková 2010a, citing Hasse collections; Knudsen & Kocourková 2010f; Stone & Villella 2010; Tucker 2010; Knudsen & Kocourková 2012a)

**Synonyms:** [A. chiodectella](#), [A. impolita](#), [A. impolita var. chiodectonoides](#), [A. impolita var. subfusca](#), [A. pruinata](#), [A. pruinosa](#)

**Misapplied names:** [A. gyalectoides](#), [A. ochrolutea](#)

**Arthonia pruinosa** Nyl. 📖 🌿

(Hasse 1898a, 1898b; Zahlbruckner 1902; Hasse 1913b; Fink 1935; TJ; Sundin 1999; Grube 2008; Knudsen & Kocourková 2010a, citing a Hasse collection)

**Note:** The only CA collection was by Hasse on an introduced tree, *Cordia caudata*.

**Arthonia pyrroliza** Nyl. 📖 🌿

(Hasse 1906; TJ; Grube 2008, from Santa Catalina Isl.)

**Misapplied names:** *A. stellaris* Kremp. (Williams & Sillett 2007)

**Arthonia rhoidis** Zahlbr. 📖 🌿

(Zahlbruckner 1902; Hasse 1903b, 1903f, 1913b; Merrill 1923; Fink 1935; TJ; Sundin 1999; Grube 2008; Knudsen & Kocourková 2010a, citing Hasse collections; Tucker 2010; *H. Hasse* 27, Santa Monica Mts, Los Angeles Co., ASU, SBBG; CA endemic)

**Synonyms:** [A. microspermella](#), *fide* Sundin (1999)

**Arthonia sanguinea** Willey 📖 🌿

(Nylander 1885; Willey 1885, 1890; Hue 1891; Hasse 1903f; Orcutt 1903; Grube 2008, for S CA)

**Synonyms:** [Arthothelium sanguineum](#)

**Misapplied names:** *A. spectabilis*, *Arthothelium spectabile*

**Arthonia sexlocularis** Zahlbr. 📖 🌿

(Tucker 2010; *S. Tucker* 37673C, Santa Barbara, Santa Barbara Co., SBBG)

**Note:** These collections are similar to the species but differ chemically, *fide* Grube 2008.

**Arthonia subdispuncta** Nyl. 📖 🌿

(Hasse 1897, 1913b; Fink 1935; TJ; Sundin 1999; Grube 2008, for S CA [Santa Monica]; Knudsen & Kocourková 2009b, 2012a; not endemic, also in Baja California)

**Arthonia tehleri** Sundin 📖 🌿

(Sundin 1999; Grube 2008, for S CA)

**Arthonia tetramera** (Stizenb.) Hasse 📖 🌿

(Hasse 1913b; Merrill 1923; Fink 1935; TJ; Bourell 2000; Sundin 1999; Grube 2008, for coastal southern and central CA and Baja California; Knudsen & Kocourková 2009b; Tucker 2009a, 2010)

**Synonyms:** [A. dispersa var. tetramera](#), [A. radiata f. angustata](#)

\***Arthonia varians** (Davies) Nyl. 📖 🌿

(Knudsen & Kocourková 2008b; Knudsen et al. 2009; Kocourková et al. 2012; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *K. Knudsen* 9989.2, San Jacinto Mts, Riverside Co., UCR, on *Lecanora rupicola*)

**Synonyms:** [A. glaucomaria](#)

\***Arthonia xanthoparmeliarum** Etayo 📖 🌿

(Kocourková 2009; Knudsen & Kocourková 2009b; Kocourková et al. 2012; *J. Kocourková s.n.*, Santa Monica Mts, Los Angeles Co., on *Xanthoparmelia mexicana*, UCR)

**Arthonia adveniens** Nyl. 📖 🌿

(Hasse 1906)

**Synonyms:** [Arthothelium adveniens](#)

**Note:** Grube (2008) omitted this species from the Sonoran area, perhaps because Hasse did not retain it in his 1913b Flora.

**Arthonia anastomosans** (Ach.) Nyl. 📖 🌿

(Hasse 1895, 1896; McClatchie 1897; Hasse 1898a, 1903b; Orcutt 1903, 1907).

**Synonyms:** [Arthothelium anastomosans](#)

**Note:** Grube (2008) omitted this species from the Sonoran area, perhaps because Hasse did not retain it in his 1913b Flora.

*Arthonia arthonioides* (Ach.) A. L. Sm. 📖 🌿

(Williams & Sillett 2007, det. L. Sparrius in 2002, but keys to *A. pinastri* in Grube [2008] key for S. CA)

*Arthonia astroidea* Ach. 📖 🌿

(McClatchie 1897; Hasse 1898a, 1903b)

=[A. radiata](#), but this species does not occur in N. Amer.

*Arthonia astroidea* Ach. var. *swartziana* Nyl. 📖 🌿

(Hasse 1898a, 1903b)

=[A. radiata](#), but this species does not occur in N. Amer.

*Arthonia caesia* (Flot.) Körb. 📖 🌿

(Brodo et al. 2001 [p. 164, with color photograph and map which showed it around Los Angeles. A search for a specimen has not been successful]; Tucker 2002, repeated the Brodo et al. report)

*Arthonia caudata* Willey 📖 🌿

(Hasse 1898a; TJ)

=name misapplied to [Arthonia ilicina](#) an eastern U. S. species

*Arthonia chiodectella* Nyl. 📖 🌿

(TJ; but based on an error; no primary CA citation)

=[A. pruinata](#), *fide* Grube 2008

*Arthonia complanata* H. Magn. 📖 🌿

(Herre 1944b)

**Synonyms:** *A. obscura* (synonymy *fide* Clauzade et al. [1981])

**Note:** According to Grube (2008), *A. complanata* is a tropical species that is similar to *A. ilicina*, although he noted differences. *A. complanata*, as reported by Herre and by Lindsay, was probably misapplied to *A. ilicina* in northern CA.

*Arthonia crozalsiana* B. de Lesd. 📖 🌿

(Sundin & Tehler 1998, cited two Hasse collections from Santa Monica Mts)

=[A. albopulverea](#)

*Arthonia cytisi* A. Massal. 📖 🌿

(Fink 1935; TJ)

**Synonyms:** [A. dispersa var. cytisi](#) (Hasse 1896, 1898a, 1903b; Orcutt 1903, 1907)

**Note:** This species was rejected by Grube (2008) for the Sonoran area on the basis that Hasse did not retain it in his 1913b flora. Grube (2008) discusses *A. cytisi* under *A. subdisputata*.

*Arthonia diffusa* Nyl. 📖 🌿

(Willey 1890, p. 36; Hasse 1898a, 1913a; TJ; *H. Hasse 852*, on *Malvastrum thurberi* [= *Malacothamnus fasciculatus*], Santa Monica Range, Los Angeles Co., 1900, MIN)

**Note:** Grube (2008) indicates that identifications of *A. diffusa* from S CA are incorrect.

*Arthonia diffusella* Fink 📖 🌿

(Lindsay 1973)

**Note:** This is probably a misidentification.

*Arthonia dispersa* (Schrad.) Nyl. 📖 🌿

(Hasse 1895; McClatchie 1897; Hasse 1898a, 1903b; Orcutt 1903, 1907; TJ; Bourell 2000 [as “cf.”])

**Note:** Grube (2008) omitted this species from the Sonoran area, perhaps because Hasse did not retain it in his 1913b Flora.

*Arthonia dispersa* var. *cytisi* A. Massal. 📖 🌿

(Hasse 1896, 1898a, 1903b; Orcutt 1903, 1907)

=[A. cytisi](#)

*Arthonia dispersa* (Schrad.) Nyl. var. *tetramera* Stizenb. 📖 🌿

(Hasse 1895, 1903b; Orcutt 1903, 1907)

=[A. tetramera](#)

*Arthonia epigina* Tuck. 📖 🌿

(Orcutt 1885, 1903, 1907; TJ)

**Note:** This name is not in Zahlbruckner (1934) or Esslinger (2011). The taxon to which it refers is uncertain.

*Arthonia epipastoides* Nyl. 📖 🌿

(Willey 1890; Hasse 1906, 1913b; Fink 1935; TJ) is a name misapplied to *Arthonia glaucella*, fide Grube 2008.

*Arthonia galactitella* (Nyl.) Hasse 📖 🌿

(Hasse 1898a, 1903f, 1913b; Fink 1935; TJ)

=name misapplied to [Arthonia glaucella](#)

*Arthonia galactites* (DC.) Dufour var. *depuncta* Nyl. 📖 🌿

(Hasse 1898a; TJ)

**Note:** This name was rejected by Grube (2008) for Sonoran area on the basis that Hasse did not retain this species in his 1913b flora.

\**Arthonia glaucomaria* Nyl. 🌿

(K. Knudsen 9138, Cuyamaca Mts, San Diego Co.)

=[A. varians](#)

*Arthonia gregaria* (Weigel) Körb. non Fée 📖 🌿

(Willey 1890; Hasse 1903f, 1906; Merrill 1923; Herre 1942c)

=[A. cinnabarina](#)

*Arthonia gyalectoides* Müll. Arg. 📖 🌿

(Hasse 1903f, 1913b; Merrill 1923; Fink 1935; TJ; Bourell 2000; *H. Hasse* (! S. Tucker) on *Heteromeles arbutifolia*, Catalina Isl., 1902, *Lichenes Exsiccati, Sullivant Moss Soc.* 2470, MIN; *B. Ryan* 31270, Santa Rosa Isl., Santa Barbara Co., ASU; *T. Tønsberg* TT14742, Del Norte Co., BG, det. R. Sundin)

=[A. pruinata](#), fide Grube 2008

*Arthonia impolita* (Hoffm.) Borrer 📖 🌿

(Tuckerman 1872; Willey 1873a, 1890; Hasse 1903f, 1913b; Merrill 1923; Fink 1935; Herre 1942c; Lindsay 1973; TJ; Doell 2002; Tucker et al. 2004; *W. Weber*, Univ. Colo. Lich. Exs. 192, Santa Catalina Isl. 477, Marin Co.)

=[A. pruinata](#)

*Arthonia impolita* var. *chiodectonoides* Tuck. 📖 🌿

(Willey 1890; Hasse 1898a, 1906, 1913b)

=[A. pruinata](#)

*Arthonia impolita* var. *subfusca* Nyl. 📖 🌿

(Hasse 1903f)

=[A. pruinata](#)

*Arthonia interveniens* Nyl. 📖 🌿

(Hasse 1906)

**Synonyms:** [Arthothelium interveniens](#)

**Note:** Grube (2008) omitted this species from the Sonoran area, perhaps because Hasse did not retain it in his 1913b Flora.

*Arthonia leucopellaea* (Ach.) Almq. 📖 🌿

(Williams & Sillett 2007, det. L. Sparrius in 2002, but keys to *A. glaucella* Nyl. in Grube [2008] key for S CA.)

*Arthonia lurida* Ach. *nom. rej.* 📖 🌿

(McClatchie 1897; Hasse 1898a; Fink 1935; TJ)

=[A. spadicea](#)

*Arthonia microspermella* Willey 📖 🌿

(Hasse 1903f, 1913b; Fink 1935; TJ; Tucker et al. 2004) possibly =*A. rhoidis*

*Arthonia ochrolutea* Nyl. 📖 🌿

(Hasse 1898a; TJ; Tucker et al. 2004)

**Note:** This name was rejected by Grube (2008) for the Sonoran area on the basis that Hasse did not retain this species in his 1913b flora. Grube asserts that this name has been misapplied to specimens of *A. pruinata*.

*Arthonia orbilifera* Almq. 📖 🌿

(Hasse 1896; McClatchie 1897; Hasse 1898a, 1903b; Orcutt 1903 [as “*A. orbolifera*”], 1907)

=name misapplied to [Arthonia beccariana](#)

*Arthonia patellulata* var. *caesiocarpa* Zahlbr. 🌿

(*H. Hasse* on *Chrysoma pinifolia* [= *Ericameria pinifolia*], near Playa del Rey, Los Angeles Co., 1900, *Lichenes Exsiccati*, *Sullivant Moss Soc.* 2071, MIN)

=name misapplied to [Arthonia pinastri](#) in depauperate condition, *fide* Grube 2008

**Synonyms:** [Allarthonia patellulata](#) var. [caesiocarpa](#)

*Arthonia polygramma* Nyl. 📖 🌿

(Hasse 1906; Herre 1912a [on oak, Alum Rock Park, Inner Coast Range, Santa Clara Co., 450 ft. elev.]; Hasse 1913b; Moxley 1921; Merrill 1923; Fink 1935; TJ; Tucker et al. 2004; *H. Hasse*, Catalina Isl., CA, 1912, *Lichenes Exsiccati*, *Sullivant Moss Soc.* 1, MIN)

**Note:** Grube (2008) indicated that identifications of *A. polygramma* from S CA are dubious.

*Arthonia polymorpha* Ach. 📖 🌿

(Hasse 1906; Fink 1935; TJ)

**Note:** Grube (2008) omitted this species from the Sonoran area, perhaps because Hasse did not retain it in his 1913b Flora.

*Arthonia premnea* (Ach.) Tuck. 📖 🌿

(Hasse 1896; Orcutt 1903, 1907)

**Note:** These reports may be based on misidentifications of *Cresponea chloroconia*.

*Arthonia pruinosa* (Nyl.) Ach. 📖 🌿

(Hue 1891; McClatchie 1897)

=[A. pruinata](#)

*Arthonia punctiformis* Ach. 📖 🌿

(McClatchie 1897; Hasse 1898a; Herre 1910; Hasse 1913b; Moxley 1921; Merrill 1923; TJ; Tucker 1997; Tucker et al. 2006; *H. Hasse*, Santa Monica Mts, July 1910, *Lichenes Exsiccati*, *Sullivant Moss Soc.* 2, MU)

**Note:** This species seems to be missing from the Sonoran area, *fide* Grube (2008). The name has been misapplied to *A. glaucella*.

*Arthonia pyrenuloides* Müll. Arg. 📖 🌿

(Hasse 1903f)

=[Pyrenula pyrenuloides](#)

*Arthonia quintaria* Nyl. 📖 🌿

(Hasse 1906; TJ)

**Note:** This name was rejected by Grube (2008) for the Sonoran area on the basis that Hasse did not retain this species in his 1913b flora. It is distinguished from *A. ilicina* on the basis of branched ascomata and its nonlichenized state.

*Arthonia radiata* (Pers.) Ach. 📖 🌿

(Hasse 1895, 1896; Orcutt 1903, 1907; Herre 1910; Volk 1963; TJ; Weber et al. 1987; von Reis 1991; Tucker & Bratt 1996; Brodo et al. 2001 [p. 165, with color photograph]; not occurring in southern CA, *fide* Grube 2008)

**Misapplied names:** [A. astroidea](#)

*Arthonia radiata* f. *angustata* Vain. 📖 🌿

(Hasse 1906, 1913b; Merrill 1923; Fink 1935)

=[A. tetramera](#), *fide* Grube (2008).

*Arthonia spadicea* Leight. 📖 🍄

(*H. Hasse* 700 on *Tilia americana*, Soldiers' Home, Los Angeles Co., 1899, MIN)

**Synonyms:** [A. lurida](#) (McClatchie 1897; Hasse 1898a; Fink 1935; TJ)

**Note:** This was rejected by Grube (2008) for the Sonoran area on the basis that Hasse did not retain this species in his 1913b flora.

*Arthonia spectabilis* Flot. 📖 🍄

(Hasse 1898a)

=name probably misapplied to *Arthonia sanguinea*

*Arthonia stellaris* Kremp. 📖 🍄

(Williams & Sillett 2007, det. L. Sparrius in 2002, but keys to *A. pyrroliza* in Grube [2008] key for S CA.)

*Arthonia stictella* Stizenb. 📖 🍄

(Hasse 1896, 1903b; Orcutt 1903, 1907; Hasse 1913b; Merrill 1923; Fink 1935; TJ)

=[A. albopulverea](#)

*Arthonia subdiffusa* Willey 📖 🍄

(Hasse 1913b)

**Note:** Grube (2008) indicated that identifications of *A. subdiffusa* from S CA are dubious.

*Arthonia taediosa* Nyl. 📖 🍄

(Hasse 1903f)

**Synonyms:** [Arthothelium taediosum](#)

=name misapplied to [Arthonia beccariana](#), which has smaller spores than *A. taediosa*, *fide* Grube (2008)

*Arthonia tumidula* (Ach.) Ach. 🍄

(*H. Thiers* 23222, San Francisco watershed, San Mateo Co.; *H. Thiers* 32400, Santa Cruz Peninsula, Santa Cruz Co., SFSU; *H. Thiers* 1208, Bolinas Lagoon, Marin Co., SFSU)

=[A. cinnabarina](#) (synonymy *fide* Esslinger 2011)

## ARTHOPYRENIA A. Massal.

**Arthopyrenia analepta** (Ach.) A. Massal. 📖 🍄

(Herre 1910; Fink 1935; TJ; Aptroot 2002 [reported only collections from CA Channel Is.]; Tucker 2010)

**Synonyms:** [A. fallax](#), [Pyrenula fallax](#), [Verrucaria epidermidis var. analepta](#), [V. fallax](#)

**Note:** Most early reports for N. Amer. were misidentifications for *A. punctiformis*, *fide* R. C. Harris (personal communication).

**Arthopyrenia cerasi** (Schrad.) A. Massal. 📖 🍄

(Herre 1912b; Fink 1935; Noble et al. 1987)

**Synonyms:** [Pyrenula cerasi](#), [Verrucaria cerasi](#)

**Arthopyrenia lyrata** R. C. Harris 📖 🍄

(Aptroot 2002; Tucker 1997, 1999; Tucker et al. 2004; Knudsen & Kocourková 2009a; Tucker 2010; Knudsen & Kocourková 2012a; *S. Tucker* 34374, Montecito, Santa Barbara Co., SBBG; *S. Tucker* 35974, Santa Cruz, Santa Cruz Co., SBBG)

**Arthopyrenia plumbaria** (Stizenb.) R. C. Harris 📖 🍄

(R. Harris 1975; TJ; Aptroot 2002; Knudsen & Kocourková 2009a, 2010a [citing a Hasse collection], 2012a)

**Synonyms:** [Porina plumbaria](#), [Verrucaria carpinea var. plumbaria](#), [V. plumbaria](#)

**Misapplied names:** [A. cinereopruinosa](#) (Herre 1910; Fink 1935; R. Harris 1975; TJ), [Pyrenula herrei](#) (Fink 1935; Herre 1942b)

*Arthopyrenia analeptella* (Nyl.) Arnold 📖 🍄

(Herre 1910; Fink 1935)

- =misidentifications for CA  
*Arthopyrenia antecellens* (Nyl.) Arnold 📖 🌿  
(Tucker 1997)  
=[\*Mycoporum antecellens\*](#)
- Arthopyrenia biformis* (Borrer) A. Massal. 📖 🌿  
(Herre 1910; Hasse 1912, 1913b; Merrill 1923; Fink 1935; Jordan 1968; TJ)  
=[\*Anisomeridium biforme\*](#) (Kocourková 2000, p. 142)
- Arthopyrenia carinthiaca* J. Steiner 📖 🌿  
(Stone & Vilella 2010)  
=[\*Anisomeridium carinthiacum\*](#)
- Arthopyrenia cinereopruinosa* (Schaer.) A. Massal. 📖 🌿  
(Herre 1910; Fink 1935; R. Harris 1975; TJ)  
=misidentifications, probably of *A. plumbaria* for early CA reports
- Arthopyrenia conformis* (Nyl.) Müll. Arg. 📖 🌿  
(Herre 1910; Fink 1935)  
=misidentifications of *Anisomeridium polypori* for N. Amer.
- Arthopyrenia epidermidis* (DC.) A. Massal. 📖 🌿  
(TJ)  
=[\*Naetrocymbe punctiformis\*](#)
- Arthopyrenia fallax* (Nyl.) Arnold 📖 🌿  
(Herre 1910; Hasse 1914, 1915b; Merrill 1923)  
=[\*A. analepta\*](#)
- Arthopyrenia halodytes* (Nyl.) Arnold 📖 🌿  
(Herre 1907; Fink 1935; TJ)  
=[\*Collemopsidium halodytes\*](#)
- Arthopyrenia herrei* R. C. Harris ined. 📖  
(R. Harris 1975; TJ; von Reis 1991)  
=[\*Naetrocymbe herrei\*](#)
- Arthopyrenia litoralis* (Leight.) Arnold 📖 🌿  
(Herre 1942c; TJ)  
=misidentifications, possibly of *Collemopsidium sublitorale*
- Arthopyrenia padi* Rabenh. 📖 🌿  
(R. Harris 1975; TJ)  
=[\*Naetrocymbe punctiformis\*](#)
- Arthopyrenia parvula* Zahlbr. 📖 🌿  
(Zahlbruckner 1902; Hasse 1903f, 1913b; Riddle 1918; Fink 1935; Herre 1944b)  
=[\*Anisomeridium biforme\*](#)
- Arthopyrenia punctiformis* (Schrank) A. Massal. 📖 🌿  
(Hasse 1915b; Merrill 1923; Fink 1935; TJ; Aptroot 2002)  
=[\*Naetrocymbe punctiformis\*](#)
- Arthopyrenia sphaeroides* (Wallr.) Zahlbr. 📖 🌿  
(Herre 1912b; Hasse 1915a; Merrill 1923; Fink 1935; TJ)  
=*Acrocordia gemmata*, but misidentifications for CA
- Arthopyrenia sublitoralis* (Leight.) Arnold 📖 🌿  
(Thomson 1997)  
=[\*Collemopsidium sublitorale\*](#)

## **ARTHOTHELIUM** A. Massal.

- Arthothelium abnorme** (Ach.) Müll. Arg. 📖 🌿  
(Fink 1935; TJ)



**Synonyms:** [\*Opegrapha abnormis\*](#)

**Arthothelium norvegicum** Coppins & Tønsberg 📖 🌿

(Tønsberg & Williams 2006, citing *C. Williams 313*, Humboldt Co. collection on *Sequoia*; Williams & Sillett 2007)

*Arthothelium adveniens* (Nyl.) Müll. Arg. 📖 🌿

(Fink 1935; TJ)

=[\*Arthonia adveniens\*](#)

*Arthothelium anastomosans* (Ach.) Arnold 📖 🌿

(Herre 1912b; Hasse 1913b; Merrill 1923; Fink 1935; TJ)

=[\*Arthonia anastomosans\*](#)

*Arthothelium interveniens* (Nyl.) Zahlbr. 📖 🌿

(TJ)

=[\*Arthonia interveniens\*](#) (Hasse 1906)

**Note:** Probably Hasse's determination was later changed, as he did not retain it in his 1913 publication.

*Arthothelium orbilliferum* (Almq.) Hasse 📖 🌿

(Hasse 1913b; Merrill 1923; Fink 1935; TJ; von Reis 1991; Bourell 2000; Baltzo 2002; Tucker et al. 2004; Tucker et al. 2006)

=name misapplied to [\*Arthonia beccariana\*](#)

*Arthothelium pruinasces* Zahlbr. 📖 🌿

(Zahlbruckner 1900; Hasse 1903f, 1913b; Fink 1935; TJ)

=[\*Arthonia pruinasces\*](#); name misapplied to *Arthonia beccariana*

*Arthothelium sanguineum* (Willey) Zahlbr. 📖 🌿

(Hasse 1913b, 1915b; Merrill 1923; Fink 1935; Herre 1944b; TJ; *S. Tucker 33739*, San Nicolas Isl., Ventura Co., SBBG)

=[\*Arthonia sanguinea\*](#) (Nylander 1885; Willey 1885, 1890; Hue 1891; Hasse 1903f)

*Arthothelium spectabile* (Flot.) A. Massal. 📖 🌿

(Hasse 1915b; Merrill 1923; TJ; Tucker et al. 2004)

=name probably misapplied to *Arthonia sanguinea*

*Arthothelium subcyrtodes* (Willey) Hasse 📖 🌿

(Hasse 1915b; Merrill 1923; Fink 1935; TJ)

=name misapplied to [\*Arthonia beccariana\*](#)

*Arthothelium taediosum* (Nyl.) Müll. Arg. 📖 🌿

(Hasse 1913b; Moxley 1921; Fink 1935; TJ; *H. Hasse*, Highland Park, near Pasadena, Apr, 1906, *Lichenes Exsiccati, Sullivant Moss Soc. 3*, MU)

=[\*Arthonia taediosa\*](#), but name misapplied to *Arthonia beccariana*, which has smaller spores than *A. taediosum*, *fide* Grube (2008)

## ARTHORRHAPHIS Th. Fr.

\***Arthrorhaphis aeruginosa** R. Sant. & Tønsberg 📖 🌿

(Kocourková et al. 2008; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *J. Kocourková s.n.*, Santa Rosa Isl., Santa Barbara Co., on *Cladonia* species, UCR)

## ASPICILIA A. Massal.

**Aspicilia anglica** Owe-Larss. & A. Nordin 📖 🌿

(Owe-Larsson et al. (2008); *B. Ryan 26279*, Eagles Roost, San Gabriel Mts, Los Angeles Co., ASU; also San Bernardino and San Diego counties; CA endemic)

**Aspicilia aquatica** Körb. 📖 🌿

(Ryan & Nash 1991; Owe-Larsson et al. 2008; *B. Ryan 12615a*, Eastern Brook Lakes, Inyo Co., ASU)

**Aspicilia aspera** (Mereschk.) Tomin 📖 🌿

(Rosentreter et al. 2007)

**Aspicilia aurantiaca** Owe-Larss. & A. Nordin 📖 🌿

(Owe-Larsson et al. 2008 from LA, San Diego, Riverside Co.; *K. Knudsen 385*, Wildomar, Menifee Hills, Riverside Co., ASU)

**Aspicilia brucei** Owe-Larss. & A. Nordin 📖 🌿

(Owe-Larsson et al. 2008 [from Riverside, San Diego, Tulare, Tuolumne counties]; *B. Owe-Larsson 9147*, North Fork of San Jacinto River, San Jacinto Mts, Riverside Co., ASU)

**Aspicilia californica** Rosentr. 📖 🌿

(Rosentreter 1998; Sanders 1999b; Riefner & Rosentreter 2004; Benson 2005; Owe-Larsson et al. 2008; CA endemic)

**Synonyms:** *Aspicilia* sp. (Weber 1967a; *W. Weber*, Univ. Colo. Lich. Exs. 178, S of Ione, Amador Co., SBBG)

**Note:** *A. tuckerae* is an herbarium name applied to some herbarium specimens of this species by Ryan.

**Aspicilia cinerea** (L.) Körb. 📖 🌿

(Weber 1967c; Sigal 1975; Baltzo 1989; Sigal 1989; Ryan & Nash 1991; von Reis 1991; Bratt 1999; Brodo et al. 2001 [p. 168, with color photograph]; Benson 2005; Carlberg et al. 2007; Owe-Larsson et al. 2008)

**Synonyms:** [\*Lecanora cinerea\*](#) (TJ)

**Aspicilia confusa** Owe-Larss. & A. Nordin 📖 🌿

(Knudsen & Werth 2008; Owe-Larsson et al. 2008; Knudsen et al. 2009; Knudsen & Kocourková 2009b, 2009c; Rajakaruna et al. 2012, on serpentine, San Benito Co.; CA endemic)

**Note:** This species is common in CA, particularly in montane areas, *fide* Owe-Larsson et al. 2008.

**Aspicilia cuprea** Owe-Larss. & A. Nordin 📖 🌿

(Knudsen 2006c [host for lichenicole *Lichenochora verrucicola*]; Owe-Larsson et al. 2008; Knudsen et al. 2009; Rajakaruna et al. 2012, on serpentine, San Benito Co.; Weber 1989a [Univ. Colo. Lich. Exs. 689, San Joaquin Experimental Range, Madera Co., ASU, as *A. cf. epiglypta*, re-identified as *A. cuprea* by Owe-Larsson])

**Note:** This species is common in the interior valleys and SW mountains, *fide* Owe-Larsson et al. 2008.

**Aspicilia cyanescens** Owe-Larss. & A. Nordin 📖 🌿

(Owe-Larsson et al. 2008; Knudsen et al. 2009; Stone & Villella 2010; CA endemic)

**Note:** This species has been found in Los Angeles, Riverside, San Diego, Santa Barbara and Tulare counties, according to Owe-Larsson et al. 2008.

**Aspicilia filiformis** Rosentr. 📖 🌿

(Tucker et al. 2006; Owe-Larsson et al. 2008 [reported a collection from Tulare Co., and occurrence northward in CA]; *S. Tucker 34130*, Big Rocks, San Luis Obispo Co., SBBG, det. B. Ryan)

**Note:** While CA is not mentioned, Rosentreter et al. (2007) describes this species with a color photograph.

**Aspicilia fumosa** Owe-Larss. & A. Nordin 📖 🌿

(Owe-Larsson et al. 2008 reporting it from Kern, Riverside, and San Diego counties; Tucker 2010; CA endemic)

**Aspicilia glaucopsina** (Nyl.) Hue 📖 🌿

(Knudsen 2005c; Knudsen & Magney 2006; Knudsen 2007b; Owe-Larsson et al. 2008 reporting it from Los Angeles, Riverside, and San Diego counties; Knudsen & Kocourková 2009c, 2012a; CA endemic)

**Synonyms:** [\*Lecanora glaucopsina\*](#) (Hasse 1898a, 1913b; Zahlbruckner 1902; Fink 1935; TJ)

**Note:** This species often coats the branches of *Selaginella bigelovii*, Spike Moss, growing on soil, *fide* Knudsen & Kocourková 2012a.

**Aspicilia knudsenii** Owe-Larss. & A. Nordin 📖 🌿

(Owe-Larsson et al. 2008; CA endemic)

**Aspicilia laevata** (Ach.) Arnold 📖 🌿

(Wetmore 1985; Baltzo 1989; Wright 1997)

**Synonyms:** *Lecanora laevata* (Hasse 1898a, 1903a, 1913b; Merrill 1923; Herre 1942c; Thomson & Ketchledge 1958; Volk 1963; Baltzo 1970)

**Aspicilia mastrucata** (Wahlenb.) Th. Fr. 📖 🌿

(Ryan & Nash 1991 [cited Inyo Co. collections]; *B. Ryan 23555*, Desolation Wilderness, El Dorado Co., ASU; *B. Ryan 24188*, Emigrant Wilderness, Tuolumne Co., ASU; Rosentreter et al. 2007, for northeastern CA)

**Note:** According to Owe-Larsson et al. (2008), some specimens of *A. simoënsis* collected by Ryan in El Dorado and Tuolumne counties strongly resemble *A. mastrucata*, and need further study.

**Aspicilia nashii** Owe-Larss. & A. Nordin 📖 🌿

(Owe-Larsson et al. 2008 reporting it from El Dorado, Inyo, Los Angeles, and Mono counties; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Aspicilia olivaceobrunnea** Owe-Larss. & A. Nordin 📖 🌿

(Owe-Larsson et al. 2008 [citing specimens from San Diego Co., Ventura Co.]; Rajakaruna et al. 2012 [on serpentine, San Benito Co.]

**Misapplied names:** *A. cinerea*

**Aspicilia pacifica** Owe-Larss. & A. Nordin 📖 🌿

(Owe-Larsson et al. 2008 reporting it as common along the coast southward from San Francisco and Solano counties; Knudsen & Kocourková 2009c, 2010f; Benson & Hillyard 2012 [as “cf.”]; Knudsen & Kocourková 2012a; CA endemic)

**Aspicilia phaea** Owe-Larss. & A. Nordin 📖 🌿

(Owe-Larsson et al. 2008 reports it as common in central and S CA; Knudsen et al. 2009; Knudsen & Kocourková 2009a, 2009c; Tucker 2010; Glacy et al. 2011; Knudsen & Kocourková 2012a; CA endemic)

**Aspicilia praecrenata** (Nyl.) Hue 📖 🌿

(Owe-Larsson et al. 2008; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *T. Nash 33002*, South Point, Santa Rosa Isl., Santa Barbara Co., ASU; CA endemic, but rare in S CA)

**Synonyms:** *Lecanora praecrenata* (Hasse 1898a, 1898b, 1913b; Fink 1935)

**Aspicilia reptans** (Looman) Wetmore 📖 🌿

(Rosentreter et al. 2007 [from extreme NE corner of CA])

**Aspicilia santamonicae** Owe-Larss. & A. Nordin 📖 🌿

(Owe-Larsson et al. 2008; *B. Owe-Larsson 9100a*, Sandstone Peak, Santa Monica Mts, Ventura Co., ASU; CA endemic)

**Aspicilia simoënsis** Räsänen 📖 🌿

(Owe-Larsson et al. 2008; Ryan & Nash 1991; *B. Ryan 26602b*, San Gabriel Wilderness, Los Angeles Co., ASU, SBBG; *B. Ryan 25382b*, Marble Mtn Wilderness, Siskiyou Co., ASU; *T. Nash 23548b* from El Dorado Co. bore this name misapplied to *Pertusaria excludens*, *vide* A. Fryday)

**Misapplied names:** *A. mastrucata*

**Aspicilia sipeana** (H. Magn.) Owe-Larss. & A. Nordin 📖 🌿

(Owe-Larsson et al. 2008, citing collections from Riverside and San Benito counties)

**Aspicilia supertegens** Arnold 📖 🌿

(Thomson 1997; *L. Sigal s.n.*, Hell's Peak Rd, Lake Co., ASU, det. J. Thomson).

**Synonyms:** *Lecanora supertegens* (Sigal & Toren 1976)

**Aspicilia tenuis** (H. Magn.) Owe-Larss. & A. Nordin ('aff.') 📖 🌿

(Owe-Larsson et al. 2008; *B. Owe-Larsson 9167a*, St. Rosa Mtn, Pinyon Flats, Riverside Co., ASU)



**Aspicilia verrucigera** Hue 📖 🌿

(Owe-Larsson et al. 2008, citing only Siskiyou Co. collection; *B. Ryan 25388*, trail through Big Meadows, edge of Marble Mtn Wilderness, Siskiyou Co., ASU)

**Aspicilia caesiocinerea** (Nyl. ex Malbr.) Arnold 📖 🌿

(Hale & Cole 1988; Sigal 1989; Ryan & Nash 1991; Tucker & Bratt 1995; Hill 1997; Thomson 1997;



McGee 1998 [as *A. cf. caesiocinerea*]; Bratt 1999; Baltzo 2002 [as *A. cf. caesiocinerea* ]; Robertson 2003b; Benson 2005; Owe-Larsson et al. 2008; Stone & Villella 2010; Tucker 2010)  
=[Circinaria caesiocinerea](#) (Nordin et al. 2010)

*Aspicilia calcarea* (L.) Mudd  

(Baltzo 1989; Wright 1997; Bratt 1999; Bourell 2000; Benson 2005)

=[Circinaria calcarea](#)

**Note:** Misidentifications for CA *fide* Owe-Larsson et al. 2008.

*Aspicilia contorta* (Hoffm.) Kremp.  



(Bowler et al. 1996; Brodo et al. 2001 [p. 169, with color photograph]; Tucker et al. 2004; Benson 2005; Knudsen 2006a; Owe-Larsson et al. 2008; Villella 2010)

=[Circinaria contorta](#) (Nordin et al. 2010 for synonymy)

*Aspicilia desertorum* (Kremp.) Mereschk.  

(Knight et al. 2002; Knudsen 2006a; Owe-Larsson et al. 2008; Rosentreter et al. 2007 [f. *terrestris*]; Villella 2010)


=[Circinaria arida](#) for N. Amer. reports

*Aspicilia gibbosa* (Ach.) Körb.  

(Baltzo 1989; von Reis 1991; Wright 1997)

**Synonyms:** [Lecanora cinerea var. gibbosa](#), [L. gibbosa](#) (Hasse 1898a, 1908a; Herre 1910; Hasse 1913b; Fink 1935; Herre 1950a; TJ), [L. gibbosula](#) (Thomson & Ketchledge 1958 [as “cf. *A. gibbosula*”]; Baltzo 1970, as “synonymous with *L. gibbosa* Ach. sensu Herre”; TJ; Baltzo 1989), [L. lusca f. lignicola](#)

**Note:** This name has been misapplied to *Aspicilia confusa* and perhaps other species.

*Aspicilia hispida* Mereschk.  

(Rosentreter et al. 2007)

=[Circinaria hispida](#) (synonymy *fide* Nordin et al. 2010)

## ATHELIA Pers.



\***Athelia arachnoidea** (Berk.) Jülich  

(Knudsen & Kocourková 2010a; Kocourková et al. 2012; *K. Knudsen 11821*, Santa Monica Mts, Los Angeles Co., UCR, on *Candelaria pacifica*)



**Note:** This species is also found on *Lepraria santamonicae*.

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

## BACIDIA De Not.

**Bacidia absistens** (Nyl.) Arnold  

(Ekman 1996 [cited collections from Marin Co. and Humboldt counties])

**Bacidia arceutina** (Ach.) Arnold  



(Herre 1944b; TJ; Ekman 1996 [cited collections from Humboldt, San Mateo, and Mendocino counties])

**Bacidia bagliettoana** (A. Massal. & De Not.) Jatta  

(Knudsen & Kocourková 2008b, based on *K. Knudsen 7574*, Santa Rosa Isl., UCR)

**Bacidia beckhausii** Körb.  

(Wetmore 1985 [based on *C. Wetmore 50703*, Sequoia N. P., junction of Crystal Cave Rd and General's Highway, Tulare Co., CA 11 May 1984, MIN])

**Bacidia biatorina** (Körb.) Vain.  

(Ekman 1996 [cited collection from Trinity Co., CA])

**Bacidia circumspecta** (Nyl. *ex* Vain.) Malme  

(Ekman 1996, 2004; Tucker et al. 2004; Knudsen & Kramer 2007; Knudsen & Kocourková 2009a; Tucker 2010; Benson et al. 2012)

**Note:** This species occurs in coastal CA and Arizona.

***Bacidia coprodes*** (Körb.) Lettau 📖 🌿

(Knudsen & Kocourková 2012a; *K. Knudsen* 8878, Santa Rosa Isl., Santa Barbara Co., UCR; *K. Knudsen* collection, Joshua Tree N. P., Riverside Co., UCR)

***Bacidia coruscans*** S. Ekman 📖 🌿

(Ekman 2004; Knudsen 2009; Knudsen & Kocourková 2010a, citing Hasse collections; Knudsen & Kocourková 2012a; not endemic, as also in Baja California; *S. Tucker* 33747, San Nicolas Isl., Ventura Co., SBBG; *S. Tucker* 35774, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Misapplied names:** [\*Bacidia endoleuca\*](#) (Hasse 1913a, 1913b)

***Bacidia heterochroa*** (Müll. Arg.) Zahlbr. 📖 🌿

(Ekman 1996; Baltzo 2002; Ekman 2004; Tucker et al. 2004; Robertson 2005b; Williams & Sillett 2007; Benson et al. 2012; Knudsen & Kocourková 2010a citing Hasse collections; Tucker 2010; Glacy et al. 2011; Knudsen & Kocourková 2012a; *S. Tucker* 37767, 37768 pr. p., Sugarloaf Ridge S. P., Sonoma Co., SBBG)

***Bacidia jacobi*** (Tuck.) Hasse 📖 🌿

(Hasse 1913b; Fink 1935; TJ; Ekman 1996 [said that the lectotype, a *Palmer* collection from San Diego, is probably not a *Bacidia*]; Ekman 2004 [p. 24]; Knudsen & Kocourková 2011; CA endemic)

**Synonyms:** [\*Biatora jacobi\*](#)

***Bacidia reagens*** Malme 📖 🌿

(Ekman 1996, 2004; *S. Ekman* L-620, Santa Ynez Mts, Santa Barbara Co., ASU; rare)

***Bacidia veneta*** S. Ekman 📖 🌿

(Ekman 2004; Knudsen & Kocourková 2011; *H. Hasse s.n.*, low elevation cyps, Santa Monica Mts, Los Angeles Co., ASU; CA endemic)

***Bacidia vermifera*** (Nyl.) Th. Fr. 📖 🌿

(Ekman 1996 [collection from Tulare Co.]

***Bacidia acclinis*** (Flot.) Zahlbr. 📖 🌿

(Herre 1944b [based on *C. L. Brown* 2951, 1/2 mi. W of Larkspur, Marin Co., F]; TJ)  
=misidentification of *Cresponea chloroconia*, *fide* S. Tucker

***Bacidia akompsa*** (Tuck.) Herre 📖 🌿

(Herre 1910; TJ)

=*Lecanactis* sp. (Ekman 1996)

**Note:** Herre made this combination slightly before Fink, who is usually credited with the name (*fide* I. Tavares, personal communication). Ekman (1996) said this is a corticolous species of *Lecanactis*, but did not indicate the species.

***Bacidia albescens*** (Kremp.) Zwackh 📖 🌿

(Hasse 1913b; Thomson & Ketchledge 1958; Weber 1967a; *W. Weber*, Univ. Colo. Lich. Exs. 182, Big Sur, Monterey Co., SBBG; TJ)

=misidentification of *Bacidina californica* for CA reports

***Bacidia atrogrisea*** (Delise ex Hepp) Körb. 📖 🌿

(references in TJ)

=[\*B. laurocerasi\*](#), although misidentifications for CA

***Bacidia clementis*** Hasse 📖 🌿

(Hasse 1910a, 1913b; Merrill 1923; Fink 1935; TJ)

=[\*Bactrospora patellarioides\* var. \*patellarioides\*](#) (Ekman 1996)

***Bacidia dryina*** (Ach.) Fink 📖 🌿

(Fink 1935; Lindsay 1973; TJ)

=[\*Bactrospora dryina\*](#)

***Bacidia effusa*** (Sm.) Trevis. 📖 🌿

(Hasse 1908b; Fink 1935; Lindsay 1973; TJ)

=misidentifications for CA

- Bacidia endoleuca* (Nyl.) J. Kickx 📖 🌿  
(Hasse 1913a, 1913b; Merrill 1923)  
=[B. laurocerasi](#), but Hasse records (repeated by Merrill) are misidentifications of *Bacidia coruscans* fide S. Ekman (personal communication)
- Bacidia fusciorubella* (Hoffm.) Bausch 📖 🌿  
(Hasse 1913b; Herre 1944b; TJ)  
=misidentifications for CA
- Bacidia granosa* (Tuck.) Zahlbr. 📖 🌿  
**Synonyms:** [Bilimbia granosa](#) (Fink 1935), [Lecidea granosa](#) (Herre 1907)  
**Note:** Ekman (1996, p. 130) denied that the species occurs in CA. The disposition of the collections reported by Herre and Fink is uncertain.
- Bacidia gyalectiformis* (Zahlbr.) Hasse 📖 🌿  
(Hasse 1913b; TJ; R. Harris 1988)  
=[Ramonia gyalectiformis](#)
- Bacidia herrei* Zahlbr. 📖 🌿  
(Zahlbruckner 1908; Herre 1910; Fink 1935; Herre 1945; TJ)  
=[Ophioparma rubricosa](#)
- Bacidia incompta* (Borrer ex Hook.) Anzi 📖 🌿  
(Herre 1944b; TJ)  
**Note:** According to Ekman (1996, p. 130) this is a misidentification; the species is European.
- Bacidia insularis* Zahlbr. 📖 🌿  
(Ekman 1996)  
=misidentifications for CA, fide Ekman 2004
- Bacidia inundata* (Fr.) Körb. 📖 🌿  
(Herre 1944b; TJ)  
=[Bacidina inundata](#)
- Bacidia ioessa* Herre 📖 🌿  
(Herre 1910; Fink 1935; TJ)  
**Note:** None of the original Herre material was found by S. Ekman, who suggested that it is probably not a *Bacidia*; Herre's collections from the Santa Cruz Peninsula should be located and studied.
- Bacidia kingmanii* Hasse 📖 🌿  
(Hasse 1911b, 1913b [*Kingman* collection was from San Gabriel Mts]; Fink 1935; TJ)  
=[Lecidea kingmanii](#)
- Bacidia laurocerasi* (Delise ex Duby) Zahlbr. 📖 🌿  
(Stone & Vilella 2010)  
=misidentifications for CA  
**Synonyms:** [B. atrogrisea](#) Delise ex Hepp, [Biatora atrogrisea](#)  
**Misapplied names:** *B. endoleuca* auct. (TJ; Baltzo 2002)  
**Note:** According to Ekman (1996), *B. laurocerasi* is not in CA, and is likely to be confused with *B. heterochroa*, which does occur in CA. The reports by Baltzo and others should be checked.
- Bacidia milliaria* Fr. 📖 🌿  
(Hasse 1908b; TJ)  
=[Micarea lignaria](#)
- Bacidia milliaria* f. *lignaria* Ach. 📖 🌿  
(Hasse 1913b; TJ)  
=[Micarea lignaria](#)
- Bacidia naegelii* (Hepp) Zahlbr. 📖 🌿  
(McClatchie 1897; Herre 1910; Hasse 1913b; Volk 1963; TJ)  
=[Lecania naegelii](#)
- Bacidia phacodes* Körb. 📖 🌿

(Baltzo 2002)

**Note:** According to Ekman (1996), this taxon does not occur in N. Amer. N. Amer. reports usually are some species of *Bacidina*.

*Bacidia rosella* (Pers.) De Not. 📖 🌿

(Herre 1944b; TJ)

=misidentifications for CA *fide* Ekman 1996

*Bacidia rubella* (Hoffm.) A. Massal. 📖 🌿

(Hasse 1913b; TJ)

=misidentifications for CA, *fide* Ekman 1996

*Bacidia sabuletorum* (Schreb.) Lettau 📖 🌿

(Brodo et al. 2001 [p. 172 with color photograph as “*Bacidia*” *sabuletorum*]; Tucker 2002 [repeated the Brodo citation])

=[\*Bilimbia sabuletorum\*](#) (synonymy *fide* Esslinger & Tucker 2009)

*Bacidia schweinitzii* (Fr. ex E. Michener) A. Schneid. 📖 🌿

(TJ)

=misidentifications for CA *fide* Ekman 1996

*Bacidia umbrina* (Ach.) Bausch 📖 🌿

(Hasse 1903e; TJ)

=[\*Scoliciosporum umbrinum\*](#)

## BACIDINA Vězda

***Bacidina californica*** S. Ekman 📖 🌿

(Ekman 1996; Magney 1999; Baltzo 2002; Ekman 2004 [pp. 29–30]; Knudsen 2009; Tucker 2010; Knudsen & Kocourková 2012a; *S. Tucker 37768*, Sugarloaf Ridge S. P., Sonoma Co., SBBG; CA endemic)

**Note:** According to Ekman (1996), reports of *Bacidia albescens* (e.g., Weber 1967a; Ekman 1996, p. 127; *W. Weber*, Univ. Colo. Lich. Exs. 182) and *B. phacodes* (Ekman 1996, p. 133) in CA may refer to *Bacidina californica*.

***Bacidina egenula*** (Nyl.) Vězda 📖 🌿

(Ekman 2004)

***Bacidina neosquamulosa*** (Aptroot & Herk) S. Ekman 📖 🌿

(Ekman 2004 [based on a single collection from downtown San Diego])

**Note:** This species is common on bark in urban situations in Europe.

***Bacidina ramea*** S. Ekman 📖 🌿

(Ekman 1996, 2004; *S. Tucker 37843*, Half Moon Bay, San Mateo Co., SBBG; Knudsen & Kocourková 2010a citing Hasse collections; Knudsen 2009; Stone & Villella 2010; Tucker 2010; Benson et al. 2012; *S. Tucker 35778*, Santa Cruz Isl., Santa Barbara Co., SBBG)

*Bacidina inundata* (Fr.) Vězda 📖 🌿

=misidentification for CA, *fide* Ekman 1996

**Synonyms:** [\*Bacidia inundata\*](#) (Herre 1944b)

## BACTROSPORA A. Massal.

***Bactrospora acicularis*** (C. W. Dodge) Egea & Torrente 📖 🌿

(Egea et al. 2004; Knudsen & Kocourková 2012a)

***Bactrospora brevispora*** R. C. Harris 📖 🌿

(Egea et al. 2004; Knudsen & Kocourková 2012a; *T. Nash 32436*, Santa Cruz Isl., Santa Barbara Co., ASU)

***Bactrospora brodoi*** Egea & Torrente 📖 🌿

(Egea et al. 2004; Knudsen & Kocourková 2012a; *T. Nash 33095, 33097, 33110*, Santa Rosa Isl., Santa Barbara Co., ASU; det. Egea & Torrente)

**Bactrospora dryina** (Ach.) A. Massal. 🍄🌿

(Egea et al. 2004, “not definitely confirmed” for CA; *L. Ross* 40, El Capitan S. P., 27 mi. W of Santa Barbara, Santa Barbara Co., ASU)

**Synonyms:** [Bacidia dryina](#), [Biatora dryina](#)

**Bactrospora patellarioides** (Nyl.) Almq. var. **convexa** (B. de Lesd.) Egea & Torrente 🍄🌿

(Egea et al. 2004; Knudsen & Kocourková 2012a; *S. Tucker* 35777, Santa Cruz Isl., Santa Barbara Co., SBBG; *B. Ryan* 31147, Santa Rosa Isl., Santa Barbara Co., ASU, SBBG)

**Bactrospora patellarioides** (Nyl.) Almq. var. **patellarioides** 🍄🌿

(Egea et al. 2004; Williams & Sillett 2007; Knudsen & Kocourková 2009b, 2012a)

**Synonyms:** [Bacidia clementis](#) (Hasse 1910a, 1913b; Merrill 1923; Fink 1935; Lindsay 1973; TJ)

**Bactrospora spiralis** Egea & Torrente 🍄🌿

(Weber 1975a; Egea & Torrente 1993a; Egea et al. 2004 [p. 17]; Tucker et al. 2004; Knudsen & Kocourková 2009a; *W. Weber*, 1975a, Univ. Colo. Lich. Exs. 456, Cypress Point, Monterey Peninsula, Monterey Co., SBBG; *S. Tucker* 37745, W side of Mendocino Pass, Mendocino Co., SBBG; CA endemic)

**BAEOMYCES** Pers.

**Baeomyces rufus** (Huds.) Rebert. 🍄🌿

(Thomson 1967; Sigal & Toren 1974; Tucker & Kowalski 1975; TJ; Thomson 1984; Hale & Cole 1988; Goward 1999; Brodo et al. 2001 [p. 174, with color photograph]; Hinds & Hinds 2007 [p. 128, color photograph only]; McCune & Geiser 2009; Glacy et al. 2011)

**BAGLIETTOA** A. Massal.

**Bagliettoa calciseda** (DC.) Gueidan & Cl. Roux 🍄🌿

(Knudsen & Kocourková 2009b, 2010a [in description of *Verrucaria dacryodes*]; Knudsen & Kocourková 2012a; *K. Knudsen* 9954, Limekiln S. P., Santa Lucia Mts, Monterey Co., UCR)

**Synonyms:** [Verrucaria calciseda](#)

**BELLEMERIA** Hafellner & Cl. Roux

**Bellemerea alpina** (Sommerf.) Clauz. & Cl. Roux 🍄🌿

(Ryan & Nash 1991; Brodo et al. 2001 [p. 175, with color photograph]; Robertson & Beyer 2005; Owe-Larsson & Ryan 2008 for Sierra Nevada; Knudsen & Kocourková 2012c)

**Synonyms:** [Lecanora alpina](#)

**Bellemerea cinereorufescens** (Ach.) Clauz. & Cl. Roux 🍄🌿

(Ryan & Nash 1991; Owe-Larsson & Ryan 2008 for central CA; Knudsen & Kocourková 2012c; *B. Ryan* 23688, Desolation Wilderness, El Dorado Co., ASU; *B. Ryan* 25507, Marble Mtn Wilderness, Siskiyou Co., ASU)

**Synonyms:** [Lecanora cinereorufescens](#) (Herre 1942a, 1950a; TJ)

**Bellemerea sanguinea** (Kremp.) Hafellner & Cl. Roux 🍄🌿

(Owe-Larsson & Ryan 2008 for northern and central CA; *B. Ryan* 24642, Carson-Iceberg Wilderness, Alpine Co., ASU)

**Misapplied names:** *B. cinereorufescens*

**BIATORA** Fr.

**Biatora efflorescens** (Hedl.) Räsänen 🍄🌿

(Printzen 1995 [description but citations only from Europe]; Williams & Sillett 2007; *T. Tønshberg* TT28922, Mendocino Co., BG)

**Biatora globulosa** (Flörke) Fr. 🍄🌿

(Herre 1910; Fink 1935; TJ; Williams & Sillett 2007; Hertel et al. 2008; Benson et al. 2012; C. Printzen s.n., W of Whisky Ridge, Sierra N. F., Madera Co., ASU)



**Synonyms:** [Biatora sylvana](#), [Catillaria globulosa](#), [Lecidea sylvana](#)

**Note:** Printzen (2004) reported this species only from Arizona, but his collection from CA suggests presence in CA also.

**Biatora rufidula** (Graewe) S. Ekman & Printzen 🍄 🌿  
(Printzen & Tønsberg 1999)

**Biatora toensbergii** Holien & Printzen 🌿  
(*T. Tønsberg TT28922* pr. p., Mendocino Co., BG)

**Biatora turgidula** (Fr.) Nyl. 🍄 🌿  
(Tuckerman 1888; Hasse 1896; McClatchie 1897; Orcutt 1903, 1907; TJ; *B. Ryan 24978*, 20 Aug., 1989, Gold Flat SW of Scott's Bar, Klamath N. F., Siskiyou Co., ASU, *B. Ryan 27080*, Monterey Co., ASU)

**Synonyms:** [Lecidea turgidula](#)

**Note:** Early reports through those of Hasse are probably based on misidentifications.

**Biatora akompsa** Tuck. 🍄 🌿  
(Tuckerman 1888)  
=*Lecanactis* sp.

**Note:** Ekman (1996) said this is a corticolous species of *Lecanactis*, but did not indicate the species.

**Biatora anthracophila** (Nyl.) Hafellner 🍄 🌿  
(Printzen 1995)  
=[Hypocenomyce anthracophila](#)

**Biatora atrogrisea** Delise ex Hepp 🍄 🌿  
(Hasse 1906)  
=[Bacidia laurocerasi](#), but misidentifications for CA

**Biatora atropurpurea** (Schaer.) Hepp 🍄 🌿  
(Tuckerman 1872; McClatchie 1897; Orcutt 1903, 1907)  
=[Catinaria atropurpurea](#)

**Biatora atrorufa** (Dicks.) Fr. 🍄 🌿  
(McClatchie 1897)  
=[Lecidoma demissum](#)

**Biatora botryosa** Fr. 🍄 🌿  
(Thomson 1997)  
=[Hertelidea botryosa](#) (synonymy *fide* Printzen 2004)

**Biatora caulophylla** Tuck. 🍄 🌿  
(Tuckerman 1877, 1888)  
=[Lecidea caulophylla](#)

**Biatora coarctata** (Turner ex Sm.) Th. Fr. 🍄 🌿  
(Tuckerman 1866; Bolander 1870; Tuckerman 1872, 1888; Hasse 1896; McClatchie 1897; Hasse 1903b; Orcutt 1903, 1907)  
=[Trapelia coarctata](#)

**Biatora conglomerata** (Fr.) Hasse 🍄 🌿  
(Hasse 1906 [on wood])  
=[Biatora vernalis](#)

**Note:** Hasse apparently changed his mind about these collections and did not cite the name in his 1913b paper; the Hasse collections need to be re-examined.

**Biatora crenata** (Taylor) Tuck. 🍄 🌿  
(McClatchie 1897)  
=[Psora crenata](#)

**Biatora cyrtella** (Ach.) Nyl. 🍄 🌿  
(Hasse 1896; Orcutt 1903, 1907)  
=[Lecania cyrtella](#)

- Biatora decipiens* (Hedw.) Fr. 🍄 🌿  
(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1888; McClatchie 1897; Hasse 1903b, 1903e; Orcutt 1903, 1907)  
=[\*Psora decipiens\*](#)
- Biatora dryina* (Ach.) Tuck. 🍄 🌿  
(Tuckerman 1888)  
=[\*Bactrospora dryina\*](#)
- Biatora effusa* (Sm.) Tuck. 🍄 🌿  
(Tuckerman 1888)  
=misidentifications for CA
- Biatora flexuosa* Fr. 🍄 🌿  
(McClatchie 1897)  
=[\*Trapeliopsis flexuosa\*](#)
- Biatora franciscana* Tuck. 🍄 🌿  
(Tuckerman 1888; Hasse 1896; McClatchie 1897; Hasse 1903b; Orcutt 1903, 1907; TJ)  
=[\*Lecania franciscana\*](#)
- Biatora friesii* Ach. 🍄 🌿  
(Hasse 1906)  
=[\*Hypocenomyce friesii\*](#)
- Biatora fuscorubella* (Hoffm.) Tuck. 🍄 🌿  
(Hasse 1903e)  
=[\*Bacidia fuscorubella\*](#), but misidentifications for CA
- Biatora glebulosa* Fr. 🍄 🌿  
(TJ)  
=[\*Trapeliopsis wallrothii\*](#)
- Biatora globifera* Fr. 🍄 🌿  
(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1888; Hasse 1896; Orcutt 1907)  
=[\*Psora globifera\*](#)
- Biatora granulosa* (Hoffm.) Flot. 🍄 🌿  
(Hasse 1903b)  
=[\*Trapeliopsis granulosa\*](#)
- Biatora granulosa* var. *corallina* Tuck. 🍄 🌿  
(Hasse 1903e)  
=[\*Trapeliopsis granulosa\*](#)
- Biatora granulosa* var. *phyllizans* Zahlbr. 🍄 🌿  
(Hasse 1903e)  
=[\*Trapeliopsis glaucopholis\*](#)
- Biatora gyalectiformis* Zahlbr. 🍄 🌿  
(Hasse 1903e)  
=[\*Ramonia gyalectiformis\*](#)
- Biatora holopolia* Tuck. 🍄 🌿  
(Hasse 1905)  
=[\*Lecidea holopolia\*](#)
- Biatora jacobi* Tuck. 🍄 🌿  
(Tuckerman 1888)  
=[\*Bacidia jacobi\*](#)
- Biatora laureri* (Hepp ex Th. Fr.) Tuck. 🍄 🌿  
(Tuckerman 1882)  
=[\*Megalalaria laureri\*](#) (Ekman & Tønsberg 1996)

*Biatora lurida* (Ach.) Fr. 🍄 🌿

(McClatchie 1897)

=[\*Romjularia lurida\*](#)

*Biatora luridella* (Tuck.) Tuck. 🍄 🌿

(Tuckerman 1888; McClatchie 1897)

=[\*Psora luridella\*](#)

*Biatora meiocarpa* (Nyl.) Arnold 🍄 🌿

**Synonyms:** [\*Lecidea meiocarpa\*](#) (Stizenberger 1895; Hasse 1915a)

**Note:** This is an accepted species, known from high elevations in Arizona (Printzen 2004), but the old reports from CA are unlikely.

*Biatora milliaria* (Fr.) Tuck. 🍄 🌿

(Tuckerman 1888)

=[\*Micarea lignaria\*](#)

*Biatora mixta* Fr. 🍄 🌿

(Hasse 1896, 1903b; Orcutt 1903, 1907)

=[\*Cliostomum griffithii\*](#) (synonymy *fide* Zahlbruckner 1934)

*Biatora mixta* var. *pacifica* Tuck. 🍄 🌿

(Tuckerman 1888, p. 30)

=[\*Cliostomum griffithii\*](#)

*Biatora moriformis* (Ach.) Hasse 🍄 🌿

(Hasse 1906)

=[\*Strangospora moriformis\*](#)

*Biatora mutabilis* (Fée) Hasse 🍄 🌿

(Hasse 1903e)

=[\*Lecidea mutabilis\*](#)

*Biatora naegelii* Hepp 🍄 🌿

(Hasse 1896, 1903b; TJ)

=[\*Lecania naegelii\*](#)

*Biatora nylanderii* Anzi 🍄 🌿

(Hasse 1903e, 1906)

=[\*Lecidea nylanderii\*](#)

*Biatora parvifolia* (Pers.) Tuck. 🍄 🌿

(McClatchie 1897)

=[\*Phyllopsora parvifolia\*](#), but misidentifications for CA

*Biatora phaeophora* Stizenb. 🍄 🌿

(Hasse 1896; McClatchie 1897; Hasse 1903b; Orcutt 1909)

=[\*Lecanora phaeophora\*](#)

*Biatora prasina* (Fr.) Th. Fr. 🍄 🌿

(McClatchie 1897; Hasse 1906)

=[\*Micarea prasina\*](#)

*Biatora punctella* Willey 🍄 🌿

(Hasse 1906)

=[\*Micarea punctella\*](#) (Norman) Hedlund (synonymy *fide* Printzen 1995)

**Note:** This report is a probable misidentification by Hasse, because he did not repeat the name in his 1913b compilation.

*Biatora querneae* (Dicks.) Fr. 🍄 🌿

(Tuckerman 1872; Willey 1873a; Tuckerman 1888; McClatchie 1897)

=[\*Pyrrhospora querneae\*](#)

*Biatora resinae* (Fr.) Tuck. 🍄 🌿

(McClatchie 1897)

- =[\*Sarea resiniae\*](#)
- Biatora russellii* Tuck. 📖 🍄  
(Tuckerman 1888)  
=[\*Psora russellii\*](#)
- Biatora schweinitzii* Fr. ex Tuck. 📖 🍄  
(Hasse 1903e)  
=[\*Bacidia schweinitzii\*](#), but misidentifications for CA
- Biatora scotopholis* Tuck. 📖 🍄  
(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1888; McClatchie 1897; Hasse 1903b)  
=[\*Miriquidica scotopholis\*](#)
- Biatora subviridis* Nyl. 📖 🍄  
(McClatchie 1897; Hasse 1906)  
=[\*Catillaria subviridis\*](#)
- Biatora sylvana* Körb. 📖 🍄  
(McClatchie 1897; Hasse 1903b, 1906)  
=[\*Biatora globulosa\*](#)
- Biatora tornoënsis* (Nyl.) Th. Fr. 📖 🍄  
(Tuckerman 1888)  
=[\*Japewia tornoënsis\*](#)
- Biatora umbrina* (Ach.) Tuck. 📖 🍄  
(Hasse 1903e; Fink 1935)  
=[\*Scoliciosporum umbrinum\*](#)
- Biatora varians* Ach. 📖 🍄  
(Hasse 1896; McClatchie 1897; Orcutt 1903, 1907)  
=[\*Pyrrhospora varians\*](#)
- Biatora vernalis* (L.) Fr. 📖 🍄  
(Brodo et al. 2001 [p. 176, with color photograph])  
**Synonyms:** [\*Lecidea vernalis\*](#), [\*B. conglomerata\*](#)  
**Note:** According to C. Printzen (personal communication), this taxon is unlikely to occur in CA.
- Biatora viridescens* (Schrad.) Fr. 📖 🍄  
(McClatchie 1897; Hasse 1906)  
=[\*Trapeliopsis viridescens\*](#)
- Biatora xanthococcoides* (Zahlbr.) Hasse 📖 🍄  
(Hasse 1903e [as “*xanthococci*”])  
=[\*Lecidea xanthococcoides\*](#)  
**Note:** Hasse 1903e referred to “*xanthococci* A. Zahlbr.” and cited Zahlbruckner 1900, the place of publication of *Lecidea xanthococcoides*.

#### BIATORELLA De Not.

- Biatorella cinerea* (Schaer.) Th. Fr. 📖 🍄  
(Herre 1950a; TJ)  
=[\*Sporastatia polyspora\*](#), an arctic/alpine species, unlikely for CA  
**Note:** Herre's specimens should be re-examined.
- Biatorella clavus* (DC.) Th. Fr. 📖 🍄  
(Hasse 1908a; Herre 1910; Hasse 1913b; Fink 1935)  
=[\*Sarcogyne clavus\*](#)  
**Note:** Herre's (1910) material was misidentified and is in part *S. similis*.
- Biatorella deplanata* Almq. f. *pruinosa* H. Magn. 📖 🍄  
(Magnusson 1935a)

**Note:** This is a European species, not otherwise reported for N. Amer., so the report should be checked.

*Biatorella hypophaea* (Nyl.) Blomb. & Forss. 📖 🍄

(Hasse 1913b; Fink 1935; Herre 1944b)

=[\*Sarcogyne privigna\*](#)

**Note:** Hasse's material may have been misidentified, since stated spore size is not correct, *fide* I. Tavares (personal communication).

*Biatorella moriformis* (Ach.) Th. Fr. 📖 🍄

(Hasse 1913b; Magnusson 1935a; TJ)

=[\*Strangospora moriformis\*](#)

*Biatorella plicata* (H. Magn.) Zahlbr. 📖 🍄

(TJ)

=[\*Sarcogyne privigna\*](#) (synonymy *fide* K. Knudsen)

*Biatorella pruinosa* (Sm.) Th. Fr. 📖 🍄

(Hasse 1913b)

=[\*Sarcogyne regularis\*](#) for CA reports

†*Biatorella resinae* (Fr.) Th. Fr. 📖 🍄

(Hasse 1908b; TJ)

=[\*Sarea resinae\*](#)

*Biatorella revertens* (Tuck.) Herre 📖 🍄

(Herre 1910; Fink 1935; Herre 1950a; Esslinger & Tucker 2009)

=[\*Polysporina simplex\*](#)

*Biatorella simplex* (Davies) Branth. & Rostr. 📖 🍄

(Herre 1910; Hasse 1913b; Merrill 1923)

=[\*Polysporina simplex\*](#)

**Note:** Herre evidently grouped material of *Sarcogyne* spp. with reddish apothecia under this name; Hasse's (1913b) material is *Sarcogyne californica*, at least in part, *fide* Magnusson (1935a).

*Biatorella terrena* Hasse 📖 🍄

(Hasse 1911a)

=[\*Sarcogyne crustacea\*](#), *fide* Knudsen & Kocourková (2010b)

*Biatorella testudinea* (Ach.) A. Massal. 📖 🍄

(Herre 1950a)

=[\*Sporastatia testudinea\*](#)

## BIATOROPSIS Räsänen

\***Biatoropsis usnearum** Räsänen 📖 🍄

(Diederich 2003; Kocourková et al. 2012; *S. Tucker 31755D*, Armstrong Redwoods S. P., Sonoma Co., on *Usnea pendulina*, SBBG, det. P. Diederich; *S. Tucker 31865B*, Indian Valley Cpgd 10.7 mi. W of Downieville, Sierra Co., on *Usnea* cf. *silesiaca*, SBBG, det. P. Diederich)

## BILIMBIA De Not. (Veldkamp 2004, for re-establishment of genus)

**Bilimbia sabuletorum** (Schreb.) Arnold 📖 🍄

(Benson et al. 2012)

**Synonyms:** [\*Bacidia sabuletorum\*](#) (Brodo et al. 2001 [pp. 172–173, with color photograph] showed it in NW CA)

*Bilimbia granosa* (Tuck.) Fink 📖 🍄

(Fink 1935 [p. 225])

=[\*Bacidia granosa\*](#), but misidentifications for CA

*Bilimbia gyalectiformis* Zahlbr. 📖 🍄

(Zahlbruckner 1902; Fink 1935)

=[\*Ramonia gyalectiformis\*](#)

*Bilimbia lignaria* (Ach.) A. Massal. 📖 🌿

(Fink 1935 [p. 225])

=[\*Micarea lignaria\*](#) (synonymy *fide* Esslinger & Tucker 2009)

*Bilimbia naegelii* (Hepp) Kremp. 📖 🌿

(Fink 1935 [p. 223])

=[\*Lecania naegelii\*](#) (synonymy *fide* Esslinger & Tucker 2009)

**BISPORA** Fuckel

\**Bispora christiansenii* D. Hawksw. 📖 🌿

(Alstrup & Cole 1998)

=[\*Intralichen christiansenii\*](#)

**BLASTENIA** A. Massal. =**CALOPLACA**

*Blastenia catalinae* (H. Magn.) E. Rud. ined. 📖

(Rudolph 1955)

=[\*Caloplaca catalinae\*](#)

*Blastenia ferruginea* (Huds.) A. Massal. 📖 🌿

(TJ for references)

=[\*Caloplaca ferruginea\*](#)

*Blastenia ferruginea* var. *ammiospila* Wahlenb. 📖 🌿

(Hasse 1915b)

=[\*Caloplaca ammiospila\*](#)

*Blastenia ferruginea* var. *bolanderi* (Tuck.) Herre 📖 🌿

(Herre 1910; Hasse 1913b; Thomson & Ketchledge 1958)

=[\*Caloplaca luteominia\* var. \*bolanderi\*](#)

*Blastenia ferruginea* var. *fraudans* (Th. Fr.) Hazsl. 📖 🌿

(Hasse 1910a, 1913b)

=[\*Caloplaca fraudans\*](#), synonymy *fide* Esslinger & Tucker 2009, but probably misdeterminations for N. Amer.

*Blastenia ferruginea* var. *wrightii* (Tuck.) Hasse 📖 🌿

(Hasse 1913b; Merrill 1923)

=[\*Caloplaca wrightii\*](#)

*Blastenia festiva* (Ach.) A. Massal. 📖 🌿

(Hasse 1913b)

=[\*Caloplaca crenularia\*](#), but misdeterminations for N. Amer., *fide* Wetmore (1996)

*Blastenia fraudans* (Th. Fr.) B. de Lesd. 📖 🌿

(Fink 1935)

=[\*Caloplaca fraudans\*](#) (synonymy *fide* Esslinger & Tucker 2009)

*Blastenia luteominia* Tuck. 📖 🌿

(Hasse 1913b; Fink 1935)

=[\*Caloplaca luteominia\* var. \*luteominia\*](#) (synonymy *fide* Esslinger & Tucker 2009)

*Blastenia subpyraceella* (Nyl.) Hasse 📖 🌿

(Hasse 1913b) probably

=[\*Caloplaca luteominia\* var. \*luteominia\*](#), *fide* Wetmore (2006)

**BOTRYDINA** Bréb. =**LICHENOMPHALIA**

*Botrydina botryoides* (L.) Redhead & Kuyper 🌿

(H. Thiers collections, Humboldt Co., Mendocino Co., SFSU)

=[\*Lichenomphalia umbellifera\*](#)

**BOTRYOLEPRARIA** Canals, Her.-Mar., Gómez-Bolea & Llimona

**Botryolepraria lesdainii** (Hue) Canals, Her.-Mar., Gómez-Bolea & Llimona 📖 🌿  
(Kocourková et al. 2008)

**BRIANCOPPINSIA** Diederich, Ertz, Lawrey & van den Boom

\***Briancoppinsia cytopora** (Vouaux) Diederich, Ertz, Lawrey & van den Boom 📖 🌿  
(Kocourková et al. 2012)

**Synonyms:** [Phoma cytopora](#)

**BRYORIA** Brodo & D. Hawksw.

**Bryoria capillaris** (Ach.) Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; TJ; Thomson 1984; Hale & Cole 1988; von Reis 1991; Wright 1997; Goward 1999; Brodo et al. 2001 [pp. 179–180, with color photograph]; Jovan & McCune 2004; Hinds & Hinds 2007 [p. 133, color photograph only]; McCune & Geiser 2009)

**Bryoria fremontii** (Tuck.) Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; Pinelli & Jordan 1978; TJ; Sigal & Nash 1983; Tucker & Bratt 1995; Wright 1997; Goward 1999; Brodo et al. 2001 [p. 180, with color photograph]; Ryan 2002; Jovan & McCune 2004; Williams & Sillett 2007; Knudsen et al. 2009 [as “cf.”, citing Segal & Nash (1983) and suggesting the species may be extinct in the Cuyamaca Mts of San Diego Co.]; McCune & Geiser 2009)

**Synonyms:** [Alectoria fremontii](#), [A. tortuosa](#), [B. tortuosa](#)

**Bryoria friabilis** Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; TJ; Hale & Cole 1988; Goward 1999; Jovan & McCune 2004; McCune & Geiser 2009)

**Note:** *Bryoria friabilis* was considered a chemical race of *B. implexa* by Holien (1989), but accepted by Esslinger (2011).

**Bryoria furcellata** (Fr.) Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; TJ; Hale & Cole 1988; West & Doell 1995; Wright 1997, 1998; Goward 1999; Brodo et al. 2001 [p. 181, with color photograph]; Ryan 2002; Baltzo 2002; Robertson 2002a; Hinds & Hinds 2007 [p. 134, color photograph only]; Williams & Sillett 2007; Glacy et al. 2011)

**Synonyms:** [Alectoria nidulifera](#)

**Bryoria fuscescens** (Gyeln.) Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; TJ; Smith 1980; Thomson 1984; Goward 1999; Brodo et al. 2001 [p. 181, with color photograph]; Ryan 2002; Blauman 2004a; Jovan & McCune 2004; Hinds & Hinds 2007 [p. 135, color photograph only]; Williams & Sillett 2007)

**Bryoria glabra** (Motyka) Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; TJ; Sweet 1983; Thomson 1984; Hale & Cole 1988; Goward 1999; Brodo et al. 2001 [p. 182, with color photograph]; Ryan 2002; McCune & Geiser 2009)

**Bryoria pseudocapillaris** Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; TJ; Hale & Cole 1988; Riefner, Bowler, & Ryan 1995; Magney 1999; Baltzo 2002; Glavich 2003; Spribille & Hauck 2003; Geiser et al. 2004; Glavich et al. 2005a, 2005b; Glavich 2008a)

**Bryoria pseudofuscescens** (Gyeln.) Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; TJ; Thomson 1984; Goward 1999; Brodo et al. 2001 [p. 184, with color photograph]; Jovan & McCune 2004; McCune & Geiser 2009; considered a chemical race of *B. implexa* by Holien [1989])

**Synonyms:** [Alectoria pseudofuscescens](#) (Lindsay 1973)

**Bryoria simplicior** (Vain.) Brodo & D. Hawksw. 📖 🌿

(Goward 1999; Jovan & McCune 2004; McCune & Geiser 2009)

**Bryoria spiralifera** Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; TJ; Hale & Cole 1988; Riefner, Bowler, & Ryan 1995; Wright 1998; Magney 1999; Glavich 2003; Spribille & Hauck 2003; Geiser et al. 2004; Glavich et al. 2005a, 2005b; Glavich 2008b; McCune & Geiser 2009)

**Bryoria subcana** (Nyl. ex Stizenb.) Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; TJ; Goward 1999; Williams & Sillett 2007; McCune & Geiser 2009, in which range is S to Santa Cruz)

**Bryoria trichodes** (Michx.) Brodo & D. Hawksw. subsp. **americana** (Motyka) Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; TJ; Goward 1999; Brodo et al. 2001 [pp. 185–186, with color photograph]; Thomson 2003; Jovan & McCune 2004; Hinds & Hinds 2007 [p. 139, color photograph only]; Williams & Sillett 2007; McCune & Geiser 2009)

**Note:** Range is S to Santa Cruz, *fide* McCune & Geiser.

*Bryoria abbreviata* (Müll. Arg.) Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; Pinelli & Jordan 1978; TJ; Sigal & Nash 1983; Tucker & Bratt 1996)

=[\*Nodobryoria abbreviata\*](#)

*Bryoria bicolor* (Ehrh.) Brodo & D. Hawksw. 📖 🌿

**Synonyms:** [\*Alectoria bicolor\*](#) (Hale 1969 [map])

**Note:** Hale's assertion that this species is in CA is incorrect; it occurs on the West Coast from Vancouver Isl. N to Alaska, *fide* Brodo & Hawksworth 1977.

*Bryoria chalybeiformis* (L.) Brodo & D. Hawksw. 📖 🌿

(Goward 1999)

**Synonyms:** [\*Alectoria chalybeiformis\*](#) (Howe 1914–1915; Herre 1945)

**Note:** This species is unlikely to be found in CA; it occurs in Rocky Mountains and Canada, *fide* Brodo & Hawksworth 1977.

*Bryoria implexa* (Hoffm.) Brodo & D. Hawksw. 📖 🌿

(TJ; Goward 1999)

**Synonyms:** [\*Alectoria implexa\*](#) (Motyka 1964; Jordan 1968)

**Note:** Baltzo (2002) suggested that Jordan's material might rather have been *B. capillaris*, based on the reported C- chemical reaction and the absence of *B. implexa* from further south than Idaho in western U. S.; no correctly identified specimens are known to me of this species from CA.

*Bryoria oregana* (Tuck.) Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; Pinelli & Jordan 1978; TJ; Hale & Cole 1988; Baltzo 1989)

=[\*Nodobryoria oregana\*](#)

**Note:** Many reports, especially from S CA, are *N. abbreviata*.

*Bryoria tortuosa* (G. Merr.) Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; Pinelli & Jordan 1978; TJ; Hale & Cole 1988; Goward 1999; Brodo et al. 2001 [p. 184]; Jovan & McCune 2004; McCune & Geiser 2009; Velmala et al. 2009)

=[\*B. fremontii\*](#)

## BUELLIA De Not.

**Buellia abstracta** (Nyl.) Oliv. 📖 🌿

(Giralt et al. 2011; Knudsen & Kocourková 2010f, 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Misapplied names:** [\*B. sequax\*](#) auct. s.l. (Knudsen & Werth 2008)

**Buellia aethalea** (Ach.) Th. Fr. 📖 🌿

(TJ; Doell et al. 1999 [as “cf. *aethalea*”; later det. F. Bungartz as *B. dispersa*]; Bourell 2000; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [\*B. atroalbella\*](#) Nyl., [\*B. verruculosa\*](#) (Sm.) Mudd

**Note:** Bungartz & Nash (2005) report *B. aethalea* only at high elevations in the southwestern U. S., none in CA.

**Buellia alboatra** (Hoffm.) Th. Fr. 📖 🌿





(Tuckerman 1866, 1888; McClatchie 1897; Hasse 1908b; Herre 1910; Hasse 1913b; Merrill 1923; Imshaug 1951; Volk 1963; Jordan 1968; Sigal 1975; TJ; Nordin 1996, 1999; Robertson & Beyer 2005; Knudsen 2007b; Bungartz et al. 2008; Knudsen 2009)

**Synonyms:** [Buellia alboatra var. ambigua](#), [B. ambigua](#), [Diplotomma alboatrum](#), [D. ambiguum](#), [Lecidea alboatra](#), [L. alboatra var. ambigua](#)



**Buellia arborea** Coppins & Tønsberg  

(Bungartz et al. 2008; *S. Tucker 34506*, Hastings Natural History Reserve, Monterey Co., SBBG, det. T. Tønsberg)

\***Buellia badia** (Fr.) A. Massal.  

(Tuckerman 1872; Willey 1873a; Tuckerman 1888; Hasse 1896; McClatchie 1897; Zahlbruckner 1900; Hasse 1903b; Herre 1910; Hasse 1913b; Merrill 1923; Fink 1935; Herre 1950a; Imshaug 1951; Thomson & Ketchledge 1958; Sigal 1975; TJ; Weber et al. 1987; Sigal 1989; Robertson et al. 1998; Bungartz & Nash 2004a; Robertson 2004; Tucker et al. 2006; Carlberg et al. 2007; Knudsen 2007b; Bungartz et al. 2008; Knudsen & Kocourková 2009c, 2010f; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a; Kocourková et al. 2012; Rajakaruna et al. 2012, on serpentine, San Benito Co.; common as a juvenile parasite on *Aspicilia* spp. and other crusts)

**Synonyms:** [Amandinea turgescens](#), [Buellia turgescens](#) (synonymy *fide* Bungartz & Nash 2004a)

**Buellia bolacina** Tuck.  

(Tuckerman 1888; Hasse 1896; McClatchie 1897; Orcutt 1903, 1907; Hasse 1913b; Fink 1935; Imshaug 1951; TJ; Robertson 2003b; Bungartz et al. 2008)

**Synonyms:** [Lecidea bolacina](#) (Hasse 1898a)

**Buellia capitis-regum** W. A. Weber  

(Weber 1971a; TJ; Weber 1989a; Robertson 2002b; Bungartz et al. 2008; Knudsen 2009; Knudsen & Kocourková 2010f, 2012a; *W. Weber*, Univ. Colo. Lich. Exs. 671, Fraser Point, Santa Cruz Isl., Santa Barbara Co., ASU; not endemic, also in Baja California)

**Buellia chloroleuca** Körb.  

(Knudsen & Werth 2008; *K. Knudsen 4396* on juniper, Granite Mts, San Bernardino Co., UCR)

**Misapplied names:** [Amandinea subduplicata](#), [A. submontana](#)

**Buellia christophii** Bungartz  

(Bungartz et al. 2004; Bungartz et al. 2008; Knudsen 2009; Knudsen & Kocourková 2010f, 2012a; *H. Hasse Exs. 205*, Los Angeles Co.; *C. Bratt 3650*, Santa Barbara Isl., Santa Barbara Co., ASU; *S. Tucker 35170*, Hastings Natural History Reserve, Mendocino Co., SBBG)

**Buellia concinna** Th. Fr.  

(Bungartz et al. 2005; Bungartz et al. 2008; Knudsen et al. 2009; Glacy et al. 2011)

**Synonyms:** [B. semitensis](#), [Lecidea semitensis](#) (Hasse 1898a)

**Buellia dakotensis** (H. Magn.) Bungartz  

(Bungartz et al. 2008; *C. Wetmore 16793*, N of Coldbrook Station, Angeles N. F., Los Angeles Co., ASU, SBBG; *B. Ryan 24746*, NW of Coarsegold, Madera Co., ASU; rarely collected in S CA)



**Note:** This occurs on bark, and is often confused with *B. punctata*. Spores are very thick-walled.

**Buellia disciformis** (Fr.) Mudd  

(Hue 1891; Merrill 1923; Wheeler 1938; Herre 1945; Jordan 1968; TJ; Hale & Cole 1988; Hill 1997 [as “?disciformis”]; Thomson 1997; Brodo et al. 2001 [p. 187, with color photograph]; Greuter et al. 2000 [regarding conservation of type]; Benson 2005; Robertson & Beyer 2005; Knudsen 2007b; Bungartz et al. 2008; Knudsen & Kocourková 2012a)

**Synonyms:** [B. parasema](#), [B. subdisciformis](#), [Hafellia disciformis](#), [Lecidea disciformis](#)

**Note:** Kalb & Elix (1998) distinguished between *B. disciformis* [spores not callisporoid, 18–28 x 7–9  $\mu\text{m}$ , some with 4 cells, with thinner end walls; hymenium oil-inspersed] and *B. parasema* [callisporoid spores, 16–22 x 8–10  $\mu\text{m}$ ], but Bungartz et al. (2008) consider them synonymous.

**Buellia dispersa** A. Massal.  

(Bungartz et al. 2002; Tucker et al. 2006; Knudsen 2007b; Bungartz et al. 2008; Knudsen et al. 2009;

Benson et al. 2012; Benson & Hillyard 2012; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [B. retrovertens](#) (synonymy *fide* Bungartz et al. 2002)

**Buellia elegans** Poelt 📖 🌿

(Rosentreter et al. 2007 [for SE edge of CA])

**Note:** This species has been collected commonly in interior western U. S.

**Buellia erubescens** Arnold 📖 🌿

(Bungartz et al. 2008; *B. Ryan 25455b*, Marble Mtn Wilderness, Siskiyou Co., ASU)

**Synonyms:** [B. stillingiana](#), [B. zahlbruckneri](#) (Imshaug 1951; TJ; synonymy *fide* Bungartz et al. 2008)

**Buellia geophila** (Sommerf.) Lynge 📖 🌿

(Ryan & Nash 1991 [on *Selaginella*, *B. Ryan 12573a*, *B. Ryan 12573b*, Eastern Brook Lakes watershed, 15 km S of Tom's Place, Sierra Nevada, Inyo Co., ASU])

**Buellia georgei** Trinkaus 📖 🌿

(Bungartz et al. 2008 [as “cf.”])

**Note:** Only 3 CA specimens, from San Diego Co., were seen by Bungartz et al. (2008). It was previously known from Australia and NZ.

**Buellia griseovirens** (Turner & Borrer *ex* Sm.) Almb. 📖 🌿

(TJ; Bungartz et al. 2008; Knudsen & Kocourková 2012a; *H. Hasse Exs. 30*, San Gabriel Mts, Los Angeles Co., ASU)

**Synonyms:** [B. hassei](#) (Imshaug 1951)

**Buellia halonia** (Ach.) Tuck. 📖 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1888; Hasse 1896; McClatchie 1897; Hasse 1903b; Herre 1907; Orcutt 1907; Herre 1910; Hasse 1913b; Merrill 1923; Imshaug 1951; Volk 1963; TJ; von Reis 1991; Bratt 1993; McGee 1995; Bowler et al. 1996; Bratt 1997; Bungartz et al. 2005; Robertson 2005b; Bungartz et al. 2008; Knudsen 2009; Knudsen & Kocourková 2009a, 2010f; Stone & Villella 2010; Glacy et al. 2011; Knudsen & Kocourková 2012a)

**Synonyms:** [Lecidea halonia](#)

**Buellia insignis** (Nägeli *ex* Hepp) Th. Fr. 📖 🌿

(Ryan & Nash 1991)

**Buellia mamillana** (Tuck.) W. A. Weber 🌿

(*J. Sheard 5054b*, Santa Rosa Isl., Santa Barbara Co., ASU; *S. Tucker 37796*, Goat Rock, W of Jenner, Sonoma Co., SBBG)

**Buellia maritima** (A. Massal.) Bagl. 📖 🌿

(Bungartz et al. 2008; Knudsen 2009; Knudsen & Kocourková 2009a, 2010a [latter citing a Hasse collection], 2012a; *K. Knudsen 2665*, Point Loma, Cabrillo Nat. Monument, San Diego Co., UCR; coastal S CA)

**Misapplied names:** [B. subalbula](#) for N. Amer. reports *fide* Bungartz (2008)

**Buellia microbola** (Tuck. *ex* Fink) Sheard 📖 🌿

(Sheard 1969; TJ; CA endemic, on central and northern coast)

**Synonyms:** [B. alboatra f. microbola](#) (Tuckerman 1888), [Rinodina microbola](#) (Hedrick 1934; Herre 1944b)

**Buellia muriformis** A. Nordin & Tønsberg 📖 🌿

(Nordin 1999 [showed it as coastal from Santa Cruz Co. northwards]; Tucker et al. 2006; Williams & Sillett 2007; Glacy et al. 2011)

**Note:** *B. muriformis* has large spores (28.5 x 14.5  $\mu\text{m}$ ) with 16–32 cells while *B. penichra* has smaller spores (21.7 x 11.6  $\mu\text{m}$ ) with < 12 cells. Both *B. muriformis* and *B. penichra* have gray thalli, while *B. oidalea* is yellowish and has much larger spores (39.6 x 15.5  $\mu\text{m}$ ) with 13–27 cells. [B. muriformis](#) occurs in northern and central CA, south to San Luis Obispo Co.



**Buellia nashii** Bungartz 📖 🌿

(Bungartz 2004; Knudsen & Kramer 2007; Bungartz et al. 2008; Rajakaruna et al. 2012, on serpentine,



San Benito Co.; *T. Nash 7052*, Ocotillo Wells, San Diego Co., ASU; *B. Ryan 14881*, Death Valley, Inyo Co., ASU)

**Buellia navajoensis** Bungartz  

(Bungartz 2004; Bungartz et al. 2008; *T. Nash 10350*, N of Barstow, San Bernardino Co., ASU)

**Buellia ocellata** (Flörke) Körb.  

(Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Buellia oidalea** (Nyl.) Tuck.  



(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Orcutt 1885; Tuckerman 1888; Eckfeldt 1893; McClatchie 1895; Hasse 1896; McClatchie 1897; Hasse 1903b; Orcutt 1907; Herre 1910; Hasse 1913b; Herre 1945; Imshaug 1951; Thomson & Ketchledge 1958; Weber 1965a [Univ. Colo. Lich. Exs. 88]; Jordan 1968; Lindsay 1973; TJ; Bratt 1987; Hale & Cole 1988; von Reis 1991; Bowler et al. 1996; Bratt 1997; Wright 1997 [as “cf.”], 1998; Nordin 1999; Baltzo 2002; Tucker et al. 2004; Bungartz et al. 2008; Knudsen 2009; Knudsen & Kocourková 2009a, 2010f; Glacy et al. 2011 [as “cf.”]; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [Lecidea aliena](#) (synonymy *fide* Hasse 1898a), [L. oidalea](#), [Rhizocarpon oidaleum](#)

**Note:** Some records may be the newly described *B. muriformis*, which is K+ yellow with spores averaging 28.5 x 15.5  $\mu\text{m}$ , while *B. oidalea* is K- with spores averaging 39.6 x 15.5  $\mu\text{m}$ .

**Buellia papillata** (Sommerf.) Tuck.  



(Robertson 2003b [as “cf.”]; *S. Tucker 37975, 37977*, Bristlecone Pine Forest, Mono Co., SBBG)

**Buellia penichra** (Tuck.) Hasse  

(Orcutt 1903; Hasse 1913b; Herre 1942c, 1945; Imshaug 1951; Lindsay 1973; Hale & Cole 1988; Nordin 1999; Benson 2005; Bungartz et al. 2008; Stone & Villella 2010)

**Synonyms:** [B. oidalea var. penichra](#), [Diplotomma penichrum](#), [Rhizocarpon penichrum](#)

**Note:** Some records may be the newly described *B. muriformis* Nordin & Tønsberg; see notes under *B. muriformis*.

**Buellia prospersa** (Nyl.) Riddle  

(Bungartz et al. 2004; Bungartz et al. 2008; Knudsen & Kocourková 2009b; Knudsen 2009; Knudsen & Kocourková 2010f, 2012a; *C. R. Orcutt 4802*, Colima, Los Angeles Co., ASU; *K. Knudsen 7768*, Santa Rosa Isl., Santa Barbara Co., ASU)

**Buellia pullata** Tuck.  

(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1888; McClatchie 1897; Herre 1910; Hasse 1913b; Fink 1935; TJ; Weber et al. 1987; Knudsen 2007b; Bungartz et al. 2008; Knudsen 2009; Knudsen & Kocourková 2009a, 2010f, 2012a)

**Note:** According to Bungartz et al. (2004) this taxon is fairly common along the CA coast.



**Buellia punctata** (Hoffm.) A. Massal.  

(Herre 1950a; Imshaug 1951; Volk 1963; Jordan 1968; Baltzo 1970; Lindsay 1973; Sigal 1975; TJ; Baltzo 1989; Sigal 1989; von Reis 1991; Bratt 1993; Tucker & Bratt 1996; Tucker et al. 2006; Knudsen 2007b; Knudsen & Kramer 2007; Rosentreter et al. 2007; Bungartz et al. 2008; Knudsen 2009; Knudsen & Kocourková 2009a, 2009c, 2010f; Stone & Villella 2010; Tucker 2010)

**Synonyms:** [Amandinea punctata](#) (synonymy *fide* F. Bungartz [personal communication]), [Buellia myriocarpa](#), [B. myriocarpa var. chloropolia](#), [B. myriocarpa var. ecrustacea](#), [B. myriocarpa var. punctiformis](#), [Catocarpus myriocarpum var. ecrustaceum](#), [C. myriocarpum var. punctiforme](#), [Lecidea myriocarpa](#)

**Buellia ryanii** Bungartz  

(Bungartz et al. 2004; Knudsen 2007b; Bungartz et al. 2008; Knudsen 2009; Knudsen & Kocourková 2009a, 2009c, 2010f, 2012a; *S. Tucker 35781A*, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Buellia sequax** (Nyl.) Zahlbr. s. str.  

(Giralt et al. 2011; Knudsen & Kocourková 2012a)

**Synonyms:** [B. lepidastroidea](#) (Tucker 2010)

**Note:** This name is correct for collections previously identified as *B. lepidastroidea*.

**Buellia schaeereri** De Not. 📖 🌿

(Knudsen & Kocourková 2008b, 2009a; *K. Knudsen 8427.2*, Point Loma, Cabrillo Nat. Monument, San Diego Co., UCR)

**Buellia spuria** (Schaer.) Anzi 📖 🌿

(McClatchie 1897; Hasse 1903b; Herre 1910; Merrill 1923; Imshaug 1951; Sigal 1975; TJ; Sigal 1989; Brodo et al. 2001 [p. 188, with color photograph]; Bungartz et al. 2008; Knudsen et al. 2009; *H. Hasse Exs. 156*, Santa Monica Mts, Los Angeles Co., ASU)

**Synonyms:** [Lecidea spuria](#) (Hasse 1898a)

**Buellia stellulata** (Taylor) Mudd 📖 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1888; Hasse 1896; McClatchie 1897; Hasse 1903b; Orcutt 1903, 1907; Herre 1910; Hasse 1913b; Merrill 1923; Fink 1935; Herre 1950a; Imshaug 1951; Volk 1963; Sigal 1975; TJ; Bratt 1987; Sigal 1989; von Reis 1991; Bratt 1997; Baltzo 2002; Bungartz & Nash 2005; Robertson 2005b; Tucker et al. 2006; Knudsen 2007b; Bungartz et al. 2008; Knudsen & Kocourková 2009a, 2010f; Stone & Vilella 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [Lecidea stellulata](#)

**Buellia tesserata** Körb. 📖 🌿

(Rico et al. 2003, although CA is not mentioned; Bungartz 2004; Knudsen 2007b; Bungartz et al. 2008; Knudsen 2009; Knudsen & Kocourková 2009a, 2009c; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [B. cerussata](#), [B. fimbriata](#), [B. pruinella](#), [Rinodina radiata var. fimbriata](#) Tuck.

**Buellia triphragmioides** Anzi 📖 🌿

(Hasse 1898b; Imshaug 1951; Lindsay 1973; TJ; Bungartz et al. 2008; *B. Ryan 26236b*, San Gabriel Wilderness, Los Angeles Co., ASU; *B. Ryan 26912*, Los Padres N. F., Arroyo Seco Cpgd, Monterey Co., ASU)

**Synonyms:** *Lecidea triphragmoides* Nyl.

**Buellia triseptata** A. Nordin 📖 🌿

(Nordin 1999; Baltzo 2002; Giralt & Nordin 2002; Knudsen & Kramer 2007; Bungartz et al. 2008; *B. Ryan 26236a*, San Gabriel Wilderness, Los Angeles Co., ASU, SBBG; *B. Ryan 23599b*, Sugar Pine Point S. P., El Dorado Co., ASU)

**Misapplied names:** [B. vernicoma](#)

**Buellia tyrolensis** Körb. 📖 🌿

(Benson & Hillyard 2012; *C. Bratt 5014*, Santa Cruz Isl., Santa Barbara Co., SBBG, as *B. novomexicana*)

**Buellia venusta** (Körb.) Lettau 📖 🌿

(Bungartz & Nash 2004b; Bungartz et al. 2008; Knudsen 2009; *S. Tucker 33812b*, Theodolite Rd off Jackson Hwy, south coast, San Nicolas Isl., Ventura Co., SBBG; *K. Knudsen 4458*, Mojave Desert, Granite Mts, San Bernardino Co., UCR)

**Synonyms:** [Diplotomma venustum](#) (Nordin 1996)

**Buellia sp. 1** 📖

(Bungartz et al. 2008)

**Buellia sp. 2** 📖

(Bungartz et al. 2008)

*Buellia alboatra* var. *ambigua* (Ach.) Th. Fr. 📖 🌿

(TJ)

=[Buellia alboatra](#)

*Buellia alboatra* f. *microbola* Tuck. ex Fink 📖 🌿

(Tuckerman 1888)

=[Buellia microbola](#)

*Buellia alboatra* var. *saxicola* (Fr.) Tuck. 📖 🌿

- (Tuckerman 1888; Hasse 1903b; Herre 1910; Hasse 1913b; TJ)  
=[\*B. sequax\*](#)
- Buellia alpicola* (Wahlenb.) Anzi f. *microspora* Nyl. 📖 🌿  
(Tuckerman 1888 [based on Lapham collection from 7,000 ft. in Sierra Nevada])  
=[\*Rhizocarpon alpicola\*](#)
- Buellia ambigua* (Ach.) Malmé 📖 🌿  
(Imshaug 1951)  
=[\*Buellia alboatra\*](#)
- Buellia atroalbella* Nyl. 📖 🌿  
(Hasse 1903b, 1903f)  
=[\*B. aethalea\*](#), but misidentifications for CA
- Buellia bolanderi* Tuck. 📖 🌿  
(TJ for references)  
=[\*Rhizocarpon bolanderi\*](#)
- Buellia bolanderi* var. *sulphurosa* Tuck. ex Willey 📖 🌿  
=[\*Rhizocarpon sulphurosum\*](#) (Lendemer et al. 2010)
- Buellia callispora* (C. Knight) J. Steiner 📖 🌿  
(Lindsay 1973; TJ; based on probable misidentifications, since this species is in the southeastern U. S.; *Hafellia fosteri* Imshaug & Sheard, however, is known from Washington [Sheard 1992], and might be the lichen collected in north coastal CA by Lindsay)
- Buellia cerussata* Llimona & Werner 📖 🌿  
(Bratt 1993; Bowler et al. 1996)  
=[\*B. tesserata\*](#)
- Buellia dialyta* (Nyl.) Tuck. 📖 🌿  
(Tuckerman 1872, 1888; Fink 1935; Imshaug 1951; TJ; Thomson 2003)  
=[\*Chrimofulvea dialyta\*](#)
- Buellia disciformis* var. *triphragmia* (Nyl.) Oliv. 📖 🌿  
(Merrill 1923)  
=[\*B. triphragmia\*](#), but misidentifications for CA
- Buellia fimbriata* (Tuck.) Sheard 📖 🌿  
(Sheard 1969; TJ; von Reis 1991; Scheidegger 1993)  
=[\*B. tesserata\*](#) (synonymy *fide* Rico et al. 2003)
- Buellia fuscoatra* (L.) Fr. 📖 🌿  
(Hasse 1903f)  
=[\*Lecidea fuscoatra\*](#)
- Buellia geographica* (L.) Tuck. 📖 🌿  
(TJ for references)  
=[\*Rhizocarpon geographicum\*](#)
- Buellia geographica* var. *lecanorina* (Körb.) Tuck. 📖 🌿  
(TJ)  
=[\*Rhizocarpon lecanorinum\*](#)
- Buellia hassei* Imshaug ined. 📖 🌿  
(Imshaug 1951)  
=[\*B. griseovirens\*](#)
- Buellia inquilina* Tuck. 📖 🌿  
(Willey 1873a; Hasse 1912, 1915b)  
=[\*Dactylospora inquilina\*](#) (non-lichenized fungus)
- Buellia lactea* Körb. 📖 🌿  
(Tuckerman 1866; Bolander 1870; Tuckerman 1872)  
**Note:** These reports are based on misidentifications for CA.

*Buellia lepidastra* (Tuck.) Tuck. 📖 🍄

(Tuckerman 1888; Hasse 1895; McClatchie 1897; Hasse 1903b; Orcutt 1903, 1907; Herre 1910; Hasse 1913b; Merrill 1923; Fink 1935; Volk 1963; McGee 1998 [as “cf.”]; Baltzo 2002 [as “cf. *lepidastra*”])

**Synonyms:** [Lecidea lepidastra](#) (Hasse 1898a; TJ)

**Note:** This species is restricted to the northeastern U. S.; CA reports represent an undescribed new species, *fide* Bungartz & Nash (2005).

*Buellia lepidastroidea* Imshaug *ex* Bungartz 📖 🍄

(Imshaug 1951; TJ; Robertson 2003b; Bungartz 2004; Bungartz et al. 2008; Tucker 2010)

=[B. sequax](#) s. str.

*Buellia myriocarpa* (DC.) De Not. 📖 🍄

(TJ for references)

=[Buellia punctata](#)

*Buellia myriocarpa* var. *chloropolia* (Fr.) Th. Fr. 📖 🍄

(Hasse 1913b; Moxley 1921; TJ [as var. “*chlorophylla*”])

=[Buellia punctata](#)

*Buellia myriocarpa* var. *ecrustacea* Leight. 📖 🍄

(Hasse 1913b)

=[Buellia punctata](#)

*Buellia myriocarpa* var. *punctiformis* (Hoffm.) Mudd 📖 🍄

(Hasse 1913b; Wheeler 1938)

=[Buellia punctata](#)

*Buellia naegelii* (Hepp) McClatchie 📖 🍄

(McClatchie 1897 [as *Buellia naegelii* Hepp, a name not in Zahlbruckner 1934])

=[Lecania naegelii](#)

*Buellia oidalea* var. *penichra* Tuck. 📖 🍄

(Hasse 1903d)

=[Buellia penichra](#)

*Buellia parasema* (Ach.) De Not. 📖 🍄

(Tuckerman 1866; Bolander 1870; Hasse 1895, 1896; McClatchie 1897; Hasse 1903d; Orcutt 1903, 1907; Hasse 1908b; Herre 1910; Moxley 1921; Imshaug 1951; Thomson & Ketchledge 1958; Hale & Cole 1988)

=[B. disciformis](#) (*fide* Marbach [2000])

**Note:** Kalb & Elix (1998) distinguished *B. parasema* from *B. disciformis*, as described under *B. disciformis*. Bungartz et al. (2008) however consider the two synonymous.

*Buellia parasema* var. *latypea* (Ach.) Nyl. 📖 🍄

(McClatchie 1897 [on rocks, Catalina Isl.])

=[Lecidea plana](#)

\**Buellia parasitica* (Flörke) Th. Fr. 📖 🍄

(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1888; Hasse 1903f; see Zahlbruckner 1931)

=[Dactylospora parasitica](#)

\**Buellia parmiliarum* (Sommerf.) Tuck. 📖 🍄

(Hasse 1915b)

=[Abrothallus parmiliarum](#)

*Buellia petraea* (Wulfen) Branth. & Rostr. 📖 🍄

(Tuckerman 1872, 1888; Blankinship & Keeler 1892; Hasse 1896, 1903b, 1905; Orcutt 1903, 1907)

=[Rhizocarpon petraeum](#)

*Buellia petraea* f. *albinea* Tuck. 📖 🍄

(Hasse 1903f)

=[Rhizocarpon petraeum](#), *fide* Zahlbruckner IV:385

*Buellia petraea* var. *grandis* Flörke 📖 🌿

(Tuckerman 1888)

=[\*Rhizocarpon grande\*](#)

*Buellia petraea* var. *montagnei* Tuck. 📖 🌿

(Tuckerman 1888; Hasse 1896; McClatchie 1897; Orcutt 1903, 1907)

=[\*Rhizocarpon disporum\*](#), *fide* Zahlbruckner (1927)

*Buellia petraea* var. *vulgaris* Tuck. 📖 🌿

(Tuckerman 1872)

=[\*Rhizocarpon petraeum\*](#)

*Buellia pruinella* Imshaug 📖 🌿

(Imshaug 1951)

=[\*B. tesserrata\*](#)

*Buellia pulchella* (Schrad.) Tuck. 📖 🌿

(Hasse 1908b)

=[\*Catolechia wahlenbergii\*](#), but probably a misidentification

*Buellia radiata* Tuck. 📖 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a)

=[\*Dimelaena radiata\*](#)

*Buellia retrovertens* Tuck. 📖 🌿

(Hasse 1909; Herre 1910; Hasse 1913b; Fink 1935; Imshaug 1951; Volk 1963; TJ; von Reis 1991; Bratt 1999; Brodo et al. 2001 [p. 186])

=[\*B. dispersa\*](#) (synonymy *fide* Bungartz et al. 2002, 2004)

*Buellia rinodinoides* Anzi 📖 🌿

(Hasse 1913b; Fink 1935; Wheeler 1938; Herre 1944b)

=[\*Rinodina rinodinoides\*](#) (Sheard 2004)

**Note:** According to J. Sheard (personal communication), early reports were misidentifications, but the species has been collected recently on San Nicolas Isl. and from mainland Santa Barbara Co. in S CA.

*Buellia semitensis* Tuck. 📖 🌿

(Tuckerman 1888; McClatchie 1897; Hasse 1915b; Fink 1935; Herre 1942c; Imshaug 1951; Weber 1963; TJ)

=[\*B. concinna\*](#) (Bungartz et al. 2005)

*Buellia sequax* (Nyl.) Zahlbr. 📖 🌿

(Bungartz et al. 2004; Benson 2005; Knudsen 2005c, 2007b; Bungartz et al. 2008; Knudsen 2009; Knudsen & Kocourková 2009a, 2009c; Tucker 2010; Benson et al. 2012; *C. Bratt 3592*, along Bayside Trail, Point Loma, Cabrillo Nat. Monument, San Diego Co., ASU; *S. Tucker 28815*, 1.6 km E of Pacheco Pass summit on old State Hwy 152 near San Luis Reservoir, Merced Co., det. F. Bungartz, ASU)

**Synonyms:** [\*B. alboatra\* var. \*saxicola\*](#) (Fr.) Tuck., [\*Lecidea alboatra\* var. \*saxicola\*](#) (Hasse 1898a)

**Note:** This name has been misapplied to *B. abstracta*.

*Buellia stigmaea* Tuck. 📖 🌿

(Tucker 2002)

=[\*B. maculata\*](#) Bungartz (Bungartz & Nash 2005, who cite no specimens from W of Illinois)

**Note:** Tucker reported *B. Ryan* collections from CA, but these now have been removed from ASU database; this species does not reach CA, *fide* F. Bungartz (personal communication).

*Buellia stillingiana* J. Steiner 📖 🌿

(Benson 2005; eastern half of U. S. and Pacific Coast from Washington northward, *fide* Brodo et al. 2001)

=[\*B. erubescens\*](#)

*Buellia subalbula* (Nyl.) Müll. Arg. 📖 🌿

(Bungartz & Nash 2004b; *S. Tucker 33692A*, San Nicolas Isl.: NAVFAC Rd, Ventura Co., SBBG, det.

F. Bungartz)

=[\*B. maritima\*](#) for N. Amer. reports

*Buellia subdisciformis* (Leight.) Vain. 📖 🌿

(Hasse 1915b)

=[\*Buellia disciformis\*](#)

**Note:** This is probably a misidentification; it is reported reliably in Sinaloa, Mexico but not in Sonoran CA. *fide* F. Bungartz (personal communication). See under *B. disciformis* for differences noted by Kalb & Elix (1998).

*Buellia triphragmia* (Nyl.) Arnold 📖 🌿

(Hasse 1903b; Orcutt 1903)

**Note:** These reports are probably misidentifications, since Hasse did not repeat the report in his definitive 1913b paper.

*Buellia turgescens* Tuck. 📖 🌿

(Hasse 1915b; Imshaug 1951; Volk 1963; TJ; von Reis 1991; Bratt 1999; Thomson 2003; Benson 2005)

=[\*B. badia\*](#) (synonymy *fide* Bungartz & Nash 2004a)

*Buellia vernicoma* (Tuck.) Tuck. 📖 🌿

(McGee 1998 [as “cf.”])

=name misapplied to [\*Buellia triseptata\*](#)

*Buellia verruculosa* (Sm.) Mudd 📖 🌿

(Sheard 1969; TJ)

=[\*B. aethalea\*](#), but misidentifications for CA (synonymy *fide* Esslinger 2011)

*Buellia vilis* Th. Fr. 📖 🌿

(Hasse 1915b; Sigal 1975; TJ; Sigal 1989; *L. Sigal 235*, Little Red Mtn, Mendocino Co.)

**Note:** These reports are probably based on misidentifications, because this is a high-elevation European species, also known in Arizona from one collection, *fide* Bungartz (2004).

*Buellia zahlbruckneri* J. Steiner 📖 🌿

(Imshaug 1951; TJ)

=[\*B. erubescens\*](#) *fide* Giralt et al. (2000)

**Note:** Giralt said that Schauer (1965) incorrectly neotypified *B. zahlbruckneri*, selecting a specimen of *B. chloroleuca* as the type. Giralt's conclusions have been verified by Bungartz (personal communication).

## **BUELLIELLA** Fink

\***Buelliella inops** (Triebel & Rambold) Hafellner 📖 🌿

(Diederich 2003; Hafellner 2004 [rare, on *Caloplaca* spp.]; Knudsen 2007b [Santa Monica Mts, Ventura Co.]; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *S. Tucker 7964B*, on *Caloplaca* sp., Rocky Nook City Park, Santa Barbara, Santa Barbara Co., SBBG, det. K. Knudsen)

\***Buelliella physciicola** Poelt & Hafellner 📖 🌿

(Esslinger & Egan 1995 [under Appendix, New records for N. Amer., p. 539, based on *H. Hasse*, Topanga Cyn, Santa Monica Mts, Los Angeles Co., UPS]; Alstrup & Cole 1998; Diederich 2003; Hafellner 2004; Knudsen & Kramer 2007; Tucker 2010; Kocourková et al. 2012; *Rundel 3214*, Hastings Natural History Reserve, Monterey Co., UPS; *T. Nash 32836*, Santa Rosa Isl., Santa Barbara Co., ASU; on *Phaeophyscia* spp.)

\***Buelliella parmeliarum** (Sommerf.) Fink 📖 🌿

(Hasse 1915b; Fink 1935; TJ)

=[\*Abrothallus parmeliarum\*](#)

## **BYSSOLOMA** Trevis.

**Byssoloma leucoblepharum** (Nyl.) Vain. 📖 🌿



(Tucker 2009a; Vilella & Carlberg 2012, mentioned from Oregon, not from CA; *S. Tucker* 35280, Pygmy Forest, Mitchell Creek Drive near Fort Bragg, Mendocino Co., SBBG)

**Byssoloma marginatum** (Arnold) Sérus. 🍄 🌿

(Williams & Sillett 2007, foliicolous on redwood; Vilella & Carlberg 2012)

*Byssoloma subdiscordans* (Nyl.) P. James 🍄 🌿

(Vilella & Carlberg 2012, mentioned from Oregon, not from CA)

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

**CAERULEUM** K. Knudsen & L. Arcadia (Arcadia & Knudsen 2012)

**Caeruleum heppii** (Nägeli *ex* Körb.) K. Knudsen & L. Arcadia 🍄 🌿

(Arcadia & Knudsen 2012)

**Synonyms:** [Acarospora aeruginosa](#) (synonymy *fide* Thomson 1997, p. 27), [A. heppii](#), [Myriospora heppii](#)

**Note:** Range includes Los Angeles, Riverside, San Bernardino, and Santa Barbara counties.

**CALICIUM** Pers.

**Calicium abietinum** Pers. 🍄 🌿

(Fink 1935; Thomson & Ketchledge 1958; Lindsay 1973; Tibell 1975; TJ; Thomson 1997; Tucker 1997; Goward 1999; Rikkinen 2003; Thomson 2003; Tibell & Ryan 2004 [for Channel Is.]; Tucker et al. 2004; Stone & Vilella 2010; Knudsen & Kocourková 2012a)

**Synonyms:** [C. curtum](#)

**Calicium adaequatum** Nyl. 🍄 🌿

(Pinelli & Jordan 1978; TJ; Goward 1999; Rikkinen 2003; *B. Ryan* 24443, 5 km SW of Fraser Flat, Tuolumne Co., ASU)

**Calicium adpersum** Pers. 🍄 🌿

(Goward 1999; Peterson & Rikkinen 1999; Rikkinen 2003; Peterson 2006 [known from only one location in CA, in Del Norte Co.]

**Calicium corynellum** (Ach.) Ach. 🍄 🌿

(Wetmore 1985; Kolb & Spribille 2001; *K. Knudsen* 9992, North Fork of San Jacinto River, San Jacinto Mts, Riverside Co., UCR)

**Note:** According to Tibell & Ryan (2004), this taxon occurs only in Arizona in Sonoran region. However, Wetmore's 1985 report, verified by Kolb & Spribille (2001), was from Sequoia N. P., Tulare Co., north of the Sonoran region in CA.

**Calicium glaucellum** Ach. 🍄 🌿

(Pinelli & Jordan 1978; TJ; Tucker 1997; Wright 1998; Goward 1999; Bourell 2000; Rikkinen 2003; Tibell & Ryan 2004 [for S CA]; Williams & Sillett 2007; Knudsen & Kocourková 2012a)

**Note:** Collections are known from El Dorado, Marin, Riverside, San Luis Obispo, Santa Barbara, Sierra, Trinity counties, ASU, SBBG, UCR.

**Calicium lenticulare** Ach. 🍄 🌿

(Goward 1999; Robertson 2002a; Rikkinen 2003; Williams & Sillett 2007)

**Calicium lutescens** Tibell 🍄 🌿

(Williams & Sillett 2007 [as “*cf. lutescens*”])

**Calicium salicinum** Pers. 🍄 🌿

(Rikkinen 2003)

**Calicium sequoiae** Williams & Tibell 🍄 🌿

(Williams & Tibell 2008; Vilella 2012)

**Calicium viride** Pers. 🍄 🌿

(Pinelli & Jordan 1978; TJ; Wetmore 1987; Goward 1999; Brodo et al. 2001 [pp. 193–194, with color photograph]; Rikkinen 2003; Williams & Sillett 2007; Peterson 2008)

**Synonyms:** [C. hyperellum](#)

*Calicium albonigrum* Nyl. 📖 🌿

(Jordan 1968)

=[Mycocalicium albonigrum](#)

*Calicium chrysocephalum* Ach. 📖 🌿

(Bolander 1870)

=[Chaenotheca chrysocephala](#)

*Calicium curtisii* Tuck. 📖 🌿

(McClatchie 1897; Hasse 1898a; Orcutt 1909; Hasse 1915b; Fink 1935; Lindsay 1973)

=[Phaeocalicium curtisii](#)

*Calicium curtum* Turner & Borrer 📖 🌿

(Herre 1910; West & Doell 1995)

=[C. abietinum](#)

*Calicium hyperellum* (Ach.) Ach. 📖 🌿

(Bolander 1870; Tuckerman 1872; Willey 1873a; Herre 1912a; Hasse 1913b; Fink 1935; Herre 1945; Tibell & Ryan 2004)

=[C. viride](#)

†*Calicium parietinum* Ach. ex Schaer. 📖 🌿

(Hasse 1905, 1913b; Merrill 1923)

=[Mycocalicium subtile](#)

*Calicium parietinum* var. *albonigrum* Nyl. 📖 🌿

(Tuckerman 1872)

=[Mycocalicium albonigrum](#)

*Calicium parvum* Tibell 📖 🌿

(Goward 1999; *H. Thiers 38241*, Calaveras Co., SFSU)

**Note:** It is likely that the Goward report was based on the Thiers collection, which probably was misidentified.

†*Calicium populneum* Brond. ex Duby 📖 🌿

(Herre 1910; Fink 1935)

=[Phaeocalicium populneum](#)

\**Calicium pusillum* (Ach.) Flörke 📖 🌿

(Hasse 1908b; Fink 1935; TJ)

=[Chaenothecopsis pusilla](#)

†*Calicium subtile* Pers. 📖 🌿

(Tuckerman 1866; Bolander 1870; Herre 1950a; Jordan 1968)

=[Mycocalicium subtile](#)

*Calicium turbinatum* Pers. 📖 🌿

(Orcutt 1903, 1907)

=[Sphinctrina turbinata](#)

**CALOPLACA** Th. Fr.

**Caloplaca albovariegata** (B. de Lesd.) Wetmore 📖 🌿

(Wetmore 1994, 2008; Knudsen & La Doux 2006; Knudsen 2007b; Wetmore 2008; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *Wetmore 16974A*, Cpgd, NW of Descanso, N of US Hwy 80, San Diego Co., MIN; *Shushan 11088*, Searsville Lake, San Mateo Co., COLO)

**Caloplaca ammiospila** (Wahlenb.) H. Olivier 📖 🌿

(TJ; Robertson 2003b [as “cf.”]; but based on a misidentification; Wetmore 2008; Knudsen & Kocourková 2012a; *H. Imshaug 17959*, summit of Mt. Whitney, Sierra Nevada Mts, Tulare/Inyo counties, MSC; *T. Nash 32055*, Santa Catalina Isl., Los Angeles Co., ASU)

**Synonyms:** [Blastenia ferruginea](#) var. [ammiospila](#)

**Caloplaca approximata** (Lyngé) H. Magn. 📖 🌿

(Benson et al. 2012)

**Note:** Known collections are from inland western states at ASU, SBBG, UCR.

**Caloplaca arenaria** (Pers.) Müll. Arg. 📖 🌿

(Ryan & Nash 1991; Doell et al. 1999; Bourell 2000; Brodo et al. 2001 [pp. 196–197, with color photograph]; Robertson 2003b; Knudsen 2007b; Knudsen & Kramer 2007; Wetmore 2008; Knudsen & Kocourková 2009c; Tucker 2010; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan 24659a*, Carson-Iceberg Wilderness, Alpine Co., ASU, SBBG; *B. Ryan 25048*, Gold Flat, Klamath N. F., Siskiyou Co., ASU; *K. Knudsen 10306*, Santa Ana Mts, Orange Co., UCR)

**Caloplaca atroalba** (Tuck.) Zahlbr. 📖 🌿

(Wetmore 1994; Thomson 2003; Wetmore 2008; *H. Hasse 883*, near Elsinore, Riverside Co., 1898, MIN; *K. Knudsen 9704*, Mojave Desert, Granite Mts, San Bernardino Co., UCR)

**Caloplaca atroflava** (Turner) Mong. 📖 🌿

(Riefner, Bowler, & Ryan 1995 [San Luis Obispo Co.]; Wetmore 1996, 2008; Knudsen 2007b; Knudsen & Kocourková 2009c; Tucker 2010; Knudsen & Kocourková 2012a; *K. Knudsen 5151.2*, Santa Monica Mts, Ventura Co., UCR)

**Caloplaca atosanguinea** (G. Merr.) I. M. Lamb 📖 🌿

(Wetmore 1994 [cited Siskiyou and Tulare county collections]; Baltzo 2002; *B. Ryan 25181*, Marble Mtn Wilderness, Siskiyou Co., ASU, MIN)

**Caloplaca austrocitrina** Vondrák, Riha, Arup & Söchting 📖 🌿

(Knudsen & Kocourková 2010g, based on *K. Knudsen 8281*, on concrete, intertidal zone, Ballona Creek, Los Angeles Co., UCR)

**Caloplaca biatorina** (Trevis.) J. Steiner 📖 🌿

(Gaya 2009 [reported 3 CA collections including a Hasse collection from Santa Monica Mts, and a historic record from San Gabriel Mts]; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *K. Knudsen 6003*, Santa Rosa Plateau, Riverside Co., UCR)

**Caloplaca bolacina** (Tuck.) Herre 📖 🌿

(Herre 1910; Hasse 1913b; Merrill 1923; Fink 1935; Magnusson 1944; Thomson & Ketchledge 1958; Volk 1963; Baltzo 1970 [as “? *bolacinum* sensu Herre 1910”]; TJ; Baltzo 1989; von Reis 1991; Arup 1995a; Riefner, Bowler, & Ryan 1995; West & Doell 1995; Bowler et al. 1996; Bratt 1997; Robertson et al. 1998 [as “cf.”]; Brodo et al. 2001 [p. 197, with color photograph]; Tucker et al. 2004; Benson 2005; Knudsen 2007b; Wetmore 2008; Knudsen 2009; Knudsen & Kocourková 2009a, 2009c; Vondrák et al. 2009; Knudsen & Kocourková 2010f; Rotter 2010; Tucker 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [Placodium bolacinum](#), [Pyrenodesmia bolacina](#)

**Caloplaca brattiae** W. A. Weber 📖 🌿

(Weber 1989b; Riefner, Bowler, & Ryan 1995; Wetmore & Kärnefelt 1998; Bratt 1999; Doell 2002; Wetmore 2008; Knudsen 2009; Knudsen & Kocourková 2012a; *K. Knudsen 5631*, Santa Monica Mts, Ventura Co., UCR)

**Caloplaca californica** Zahlbr. 📖 🌿

(Keissler 1926; Magnusson 1944; Rudolph 1955; Lindsay 1973; Weber et al. 1987; TJ; von Reis 1991; Bratt 1993; McGee 1995; Bowler et al. 1996; Tavares 1996)

**Synonyms:** [Pyrenodesmia californica](#)

**Note:** This species occurs in central and N CA.

**Caloplaca catalinae** H. Magn. 📖 🌿

(Magnusson 1944; TJ; Wetmore 1994, who suggested that this may be a synonym of *C. atosanguinea*; Bowler et al. 1996; Wetmore 2008; Knudsen & Kocourková 2012a; *C. Bratt 7450*, Rancho Las Flores near Los Alamos, Santa Barbara Co., ASU, SBBG; CA endemic)

**Synonyms:** [Blastenia catalinae](#)

**Caloplaca cerina** (Ehrh. ex Hedw.) Th. Fr. 📖 🌿

(Herre 1910; Hasse 1913b; Merrill 1923; Thomson & Ketchledge 1958; Volk 1963; Jordan 1968; Weber et al. 1987; TJ; Ryan & Nash 1991; von Reis 1991; Riefner, Bowler, & Ryan 1995; Tucker & Bratt 1995, 1996; Hill 1997; Wright 1997 [as var. *cerina*]; Robertson et al. 1998 [as “cf.”]; Bratt 1999; Brodo et al. 2001 [p. 197, with color photograph, as var. *cerina*]; Baltzo 2002; Tucker et al. 2004, 2006; Wetmore 2007, 2008; Knudsen et al. 2009; Knudsen & Kocourková 2010f; Stone & Villella 2010; Tucker 2010; Glacy et al. 2011; Knudsen & Kocourková 2012a)

**Synonyms:** [C. gilva](#), [C. stillicidiorum](#), [C. ulmorum](#), [Lecanora cerina](#), [Placodium cerinum](#), [Pyrenodesmia cerina](#)

**Caloplaca chlorina** (Flot.) H. Olivier 📷 🌿

(Wetmore 1996; *Wetmore 51152* and *J. Blakeman 364*, Sequoia N. P., Tulare Co., MIN)

**Caloplaca citrina** (Hoffm.) Th. Fr. 📷 🌿

(Herre 1910; Hasse 1913b; Jordan 1968; Lindsay 1973; TJ; von Reis 1991; Tucker 1999; Wetmore 2001; Brodo et al. 2001 [p. 198, with color photograph]; Baltzo 2002; Tucker et al. 2004; Robertson 2005a; Carlberg et al. 2007; Knudsen 2007b; Robertson & Robertson 2008; Wetmore 2008; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Tucker 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Note:** According to Vondrák et al. (2009), presence of *C. citrina* is not confirmed outside Europe, but see Wetmore (2008).

**Caloplaca cladodes** (Tuck.) Zahlbr. 📷 🌿

(TJ; Ryan & Nash 1991; Wetmore & Kärnefelt 1998; *B. Ryan 12664*, Eastern Brook Lakes watershed, Sierra Nevada Mts, Inyo Co., ASU)

**Synonyms:** [Placodium cladodes](#)

**Caloplaca coralloides** (Tuck.) Hulting 📷 🌿

(Hulting 1896; Zahlbruckner 1907; Herre 1910; Hasse 1913b; Merrill 1923; Fink 1935; Wheeler 1938; Herre 1945; TJ; Hale & Cole 1988; von Reis 1991; Bowler et al. 1996; Wetmore & Kärnefelt 1998; Wright 2000; Brodo et al. 2001 [pp. 198–199, with color photograph]; Wetmore 2008; Knudsen 2009; McCune & Geiser 2009; Knudsen & Kocourková 2010f; Stone & Villella 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [Placodium coralloides](#) (TJ for references), [Polycauliona coralloides](#) (TJ for references)

**Caloplaca crenulatella** (Nyl.) Oliv. 📷 🌿

(Knudsen 2006a, 2007b; Wetmore 2008; Knudsen et al. 2009; Knudsen & Kocourková 2009c, 2012a [with photograph, Plate 4B, p. 180]; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *K. Knudsen 2963*, Palomar S. P., San Diego Co., UCR; *B. Ryan 31021*, Santa Rosa Isl., Santa Barbara Co., ASU; *B. Ryan 27052*, Monterey Co., ASU; *B. Ryan 32212*, West Fork Ranger Station, Madera Co., ASU)

**Caloplaca decipiens** (Arnold) Blomb. & Forss. 📷 🌿

(Anderson 1962; Baltzo 1970; Weber et al. 1987; TJ; Baltzo 1989; Wetmore & Kärnefelt 1998; Doell et al. 1999; Knight et al. 2002; Carlberg et al. 2007; Knudsen 2007b; Wetmore 2008; Knudsen & Kocourková 2009c; Stone & Villella 2010)

**Caloplaca demissa** (Körb.) Arup & Grube 📷 🌿

(Arup & Grube 1999 [based the transfer of this puzzling sterile lobate crust to *Caloplaca* on molecular evidence]; Robertson & Robertson 2001 [from Marin, Mendocino, Napa, Solano, and Sonoma counties]; Benson 2005; Carlberg et al. 2007; Knudsen 2007b; Wetmore 2008; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [Lecanora demissa](#), [L. subolivascens](#)

**Caloplaca durietzii** H. Magn. 📷 🌿

(Knudsen & Werth 2008; Wetmore 2008; Knudsen & Kocourková 2012a; *P. van den Boom 29529*, Joshua Tree N. P., Riverside Co., ASU)

\***Caloplaca epithallina** Lynge 📷 🌿

(Wetmore 1983, 1985; Ryan & Nash 1991; Riefner, Bowler, & Ryan 1995; Bratt 1999; Brodo et al. 2001 [p. 199, with color photograph]; Robertson & Beyer 2005; Knudsen 2007b; Knudsen & Kramer

2007; Wetmore 2008; Knudsen & Kocourková 2009c; Kocourková et al. 2012; Rajakaruna et al. 2012, on serpentine, San Benito Co.; Knudsen collections, common on various crusts from Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, and Ventura counties., UCR)

**Caloplaca eugyra** (Tuck.) Zahlbr. 📖 🌿

(Wetmore 2008)

**Synonyms:** [Placodium eugyrum](#)

**Caloplaca feracissima** H. Magn. 📖 🌿

(Wetmore 1985; Brodo et al. 2001 [p. 199, in central Sierra Nevada, with color photograph]; Tucker 2002 [pointed out rarity]; *C. Wetmore 50760*, near Ladybug Cpgd E of South Fork Ranger Station, Sequoia N. P., Tulare Co., MIN)

**Caloplaca ferruginea** (Huds.) Th. Fr. 📖 🌿

(Herre 1942a; Volk 1963; Jordan 1968; Baltzo 1970; Lindsay 1973; TJ; Baltzo 1989; Tucker & Bratt 1995 [as “cf.”], 1996; Wright 1997; Bratt 1999; Brodo et al. 2001 [p. 195]; Baltzo 2002; Tucker et al. 2004; Wetmore 2008; Glacy et al. 2011 [as “cf.”]; Knudsen & Kocourková 2012a)

**Synonyms:** [Blastenia ferruginea](#), [Lecanora ferruginea](#), [Placodium ferrugineum](#), [Pyrenodesmia ferruginea](#)

**Caloplaca flavogranulosa** Arup 📖 🌿

(Arup 1993b, 1995b; Brodo et al. 2001 [p. 200, with color photograph]; Vondrák et al. 2009; *U. Arup L-89290*, Trinidad State Beach, Humboldt Co., ASU; *U. Arup L-89288*, Russian Gulch S. P., Mendocino Co., ASU)

**Note:** According to Arup (1993b) this species occurs S to Monterey Co. in CA.

**Caloplaca flavorubescens** (Huds.) J. R. Laund. 📖 🌿

(von Reis 1991; Bratt 1993; Brodo et al. 2001 [pp. 200–201 with color photograph]; Benson 2005)

**Synonyms:** [C. aurantiaca](#), [Placodium aurantiacum](#), [Pyrenodesmia aurantiaca](#)

**Note:** Reports from S CA are probably *C. stipitata*.

**Caloplaca flavovirescens** (Wulfen) Dalla Torre & Sarnth. 📖 🌿

(TJ; Wright 1997 [as “?”]; Bourell 2000; Baltzo 2002; Tucker 2002 [pointing out its rarity]; Wetmore 2008; Tucker 2010)

**Synonyms:** [C. erythrella var. rubescens](#), [Pyrenodesmia flavovirescens](#)

**Note:** The map in Brodo et al. (2001, p. 201, with color photograph) does not show this species on the West Coast of N. Amer.

**Caloplaca holocarpa** (Hoffm. ex Ach.) A. E. Wade 📖 🌿

(TJ; Tucker & Bratt 1996; Wright 1997; Bourell 2000; Baltzo 2002; Tucker et al. 2006; Knudsen 2007b; Williams & Sillett 2007; Wetmore 2008; Knudsen 2009; Color photograph in Arup 2009, although giving only European distribution; Knudsen & Kocourková 2009a)

**Note:** According to Arup (2009), reports of corticolous *C. holocarpa* usually refer to *C. pyracea*.

**Caloplaca ignea** Arup 📖 🌿

(Arup 1995a, 1995b; Wetmore & Kärnefelt 1998; Bratt 1999; Brodo et al. 2001 [p. 202, with color photograph]; Benson 2005; Carlberg et al. 2007; Knudsen 2007b; Wetmore 2008; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Caloplaca impolita** Arup 📖 🌿

(Arup 1995a, 1995b; Robertson et al. 1998 [as “cf.”]; Wetmore & Kärnefelt 1998; Benson 2005; Knudsen 2007b; Wetmore 2008; Knudsen & Kocourková 2010f; Tucker 2010; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Caloplaca inconspicua** Arup 📖 🌿

(Arup 1995a, 1995b; Brodo et al. 2001 [pp. 202–203, with color photograph]; Vondrák et al. 2009; Stone & Villella 2010; Benson et al. 2012; *S. Tucker 37583*, Mt. Tamalpais, Marin Co., SBBG)

**Caloplaca jungermanniae** (Vahl) Th. Fr. 📖 🌿

(Wetmore 1985; Robertson & Beyer 2005; *B. Ryan 25284*, Marble Mtn Wilderness, 1.6 km along Shackleford Creek, Siskiyou Co., ASU; *B. Ryan 24550*, Emigrant Wilderness, Tuolumne Co., ASU)

- Caloplaca lactea** (A. Massal.) Zahlbr. 🌱  
(*B. Ryan 32212*, North Fork Ranger Station grounds, Sierra N. F., Madera Co., ASU)
- Caloplaca lecanoroides** Lendemer 🌱  
(Lendemer et al. 2010 [by waterfalls at Yosemite N. P.]; Villella 2012)
- Caloplaca ludificans** Arup 🌱  
(Arup 1995a, 1995b; Doell 2002; Knudsen 2007b; Wetmore 2008; Knudsen 2009, 2009; Vondrák et al. 2009; Knudsen & Kocourková 2010f; Benson et al. 2012; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)
- Caloplaca luteominia** var. **bolanderi** (Tuck.) Arup 🌱  
(Arup 1993a [pp. 137–138]; Bowler et al. 1996; Wright 1997; Tucker 1999; Brodo et al. 2001 [p. 203, with color photograph]; Knudsen 2007b; Wetmore 2008; Knudsen & Kocourková 2009a, 2010f, 2012a; CA endemic)  
**Synonyms:** [C. bolanderi](#), [C. ferruginea](#) var. [bolanderi](#), [Blastenia ferruginea](#) var. [bolanderi](#), [Placodium ferrugineum](#) f. [bolanderi](#),
- Caloplaca luteominia** (Tuck.) Zahlbr. var. **luteominia** 🌱  
(TJ; Arup 1995a; Bratt 1997; Brodo et al. 2001 [p. 203]; Doell 2002; Tucker et al. 2006; Knudsen 2007b; Wetmore 2008; Knudsen 2009; Knudsen & Kocourková 2009a; Vondrák et al. 2009; Knudsen & Kocourková 2010f; Stone & Villella 2010; Tucker 2010; Benson et al. 2012; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)  
**Synonyms:** [Blastenia luteominia](#), [C. laeta](#), [Placodium luteominium](#), [P. subpyraceelum?](#), [Pyrenodesmia laeta](#), [P. luteominia](#)
- Caloplaca marina** (Wedd.) Zahlbr. subsp. **americana** Arup 🌱  
(Arup 1992a, 1995b; Doell 2002; Wetmore 2008; Knudsen 2009; Vondrák et al. 2009; Glacy et al. 2011; Knudsen & Kocourková 2012a)
- Caloplaca marmorata** (Bagl.) Jatta 🌱  
(Knudsen & La Doux 2005; Wetmore 2008; Knudsen 2009; Knudsen & Kocourková 2012a; *C. Bratt 3711B*, Santa Barbara Isl., Santa Barbara Co., SBBG; *K. Knudsen 6767*, San Miguel Isl., Santa Barbara Co.; new to N. Amer.)
- Caloplaca microphyllina** (Tuck.) Hasse 🌱  
(Hasse 1913b; Fink 1935; Herre 1942c; TJ; Brodo et al. 2001 [p. 198]; Tucker et al. 2004; Wetmore 2005, 2008 [2007]; Knudsen & Kocourková 2009c, 2012a)  
**Synonyms:** [Placodium microphyllum](#)
- Caloplaca nashii** Nav.-Ros., Gaya, & Hladún 🌱  
(Knudsen & La Doux 2005, 2006; Knudsen 2006a, 2007b; Wetmore 2005, 2008; Knudsen et al. 2009; Knudsen & Kocourková 2009a, 2009c; Tucker 2010; Knudsen & Kocourková 2012a; *K. Knudsen 5265*, Mojave Desert, Joshua Tree N. P., Riverside Co., UCR)
- Caloplaca obamae** K. Knudsen 🌱  
(Knudsen 2009; Knudsen & Kocourková 2012a; *K. Knudsen 10545*, Santa Rosa Isl., Santa Barbara Co., UCR, sterile soil crust; Villella 2012; CA endemic)
- Caloplaca oblongula** (H. Magn.) Wetmore 🌱  
(Rajakaruna et al. 2012, on serpentine, San Benito Co.)
- Caloplaca oregona** H. Magn. 🌱  
(Lindsay 1973; TJ; von Reis 1991; Bowler et al. 1996; Benson 2005; *T. Nash 11359*, along State Hwy 253, 11 km E of Hwy 128, Mendocino Co., ASU)
- Caloplaca pacifica** Wetmore 🌱  
(Wetmore 2007 [as “sp. 2”]; on rock, S CA, like *C. ferruginea*)
- Caloplaca parviloba** Wetmore 🌱  
(Wetmore 2003 [reported *B. Ryan 26051* collection from Riverside Co., ASU]; Wetmore 2008; *C. Bratt L-13067*, Vandenberg Air Force Base, Santa Barbara Co., SBBG)
- Caloplaca peliophylla** (Tuck.) Zahlbr. 🌱

(Fink 1935; Herre 1944b [*C. L. Brown*, Marin Co.]; TJ; Wetmore 1994, 2008; Knudsen & Kocourková 2012a; *T. Nash 32731b*, Hi Mtn, San Luis Obispo Co., ASU; not CA endemic; see collections from Baja California at ASU)

**Synonyms:** [\*Gasparrinia peliophylla\*](#), [\*Placodium peliophyllum\*](#)

**Caloplaca pellodella** (Nyl.) Hasse 📖 🌿

(Hasse 1913b; Fink 1935; TJ; Wetmore 1996; Doell et al. 1999; Brodo et al. 2001 [pp. 203–204, with color photograph]; Paz-Bermúdez et al. 2006; Wetmore 2008; *K. Knudsen 3026*, Joshua Tree N. P., Mojave Desert, San Bernardino Co., UCR)

**Synonyms:** [\*Lecanora pellodella\*](#), [\*Pyrenodesmia pellodella\*](#)

**Caloplaca persimilis** Wetmore 📖 🌿

(Wetmore 2005, 2008; Knudsen & Kocourková 2009b; Tucker 2010; *S. Tucker 10995*, foothills of Santa Lucia Range, W of Creston, San Luis Obispo Co., SBBG, det. C. Wetmore)

**Caloplaca pinicola** H. Magn. 📖 🌿

(Wetmore 2007)

**Caloplaca pygmaea** Wetmore 📖 🌿

(Wetmore 2008; *C. Bratt 3311A*, Figueroa Mtn, Santa Barbara Co., ASU, SBBG, det. C. Wetmore)

**Caloplaca pyracea** (Ach.) Th. Fr. 📖 🌿

(Fink 1935; Wheeler 1938; Jordan 1968; Knudsen & Kocourková 2009c; color photograph in Arup 2009, although only European distribution; Tucker 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

=[\*C. holocarpa\*](#), but distinct according to Arup (2009)

**Synonyms:** [\*Placodium cerinum\* var. \*pyraceum\*](#), [\*Lecanora pyracea\*](#), [\*Pyrenodesmia pyracea\*](#)

**Note:** Arup (2009) claims that *C. pyracea* is generally saxicolous.

**Caloplaca rosei** Hasse 📖 🌿

(Arup 1992a; Bratt 1993; Bowler et al. 1996; Wetmore & Kärnefelt 2000; Wetmore 2008; Knudsen 2009; Vondrák et al. 2009; Knudsen & Kocourková 2010f, 2012a; *C. Bratt 3390*, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Caloplaca saxicola** (Hoffm.) Nordin 📖 🌿

(Weber et al. 1987; Hale & Cole 1988; Bowler & Riefner 1990; Bratt 1993; Bowler et al. 1996; Thomson 1997; Robertson et al. 1998 [as “cf.”]; Wetmore & Kärnefelt 1998; Doell et al. 1999; Knight et al. 2002; Wetmore 2008; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Rotter 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [\*C. murorum\*](#), [\*Gasparrinia murorum\*](#), [\*Lecanora murorum\*](#), [\*L. murorum\* subsp. \*tegaris\*](#), [\*L. tegaris\*](#), [\*Placodium murorum\*](#), [\*P. murorum\* var. \*gyalolechioides\*](#), [\*P. murorum\* var. \*miniatum\*](#), [\*P. murorum\* var. \*obliterascens\*](#)

**Caloplaca sideritis** (Tuck.) Zahlbr. 📖 🌿

(Bratt 1993; Wetmore 1996)

**Synonyms:** [\*Placodium cerinum\* var. \*sideritis\*](#) [\*Pyrenodesmia sideritis\*](#)

**Caloplaca sonorae** Wetmore 📖 🌿

(Wetmore 2008 shows CA on map; *S. Tucker 35559*, Big Rocks, 2.8 mi. N of CA Hwy 166, Los Padres N. F., San Luis Obispo Co., SBBG, det. C. Wetmore; described in Wetmore [1996], but CA not mentioned)

**Caloplaca squamosa** (B. de Lesd.) Zahlbr. 📖 🌿

(Sigal 1975; TJ; Sigal 1989; Hill 1997; McGee 1998 [as “cf.”]; Baltzo 2002; Wetmore 2003; Robertson 2005c [as “cf.”]; Wetmore 2008; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Tucker 2010; Knudsen & Kocourková 2012a; *T. Nash 8338*, Ocotillo Wells, San Diego Co., ASU)

**Caloplaca stanfordensis** H. Magn. 📖 🌿

(Magnusson 1944; Weber 1967a; Baltzo 1970; Lindsay 1973; TJ; Weber et al. 1987; Baltzo 1989; Weber 1989a, 1989b; Bowler et al. 1996; Tavares 1996; Tucker et al. 2004, 2006; Wetmore 2008; Knudsen 2009; Knudsen & Kocourková 2009b, 2010f; Tucker 2010; Knudsen & Kocourková 2012a;

*W. Weber*, Univ. Colo. Lich. Exs. 193, Santa Catalina Isl., Los Angeles Co.; *W. Weber*, Univ. Colo. Lich. Exs. 695, ASU; *S. Tucker* 38304, campus of Univ. of Calif., Santa Cruz, Santa Cruz Co., SBBG)

**Synonyms:** [\*Pyrenodesmia stanfordensis\*](#)

***Caloplaca stantonii*** *W. A. Weber ex Arup* 📷 🌿

(Weber 1989a; Arup 1992b, 1995b; Bowler et al. 1996; Wetmore 2008; Knudsen 2009; Knudsen & Kocourková 2010f, 2012a; *W. Weber*, Univ. Colo. Lich. Exs. 672, Fraser Point, Santa Cruz Isl., Santa Barbara Co., ASU, SBBG)

***Caloplaca stellata*** Wetmore & Kärnef. 📷 🌿

(Wetmore & Kärnefelt 1998; Tucker et al. 2006; Knudsen 2007b; Wetmore 2008; Knudsen et al. 2009; Knudsen & Kocourková 2012a; *T. Nash* 22843, Lassen Volcanic N. P., Shasta Co., ASU; *K. Knudsen* 4166.3, Pinnacles Nat. Monument, San Benito Co., SBBG, UCR)

***Caloplaca stipitata*** Wetmore 📷 🌿

(Wetmore 1999, 2008; Knudsen 2009; Knudsen & Kocourková 2012a; *C. Wetmore* 73651, Santa Rosa Isl., Santa Barbara Co., isotype, MIN; *T. Nash* 41082, San Miguel Isl., Santa Barbara Co., ASU; *C. Bratt* 4804, Santa Barbara Isl., Santa Barbara Co., SBBG)

**Note:** This species occurs on bark in arid parts of S CA. It has been confused with *C. californica* (*vide* Wetmore 1999), which is on wood in more northern maritime situations.

***Caloplaca subpyraceella*** (Nyl.) Zahlbr. 📷 🌿

(Zahlbruckner 1902; Fink 1935; TJ; von Reis 1991; Riefner, Bowler, & Ryan 1995; Magney 1999; Riefner & Rosentreter 2004; Wetmore 2008; *K. Knudsen* 10827.2, West Anacapa Isl., Ventura Co., UCR; *I. Tavares* 415, San Clemente Beach S. P., Orange Co., ASU)

**Synonyms:** [\*Pyrenodesmia subpyraceella\*](#)

**Note:** Wetmore (2008) lists *Caloplaca subpyraceella* (Nyl. ex Hasse) Zahlbr. as a questionable synonym of *Caloplaca luteominia* var. *luteominia*.

***Caloplaca subsoluta*** (Nyl.) Zahlbr. 📷 🌿

(Wetmore 2003; Tucker et al. 2004; Carlberg et al. 2007; Knudsen 2007b; Wetmore 2008; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Tucker 2010; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Misapplied names:** [\*C. modesta\*](#), [\*C. sipeana\*](#)?, [\*C. lobulata\*](#) (some reports)

***Caloplaca tirolensis*** Zahlbr. 📷 🌿

(Lindsay 1973; TJ; *B. Ryan* 25291, Marble Mtn Wilderness, Siskiyou Co., ASU)

***Caloplaca tominii*** (Savicz) Ahlner 📷 🌿

(Wetmore 2001 [for description but CA not mentioned]; Rosentreter et al. 2007 [with color photograph, for NE and E edge of CA])

**Misapplied names:** *C. cirrochroa* (Herre 1912a; Hasse 1913b; Fink 1935; TJ)

**Note:** According to McCune (1985), these records should be verified, as the nearest collections known to him are from western Nevada. This species has been collected commonly in interior western U. S.

***Caloplaca trachyphylla*** (Tuck.) Zahlbr. 📷 🌿

(Hebert & Meyer 1984; TJ; Hale & Cole 1988; von Reis 1991; Wetmore & Kärnefelt 1998; Doell et al. 1999; Brodo et al. 2001 [pp. 204–205, with color photograph]; Robertson 2003b; Benson 2005; *K. Knudsen* 11752, Clark Mts, Mojave Desert, San Bernardino Co., UCR)

**Synonyms:** [\*C. elegans\* var. \*trachyphylla\*](#)

***Caloplaca variabilis*** (Pers.) Müll. Arg. 📷 🌿

(Herre 1910; Hasse 1913b; Fink 1935; TJ; Bratt 1993; Robertson 2004; Carlberg et al. 2007; *K. Knudsen* 13129, Joshua Tree N. P., Mojave Desert, Riverside Co., UCR)

**Synonyms:** [\*Lecanora variabilis\*](#), [\*Pyrenodesmia variabilis\*](#)

***Caloplaca verruculifera*** (Vain.) Zahlbr. 📷 🌿

(Bratt 1993; Arup 1994, 1995a; Wetmore & Kärnefelt 1998; Brodo et al. 2001 [p. 205, with color photograph]; Tucker 2002)

**Note:** Wetmore & Kärnefelt (1998) included coastal northern CA locations on map, although they did



not see those collections. Tucker (2002) raised questions about reports of this species in CA.

**Caloplaca vitellinula** (Nyl.) H. Olivier 📖 🌿

(Wetmore 1985, based on *J. Blakeman* 235, Redwood Cyn, Kings Canyon N. P., Tulare Co., MIN;  
Color photograph in Arup 2009, although only European distribution)

**Caloplaca wrightii** (Willey) Fink 📖 🌿

(TJ; *C. Bratt* 3122, Santa Cruz Isl., Santa Barbara Co., SBBG, det. C. Wetmore)

**Synonyms:** [Blastenia ferruginea var. wrightii](#), [C. ferruginea var. wrightii](#), [Placodium ferrugineum var. wrightii](#)

**Caloplaca sp. 1.** 📖

(Wetmore 2007; on bark, S CA, like *C. catalinae*)

**Caloplaca aurantia** (Pers.) Hellb. 📖 🌿

(Wetmore 1985; not included for N. Amer. by Wetmore & Kärnefelt 1998)

**Synonyms:** [C. callopisma](#)

**Caloplaca aurantiaca** (Lightf.) Th. Fr. 📖 🌿

(Hasse 1908b, 1913b; Merrill 1923; Volk 1963; Jordan 1968; TJ)

=[C. flavorubescens](#)

**Caloplaca bolanderi** (Tuck.) H. Magn. 📖 🌿

(TJ; Sigal 1989; Riefner, Bowler, & Ryan 1995)

=[C. luteominia var. bolanderi](#)

**Caloplaca callopisma** (Ach.) Th. Fr. 📖 🌿

(Fink 1935; TJ)

=[C. aurantia](#), but apparent misidentifications for N. Amer.

**Caloplaca castellana** (Räsänen) Poelt 📖 🌿

(Riefner, Bowler, & Ryan 1995; Robertson 2003b [as “cf.”, from White Mts, 10,000 ft. elev., Mono Co.])

**Note:** This is a European and arctic species, unlikely on the CA coast but possible at high elevations in the mountains.

**Caloplaca chrysophthalma** Degel. 📖 🌿

(Baltzo 1970; TJ; Weber et al. 1987 [as “cf.”]; Baltzo 1989; von Reis 1991; Riefner, Bowler, & Ryan 1995; Tucker & Bratt 1996; Tucker 1999; Bourell 2000; Robertson 2001, 2003a; Thomson 2003; Tucker et al. 2004; Benson 2005; Carlberg et al. 2007)

**Note:** The disposition of these records is uncertain. According to Wetmore (2005), the species does not occur W of South Dakota.

**Caloplaca cinnabarina** (Ach.) Zahlbr. 📖 🌿

(Herre 1910, 1950a; Thomson & Ketchledge 1958; Volk 1963; TJ; von Reis 1991; Tucker & Bratt 1996)

**Note:** According to Wetmore (2003) the name *Caloplaca cinnabarina* has been applied widely to other species including taxa in the *C. squamosa* group. Wetmore & Kärnefelt (1999) restrict *C. cinnabarina* s. str. to an area from Virginia to New Mexico and Mexico, not including CA.

**Caloplaca cirrochroa** (Ach.) Th. Fr. 📖 🌿

(Herre 1912a; Hasse 1913b; Fink 1935; TJ; Hale & Cole 1988)

**Note:** Many older reports for western N. Amer. are misidentifications of *C. tominii*, *fide* McCune (1985), but the latter is not reported for CA; Hale & Cole's (1988) description of “*C. cirrochroa*” resembles that of *C. decipiens* (having tiny soredate lobes, lacking lower cortex, appressed to rock).

**Caloplaca constipans** (Nyl.) Zahlbr. 📖 🌿

(TJ)

=[Edrudia constipans](#)

**Caloplaca crenularia** (With.) J. R. Laund. 📖 🌿

**Synonyms:** [Blastenia festiva](#) (Hasse 1913b), [C. festiva](#), [C. ferruginea var. festiva](#), [Placodium ferrugineum var. festivum](#), [P. festivum](#), [Pyrenodesmia festiva](#)

**Note:** According to Wetmore (1996), N. Amer. reports are based on misidentifications.

*Caloplaca elegans* (Link) Th. Fr. 📖 🌿

(Herre 1910; Hasse 1913b; Merrill 1923; Herre 1945, 1950a; TJ)

=[\*Xanthoria elegans\*](#)

*Caloplaca elegans* var. *trachyphylla* Tuck. 📖 🌿

(Herre 1950a)

=[\*C. trachyphylla\*](#)

*Caloplaca erythrantha* (Tuck.) Zahlbr. 📖 🌿

**Synonyms:** [\*Lecanora erythrantha\*](#) (Fink 1935)

**Note:** This species is tropical, and in extreme southern Texas (Wetmore 2007), so likely a misidentification for CA.

*Caloplaca erythrella* (Ach.) Kieffer var. *rubescens* (Ach.) Hasse 📖 🌿

(Hasse 1911a)

=[\*Caloplaca flavovirescens\*](#) (synonymy *fide* Zahlbruckner 1931, p. 138)

*Caloplaca ferruginea* var. *bolanderi* (Tuck.) Herre 📖 🌿

(Thomson & Ketchledge 1958)

=[\*C. luteominia\* var. \*bolanderi\*](#)

*Caloplaca ferruginea* var. *festiva* (Ach.) Th. Fr. 📖 🌿

(Herre 1942a, 1950a)

=*C. crenularia*, but misidentifications for CA

*Caloplaca ferruginea* var. *wrightii* Tuck. 📖 🌿

(Hasse 1913b; Merrill 1923)

=[\*C. wrightii\*](#)

*Caloplaca festiva* (Ach.) Zwackh 📖 🌿

(Fink 1935)

=[\*Caloplaca crenularia\*](#), but misidentifications for N. Amer. *fide* Wetmore (1996)

*Caloplaca fraudans* (Th. Fr.) H. Olivier 📖 🌿

(TJ; Bratt 1987; Bowler & Riefner 1990; von Reis 1991 [but report based on a misidentification *fide* Tucker 1999]; Bratt 1997; Bourell 2000)

**Synonyms:** [\*Blastenia ferruginea\* var. \*fraudans\*](#), [\*B. fraudans\*](#), [\*Pyrenodesmia fraudans\*](#)

**Note:** Arup (1994) said that he had not seen material of this species from N. Amer.

*Caloplaca fulgens* (Sw.) Körb. 📖 🌿

(Hasse 1906; TJ)

=[\*Fulgensia fulgens\*](#)

*Caloplaca gilva* (Hoffm.) Zahlbr. 📖 🌿

(Herre 1910; Hasse 1913b; Fink 1935)

=[\*C. cerina\*](#)

*Caloplaca laeta* H. Magn. 📖 🌿

(Magnusson 1944; Baltzo 1970; Sigal 1975; TJ; Baltzo 1989; Sigal 1989; von Reis 1991 [but misidentifications, *fide* Tucker 1999])

=[\*C. luteominia\* var. \*luteominia\*](#) (synonymy *fide* Arup 1993b)

*Caloplaca lobulata* (Flörke) B. de Lesd. 📖 🌿

(Baltzo 1970; TJ; Hale & Cole 1988; Robertson et al. 1998 [as “cf.”])

**Synonyms:** [\*Xanthoria lobulata\*](#)

**Note:** This species has been collected in interior western U. S.

*Caloplaca modesta* (Zahlbr.) Fink 📖 🌿

(Weber et al. 1987; Ryan & Nash 1991; Bratt 1993)

=[\*C. subsoluta\*](#) for some CA records *fide* Wetmore (2003)

*Caloplaca murorum* (Hoffm.) Th. Fr. 📖 🌿

(TJ for references)

=[\*Caloplaca saxicola\*](#)

*Caloplaca pollinii* (A. Massal.) Jatta 📖 🌿

(Hasse 1913b; TJ)

**Note:** Because Wetmore (1994) cited only for Mexico, Colorado, and eastern U. S., CA records are probably based on misidentifications.

*Caloplaca sipeana* H. Magn. 📖 🌿

(Riefner, Bowler, & Ryan 1995; Bowler et al. 1996)

=[\*C. subsoluta\*](#) for some CA records.

*Caloplaca stillicidiorum* (Vahl) Lynge 📖 🌿

(Riefner, Bowler, & Ryan 1995)

=[\*C. cerina\*](#)

*Caloplaca teicholyta* (Ach.) J. Steiner 📖 🌿

(TJ, but misidentifications for N. Amer., *fide* Wetmore [1996] and Esslinger [2011])

**Synonyms:** [\*Placodium teicholytum\*](#), [\*Pyrenodesmia teicholyta\*](#)

*Caloplaca ulmorum* (Fink) Fink 📖 🌿

(Wright 1997, but a misidentification)

=[\*C. cerina\*](#) (*fide* Wetmore 2007 [p. 799])

*Caloplaca viridirufa* (Ach.) Zahlbr. 📖 🌿

(Hasse 1898a; probably a misidentification)

*Caloplaca* sp. 2 📖

(Wetmore 2007; on bark, S CA, like *C. stanfordensis*)

=[\*C. pacifica\*](#)

## CALVITIMELA Hafellner

**Calvitimela aglaea** (Sommerf.) Hafellner 🌿

(*J. & R. Robertson 6886*, on serpentine outcrop, Bolinas Fairfax Rd 0.3 mi. W of golf course, Mt. Tamalpais S. P., Marin Co., UC1975524)

*Calvitimela armeniaca* (DC.) Hafellner 📖 🌿

**Synonyms:** [\*Tephromela armeniaca\*](#) (Ryan & Nash [1991], but report was based on a misdetermination)

**Note:** According to Brodo et al. (2001) and Hafellner et al. (2004), this species does not occur in CA.

## CANDELARIA A. Massal.

**Candelaria concolor** (Dicks.) Stein 📖 🌿

(Herre 1910; Baltzo 1970; Sigal 1975; Pinelli & Jordan 1978; TJ; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; Sigal 1989; von Reis 1991; Doell & Wright 1996; Tucker & Bratt 1996; Hill 1997; Wright 1997; McGee 1998; Brodo et al. 2001 [pp. 205–206, with color photograph]; Robertson 2001; Baltzo 2002; Westberg & Nash 2002; Robertson 2003b; Blauman 2004a; Jovan & McCune 2004; Tucker et al. 2004; Carlberg et al. 2007; Hinds & Hinds 2007 [p. 141, color photograph only]; Williams & Sillett 2007; Knudsen et al. 2009; Knudsen & Kocourková 2009a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [\*C. concolor\* var. \*effusa\*](#), [\*Teloschistes concolor\*](#)

**Candelaria pacifica** M. Westb. 📖 🌿

(Westberg & Nash 2002 [as *Candelaria* “*pacifica*”]; Tucker et al. 2006; Knudsen 2007b; Knudsen & Kocourková 2009c; Tucker 2009a; Tucker 2010; Knudsen & Kocourková 2012a; *C. Wetmore 73411*, Santa Catalina Isl., Los Angeles Co., ASU; *T. Nash 18927*, E side of Pinnacles Nat. Monument, San Benito Co., ASU; *S. Tucker 34684*, Santa Margarita-Pozo Rd, San Luis Obispo Co., ASU)

*Candelaria concolor* var. *effusa* (Tuck.) G. Merr. & Burnham 📖 🌿

(Pinelli & Jordan 1978; TJ; Hebert & Meyer 1984; Weber et al. 1987; Robertson 2002a; Benson 2005; *T. Nash 11398*, Mendocino Co., ASU)

=[\*C. concolor\*](#) (*fide* Lendemer & Westberg 2010)

*Candelaria dispersa* (Räsänen) Hakul. 📖 🌿

(Thomson & Ketchledge 1958)

=error for *Candelariella dispersa*

*Candelaria vitellina* (Ehrh.) Müll. Arg. 📖 🌿

(Hasse 1908b)

**Note:** This report is probably a misidentification, since Hasse did not repeat the report in his definitive 1913b paper.

**CANDELARIELLA** Müll. Arg.

**Candelariella antennaria** Räsänen 📖 🌿

(Westberg 2005, 2007c [Ventura Co.]; Tucker 2009a; Tucker 2010; *M. Westberg 1021*, along Route 33, Cuyama Valley, Ventura Co., ASU“)

**Note:** This species is common in interior western U. S.

**Candelariella aurella** (Hoffm.) Zahlbr. 📖 🌿

(Fink 1935; TJ; Hale & Cole 1988; Tucker & Bratt 1995; Thomson 1997; Brodo et al. 2001 [p. 207, with color photograph]; Robertson 2003b; Westberg 2004; Benson 2005; Westberg 2005; Knudsen 2006a, 2007b; Westberg 2007c; Knudsen 2009; Knudsen et al. 2009; Knudsen & Kocourková 2009a, 2009c; Glacy et al. 2011; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [\*C. cerinella\*](#), [\*C. dispersa\*](#), [\*Lecanora cerinella\*](#), [\*L. vitellina\* var. \*aurella\*](#), [\*Placodium epixanthum\*](#), [\*P. vitellinum\* var. \*aurellum\*](#)

**Candelariella biatorina** M. Westb. 📖 🌿

(Westberg 2005, 2007a [Tulare Co., El Dorado Co.]; Westberg & Nash 2008; Tucker 2009a)

**Note:** This rare species has been collected also in Wyoming and Montana.

**Candelariella californica** M. Westb. 📖 🌿

(Westberg 2005, 2007c [Sierra Nevada and Coast Ranges; Los Angeles Co., El Dorado Co., Mariposa Co.]; Westberg & Nash 2008; CA endemic)

**Candelariella citrina** B. de Lesd. 📖 🌿

(Westberg 2004, 2005; Carlberg et al. 2007; Rosentreter et al. 2007 [with color photograph]; Westberg 2007b; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [\*C. terrigena\*](#)

**Candelariella deppeanae** M. Westb. 📖 🌿

(Knudsen 2006b [N of Hotspring Mtn, Cleveland N. F., San Diego Co.]; description in Westberg 2005, 2007b)

**Note:** This species has also been collected in Arizona and Texas.

**Candelariella efflorescens** R. C. Harris & W. R. Buck 📖 🌿

(Westberg 2005, 2007b [Mendocino, San Diego, and Tulare counties])

**Candelariella granuliformis** M. Westb. 📖 🌿

(Westberg et al. 2011, from Fresno, Inyo, and Tuolumne counties)

**Candelariella lutella** (Vain.) Räsänen 📖 🌿

(Westberg 2005, 2007b; Knudsen & Kocourková 2010a, citing Hasse collections; Tucker 2010; Knudsen & Kocourková 2012a)

**Note:** Collections are known from Ventura Co., San Luis Obispo Co., Santa Barbara Co., Kern Co., Los Angeles Co., Madera Co., Monterey Co., ASU, SBBG, UCR.

**Candelariella rosulans** (Müll. Arg.) Zahlbr. 📖 🌿

(Pinelli & Jordan 1978; TJ; Wetmore 1983; Hale & Cole 1988; Wright 1997; Bratt 1999; Doell et al. 1999; Brodo et al. 2001 [p. 208, with color photograph]; Knight et al. 2002; Robertson 2003b; Westberg 2004; Benson 2005; Westberg 2005; Carlberg et al. 2007; Knudsen 2007b; Westberg 2007c; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Rajakaruna et al. 2012, on serpentine, San Benito

Co.)

**Candelariella vitellina** (Erhr.) Müll. Arg. 📖 🌿

(Herre 1910; Hasse 1913b; Herre 1942a, 1945, 1950a; Volk 1963; Baltzo 1970; Pinelli & Jordan 1978; TJ; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; Sigal 1989; von Reis 1991; Tucker & Bratt 1995, 1996 [color photograph]; Riefner et al. 2003; Robertson 2003b; Tucker et al. 2004; Westberg 2004; Benson 2005; Westberg 2005, 2007b; Knudsen et al. 2009; Knudsen & Kocourková 2009c, 2010f; Tucker 2010; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [Lecanora vitellina](#), [Placodium vitellinum](#)

**Note:** This species occurs from Siskiyou Co. in the north to San Diego Co. in the south.

**Candelariella xanthostigma** (Ach.) Lettau 📖 🌿

(Lindsay 1973; TJ; Thomson 1997, 2003; Westberg 2004, 2005, 2007b; Knudsen 2009; Knudsen & Kocourková 2012a; *K. Knudsen 15692*, Carmel Mtn, San Diego Co., UCR; *B. Ryan 12555*, Eastern Brook Lakes watershed, Inyo Co., ASU; *T. Nash 11237*, Onyx Summit, San Bernardino Mts, San Bernardino Co., ASU; *T. Nash 8001*, S of Pinecrest, Tuolumne Co., ASU)

**Note:** This species is most common in southeastern U. S.

**Candelariella xanthostigmoides** (Müll. Arg.) R. W. Rogers 📖 🌿

(Lendemmer & Westberg 2010, cited Knudsen collection from San Bernardino Mts)

**Candelariella cerinella** (Flörke) Zahlbr. 📖 🌿

(Hasse 1913b; Fink 1935; TJ)

=[C. aurella](#)

**Candelariella coralliza** (Nyl.) H. Magn. 📖 🌿

(Bratt 1999; Bourell 2000, cited *J. Doell* collection)

=misidentifications, as this is a European species

**Candelariella dispersa** (Räsänen) Hakul. 📖 🌿

(Thomson & Ketchledge 1958 [as "*Candelaria dispersa*"]; TJ; Thomson 1997, 2003)

=[Candelariella aurella](#), *fide* Westberg (2005)

**Candelariella holophaea** (Mont.) Zahlbr. 📖 🌿

(TJ)

=[Solenopsis holophaea](#), but misidentifications, since Hasse described the spores (of *Lecanora holophaea*) as brown and 1--3-septate; in addition, this species was not mentioned for CA in Ryan & Timdal (2002)

**Candelariella reflexa** (Nyl.) Lettau 📖 🌿

(Wetmore 1985)

**Note:** Westberg (2005) did not find any *C. reflexa* from N. Amer.

**Candelariella spraguei** (Tuck.) Zahlbr. 📖 🌿

(TJ)

**Synonyms:** [Lecanora spraguei](#) (Hasse 1898a)

**Note:** Hasse's failure to retain this species in his definitive 1913b paper suggests that he changed the determination.

**Candelariella terrigena** Räsänen 📖 🌿

(Ryan & Nash 1991; Brodo et al. 2001 [pp. 208–209, with color photograph]; Robertson 2003b, 2004; Westberg 2004; Benson 2005; Robertson & Beyer 2005; *T. Nash 7056*, Ocotillo Wells, San Diego Co., ASU; *B. Ryan 31071*, Santa Rosa Isl., Santa Barbara Co.; *J. Shevock 17560*, Kern Plateau, Tulare Co., ASU)

=[C. citrina](#) (Westberg 2004, 2005, 2007b)

**Candelariella vitellina** var. *assericola* Räsänen 🌿

(*T. Nash 18947*, E side of Pinnacles Nat. Monument, San Benito Co., ASU)

**Note:** M. Westberg does not accept this varietal name (2005).

**CAPRONIA** Sacc.

**Capronia peltigerae** (Fuckel) D. Hawksw. 📖 🌿

(Knudsen & Kocourková 2012c)

**CARBACANTHOGRAPHIS** Staiger & Kalb

**Carbacanthographis candidata** (Nyl.) Staiger & Kalb 📖 🌿

**Synonyms:** [Graphis saxorum](#)

**Note:** Esslinger (2011) retains *Graphis saxorum* as a separate entity.

**CARBONEA** (Hertel) Hertel

**Carbonea latypizodes** (Nyl.) Knoph & Rambold 📖 🌿

(Knudsen & Kocourková 2009a, 2009c, 2012a; *K. Knudsen 8573*, Santa Cruz Isl., UCR)

**Synonyms:** *Lecidea subplebeia* Nyl., *fide Index Fungorum*

\***Carbonea vitellinaria** (Nyl.) Hertel 📖 🌿

(Triebel et al. 1991; Diederich 2003; Robertson 2003b; Knoph et al. 2004; Kocourková et al. 2012; *B. Ryan 12735*, Eastern Brook Lakes watershed, Inyo Co., on *Candelariella* spp., ASU)

**Carbonea vorticosa** (Flörke) Hertel 📖 🌿

(Knoph et al. 2004; *H. Imshaug 17983*, summit of Mt. Whitney, Sierra Nevada Mts, Tulare/Inyo counties, MSC)

**Synonyms:** [Lecidea vorticosa](#)

**CATAPYRENIUM** Flot.

**Catapyrenium cinereum** (Pers.) Körb. 📖 🌿

(Thomson 1987; Sigal 1989; Goward et al. 1994; Ryan & Nash 1991 [whose report was based on a misidentification of *C. daedaleum*])

**Synonyms:** [Dermatocarpon cinereum](#), [D. hepaticum](#) (Ach.) Th. Fr. s. str., non auct., [Endocarpon cinereum var. cartilagineum](#), [E. hepaticum](#), [E. tephroides](#)

**Note:** Breuss & Bratt (2001) said it is not known with certainty from CA, but is likely to occur in the Sierra Nevada.

**Catapyrenium daedaleum** (Kremp.) Stein 📖 🌿

(reported by Ryan & Nash [1991] as *C. cinereum*; Breuss & Bratt 2001, based on *B. Ryan 12648* from Sierra Nevada, Inyo Co., ASU)

**Note:** This is an arctic/alpine species not in Sonoran area of S CA, *fide* Breuss (2002).

**Catapyrenium psoromoides** (Borrer) R. Sant. 📖 🌿

(Breuss & McCune 1994; Breuss & Bratt 2001; Brodo et al. 2001 [p. 571]; Robertson & Robertson 2001 [p. 64, based on their collections from Lake, Mendocino, Solano, and Sonoma counties, confirmed by O. Breuss]; Breuss 2002; Tucker 2002; Robertson 2004; Carlberg et al. 2007)

**Catapyrenium squamellum** (Nyl. *ex* Hasse) J. W. Thoms. 📖 🌿

(Thomson 1987; Breuss & Bratt 2001; Breuss 2002; Robertson 2003b; Knudsen 2004c; Tucker et al. 2004; Knudsen 2006b, 2007b)

**Synonyms:** [Dermatocarpon squamellum](#), [Verrucaria squamella](#)

**Note:** This very rare lichen may be extirpated from the Santa Monica Mts, which includes its type locality, *fide* Knudsen (2006b, 2007a).

*Catapyrenium acarosporoides* (Zahlbr.) J. W. Thoms. 📖 🌿

(Thomson 1987)

=[Placidium acarosporoides](#)

*Catapyrenium caeruleopulvinum* J. W. Thoms. 📖 🌿

(Thomson 1987)

=[Placopyrenium caeruleopulvinum](#)

*Catapyrenium heppioides* (Zahlbr.) J. W. Thoms. 📖 🌿

- (Thomson 1987)  
 = [\*Placopyrenium heppioides\*](#)  
*Catapyrenium lachneum* (Ach.) R. Sant. 📖 🌿  
 (Thomson 1987; Weber et al. 1987; Baltzo 1989; Doell & Wright 1996; Bratt 1997)  
 = [\*Placidium lachneum\*](#) (Breuss 1996)  
**Note:** According to O. Breuss (personal communication), CA records are based on misidentifications; many collections are referable to *Claviscidium lacinulatum*.  
*Catapyrenium pilosellum* Breuss 🌿  
 = [\*Placidium pilosellum\*](#) (Breuss 1996)  
*Catapyrenium plumbeum* (B. de Lesd.) J. W. Thoms. 🌿  
 (*R. Rosentreter* 7234, eastern end of High Peaks Trail, Pinnacles Nat. Monument, San Benito Co., SBBG; the name was misapplied to *Verrucaria inficiens* pr. p. [Breuss 1998])  
*Catapyrenium squamulosum* (Ach.) Breuss 🌿  
 = [\*Placidium squamulosum\*](#)  
*Catapyrenium tuckermanii* (Ravenel ex Mont.) J. W. Thoms. 📖 🌿  
 (Thomson 1987, 2003; Breuss & Bratt 2001 [not known with certainty for CA])  
 = [\*Placidium arboreum\*](#) (synonymy *vide* Lendemer & Yahr 2004)  
*Catapyrenium zahlbruckneri* (Hasse) J. W. Thoms. 📖 🌿  
 (Thomson 1987)  
 = [\*Placopyrenium stanfordii\*](#)

#### CATILLARIA A. Massal.

- Catillaria chalybeia** (Borrer) A. Massal. 📖 🌿  
 (Hasse 1913b; Fink 1935; TJ; Hertel et al. 2008; Knudsen & Kocourková 2012a, from Santa Rosa Isl.)  
**Catillaria glauconigrans** (Tuck.) Hasse 📖 🌿  
 (Hasse 1909, 1913b; Fink 1935; Herre 1942c; Thomson & Ketchledge 1958; TJ; Hertel et al. 2008; Knudsen & Kocourková 2010a, citing a Hasse collection)  
**Catillaria lenticularis** (Ach.) Th. Fr. 📖 🌿  
 (Hasse 1913b; Fink 1935; Sigal 1975; TJ; Sigal 1989; Tucker & Bratt 1996; Riefner et al. 2003; Hertel et al. 2008; Knudsen & Kocourková 2009b; Knudsen & Kocourková 2012a)  
**Synonyms:** [\*C. lenticularis\* var. \*acrustacea\*](#), [\*Lecidea lenticularis\* f. \*acrustacea\*](#)  
**Catillaria nigroclavata** (Nyl.) Schuler 📖 🌿  
 (TJ; Hertel et al. 2008; Benson et al. 2012; Knudsen & Kocourková 2012a; *B. Ryan* 26661, Hwy 152, 32 km NNE of Hollister, Merced Co., ASU)  
**Synonyms:** [\*C. lenticularis\* var. \*vulgaris\*](#)  
**Catillaria subviridis** (Nyl.) Zahlbr. 📖 🌿  
 (TJ; Tucker et al. 2004 [as “cf.”]; Hertel et al. 2008; Knudsen & Kocourková 2012a)  
**Synonyms:** [\*Biatora subviridis\*](#)  
*Catillaria athallina* (Hepp) Hellb. 📖 🌿  
 (Thomson 1997 [Catalina Isl. report])  
 = [\*Toninia athallina\*](#)  
*Catillaria atropurpurea* (Schaer.) Th. Fr. 📖 🌿  
 (Hasse 1913b [*H. Hasse*, Santa Monica Range, *Lichenes Exsiccati*, *Sullivant Moss Soc.* 209, MU L-5706]; Fink 1935; Herre 1942c; Thomson & Ketchledge 1958; Lindsay 1973; TJ; Thomson 2003)  
 = [\*Catinaria atropurpurea\*](#)  
*Catillaria bouteillei* (Desm.) Zahlbr. 📖 🌿  
 (Santesson 1952 [p. 434, based on *Felton*, 1885 on *Umbellularia* at Big Tree Grove, Santa Cruz Co., K]; TJ; Williams & Sillett 2007)  
 = [\*Fellhanera bouteillei\*](#)  
*Catillaria columbiana* (G. Merr.) W. J. Noble 📖 🌿

(Noble 1980, 1982; Bowler et al. 1996)

=[Megalaria columbiana](#)

*Catillaria endochroma* (Fée) Zahlbr. 🍄 🌿

(Fink 1935, but erroneously based on a Mexican report of *Heterothecium endochromum* by Tuckerman)

*Catillaria franciscana* (Tuck.) Herre 🍄 🌿

(Herre 1910; Hasse 1913b; Fink 1935 [p. 219]; TJ; Knudsen 2005c; Hertel et al. 2008; *L. Sigal*, Land's End, San Francisco, San Francisco Co., 23 Mar 1973, ASU)

=[Lecania franciscana](#)

**Note:** Knudsen & Lendemer (2007a) transferred this species to *Lecania*, but the transfer has been challenged, *fide* T. Nash.

*Catillaria globulosa* (Flörke) Th. Fr. 🍄 🌿

(Herre 1910; Fink 1935; TJ; Hertel et al. 2008)

=[Biatora globulosa](#)

*Catillaria griffithii* (Sm.) Malme 🍄 🌿

(Merrill 1923; Volk 1963; Jordan 1968; TJ; *W. Weber*, Univ. Colo. Lich. Exs. 179, Santa Catalina Isl., Los Angeles Co.)

=[Cliostomum griffithii](#)

*Catillaria laureri* Hepp ex Th. Fr. 🍄 🌿

(Herre 1912b; Fink 1935; Volk 1963; Jordan 1968; Lindsay 1973; TJ)

=[Megalaria laureri](#) (but probably misidentifications of *M. columbiana*)

*Catillaria lenticularis* var. *acrustacea* Hepp 🍄 🌿

(Hasse 1908a)

=[C. lenticularis](#)

*Catillaria lenticularis* var. *vulgaris* (Körb.) Th. Fr. 🍄 🌿

(Bolander 1870; Hasse 1909, 1913b [as “f. *vulgaris* auct.”])

=[C. nigroclavata](#)

*Catillaria prasina* (Fr.) Th. Fr. 🍄 🌿

(Herre 1942c [based on *C. L. Brown*, Marin Co.])

=[Micarea prasina](#)

*Catillaria subnigrata* (Nyl.) Blomb. & Forss. 🍄 🌿

(Herre 1910; Fink 1935; misidentifications)

=*Micarea subnigrata*, a European species, not in N. Amer.

*Catillaria tricolor* (With.) Th. Fr. 🍄 🌿

(Herre 1910; Hasse 1913b)

=[Cliostomum griffithii](#) for CA records

## CATINARIA Vain.

*Catinaria atropurpurea* (Schaer.) Vězda & Poelt 🍄 🌿

(Brodo et al. 2001 [p. 131]; Hafellner & Ryan 2004; Tucker et al. 2004; Knudsen & Kocourková 2010a, citing a Hasse collection)

**Synonyms:** [Biatora atropurpurea](#), [Catillaria atropurpurea](#), [Lecidea atropurpurea](#)

## CATOCARPUS Hellb.

*Catocarpus myriocarpum* Mudd var. *ecrustaceum* (Leight.) Hasse 🍄 🌿

(Hasse 1908a, 1908b)

=[Buellia punctata](#)

*Catocarpus myriocarpum* var. *punctiforme* (Mudd) Fr. 🍄 🌿

(Hasse 1908a, 1908b)

=[Buellia punctata](#)



**CATOLECHIA** Flot.

*Catolechia wahlenbergii* (Ach.) Körb. 📖 🌿

**Synonyms:** [Buellia pulchella](#) (Hasse 1908b), [Lecidea aliena var. pulchella](#) Schrad. (Hasse 1898a)

**Note:** Hasse (1898a, 1908b) reports were not retained in Hasse's 1913b Flora, indicating he had changed his mind. The species is said to be arctic/alpine (Purvis et al. 1992) so would be highly unusual for the desert mountain ranges of southern CA.

**CAVERNULARIA** Degel. = [HYPOGYMNIA](#) (fide Miadlikowska et al. 2011)

*Cavernularia hultenii* Degel. 📖 🌿

(Ahti & Henssen 1965; Lindsay 1973; TJ; Hale & Cole 1988; Goward et al. 1994; Brodo et al. 2001 [p. 213, with color photograph]; Wright 2001a; Williams & Sillett 2007; McCune & Geiser 2009)

= [Hypogymnia hultenii](#)

*Cavernularia lophyrea* (Ach.) Degel. 📖 🌿

(Lindsay 1973; Malachowski 1975; TJ; Sweet 1983; Hale & Cole 1988; Goward et al. 1994; Brodo et al. 2001 [p. 213, with color photograph]; Wright 2001a; Robertson 2002a; Williams & Sillett 2007; McCune & Geiser 2009)

= [Hypogymnia lophyrea](#)

**CERCIDOSPORA** Körb.

\***Cercidospora caudata** Kernst. 📖 🌿

(Knudsen 2006a; Etayo et al. 2007; Knudsen & Werth 2008; Wetmore 2008; Knudsen & Kocourková 2009b, 2009c; Kocourková et al. 2012)

**Note:** This lichenicole is reported on *Caloplaca nashii*, *C. subsoluta* and *C. squamosa* from Orange, Santa Barbara, and San Bernardino counties, UCR.

\***Cercidospora cladoniicola** Alstrup 📖 🌿

(Lendemer et al. 2008; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *J. Kocourková & K. Knudsen s.n.*, on *Cladonia* sp., S. Rosa Isl., Santa Barbara Co., PRM, UCR)

\***Cercidospora lobothalliae** Nav.-Ros. & Calat. 📖 🌿

(Navarro-Rosinés et al. 2004; Kocourková et al. 2012; *K. Knudsen 5775*, Rd to Eureka Peak, San Bernardino Co., UCR; on *Lobothallia* spp.)

\***Cercidospora macrospora** (Uloth) Hafellner & Nav.-Ros. 📖 🌿

(Kocourková 2000, pp. 93–94; Knudsen & Werth 2008; Knudsen & Kocourková 2009b; Kocourková et al. 2012; Knudsen collections on *Lecanora muralis* from Granite Mts, San Bernardino Co., and San Jacinto Mts, Riverside Co., UCR)

**Synonyms:** [C. ulothii](#)

\***Cercidospora xanthoriae** (Wedd.) R. Sant. 📖 🌿

(Knudsen & Lendemer 2006a [on *Xanthomendoza fallax*, San Diego Co. and *Xanthoria* spp.]; Kocourková et al. 2012)

\***Cercidospora ulothii** Körb. 📖 🌿

(Triebel et al. 1991 [based on *B. Ryan 12510*, Rock Creek Cyn, Mono Co., on *Lecanora* [subg. *Placodium*] sp., ASU])

= [C. macrospora](#)

**CETRARIA** Ach.

**Cetraria aculeata** (Schreb.) Fr. 📖 🌿

(Herre 1944b; Tucker & Bratt 1996, based on *S. Tucker 34580*, on road to schoolhouse, Hastings Natural History Reserve, Monterey Co., SBBG; *M. A. Howe*, hills above Ocean View, S of Westminster, Orange Co., 10 Nov 1895, SBBG; Brodo et al. 2001 [p. 213, with color photograph] showed it only in Washington state on the West Coast; Tucker 2002; Hinds & Hinds 2007 [p. 144, color photograph only]; Glacy et al. 2011)

**Synonyms:** [\*Coelocaulon aculeatum\*](#), [\*Cornicularia aculeata\*](#)

***Cetraria muricata*** (Ach.) Eckfeldt 📖 🌿

(Robertson & Robertson 2002 [based on *J. & R. Robertson 4682*, 5 km S of Stinson Beach, Mt. Tamalpais S. P., Marin Co., UC, and *J. & R. Robertson 2965*, Chanslor Guest Ranch, Sonoma Co., UC]; Kärnefelt 1986)

**Synonyms:** [\*Coelocaulon muricatum\*](#)

***Cetraria californica*** G. Merr. non Tuck. 📖 🌿

(Merrill 1910)

=[\*Kaernefeltia merrillii\*](#)

***Cetraria californica*** Tuck. non G. Merr. 📖 🌿

(Tuckerman 1859; Nylander 1858–1860; Tuckerman 1866; Bolander 1870; Willey 1873a; Tuckerman 1882; Hue 1890; Hasse 1895; McClatchie 1895, 1897; Hasse 1898a; Orcutt 1903; Hasse 1905; Herre 1906, 1907; Orcutt 1907; Hasse 1908b; Herre 1910; Howe 1911; Hasse 1913b; Merrill 1923; Fink 1935; TJ; Goward et al. 1994; West & Doell 1995; McCune & Geiser 2009)

=[\*Kaernefeltia californica\*](#)

***Cetraria canadensis*** (Räsänen) Räsänen 📖 🌿

(Esslinger 1973b; Tucker 1973; Pinelli & Jordan 1978; TJ; Sigal & Nash 1983)

=[\*Vulpicida canadensis\*](#)

***Cetraria chlorophylla*** (Willd.) Vain. 📖 🌿

(TJ; Thomson 1984; Goward et al. 1994; Ellyson & Sillett 2003; Jovan & McCune 2004; McCune & Geiser 2009)

=[\*Tuckermannopsis chlorophylla\*](#)

***Cetraria ciliaris*** Ach. 📖 🌿

(TJ)

=[\*Tuckermannopsis ciliaris\*](#), but CA reports may be misidentifications of *T. orbata* (*fide* B. Ryan)

***Cetraria glauca*** (L.) Ach. 📖 🌿

(TJ)

=[\*Platismatia glauca\*](#)

***Cetraria herrei*** Imshaug 📖 🌿

(TJ)

=[\*Platismatia herrei\*](#)

***Cetraria idahoensis*** Essl. 📖 🌿

(TJ)

=[\*Esslingeriana idahoensis\*](#)

***Cetraria juniperina*** (L.) Ach. 📖 🌿

(Tuckerman 1866; Bolander 1870; Hansen 1896; Hasse 1903c; Herre 1906, 1910; Hasse 1913b; TJ)

=[\*Vulpicida canadensis\*](#) for CA records

***Cetraria lacunosa*** Ach. 📖 🌿

(Tuckerman 1866; Bolander 1870; Hasse 1913b; TJ)

=[\*Platismatia lacunosa\*](#)

**Note:** The Hasse (1913b) report for S CA is probably based on misidentifications.

***Cetraria lacunosa*** var. *stenophylla* Tuck. 📖 🌿

(Tuckerman 1882; Zahlbruckner 1930; Herre 1907, 1907, 1910; TJ)

=[\*Platismatia stenophylla\*](#)

***Cetraria merrillii*** Du Rietz 📖 🌿

(TJ; Sigal & Nash 1983; Weber et al. 1987; Goward et al. 1994; Jovan & McCune 2004; McCune & Geiser 2009)

=[\*Kaernefeltia merrillii\*](#)

***Cetraria orbata*** (Nyl.) Fink 📖 🌿

(TJ; Goward et al. 1994; Jovan & McCune 2004; McCune & Geiser 2009)

=[\*Tuckermannopsis orbata\*](#)

*Cetraria pallidula* Tuck. ex Riddle 🍄 🌿

(TJ; Tucker 1973; Pinelli & Jordan 1978; Goward et al. 1994; Jovan & McCune 2004; McCune & Geiser 2009)

=[\*Ahtiana pallidula\*](#)

*Cetraria platyphylla* Tuck. 🍄 🌿

(Tuckerman 1882; Hasse 1903c; Herre 1906; Fink 1935; Esslinger 1973b; Pinelli & Jordan 1978; TJ; Goward et al. 1994; Jovan & McCune 2004; McCune & Geiser 2009)

=[\*Tuckermannopsis platyphylla\*](#)

*Cetraria scutata* (Wulfen) Poetsch 🍄 🌿

(Jordan 1968)

=[\*Tuckermannopsis sepincola\*](#) (Ehrh.) Hale, an apotheciate species

*Cetraria sepincola* (Ehrh.) Ach. 🍄 🌿

(McClatchie 1897; Hasse 1913b; Fink 1935; Thomson 1984)

=[\*Tuckermannopsis sepincola\*](#)

*Cetraria sepincola* var. *chlorophylla* (Willd.) Schaer. 🍄 🌿

(Tuckerman 1882; Eckfeldt 1893; TJ)

=[\*Tuckermannopsis chlorophylla\*](#)

*Cetraria scutata* auct. non (Wulfen) Poetsch 🌿

=[\*Tuckermannopsis chlorophylla\*](#)

**Note:** Reports such as Jordan (1968) may be based at least partly on this soraliolate species.

*Cetraria stenophylla* (Tuck.) G. Merr. 🍄 🌿

(TJ)

=[\*Platismatia stenophylla\*](#)

*Cetraria tuckermanii* Herre non Oakes 🍄 🌿

(Herre 1906, 1910; Fink 1935)

=[\*Platismatia herrei\*](#)

**Note:** Herre (1910) described this taxon as narrow-lobed which fits *P. herrei*, although it was called broad-lobed in his key.

*Cetraria viridis* Schwein. 🍄 🌿

=[\*Vulpicida viridis\*](#) (Hale 1969 [erroneously indicated its presence in CA])

**Note:** Mattsson (1993) reported it only in eastern U. S. W to Arkansas.

**CETRELIA** W. L. Culb. & C. F. Culb.

***Cetrelia cetrarioides*** (Delise ex Duby) W. L. Culb. & C. F. Culb. 🍄 🌿

(Ellyson & Sillett 2003; Jovan & McCune 2004; Glavich et al. 2005b)

**Synonyms:** [\*Parmelia cetrarioides\*](#)

***Cetrelia olivetorum*** (Nyl.) W. L. Culb. & C. F. Culb. 🍄 🌿

(TJ; Ryan & Nash 2002, based on Hasse collections from southern CA; Hinds & Hinds 2007 [p. 150, color photograph only])

**Synonyms:** [\*Parmelia olivaria\*](#), [\*P. olivetorum\*](#)

**Note:** This taxon is now probably extinct in CA.

**CHAENOTHECA** Th. Fr.

***Chaenotheca australis*** Tibell 🍄 🌿

(Williams & Sillett 2007 [as cf. *australis*])

**Note:** Tibell (1998) described this species from S. Amer.

***Chaenotheca brachypoda*** (Ach.) Tibell 🍄 🌿

(Goward 1999; Williams & Sillett 2007)

**Synonyms:** [\*C. sulphurea\*](#)

**Chaenotheca brunneola** (Ach.) Müll. Arg. 📖 🌿

(Pinelli & Jordan 1978 [based on record from Calaveras Co.]; TJ; Goward 1999; Brodo et al. 2001 [p. 222, in E central CA, color photograph]; Tucker 2002; Rikkinen 2003; Williams & Sillett 2007; *C. Wetmore 50721*, Sequoia N. P., Tulare Co., MIN)

**Note:** Tibell (1980) reported this species from Oregon, Washington, and eastern states.

**Chaenotheca chlorella** (Ach.) Müll. Arg. 📖 🌿

(Wetmore 1985; Goward 1999; Peterson & Rikkinen 1999 [in table]; *C. Wetmore 50714*, Sequoia N. P., Tulare Co., 11 May 1984, MIN)

**Synonyms:** *C. carthusiae* (synonym according to Tibell 1987)

**Chaenotheca chrysocephala** (Ach.) Th. Fr. 📖 🌿

(Herre 1950a [f. *melanocephala* (Nyl.) A. L. Sm.]; Jordan 1968; Lindsay 1973; TJ; Tibell 1980; Goward 1999; Baltzo 2002 [repeated Jordan report]; Rikkinen 2003; Glacy et al. 2011; *K. Knudsen 9860*, Point Reyes Nat. Seashore, Marin Co., UCR; most reports are from central or N CA)

**Synonyms:** *Calicium chrysocephalum*, *Cyphelium chrysocephalum*

**Chaenotheca ferruginea** (Turner ex Sm.) Mig. 📖 🌿

(Rikkinen 2003; Williams & Sillett 2007)

**Chaenotheca furfuracea** (L.) Tibell 📖 🌿

(Baltzo 2002 [repeated Jordan [1968] report]; Goward 1999; Brodo et al. 2001 [p. 222, with color photograph]; Tucker 2002; Rikkinen 2003; Williams & Sillett 2007; *B. Ryan 22229*, Redwood Experimental Forest N of Cloverdale, Mendocino Co., ASU; most reports are from central or N CA)

**Synonyms:** *Coniocybe furfuracea*

**Chaenotheca gracillima** (Vain.) Tibell 📖 🌿

(Rikkinen 2003)

**Chaenotheca laevigata** Nád. 📖 🌿

(Rikkinen 2003; Williams & Sillett 2007)

**Chaenotheca nitidula** Tibell 📖 🌿

(Rikkinen 2003 [as “cf.”])

**Chaenotheca olivaceorufa** Vain. 📖 🌿

(Rikkinen 1998 [for collections from Mendocino and Humboldt counties]; Rikkinen 2003 [added a collection from Del Norte Co.])

**Chaenotheca phaeocephala** (Turner) Th. Fr. 📖 🌿

(Herre 1912a [based on A. Herre collection, on redwood post, Oakland hills, 525 ft. elev.; *F. T. Bioletti*, Sonoma Co., UC]; Tibell 1980; Goward 1999; Rikkinen 2003; Tibell & Ryan 2004)

**Chaenotheca sphaerocephala** Nád. 📖 🌿

(Williams & Sillett 2007)

**Chaenotheca subroscida** (Eitner) Zahlbr. 📖 🌿

(Tibell 1980; Goward 1999; Tibell & Ryan 2004; *B. Ryan 32106*, Brown's Creek, Sierra N. F., Madera Co., ASU)

**Chaenotheca trichialis** (Ach.) Th. Fr. 📖 🌿

(Jordan 1968; TJ; Tibell 1980; Goward 1999; Baltzo 2002 [repeated Jordan report]; Rikkinen 2003; Tibell & Ryan 2004; Williams & Sillett 2007; Doell et al. 2009; Glacy et al. 2011)

**Chaenotheca xyloxena** Nád. 📖 🌿

(Tibell 1980; Goward 1999; Rikkinen 2003; Tibell & Ryan 2004)

*Chaenotheca carthusiae* (Harm.) Lettau 🌿

=*C. chlorella* (Wetmore 1985)

*Chaenotheca subpusilla* (Vain.) Tibell 📖 🌿

(Pinelli & Jordan 1978; TJ)

=*Chaenothecopsis pusilla*

*Chaenotheca sulphurea* (Retz.) Middelb. & J.-E. Mattsson 📖 🌿

(Wetmore 1985; *C. Wetmore 50733*, Sequoia N. P., junction of Crystal Cave Rd and General's

Highway, Tulare Co., MIN)

=[C. brachypoda](#)

### CHAENOTHECOPSIS Vain.

†**Chaenothecopsis debilis** (Turner & Borrer *ex* Sm.) Tibell 📖 🍄

(Goward 1999; Peterson & Rikkinen 1999; Rikkinen 2003; Robertson 2003b)

\***Chaenothecopsis epithallina** Tibell 📖 🍄

(Rikkinen 2003; Kocourková et al. 2012; *E. Peterson* collections from Trinity Co., on *Chaenotheca trichialis*)

**Chaenothecopsis montana** Rikkinen 📖 🍄

(Rikkinen 2003)

†**Chaenothecopsis nana** Tibell 📖 🍄

(Tibell 1981; Goward 1999; Peterson & Rikkinen 1999; Rikkinen 2003; Tibell & Ryan 2004; *B. Ryan* 22231, near county airport, Mendocino Co., ASU)

\***Chaenothecopsis pusilla** (Ach.) Alb. Schmidt 📖 🍄

(Tibell 1980; Goward 1999; Rikkinen 2003; Thomson 2003; Tibell & Ryan 2004 for description [cite S CA without naming specimens]; Villella 2010; Kocourková et al. 2012)

**Synonyms:** [Calicium pusillum](#), [Chaenotheca subpusilla](#)

#**Chaenothecopsis pusiola** (Ach.) Vain. 📖 🍄

(Rikkinen 2003)

\***Chaenothecopsis rubina** Tibell 📖 🍄

(Peterson & Rikkinen 1999; Rikkinen 2003 [as “cf.” in latter])

†**Chaenothecopsis savonica** (Räsänen) Tibell 📖 🍄

(Goward 1999; Peterson & Rikkinen 1999; Rikkinen 2003)

†**Chaenothecopsis ussuriensis** Titov 📖 🍄

(Peterson & Rikkinen 1999)

**Chaenothecopsis vainioana** (Nádv.) Tibell 📖 🍄

(Rikkinen 2003)

#**Chaenothecopsis viridireagens** (Nádv.) Alb. Schmidt 📖 🍄

(Rikkinen 2003; Williams & Sillett 2007)

#*Chaenothecopsis subpusilla* (Vain.) Tibell 📖 🍄

(Pinelli & Jordan 1978; TJ)

=[C. pusilla](#)

*Chaenothecopsis viridialba* (Kremp.) Alb. Schmidt 📖 🍄

(Goward 1999; Peterson & Rikkinen 1999)

**Note:** The latter reference described this species as saprobic on wood in CA.

### CHIODECTON Ach.

*Chiodecton californicum* Tuck. 📖 🍄

(Tuckerman 1888 [p. 135]; Hasse 1913b)

**Synonyms:** [Limonaea californica](#) (Sparrius 2004)

=[Schizopelte crustosa](#)

*Chiodecton ochroleucum* Zahlbr. 📖 🍄

(Zahlbruckner 1900; Hasse 1903b, 1903f, 1913b; Merrill 1923; Hedrick 1933; Fink 1935 [p. 122]; Herre 1945; TJ; Thor 1990; Nash 2008)

=[Paraschismatomma ochroleucum](#) (Zahlbr.) K. Knudsen, Ertz, & Tehler (Ertz & Tehler 2011).

**Note:** Thor studied this entity but did not include it in his monograph.

*Chiodecton rubrocinctum* (Ehrenb.: Fr.) Nyl. 📖 🍄

(Hasse 1903b)

=[Herpothallon rubrocinctum](#), but misidentification for CA

*Chiodecton sanguineum* (Sw.) Vain. 📖 🌿

(Hasse 1903b)

=[Herpothallon rubrocinctum](#), but misidentification for CA

*Chiodecton subochroleucum* Fink ex J. Hedrick 📖 🌿

(Hedrick 1933; Fink 1935; TJ)

=[Dendrographa franciscana](#) (Kocourková et al. 2010)

**CHLOREA** Nyl.

*Chlorea californica* Lév. ex Nyl. 📖 🌿

(Nylander 1858; Hue 1890; Hasse 1898a; Orcutt 1909; TJ)

=[Letharia columbiana](#)

*Chlorea vulpina* (L.) Nyl. 📖 🌿

(Nylander 1858–1860)

=[Letharia vulpina](#)

*Chlorea vulpina* var. *californica* (Lév. ex Nyl.) Nyl. 🌿

=[Letharia columbiana](#)

**CHRISMOFULVEA** Marbach

**Chrimofulvea dialyta** (Nyl.) Marbach 📖 🌿

(Marbach 2000; Williams & Sillett 2007)

**Synonyms:** [Buellia dialyta](#), [Lecidea dialyta](#)

**Note:** The type is a *Bolander* specimen from CA.

**CHROMATOCHLAMYS** Trevis.

*Chromatochlamys muscorum* (Fr.) H. Mayrhofer & Poelt var. *muscorum* 📖 🌿

(Mayrhofer 2002; Knudsen & Kocourková 2012a)

=[Thelenella muscorum](#) (synonymy *fide* Fryday & Coppins 2004)

**CHRYSOTHRIX** Mont.

**Chrysothrix granulosa** G. Thor 📖 🌿

(Tønberg [2004] reported it as common from Mexico to British Columbia; Knudsen 2009; Knudsen & Kocourková 2009a, 2010f; Tucker 2010; Knudsen & Kocourková 2012a; *K. Knudsen 4603*, Morro Bay S. P., San Luis Obispo Co.)

**Chrysothrix xanthina** (Vain.) Kalb 📖 🌿

(Kukwa & Knudsen 2011; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Note:** This is correct name for coastal material under *C. candelaris*.

*Chrysothrix candelaris* (L.) J. R. Laund. 📖 🌿

(Wetmore 1985; Weber et al. 1987; Ryan & Nash 1991; von Reis 1991; Tucker & Bratt 1996; Hill 1997 [as ?“]; Bourell 2000; Brodo et al. 2001 [p. 223, with color photograph]; Robertson 2001; Baltzo 2002; Robertson 2002a; Blauman 2004a; Tønberg 2004; Tucker et al. 2004; Knudsen 2007b; Williams & Sillett 2007; Knudsen 2009; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Rotter 2010; Glacy et al. 2011; Villella & Carlberg 2012, as foliicole)

**Note:** *C. candelaris* does not occur in N. Amer. This name has been misapplied to coastal CA material of *C. xanthina* (Kukwa & Knudsen 2011).

*Chrysothrix chlorina* (Ach.) J. R. Laund. 📖 🌿

(Benson 2005)

**Synonyms:** [Lepraria chlorina](#) (Hale & Cole 1988 [but probably an error for *C. xanthina* or *C. granulosa*])

**Note:** This species was not mentioned for the Sonoran region by Tønberg (2004).

**CIRCINARIA** Link (Nordin et al. 2010)

**Circinaria arida** Owe-Larss., A. Nordin & Tibell 📖 🌿

(K. Knudsen collection, Joshua Tree N. P.)

**Misapplied names:** [Aspicilia desertorum](#) (fide Knudsen, personal communication)

**Circinaria caesiocinerea** (Nyl. ex Malbr.) A. Nordin, S. Savić & Tibell 📖 🌿

(Nordin et al. 2010, for name change; CA not mentioned)

**Synonyms:** [Aspicilia caesiocinerea](#)

**Note:** *C. caesiocinerea* is very rare in southern CA. The only collection verified by Owe-Larsson is *C. Wetmore 50159*, Sequoia N. P., Tulare Co., ASU.

**Circinaria contorta** (Hoffm.) A. Nordin, S. Savić & Tibell 📖 🌿

(Nordin et al. 2010, for name change; CA not mentioned)

**Synonyms:** [Aspicilia contorta](#), [Lecanora contorta](#), [L. calcarea var. contorta](#)

**Note:** According to Owe-Larsson et al. (2008), at least part of Hasse's material (Hasse 1898a, 1903e) that he called *Lecanora calcarea* is *Aspicilia contorta* (*Circinaria contorta*).

**Circinaria hispida** (Mereschk.) A. Nordin, S. Savić & Tibell 📖 🌿

(Nordin et al. 2010, for name change; CA not mentioned)

**Synonyms:** [Aspicilia hispida](#)

**CLADIDIUM** Hafellner

**Cladidium bolanderi** (Tuck.) B. D. Ryan 📖 🌿

(Ryan 1989a; von Reis 1991; Brodo et al. 2001 [pp. 385–386]; Stone & Vilella 2010; Glacy et al. 2011; CA endemic)

**Synonyms:** [C. thamnitis](#), [Lecanora bolanderi](#), [Lecanora thamnitis](#), [Polycauliona bolanderi](#), [P. thamnitis](#)

**Note:** CA collections are from San Francisco northward along the coast.

*Cladidium thamnitis* (Tuck.) Hafellner 📖 🌿

(Hafellner 1984)

=[C. bolanderi](#)

*CLADINA* Nyl. = **CLADONIA** (Ahti & DePriest 2001)

*Cladina alpestris* (L.) Nyl. 📖 🌿

(Lindsay 1973; TJ)

=[Cladonia stellaris](#), but not in CA

*Cladina arbuscula* (Wallr.) Hale & W. L. Culb. subsp. *beringiana* (Ahti) N. S. Golubk. 📖 🌿

(Wright 1992 [identified only to genus]; Tucker & Ryan 2006, based on *D. Wright 3079*, coast near Dillon Beach, Marin Co., SFSU, det. T. Ahti)

=[Cladonia arbuscula subsp. beringiana](#)

*Circinaria calcarea* (L.) A. Nordin, S. Savić & Tibell 🌿

**Synonyms:** [Aspicilia calcarea](#), [Lecanora calcarea](#)

*Cladina ciliata* (Stirt.) Trass 📖 🌿

(Wright 1992 [identified only to genus]; Goward 1999, based on *D. Wright 3007*, coast near Dillon Beach, Marin Co. collection, SFSU, det. J. Thomson; Tucker & Ryan 2006; T. Ahti identified it as *C. arbuscula* subsp. *beringiana*)

=[Cladonia ciliata var. ciliata](#)

*Cladina impexa* (Harm.) B. de Lesd. 📖 🌿

(Lindsay 1973; TJ; name misapplied to CA collections of *Cladonia portentosa*; synonymy fide Ahti [1984])

*Cladina mitis* (Sandst.) Hustich 📖 🌿

(Herre 1945; Lindsay 1973; name misapplied to CA collections of *Cladonia portentosa*)

*Cladina portentosa* (Dufour) Follmann f. *pacifica* (Ahti) Ahti 📖 🌿

(Brodo & Ahti 1996; Goward 1999; Brodo et al. 2001 [pp. 225–226, with color photograph]; Robertson 2002a; Tucker 2002)

=[\*Cladonia portentosa\*](#)

*Cladonia stellaris* (Opiz) Brodo 🍄 🌿

(Goward 1999; not in CA, absent from western U. S. except Colorado, *fide* Brodo et al. 2001 [p. 228]; Tucker 2002 [indicated reports are probably errors for *Cladonia portentosa*])

**Synonyms:** [\*Cladonia alpestris\*](#), [\*C. stellaris\*](#)

**CLADONIA** P. Browne

**Cladonia acuminata** (Ach.) Norrl. 🍄 🌿

(Knudsen & Kocourková 2009c [as “cf. *acuminata*”]; *K. Knudsen 6442*, Santa Ana Mts, Orange Co., UCR)

**Cladonia albonigra** Brodo & Ahti 🍄 🌿

(Brodo & Ahti 1996; Goward 1999; McCune & Geiser 2009; Rotter 2010)

**Cladonia arbuscula** subsp. **beringiana** (Ahti) N. S. Golubk. 🌿

**Synonyms:** [\*Cladonia arbuscula\* subsp. \*beringiana\*](#) (based on *D. Wright 3079*, coast near Dillon Beach, Marin Co., SFSU, det. T. Ahti)

**Cladonia artuata** S. Hammer 🍄 🌿

(Hammer 1993, 1995; Brodo & Ahti 1996; McCune & Geiser 2009; Glacy et al. 2011; *S. Hammer 1007*, vicinity of Hwy 408, Mendocino S. F., Mendocino Co., ASU)

**Misapplied names:** *C. carassensis*, for CA records, in part.

**Cladonia asahinae** J. W. Thoms. 🍄 🌿

(Hammer 1994, 1995; Brodo & Ahti 1996; Doell & Wright 1996; Goward 1999; Brodo et al. 2001 [pp. 238–239, with color photograph]; Ahti & Hammer 2002; Benson 2005; Rotter 2010; Glacy et al. 2011 [as “cf.”]; Benson et al. 2012)

**Cladonia bacilliformis** (Nyl.) Glück 🍄 🌿

(Goward 1999; not in southern CA *fide* Ahti & Hammer 2002)

**Cladonia bellidiflora** (Ach.) Schaer. 🍄 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1882; Fink 1908, 1935; Thomson 1968a; Malachowski 1975; TJ; Thomson 1984; Hammer 1989c, 1994, 1995; Brodo & Ahti 1996; Goward 1999; Brodo et al. 2001 [p. 239, with color photograph]; Robertson 2002a; Blauman 2004a; Williams & Sillett 2007)

**Cladonia cariosa** (Ach.) Spreng. 🍄 🌿

(Hasse 1898a; Fink 1906; Robbins 1931; TJ; Thomson 1984; Goward 1999; Brodo et al. 2001 [pp. 242–243, with color photograph]; Hinds & Hinds 2007 [p. 169, color photograph only]; Thomson 2003)

**Cladonia carneola** (Fr.) Fr. 🍄 🌿

(Hammer 1989b, 1989c, 1995; Goward 1999; Brodo et al. 2001 [p. 243, with color photograph]; Ahti & Hammer 2002; Robertson & Beyer 2005)

**Cladonia cervicornis** subsp. **verticillata** (Hoffm.) Ahti 🍄 🌿

(Baltzo 1989; Hammer 1989c; von Reis 1991; McGee 1995; Brodo et al. 2001 [pp. 245–246, with color photograph]; Robertson 2002a, 2003a; Tucker et al. 2004; Robertson 2005c)

**Synonyms:** [\*C. verticillata\*](#), [\*C. verticillata\* f. \*phyllophora\*](#)

**Cladonia chlorophaea** (Flörke *ex* Sommerf.) Spreng. 🍄 🌿

(Hasse 1898a; Nylander 1900; Herre 1906; Robbins 1931; Herre 1945; Thomson & Ketchledge 1958; Jordan 1968; Baltzo 1970; Bowler 1972; TJ; Thomson 1984; Weber et al. 1987; Baltzo 1989; Hammer 1989c; von Reis 1991; Doell & Wright 1996; Bratt 1997; McGee 1998; Goward 1999; Brodo et al. 2001 [p. 247, with color photograph]; Robertson 2001; Ahti & Hammer 2002; Baltzo 2002; Robertson 2002a, 2003a; Blauman 2004a; Jovan & McCune 2004; Tucker et al. 2004; Benson 2005; Robertson 2005a, 2005b; Carlberg et al. 2007; Hinds & Hinds 2007 [p. 171, color photograph only]; Knudsen 2007b; Williams & Sillett 2007; Knudsen et al. 2009; Knudsen & Kocourková 2009c, 2010f; Rotter



2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [\*C. pyxidata\* var. \*chlorophaea\*](#)

**Cladonia ciliata** Stirt. var. **ciliata** 📖 🌿

**Synonyms:** [\*Cladina ciliata\*](#)

**Cladonia concinna** Ahti & Goward 📖 🌿

(Ahti 2007; Knudsen & Lendemer 2009a; McCune & Geiser 2009; Glacy et al. 2011)

**Misapplied names:** [\*C. cervicornis\* subsp. \*cervicornis\*](#), [\*C. cervicornis\* subsp. \*verticillata\*](#)

**Cladonia coniocraea** (Flörke) Spreng. 📖 🌿

(Jordan 1968; Thomson 1968a; Lindsay 1973; Malachowski 1975; Sigal 1975; Pinelli & Jordan 1978; TJ; Thomson 1984; Sigal 1989; Tucker & Bratt 1996; Goward 1999; Brodo et al. 2001 [p. 247, with color photograph]; Baltzo 2002; Robertson 2002a; Jovan & McCune 2004; Robertson 2005b; Williams & Sillett 2007; Rotter 2010)

**Synonyms:** [\*C. fimbriata\* var. \*tubaeformis\*](#)

**Cladonia conista** (Nyl.) Robbins 📖 🌿

(Robbins 1931; TJ; Hammer 1995; Wright 1997; Tucker 2002)

**Note:** Ahti (1980a) pointed out that the basionym of *C. conista* is *Cladonia fimbriata* f. *conista* Nyl., not *Cenomyce fimbriata* var. *conista* Ach. Ahti (2000) and others included this taxon as a chemical variant of *C. humilis*.

**Cladonia cornuta** (L.) Hoffm. subsp. **groenlandica** (Å. E. Dahl) Ahti 📖 🌿

(Hammer & Ahti 1990; Hinds & Hinds 2007 [p. 174, for *C. cornuta* s. str., color photograph only])

**Cladonia crispata** (Ach.) Flot. 📖 🌿

(Fink 1904b; Herre 1910; Robbins 1927; Thomson 1968a; Malachowski 1975; TJ; Thomson 1984; Hale & Cole 1988; Hammer 1989c; Goward 1999; Brodo et al. 2001 [pp. 249–250, with color photograph]; Robertson 2002a; Hinds & Hinds 2007 [p. 175, color photograph only])

**Synonyms:** [\*C. japonica\*](#)

**Note:** Mendocino Co. collections (Malachowski, Robertson) are probably identified accurately, but those from other areas such as Santa Cruz (Herre 1910) and San Francisco [*Bolander 30* in Robbins 1927] should be checked.

**Cladonia crispata** var. **cetrariiformis** (Delise) Vain. 📖 🌿

(Goward 1999)

**Cladonia cryptochlorophaea** Asah. 📖 🌿

(Ryan & Nash 1991; *B. Ryan 12579*, 15 km S of Tom's Place, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU)

**Cladonia deformis** (L.) Hoffm. 📖 🌿

(Herre 1942c; TJ; Sweet 1983; Thomson 1984; Goward 1999; Brodo et al. 2001 [p. 251, with color photograph]; Tucker 2002; Hinds & Hinds 2007 [p. 178, color photograph only]; *B. Ryan 25151*, Marble Mtn Wilderness, 1.6 km along trail from Lovers Camp, Siskiyou Co., ASU; Brodo et al. 2001 [p. 251], indicate that it is in CA near the Oregon border)

**Cladonia dimorpha** S. Hammer 📖 🌿

(Hammer & Ahti 1990; Goward 1999; Ahti & Hammer 2002; *S. Hammer SH1008*, Hwy. 408 near Fire Station, Mendocino Co., ASU)

**Cladonia extracorticata** S. Hammer 📖 🌿

(Hammer 1995; CA endemic)

**Cladonia fimbriata** (L.) Fr. 📖 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1882; Orcutt 1885; Eckfeldt 1893; McClatchie 1895; Hasse 1896; McClatchie 1897; Hasse 1898a; Hasse 1903a; Orcutt 1903; Fink 1904a; Orcutt 1907, 1909; Herre 1910; Hasse 1913b; Moxley 1921; Merrill 1923; Herre 1945, 1950a; Jordan 1968; Thomson 1968a; Baltzo 1970; Lindsay 1973; Pinelli & Jordan 1978; TJ; Sweet 1983; Thomson 1984; Hale & Cole 1988; Baltzo 1989; Hammer 1989c; Ryan & Nash 1991; Hammer 1995; McGee 1995; Doell & Wright 1996; Tucker & Bratt 1996; Hill 1997; McGee 1998; Goward 1999; Brodo et al. 2001

[p. 254, with color photograph]; Ahti & Hammer 2002; Baltzo 2002; Robertson 2003a; Blauman 2004a; Jovan & McCune 2004; Tucker et al. 2004; Benson 2005; Robertson 2005a, 2005c; Carlberg et al. 2007; Hinds & Hinds 2007 [p. 182, color photograph only]; Knudsen 2007b; Rosentreter et al. 2007; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Rotter 2010 [as “cf.”]; Glacy et al. 2011; Benson et al. 2012)

**Synonyms:** [C. major](#) (synonymy *fide* T. Ahti [personal communication])

**Cladonia fimbriata** var. **simplex** (Weiss) Flot. *ex* Vain. 📖 🌿

(Herre 1910, 1942a)

**Cladonia firma** (Nyl.) Nyl. 📖 🌿

(Hammer 1991, 1994, 1995; Riefner, Bowler, & Ryan 1995 [as “cf.”]; Hill 1996; Magney 1999; Ahti & Hammer 2002; Knudsen & Lendemer 2006c; Knudsen & Lendemer 2009a)

**Note:** This taxon is locally common but known in CA from only two areas; *S. Tucker 34627*, Los Osos, San Luis Obispo Co., ASU, SBBG; *K. Knudsen 4547-1*, Morro Bay S. P., San Luis Obispo Co., UCR. A similar population in Torrey Pines, San Diego Co. is now called *C. maritima*.

**Cladonia furcata** (Huds.) Schrad. 📖 🌿

(Tuckerman 1882; Orcutt 1885; Hasse 1895; McClatchie 1895, 1897; Hasse 1898a, 1903a; Orcutt 1903; Herre 1906; Orcutt 1907; Herre 1910; Hasse 1913b; Merrill 1923; Robbins 1931; Herre 1945; Thomson & Ketchledge 1958; Jordan 1968; Lindsay 1973; TJ; Hammer 1989c, 1994; McGee 1995; Doell & Wright 1996; McGee 1998; Goward 1999; Brodo et al. 2001 [pp. 255–256, with color photograph]; Baltzo 2002; Robertson 2003a; Blauman 2004a; Jovan & McCune 2004; Robertson 2004, 2005b, 2005c; Tucker et al. 2004; Hinds & Hinds 2007 [p. 184, color photograph only]; McCune & Geiser 2009; Rotter 2010; Benson et al. 2012; Benson & Hillyard 2012)

**Synonyms:** [C. furcata](#) var. [C. corymbosa](#), [C. herrei](#) (synonymy *fide* S. Hammer, personal communication)

**Cladonia gracilis** var. **elongata** (Jacq.) Vain. 📖 🌿

(Tuckerman 1882)

**Synonyms:** [C. elongata](#)

**Cladonia grayi** G. Merr. *ex* Sandst. 📖 🌿

(Goward 1999; *H. Peters 25*, near Yountville, Napa Co., SFSU, is UV+)

**Note:** Chemistry of specimens should be checked, *fide* S. Hammer.

**Cladonia hammeri** Ahti 📖 🌿

(Ahti & Hammer 2002; Knudsen 2005c, 2007b; Knudsen & Kocourková 2009a, 2009c, 2010f; Tucker 2010; Knudsen & Kocourková 2012a; *K. Knudsen 2146*, Bernard Field Station, base of San Gabriel Mts, Claremont, Los Angeles Co., UCR)

**Note:** This is also found in Baja California.

**Cladonia humilis** (With.) J. R. Laund. 📖 🌿

(Hale & Cole 1988; Hammer & Ahti 1990; Doell & Wright 1996; Goward 1999; Ahti & Hammer 2002; Glacy et al. 2011)

**Synonyms:** [C. conistea](#)

**Cladonia lacryma** S. Hammer 📖 🌿

(Hammer 2001)

**Cladonia macilenta** Hoffm. 📖 🌿

(Herre 1907, 1910, 1945; Thomson & Ketchledge 1958 [f. *styracella*]; Jordan 1968; Thomson 1968a; Baltzo 1970; Lindsay 1973; Malachowski 1975; Pinelli & Jordan 1978; TJ; Sweet 1983; Hale & Cole 1988; Baltzo 1989; Hammer 1989c; Hill 1997; Goward 1999; Bourell 2000; Brodo et al. 2001 [p. 259, with color photograph]; Baltzo 2002; Doell 2002; Robertson 2002a, 2003a; Thomson 2003; Blauman 2004a; Tucker et al. 2004; Robertson 2005a, 2005c; Williams & Sillett 2007; Rotter 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [C. balfourii](#) Cromb. non auct., [C. macilenta](#) var. [bacillaris](#)

**Cladonia macrophyllodes** Nyl. 📖 🌿

(Thomson 1984; Hammer 1995; Goward 1999; Bourell 2000; Brodo et al. 2001 [pp. 260–261, with color photograph]; Knudsen & Lendemer 2009a; McCune & Geiser 2009)

**Cladonia maritima** K. Knudsen & Lendemer 📄 🌿

(Knudsen & Lendemer 2009a; Knudsen & Kocourková 2009a, 2009b, 2010f; Knudsen & Kocourková 2012a; Villella 2012; *H. Hasse s.n.*, Santa Monica Mts, NY; CA endemic)

**Misapplied names:** *C. firma*

**Note:** This species occurs in coastal habitats in S CA from San Diego Co. to Santa Barbara Co.

**Cladonia merochlorophaea** Asah. var. **merochlorophaea** 📄 🌿

(Hammer 1995; Goward 1999)

**Cladonia multiformis** G. Merr. 📄 🌿

(TJ; Thomson 1984 [shown on map]; Goward 1999; Hinds & Hinds 2007 [p. 192, color photograph only]; *H. Thiers*, Lime Cave near Cedarville, Modoc Co., no number or date, SFSU, ! S. Tucker)

**Synonyms:** [\*C. furcata\* var. \*racemosa\*](#)

**Cladonia nashii** Ahti 📄 🌿

(Ahti & Hammer 2002; Robertson 2003b; Knudsen 2006d, 2007b; Knudsen 2009; Knudsen & Kocourková 2009a, 2009c, 2010f; Glacy et al. 2011; Knudsen & Kocourková 2012a; *T. Nash 34092*, Santa Catalina Isl., Los Angeles Co., ASU; *McLeod P11912a*, Cuesta Ridge, San Luis Obispo Co., ASU; *B. Ryan 27136b*, Hastings Natural History Reserve, Monterey Co., ASU)

**Note:** This species also occurs in Baja California.

**Cladonia norvegica** Tønsberg & Holien 📄 🌿

(Williams & Sillett 2007 [as cf. *norvegica*])

**Note:** This species has been collected in interior western and midwestern U. S. and Alaska.

**Cladonia ochrochlora** Flörke 📄 🌿

(Merrill 1923; Thomson 1968a; TJ; Hale & Cole 1988; Doell & Wright 1996; Wright 1997; Goward 1999; Bourell 2000; Brodo et al. 2001 [pp. 262–263, with color photograph]; Ahti & Hammer 2002; Baltzo 2002; Robertson 2003a; Blauman 2004a; Jovan & McCune 2004; Benson 2005; Robertson 2005a, 2005c; Hinds & Hinds 2007 [p. 193, color photograph only]; Williams & Sillett 2007; Villella 2010; Glacy et al. 2011)

**Synonyms:** [\*C. fimbriata\* var. \*ochrochlora\*](#)

**Cladonia peziziformis** (With.) J. R. Laund. 📄 🌿

(Hale 1979; Hinds & Hinds 2007 [p. 196, color photograph only])

**Synonyms:** [\*C. capitata\*](#)

**Note:** In San Francisco Bay area, *fide* S. Hammer (personal communication).

**Cladonia pleurota** (Flörke) Schaer. 📄 🌿

(TJ; Thomson 1984, 2003, although S. Hammer [personal communication] doubted that it is in CA; Brodo et al. 2001 [p. 265, color photograph but no CA report]; Hinds & Hinds 2007 [p. 198, color photograph only])

**Cladonia pocillum** (Ach.) Grognot 📄 🌿

(TJ; Bratt 1997; Goward 1999; Ahti & Hammer 2002; Brodo et al. 2001 [p. 266, color photograph but no CA report]; Hinds & Hinds 2007 [p. 199, color photograph only]; Rosentreter et al. 2007 [with color photograph]; *J. Shevock 12890*, Table Mtn Fish & Game Preserve, Millerton Lake, Fresno Co., CAS)

**Synonyms:** [\*C. pyxidata\* var. \*pocillum\*](#)

**Note:** The specific status of *C. pocillum* is in doubt. According to Ahti & Hammer (2002, p. 151), *C. pocillum* may be an ecotype of the *C. pyxidata* complex.

**Cladonia poroscypha** S. Hammer 📄 🌿

(Hammer 1993 [reported type, *A. Herre 3*, Pilarcitos], 1995; Brodo & Ahti 1996; McCune & Geiser 2009; *R. Y. Wing 5109*, Inverness, Marin Co., det. S. Hammer, ASU; CA endemic)

**Misapplied names:** *C. carassensis* for CA records, in part.

**Cladonia portentosa** (Dufour) Coem. 📄 🌿

(McCune & Geiser 2009)

**Synonyms:** [Cladina portentosa f. pacifica](#)

**Misapplied names:** [Cladina alpestris](#), (Lindsay 1973), [C. impexa](#) (Lindsay 1973), [C. mitis](#) (Herre 1945; Lindsay 1973), [C. stellaris](#) (Goward 1999), [Cladonia impexa](#) (Thomson 1968a; Tucker 1973; Malachowski 1975), [C. mitis](#), [C. stellaris](#)

**Cladonia prolifica** Ahti & S. Hammer 📷 🌿

(Hammer & Ahti 1990; Hammer 1995; Brodo & Ahti 1996; Goward 1999; *B. Ryan 31351b*, Santa Rosa Isl., Santa Barbara Co., ASU)

**Cladonia pulvinella** S. Hammer 📷 🌿

(Hammer 1995; Ahti 2000 [p. 147]; Ahti & Hammer 2002; Knudsen 2005c, 2007b; Glacy et al. 2011; *K. Knudsen 351*, Santa Monica Mts, Los Angeles Co., UCR)

**Cladonia pyxidata** (L.) Hoffm. 📷 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1882; Orcutt 1885; Eckfeldt 1893; Hansen 1895; Hasse 1895; McClatchie 1895; Hasse 1896; McClatchie 1897; Hasse 1898a; Orcutt 1903; Fink 1907; Orcutt 1907; Hasse 1908a; Herre 1910; Hasse 1913b; Moxley 1921; Thomson 1968a; Lindsay 1973; Malachowski 1975; Sigal 1975; Pinelli & Jordan 1978; TJ; Thomson 1984; Weber et al. 1987; Hale & Cole 1988; Hammer 1989c; Sigal 1989; Bratt 1993; Hill 1997; Robertson et al. 1998 [as “cf.”]; Bratt 1999; Goward 1999; Brodo et al. 2001 [pp. 267–268, with color photograph]; Ahti & Hammer 2002; Baltzo 2002; Robertson 2002a; Tucker 2002; Robertson 2003a; Blauman 2004a; Tucker et al. 2004; Benson 2005; Carlberg et al. 2007; Hinds & Hinds 2007 [p. 201, color photograph only]; Knudsen 2007b; Knudsen & Kocourková 2009a, 2009c, 2010f; Glacy et al. 2011; Benson et al. 2012; Benson & Hillyard 2012)

**Synonyms:** [C. floccida](#)(?), [C. pyxidata f. lophyra](#), [C. pyxidata f. syntheta](#)

**Cladonia rei** Schaer. 📷 🌿

(Malachowski 1975; Pinelli & Jordan 1978; TJ; Weber et al. 1987; Robertson 2002a; Blauman 2004a; Brodo et al. 2001 [p. 269, color photograph but no CA report]; Hinds & Hinds 2007 [p. 203, color photograph only]; *B. Ryan 31601*, Santa Cruz Isl., Santa Barbara Co., ASU; *B. Ryan 32179a*, eastern end of Kerckhoff Lake, Sierra N. F., Madera Co., ASU; *D. Wright*, shore of Arcata Bay, Humboldt Co., SFSU)

**Synonyms:** [C. nemoxyna](#), [C. fimbriata var. nemoxyna](#)

**Note:** According to S. Hammer, some records may be based on misidentifications of *C. ochrochlora*, *C. subfimbriata*, or *C. verruculosa*.

**Cladonia scabriuscula** (Delise) Nyl. 📷 🌿

(Robbins 1931; Thomson 1968a; Lindsay 1973; TJ; Sweet 1983; Thomson 1984; Hale & Cole 1988; von Reis 1991; McGee 1995; Bowler et al. 1996; Doell & Wright 1996; Bratt 1997; Goward 1999; Brodo et al. 2001 [p. 270, with color photograph]; Robertson 2001; Ahti & Hammer 2002; Carlberg et al. 2007; Hinds & Hinds 2007 [p. 205, color photograph only]; Knudsen & Kocourková 2009a, 2009c; Glacy et al. 2011; Knudsen & Kocourková 2012a)

**Cladonia squamosa** Hoffm. 📷 🌿

(Herre 1906, 1907, 1910; Thomson 1968a; TJ; Sweet 1983; Thomson 1984; Hammer 1989c, 1995; Goward 1999; Brodo et al. 2001 [p. 270, with color photograph]; Ahti & Hammer 2002; Blauman 2004a; Carlberg et al. 2007; Hinds & Hinds 2007 [p. 207, color photograph only]; Glacy et al. 2011)

**Synonyms:** [C. squamosa var. subsquamosa](#), *C. subsquamosa*, synonymy *fide* Ahti & Hammer (2002, p. 153)

**Cladonia subfimbriata** Ahti 📷 🌿

(Ahti & Hammer 2002; Knudsen 2007b; Knudsen & Kocourková 2009c; Glacy et al. 2011; Knudsen & Kocourková 2012a; *B. Ryan 11272*, Espanoza Cyn, Santa Monica Mts, Los Angeles Co., ASU)

**Cladonia subradiata** (Vain.) Sandst. 📷 🌿

(Tucker & Bratt 1996; Ahti & Hammer 2002 [“California specimens could not be identified with certainty”]; Brodo et al. 2001 [pp. 272–273, color photograph but out of range])

**Cladonia subulata** (L.) F. H. Wigg. 📷 🌿

(Thomson 1968a; Malachowski 1975; TJ; von Reis 1991; Goward 1999; Brodo et al. 2001 [p. 273, with color photograph]; Ahti & Hammer 2002; Robertson 2002a; Thomson 2003; Ellyson & Sillett 2003; Tucker et al. 2004; Benson 2005; Hinds & Hinds 2007 [p. 212, color photograph only]; Glacy et al. 2011; Benson et al. 2012; *J. Linsdale 447* as *C. fimbriata*, Hastings Natural History Reserve, Monterey Co., 1944, UC)

**Synonyms:** [\*C. fimbriata\* var. \*subulata\*](#)

***Cladonia sulphurina*** (Michx.) Fr. 📖 🌿

(Ellyson & Sillett 2003)

**Note:** This species has been collected in Washington, interior western and midwestern U. S. and Alaska.

***Cladonia symphy carpia*** (Flörke) Fr. 📖 🌿

(Brodo et al. 2001 [pp. 274–275, with color photograph]; Tucker 2002)

***Cladonia thiersii*** S. Hammer 📖 🌿

(Hammer 1989a; Riefner, Bowler, & Ryan 1995 [San Diego Co. report]; Magney 1999 [repeated earlier reports]; *S. Hammer 3231*, Kehoe Beach, Point Reyes, Marin Co., ASU; *R. Riefner 49*, Torrey Pines Reserve, San Diego Co., SBBG, UCR; CA endemic)

***Cladonia transcendens*** (Vain.) Vain. 📖 🌿

(Evans 1951; Thomson 1968a; Yoshimura 1968b; Lindsay 1973; Pinelli & Jordan 1978; TJ; Hammer 1989c, 1995; McGee 1998; Goward 1999; Baltzo 2002; Ellyson & Sillett 2003; Blauman 2004a; Jovan & McCune 2004; Williams & Sillett 2007; McCune & Geiser 2009; Benson et al. 2012)

***Cladonia umbricola*** Tønsberg & Ahti 📖 🌿

(Brodo & Ahti 1996; Goward 1999; Brodo et al. 2001 [pp. 276–277, with color photograph]; McCune & Geiser 2009; Glacy et al. 2011; *C. Bratt 4688*, South Range, Santa Cruz Isl., Santa Barbara Co., SBBG; *C. Bratt 3766*, Point Lobos State Reserve, Monterey Co., SBBG)

**Misapplied names:** [\*C. polydactyla\*](#) *fide* T. Ahti (most CA records)

***Cladonia verruculosa*** (Vain.) Ahti 📖 🌿

(Hammer & Ahti 1990; Goward 1999; Brodo et al. 2001 [p. 278, with color photograph]; Ahti & Hammer 2002; Jovan & McCune 2004; Tucker et al. 2004; Benson 2005; Williams & Sillett 2007; McCune & Geiser 2009; Glacy et al. 2011; *B. Ryan 26355*, San Gabriel Wilderness, Los Angeles Co., det. S. Hammer)

**Note:** Specimens identified by S. Hammer from S CA as this species are *C. subulata*, *fide* Knudsen & Kocourková 2012a.

***Cladonia alpestris*** (L.) Rabenh. 📖 🌿

(Lindsay 1973 [misapplied to *Cladonia portentosa*; Thomson 1968a)

=[\*Cladonia stellaris\*](#), but not in CA

***Cladonia anomaea*** (Ach.) Ahti & P. James 📖 🌿

(Thomson 1984)

=[\*C. ramulosa\*](#)

***Cladonia bacillaris*** Nyl. 📖 🌿

(TJ; Hale & Cole 1988)

=[\*C. macilenta\* var. \*bacillaris\*](#), but misidentifications for CA *fide* Hammer 1995

***Cladonia balfourii*** Cromb. 📖 🌿

(TJ)

=[\*C. macilenta\*](#)

***Cladonia caespiticia*** (Pers.) Flörke 📖 🌿

(Hasse 1908a, 1913b; Fink 1935; misidentifications for CA, since it occurs only in eastern U. S., *fide* Brodo et al. 2001 [p. 242])

***Cladonia capitata*** (Michx.) Spreng. 📖 🌿

(TJ)

=[\*C. peziziformis\*](#)

*Cladonia carassensis* Vain. 📖 🌿

(Herre 1944c; Thomson & Ketchledge 1958 [“f. *subulata* (Sandst.) Evans”]; Lindsay 1973; Malachowski 1975; TJ; Hammer 1989c [as s. lat.]; Robertson 2002a)

**Note:** According to Hammer (1993), N. Amer. records of this species are based on misidentifications. Hammer proposed two new species, *C. artuata* and *C. poroscypha*, for these records.

*Cladonia cenotea* (Ach.) Schaer. 📖 🌿

(TJ; Thomson 1984; based on misidentifications, *fide* Hammer [1995] and Tucker [2002]; not in CA, only in Washington state and inland *fide* Brodo et al. 2001 [p. 245, with color photograph])

*Cladonia cervicornis* (Ach.) Flot. subsp. *cervicornis* 📖 🌿

(Herre 1910; TJ; Hammer 1989c; Hammer & Ahti 1990; [CA inferred but not definitely reported]; Goward 1999; Ahti & Hammer 2002; Glacy et al. 2011)

**Note:** According to Ahti (2007), *C. cervicornis* s. str. does not occur in western N. Amer. The name has been applied to what is now *C. concinna* or *C. maritima*.

*Cladonia coccifera* (L.) Willd. 📖 🌿

(Ryan & Nash 1991)

**Note:** Hammer (personal communication) strongly doubted its presence in CA; report need to be verified.

*Cladonia conistea* (Delise) Asah. 📖 🌿

(Yoshimura 1968b; TJ; not in Hammer 1995)

=[\*C. humilis\*](#)

*Cladonia cornuta* (L.) Hoffm. 📖 🌿

(Fink 1935; Lindsay 1973; TJ; Thomson 1984; Goward 1999; Brodo et al. 2001 [p. 249, with color photograph]; misidentifications, *fide* S. Hammer, personal communication, 1997)

**Synonyms:** *C. Cladonia cornuta* subsp. *cornuta*, *C. fimbriata* var. *cornuta*

*Cladonia degenerans* (Flörke) Spreng. 📖 🌿

(Robbins 1931; Herre 1942c)

=[\*C. phyllophora\*](#), but misidentifications for CA

*Cladonia digitata* (L.) Hoffm. 📖 🌿

(Robbins 1931; not in range *fide* Brodo et al. 2001 [p. 252, but with color photograph]; collections should be verified)

*Cladonia elongata* (Jacq.) Hoffm. 📖 🌿

(TJ)

=[\*C. gracilis\* var. \*elongata\*](#)

**Note:** CA reports are questionable *fide* S. Hammer (personal communication).

*Cladonia fimbriata* var. *nemoxyna* (Ach.) Coem. 📖 🌿

(Hasse 1915b; Wheeler 1938)

=[\*C. rei\*](#), but misidentifications for CA

*Cladonia fimbriata* var. *ochrochlora* (Flörke) Vain. 📖 🌿

(Hasse 1915b; Fink 1935)

=[\*C. ochrochlora\*](#)

*Cladonia fimbriata* var. *subulata* (L.) Vain. 📖 🌿

(Herre 1910, p. 117)

=[\*C. subulata\*](#)

*Cladonia fimbriata* var. *tubaeformis* (Mudd) Vain. 📖 🌿

(Hasse 1895, 1903a; Orcutt 1903; Herre 1910)

=[\*C. coniocraea\*](#)

*Cladonia flabelliformis* (Flörke) Vain. 📖 🌿

(Herre 1910; Fink 1935; TJ) misidentifications

*Cladonia floccida* Nyl. 📖 🌿

(Hasse 1898a; TJ)

- =[C. pyxidata](#)  
*Cladonia foliacea* (Huds.) Willd. 📖 🌿  
(Fink 1935; TJ) misidentifications for N. Amer.
- Cladonia furcata* var. *corymbosa* (Ach.) Nyl. 📖 🌿  
(Hasse 1903a)  
=[C. furcata](#)
- Cladonia furcata* var. *racemosa* Flörke 📖 🌿  
(Fink 1935; Herre 1942a)  
=[C. multiformis](#), but possible misidentifications for CA
- Cladonia gracilis* (L.) Willd. 📖 🌿  
(Tuckerman 1866; Bolander 1870; Fink 1905; Orcutt 1907; Herre 1942c, 1945; TJ; Thomson 1984; not in CA, *fide* S. Hammer [personal communication])
- Cladonia herrei* Fink ex J. Hedrick 📖 🌿  
(Hedrick 1934; Herre 1942c; TJ)  
=[C. furcata](#)
- Cladonia impexa* Harm. 📖 🌿  
(Thomson 1968a; Tucker 1973; Malachowski 1975; misidentifications of *Cladonia portentosa*)
- Cladonia japonica* Vain. 📖 🌿  
(McCune & Geiser 1997; McCune & Geiser 2009)  
=[C. crispata](#)
- Cladonia krempelhuberi* Vain. 📖 🌿  
(Robbins 1931; a misidentification, since this is Asian, and not in N. Amer.)
- Cladonia macilenta* var. *bacillaris* (Genth.) Schaer. 📖 🌿  
(Baltzo 2002; Hinds & Hinds 2007 [p. 189, color photograph only])  
=[C. macilenta](#) (synonymy *fide* Ahti & Hammer 2002)
- Cladonia major* (K. G. Hagen) Sandst. 📖 🌿  
(Robbins 1931; Thomson 1968a; TJ; Thomson 1984; Hale & Cole 1988)  
=[C. fimbriata](#) (synonymy *fide* T. Ahti [personal communication])
- Cladonia mitis* Sandst. 📖 🌿  
(Herre 1945 [misidentification of *Cladonia portentosa*])
- Cladonia nemoxyna* Ach. 📖 🌿  
(Robbins 1931; Thomson 1968a; Malachowski 1975)  
=[C. rei](#)
- Cladonia phyllophora* Hoffm. 📖 🌿  
(TJ; Hammer 1989c; Goward 1999)  
**Synonyms:** [C. degenerans](#) (Robbins 1931; Herre 1942c)  
**Note:** *Cladonia degenerans*, considered conspecific with *C. phyllophora* by Thomson (1968a, p. 94), was reported from CA by Robbins 1931 and Herre 1942c. These reports were picked up by Hammer and Goward. Hammer (personal communication cited in Tucker 2002) later considered these reports to be based on misidentifications. The identity of the taxon reported by Robbins and Herre has not been determined.
- Cladonia pityrea* (Flörke) Fr. 📖 🌿  
(Hasse 1913b; Herre 1942c; Baltzo 1970; Lindsay 1973; TJ)  
=[C. ramulosa](#)
- Cladonia polydactyla* (Flörke) Spreng. 📖 🌿  
(TJ; Hammer 1989c [as s. l.]  
=misidentifications for N. Amer. Most CA collections under this name are referable to *C. umbricola*, *fide* T. Ahti
- Cladonia pyxidata* var. *chlorophaea* Flörke 📖 🌿  
(Hasse 1903a)

- =[C. chlorophaea](#)  
*Cladonia pyxidata* f. *lophyra* Coem. 📖 🌿  
(Hasse 1908a)  
=[C. pyxidata](#)
- Cladonia pyxidata* f. *syntheta* Ach. 📖 🌿  
(Hasse 1908a)  
=[C. pyxidata](#)
- Cladonia pyxidata* var. *pocillum* (Ach.) Flot. 📖 🌿  
(McClatchie 1897; Hasse 1898a; Herre 1910; Hasse 1913b; Moxley 1921)  
=[C. pocillum](#)
- Cladonia ramulosa* (With.) J. R. Laund. 📖 🌿  
(Baltzo 1989)  
**Synonyms:** [C. anomaea](#), [C. pityrea](#), but reports based on misidentifications *fide* S. Hammer [personal communication, 1997] who saw no specimens from CA)
- Cladonia robbinsii* A. Evans 📖 🌿  
(Herre 1950a; Thomson 2003)  
=misidentifications; eastern U. S. only, *fide* Brodo et al. (2001, pp. 269–270, with color photograph)
- Cladonia santensis* Tuck. 📖 🌿  
(Tuckerman 1866; Bolander 1870; Willey 1873a; TJ; misidentifications for CA)
- Cladonia sobolifera* (Harm.) Nyl. 📖 🌿  
(Hasse 1906; Fink 1935)  
=[C. strepsilis](#), but misidentifications for CA
- Cladonia squamosa* var. *subsquamosa* (Nyl. ex Leight.) Vain. 📖 🌿  
(Hammer 1989c, 1995; Robertson 2002a; Jovan & McCune 2004; Tucker et al. 2004; Robertson 2005b, 2005c; Williams & Sillett 2007)  
=[C. squamosa](#)
- Cladonia stellaris* (Opiz) Pouzar & Vězda 📖 🌿  
(Thomson 1984)  
=[Cladonia portentosa](#)
- Cladonia stricta* (Nyl.) Nyl. 📖 🌿  
(Thomson 1984; not known from CA, *fide* S. Hammer [personal communication])
- Cladonia subcariosa* Nyl. 📖 🌿  
(Fink 1935; misidentifications)
- Cladonia subcervicornis* (Vain.) Kernst. 📖 🌿  
(TJ; not in Hammer 1995; misidentifications for N. Amer., *fide* T. Ahti)
- Cladonia subsquamosa* (Nyl. ex Leight.) Cromb. nom. illeg. non Kremp. 📖 🌿  
(Herre 1910; Fink 1935; Thomson & Ketchledge 1958; Lindsay 1973; Malachowski 1975; TJ; Hale & Cole 1988)  
=[C. squamosa](#)  
**Note:** For distinctions between this species and *C. subsquamosa* Kremp., see Ahti & Hammer 2002, pp. 153, 156.
- Cladonia tubaeformis* Hoffm. 📖 🌿  
(Hasse 1913b; misidentifications for CA)
- Cladonia verticillata* (Hoffm.) Schaer. 📖 🌿  
(McClatchie 1897; Hasse 1898a [as var. *phyllocephala* Flot.]; Fink 1904c; Herre 1906, 1907, 1910; Hasse 1915b [as var. *phyllocephala* Flot.]; Merrill 1923; Robbins 1931; Herre 1945; Thomson & Ketchledge 1958; TJ; Lindsay 1973; Thomson 1984; Hinds & Hinds 2007 [p. 217, color photograph only])  
=[C. cervicornis](#) subsp. [verticillata](#)
- Cladonia verticillata* f. *phyllophora* Sandst. 📖 🌿



(Thomson & Ketchledge 1958)

=[C. cervicornis subsp. verticillata](#)

**CLAUZADEA** Hafellner & Bellem.

*Clauzadea monticola* (Ach. ex Schaer.) Hafellner & Bellem. 🍄 🌿

(Kocourková et al. 2008)

**Synonyms:** [Lecidea fuscorubens](#) (Herre 1944b, but Herre misapplied this name to a collection [*C. L. Brown 153*, 4 mi. NW of Mill Valley, Marin Co., F] of *Porpidia thomsonii*)

**CLAVASCIDIUM** Breuss

**Clavascidium lacinulatum** (Ach.) M. Prieto 🍄 🌿

(Prieto et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [Placidium lacinulatum](#)

**Clavascidium lacinulatum** var. **erythrostratum** (Breuss) M. Prieto 🌿

**Synonyms:** [Placidium lacinulatum](#) var. [erythrostratum](#)

**Clavascidium umbrinum** (Breuss) Breuss 🍄 🌿

(Breuss & Bratt 2001; Breuss 2002; *C. Bratt 12100*, NE of Escondido, San Diego Co., SBBG)

**CLIOSTOMUM** Fr.

**Cliostomum flavidulum** Hafellner & Kalb 🍄 🌿

(Tønnsberg 1998; *T. Tønnsberg 14807*, E of Lord-Ellis summit, Del Norte Co.)

**Cliostomum griffithii** (Sm.) Coppins 🍄 🌿

(Gowan 1990; Bourell 2000; Brodo et al. 2001 [p. 279, with color photograph]; Baltzo 2002; Tucker 2002; Ekman 2004; Tucker et al. 2004; Williams & Sillett 2007; Knudsen 2009; Knudsen & Kocourková 2009b, 2010f; Tucker 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [Biatora mixta](#), [B. mixta](#) var. [pacifica](#), [Catillaria griffithii](#)

**Misapplied names:** [C. tricolor](#) (Hasse 1913b; Herre 1910) [Lecidea tricolor](#) (Hasse 1898a)

**CLYPEOCOCCUM** D. Hawksw.

\***Clypeococcum hypocenomycis** D. Hawksw. 🍄 🌿

(Etayo et al. 2007, based on *K. Knudsen 8297*, on *Hypocenomyce scalaris*, San Jacinto Mts, Riverside Co., UCR; Glacy et al. 2011; Kocourková et al. 2012)

**COCCOTREMA** Müll. Arg.

*Coccotrema pocillarium* (C. E. Cumm.) Brodo 🍄 🌿

(Riefner, Bowler, & Ryan 1995, on soil along coastal bluffs, Sonoma Co.; Magney 1999 [reported same collection]; Williams & Sillett 2007 [as “cf.”])

**Note:** The Riefner determination is dubious and is discussed in Tucker (2002). The collection by Williams and Sillett lacks mature ascocarps and resembles *Rinodina griseosoralifera*.

**COELOCAULON** Link

*Coelocaulon aculeatum* (Schreb.) Link 🍄 🌿

(Goward 1999)

=[Cetraria aculeata](#)

*Coelocaulon muricatum* (Ach.) J. R. Laund. 🍄 🌿

(McCune & Geiser 1997, 2009)

=[Cetraria muricata](#)

**COENOGONIUM** Ehrenb. (Lücking & Kalb 2000)

**Coenogonium luteum** (Dicks.) Kalb & Lücking 🍄 🌿

(Tucker 2009a)

**Synonyms:** [\*Dimerella lutea\*](#), [\*Microphiale lutea\*](#)

**Coenogonium pineti** (Ach.) Lücking & Lumbsch 📖 🌿

(*C. L. Brown s.n.*, Larkspur, Marin Co., 21 Mar 1943, F, ! S. Tucker)

**Synonyms:** [\*Microphiale diluta\*](#)

*Coenogonium interpositum* Nyl. 📖 🌿

(Stizenberger 1895; TJ)

**Note:** This was a dubious report for this species otherwise known from southeastern U. S.

**COLLEMA** F. H. Wigg.

**Collema bachmanianum** (Fink) Degel. 📖 🌿

(Schultz et al. 2004; Knudsen & Kocourková 2010a, citing a Hasse collection)

**Misapplied names:** *C. pulposum fide* Schultz et al. (2004) (Hasse 1896, 1898a, 1913b)

**Collema coccophorum** Tuck. 📖 🌿

(Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1882; Hasse 1898a, 1906; Orcutt 1909; Herre 1910; Hasse 1913b; Brodo et al. 2001 [pp. 283–284, with color photograph]; Knight et al. 2002; Schultz et al. 2004; Knudsen 2007b; Rosentreter et al. 2007; Knudsen 2009; Knudsen & Kocourková 2009a, 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [\*Synechoblastus coccophorus\*](#)

**Collema conglomeratum** Hoffm. 📖 🌿

(Nylander 1900; Wetmore 1985, based on *C. Wetmore 50485*, Sequoia N. P., Tulare Co., MIN; Brodo et al. 2001 [“widely distributed”]; Hinds & Hinds 2007 [p. 222, color photograph only])

**Collema crispum** (Huds.) F. H. Wigg. 📖 🌿

(Hasse 1903c; Herre 1912b; Degelius 1954, 1974; TJ; Goward et al. 1994; Wright 1997 [as “cf.”]; Doell et al. 1999; Brodo et al. 2001; Knight et al. 2002; Schultz et al. 2004; Knudsen 2007b; McCune & Geiser 2009; Knudsen & Kocourková 2010f, 2012a)

**Synonyms:** [\*C. cheileum\*](#), [\*C. cheileum f. monocarpum\*](#)

**Collema crispum** var. **metzleri** (Arnold) Degel. 📖 🌿

(Degelius 1974; TJ)

**Collema cristatum** (L.) F. H. Wigg. 📖 🌿

(Schultz et al. 2004; Brodo et al. 2001 [pp. 284–285, color photograph but no CA record]; Knudsen 2009; Knudsen & Kocourková 2012a; *K. Knudsen 6940*, San Miguel Isl., UCR; *T. Nash 32887*, Santa Rosa Isl., Santa Barbara Co., ASU)

**Collema furfuraceum** (Arnold) Du Rietz 📖 🌿

(Jordan 1968; Baltzo 1970; Lindsay 1973; Degelius 1974; Tucker & Kowalski 1975; TJ; Hale & Cole 1988; Baltzo 1989; von Reis 1991; McGee 1995; Doell & Wright 1996; Tucker & Bratt 1996; Wright 1997; Bourell 2000; Brodo et al. 2001 [p. 285, with color photograph]; McGee 2001; Baltzo 2002; Robertson 2003a; Jovan & McCune 2004; Schultz et al. 2004; Tucker et al. 2004; Benson 2005; Hinds & Hinds 2007 [p. 224, color photograph only]; Knudsen 2007b; Knudsen et al. 2009; McCune & Geiser 2009; Schultz 2009; Tucker 2010; Glacy et al. 2011; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Collema furfuraceum** var. **luzonense** (Räsänen) Degel. 📖 🌿

(Degelius 1974 [p. 181]; TJ)

**Collema fuscovirens** (With.) J. R. Laund. 📖 🌿

(Schultz et al. 2004; Tucker et al. 2004; Hinds & Hinds 2007 [p. 225, color photograph only]; *C. Wetmore 16790*, 2 mi. N of Coldbrook Station, Angeles N. F., Tulare Co., MIN; *B. Ryan 26378*, San Gabriel Wilderness, Los Angeles Co., ASU)

**Synonyms:** [\*C. tuniforme\*](#)

**Collema limosum** (Ach.) Ach. 📖 🌿

(Tuckerman 1882; Hasse 1896; McClatchie 1897; Hasse 1898a; Orcutt 1903; Herre 1906; Hasse

1913b; Degelius 1974 [p. 52]; TJ; Schultz et al. 2004; Knudsen & Kocourková 2010a, citing a Hasse collection; *C. Bratt 4225*, upper Santa Ynez Valley, Santa Barbara Co., det. M. Schultz, SBBG, ASU)

**Synonyms:** [\*C. glaucescens\*](#)

***Collema nigrescens*** (Huds.) DC. 📖 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Tuckerman 1882; Hasse 1895; McClatchie 1895, 1897; Hasse 1898a; Orcutt 1903; Herre 1906, 1907; Orcutt 1907; Herre 1910; Hasse 1913b; Thomson & Ketchledge 1958; Jordan 1968; Baltzo 1970; Degelius 1974; Pinelli & Jordan 1978; TJ; Weber et al. 1987; Baltzo 1989; Goward et al. 1994; Tucker & Bratt 1996; Hill 1997; Wright 1997; McGee 1998; Wright 1998; Brodo et al. 2001 [p. 285, with color photograph]; Robertson 2001; Baltzo 2002; Robertson 2003a; Thomson 2003; Jovan & McCune 2004; Schultz et al. 2004; Tucker et al. 2004; Benson 2005; Hinds & Hinds 2007 [p. 227, color photograph only]; Knudsen et al. 2009; Knudsen & Kocourková 2009b; McCune & Geiser 2009; Villella 2010; Knudsen & Kocourková 2012a)

**Synonyms:** [\*C. nigrescens\* var. \*leucopeplum\*](#) [\*C. vespertilio\*](#)

***Collema occultatum*** Bagl. var. ***populinum*** (Th. Fr.) Degel. 📖 🌿

(Degelius 1974; TJ; *A. Henssen 13763a*, 4 mi. N of Barona, San Diego Co., Lichenes Cyanophili Exsiccati #2, Botanical Institute, Univ. of Marburg, Germany, ASU, UPS)

**Note:** This species occurs in Arizona and Baja California but is not reported from CA, *fide* Schultz (2004).

***Collema polycarpon*** Hoffm. 📖 🌿

(Degelius 1974; TJ; Brodo et al. 2001 [p. 286, with color photograph]; Schultz et al. 2004; Tucker et al. 2004; Benson 2005 [as “cf.”]; Hinds & Hinds 2007 [p. 229, color photograph only]; *J. Shevock 17156*, Marble Fork, Kaweah River, across canyon from Inspiration Point, Tulare Co., ASU; *H. Thiers 33611*, Decker Cyn Rd, Ventura Co., ASU)

**Misapplied names:** *C. aggregatum* of early collectors

***Collema quadrifidum*** Stone & McCune 📖 🌿

(Stone & McCune 2010, from Trinity Co.; Clark 2011)

***Collema subflaccidum*** Degel. 📖 🌿

(TJ; Tucker 2002; Jovan & McCune 2004; Schultz et al. 2004; Benson 2005; Hinds & Hinds 2007 [p. 230, color photograph only]; *B. Ryan 21930b*, N of Baywood Park, northern side of Los Osos, San Luis Obispo Co., ASU)

**Note:** Degelius (1954) was cited in TJ, but it included no CA reference.

***Collema subnigrescens*** Degel. 📖 🌿

(Degelius 1974; TJ; Knudsen & Kocourková 2010a, citing a Hasse collection; *H. Hasse Exs. 183, 638*, Santa Monica Mts, Los Angeles Co., ASU; *C. Bratt 3175*, Los Osos, San Luis Obispo Co., SBBG)

***Collema subnigrescens*** Degel. f. ***caesium*** (Clemente) Degel. 📖 🌿

(Schultz et al. 2004; *B. Ryan 21930a*, N of Baywood Park, San Luis Obispo Co., ASU, det. M. Schultz)

***Collema tenax*** (Sw.) Ach. 📖 🌿

(TJ; von Reis 1991; Goward et al. 1994; Bowler et al. 1996 [as “cf.”]; Brodo et al. 2001 [p. 287, with color photograph]; Knight et al. 2002; Riefner et al. 2003; Robertson 2003b, 2004; Schultz et al. 2004; Robertson 2005c; Knudsen 2006a; Hinds & Hinds 2007 [p. 231, color photograph only]; Knudsen 2007b; Rosentreter et al. 2007; Knudsen & Kocourková 2009c, 2012a)

**Synonyms:** [\*C. pulposum\*](#)

***Collema tenax*** var. ***corallinum*** (A. Massal.) Degel. 📖 🌿

(TJ)

**Synonyms:** [\*C. cristatellum\*](#), [\*Leptogium cristatellum\*](#)

***Collema texanum*** Tuck. 📖 🌿

(TJ; Weber et al. 1987; *H. Hasse Exs. 829*, Santa Monica Mts, Los Angeles Co., ASU)

**Synonyms:** [\*Synechoblastus laciniatus\*](#)

**Note:** CA is not included in the distribution of this species by Schultz et al. (2004) who did not comment on the Riverside Co. record of Weber et al. or the Hasse collection.

**Collema undulatum** Laurer *ex* Flot. 🍄 🌿

(Wetmore 1985, based on *C. Wetmore 50813*, Sequoia N. P., Ladybug Cpgd 2 mi. E of South Fork Ranger Station, Tulare Co., 12 May 1984, MIN; Hinds & Hinds 2007 [p. 232, color photograph only]; Schultz 2009)

**Note:** Distribution on the West Coast is north from British Columbia *fide* Brodo et al. (2001, p. 287–288, with color photograph), but Schultz's report is from the Kern River valley north of Lake Isabelle.

**Collema aggregatum** (Ach.) Nyl. 🍄 🌿

(McClatchie 1897; Hasse 1898a; Herre 1906; Orcutt 1909; Herre 1910; Hasse 1913b)

**Note:** These reports are probably misidentifications of *C. polycarpon*.

**Collema chalazanum** Ach. 🍄 🌿

(Hasse 1898a; Orcutt 1909)

=[\*Lempholemma chalazanum\*](#)

**Collema cheileum** (Ach.) Ach. 🍄 🌿

(Hasse 1898a, 1913b; Orcutt 1909; Fink 1935)

=[\*C. crispum\*](#)

**Collema cheileum** f. *monocarpum* Nyl. 🍄 🌿

(Hasse 1903c)

=[\*C. crispum\*](#)

**Collema confertum** Nyl. 🍄 🌿

(Hasse 1898a; Orcutt 1909)

=[\*Lempholemma confertum\*](#)

**Collema cristatellum** Tuck. 🍄 🌿

(Tuckerman 1872; Willey 1873a; Tuckerman 1882; Herre 1906, 1907, 1910; Fink 1935)

=[\*C. tenax\* var. \*corallinum\*](#)

**Collema fasciculare** (L.) F. H. Wigg. 🍄 🌿

(Hasse 1906, 1913b; TJ; but misidentifications for CA)

**Synonyms:** [\*Synechoblastus aggregatus\*](#), [\*S. fascicularis\*](#)

**Collema flaccidum** (Ach.) Ach. 🍄 🌿

(Hasse 1895, 1898a; Orcutt 1903, 1907; TJ; Goward et al. 1994; Hinds & Hinds 2007 [p. 223, color photograph only])

**Note:** Most reports are probably misidentifications, as *C. flaccidum* is mostly from the eastern U. S.

**Collema fragile** Taylor 🌿

(CA records are based on misidentifications)

**Synonyms:** [\*Collemodium fragile\*](#), [\*Leptogium fragile\*](#)

**Collema glaucescens** Hoffm. 🍄 🌿

(Herre 1910)

=[\*C. limosum\*](#)

**Collema glaucophthalmum** Nyl. 🍄 🌿

(Hasse 1913b)

=*C. leucocarpum* Hook. f. & Taylor, but misidentifications for N. Amer.

**Collema myriococcum** Ach. 🍄 🌿

(Hasse 1898a; Orcutt 1909)

=[\*Lempholemma polyanthes\*](#)

**Collema nigrescens** var. *leucopeplum* Tuck. 🍄 🌿

(Hasse 1903c, as “*leucopipta*”)

=[\*C. pulchellum\* var. \*leucopeplum\*](#)

**Collema pulchellum** var. *leucopeplum* (Tuck.) Degel. 🍄 🌿

(Degelius 1974; TJ; an accepted name in Esslinger [2011] but not reported in CA *fide* Brodo et al. 2001 [p. 286]; discussed in Tucker 2002)

**Synonyms:** [\*C. nigrescens\* var. \*leucopeplum\*](#)

*Collema pulchellum* var. *subnigrescens* (Müll. Arg.) Degel. 📖 🍄

(Degelius 1974; not in CA *fide* Brodo et al. 2001 [p. 286]; discussed in Tucker [2002])

*Collema pulposum* (Bernh.) Ach. 📖 🍄

(Hasse 1896; McClatchie 1897; Hasse 1898a; Orcutt 1903; Herre 1906; Orcutt 1907; Herre 1910; Hasse 1913b)

=[\*C. tenax\*](#)

**Note:** According to Schultz et al. 2004, Hasse's material *is referable to C. bachmanianum*, which is similar to *C. tenax* but pale, with lobulate apothecial margins.

*Collema tuniforme* (Ach.) Ach. 📖 🍄

(Tucker & Kowalski 1975; TJ)

=[\*C. fuscovirens\*](#)

*Collema verruciforme* Nyl. 📖 🍄

(Hasse 1903c; misidentifications for N. Amer., according to Degelius 1954)

*Collema vespertilio* (Lightf.) Vain. 📖 🍄

(Herre 1906, 1907, 1910)

=[\*C. nigrescens\*](#)

**COLLEMIDIUM** Nyl.

*Collemodium fragile* (Taylor) Nyl. *ex* Cromb. 📖 🍄

(Hasse 1906)

=[\*Collema fragile\*](#) (but CA records are based on misidentifications)

*Collemodium plicatile* (Ach.) Nyl. 📖 🍄

(Hasse 1898a; Orcutt 1909)

=[\*Leptogium plicatile\*](#)

*Collemodium schraderi* (Bernh.) Nyl. 📖 🍄

(Hasse 1903c)

=[\*Leptogium schraderi\*](#) (Bernh.) Nyl., but misidentifications for CA

*Collemodium turgidum* Nyl. 📖 🍄

(Hasse 1898a; Orcutt 1909)

=[\*Leptogium plicatile\*](#)

**COLLEMOPSISIDIUM** Nyl.

*Collemopsidium elegans* (R. Sant.) Grube & B. D. Ryan 📖 🍄

(Grube & Ryan 2002)

**Synonyms:** [\*Pyrenocollema elegans\*](#)

*Collemopsidium halodytes* (Nyl.) Grube & B. D. Ryan 📖 🍄

(Grube & Ryan 2002; Stone & Villella 2010)

**Synonyms:** [\*Arthopyrenia halodytes\*](#), [\*Pyrenocollema halodytes\*](#)

*Collemopsidium sublitorale* (Leight.) Grube & B. D. Ryan 📖 🍄

(Grube & Ryan 2002; Knudsen & Kocourková 2009a, 2009b, 2012a)

**Synonyms:** [\*Arthopyrenia sublitoralis\*](#)

**Misapplied names:** [\*Arthopyrenia litoralis\*](#) (Herre 1942a)

**COLLEMOPSIS** Trevis.

*Collemopsis arnoldiana* Nyl. 📖 🍄

(Hasse 1906; misidentifications of *Psorotichia hassei*)

*Collemopsis schaeferi* (A. Massal.) Cromb. 📖 🍄

(Hasse 1898a; Orcutt 1909)

=[\*Psorotichia schaeferi\*](#) (A. Massal.) Arnold

*Collemopsis segregata* Nyl. 📖 🍄

(Hasse 1898a; Orcutt 1909)

=[\*Psorotichia segregata\*](#)

**Note:** According to Schultz (2004, p. 321), the name *Collemopsis segregata* Nyl. was misapplied by Hasse to specimens of *Lempholemma chalazanum* (H. Hasse Exs. 892).

**COMBEA** De Not.

*Combea californica* (Th. Fr.) Follmann & M. Geyer 🍄 🌿

(von Reis 1991)

=[\*Schizopelte californica\*](#)

**CONIOCYBE** Ach.

*Coniocybe furfuracea* (L.) Ach. 🍄 🌿

(Herre 1910; Fink 1935; Jordan 1968; Tibell 1975; Pinelli & Jordan 1978; TJ)

=[\*Chaenotheca furfuracea\*](#)

**CORNICULARIA** (Schreb.) Hoffm.

*Cornicularia normoerica* (Gunn.) Du Rietz 🍄 🌿

(Sigal & Toren 1974; TJ; Goward 1999; Brodo et al. 2001 [p. 289, with color photograph]; Carlberg 2003 [based on *T. Carlberg* 633, Broken Rib Mtn Botanical Area, Six Rivers N. F., Del Norte Co.]; McCune & Geiser 2009)

*Cornicularia aculeata* (Schreb.) Ach. 🍄 🌿

(Tucker & Kowalski 1975, based on *S. Tucker* 11036, 0.5 mi. from Dillon Beach, Marin Co., SBBG; TJ; Thomson 1984)

=[\*Cetraria aculeata\*](#)

*Cornicularia californica* (Tuck.) Du Rietz 🍄 🌿

(Du Rietz 1926; Thomson & Ketchledge 1958; Jordan 1968; Lindsay 1973; Malachowski 1975; TJ)

=[\*Kaernefeltia californica\*](#)

**CORNUTISPORA** Piroz

\**Cornutispora ciliata* Kalb 🍄 🌿

(Kocourková & Knudsen 2007; Kocourková et al. 2012)

**Note:** One collection (*J. Kocourková* and *K. Knudsen* s.n., Santa Ana Mts, Elsinore Peak, Riverside Co., PRM, on *Evernia prunastri*) is known from CA.

**CRESPONEA** Egea & Torrente

*Cresponea chloroconia* (Tuck.) Egea & Torrente 🍄 🌿

(Egea & Torrente 1993b; Baltzo 2002; Thomson 2003; Egea et al. 2004; Stone & Villella 2010 [as “cf.”]; Tucker 2010; Knudsen & Kocourková 2012a)

**Synonyms:** [\*Lecanactis chloroconia\*](#), [\*L. premnea\* var. \*chloroconia\*](#)

**Misapplied names:** [\*Bacidia acclinis\*](#) (Herre 1944b [*C. L. Brown* 2951, W of Larkspur, Marin Co., F]), [\*Lecanactis premnea\*](#), [\*Arthonia premnea\*](#)

*Cresponea premnea* (Ach.) Egea & Torrente 🌿

(*S. Tucker* 39076C, Santa Barbara Botanic Garden, Santa Barbara Co., SBBG)

**CROCYNIA** (Ach.) A. Massal.

#*Crocynia moxleyi* Plitt 🍄 🌿

(Plitt 1923; TJ; *E. Moxley* s.n., Griffith Park, Mt. Hollywood, Los Angeles, Los Angeles Co., ASU)

=*Septobasidium* sp., a non-lichenized fungus

**CYPHELIOPSIS** Vain.

*Cypheliopsis bolanderi* (Tuck.) Vain. 🍄 🌿

(Zahlbruckner 1903–1907; Fink 1935; Herre 1957; Volk 1963; TJ)

=[\*Thelomma mammosum\*](#)

## CYPHELIUM Ach.

### **Cyphelium brachysporum** Nád.

(Nádornik 1942; Weber 1967b; TJ; Knudsen & Kocourková 2008c; Lendemer et al. 2008; Knudsen & Kocourková 2011; Knudsen 2012c; *B. Ryan 31340*, Santa Rosa Isl., Santa Barbara Co., ASU)

**Note:** Tibell & Ryan (2004) cited a record under the name *Cyphelium notarisii*, which they considered synonymous with *C. brachysporum*; Knudsen & Kocourková point out that the spores differ in size.

### **Cyphelium brunneum** W. A. Weber

(Weber 1967b; TJ; Riefner, Bowler, & Ryan 1995 [Orange Co.]; Magney [1999] and Knudsen & Magney [2006] repeated earlier report; Tibell & Ryan 2004; Knudsen 2007b; Knudsen & Kocourková 2012a; *B. Ryan 31272*, Santa Rosa Isl., Santa Barbara Co., ASU)

### **Cyphelium chloroconium** (Tuck.) Zahlbr.

(Fink 1935; Weber 1967b; TJ; Brodo et al. 2001 [p. 292]; Tibell & Ryan 2004; *W. Weber L-80212*, Los Osos, San Luis Obispo Co., ASU, SBBG; CA endemic)

**Synonyms:** [\*Acolium chloroconium\*](#), [\*Trachylia chloroconium\*](#)

### **Cyphelium inquinans** (Sm.) Trevis.

(Herre 1910; Hasse 1913b; Fink 1935; Thomson & Ketchledge 1958; TJ; Brodo et al. 2001 [p. 292, with color photograph]; Rikkinen 2003; Tibell & Ryan 2004; Benson 2005; Williams & Sillett 2007; Glacy et al. 2011; *H. Hasse 85*, Tehachapi Mts, Kern Co., ASU, SBBG; *C. Bratt 2318*, Mariposa Grove, Yosemite N. P., Mariposa Co., SBBG)

**Synonyms:** [\*Acolium tympanellum\*](#), [\*Trachylia tympanella\*](#)

### **Cyphelium karelicum** (Vain.) Räsänen

(Rikkinen 2003; *B. Ryan 25192*, Marble Mtn Wilderness, Siskiyou Co., ASU; *B. Ryan 11311b*, 1 km W of Lassen Volcanic N. P., Shasta Co., ASU)

### **Cyphelium lucidum** (Th. Fr.) Th. Fr.

(Tucker & Bratt 1996 [based on *B. Ryan 27084*, Monterey Co., ASU]; Tibell & Ryan 2004; *B. Ryan 23422*, Desolation Wilderness, El Dorado Co., ASU; Brodo et al. 2001 [pp. 292–293, color photograph but no CA report])

### **Cyphelium pinicola** Tibell

(Rikkinen 2003; Tibell & Ryan 2004; Knudsen & La Doux 2005, 2006; Knudsen & Kramer 2007; *C. Bratt 4911*, Pine Mtn Ridge, Ventura Co., SBBG, det. L. Tibell; *B. Ryan 26189*, Mt. Mooney Rd, San Gabriel Mts, Los Angeles Co., ASU, det. L. Tibell; *B. Ryan 23353*, SW of Fallen Leaf Lake, El Dorado Co., ASU)

### **Cyphelium tigillare** (Ach.) Ach.

(Hasse 1908b; Herre 1910; Hasse 1913b; Fink 1935; TJ; von Reis 1991; Tucker & Bratt 1996; Thomson 2003; Robertson 2004; Tibell & Ryan 2004; Tucker et al. 2004; Benson 2005; *T. Nash 19056*, Hastings Natural History Reserve, Carmel Valley, Monterey Co., ASU)

**Synonyms:** [\*Acolium tigillare\*](#)

### **Cyphelium trachylioides** (Nyl. ex Branth. & Rostr.) Erichsen

(Tibell 1978a; Brodo et al. 2001 [p. 292]; Tibell & Ryan 2004; *L. Tibell 7768*, San Jacinto Mts, Riverside Co., ASU, SBBG)

### *Cyphelium andersonii* Herre

(Herre 1910; Fink 1935)

=[\*Thelomma californicum\*](#)

### *Cyphelium bolanderi* (Tuck.) Zahlbr.

(Herre 1910; Hasse 1913b; Merrill 1923; Thomson & Ketchledge 1958)

=[\*Thelomma mammosum\*](#)

### *Cyphelium caliciforme* (Flot.) Zahlbr.

(Weber 1967b; TJ)

=[\*Thelomma occidentale\*](#)

*Cyphelium californicum* (Tuck.) Zahlbr. 📖 🍄

(Zahlbruckner 1903–1907; Herre 1910; Fink 1935; Volk 1963; Weber 1967b; Jordan 1968; Lindsay 1973; TJ)

=[\*Thelomma californicum\*](#)

*Cyphelium carolinianum* (Tuck.) Zahlbr. 📖 🍄

(Hasse 1908b; Lindsay 1973; TJ)

=[\*Thelomma carolinianum\*](#), but based on misidentifications, *fide* Tibell & Ryan 2004

*Cyphelium chrysocephalum* (Ach.) De Not. 📖 🍄

(Tuckerman 1872)

=[\*Chaenotheca chrysocephala\*](#)

*Cyphelium farlowii* (Tuck. *ex* Herre) Herre 📖 🍄

(Herre 1910; Fink 1935)

=[\*Thelomma californicum\*](#) Herre (Thomson & Ketchledge 1958; Volk 1963; Weber 1967b; TJ)

*Cyphelium occidentale* Herre 📖 🍄

(Herre 1910, 1942c; Thomson & Ketchledge 1958; Volk 1963; Weber 1967b; TJ; Villella 2010)

=[\*Thelomma occidentale\*](#)

*Cyphelium sancti-jacobi* (Tuck.) Zahlbr. 📖 🍄

(Fink 1935; Weber 1967b)

=[\*Texosporium sancti-jacobi\*](#)

## CYSTOBASIDIUM (Lagerh.) Neuhoff

\**Cystobasidium hypogymniicola* Diederich & Ahti 📖 🍄

(Diederich 2003, 2004; Kocourková et al. 2012; *S. Tucker 35479*, Soda Springs Ranger Station, near Pillsbury Lake, Lake Co., on *Hypogymnia imshaugii*, *S. Tucker 31841*, Indian Valley Cpgd 10.7 mi. W of Downieville, Tahoe N. F., Sierra Co. on *Hypogymnia imshaugii*, both SBBG, dets. P. Diederich)

\**Cystobasidium usneicola* Diederich & Alstrup 📖 🍄

(Diederich 2003, 2004 [Mendocino Co. collection on *Usnea*]; Kocourková et al. 2012; *E. Palmer*, 1888, San Diego Co., on *Usnea* sp., SBBG, det. P. Diederich; *S. Tucker 28938b*, Point Reyes, Sonoma Co., SBBG)

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

## DACAMPIA A. Massal.

\**Dacampia lecaniae* Kocourk. & K. Knudsen 📖 🍄

(Kocourková & Knudsen 2010; Knudsen & Kocourková 2010f, on *Lecania fuscella* on West Anacapa Isl., Ventura Co., the only known CA report; Knudsen & Kocourková 2012a; Kocourková et al. 2012)

## DACTYLOSPORA Körb.

\**Dactylospora parasitica* (Flörke) Zopf 📖 🍄

(Tuckerman 1866, p. 26, citing specimen collected by Bolander probably near San Diego, *fide* Hafellner [2004]; Weber et al. 1987 [as *Leciographa parasitica*]; Kocourková et al. 2012; *K. Knudsen 2734*, Palomar Mtn, San Diego Co., UCR)

**Synonyms:** [\*Buellia parasitica\*](#)

**Misapplied names:** *Leciographa parasitica* (records from bark)

**Note:** The usual hosts are *Pertusaria* and *Ochrolechia*.

\**Dactylospora pleiosperma* Triebel 📖 🍄

(Hafellner et al. 2002; Hafellner 2004 [p. 647]; Knudsen & Kocourková 2009b, based on *K. Knudsen 9928*, Los Osos Oaks Reserve, San Luis Obispo Co., UCR; Knudsen & Kocourková 2012a;



Kocourková et al. 2012; *C. Bratt 7435*, on *Lecanora caesiorubella*, SBBG; lichenicole is a CA endemic)

\***Dactylospora saxatilis** (Schaer.) Hafellner var. **saxatilis** 📖 🌿

(Kocourková et al. 2009, on *Pertusaria*; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *K. Knudsen 7496*, Santa Rosa Isl., Santa Barbara Co., UCR, on *Pertusaria* spp.)

\***Dactylospora inquilina** (Tuck.) Hafellner 📖 🌿

**Synonyms:** [Buellia inquilina](#) (Willey 1873a; Hasse 1912, 1915b)

**Note:** This report needs re-evaluation, as it was reported (*H. Hasse*, Eden Hot Springs on *Lecanora muralis*, the wrong host, rather than *L. saxicola*).

“**DENDRISCOCAULON**” Nyl.

Note: According to Tønsberg & Goward (2001) the type specimen of *D. umhausense*, the type of the generic name *Dendriscocaulon*, is representative of cephalodia of *Lobaria*. Therefore, *D. umhausense* is a taxonomic synonym of *Lobaria amplissima*. The disposition of other species of *Dendriscocaulon* is uncertain. Tønsberg & Goward (2001) and Jovan & McCune (2004) reported CA records under *Dendriscocaulon* sp.

*Dendriscocaulon intricatum* (Nyl.) Henssen 📖 🌿

(Malachowski 1975 [as *D. intricatum*]; TJ; Wright 1997, 1998; Brodo et al. 2001 [p. 295, with color photograph]; Robertson & Robertson 2001 [from Marin, Mendocino, and Sonoma counties]; Robertson 2005b; Hinds & Hinds 2007 [p. 234, color photograph only])

**Note:** According to Tønsberg & Goward (2001) this name is misapplied to an undescribed western Amer. species.

**DENDROGRAPHA** Darb.

**Dendrographa alectoroides** Sundin & Tehler 📖 🌿

(Brodo et al. 2001 [p. 297]; Tehler 2002; *W. Weber L-42837*, San Clemente Isl., Los Angeles Co., ASU)

**Dendrographa alectoroides** Sundin & Tehler f. **alectoroides** 📖 🌿

(Sundin & Tehler 1996; Lohtander et al. 1998; Tehler 2002 [p. 166]; Knudsen & Kocourková 2012a; CA endemic)

**Dendrographa alectoroides** f. **parva** Sundin & Tehler 📖 🌿

(Bowler et al. 1996; Sundin & Tehler 1996; Wright 1996; Lohtander et al. 1998; Tehler 2002 [p. 166]; *S. Sharnoff 4051*, Rodeo Beak, Marin Co., UCR; CA endemic)

**Misapplied names:** *D. minor*

**Dendrographa conformis** (Tehler) Ertz & Tehler 📖 🌿

(Ertz & Tehler 2011)

**Synonyms:** [Roccellina conformis](#)

**Dendrographa decolorans** (Turner & Borrer ex Sm.) Ertz & Tehler 📖 🌿

(Ertz & Tehler 2011)

**Synonyms:** [Schismatomma decolorans](#)

**Dendrographa franciscana** (Zahlbr.) Ertz & Tehler 📖 🌿

(Ertz & Tehler 2011; *T. Nash 40721*, Patrick's Point S. P., Humboldt Co., ASU; *W. Weber s.n.*, Seventeen-Mile-Drive, Monterey Co., ASU; *K. Knudsen 7749*, Santa Rosa Isl., Santa Barbara Co., UCR)

**Synonyms:** [Chiodecton subochroleucum](#), [Dirina franciscana](#), [Roccellina franciscana](#), [Schismatomma cupressum](#)

**Dendrographa leucophaea** (Tuck.) Darb. 📖 🌿

(Darbishire 1895, 1898; Hasse 1898a; Hasse 1903a, 1903d; Zahlbruckner 1903–1907; Hasse 1913b; Merrill 1923; Darbishire 1935; Fink 1935; Herre 1945; TJ; Riefner, Bowler, & Ryan 1995; Bowler et al. 1996; Lohtander et al. 1998; Brodo et al. 2001 [p. 297, with color photograph]; Tehler 2002;

Knudsen 2009; Knudsen & Kocourková 2009a, 2010f, 2012a; Glacy et al. 2011)

**Synonyms:** [D. minor](#), [D. leucophaea f. leucophaea](#), [D. leucophaea f. minor](#), [Roccella leucophaea](#), [R. leucophaea var. minor](#) Misapplied name: [Roccella babingtonii](#) (von Reis 1991, *fide* Tucker 1999)

*Dendrographa leucophaea f. leucophaea* 📖 🌿

(Sundin & Tehler 1996;

=[D. leucophaea](#) Tehler 2002)

*Dendrographa leucophaea f. minor* (Darb.) Sundin & Tehler 📖 🌿

(Hill 1996; Sundin & Tehler 1996; Wright 1996; Lohtander et al. 1998; Bratt 1999; Tucker 1999; Tehler 2002)

=[D. leucophaea](#)

*Dendrographa minor* Darb. 📖 🌿

(TJ; West & Doell 1995; Robertson & Robertson 2001)

=[D. leucophaea](#)

**Note:** Many reports are based on *D. alectoroides f. parva*; Herre's reports of fertile material are based on *D. leucophaea* [Tuck.] Darb. f. *leucophaea* or *D. alectoroides f. alectoroides*, since f. *minor* and f. *parva* are sterile.

## DERMATOCARPON Eschw.

**Dermatocarpon americanum** Vain. 📖 🌿

(Doell et al. 1999 [as "cf."]; Heidhmarsson 2000; Heidhmarsson & Breuss 2004; Knudsen 2006a, 2007b; Knudsen et al. 2009; Knudsen & Kocourková 2009c, 2012a; *C. Wetmore 73929*, Old Ranch Cyn, Santa Rosa Isl., Santa Barbara Co., [det. S. Heidhmarsson, MIN]; see also *D. miniatum*)

**Dermatocarpon arenosaxi** Amtoft 📖 🌿

(Amtoft et al. 2008 for description, CA not mentioned; *Tucker 14860A*, 6 mi. N of Oroville, Butte Co., SBBG;

**Dermatocarpon bachmannii** Anders 🌿

(*C. Wetmore 50149, 50797*, Sequoia N. P., Tulare Co., MIN; *L. Janeway 10070 & Castro*, Sierra Nevada, Tuolumne Co., SBBG)

**Dermatocarpon intestiniforme** (Körb.) Hasse 📖 🌿

(Hasse 1912, 1913b; TJ; Ryan & Nash 1991; Wright 1997; Robertson 2004; Blauman 2004a; Carlberg et al. 2007)

**Synonyms:** [D. polyphyllum](#)

**Dermatocarpon leptophyllodes** (Nyl.) Zahlbr. 📖 🌿

(Heidhmarsson & Breuss 2004; Tucker et al. 2006; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *W. Weber L-42878*, San Clemente Isl., Los Angeles Co., ASU)

**Dermatocarpon lorenzianum** Anders 📖 🌿

(Breuss & McCune 1994)

**Note:** This species has also been collected in Oregon.

**Dermatocarpon luridum** (With.) J. R. Laund. 📖 🌿

(Brodo et al. 2001 [pp. 297–298, with color photograph]; Tucker 2002; Robertson 2004; Hinds & Hinds 2007 [p. 236, color photograph only]; *B. Ryan 24666a*, end of Clark Fork Rd, edge of Carson-Iceberg Wilderness, Alpine Co., ASU; Butte and Siskiyou county collections also)

**Synonyms:** [D. aquaticum](#), [D. fluviatile](#), [D. weberi](#)

**Dermatocarpon meiophyllizum** Vain. 📖 🌿

(Glavich & Geiser 2004; Glavich 2009; *B. Ryan 25237B*, edge of Marble Mtn Wilderness, Siskiyou Co., ASU; *B. Ryan 12611A*, 15 km S of Tom's Place, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU)

**Misapplied names:** [D. luridum](#)

**Dermatocarpon moulinsii** (Mont.) Zahlbr. 📖 🌿

(Hinds & Hinds 2007 [p. 238, color photograph only]; *B. Ryan 24141*, Emigrant Wilderness, Tuolumne

Co., ASU; *T Carlberg* collection, Six Rivers N. F., Del Norte Co.; *K. Knudsen 489*, San Jacinto Mts, Riverside Co., UCR; not mentioned for S CA by Heidhmarsson & Breuss [2004])

***Dermatocarpon muhlenbergii*** (Ach.) Müll. Arg. 🍄 🌿

(Amtoft et al. 2008 for description, CA not mentioned; *C. Bratt 4755*, railroad grade entrance to Central Camp, Madera Co., SBBG; *S. Tucker 36299*, on Kelbaker Rd, 13 mi. E of Baker, San Bernardino Co., SBBG)

***Dermatocarpon reticulatum*** H. Magn. 🍄 🌿

(Baltzo 1970; Tucker & Kowalski 1975; TJ; Hale & Cole 1988; Baltzo 1989; Doell et al. 1999; Brodo et al. 2001 [p. 299, with color photograph]; Heidhmarsson & Breuss 2004; Benson 2005; Robertson & Beyer 2005; Villella 2010; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

***Dermatocarpon rivulorum*** (Arnold) Dalla Torre & Sarnth. 🍄 🌿

(Ryan & Nash 1991; *B. Ryan 12611a, 12617a*, Eastern Brook Lakes watershed, Inyo Co., ASU; *J. Shevock 17571*, Kern Plateau, Tulare Co., ASU)

***Dermatocarpon taminium*** Heidhmarsson 🍄 🌿

(Heidhmarsson & Breuss 2004; *S. Parish 3527*, San Bernardino Co., ASU)

***Dermatocarpon tenue*** (Müll. Arg.) Heidhmarsson 🌿

(*B. Ryan 30982*, Middle Cyn, Santa Catalina Isl., Los Angeles Co., ASU; *J. Marsh 6961*, Prisoner's Harbor, Santa Cruz Isl., Santa Barbara Co., ASU; previously reported only from Arizona [Heidhmarsson & Breuss 2004])

***Dermatocarpon vellereum*** Zschacke 🍄 🌿

(Knight et al. 2002)

**Note:** This species has previously been reported from inland western states (Colorado, New Mexico) and Mexico.

*Dermatocarpon acarosporoides* Zahlbr. 🍄 🌿

(Zahlbruckner 1902; Hasse 1903f, 1913b; Fink 1935; TJ; Breuss 1996)

=[\*Placidium acarosporoides\*](#)

*Dermatocarpon aquaticum* (Weiss) Zahlbr. 🍄 🌿

(Herre 1906; Fink 1935; Herre 1950a)

=[\*D. luridum\*](#)

*Dermatocarpon cinereum* (Pers.) Th. Fr. 🍄 🌿

(Fink 1935; Sigal 1975; TJ; Thomson 1984)

=[\*Catapyrenium cinereum\*](#)

*Dermatocarpon contumescens* (Nyl.) Zahlbr. 🍄 🌿

(Hasse 1906)

=[\*Placidium acarosporoides\*](#)

*Dermatocarpon fluviatile* (Weber) Th. Fr. 🍄 🌿

(Herre 1910; TJ)

=[\*D. luridum\*](#)

*Dermatocarpon guepinii* (Delise) Tuck. 🍄 🌿

(Tuckerman 1866; Bolander 1870)

=[\*Peltula euploca\*](#)

*Dermatocarpon hepaticum* (Ach.) Th. Fr. 🍄 🌿

(Herre 1910; Hasse 1913b; Thomson & Ketchledge 1958; Sigal 1975; TJ)

=[\*Catapyrenium cinereum\*](#) (synonymy *vide* Breuss 1990)

*Dermatocarpon hepaticum* auct. non (Ach.) Th. Fr. 🍄 🌿

(Breuss 1990 [for synonymy])

=[\*Placidium squamulosum\*](#)

*Dermatocarpon heppioides* Zahlbr. 🍄 🌿

(Zahlbruckner 1912b; Hasse 1915a; Fink 1935; Herre 1944b; TJ)

=[\*Placopyrenium heppioides\*](#)

*Dermatocarpon lachneum* (Ach.) A. L. Sm. 📖 🌿

(Thomson 1984; Weber et al. 1987; Sigal 1989; misidentifications of *Clavascidium* spp., especially *C. lacinulatum*)

*Dermatocarpon lecideoides* (A. Massal.) Hasse 📖 🌿

(Hasse 1915b; TJ)

=[\*Placopyrenium lecideoides\*](#)

*Dermatocarpon leptophyllum* (Ach.) K. G. W. Lång 🌿

(*T. Nash* 8099, along State Hwy 108, 1.6 km W of Sonora Pass, Tuolumne Co., ASU)

=[\*D. miniatum\*](#) (synonymy in Heidhmarsson 2000)

*Dermatocarpon miniatum* (L.) W. Mann 📖 🌿

(Tuckerman 1866; Bolander 1870; Herre 1906; Hasse 1908b; Herre 1910; Hasse 1913b; Merrill 1923; Imshaug 1957; Baltzo 1970; Pinelli & Jordan 1978; TJ; Baltzo 1989; Ryan & Nash 1991; von Reis 1991; Tucker & Bratt 1995; Bowler et al. 1996; Wright 1997; McGee 1998; Robertson et al. 1998; Brodo et al. 2001 [pp. 298–299, with color photograph]; Baltzo 2002; Knight et al. 2002; Robertson 2003a, 2003b; Blauman 2004a; Benson 2005; Robertson 2005c; Robertson & Beyer 2005; Carlberg et al. 2007; Hinds & Hinds 2007 [p. 237, color photograph only]; Vilella 2010; Glacy et al. 2011)

**Synonyms:** [\*Dermatocarpon miniatum\* var. \*complicatum\*](#), [\*Endocarpon miniatum\*](#)

**Note:** *D. miniatum* is still commonly accepted; the opinion of Heidhmarsson (2000) that most collections labeled *D. miniatum* from N. Amer. are *D. americanum*, is controversial.

*Dermatocarpon miniatum* var. *complicatum* (Sw.) Th. Fr. 📖 🌿

(Herre 1906, 1910; Hasse 1913b; Sigal 1975; TJ; Sigal 1989)

=[\*D. miniatum\*](#) (*fide* Heidhmarsson 2000 [fourth paper in thesis]; Heidhmarsson & Breuss 2004)

*Dermatocarpon polyphyllum* (Wulfen) Dalla Torre & Sarnth. 📖 🌿

(Fink 1935)

=[\*D. intestiniforme\*](#)

*Dermatocarpon rufescens* (Ach.) Th. Fr. 📖 🌿

(Hasse 1908b, 1913b; Parish 1914; Fink 1935; TJ)

=[\*Placidium rufescens\*](#)

*Dermatocarpon squamellum* (Nyl. ex Hasse) Herre 📖 🌿

(Herre 1910; Hasse 1915b; Fink 1935; Sigal & Toren 1976; TJ)

=[\*Catapyrenium squamellum\*](#)

*Dermatocarpon weberi* (Ach.) W. Mann 📖 🌿

(Hale & Cole 1988)

=[\*D. luridum\*](#)

*Dermatocarpon zahlbruckneri* Hasse 📖 🌿

(Hasse 1913a; Fink 1935; TJ)

=[\*Placopyrenium stanfordii\*](#)

**DESMAZIERIA** Mont.

*Desmazieria cephalota* (Tuck.) Follmann & Huneck 📖 🌿

(Lindsay 1973)

=[\*Niebla cephalota\*](#)

*Desmazieria ceruchis* (Ach.) Trevis. 📖 🌿

(Lindsay 1973)

=[\*Niebla ceruchis\*](#)

**DIBAEIS** Clem.

*Dibaeis baeomyces* (L. f.) Rambold & Hertel 📖 🌿

(Robertson 2002a; Hinds & Hinds 2007 [p. 239, color photograph only]; *B. Shervanick* 38, near Alpine Lake, Marin Co., CAS; *J. Robertson s.n.*, Pygmy Forest, Mendocino Co., UC)

**DIEVERNIA** Bowler & Riefner = [RAMALINA](#)

*Dievernina lacera* (With.) Bowler & Riefner 📖 🌿

(Bowler & Riefner 1995)

= [Ramalina lacera](#)

**DIMELAENA** Norman

\***Dimelaena californica** (H. Magn.) Sheard 📖 🌿

(Sheard 1974, 1977; TJ; Hale & Cole 1988; von Reis 1991; Riefner, Bowler, & Ryan 1995; Brodo et al. 2001 [p. 301]; Mayrhofer & Sheard 2004; Knudsen 2009; Knudsen & Kocourková 2010f, 2012a; Kocourková et al. 2012)

**Synonyms:** [Rinodina californica](#)

**Note:** This is a juvenile parasite, usually on *D. radiata*.

**Dimelaena oreina** (Ach.) Norman 📖 🌿

(Argus & Sheard 1972; Sheard 1974, 1977; TJ; Weber et al. 1987; Baltzo 1989; Brodo et al. 2001 [p. 300, with color photograph]; Robertson 2001; Robertson & Robertson 2001; Robertson 2003b; Mayrhofer & Sheard 2004; Benson 2005; Knudsen & Kramer 2007; Knudsen et al. 2009; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [Lecanora oreina](#), [Rinodina oreina](#)

**Dimelaena radiata** (Tuck.) Müll. Arg. 📖 🌿

(Sheard 1974; Sigal 1975; Sheard 1977; TJ; Weber et al. 1987; Sigal 1989; von Reis 1991; McGee 1995; Bowler et al. 1996; Hill 1996; Bratt 1997; Tucker 1999; Bourell 2000; Brodo et al. 2001 [pp. 300–301, with color photograph]; Robertson 2001, 2002c; Doell 2002; Rico et al. 2003; Mayrhofer & Sheard 2004; Robertson 2004; Benson 2005; Robertson 2005b; Knudsen 2007b, 2009; Knudsen & Kocourková 2009a, 2009c, 2010f; Rotter 2010 [“?”]; Tucker 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a; color photograph on front cover of CALS Bulletin 6[1], 1999)

**Synonyms:** [Buellia radiata](#), [Rinodina radiata](#)

**Dimelaena thysanota** (Tuck.) Hale & W. L. Culb. 📖 🌿

(Sheard 1974, 1977; TJ; Bowler et al. 1996; Doell et al. 1999; Robertson 2001; Robertson & Robertson 2001; Mayrhofer & Sheard 2004; Robertson 2004; Benson 2005; Knudsen & Kramer 2007; Knudsen et al. 2009; Knudsen & Kocourková 2009b; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [Lecanora thysanota](#), [Rinodina thysanota](#)

**Dimelaena weberi** Sheard 📖 🌿

(Sheard & Mayrhofer 1984; Mayrhofer & Sheard 2004; Knudsen 2009; Knudsen & Kocourková 2009b, 2012a; *T. Nash* 32580, Santa Cruz Isl., Santa Barbara Co., ASU)

**DIMERELLA** Trevis.

*Dimerella lutea* (Dicks.) Trevis. 📖 🌿

(Herre 1944b; Jordan 1968; Lindsay 1973; TJ; Brodo et al. 2001 [p. 302, with color photograph]; Baltzo 2002; Robertson 2002a; Thomson 2003; Ryan & Nimis 2004; Tucker et al. 2004)

= [Coenogonium luteum](#)

**DIPLOICIA** A. Massal.

**Diploicia canescens** (Dicks.) A. Massal. 📖 🌿

(Bratt 1984, 1987, 1993; Bowler et al. 1996; Bratt 1997; Wright 1997; Brodo et al. 2001 [pp. 302–303, with color photograph]; Doell 2002; Tucker et al. 2004; Knudsen 2007b; Kalb & Elix 2008; Knudsen 2009; Knudsen & Kocourková 2009a, 2009c, 2010f; Tucker 2010; Knudsen & Kocourková 2012a; *W. Weber*, Univ. Colo. Lich. Exs. 184, Irvine Ranch, Morro Cyn, Orange Co., ASU)

**Note:** Old collections labeled *Pyxine soreliata* from CA (Hasse 1903c, 1913b) may belong here; see Bratt 1984.

**DIPLOLAEVIOPSIS** Giralt & D. Hawksw.

\***Diplolaeviopsis ranula** Giralt & D. Hawksw. 📖 🌿

(Etayo et al. 2007, on *Lecanora strobilina*; Knudsen & Kocourková 2009a; Kocourková et al. 2012)

**DIPLOSCHISTELLA** Vain.

**Diploschistella athalloides** (Nyl.) Lücking, K. Knudsen & Fryday 📖 🌿

(Lücking et al. 2008; Knudsen 2007b, a terricolous species)

**Synonyms:** [Gyalideopsis athalloides](#), [Rhizocarpon athalloides](#)

**DIPLOSCHISTES** Norman

**Diploschistes actinostomus** (Ach.) Zahlbr. 📖 🌿

(Herre 1910; Hasse 1913b; Thomson & Ketchledge 1958; Volk 1963; Baltzo 1970; TJ; Weber et al. 1987; Wright 1997 [as “?”]; Bratt 1999; Tucker 1999; Robertson 2001; Brodo et al. 2001 [p. 305] reporting it in eastern U. S. only, but there are several reliable CA reports; Lumbsch 2002; Tucker 2002; Blauman 2004a; Knudsen 2007b; Knudsen & Kocourková 2009c, 2010f; Stone & Vilella 2010; Glacy et al. 2011; Knudsen & Kocourková 2012a)

**Synonyms:** [Urceolaria actinostoma](#)

**Diploschistes aeneus** (Müll. Arg.) Lumbsch 📖 🌿

(Lumbsch 1989 [Marin Co. collection]; Brodo et al. 2001; Lumbsch 2002; Knudsen & Kocourková 2012a; *K. Knudsen 1544*, Santa Ana Mts, Orange Co., UCR; *T. Nash 33015*, Santa Rosa Isl., Santa Barbara Co., ASU)

**Diploschistes caesioplumbeus** (Nyl.) Vain. 📖 🌿

(Lumbsch 2002; *T. Nash 38742*, San Nicolas Isl., Ventura Co., ASU)

**Diploschistes diacapsis** (Ach.) Lumbsch 📖 🌿

(Lumbsch 1989; Brodo et al. 2001 [p. 303, with color photograph]; Lumbsch 2002; Benson 2005; Knudsen 2007b; Rosentreter et al. 2007 [with color photograph]; Knudsen & Kocourková 2009a, 2010f, 2012a; *T. Nash 37108*, West Anacapa Isl., Ventura Co.)

**Synonyms:** [Urceolaria albissima](#)

**Note:** This species grows on soil, unlike most other species in the genus.

\***Diploschistes muscorum** (Scop.) R. Sant. subsp. **muscorum** 📖 🌿

(Lumbsch 1988; Baltzo 1989; Lumbsch 1989; McGee 1995; Tucker & Bratt 1996; Wright 1997; Brodo et al. 2001 [p. 304, with color photograph]; Robertson 2001; Lumbsch 2002; Riefner et al. 2003; Robertson 2003a, 2003b; Benson 2005; Robertson 2005b; Carlberg et al. 2007; Knudsen 2007b; Rosentreter et al. 2007 [with photograph]; Knudsen 2009; Knudsen & Kocourková 2009a, 2009c, 2010f; Stone & Vilella 2010; Vilella 2010; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *W. Weber 36683*, Del Mar, San Diego Co., ASU; *B. Ryan 24777*, S of Coulterville, Madera Co., ASU)

**Synonyms:** [D. scruposus](#) var. [bryophilus](#), [D. scruposus](#) var. [parasiticus](#), [Urceolaria scruposa](#) subsp. [bryophylla](#)

**Note:** This species begins as a juvenile parasite on *Cladonia* species and *Leprocaulon microscopicum*.

**Diploschistes scruposus** (Schreb.) Norman 📖 🌿

(Herre 1910; Hasse 1913b; Merrill 1923; Thomson & Ketchledge 1958; Sigal 1975; TJ; Weber et al. 1987; Baltzo 1989; Sigal 1989; Ryan & Nash 1991; von Reis 1991; McGee 1995; Tucker & Bratt 1995; Bowler et al. 1996; Doell et al. 1999; Tucker 1999; Bourell 2000; Brodo et al. 2001 [pp. 304–305, with color photograph]; Robertson 2001; Lumbsch 2002; Riefner et al. 2003; Robertson 2003a; Blauman 2004a; Benson 2005 [as *D. scruposus* var. *scruposus*]; Robertson 2005b; Carlberg et al. 2007; Knudsen 2007b; Knudsen & Kocourková 2009a, 2009c; Rotter 2010; Knudsen & Kocourková 2012a; Benson et al. 2012)

**Synonyms:** [Urceolaria scruposa](#) (TJ for references)

**Note:** This species grows on rock; if on soil, see *D. diacapsis*.

*Diploschistes gypsaceus* (Ach.) Zahlbr. 📖 🌿

(Hasse 1913b; Merrill 1923; TJ; Robertson 2001; Benson 2005)

**Synonyms:** *Urceolaria gypsacea* (Hasse 1895, 1896, 1898a, 1903b; Orcutt 1903, 1907), *U. scruposa* var. *gypsacea* (McClatchie 1897)

**Note:** The Hasse and Robertson reports pertained to specimens collected on soil, whereas *D. gypsaceus* is on rock, *vide* Lumbsch 1988. This species was not reported from the Sonoran region of S CA by Lumbsch (2002), so the S CA reports by Hasse, Merrill, and Orcutt are in doubt.

*Diploschistes scruposus* var. *bryophilus* (Ehrh. ex Ach.) Oxner 📖 🌿

(Hasse 1913b)

=*D. muscorum* subsp. *muscorum*

*Diploschistes scruposus* var. *parasiticus* (Sommerf.) Zahlbr. 📖 🌿

(Hasse 1913b)

=*D. muscorum* subsp. *muscorum*

**DIPLATOMMA** Flot. =**BUELLIA**

*Diplotomma alboatrum* (Hoffm.) Flot. 📖 🌿

(Sigal 1989; Bourell 2000; Baltzo 2002; Thomson 2003; Benson 2005; Knudsen & Kocourková 2009c, 2012a; Benson et al. 2012)

=*Buellia alboatra*

*Diplotomma ambiguum* (Ach.) Flagey 📖 🌿

=*Buellia alboatra* (Nordin 1996)

*Diplotomma penichrum* (Tuck.) Szatala 📖 🌿

(Wright 1997)

=*Buellia penichra*

*Diplotomma venustum* (Körb.) Körb. 📖 🌿

(Knudsen & Kocourková 2012a)

=*Buellia venusta* (Nordin 1996)

**DIRINA** Fr.

***Dirina catalinariae*** Hasse 📖 🌿

(TJ; Brodo et al. 2001 [p. 305, with color photograph]; Tehler 2002; Knudsen 2009; Knudsen & Kocourková 2010f, 2012a; W. Weber L-42620, San Clemente Isl., Los Angeles Co., ASU)

**Synonyms:** *D. catalinariae* f. *catalinariae*, *D. catalinariae* f. *sorediata*

***Dirina paradoxa*** (Fée) Tehler 🌿

(C. Bratt 11791, between Emerald Bay and Parsons Landing, W end of Santa Catalina Isl., Los Angeles Co., SBBG; S. Tucker 35261, Cabrillo Drive, Caspar Point, S of Fort Bragg, Mendocino Co., SBBG)

*Dirina californica* Tuck. 📖 🌿

(Tuckerman 1866 [p. 17, in Oakland, Alameda Co.]; Bolander 1870; Fink 1935; TJ)

=*Sigridea californica*

*Dirina catalinariae* Hasse f. *catalinariae* 📖 🌿

(Tehler 1983; Bowler et al. 1996)

=*D. catalinariae*

*Dirina catalinariae* f. *sorediata* Tehler 📖 🌿

(Tehler 1983; Bratt 1993; Bowler et al. 1996; Bratt 1997; Sanders 1999b; photographs on back cover of CALSBulletin 6[1], 1999; Brodo et al. 2001 [p. 305]; Knudsen & Kocourková 2009a; C. Bratt 3620, Santa Barbara Isl., Santa Barbara Co., SBBG; C. Bratt 5650, Point Loma, Cabrillo Nat. Monument, San Diego Co., ASU)

=*D. catalinariae*

*Dirina franciscana* Zahlbr. ex Herre 📖 🌿

(Herre 1907, 1910; Fink 1935; TJ)

=[Dendrographa franciscana](#)

*Dirina hassei* Zahlbr. 📖 🌿

(Zahlbruckner 1900, 1901; Hasse 1902, 1903b, 1903e; Merrill 1923; Fink 1935; TJ)

=[Sigridea californica](#)

*Dirina rediunta* (Stizenb.) Zahlbr. 📖 🌿

(Zahlbruckner 1901; Hasse 1902, 1903b, 1903e, 1913b; Merrill 1923; Fink 1935; Wheeler 1938; TJ)

=[Schismatomma rediunta](#)

**DIRINARIA** (Tuck.) Clem.

**Dirinaria neotropica** Kalb 📖 🌿

(Kalb 2004; *B. Ryan 21988b*, San Bruno Mtn, San Mateo Co., on rock, ASU; *S. Chaney L-1463b*, San Miguel Isl., Santa Barbara Co., SBBG)

*Dirinaria aegialita* (Afzel. ex Ach.) B. J. Moore 🌿

(*C. Bratt 9151*, West Anacapa Isl., western end of island, between Rat Rock and cpqd, Ventura Co., SBBG =probable misdetermination)

*Dirinaria picta* (Sw.) Schaer. ex Clem. 📖 🌿

(Riefner, Bowler, & Ryan 1995; *R. Riefner* collections from Sonoma, Ventura, and San Luis Obispo counties; misidentifications. which have been identified by S. Tucker as *Physcia poncinsii* [*Riefner 88–78*] and *Trapeliopsis steppica* [*Riefner 92–190, 92–408*])

**Note:** *R. Riefner* collections from Sonoma, Ventura, and San Luis Obispo counties have been identified by S. Tucker as *Physcia poncinsii* (*Riefner 88–78*) and *Trapeliopsis steppica* (*Riefner 92–190, 92–408*).

**DISTOPYRENIS** Aptroot

**Distenopyrenis americana** Aptroot 📖 🌿

(Aptroot 2002; *S. Tucker 33682B*, San Nicolas Isl., Ventura Co., SBBG, det. A. Aptroot)

**DUFOUREA** Ach.

*Dufourea madreporiformis* Ach. 📖 🌿

(Fink 1935)

=*Dactylina madreporiformis*

**Note:** Fink report for CA was an error, being based on a Tuckerman (1866) report of *Dactylina madreporiformis* from the Rocky Mountains; the species is not known in CA.

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

**ECHINODISCUS** Etayo & Diederich

\***Echinodiscus lesdainii** (Vouaux) Etayo & Diederich 📖 🌿

(Kocourková et al. 2010; Kocourková et al. 2012; *J. Kocourková 7344* & *K. Knudsen*, Santa Monica Mts, Point Mugu S. P., Ventura Co., on *Lecania cyrtella* apothecia, on *Malacothamnus fasciculatus*)

**ECHINOTHECIUM** Zopf (accepted in 2011 Esslinger list)

\***Echinothecium reticulatum** Zopf 📖 🌿

(Kocourková et al., 2012; *S. Tucker 35088C* pr. p., Los Osos, San Luis Obispo Co., on *Hypogymnia*, SBBG, det. P. Diederich; *K. Knudsen 2856*, San Jacinto Mts, Riverside Co., UCR)

=[Sphaerellothecium reticulatum](#)

**EDRUDIA** W. P. Jord.



**Edrudia constipans** (Nyl.) W. P. Jord. 📖 🌿

(Jordan 1980; Hale & Cole 1988 [p. 8]; Wright 2000; *H. Thiers 15228*, Farallon Is., San Francisco Co., ASU; CA endemic)





**Synonyms:** [\*Caloplaca constipans\*](#), [\*Lecanora constipans\*](#), [\*Placodium constipans\*](#), [\*Polycauliona constipans\*](#)

**ENDOCARPISCUM** Nyl.

*Endocarpiscum bolanderi* (Tuck.) Tuck.    
(Tuckerman 1882; McClatchie 1897)

= [\*Peltula bolanderi\*](#)

*Endocarpiscum guepinii* (Delise) Nyl.  

(Tuckerman 1882; Hasse 1895, 1896; McClatchie 1897; Orcutt 1903; Herre 1906; Orcutt 1907; TJ)

= [\*Peltula euploca\*](#)

**ENDOCARPON** Hedw.

**Endocarpon loscosii** Müll. Arg.  

(Breuss 2002; Knudsen 2003a; Tucker et al. 2004; Carlberg et al. 2007; Knudsen 2007b, 2009; Knudsen & Kocourková 2009a, 2009c; Stone & Villella 2010; Tucker 2010; Knudsen & Kocourková 2012a; *H. Hasse 1777*, Rustic Cyn, Santa Monica Mts, Los Angeles Co., ASU; *S. Tucker 37910* [as “cf.”], on *Quercus agrifolia* [unusual substrate], Jasper Ridge, W of Palo Alto, San Mateo Co., SBBG, det. O. Breuss)

**Endocarpon pallidulum** (Nyl.) Nyl.  

(Breuss 2002; Knudsen 2007b; Knudsen & Kocourková 2009c, 2012a; *S. Tucker 37922*, Jasper Ridge, W of Palo Alto, San Mateo Co., SBBG; *K. Knudsen 6128*, Weir Cyn, Santa Ana Mts, Orange Co., UCR)

**Endocarpon pallidum** Ach.  

(Hasse 1898a, 1906; Herre 1910; Hasse 1915b; Fink 1935; Breuss 2002; *H. Hasse 489*, Santa Monica Mts, Los Angeles Co., ASU; *C. Bratt 12521*, Point Loma, Cabrillo Nat. Monument, San Diego Co., SBBG)

**Note:** This name was considered synonymous with *E. adscendens* in TJ, but Breuss (personal communication) and Esslinger (2011) consider the two species distinct.

**Endocarpon petrolepideum** (Nyl.) Hasse  

(Hasse 1915b; Fink 1935; TJ; Breuss 2002; Tucker 2010; Knudsen & Kocourková 2012a; *C. Bratt 8498*, Santa Rosa Isl., Santa Barbara Co., ASU, SBBG)

**Endocarpon pseudosubnitescens** Breuss  

(Knudsen 2005c, 2007b; *C. Bratt 5217*, Santa Barbara Isl., Santa Barbara Co., SBBG; *K. Knudsen 617*, Santa Monica Mts, Los Angeles Co., UCR)

**Endocarpon pulvinatum** Th. Fr.  

(Herre 1910; Fink 1935; TJ; Ryan & Nash 1991; Brodo et al. 2001 [p. 308, with color photograph]; Robertson & Robertson 2002 [based on *J. & R. Robertson 6467*, Sonora Bridge Cpgd, 3 km NW of Sonora Junction in drainage channels, Mono Co.]; Robertson & Beyer 2005; *B. Ryan 12770*, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU)

**Synonyms:** [\*E. tortuosum\*](#)

**Endocarpon pusillum** Hedw.  

(Orcutt 1885, 1903, 1907; Herre 1910; Hasse 1913b; Fink 1935; TJ; Hebert & Meyer 1984; von Reis 1991; Bratt 1993; Goward et al. 1994; Bowler et al. 1996; McGee 1998; Doell et al. 1999; Brodo et al. 2001 [pp. 308–309, with color photograph]; Robertson 2001; Baltzo 2002; Breuss 2002; Doell 2002; Knight et al. 2002; Robertson 2004; Tucker et al. 2004; Benson 2005; Robertson 2005c; Carlberg et al. 2007; Hinds & Hinds 2007 [p. 241, color photograph only]; Knudsen 2007b; Rosentreter et al. 2007 [with photograph]; Knudsen 2009; Knudsen & Kocourková 2009a, 2009c, 2010f; Tucker 2010; Knudsen & Kocourková 2012a; *B. Ryan 31599b*, Santa Cruz Isl., Santa Barbara Co., ASU, det. O. Breuss; *T. Nash 8457*, SW of Parker Dam on Colorado River, San Bernardino Co., ASU, det. O. Breuss)

**Synonyms:** [E. adnatum](#), [E. lepidallum](#), [E. subnitescens](#)

**Endocarpon simplicatum** (Nyl.) Nyl. 🍄 🌿

(Breuss 2002; Knudsen & Kocourková 2012a; *T. Nash* 32426, terraces NE of Fraser Point, Santa Cruz Isl., Santa Barbara Co., ASU)

*Endocarpon adnatum* Nyl. 🍄 🌿

(Hasse 1898a, 1906)

=[E. pusillum](#)

*Endocarpon cinereum* Pers. var. *cartilagineum* Nyl. 🍄 🌿

(Tuckerman 1872; Willey 1873a; Thomson 1987)

=[Catapyrenium cinereum](#)

*Endocarpon hepaticum* Ach. 🍄 🌿

(Hasse 1896, 1898a; Orcutt 1903, 1907)

=[Catapyrenium cinereum](#)

*Endocarpon lepidallum* Nyl. 🍄 🌿

(Hasse 1898a, 1913b; Fink 1935; TJ)

=[E. pusillum](#) (synonymy *fide* Breuss 2002)

*Endocarpon miniatum* Ach. 🍄 🌿

(McClatchie 1895)

=[Dermatocarpon miniatum](#)

*Endocarpon miniatum* var. *complicatum* (Sw.) Schaer. 🍄 🌿

(McClatchie 1897)

=[Dermatocarpon miniatum](#)

*Endocarpon monicae* Zahlbr. 🍄 🌿

(Zahlbruckner 1902; Hasse 1903f, 1913b; Fink 1935; TJ)

=[Staurothele monicae](#)

\**Endocarpon ochroleucum* Tuck. 🍄 🌿

(Tuckerman 1872; Willey 1873a; Tuckerman 1888)

=[Heterocarpon ochroleucum](#)

*Endocarpon rufescens* Ach. 🍄 🌿

(Hasse 1898a [but omitted in Hasse 1913b])

=[Placidium rufescens](#)

*Endocarpon subnitescens* (Nyl.) Nyl. 🍄 🌿

(Hue 1887, 1888; Hasse 1898a, 1913b; Fink 1935; TJ; Riefner, Bowler, & Ryan 1995; Robertson 2001)

=[E. pusillum](#) (synonymy *fide* Breuss 2002)

*Endocarpon tephroides* (Ach.) Nyl. 🍄 🌿

(Hasse 1898a)

=[Catapyrenium cinereum](#)

*Endocarpon tortuosum* Herre 🍄 🌿

(Herre 1945 [northeastern interior CA]; TJ)

=[E. pulvinatum](#) Th. Fr. (synonymy *fide* Breuss 2002)

*Endocarpon wilmsioides* Zahlbr. 🍄 🌿

(Zahlbruckner 1902; Hasse 1903f, 1913b; Fink 1935; TJ; Thomson 1991; *H. Hasse Exs.* 237, Santa Monica Range, June, 1906, MU)

=[Staurothele drummondii](#)

**ENDOCOCCUS** Nyl.

\***Endococcus incrassatus** Etayo & Breuss 🍄 🌿

(Knudsen & Kocourková 2008b; Kocourková et al. 2012; *K. Knudsen* 9538 from Anza-Borrego S. P., San Diego Co., UCR, on *Placidiosis cinerascens*)

\***Endococcus matzeri** D. Hawksw. & Iturr. 🍄 🌿

(Knudsen & Kocourková 2009b; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *K. Knudsen 10697*, Santa Monica Mts, Ventura Co., UCR)

**Misapplied names:** *E. buelliae*

**Note:** It occurs on *Buellia venusta*, *Dimelaena radiata*, and *Mobergia angelica*.

\***Endococcus oreinae** Hafellner 🍄 🌿

(Knudsen 2007a [Riverside Co., on *Dimelaena oreina*]; Kocourková et al. 2012)

\***Endococcus rugulosus** Nyl. 🍄 🌿

(Knudsen & Kocourková 2010a; Kocourková et al. 2012; collection from Los Angeles Co. on *Verrucaria furfuracea*)

\***Endococcus stigma** (Körb.) Stizenb. 🍄 🌿

(Knudsen 2007a; Knudsen & Kocourková 2007; Knudsen 2008 [p. 31], on *Acarospora socialis*; Knudsen & Kocourková 2010a, 2012a; Kocourková et al. 2012; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *K. Knudsen 4296*, Bridle Ridge, Santa Barbara Co., UCR; *K. Knudsen 3629*, Anza-Borrego S. P., San Diego Co., ASU)

**Note:** This species grows on either yellow or brown species of *Acarospora*.

\***Endococcus thelommatis** Kocourk. & K. Knudsen 🍄 🌿

(Kocourková & Knudsen 2011b; Knudsen & Kocourková 2012a; *K. Knudsen 7414.2*, Santa Rosa Isl., Santa Barbara Co., UCR, on *Thelomma santessonii*, SBBG)

\***Endococcus zahlbrucknerellae** (Henssen) D. Hawksw. 🍄 🌿

(Henssen 1977, on type collection of *Zahlbrucknerella californica* from Humboldt Co.; Hawksworth 1979; Kocourková et al. 2012)

**Synonyms:** [\*Tichothecium zahlbrucknerellae\*](#)

\**Endococcus buelliae* (Dodge) Matzer 🍄 🌿

(Kainz & Triebel 2004, on *Dimelaena radiata*)

=[\*E. matzeri\*](#) for N. Amer. reports

*Endococcus erraticus* Nyl. 🍄 🌿

(Hasse 1906)

**Note:** This is a nonlichenized fungus.

## ENTEROGRAPHA Fée

**Enterographa anguinella** (Nyl.) Redinger 🌿

(*W. Weber L-1306*, Monterey Co., as *E. pallidella*)

**Enterographa oregonensis** Sparrius & Bjork 🍄 🌿

(Villella & Carlberg 2012)

**Note:** This species is foliicolous on the fern *Polystichum munitum*, on *Vaccinium ovatum*, *Picea sitchensis* and *Abies grandis*.

## EPHEBE Fr.

**Ephebe hispidula** (Ach.) Horwood 🍄 🌿

(Goward 1999; *J. Shevock 14256*, Western Divide Hwy., Co. Rd M-107, Tulare Co., CAS, UC, det. B. Ryan)

**Ephebe lanata** (L.) Vain. 🍄 🌿

(Hale 1979; TJ; Goward 1999; Tucker 2002 [reporting *J. Shevock 13883*, First Dinkey Lake, Fresno Co., ASU, UC, CAS, det. B. Ryan]; Brodo et al. 2001 [p. 309, color photograph but no CA report]; Schultz 2009)

**Note:** A collection by *H. Thiers 1066b*, Alpine Co., UCD, has only cyanobacteria, presumably *Stigeonema*.

**Ephebe solida** Bornet 🍄 🌿

(Zahlbruckner 1912a; Herre 1910; Thomson & Ketchledge 1958; Schultz 2009)

**Note:** Herre's collections with this name were *Spilonema revertens*, at least in part.

*Ephebe pubescens* (Ach.) Fr. 📖 🌿

(Herre 1906)

=[\*Spilonema revertens\*](#), at least in part

## ERIODERMA Fée

**Erioderma soledatum** D. J. Galloway & P. M. Jørg. 📖 🌿

(Ellyson & Sillett 2003; *B. Ellyson LU-40-II-1*, Prairie Creek Redwoods S. P., Humboldt Co., HSU, reported by Wright [2001a])

## ESSLINGERIANA Hale & M. J. Lai

**Esslingeriana idahoensis** (Essl.) Hale & M. J. Lai 📖 🌿

(Hale & Cole 1988; Goward et al. 1994; Tucker & Bratt 1995; Wright 1997; Brodo et al. 2001 [p. 310, with color photograph]; Wright 2001a; Jovan & McCune 2004; McCune & Geiser 2009; *B. Ryan 26705*, SE of Dunsmuir, Shasta Co., ASU)

**Synonyms:** [\*Cetraria idahoensis\*](#)

## EUOPSIS Nyl.

*Euopsis pulvinata* (Schaer.) Vain. 📖 🌿

**Synonyms:** [\*Pyrenopsis pulvinata\*](#) (Sigal 1975, 1989)

**Note:** The *L. Sigal* collection (Little Red Mtn, Mendocino Co., 13 June 1973, SFSU) was misdetermined.

## EVERNIA Ach.

**Evernia prunastri** (L.) Ach. 📖 🌿

(Bolander 1870; Orcutt 1885; Hasse 1895, 1897; McClatchie 1897; Hasse 1898a, 1903a; Herre 1906, 1907; Orcutt 1907; Herre 1910; Hasse 1913b; Merrill 1923; Herre 1945, 1950a; Thomson & Ketchledge 1958; Jordan 1968; Lindsay 1973; Pinelli & Jordan 1978; TJ; Sigal & Nash 1983; Weber et al. 1987; Baltzo 1989; von Reis 1991; Riefner, Bowler, & Ryan 1995; Tucker & Bratt 1995; Bowler et al. 1996; Doell & Wright 1996; Tucker & Bratt 1996; Hill 1997; Wright 1997; McGee 1998; Goward 1999; Bourell 2000; Brodo et al. 2001 [pp. 312–313, with color photograph]; Robertson 2001; Baltzo 2002; Ryan 2002; Robertson 2003a; Blauman 2004a; Jovan & McCune 2004; Tucker et al. 2004; Benson 2005; Robertson 2005a, 2005b; Carlberg et al. 2007; Knudsen 2007b; Williams & Sillett 2007; Knudsen 2009; Tucker 2010; Rotter 2010; Villella 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a)

*Evernia divaricata* (L.) Ach. 📖 🌿

(Howe 1911; Fink 1935; but misidentifications for CA)

*Evernia furfuracea* (L.) W. Mann 📖 🌿

(Howe 1911)

**Note:** N. Amer. records are referable to *Pseudevernia consocians* (Vain.) Hale & W. L. Culb. or *P. intensa* (Nyl.) Hale & W. L. Culb., but neither has been reported in CA; see *Pseudevernia intensa*.

*Evernia vulpina* (L.) Ach. 📖 🌿

(Tuckerman 1866; Bolander 1870; Hasse 1895, Herre 1906, 1907)

=[\*Letharia vulpina\*](#)

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

## FELLHANERA Vězda

**Fellhanera bouteillei** (Desm.) Vězda 📖 🌿

(Villella & Carlberg 2012, foliicolous on *Polystichum munitum*, *Vaccinium ovatum*, *Abies grandis*,

*Picea sitchensis*, and *Pinus contorta* needles; Benson 2012b)

**Synonyms:** [Catillaria bouteillei](#)

## FISSURINA Fée

**Fissurina humilis** (Vain.) Staiger 📖 🌿

(Staiger & Kalb 2004 [for coastal central CA]; *S. Tucker 14969B*, Del Norte Coast Redwoods Park, 15 mi. S of Crescent City, Del Norte Co., ASU, SBBG)

*FISTULARIELLA* Bowler & Rundel = [RAMALINA](#)

*Fistulariella geniculata* (Hook. f. & Taylor) Bowler & Rundel 📖 🌿

(Bowler & Rundel 1977; TJ)

= [Ramalina geniculata](#)

*Fistulariella inflata* (Hook. f. & Taylor) Bowler & Rundel 📖 🌿

(Bowler & Rundel 1977; TJ)

= [Ramalina inflata](#)

*Fistulariella minuscula* (Nyl.) Bowler & Rundel 📖 🌿

(Bowler & Rundel 1977; TJ)

= [Ramalina dilacerata](#)

*Fistulariella roesleri* (Hochst. ex Schaer.) Bowler & Rundel 📖 🌿

(Bowler & Rundel 1977; TJ)

= [Ramalina roesleri](#)

## FLAVOPARMELIA Hale

**Flavoparmelia baltimorensis** (Gyeln. & Főriss) Hale 📖 🌿

(Nash & Elix 2002; Hinds & Hinds 2007 [p. 250, color photograph only]; Knudsen & Kocourková 2009c, based on *K. Knudsen 6344*, Weir Cyn, Orange Co., UCR, only second report for CA; Glacy et al. 2011)

**Flavoparmelia caperata** (L.) Hale 📖 🌿

(Baltzo 1989; von Reis 1991; West & Doell 1995; Bowler et al. 1996; Doell & Wright 1996; Tucker & Bratt 1996; Bratt 1997; Hill 1997; Wright 1997; McGee 1998; Robertson et al. 1998; Tucker 1999; Bourell 2000; Brodo et al. 2001 [p. 317, with color photograph]; Robertson 2001; Baltzo 2002; Nash & Elix 2002; Robertson 2003a; Jovan & McCune 2004; Tucker et al. 2004; Robertson 2005b; Carlberg et al. 2007; Hinds & Hinds 2007 [p. 251, color photograph only]; Knudsen 2007b, 2009; Knudsen & Kocourková 2009a, 2009c, 2010f; Rotter 2010; Tucker 2010; Glacy et al. 2011; Benson et al. 2012)

**Synonyms:** [Parmelia caperata](#), [P. flavicans](#) sensu Tuckerman, [P. herreana](#), [P. perlata var. flavicans](#), [Pseudoparmelia caperata](#)

**Flavoparmelia subcapitata** (Nyl. ex Hasse) Hale ex DePriest & B. W. Hale 📖 🌿

(Nash & Elix 2002; Knudsen et al. 2005 [with cover photograph]; Knudsen 2006b; Knudsen & Kocourková 2009a)

**Synonyms:** [Parmelia subcapitata](#)

**Note:** This taxon had been presumed extinct in CA, but it has been found on chaparral in several locations in San Diego Co. (Knudsen 2006b).

*Flavoparmelia rutidota* (Hook. f. & Taylor) Hale 🌿

**Synonyms:** [Parmelia conspersa var. subconspersa](#), [Parmelia rutidota](#)

**Note:** Collections from CA under this name are misdeterminations.

## FLAVOPUNCTELIA (Krog) Hale

**Flavopunctelia flaventior** (Stirt.) Hale 📖 🌿

(Weber et al. 1987; Baltzo 1989; Sigal 1989; von Reis 1991; Goward et al. 1994; McGee 1995; Bowler et al. 1996; Doell & Wright 1996; Tucker & Bratt 1996; Hill 1997; Wright 1997; McGee 1998;

Robertson et al. 1998; Bourell 2000; Brodo et al. 2001 [pp. 317–318, with color photograph]; Robertson 2001; Baltzo 2002; Robertson 2003a; Egan 2004; Jovan & McCune 2004; Tucker et al. 2004; Benson 2005; Robertson 2005b; Carlberg et al. 2007; Hinds & Hinds 2007 [p. 252, color photograph only]; Knudsen 2007b, 2009; Knudsen & Kocourková 2009c; McCune & Geiser 2009; Rotter 2010; Tucker 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [Parmelia andreana](#), [P. californica](#), [P. flaventior](#), [P. kernstockii](#)

**Flavopunctelia praesignis** (Nyl.) Hale 📖 🌿

(Tucker 2002; Egan 2004 [cited a central CA collection by *W. Weber S-3497*, Mt. Hamilton, Santa Clara Co., ASU, det. B. Ryan]; *R. Rosentreter 14735*, Madera Cyn, Coronado N. F., Santa Rita Mts, Santa Cruz Co., SRP)

**Synonyms:** [Parmelia caperata var. incorrupta](#), [P. praesignis](#)

**Flavopunctelia soledica** (Nyl.) Hale 📖 🌿

(Weber et al. 1987; Riefner, Bowler, & Ryan 1995; Bratt 1999; Brodo et al. 2001 [p. 319, with color photograph]; Robertson 2001; Tucker 2002; Egan 2004; Jovan & McCune 2004; Tucker et al. 2004; Benson 2005; Carlberg et al. 2007; Knudsen 2007b; Knudsen & Kocourková 2009c; McCune & Geiser 2009; Tucker 2010; Benson & Hillyard 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [Parmelia soledica](#)

**FULGENSIA** A. Massal. & De Not.

**Fulgensia bracteata** (Hoffm.) Räsänen 📖 🌿

(Rosentreter et al. 2007 [for central and N CA]; *T. Nash 38927*, San Nicolas Isl., Ventura Co., ASU; *C. Bratt 6073*, Seven Level Hill, San Jacinto Mts, Riverside Co., SBBG)

**Fulgensia desertorum** (Tomin) Poelt 📖 🌿

(Doell et al. 1999; Brodo et al. 2001 [pp. 319–320, with color photograph]; Knight et al. 2002; Kasalicky 2004; Knudsen & Kocourková 2012a; *C. Bratt 7877*, San Nicolas Isl., below Twin Towers, bluff edge on southern side, Ventura Co., SBBG, det. W. Weber; *K. Knudsen 8959*, Santa Rosa Isl., Santa Barbara Co., UCR)

**Fulgensia subbracteata** (Sw.) Elenkin 📖 🌿

(Kasalicky 2004; *C. Wetmore 14570*, San Bernardino N. F., San Jacinto Mts above Palm Desert, San Bernardino Co., 17 June 1966, MIN; *T. Nash 8451*, 2 mi. SW of Parker Dam on Colorado River, San Bernardino Co., 16 Feb 1974, ASU, MIN, det. C. Wetmore)

*Fulgensia fulgens* (Sw.) Elenkin 📖 🌿

(Rudolph 1955 [based on Hasse 1420, collected near Palm Springs, Riverside Co., FH]; Thomson 1997; Tucker 2002)

**Synonyms:** [Caloplaca fulgens](#) (Hasse 1913b)

**Note:** This species was not mentioned for S CA by Kasalicky (2004). CA reports are probably misidentifications, based on specimens of *F. desertorum* or *F. subbracteata*.

**FULVOPHYTON** Ertz & Tehler

**Fulvophyton murex** (Egea & Torrente ex Sparrius) Ertz & Tehler 📖 🌿

(Ertz & Tehler 2011)

**Synonyms:** [Sclerophyton murex](#)

**FUSCOPANNARIA** P. M. Jørg.

**Fuscopannaria aurita** P. M. Jørg. & Tønsberg 📖 🌿

(Jørgensen 2001a; McCune & Geiser 2009; *S. Tucker 31799*, Oregon Creek Cpgd S of Comptonville, Yuba Co., SBBG, det. P. Jørgensen)

**Fuscopannaria coralloidea** P. M. Jørg. 📖 🌿

(Jørgensen 2001a, 2002; Knudsen & Kocourková 2009c; McCune & Geiser 2009; Knudsen & Kocourková 2012a; *T. Nash 34112*, Santa Catalina Isl., Los Angeles Co., ASU; *B. Ryan 25596*, N of

Yreka, Siskiyou Co., ASU)

**Misapplied names:** *Parmeliella lepidiota* var. *corallophora* (Tuck.) Vain. (Herre 1910 [as var. *corallophora*]; Hasse 1913b [as *Parmeliella lepidiota* var. *coralliphora* auct., p. 80]; Fink 1935; Thomson & Ketchledge 1958; TJ; Benson 2005)

**Fuscopannaria crustacea** P. M. Jørg. 📷 🌿

(Jørgensen 2001a; McCune & Geiser 2009; Knudsen & Kocourková 2010a, citing a *H. Hasse* collection labeled *Parmeliella lepidiota* as the type)

**Fuscopannaria cyanolepra** (Tuck.) P. M. Jørg. 📷 🌿

(Jørgensen 2001a, 2002; Robertson & Robertson 2008; McCune & Geiser)

**Synonyms:** [Pannaria cyanolepra](#), [Pannaria lepidiota](#) var. [cyanolepra](#), [Pannularia lepidiota](#) var. [cyanolepra](#), [Parmeliella cyanolepra](#), [Parmeliella lepidiota](#) var. [cyanolepra](#)

**Fuscopannaria laceratula** (Hue) P. M. Jørg. 📷 🌿

(Jørgensen 2001a; McCune & Geiser 2009; *L. Sigal LS-336*, near Branscomb, N CA Coastal Preserve, Mendocino Co., SBBG)

**Synonyms:** [Pannaria lepidiota](#) var. [coralliphora](#), [Parmeliella lepidiota](#) var. [coralliphora](#) (synonymy *fide* Jørgensen 2001a [p. 683])

**Fuscopannaria leucostictoides** (Ohlsson) P. M. Jørg. 📷 🌿

(McGee 1998; Wright 1998; Brodo et al. 2001 [p. 322, with color photograph]; Jørgensen 2001a; Baltzo 2002; Jørgensen 2002; Robertson 2003a; Jovan & McCune 2004; Tucker et al. 2004; McCune & Geiser 2009; *S. Tucker 13411*, Skyline Dr., S of junction to Burlingame, San Mateo Co., SBBG)

**Synonyms:** [Pannaria leucostictoides](#)

**Fuscopannaria maritima** (P. M. Jørg.) P. M. Jørg. 🌿

(*J. Lindsay 525, 805*, Samoa Peninsula, Humboldt Co., SBBG; *S. Tucker 12026*, S of Camptonville, W of Downieville, Yuba Co., SBBG)

**Fuscopannaria mediterranea** (Tav.) P. M. Jørg. 📷 🌿

(Jovan & McCune 2004; McCune & Geiser 2009; Stone & Villella 2010 [as “cf.”]; *T. Tønsberg TT2891*, Humboldt Co., BG; *S. Jovan* collections in Colusa and Trinity counties, cited in Anonymous 2002; *S. Tucker 31765* [as “cf.”], Mix Cyn, Solano Co., SBBG, det. P. Jørgensen; *B. Ryan 11230*, James Lee Cpgd, Plumas N. F., State Hwy 70, 13 km NE of Butte Co. border, Plumas Co., ASU)

**Fuscopannaria pacifica** P. M. Jørg. 📷 🌿

(Jørgensen 2001a; Jovan & McCune 2004; Tucker et al. 2004; Benson 2005; McCune & Geiser 2009; *T. Nash 11572*, Gasquet, Del Norte Co., ASU; *S. Tucker 31854*, Indian Valley Cpgd, W of Downieville, Sierra Co., SBBG)

**Misapplied names:** [Pannaria saubinetii](#) (many collections, at least, *fide* Jørgensen 2001a)

**Fuscopannaria praetermissa** (Nyl.) P. M. Jørg. 📷 🌿

(Jørgensen 1978; Ryan & Nash 1991; Jørgensen 1994; Bowler et al. 1996; Baltzo 2002; Jørgensen 2002; Benson 2005; Brodo et al. 2001 [pp. 323–324, color photograph but no CA report]; Knudsen & Kocourková 2012a; *B. Ryan 12584*, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU, SBBG; *C. Bratt 9731*, San Clemente Isl., Los Angeles Co., ASU, SBBG)

**Synonyms:** [Pannaria lepidiota](#), [Pannaria praetermissa](#), [Pannularia lepidiota](#), [Parmeliella lepidiota](#), [P. praetermissa](#)

**Fuscopannaria pulveracea** (P. M. Jørg. & Henssen) P. M. Jørg. 📷 🌿

(Jørgensen 2001a, 2002; Anonymous 2002 [*S. Jovan* collection, Mendocino Co.]; Jovan & McCune 2004; McCune & Geiser 2009; *K. Knudsen 8298*, Palomar Mtn, San Diego Co., UCR; *C. Bratt 6110*, top of Nacimiento-Ferguson Rd, Santa Lucia Mts, Los Padres N. F., Monterey Co., SBBG)

**Synonyms:** [Pannaria pulveracea](#)

**Note:** This species was thought to be endemic to CA (Jørgensen 2002) but was reported from Oregon by Curtis (2003) and McCune & Geiser 2009.

**Fuscopannaria thiersii** P. M. Jørg. 📷 🌿

(Jørgensen 2001a; McCune & Geiser 2009; *H. Thiers 37236*, N of Potter Valley, Mendocino Co.,

ASU)

*Fuscopannaria californica* (Tuck.) P. M. Jørg. 📖 🌿

(Jørgensen 2001a, 2002; Benson 2005; Knudsen 2007b; McCune & Geiser 2009; Knudsen & Kocourková 2010a, citing a Hasse collection)

=[\*Vahliella californica\*](#)

*Fuscopannaria labrata* P. M. Jørg. 📖 🌿

(Jørgensen 2005 *C. Bratt* 6257, on soil in rock crevices, headlands W of Coches Prietos, Santa Cruz Isl., Santa Barbara Co., SBBG, holotype, det. P. Jørgensen)

=[\*Vahliella labrata\*](#)

*Fuscopannaria leucophaea* (Vahl) P. M. Jørg. 📖 🌿

(Bratt 1999; Brodo et al. 2001 [pp. 321–322, with color photograph]; Jørgensen 2002; Tucker 2002; Hinds & Hinds 2007 [p. 256, color photograph only])

=[\*Vahliella leucophaea\*](#)

*Fuscopannaria leucosticta* (Tuck.) P. M. Jørg. 📖 🌿

**Synonyms:** [\*Pannaria leucosticta\*](#) (Herre 1912b; Lindsay 1973)

**Note:** According to Jørgensen (2001a), this taxon is replaced in the West by *F. leucostictoides*.

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

**GASPARRINIA** Tornab.

*Gasparrinia callopisma* (Ach.) Syd. 📖 🌿

(Rudolph 1955)

=[\*Caloplaca aurantia\*](#), but apparent misidentifications for N. Amer.

*Gasparrinia elegans* (Link) Stein 📖 🌿

(Rudolph 1955)

=[\*Xanthoria elegans\*](#)

*Gasparrinia murorum* (Hoffm.) Tornab. 📖 🌿

(Rudolph 1955)

=[\*Caloplaca saxicola\*](#)

*Gasparrinia peliophylla* (Tuck.) E. Rud. ined. 📖

(Rudolph 1955)

=[\*Caloplaca peliophylla\*](#)

**GELATINOPSIS** Rambold & Triebel

\**Gelatinopsis acarosporicola* Kocourk. & K. Knudsen 📖 🌿

(Kocourková & Knudsen 2009a, 2009c, on *Acarospora socialis* from Santa Ana Mts)

=[\*Llimoniella acarosporicola\*](#)

*Gelatinopsis tryblidariae* (A. Carter & Malloch) Hosoya & Y. Otani 📖 🌿

(Carter & Malloch 1982 [from San Gabriel Mts, on a non-lichenized fungus])

**GLOEOHEPPIA** Gyeln.

*Gloeoheppia polyspora* Henssen 🌿

(K. Knudsen 5716, San Jacinto Mts, Riverside Co., UCR)

*Gloeoheppia squamulosa* (Zahlbr.) M. Schultz 📖 🌿

(Schultz 2006, 2007, 2008; *T. Nash* 8443, 3 km SW of Parker Dam on Colorado River, San Bernardino Co., ASU)

**Synonyms:** [\*Psorotichia squamulosa\*](#)

**GLYPHOLECIA** Nyl.

*Glypholecia scabra* (Pers.) Müll. Arg. 📖 🌿



(Knudsen & Kocourková 2010g, on silicate rock, Clark Mts, San Bernardino Co.)

**Synonyms:** [\*Acarospora saxicola\*](#)


**GONOHYMENIA** J. Steiner = [LICHINELLA](#)

*Gonohymenia nigritella* (Lettau) Henssen  

(Henssen 1986; Goward et al. 1994)

= [\*Lichinella nigritella\*](#)

**GRAPHINA** Müll. Arg.

*Graphina parilis* (Kremp.) Müll. Arg.  

(Tucker & Kowalski 1975)

= [\*Graphis parilis\*](#), but this was a misidentification of *Fissurina humilis*

**GRAPHIS** Adans.

**Graphis caesiella** Vain.  

(Lindsay 1973; TJ; *J. Lindsay* 796, Samoa Peninsula, Humboldt Co., WIS; identification should be verified)

**Graphis elegans** (Borrer ex Sm.) Ach.  

(Tucker & Kowalski 1975; TJ; Williams & Sillett 2007; reported from Mendocino Co., *fide* Staiger [personal communication to Ryan, 2003])

**Graphis inustuloides** Lücking  

(Lücking & McCune 2012)



**Synonyms:** [\*Graphis britannica\*](#)

**Graphis parilis** Kremp. 



(*E. McNichols s.n.*, 1971, Prairie Creek Redwoods S. P., Humboldt Co., SBBG)

**Graphis scripta** (L.) Ach.  

(Lindsay 1973; TJ; Brodo et al. 2001 [pp. 327–328, with color photograph]; Robertson 2003a; Williams & Sillett 2007; Glacy et al. 2011; Benson et al. 2012)

**Graphis striatula** (Ach.) Spreng.  

(Lindsay 1973; Tucker & Kowalski 1975; TJ; Robertson 2002a)

*Graphis britannica* Staiger & Kalb  

(Staiger & Kalb 2004 [p. 118], for N CA; Humboldt and Mendocino counties *fide* Staiger [personal communication to B. Ryan, 2003])

= [\*Graphis inustuloides\*](#)

*Graphis eulectra* Tuck. 

**Synonyms:** [\*Phaeographis eulectra\*](#), but misidentifications for CA reports

*Graphis saxorum* (Egea & Torrente) Bungartz  



(Egea & Torrente 1997; Staiger & Kalb 2004)

= [\*Carbacanthographis candidata\*](#)

**GYALECTA** Ach.

**Gyalecta herrei** Vězda  

(Jordan 1968; Lindsay 1973; TJ; Riefner, Bowler, & Ryan 1995; Magney 1999; Baltzo 2002; Doell 2002 [p. 11]; Ryan & Nimis 2004 [p. 124]; Knudsen & Kocourková 2010f; Stone & Villella 2010; Glacy et al. 2011; Benson et al. 2012; Benson & Hillyard 2012; Knudsen & Kocourková 2012a; *W. Weber L-42055*, Irvine Ranch, Morro Cyn, SE of Newport Beach, Orange Co., ASU; *J. Robertson 2052*, Rd to Cahill Ridge, Crystal Springs watershed, San Mateo Co., SBBG; collections from Monterey, San Luis Obispo, San Francisco, San Mateo, Santa Barbara, and Ventura counties, ASU, SBBG; CA endemic)

**Gyalecta jenensis** (Batsch) Zahlbr.  

(Doell 2002 [p. 12]; Ryan & Nimis 2004; Knudsen & Kocourková 2009a, 2010f, 2012a; *B. Ryan 31304*, Santa Rosa Isl., Santa Barbara Co., ASU; *K. Knudsen 11501*, Coon Creek, Montana de Oro S. P., San Luis Obispo Co., UCR)

***Gyalecta truncigena* (Ach.) Hepp** 📖 🌿

(Herre 1944c [Stanford Univ. campus, San Mateo Co.]; TJ; Ryan & Nimis 2004, for coastal central CA; *C. Bratt 9216*, cpgd, West Anacapa Isl., Ventura Co., SBBG)

**GYALIDEA** Lettau *ex* Vězda

**GYALIDEOPSIS** Vězda

*Gyalideopsis anastomosans* P. James & Vězda 📖 🌿

(Nash & Tønsberg 2004 [reported one collection from Santa Ynez Mts, Santa Barbara Co.])

=[\*Jamesiella anastomosans\*](#)

*Gyalideopsis athalloides* (Nyl.) Vězda 📖 🌿

(Vězda 1972, 1979; Lücking et al. 2006, 2008; *H. Hasse 246*, Santa Monica Range, SBBG)

=[\*Diploschistella athalloides\*](#)

**Note:** Lücking et al. (2006) thought that the name *Diploschistella urceolata* Vain. had priority, but in Lücking et al. (2008) [2007] the authors realized that *D. athalloides* had priority.

**GYROPHORA** Ach. =**UMBILICARIA**

*Gyrophora angulata* (Tuck.) Herre 📖 🌿

(Hasse 1898a; Orcutt 1909; Herre 1911b; Hasse 1913b; Fink 1935; Herre 1945)

=[\*Umbilicaria angulata\*](#)

*Gyrophora arctica* Ach. 📖 🌿

(Herre 1911b, 1942a, 1945, 1950a; Llano 1950)

=[\*Umbilicaria arctica\*](#)

*Gyrophora decussata* (Vill.) Zahlbr. 📖 🌿

(Fink 1935; Herre 1942a, 1945, 1950a; TJ)

=[\*Umbilicaria decussata\*](#)

*Gyrophora diabolica* Zahlbr. 📖 🌿

(Herre 1906, 1907)

=[\*Umbilicaria polyrhiza\*](#)

*Gyrophora erosa* (Weber) Ach. 📖 🌿

(Hasse 1903c; Herre 1911b; Hasse 1913b; Fink 1935; Herre 1945)

=[\*Umbilicaria torrefacta\*](#)

*Gyrophora grisea* Swartz *ex* Westr. 📖 🌿

(Herre 1911b; Fink 1935 [p. 275])

=[\*Umbilicaria hirsuta\*](#) for N. Amer. reports, but misapplied name, not in CA; synonymy *fide* Esslinger & Tucker 2009

*Gyrophora hirsuta* Ach. 📖 🌿

(Hasse 1908b; Fink 1935; Herre 1942a, 1950a)

=[\*Umbilicaria hirsuta\*](#)

*Gyrophora hirsuta* var. *grisea* (Sw. *ex* Westr.) Th. Fr. 📖 🌿

(Hasse 1898a, 1908b)

=[\*Umbilicaria hirsuta\*](#), but misapplied name, not in CA

*Gyrophora hyperborea* Ach. 📖 🌿

(Herre 1911b; Fink 1935; Herre 1945, 1950a)

=[\*Umbilicaria hyperborea\*](#)

*Gyrophora phaea* (Tuck.) Nyl. 📖 🌿

(Hue 1891; Hasse 1898a; Herre 1906, 1907; Hasse 1908b; Orcutt 1909; Herre 1910, 1911b; Hasse

- 1913b; Moxley 1921; Herre 1945)  
 = [Umbilicaria phaea var. phaea](#)
- Gyrophora polyphylla* (L.) Funck 📖 🌿  
 (Herre 1906, 1907; Hasse 1908b; Herre 1910, 1911b; Hasse 1913b; Fink 1935)  
 = [Umbilicaria polyphylla](#)
- Gyrophora polyrhiza* (L.) Körb. 📖 🌿  
 (Herre 1910, 1911b; Fink 1935)  
 = [Umbilicaria polyrhiza](#) (synonymy *fide* Esslinger & Tucker 2009)
- Gyrophora reticulata* (Schaer.) Th. Fr. 📖 🌿  
 (Herre 1910, 1911b; Hasse 1913b; TJ)  
 = [Umbilicaria krascheninnikovii](#)
- Gyrophora rugifera* (Nyl.) Th. Fr. 📖 🌿  
 (Hasse 1898a, 1908b; Orcutt 1909; Herre 1911b; Du Rietz 1925; Fink 1935; Herre 1945, 1950a)  
 = [Umbilicaria virginis](#) (synonymy *fide* Esslinger & Tucker 2009)
- Gyrophora semitensis* (Tuck.) Hasse 📖 🌿  
 (Hasse 1898a; Orcutt 1909; Herre 1911b)  
 = [Umbilicaria semitensis](#)  
**Note:** This name has been misapplied to *Umbilicaria angulata*.
- Gyrophora torrefacta* (Lightf.) Cromb. 📖 🌿  
 (Herre 1911b; Fink 1935; Herre 1945)  
 = [Umbilicaria torrefacta](#) (synonymy *fide* Esslinger & Tucker 2009)

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

## HAEMATOMMA A. Massal.

- Haematomma persoonii** (Fée) A. Massal. 📖 🌿  
 (Staiger & Kalb 1995; Brodo et al. 2001 [p. 332, with color photograph])  
**Note:** This species is most common in southeastern U. S.
- Haematomma californicum* Sigal & D. R. Toren 📖 🌿  
 (Sigal & Toren 1975; TJ)  
 = [Ophioparma rubricosa](#)
- Haematomma lapponicum* Räsänen 🌿  
 =probable misidentification of *Ophioparma rubricosa* [May 1997]
- Haematomma pacificum* Hasse 📖 🌿  
 (Hasse 1910a; Hale & Cole 1988)  
 = [Ophioparma rubricosa](#)
- Haematomma ventosum* (L.) A. Massal. 📖 🌿  
 (Fink 1935)  
 = [Ophioparma rubricosa](#)  
**Note:** According to K. Kalb et al. (2004), there are no confirmed records from the Sonoran region (although P. May 1997 reported it rarely from Oregon). *H. Hasse* collections labeled *H. ventosum* from the San Gabriel Mts are referable to *Ophioparma rubricosa*.

## HAFELLIA Kalb, H. Mayrhofer & Scheid.

- Hafellia disciformis* (Fr.) Marbach & H. Mayrhofer 📖 🌿  
 (Marbach 2000 [for taxonomy]; Baltzo 2002; Williams & Sillett 2007)  
 = [Buellia disciformis](#)  
**Note:** According to F. Bungartz (personal communication), *B. disciformis* is the conserved type of the generic name *Buellia*, so this species must be retained in *Buellia*.

## HARPIDIUM Körb.

### **Harpidium nashii** Scheid. 📖 🌿

(Schultz et al. 2001 [reported a collection from Santa Cruz Isl.]; Scheidegger & Schultz 2004; Knudsen & Kocourková 2012a)

### *Harpidium glaucophanum* (Nyl. ex Hasse) Hasse 📖 🌿

(Hasse 1913b)

=[\*Rhizoplaca glaucophana\*](#)

## HASSEA Zahlbr.

### *Hassea bacillosa* (Nyl.) Zahlbr. 📖 🌿

(Zahlbruckner 1902, 1903–1907; Hasse 1903f, 1913b; Fink 1935; TJ)

=[\*Sarcopyrenia bacillosa\*](#)

## HEPPIA Nägeli

### **Heppia adglutinata** (Kremp.) A. Massal. 📖 🌿

(*K. Knudsen 13263.I*, Joshua Tree N. P., Riverside Co., UCR; *K. Knudsen 860*, W side of San Jacinto Mts, San Bernardino Co., SBBG, UCR)

**Note:** Henssen (1994) asserted that some reports of *H. lutosa*, not specifically from CA, refer to either *H. adglutinata* or *H. conchiloba*.

### **Heppia conchiloba** Zahlbr. 📖 🌿

(Zahlbruckner 1902; Hasse 1903c [as “*conchildobata*”], 1913b; Fink 1935; Wetmore 1970; Henssen 1994; Brodo et al. 2001 [p. 333, with color photograph]; Büdel et al. 2002; Robertson & Robertson 2002 [based on *J. & R. Robertson 5520*, sandstone outcrops on northern side of Putah Creek below Monticello Dam, Solano Co., UC]; *T. Nash 8448*, 3 km SW of Parker Dam on Colorado River, San Bernardino Co., ASU; *K. Knudsen 2420*, Mountain Palm Springs area, Colorado Desert, San Diego Co., UCR)

**Note:** Some reports of *H. lutosa* may belong here, *fide* A. Henssen (1994); Wetmore (1970) considered this a form of *H. lutosa* “of no taxonomic significance”.

### **Heppia despreauxii** (Mont.) Tuck. 📖 🌿

(Orcutt 1885; McClatchie 1897; Hasse 1898a; Orcutt 1903, 1907, 1909; Hasse 1913b; in Arizona, *fide* Büdel et al. 2002; in CA as *Anema dodgei*, *fide* Schultz 2007; *K. Knudsen 13448.I*, Joshua Tree N. P., Mojave Desert, Riverside Co., UCR)

**Synonyms:** [\*Anema dodgei\*](#)

### **Heppia lutosa** (Ach.) Nyl. 📖 🌿

(Wetmore 1970; Sigal & Toren 1976; TJ; Bowler et al. 1996; Doell et al. 1999; Robertson & Robertson 2001; Büdel et al. 2002; Knight et al. 2002; Rosentreter et al. 2007 [with photograph]; Knudsen & Kocourková 2010a, citing two Hasse collections called *H. despreauxii*. *H. Hasse 34*, Santa Monica Mts, Los Angeles Co., SBBG, ASU; *C. Bratt 3073*, Islay Cyn, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Note:** Some collections may be misidentifications of *H. conchiloba*.

### *Heppia alumenensis* Herre 📖 🌿

(Herre 1912a; Fink 1935; TJ; not treated by Wetmore [1970] because type was not found)

### *Heppia bolanderi* (Tuck.) Vain. 📖 🌿

(Hasse 1908a; Herre 1910; Hasse 1913b; Fink 1935)

=[\*Peltula bolanderi\*](#)

### *Heppia guepinii* (Delise) Nyl. 📖 🌿

(Hasse 1898a; Orcutt 1909; Herre 1910; Hasse 1913b; Merrill 1923; Fink 1935)

=[\*Peltula euploca\*](#)

### *Heppia hassei* Zahlbr. 📖 🌿

(Zahlbruckner 1902; Hasse 1903c; Herre 1910; Hasse 1913b; Fink 1935)

=[\*Peltula obscurans\* var. \*hassei\*](#)

*Heppia leptopholis* Nyl. ex Hasse 📖 🌿

(Hasse 1898a; Nylander 1900; Orcutt 1909; Hasse 1913b; Merrill 1923; Fink 1935)

=[\*Peltula patellata\*](#)

*Heppia omphaliza* Nyl. 📖 🌿

(Hue 1891 [Baja California collections only])

=[\*Peltula omphaliza\*](#)

*Heppia polyspora* Tuck. 📖 🌿

(Hasse 1898a; Orcutt 1909; Hasse 1913b; Fink 1935)

=[\*Peltula patellata\*](#)

*Heppia psammophila* Nyl. 📖 🌿

(Hasse 1915b; Fink 1935; but misidentifications for N. Amer.; reported for Algeria by Zahlbruckner [1925])

*Heppia terrena* Nyl. ex Hasse 📖 🌿

(Hasse 1897; McClatchie 1897; Hasse 1898a; Orcutt 1909; Hasse 1913b; Fink 1935)

=[\*Peltula patellata\*](#)

*Heppia zahlbruckneri* Hasse 📖 🌿

(Hasse 1911b, 1913b; Zahlbruckner 1925; Fink 1935)

=[\*Peltula zahlbruckneri\*](#)

#### HERPOTHALLON Tobler

*Herpothallon rubrocinctum* (Ehrenb.: Fr.) Aptroot, Lücking & G. Thor 📖 🌿

**Synonyms:** [\*Chiodecton rubrocinctum\*](#) (Hasse 1903b, but based on a misidentification), [\*Chiodecton sanguineum\*](#) (Hasse 1903b, but based on a misidentification)

#### HERTELIDEA Printzen & Kantvilas

*Hertelidea botryosa* (Fr.) Printzen & Kantvilas 📖 🌿

(Printzen 2004 [for synonymy, but author does not include S CA in its range]; Williams & Sillett 2007 [not verified]; Glacy et al. 2011; *K. Knudsen 9891*, Golden Gate Nat. Recreation Area, W of Rock Spring, Marin Co., UCR; *K. Knudsen 9974*, Limekiln S. P., Santa Lucia Mts, Monterey Co., NY, UCR)

**Synonyms:** [\*Biatora botryosa\*](#), [\*Lecidea botryosa\*](#)

#### HETEROCARPON Müll. Arg.

\**Heterocarpon ochroleucum* (Tuck.) Müll. Arg. 📖 🌿

(Zahlbruckner 1922; Hasse 1906, 1915b; Fink 1935; TJ; Harada 1991)

**Synonyms:** [\*Endocarpon ochroleucum\*](#)

**Note:** This is a lichenicolous perithecioid fungus on an unidentified host thallus; the type specimen is in poor condition, *fide* P. Diederich (personal communication to T. Nash).

#### HETERODERMIA Trevis.

*Heterodermia boryi* (Fée) K. P. Singh & S. R. Singh 🌿

**Synonyms:** [\*H. leucomela\* subsp. \*boryi\*](#), [\*H. neoleucomelaena\*](#)

*Heterodermia erinacea* (Ach.) W. A. Weber 📖 🌿

(Hale & Cole 1988; Bratt 1993; Bowler et al. 1996; Moberg & Nash 1999; Brodo et al. 2001 [p. 337, with color photograph]; Moberg & Nash 2002; McCune & Geiser 2009; Knudsen & Kocourková 2010f, 2012a; *H. Hasse 178*, Point Loma, San Diego Co., SBBG; *S. Tucker 6211b*, Blake Estate, Kensington, Berkeley Hills, Contra Costa Co., SBBG)

**Synonyms:** [\*Anaptychia erinacea\*](#), [\*Physcia ciliaris\* var. \*erinacea\*](#), [\*Physcia erinacea\*](#)

*Heterodermia japonica* (Satôum;) Swinscow & Krog 📖 🌿

(*C. Bratt 11079*, on *Quercus tomentella*, top of Black Mtn, Santa Rosa Isl., Santa Barbara Co., SBBG,

det. T. Esslinger; Moberg & Nash 2002 [report it in Baja California, although not in CA])

**Heterodermia leucomela** (L.) Poelt 📖 🌿

(Lindsay 1973; TJ; Hale & Cole 1988; von Reis 1991 [as subsp. *leucomelos*]; Goward et al. 1994 [as subsp. *leucomelos*]; McGee 1995; West & Doell 1995; Bowler et al. 1996; Hill 1996 [as *H. leucomelos* f. *albociliata*]; Wright 1997; McGee 1998; Wright 1998; Brodo et al. 2001 [pp. 338–339, with color photograph]; McGee 2001; Baltzo 2002; Moberg & Nash 2002; Robertson 2002a; Ellyson & Sillett 2003; Geiser et al. 2004; Jovan & McCune 2004; Tucker et al. 2004; Glavich et al. 2005a, 2005b; Hinds & Hinds 2007 [p. 262, color photograph only]; Robertson 2005b; Knudsen 2009; McCune & Geiser 2009; Knudsen & Kocourková 2010f; Rotter 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [Anaptychia leucomela](#), [A. leucomelaena](#), [Parmelia ophioglossa](#), [Physcia leucomela](#).

**Heterodermia namaquana** Brusse 📖 🌿

(Esslinger & Bratt 1998; Tucker 1999; Brodo et al. 2001 [p. 339]; Moberg & Nash 2002; Robertson & Robertson 2002; color photograph on back cover of CALS Bulletin 8 [2], 2001; Knudsen 2009; Knudsen & Kocourková 2009a; McCune & Geiser 2009; Knudsen & Kocourková 2010f, 2012a; C. Bratt 1442, E of Fraser Point, Santa Cruz Isl., Santa Barbara Co., SBBG)

*Heterodermia albicans* (Pers.) Swinscow & Krog 🌿

**Synonyms:** [Physcia albicans](#)

*Heterodermia comosa* (Eschw.) Follmann & Redón 📖 🌿

**Synonyms:** [Anaptychia comosa](#) (Eschw.) A. Massal. (Herre 1910 [but Herre collections should be verified])

**Note:** This species occurs in Texas (Lendemer 2009) and Mexico outside the Sonoran area, *fide* Moberg & Nash (2002).

*Heterodermia leucomela* subsp. *boryi* (Fée) Swinscow & Krog 📖 🌿

(Moberg & Nash 2002)

=[Heterodermia boryi](#)

**Note:** Moberg & Nash (2002, p. 214) include this under *H. leucomela*.

*Heterodermia neoleucomelaena* (Kurok.) Follmann & Redón 🌿

(Lindsay 1973 [Lindsay collection from Humboldt Co., HSC]; collection not verified)

=[Heterodermia boryi](#), but collection probably misidentified

*Heterodermia speciosa* (Wulfen) Trevis. 📖 🌿

**Synonyms:** [Physcia speciosa](#) (Bolander 1870)

**Note:** This species does not occur in CA. The identity of Bolander's material is not known.

**HETEROPLACIDIUM** Breuss

\***Heteroplacidium zamenhofianum** (Clauz. & Cl. Roux) Gueidan & Cl. Roux 📖 🌿

(Knudsen 2005c; Kocourková et al. 2012; *K. Knudsen 3383*, Cactus Flats, San Bernardino Mts, San Bernardino Co., UCR; *C. Bratt 8447*, Orr Camp Rd, Santa Rosa Isl., Santa Barbara Co., SBBG; a juvenile parasite on *Staurothele* species)

**Synonyms:** [Verrucaria zamenhofiana](#)

**Misapplied names:** [V. compacta](#)

**HETEROTHECIUM** Flot.

*Heterothecium sanguinarium* (L.) Tuck. 📖 🌿

(Tuckerman 1872, 1888)

=[Mycoblastus sanguinarius](#)

**HOMODIUM** Nyl. ex H. Olivier

*Homodium microdium* Nyl. ex Hasse 📖 🌿

(Hasse 1898a; Orcutt 1909)

=[\*Leptogium plicatile\*](#) (synonymy *fide* Jørgensen & Nash 2004, p. 345)

**HUBBSIA** W. A. Weber

**Hubbsia californica** (Räsänen) W. A. Weber 📖 🌿

**Synonyms:** [\*Reinkella californica\*](#)

**Note:** Although the type specimen is from San Diego (discussed in Tucker 2002), this taxon has not been found north of Baja California in recent times, *fide* Esslinger (2011) and Tehler (2002).

*Hubbsia parishii* (Hasse) Tehler, Loht., Myllys, & Sundin 📖 🌿

(Tehler et al. 1997; Lohtander et al. 1998; Robertson & Robertson 2001 [but based on a misidentification]; Brodo et al. 2001 [pp. 341–342, with color photograph]; Tehler 2002; Tucker 2002 [repeated Robertson record]; Knudsen 2009; color photograph on back cover of CALS Bulletin 7 [2], 2000)

=[\*Schizopelte parishii\*](#)

**HYDROPUNCTARIA** Keller, Gueidan, & Thüs (Gueidan et al. 2009)

**Hydropunctaria maura** (Wahlenb.) Keller, Gueidan, & Thüs 📖 🌿

(Benson et al. 2012)

**Synonyms:** [\*Verrucaria maura\*](#)

**HYDROTHYRIA** J. L. Russell =**PELTIGERA**

*Hydrothyria venosa* J. L. Russell 📖 🌿

(Bolander 1870; Tuckerman 1872, 1882; Willey 1887; Fink 1935; Weber 1971b; Pinelli & Jordan 1978; TJ; Hale & Cole 1988; Goward et al. 1994; Brodo et al. 2001 [pp. 342–343, with color photograph]; *Bolander's* Mariposa Co. collection was the basis for the E. Tuckerman and H. Willey reports; *W. Weber*, Univ. Colo. Lich. Exs. 293, Yosemite N. P., Mariposa Co.; *B. Ryan 32035*, Brown's Creek, Sierra N. F., Madera Co., ASU)

=[\*Peltigera gowardii\*](#)

**HYMENELIA** Kremp.

**Hymenelia epulotica** (Ach.) Lutzoni 📖 🌿

(*H. Hasse 630*, Mt. Wilson, San Gabriel Range, Los Angeles Co., NY)

**Synonyms:** [\*Ionaspis epulotica\*](#), [\*Lecanora epulotica\*](#) var. [\*subepulotica\*](#)

**HYPERPHYSICIA** Müll. Arg.

**Hyperphyscia adglutinata** (Flörke) H. Mayrhofer & Poelt 📖 🌿

(Hale & Cole 1988; von Reis 1991; Doell & Wright 1996; Bourell 2000; Brodo et al. 2001 [p. 343, with color photograph]; Robertson 2001; Wright 2001a; Moberg 2002; Robertson 2003a; Thomson 2003; Tucker et al. 2004; Robertson 2005c; Carlberg et al. 2007; Hinds & Hinds 2007 [p. 265, color photograph only]; Knudsen & Kocourková 2009b, 2009c; Tucker 2010; Glacy et al. 2011; Benson et al. 2012; Esslinger et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [\*Physcia adglutinata\*](#), [\*P. elaeina\*](#)

**Hyperphyscia confusa** Essl., Morse, & Leavitt 📖 🌿

(Esslinger et al. 2012, citing collections from Los Alamos and Santa Cruz Isl., Santa Barbara Co.; Knudsen & Kocourková 2012a, on rock, Santa Cruz Isl.)

**HYPOCENOMYCE** M. Choisy

**Hypocenomyce anthracophila** (Nyl.) P. James & Gotth. Schneid. 📖 🌿

(Brodo et al. 2001 [p. 343, with color photograph]; Robertson 2005b; Hinds & Hinds 2007 [p. 267, color photograph only]; Knudsen & Kramer 2007; *B. Ryan 32204a*, Benedict Meadow, Sierra N. F., Madera Co., ASU; other collections from Tulare, Monterey Co., ASU, Yuba Co., SBBG)

**Synonyms:** [\*Biatora anthracophila\*](#), [\*Lecidea anthracophila\*](#)

**Hypocenomyce castaneocinerea** (Räsänen) Timdal 📄 🌿

(combination made in Timdal 2002; Williams & Sillett 2007; Knudsen et al. 2009; Villella 2010; *H. Hasse*, San Gabriel Mts, San Bernardino Co., NY; *B. Ryan* 26183, 26188, Mooney Mtn Rd, San Gabriel Mts, Los Angeles Co., ASU, det. E. Timdal; *E. Timdal* 7096, Yosemite N. P., Mariposa Co., ASU)

**Note:** Timdal collected this species also in Del Norte, Los Angeles, Mendocino, and Tulare counties.

**Hypocenomyce oligospora** Timdal 📄 🌿

(Timdal 2001; Williams & Sillett 2007)

**Hypocenomyce scalaris** (Ach. ex Lilj.) M. Choisy 📄 🌿

(Baltzo 1989; Ryan & Nash 1991; Goward et al. 1994; Tucker & Bratt 1995; Hill 1997; Timdal 2002; Tucker et al. 2004; Benson 2005; Robertson & Beyer 2005; Hinds & Hinds 2007 [p. 269, color photograph only]; Robertson & Robertson 2008; Knudsen et al. 2009; Brodo et al. 2001 [p. 345, color photograph but no CA report]; Knudsen & Kocourková 2012a)

**Synonyms:** [Lecidea scalaris](#)

**Note:** Timdal collected this species also in El Dorado, Fresno, Inyo, Lake, Los Angeles, Madera, Mendocino, Orange, San Bernardino, Siskiyou, Tulare, and Tuolumne counties.

**Hypocenomyce sierrae** Timdal 📄 🌿

(Timdal 2002; Knudsen et al. 2009; *B. Ryan* 26184, San Gabriel Mts, Los Angeles Co., ASU; *B. Ryan* 24615b, Emigrant Wilderness, Tuolumne Co., ASU, det. E. Timdal)

**Note:** Timdal collected this species also in Fresno, San Bernardino, San Diego, and Tulare counties.

*Hypocenomyce friesii* (Ach.) P. James & Gotth. Schneid. 📄 🌿

(Hasse 1913b; Lowe 1939; Goward et al. 1994)

**Synonyms:** [Biatora friesii](#), [Lecidea friesii](#), [Psora friesii](#)

**Note:** This species is accepted in Esslinger (2011), but CA reports are probably misidentifications of other species, *fide* E. Timdal.

*Hypocenomyce xanthococca* (Sommerf.) P. James & Gotth. Schneid. 📄 🌿

(Ryan & Nash 1991)

=[Pycnora xanthococca](#)

**Note:** According to Timdal (2002, p. 226), N. Amer. records are based on misidentifications. Esslinger (2011) retains the name in the N. Amer. checklist.

**HYPOGYMNIA** (Nyl.) Nyl.

**Hypogymnia apinnata** Goward & McCune 📄 🌿

(Goward et al. 1994; McCune & Geiser 1997; Brodo et al. 2001 [pp. 346–347, with color photograph]; Wright 2001a; Baltzo 2002; Nash 2002b, p. 509; Ellyson & Sillett 2003; Jovan & McCune 2004; Tucker et al. 2004; Williams & Sillett 2007; McCune & Geiser 2009; Glacy et al. 2011 [as “cf.”]; *T. Nash* 11411a, near county airport, Mendocino Co., ASU; *E. Peterson* collections, Humboldt Co. & Contra Costa Co.)

**Hypogymnia enteromorpha** (Ach.) Nyl. 📄 🌿

(Ahti & Henssen 1965; Jordan 1968; Baltzo 1970; Lindsay 1973; Ohlsson 1973; Pinelli & Jordan 1978; TJ; Sigal & Nash 1983; von Reis 1991; Goward et al. 1994; Tucker & Bratt 1995; Wright 1997; Bourell 2000; Brodo et al. 2001 [p. 349, with color photograph]; Wright 2001a; Baltzo 2002; Ellyson & Sillett 2003; Robertson 2003a; Blauman 2004a; Jovan & McCune 2004; Williams & Sillett 2007; McCune & Geiser 2009; Rotter 2010; Benson et al. 2012)

**Synonyms:** [Parmelia enteromorpha](#), [P. physodes](#) var. [enteromorpha](#)

**Note:** Many early reports in TJ under these synonyms are misidentifications; most reports from the southern inland half of CA are referable to *H. imshaugii*.

**Hypogymnia gracilis** McCune 📄 🌿

(McCune 2002; Tucker 2009a; Knudsen & Kocourková 2010a, citing a Hasse collection [*H. Hasse*, Santa Monica Range, NY]; Knudsen & Kocourková 2012a; *D. Keil* collection, Los Osos, San Luis



Obispo Co., Nov 1955, OBI; *T. Nash 29969*, Hastings Natural History Reserve, Monterey Co., ASU; *S. Tucker 37576*, trail to East Peak, Mt. Tamalpais, Marin Co., SBBG, det. B. McCune)

**Hypogymnia heterophylla** L. H. Pike 📖 🌿

(Pike & Hale 1982; Hale & Cole 1988; von Reis 1991; Goward et al. 1994; Riefner, Bowler, & Ryan 1995 [San Luis Obispo Co.]; Doell & Wright 1996; Brodo et al. 2001 [pp. 349–350, with color photograph]; Wright 2001a [identified Lindsay [1973] collection, originally named *H. duplicata*, as *H. heterophylla*]; McCune 2002; Tucker et al. 2004; Williams & Sillett 2007; McCune & Geiser 2009; Knudsen & Kocourková 2012a; *B. Ryan 22236b*, Pygmy Forest, Mendocino Co., ASU; *C. Bratt 2309*, Point Lobos State Reserve S of Carmel, Monterey Co., SBBG)

**Hypogymnia hultenii** (Degel.) Krog 📖 🌿

(Miadlikowska et al. 2011; *T. Nash 11510*, seaside sand dunes, 5 km N of Eureka, Humboldt Co., ASU)

**Synonyms:** [\*Cavernularia hultenii\*](#)

**Hypogymnia imshaugii** Krog 📖 🌿

(Lindsay 1973; Ohlsson 1973; Pinelli & Jordan 1978; TJ; Weber et al. 1987; Baltzo 1989; von Reis 1991; Goward et al. 1994; Tucker & Bratt 1995; Doell & Wright 1996; Tucker & Bratt 1996; Hill 1997; McGee 1998; Brodo et al. 2001 [p. 350, with color photograph]; Wright 2001a; Baltzo 2002; McCune 2002; Ellyson & Sillett 2003; Robertson 2003a; Blauman 2004a; Jovan & McCune 2004; Benson 2005; Robertson 2005a; Knudsen 2007b; Williams & Sillett 2007; Knudsen et al. 2009; McCune & Geiser 2009; Villella 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a; color photograph on front cover of CALS Bulletin 7 [2], 2000)

**Hypogymnia inactiva** (Krog) Ohlsson 📖 🌿

(Ohlsson 1973; Malachowski 1975; Pinelli & Jordan 1978; TJ; Goward et al. 1994; Bourell 2000; Brodo et al. 2001 [p. 350, with color photograph]; Wright 2001a; Baltzo 2002; Robertson 2002a; Jovan & McCune 2004; Williams & Sillett 2007; McCune & Geiser 2009; Rotter 2010; Glacy et al. 2011; Benson et al. 2012; *T. Nash 11562*, Gasquet, Del Norte Co., ASU; *S. Tucker 13418b*, Skyline Blvd S of junction to Burlingame, San Mateo Co., SBBG)

**Hypogymnia lophyrea** (Ach.) Krog 📖 🌿

(Miadlikowska et al. 2011 *H. Thiers 15133*, Patrick's Point S. P., Humboldt Co., ASU)

**Synonyms:** [\*Cavernularia lophyrea\*](#), [\*Parmelia lophyrea\*](#)

**Hypogymnia minilobata** McCune & Schoch 📖 🌿

(McCune & Schoch 2009; Lendemer 2010a, citing N. Amer. Exsiccati 354; Knudsen & Kocourková 2012a; Villella 2012; *S. Tucker 13710B*, Point Sal, Santa Barbara Co., SBBG; *S. Tucker 35800*, Santa Cruz Isl., Santa Barbara Co., SBBG, dets. by B. McCune)

**Hypogymnia mollis** L. H. Pike & Hale 📖 🌿

(Pike & Hale 1982; Weber et al. 1987; von Reis 1991; Riefner, Bowler, & Ryan 1995; Hill 1996; Wright 2001a; McCune 2002; Knudsen 2007b; Knudsen & Kocourková 2010f, 2012a; Lendemer 2010a, citing N. Amer. Exsiccati 353)

**Note:** The range is from San Luis Obispo Co. S to San Diego Co.

**Hypogymnia occidentalis** L. H. Pike 📖 🌿

(Pike & Hale 1982; Goward et al. 1994; Riefner, Bowler, & Ryan 1995; West & Doell 1995; Doell & Wright 1996; Tucker & Bratt 1996; Brodo et al. 2001 [p. 353, with color photograph]; Wright 2001a; McCune 2002; Robertson 2002a; Jovan & McCune 2004; McCune & Geiser 2009; Glacy et al. 2011; *S. Tucker 35341B*, 8.6 mi. from Lake Pillsbury on Potter Valley Rd, Mendocino N. F., Lake Co., SBBG, det. B. McCune; *B. Ryan*, Marble Mtn Wilderness, Siskiyou Co., ASU; also in San Luis Obispo, Santa Barbara counties)

**Hypogymnia physodes** (L.) Nyl. 📖 🌿

(Herre 1910, which may be misidentifications; Jordan 1968; Lindsay 1973; Ohlsson 1973; Malachowski 1975; Pinelli & Jordan 1978; TJ; Sweet 1983; Hale & Cole 1988; Goward et al. 1994; Riefner, Bowler, & Ryan 1995; West & Doell 1995; Hill 1997; Brodo et al. 2001 [p. 354, with color

photograph]; Wright 2001a; Baltzo 2002; McCune 2002; Robertson 2002a; Ellyson & Sillett 2003; Robertson 2003a; Jovan & McCune 2004; Robertson 2004; Tucker et al. 2004; Hinds & Hinds 2007 [p. 274, color photograph only]; Williams & Sillett 2007; Glacy et al. 2011; *H. N. Bolander*, Oakland, Alameda Co., ASU; *S. Tucker 35005C*, Patrick's Point S. P., 20 mi. N of Arcata, Humboldt Co., SBBG)

**Synonyms:** [\*Parmelia physodes\*](#)

**Hypogymnia schizidiata** McCune 📄 🌿

(McCune 2002, 2006; Knudsen & Kocourková 2012a; *C. Bratt 1469*, Christy Pines, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Hypogymnia tubulosa** (Schaer.) Hav. 📄 🌿

(Jordan 1968; Lindsay 1973; Ohlsson 1973; Pinelli & Jordan 1978; TJ; Sweet 1983; Hale & Cole 1988; Baltzo 1989; Goward et al. 1994; Riefner, Bowler, & Ryan 1995 [range from San Luis Obispo Co. N to Humboldt Co.]; Hill 1997; Brodo et al. 2001 [pp. 355–356, with color photograph]; Wright 2001a; Baltzo 2002; McCune 2002; Robertson 2002a, 2002c, 2003a; Jovan & McCune 2004; Tucker et al. 2004; Hinds & Hinds 2007 [p. 275, color photograph only]; Williams & Sillett 2007; Glacy et al. 2011; Knudsen & Kocourková 2012a)

**Hypogymnia wilfiana** Goward, T. Sprib. & Ahti 📄 🌿

(Goward et al. 2010)

**Misapplied names:** [\*H. metaphysodes\*](#), for N. Amer. material

*Hypogymnia bitteri* (Lynge) Ahti 📄 🌿

(map in Hale 1979; Wright 2001a [citing Hale]; Brodo et al. 2001 [p. 348, color photograph but no CA report]; *D. Wright*, 1999, Horse Mtn, Humboldt Co., but later det. *D. Wright* as *H. tubulosa*)

*Hypogymnia duplicata* (Ach.) Räsänen 📄 🌿

(Lindsay 1973; TJ; Wright 2001a [refuted the Lindsay record as a misidentification: see *H. heterophylla*]; Brodo et al. 2001 [p. 348]; discussed by Tucker 2002; Tucker et al. 2004, based on a J. Robertson collection from Santa Cruz, Santa Cruz Co., UC)

**Note:** B. McCune has suggested that the Robertson collection may be misidentified.

*Hypogymnia metaphysodes* (Asah.) Räsänen 📄 🌿

(Hale & Cole 1988; von Reis 1991; Riefner, Bowler, & Ryan 1995 [Merced, San Luis Obispo counties]; McGee 1998; Brodo et al. 2001 [p. 353, with color photograph]; Wright 2001a; Baltzo 2002 [as “cf.”]; Jovan & McCune 2004; McCune & Geiser 2009)

=name misapplied to *H. wilfiana*

**Note:** *Hypogymnia metaphysodes* is restricted to Asian material, *fide* Goward et al. (2010).

*Hypogymnia rugosa* (G. Merr.) L. H. Pike 📄 🌿

Brodo et al. 2001 [p. 354, shown with color photograph but no CA report, Oregon and north]; (*B. Ryan 11138*, Sequoia N. P., Tulare Co., SBBG, but collection misidentified, *fide* B. McCune)

*Hypogymnia vittata* (Ach.) Parrique 📄 🌿

(TJ)

**Synonyms:** [\*Parmelia vittata\*](#) (Merrill 1923)

**Note:** This is a misidentification for CA, *fide* B. Ryan.

**HYPOTRACHYNA** (Vain.) Hale

**Hypotrachyna afrorevoluta** (Krog & Swinscow) Krog & Swinscow 📄 🌿

(Knudsen & Lendemer 2005b; Lendemer 2006a; McCune & Geiser 2009; Knudsen & Kocourková 2012a; *S. Tucker 37589*, Mt. Tamalpais, Marin Co., SBBG; *K. Knudsen 8563*, Christy Pines, Santa Cruz Isl., Santa Barbara Co., UCR)

**Hypotrachyna revoluta** (Flörke) Hale 📄 🌿

(Bratt 1986; Hale & Cole 1988; McCune & Geiser 1997; Wright 1998; McGee 1999; Brodo et al. 2001 [pp. 359–360, with color photograph]; Wright 2001a [indicated that specimen reported in Wright 1998 from Marin Co. was misidentified]; Baltzo 2002; Doell 2002; Nash, Sipman, & Elix 2002; Robertson

2003a; Geiser et al. 2004; Tucker et al. 2004; Glavich et al. 2005a, 2005b; Robertson 2005b; McCune & Geiser 2009; Benson et al. 2012; *C. Bratt 3489a*, Western Pines, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Synonyms:** [Parmelia revoluta](#)

**Hypotrachyna sinuosa** (Sm.) Hale 📖 🌿

(Hale & Cole 1988 [Humboldt Co.]; Brodo et al. 2001 [p. 360]; Tucker et al. 2004; McCune & Geiser 2009; *S. Tucker 38399*, campus of Univ. of Calif., Santa Cruz, Santa Cruz Co., SBBG)

**Hypotrachyna laevigata** (Sm.) Hale 📖 🌿

**Synonyms:** [Parmelia laevigata](#) (Hue 1895; Hasse 1903a; Merrill 1923)

**Note:** The Hue record reported an M. Diguet collection from the southern end of the Gulf of California in the Sierra de la Laguna range, Mexico. Hasse's report of *Parmelia laevigata* was not repeated in his definitive 1913b publication, so presumably he changed his mind about its identity.

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

**ICMADOPHILA** Trevis.

**Icmadophila ericetorum** (L.) Zahlbr. 📖 🌿

(Tucker & Kowalski 1975 [based on *D. T. Kowalski 12048*, Prairie Creek S. P., Humboldt Co.]; TJ; Hale & Cole 1988; Brodo et al. 2001 [p. 360, with color photograph]; Tucker 2002 [discussed *D. T. Kowalski* collection from CA]; Carlberg 2003; Williams & Sillett 2007; *L. Sigal s.n.*, Jackson S. F., Mendocino Co., ASU)

**IMSHAUGIA** S. L. F. Meyer

**Imshaugia aleurites** (Ach.) S. L. F. Meyer 📖 🌿

(Robertson & Robertson 2001 [based on *J. Robertson 3955*, ~5 mi. NW of Cazadero, W of King Ridge Rd, Sonoma Co., 20 May 2000, UC]; Wright [2001a] and Tucker [2002] repeated Robertson report; Brodo et al. 2001 [pp. 361–362, color photograph but no CA report]; Benson 2005; Hinds & Hinds 2007 [p. 280, color photograph only]; Williams & Sillett 2007)

**INGVARIELLA** Guderley & Lumbsch

**Ingvariella bispora** (Bagl.) Guderley & Lumbsch 📖 🌿

(Lumbsch 2004 [reported a collection from Santa Rosa Isl.]; Carlberg 2012; Knudsen & Kocourková 2012a [for Santa Rosa Isl. collection]; *C. Bratt 7177*, Hollister Ranch, Santa Ynez Mts, Santa Barbara Co., SBBG; *T. Carlberg 02818*, Long Ridge Open Space Reserve, Achistaca Trail, Santa Cruz Co., Herb. Carlberg)

**INTRALICHEN** D. Hawksw. & M. S. Cole

\***Intralichen baccisporus** D. Hawksw. & M. S. Cole 📖 🌿

(Knudsen & Kocourková 2009b, 2009c, 2012a; Kocourková et al. 2012; *J. Kocourková & K. Knudsen s.n.*, on *Caloplaca* spp., Santa Rosa Isl., PRM, UCR, other Channel Is., mainland Los Angeles, and Monterey counties)

\***Intralichen christiansenii** (D. Hawksw.) D. Hawksw. & M. S. Cole 📖 🌿

(Cole & Hawksworth 2001; Hawksworth & Cole 2002 [for nomenclature]; Knudsen & Kocourková 2009a; Kocourková et al. 2012; on *Lecanora strobilina*, *S. Tucker 14848b* pr. p., Mt. Shasta, Siskiyou Co., SBBG, on *Letharia vulpina*, det. D. Triebel; *S. Tucker 28798*, Bartlett Springs Rd, Lake Co., SBBG, det. D. Triebel; *C. Bratt 7223A*, Santa Cruz Isl., Santa Barbara Co., SBBG, on *Caloplaca brattii*; *C. Bratt 9584*, San Clemente Isl., Los Angeles Co., SBBG, on *Caloplaca californica*; last two determinations by M. Cole)

**Synonyms:** [Bispora christiansenii](#)

\***Intralichen lichenicola** M. S. Christ. & D. Hawksw. 📖 🌿

(Knudsen & Kocourková 2012a; Kocourková et al. 2012; *J. Kocourková & K. Knudsen s.n.*, Santa Rosa Isl., PRM, UCR)

## IONASPIS Th. Fr.

### **Ionaspis alba** Lutzoni 🍄🌿

(Owe-Larsson & Nordin 2008; Robertson & Robertson 2008, [“from Marin to Mendocino County”]; Glacy et al. 2011)

**Misapplied names:** *I. epulotica*, *Lecanora lacustris* (Hasse 1915a)

**Note:** Hasse reported *I. epulotica* from the Santa Monica Mts in S CA on rocks that were inundated only during the brief rainy season. The species is typically found at the edge of streams or lakes. According to Owe-Larsson & Nordin (2008), cited reports referred to *I. alba* or other taxa.

### **Ionaspis lacustris** (With.) Lutzoni 🍄🌿

(Lendemer et al. 2010; Knudsen 2012a)

**Synonyms:** *Lecanora lacustris*

**Note:** According to Brodo et al. (2001, p. 363, with color photograph), the range of *I. lacustris* is along the Pacific Coast S to Oregon; this discrepancy regarding range is discussed by Tucker (2002).

### *Ionaspis epulotica* (Ach.) Blomb. & Forss. 🍄🌿

(TJ)

=*Hymenelia epulotica*

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

## JAMESIELLA Lücking, Sérus. & Vězda

### **Jamesiella anastomosans** (P. James & Vězda) Lücking, Sérus. & Vězda 🍄🌿

(Lücking et al. [2005], but CA not mentioned)

**Synonyms:** *Gyalideopsis anastomosans*

## JAPEWIA Tønsberg

### **Japewia subaurifera** Muhr & Tønsberg 🍄🌿

(*E. Peterson* 1906, Trinity Co.)

### **Japewia tornoënsis** (Nyl.) Tønsberg 🍄🌿

(Tønsberg [1990], described but CA not cited; Robertson & Robertson 2002 [based on *J. & R. Robertson* 2458, 8 km NW of Cazadero, Sonoma Co., and *J. & R. Robertson* 5391, NE side of East Peak, Mt. Tamalpais S. P., Marin Co., UC]; Brodo et al. 2001 [pp. 364–365, color photograph but no CA report]; Williams & Sillett 2007; *B. Ryan* 26715, W Soda Creek Rd, 3 mi. E of Hwy I-5, 4 mi. SE of Dunsmuir, Shasta Co., SBBG)

**Synonyms:** *Biatora tornoënsis*, *Lecidea tornoënsis*, *Mycoblastus tornoënsis*

## JULELLA Fabre

### †**Julella vitrispora** (Cooke & Harkn.) M. E. Barr 🍄🌿

(Riedl 1962b; Barr 1985, 1990; R. Harris 1995 [pp. 84–86]; Aptroot & van den Boom 1995 [for discussion of *Julella* and *Peltosphaeria*]; Knudsen & Kocourková 2012a [reporting a Santa Cruz Isl. collection]; *L. W. Nuttall* 620, Santa Catalina Isl., Los Angeles Co., ASU)

### *Julella lactea* (A. Massal.) M. E. Barr var. *lactea* 🍄🌿

**Synonyms:** *Polyblastiopsis lactea*, *Pyrenula lactea* (Orcutt 1903, 1907)

**Note:** According to R. Harris (1995) this species is restricted to eastern N. Amer. and Europe. He said [personal communication] that he has seen no material from CA that could be called *Julella lactea*. According to Aptroot (2002), it has been collected several times in S CA and the Channel Is., although he did not specify the collections. Aptroot and Harris are both experts on Pyrenocarps including *Julella*, and they occasionally disagree about the limits of certain species.

**KAERNEFELTIA** A. Thell & Goward

**Kaernefeltia californica** (Tuck.) A. Thell & Goward 📖 🌿

(Thell & Goward 1996; Wright 1998; Brodo et al. 2001 [p. 365, with color photograph]; Baltzo 2002; Robertson 2002a; Thell 2002, 2008; Benson et al. 2012)

**Synonyms:** *Alectoria californica*, *Cetraria californica* Tuck. non Merr., *Cornicularia californica*

**Note:** According to Thell (2008), this species is recorded from San Luis Obispo Co. north to Alaska. Reports from S CA by Hasse are based on specimens that have been re-determined as *K. merrillii*.

**Kaernefeltia merrillii** (Du Rietz) A. Thell & Goward 📖 🌿

(Thell & Goward 1996; Hill 1997; Wright 1997, 1998; Brodo et al. 2001 [p. 366, with color photograph]; Baltzo 2002; Thell 2002; Benson 2005; Thell 2008; Knudsen 2007b; Knudsen et al. 2009; Knudsen & Kocourková 2012a; *B. Ryan 26015*, Agua Tibia Wilderness, Arroyo Seco Cyn, Riverside Co., ASU)

**Synonyms:** *Cetraria californica* Merr. non Tuck., *C. merrillii*, *Tuckermannopsis merrillii*

**KOERBERIA** A. Massal.

**Koerberia biformis** A. Massal. 📖 🌿

(Sigal & Toren 1976; TJ; Baltzo 1989; Tucker & Bratt 1995; Robertson & Robertson 2001; Schoeninger 2002; Tucker et al. 2004; McCune & Geiser 2009; Schultz 2009; *B. Ryan 11223*, Nacimiento Rd, W side of Santa Lucia Mts, Monterey Co., ASU)

**Koerberia sonomensis** (Tuck.) Henssen 📖 🌿

(Henssen 1963c, 1977; Goward et al. 1994; Tucker & Bratt 1995; Schoeninger 2002; McCune & Geiser 2009; Knudsen & Kocourková 2010a, citing a Hasse collection; Schultz 2009; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan 24513a*, Herring Creek Rd, Stanislaus N. F., Tuolumne Co., ASU)

**Synonyms:** *Pannaria sonomensis*, *Parmeliella sonomensis*, *Placynthium sonomense*

**LASALLIA** Mérat

**Lasallia pennsylvanica** (Hoffm.) Llano 📖 🌿

(Llano 1950; TJ; Brodo et al. 2001 [pp. 367–368, with color photograph]; Hinds & Hinds 2007 [p. 283, color photograph only])

**Note:** Llano (1950) reported a Bolander collection from the Geysers, Sonoma Co. (FH).

**LECANACTIS** Körb.

**Lecanactis abietina** (Ach.) Körb. 📖 🌿

(Tuckerman 1872; Willey 1873a; Tuckerman 1888 [based on Bolander collection on *Abies*, probably from N of Sonoran region of CA]; McClatchie 1897; Hasse 1898a [as *L. abietina* Tuck.]; Orcutt 1903, 1907; TJ; Brodo et al. 2001 [p. 369, with color photograph]; Tucker 2002; Williams & Sillett 2007)

**Synonyms:** *Schismatomma abietinum*

**Note:** According to Ryan & Tehler (2004), no material was seen from the Sonoran region of CA. They suggest that H. E. Hasse may have later changed the determination of his material, since the name *Lecanactis abietina* was not repeated in his flora (Hasse 1913b).

**Lecanactis californica** Tuck. 📖 🌿

(Tuckerman 1888, p. 115; Hasse 1896; McClatchie 1897; Hasse 1898a, 1903b; Orcutt 1903, 1907; Zahlbruckner 1911; Hasse 1913b; Merrill 1923; Weber 1967a; C. Culberson 1972; Ryan & Tehler 2004; Knudsen 2009; Knudsen & Kocourková 2009a, 2010a [the latter citing a Hasse collection]; Knudsen & Kocourková 2010f; Benson et al. 2012; Knudsen & Kocourková 2012a; *W. Weber*, Univ.

Colo. Lich. Exs. 194, between Cottonwood Cyn and Mills Landing, Santa Catalina Isl., Los Angeles Co., SBBG; *K. Knudsen 11107*, Point Lobos State Reserve, Monterey Co., UCR)

**Synonyms:** [L. zahlbruckneri](#)

**Note:** Esslinger & Egan (1995) treated *Sigridea californica* and *L. californica* as synonymous, but that error was corrected in Ryan & Tehler (2004, p. 142).

**Lecanactis dubia** G. Merr. 📖 🌿

(Merrill 1923; TJ; Ryan & Tehler 2004 [known only on Santa Catalina Isl.]; *K. Knudsen 10089*, Limekiln S. P., Santa Lucia Mts, Monterey Co., UCR; CA endemic)

**Lecanactis salicina** Zahlbr. 📖 🌿

(Hasse 1906; Zahlbruckner 1906; Hasse 1908a, 1913b; Merrill 1923; Fink 1935; Herre 1945; TJ; Ryan & Tehler 2004; Tucker et al. 2004; Knudsen 2009; Knudsen & Kocourková 2009b; Tucker 2010; Knudsen & Kocourková 2012a; *H. Hasse Exs. 10a*, Point Loma, San Diego Co., ASU)

**Lecanactis chloroconia** Tuck. 📖 🌿

(Herre 1910)

=[Cresponea chloroconia](#)

**Lecanactis dimelaenoides** Egea & Torrente 📖 🌿

(Bowler et al. 1996)

=[Lecanographa dimelaenoides](#)

**Lecanactis premnea** (Ach.) Arnold 📖 🌿

(Tuckerman 1872; Hasse 1898a; Orcutt 1903; Fink 1935; TJ)

=[Cresponea premnea](#), but some CA collections may be misidentifications of *C. chloroconia*

**Lecanactis premnea** var. *chloroconia* (Tuck.) Tuck. 📖 🌿

(Fink 1935; TJ)

=[Cresponea chloroconia](#)

**Lecanactis zahlbruckneri** Herre 📖 🌿

(Herre 1907, 1910; Fink 1935 [p. 127]; Herre 1945; TJ; von Reis 1991 [but report based on a misidentification *fide* Tucker 1999]; Riefner, Bowler, & Ryan 1995)

=[L. californica](#) (synonymy *fide* Esslinger & Tucker 2009; not *Sigridea californica*)

**LECANIA** A. Massal.

**Lecania arizonica** B. D. Ryan & van den Boom 📖 🌿

(Kocourková et al. 2008; *K. Knudsen 13886.1*, Joshua Tree N. P., Mojave Desert, Riverside Co., UCR)

**Note:** This rare species has been found only three times in CA, in the Mojave Desert, Little San Bernardino Mts.

**Lecania brunonis** (Tuck.) Herre 📖 🌿

(Herre 1910; Hasse 1913b; Merrill 1923; Fink 1935; TJ; Weber 1989a; Bowler & Riefner 1990; von Reis 1991; Bowler et al. 1996; Bratt 1987, 1993, 1997; Brodo et al. 2001 [p. 370, with color photograph]; Robertson 2004; Tucker et al. 2004; van den Boom & Ryan 2004; Knudsen 2007b, 2009; Knudsen & Kocourková 2009c, 2010f; Tucker 2010; Knudsen & Kocourková 2012a; W. Weber, Univ. Colo. Lich. Exs. 675 [Fraser Point, Santa Cruz Isl., Santa Barbara Co., ASU] was annotated as *L. brunonis* by van den Boom & Ryan [2004])

**Synonyms:** [Lecanora brunonis](#)

\***Lecania caloplacicola** B. D. Ryan & van den Boom 📖 🌿

(van den Boom & Ryan 2004; Knudsen & Kocourková 2012a; Kocourková et al. 2012; CA endemic)

**Note:** This is a juvenile parasite on saxicolous *Caloplaca* species, developing as an independent thallus; endemic to Santa Rosa Isl.

**Lecania chalcophila** B. D. Ryan & van den Boom 📖 🌿

(van den Boom & Ryan 2004; *C. Bratt 7950B*, San Nicolas Isl., north side, base of L Cyn near road, Ventura Co., SBBG, det. B. Ryan; CA endemic)

**Lecania cuprea** (A. Massal.) van den Boom & Coppins 🌿

(*S. Tucker 38899*, Santa Barbara Botanic Garden, Santa Barbara Co., SBBG)

**Lecania cyrtella** (Ach.) Th. Fr. 📖 🌿

(Hasse 1913b; Fink 1935; TJ; Brodo et al. 2001 [p. 371]; van den Boom & Ryan 2004; Knudsen 2007b; Williams & Sillett 2007; Knudsen & Kocourková 2009a, 2009c; Tucker 2010; Knudsen & Kocourková 2012a; *S. Tucker 13399*, near Woodside, San Mateo Co., SBBG; *S. Tucker 28826A*, Morro Bay S. P., San Luis Obispo Co., SBBG)

**Synonyms:** [Biatora cyrtella](#), [Lecidea cyrtella](#)

**Lecania dudleyi** Herre 📖 🌿

(Herre 1910; Hasse 1913b; Fink 1935; TJ; Weber 1989a; Bratt 1993; Bowler et al. 1996; Hill 2002; van den Boom & Ryan 2004; Knudsen 2009; Knudsen & Kocourková 2009a, 2012a; *W. Weber L-42180*, Santa Catalina Isl., Los Angeles Co., ASU, det. P. van den Boom; Univ. Colo. Lich. Exs. 675, labeled as *L. dudleyi*, is more likely *L. brunonis*)

**Lecania franciscana** (Tuck.) K. Knudsen & Lendemer 📖 🌿

(Knudsen 2007b; Knudsen & Lendemer 2007a; Knudsen 2009; Knudsen & Kocourková 2012a; *H. Hasse s.n.*, Santa Monica Mts, Los Angeles Co., UCR; CA endemic)

**Synonyms:** [Biatora franciscana](#), [Catillaria franciscana](#), [Lecidea franciscana](#), *Lecania subdispersa* B. D. Ryan

**Note:** The inclusion of *Lecania subdispersa* B. D. Ryan (nom. illeg., non *Lecania subdispersa* (Nyl. ex Hasse) Hasse) is explained in Knudsen & Lendemer 2007a.

**Lecania fructigena** Zahlbr. 📖 🌿

(Hasse 1914; Merrill 1923; TJ; Bratt 1987, 1997; van den Boom & Ryan 2004; Knudsen 2007b, 2009; Knudsen & Kocourková 2009a, 2010f; Tucker 2010; Benson et al. 2012; Knudsen & Kocourková 2012a; *B. Ryan 31256*, Santa Rosa Isl., Santa Barbara Co., ASU)

**Lecania fuscella** (Schaer.) Körb. 📖 🌿

(van den Boom & Ryan 2004; Knudsen & Kocourková 2010a, citing a Hasse collection [as *Lecanora dimera*] from Santa Monica range; Knudsen & Kocourková 2010f; Knudsen & Kocourková 2012a; *H. Hasse s.n.*, Santa Monica Mts, Los Angeles Co., UCR; *C. Bratt 3728b*, Santa Barbara Isl., Santa Barbara Co., SBBG)

**Synonyms:** [L. syringea](#), [Lecanora athroocarpa](#), [L. syringea](#)

**Misapplied names** (for CA): [L. dimera](#)

**Lecania fuscelloides** B. D. Ryan & van den Boom 📖 🌿

(van den Boom & Ryan 2004; Tucker et al. 2006; *S. Tucker 39100*, Asilomar Beach, Monterey Co., SBBG; CA endemic)

**Lecania hassei** (Zahlbr. ex Hasse) W. J. Noble 📖 🌿

(Noble 1982; van den Boom & Ryan 2004; Knudsen 2007a; Knudsen & Lendemer 2007b; Knudsen & Kocourková 2009a, 2009c, 2010f, 2012a; *K. Knudsen 4033*, Long Grade Valley above Conejo Creek, Santa Monica Mts, Los Angeles Co., ASU; CA endemic)

**Synonyms:** [L. brattiae](#) (synonymy *vide* Knudsen & Lendemer 2007a), [Placolecania hassei](#), [Solenopsora hassei](#)

**Lecania inundata** (Hepp ex Körb.) M. Mayrhofer 📖 🌿

(van den Boom & Ryan 2004; Knudsen 2009; Knudsen & Kocourková 2010a, citing a Hasse collection under name of *Lecanora polytropa*; Benson et al. 2012; Knudsen & Kocourková 2012a; *T. Nash 32183*, Parsons Landing near old quarry, Santa Catalina Isl., Los Angeles Co., ASU)

**Lecania naegelii** (Hepp) Diederich & van den Boom 📖 🌿

(Ekman 1996; Bratt 1999; van den Boom & Ryan 2004; Knudsen 2009; Knudsen & Kocourková 2009a, 2009b, 2009c; Tucker 2010; Knudsen & Kocourková 2012a; *H. Hasse*, Santa Catalina Isl., Los Angeles Co., ASU; *B. Ryan 25468*, edge of Marble Mtn Wilderness, Siskiyou Co., ASU)

**Synonyms:** [Bacidia naegelii](#) (Herre 1910; Hasse 1913b; Volk 1963; TJ), [Biatora naegelii](#), [Bilimbia naegelii](#), [Buellia naegelii](#), [Lecidea naegelii](#)

**Lecania pacifica** Zahlbr. ex B. D. Ryan & van den Boom 📖 🌿

(van den Boom & Ryan [2004] cited collections from Monterey Co. south to Los Angeles Co.; Benson et al. 2012; Knudsen & Kocourková 2012a; CA endemic)

***Lecania polycycla*** (Anzi) Lettau 📖 🌿

(Knudsen & La Doux 2005; Knudsen 2006a; *K. Knudsen 3335B*, Cactus Flats, San Bernardino Mts, San Bernardino Co., UCR)

***Lecania rabenhorstii*** (Hepp) Arnold 📖 🌿

(van den Boom & Ryan 2004; Knudsen & Kocourková 2010a, citing a Hasse collection under name of *L. arenaria*; Knudsen & Kocourková 2012a; *H. Hasse s.n.*, San Nicolas Isl., Ventura Co., ASU)

***Lecania ryaniana*** van den Boom 📖 🌿

(van den Boom & Ryan [2004] reports from two of the Channel Is.; Knudsen 2009; Knudsen & Kocourková 2012a; *C. Bratt 11051*, Santa Rosa Isl., Santa Barbara Co., SBBG; CA endemic)

***Lecania toninioides*** Zahlbr. 📖 🌿

(Zahlbruckner 1902; Hasse 1903e, 1913b; Fink 1935 [p. 313]; van den Boom & Ryan 2004 [p. 168]; Knudsen 2007b, 2009; Knudsen & Kocourková 2009c; Knudsen & Kocourková 2012a; *T. Nash 41458*, San Miguel Isl., Santa Barbara Co., ASU; CA endemic)

***Lecania turicensis*** (Hepp) Müll. Arg. 📖 🌿

(Zahlbruckner 1902; Hasse 1903e; van den Boom & Ryan 2004; Knudsen 2009; Knudsen & Kocourková 2010f, 2012a; *T. Nash 41216*, China Point, San Miguel Isl., Santa Barbara Co., ASU)

**Synonyms:** [L. albariella](#), [L. californica](#), [L. turicensis var. californica](#), [Lecanora franciscana](#)

*Lecania aipospila* (Wahlenb.) Th. Fr. 📖 🌿

**Synonyms:** [Lecania spodophaeiza](#), [Lecanora spodophaeiza](#)

**Note:** Ryan, Lumbsch et al. (2004) indicated that CA specimen reports are misidentifications.

*Lecania albariella* (Nyl.) Müll. Arg. 📖 🌿

(TJ)

=[L. turicensis](#) (synonymy *fide* Esslinger 2011)

*Lecania brattiae* B. D. Ryan & van den Boom 📖 🌿

(van den Boom & Ryan 2004)

=[L. hassei](#)

*Lecania californica* (Zahlbr.) Fink 📖 🌿

(Fink 1935; TJ)

=[L. turicensis](#) (synonymy *fide* van den Boom & Ryan 2004)

*Lecania cyathiformis* Szatala 📖 🌿

(Tavares 1997a; Tucker 1997; Magney 1999 [repeated report by S. Tucker])

=[Solenopsis cyathiformis](#) (synonymy in van den Boom & Ryan 2004)

*Lecania dimera* (Nyl.) Th. Fr. 📖 🌿

(Herre 1910; Hasse 1913b; Merrill 1923; Jordan 1968; Lindsay 1973; TJ)

=[L. dubitans](#), but not in CA, *fide* I. Brodo (personal communication)

**Note:** *L. dimera* has been misapplied to *L. fuscella*.

*Lecania dubitans* (Nyl.) A. L. Sm. 📖 🌿

(Wright 1997; Baltzo 2002; discussed in Tucker 2002; Benson 2005)

**Synonyms:** [L. dimera](#), [L. syringeae var. dimera](#)

**Note:** This species is not in CA, but in British Columbia and Utah, *fide* Brodo et al. (2001, pp. 370–371, with color photograph); not mentioned for CA by van den Boom & Ryan (2004); however it has been reported several times in CA and these collections should be checked.

*Lecania erysibe* (Ach.) Mudd 📖 🌿

(Herre 1912a; Hasse 1913b; TJ; misidentifications for CA and other N. Amer. material, *fide* B. Ryan)

*Lecania shastensis* Herre 📖 🌿

(Herre 1912a; Fink 1935)

**Note:** The Herre collection probably does not belong in *Lecania*, because spores are described as four-celled.



*Lecania spodophaeiza* (Nyl.) A. L. Sm. 📖 🌿

(Bratt 1993; synonymy *fide* Esslinger & Tucker 2009; Ryan, Lumbsch et al. [2004] indicated that CA specimens almost certainly are misidentified)

\**Lecania subdispersa* (Nyl. ex Hasse) Hasse non B. D. Ryan 📖 🌿

(Hasse 1913b; Fink 1935)

=[Toninia subdispersa](#) (Knudsen & Lendemer 2007a)

**Note:** According to Knudsen & Lendemer (2007a), *L. subdispersa* B. D. Ryan, nom. illeg. (Tucker et al. 2004; van den Boom & Ryan 2004; *H. Hasse* 480, Santa Monica Range, Los Angeles Co., 1897, H-Nyl. 5318) is conspecific with *Lecania franciscana*.

*Lecania syringea* (Ach.) Th. Fr. 📖 🌿

(Hasse 1913a; Fink 1935; TJ; Bratt 1993)

=[L. fuscella](#) for S CA reports

*Lecania syringea* var. *dimera* (Nyl.) H. Olivier 📖 🌿

(Fink 1935)

=[L. dubitans](#)

*Lecania syringea* [var.] *metabolica* Nyl. 📖 🌿

(Hasse 1913b)

=misidentifications for CA (B. Ryan, unpublished data)

*Lecania turicensis* var. *californica* Zahlbr. 📖 🌿

(Zahlbruckner 1902; Hasse 1903e, 1913b; Knudsen & Kocourková 2010a, citing a Hasse collection)

=[L. turicensis](#)

## LECANOGRAPHA Egea & Torrente

**Lecanographa aggregata** Egea & Torrente 📖 🌿

(Egea et al. 2004 [*Nash* 33045, as “aff.”]; Knudsen & Kocourková 2012a, citing same Nash collection; *T. Nash* 33045, Santa Rosa Isl., 0.5 km N of pass adjacent to Black Mtn, Santa Barbara Co., ASU)

**Lecanographa brattiae** (Egea & Ertz) Ertz & Tehler 📖 🌿

(Ertz & Tehler 2011; Knudsen & Kocourková 2012a; *K. Knudsen* 6511, San Simeon S. P., San Luis Obispo Co., UCR)

**Synonyms:** [Opegrapha brattiae](#)

**Misapplied names:** [O. calcarea](#), [O. chevallieri](#) for CA specimens

**Lecanographa dimelaenoides** (Egea & Torrente) Egea & Torrente 📖 🌿

(Egea et al. 2004; Knudsen 2009; Knudsen & Kocourková 2010f, 2012a; *T. Nash* 32388, Santa Cruz Isl., Santa Barbara Co., ASU; *T. Nash* 38754, San Nicolas Isl., Ventura Co., ASU; *W. Weber*, Univ. Colo. Lich. Exs. 662, Trailer Barranca, W end of Santa Cruz Isl., Santa Barbara Co., ASU)

**Synonyms:** [Lecanactis dimelaenoides](#)

**Misapplied names:** *Arthrothelium* sp. (Weber 1989a)

**Lecanographa hypothallina** (Zahlbr.) Egea & Torrente 📖 🌿

(Bowler et al. 1996; Tucker 1999; Bourell 2000; Brodo et al. 2001 [pp. 371–372, with color photograph]; Robertson & Robertson 2001; Robertson 2002b; Egea et al. 2004; Knudsen 2009; Knudsen & Kocourková 2010f, 2012a; *R. Riefner* 86–07, Morro Bay S. P., San Luis Obispo Co., UCR)

**Synonyms:** [Opegrapha hassei](#), [O. hypothallina](#), [Platygrapha hypothallina](#), [Schismatomma hypothallinum](#)

**Lecanographa insolita** Lendemer & K. Knudsen 📖 🌿

(Lendemer & Knudsen 2010; Lendemer 2012; Knudsen & Kocourková 2012a; Villella 2012; *C. Bratt* 3384, Santa Cruz Isl., Santa Barbara Co., SBBG; *C. Bratt* 7593B, Hollister Ranch, Santa Barbara Co., SBBG; CA endemic)

**Lecanographa lyncea** (Sm.) Egea & Torrente 📖 🌿

(Egea et al. 2004; Knudsen & Kocourková 2012a; *T. Nash* 32955, Santa Rosa Isl., Santa Barbara Co., ASU, det. Egea & Torrente)

**Lecanographa lynceoides** (Müll. Arg.) Egea & Torrente 📖 🌿

(Egea et al. 2004; Knudsen & Kocourková 2012a; *T. Nash* 32738, Santa Rosa Isl., Santa Barbara Co., ASU, det. Egea & Torrente)

**Lecanographa subdryophila** (Follmann & Vězda) Egea & Torrente 📖 🌿

(Egea et al. 2004; *B. Trask s.n.*, San Nicolas Isl., Ventura Co., ASU)

**LECANORA** Ach.

**Lecanora albella** (Pers.) Ach. 📖 🌿

(Hasse 1898a; Herre 1910; Hasse 1913b; Moxley 1921; Wheeler 1938; McGee 1998 [as var. *albella*]; Baltzo 2002 [as var. *albella*]; Ryan, Lumbsch et al. 2004; Knudsen & Kocourková 2012a; *B. Ryan* 32033, Brown's Creek, Sierra N. F., Madera Co., ASU; *C. Wetmore* 73256, Santa Catalina Isl., Los Angeles Co., MIN)

**Misapplied names:** *L. pallida*

**Note:** This taxon is very similar to *L. caesiorubella*, which, however, has larger apothecia and a thicker pseudocortex.

**Lecanora albellula** Nyl. 📖 🌿

(Printzen 2001; Ryan, Lumbsch et al. 2004; Tucker et al. 2004; Knudsen & Kramer 2007; Tucker 2010; *S. Tucker* 14977, Del Norte Beach, Del Norte Co., SBBG; *B. Ryan* 12545a, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU; *K. Knudsen* 7079, Tahquitz Peak, San Jacinto Mts, Riverside Co., UCR)

**Synonyms:** [\*L. piniperda\*](#)

**Lecanora albocaesiella** B. D. Ryan & T. H. Nash 📖 🌿

(Ryan, Lumbsch et al. 2004; Knudsen & Kocourková 2012a; *T. Nash* 34122, Santa Catalina Isl., Los Angeles Co., ASU)

**Lecanora allophana** (Ach.) Nyl. 📖 🌿

(Hasse 1898a, 1913b; Brodo 1984; Brodo et al. 2001 [p. 375, with color photograph]; Baltzo 2002; Thomson 2003; Ryan, Lumbsch et al. 2004; Knudsen et al. 2009; *B. Ryan* 25182, edge of Marble Mtn Wilderness, Siskiyou Co., ASU; *T. Nash* 44027, Cuyamaca S. P., San Diego Co., ASU)

**Synonyms:** [\*L. subfusca\*](#), [\*L. subfusca\* var. \*allophana\*](#)

**Lecanora andrewii** B. de Lesd. 📖 🌿

(Knudsen & Kocourková 2012a, for Santa Rosa Isl. collection; *B. Ryan* 31286b, Lobo Cyn on rock, Santa Rosa Isl., Santa Barbara Co., ASU, det. Śliwa)

**Lecanora argentata** (Ach.) Malme 📖 🌿

(Brodo 1984; *R. Riefner* 90–22, Morro Bay S. P., San Luis Obispo Co., UCR; *H. Hasse s.n.*, Santa Monica Mts, Los Angeles Co., MIN)

**Synonyms:** [\*L. subfusca\* var. \*argentata\*](#)

**Lecanora argopholis** (Ach.) Ach. 📖 🌿

(Sigal 1989; Ryan & Nash 1991; Ryan, Lumbsch et al. 2004; Robertson & Beyer 2005; Knudsen & Werth 2008; Tucker 2010; *T. Nash* 8088, near Westgard Pass, White Mts, Inyo Co., ASU; *S. Tucker* 38529, Santa Barbara Botanic Garden, Santa Barbara Co., SBBG)

**Misapplied names:** *L. frustulosa* (Tuckerman 1882; Herre 1950a)

**Lecanora austrocalifornica** Lendemer & K. Knudsen 📖 🌿

(Knudsen et al. 2009, citing *K. Knudsen* 9042 from Cuyamaca S. P., San Diego Co., UCR; Lendemer & Knudsen 2009; Villella 2012)

**Lecanora bicincta** Ramond 📖 🌿

(Ryan, Lumbsch et al. 2004; Robertson & Beyer 2005; *B. Ryan* 24483, Herring Creek Rd, Stanislaus N. F., Tuolumne Co., ASU, SBBG; *B. Ryan* 12699, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU; *B. Ryan* 26580, San Gabriel Wilderness, Los Angeles Co., ASU, UCR)

**Synonyms:** [\*L. sordida\* var. \*bicincta\*](#)

**Note:** Many reports of *L. rupicola* are probably misdeterminations of this species.

**Lecanora bipruinosa** Fink 📄 🌿

(Ryan, Lumbsch et al. 2004; *T. Nash 8462*, 3 km SW of Parker Dam on Colorado River, San Bernardino Co., ASU)

**Lecanora boligera** (Norman ex Th. Fr.) Hedl. 🌿

(*S. Tucker 37698*, Plaskett Meadows, Glenn Co., SBBG, det. C. Printzen)

**Lecanora brattiae** B. D. Ryan & T. H. Nash 📄 🌿

(Ryan, Lumbsch et al. 2004; Tucker et al. 2006; Knudsen & Kocourková 2012a; *K. Knudsen 4181*, Pinnacles Nat. Monument, San Benito Co., UCR; *B. Ryan 31543d*, Santa Cruz Isl., Santa Barbara Co., ASU)

**Lecanora brodoana** Lumbsch & T. H. Nash 📄 🌿

(Lumbsch & Nash 1995)

**Note:** This species is more common in Arizona.

**Lecanora cadubriae** (A. Massal.) Hedl. 📄 🌿

(TJ; Ryan, Lumbsch et al. 2004; Knudsen & Kramer 2007; *B. Ryan 11310*, 1 km W of Lassen Volcanic N. P., Shasta Co., ASU; *B. Ryan 24046a*, edge of Emigrant Wilderness, Tuolumne Co., ASU; *K. Knudsen 1498*, San Jacinto Mts, Riverside Co., UCR)

**Synonyms:** [Lecidea cadubriae](#), [Lecidea ramulicola](#)

**Lecanora caesiorubella** Ach. 📄 🌿

(Hasse 1898a; TJ; Brodo et al. 2001 [pp. 376–377, with color photograph]; Ryan, Lumbsch et al. 2004; Tucker et al. 2004; Knudsen 2007b, 2009; Knudsen & Kocourková 2009c; Tucker 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [L. albella var. cancriformis](#), [L. caesiorubella subsp. merrillii](#), [L. cancriformis](#), [L. pallida var. cancriformis](#), [L. subpallida](#)

**Note:** Lumbsch et al. (1997) regard most subspecies of *L. caesiorubella* as chemical variants only.

**Lecanora californica** Brodo 📄 🌿

(Brodo 1984; Brodo et al. 2001 [p. 377]; Ryan, Lumbsch et al. 2004; Knudsen 2009; Stone & Vilella 2010; Glacy et al. 2011; Knudsen & Kocourková 2012a; *B. Ryan 33010*, northern end of Point Reyes, Marin Co., ASU; *C. Bratt 9019*, San Miguel Isl., Santa Barbara Co., SBBG)

**Lecanora campestris** (Schaer.) Hue 📄 🌿

(TJ; Brodo 1984; Ryan, Lumbsch et al. 2004; Knudsen & Kocourková 2010f; Knudsen & Kocourková 2012a; *S. Tucker 34497*, Hastings Natural History Reserve, Carmel Valley, Monterey Co., SBBG; *C. Bratt 5665*, Santa Cruz Isl., Santa Barbara Co., ASU, SBBG; *W. Weber S-1034*, W of Matilija Hot Springs, Matilija Cyn, Los Padres N. F., Ventura Co., ASU)

**Synonyms:** [L. subfusca var. campestris](#)

**Note:** Older CA collections were probably misidentified, *fide* Knudsen & Kocourková 2012a.

**Lecanora carneolutescens** Nyl. 📄 🌿

(Lumbsch et al. 2003; Ryan, Lumbsch et al. 2004; Knudsen 2009 with photograph; Knudsen & Kocourková 2012a; *K. Knudsen 6710*, San Miguel Isl., Santa Barbara Co., UCR)

**Lecanora carpinea** (L.) Vain. 📄 🌿

(Imshaug & Brodo 1966; TJ; Ryan, Lumbsch et al. 2004; Knudsen et al. 2009; Stone & Vilella 2010; Glacy et al. 2011; *S. Tucker 38772*, E side of Lake Almanor, Plumas Co., SBBG; *W. Weber*, Univ. Colo. Lich. Exs. 183, Silverado Cyn, southern slope of Santa Ana Mts, Orange Co., BRY, SBBG, SBBG)

**Lecanora cenisia** Ach. 📄 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1882, 1884; Orcutt 1885; Eckfeldt 1893; Hasse 1896; McClatchie 1897; Zahlbruckner 1900; Orcutt 1903, 1907; Hasse 1913b; Fink 1935; TJ; Brodo 1984; Ryan & Nash 1991; Bratt 1993; Brodo et al. 2001 [p. 377, with color photograph]; Robertson 2003b; Ryan, Lumbsch et al. 2004; Robertson & Beyer 2005; Knudsen & Kramer 2007; *B. Ryan 11356*, 1 km W of Lassen Volcanic N. P., Shasta Co., ASU; *B. Ryan 23531*, W end of Heather Lake, Desolation Wilderness, El Dorado Co., ASU; *K. Knudsen 510*, Dark Cyn, San

Jacinto Mts, Riverside Co., UCR)

**Synonyms:** [L. atrynea](#), [L. atrynea var. cenisia](#)

**Lecanora chlarotera** Nyl. 📖 🌿

(Lindsay 1973; TJ; Brodo 1984; Ryan, Lumbsch et al. 2004; Knudsen et al. 2009; *B. Ryan 26713*, Soda Creek Rd, SE of Dunsmuir, Shasta Co., ASU; *T. Nash 44064*, Cuyamaca Peak, Cuyamaca S. P., San Diego Co.)

**Synonyms:** [L. rugosa](#), [L. rugosella](#) (synonymy *fide* Ryan, Lumbsch et al. 2004)

**Lecanora cinereofusca** H. Magn. var. **cinereofusca** 📖 🌿

(Brodo 1984; Brodo et al. 2001 [pp. 377–378, with color photograph as *L. cinereofusca*])

**Note:** This species is primarily found in eastern and southeastern U. S.

**Lecanora circumborealis** Brodo & Vitik. 📖 🌿

(Brodo et al. 2001 [p. 379, with color photograph]; Ryan, Lumbsch et al. 2004; Tucker et al. 2006; Knudsen 2007b; Knudsen et al. 2009; Tucker 2010; *B. Ryan 25193b*, Marble Mtn Wilderness, Siskiyou Co., ASU; *B. Ryan 26843*, SW of Soledad, Monterey Co., ASU, SBBG; *B. Ryan 25868*, Agua Tibia Wilderness, San Diego Co., ASU)

**Lecanora collatolica** J. W. Thoms. & T. H. Nash 📖 🌿

(Thomson & Nash 1976; Ryan & Nash 1997; Ryan, Lumbsch et al. 2004; *T. Nash 8071*, 32 km ESE of Bakersfield, Kern Co., ASU, MIN; CA endemic)

**Note:** Intermediates are common between this and *L. mellea*.

**Lecanora comonduensis** T. H. Nash & Hertel 📖 🌿

(Ryan, Lumbsch et al. 2004; Knudsen & Kocourková 2012a; *T. Nash 32170*, Parsons Landing near old quarry, Santa Catalina Isl., Los Angeles Co., ASU; *T. Nash 25495*, near county airport, Mendocino Co., ASU)

**Lecanora confusa** Almb. 📖 🌿

(Tucker & Bratt 1996; Wright 1997; Printzen 2001; Ryan, Lumbsch et al. 2004; Williams & Sillett 2007; Knudsen 2009; Knudsen & Kocourková 2009b; Tucker 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a; *B. Ryan 27074*, Hastings Natural History Reserve, Carmel Valley, Monterey Co., ASU; *C. Bratt 10766*, Santa Cruz Isl., Santa Barbara Co., ASU, SBBG)

**Synonyms:** [Lecanora symmictera f. occidentalis](#) (synonymy *fide* Ryan, Lumbsch et al. 2004)

**Misapplied names:** [L. conizaeoides](#)

**Note:** Śliwa & Wetmore (2000) suggest that *L. confusa* is a non-soresiate form of *L. expallens*, but they do not list it under that species as a synonym.

**Lecanora coniferarum** Printzen 📖 🌿

(Printzen 2001; Martínez & Aragón 2004; Ryan, Lumbsch et al. 2004; Williams & Sillett 2007; *C. Wetmore 50727*, Sequoia N. P., Tulare Co., MIN)

**Lecanora crenulata** Hook. 📖 🌿

(Ryan, Lumbsch et al. 2004; Knudsen 2006a; Knudsen & Kocourková 2010a, citing a Hasse collection [*Exs. 240* as *L. hagenii*] from the Santa Monica range, Los Angeles Co., ASU, FH, SBBG; Tucker 2010; Benson et al. 2012; Knudsen & Kocourková 2012a; *T. Nash 18984*, W side of Pinnacles Nat. Monument, San Benito Co., ASU; *S. Tucker 33800*, San Nicolas Isl., Ventura Co., SBBG)

**Lecanora demosthenesii** Lumbsch & Messuti 📖 🌿

(Lumbsch et al. 2003; Ryan, Lumbsch et al. 2004; Knudsen 2009; Knudsen & Kocourková 2012a; *C. Bratt 5608*, Seventeen-Mile-Drive, Monterey, Monterey Co., ASU, SBBG, det. Lumbsch & Messuti; *C. Wetmore 73668*, Santa Rosa Isl., Santa Barbara Co., MIN)

**Lecanora dispersa** (Pers.) Sommerf. 📖 🌿

(Bratt 1993; Brodo et al. 2001 [p. 380, with color photograph]; Robertson 2002c; Ryan, Lumbsch et al. 2004; Tucker et al. 2004; Knudsen & Kramer 2007; Knudsen 2009; Knudsen & Kocourková 2009a; Tucker 2010; Benson et al. 2012; Knudsen & Kocourková 2012a; *S. Tucker 14978*, on rock, Del Norte Beach, Del Norte Co., SBBG; *S. Tucker 6175D*, Blue Rock Springs Park SE of Vallejo, Solano Co., SBBG, det. B. Ryan; *B. Ryan 14817*, 16 km NNE of Big Bear Lake Village, San Bernardino Co., ASU)

**Lecanora epibryon** (Ach.) Ach. 📖 🌿

(Brodo 1984)

**Note:** This species has been collected mostly in interior western U. S. and Alaska.

**Lecanora expallens** Ach. 📖 🌿

(Tucker & Bratt 1996; Thomson 1997; Bourell 2000; Ryan, Lumbsch et al. 2004; Williams & Sillett 2007; Stone & Vilella 2010; Tucker 2010; Benson et al. 2012; Knudsen & Kocourková 2012a; *T. Nash 11402*, 8 km E of Navarro, Mendocino Co., ASU; *S. Tucker 36342*, Jasper Ridge Biological Preserve, near Palo Alto, San Mateo Co., SBBG; *C. Bratt 11990c*, San Nicolas Isl., Ventura Co., SBBG)

**Lecanora farinaria** Borrer 🌿

(*T. Tønberg TT14688*, Del Norte Co., BG; *T. Tønberg TT28919*, Mendocino Co., BG)

**Note:** This species is rare in N. Amer.; it has been collected in Washington and eastern Canada.

**Lecanora flowersiana** H. Magn. 📖 🌿

(Ryan, Lumbsch et al. 2004; Śliwa 2007; *K. Knudsen 13734*, Joshua Tree N. P., Mojave Desert, San Bernardino Co., UCR)

**Note:** This species has been found only three times in CA.

**Lecanora fugiens** Nyl. 📖 🌿

(Ryan, Lumbsch et al. 2004 [as “aff.”] report material from Santa Rosa Isl.; *C. Bratt 8879b* (“aff.”), Hollister Ranch, Santa Ynez Mts, Santa Barbara Co., SBBG)

**Lecanora fuscescens** (Sommerf.) Nyl. 📖 🌿

(Sonoran distribution uncertain, *fide* Ryan, Lumbsch et al. 2004; *B. Ryan 25445*, edge of Marble Mtn Wilderness, Siskiyou Co., ASU, SBBG, WIS; *A. Herre s.n.*, Loma Prieta, Santa Cruz Mts, Santa Clara Co., MIN)

**Synonyms:** [\*Lecidea fuscescens\*](#)

**Lecanora gangaleoides** Nyl. 📖 🌿

(Weber et al. 1987; Brodo 1984; Bowler et al. 1996; Doell 2002; Robertson 2004; Lumbsch & Nash 1995; Ryan, Lumbsch et al. 2004; Benson 2005; Robertson 2005b, 2005c; Knudsen 2007b; Robertson & Robertson 2008; Knudsen & Kocourková 2009a, 2009c, 2010f; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a; *B. Ryan 24502*, Herring Creek Rd, Stanislaus N. F., Tuolumne Co., ASU; *C. Bratt 3376*, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Lecanora garovaglii** (Körb.) Zahlbr. 📖 🌿

(Ryan & Nash 1993 [as s. l.], 1997; Doell et al. 1999; Brodo et al. 2001 [p. 380, with color photograph]; Knight et al. 2002; Robertson 2003b; Ryan, Lumbsch et al. 2004 [as subsp. *garovaglii*]; Knudsen et al. 2009; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan 14868*, Death Valley Nat. Monument, Inyo Co., ASU; *B. Ryan 26292b*, Eagles Roost, San Gabriel Mts, Los Angeles Co., ASU)

**Lecanora garovaglii** subsp. **cascadensis** (H. Magn.) B. D. Ryan & T. H. Nash 📖 🌿

(Ryan, Lumbsch et al. 2004)

**Synonyms:** [\*L. cascadensis\*](#) H. Magn., [\*L. nevadensis\*](#) H. Magn.

**Lecanora hagenii** (Ach.) Ach. 📖 🌿

(Tuckerman 1882; Hasse 1895, 1896; McClatchie 1897; Hasse 1898a, 1908b; Orcutt 1909; Herre 1910; Hasse 1913b; Jordan 1968; Lindsay 1973; TJ; Baltzo 1989; Ryan & Nash 1991; von Reis 1991; Tucker & Bratt 1996; Baltzo 2002; Ryan, Lumbsch et al. 2004; Knudsen 2007b, 2009; Knudsen & Kocourková 2009a, 2009c, 2010a; Benson et al. 2012; Knudsen & Kocourková 2012a; *W. Weber S-3519*, base of Mt. Hamilton along San Felipe Creek, Santa Clara Co., ASU; *K. Knudsen 6136*, Weir Cyn, Santa Ana Mts, Orange Co., UCR)

**Note:** Knudsen & Kocourková (2010a) say that Hasse misapplied this name to *L. crenulata*.

**Lecanora horiza** (Ach.) Linds. 📖 🌿

(Brodo 1984; Brodo & Vitikainen 1984; Bratt 1993; Tucker & Bratt 1995; Bowler et al. 1996; Brodo et al. 2001 [p. 375]; Ryan, Lumbsch et al. 2004; Knudsen 2009; Knudsen & Kocourková 2010f; Tucker

2010; Knudsen & Kocourková 2012a; *W. Weber S-1299*, road from Madrone to Madrone Soda Springs, Santa Clara Co., ASU; *T. Nash 42084*, San Miguel Isl., Santa Barbara Co., ASU)

***Lecanora hybocarpa*** (Tuck.) Brodo 📖 🌿

(Brodo 1984; Brodo et al. 2001 [pp. 378–382, with color photograph]; Ryan, Lumbsch et al. 2004; Benson 2005; Knudsen & Kramer 2007; Knudsen et al. 2009; Stone & Villella 2010; Tucker 2010; *S. Tucker 28947a*, 4 mi. N of Fort Bragg, Mendocino Co., SBBG; *B. Ryan 32165*, Rock Creek Cpgd, Sierra N. F., Madera Co., ASU; *K. Knudsen 7215*, Devil's Slide, San Jacinto Mts, San Diego Co., UCR)

***Lecanora hypoptoides*** (Nyl.) Nyl. 📖 🌿

(Ryan, Lumbsch et al. 2004, as “aff.”; Knudsen & Kramer 2007; *B. Ryan 27107*, Hastings Natural History Reserve, Carmel Valley, Monterey Co., ASU, det. Printzen; *H. Hasse s.n.*, Santa Monica Mts, Los Angeles Co., ASU, det. Printzen)

***Lecanora impudens*** Degel. 📖 🌿

(Tucker et al. 2004; Williams & Sillett 2007 [although latter specimen is scant, lacks apothecia]; Knudsen & Kocourková 2009b; *S. Tucker 38291*, campus of Univ. of Calif., Santa Cruz, Santa Cruz Co., SBBG; *K. Knudsen 11573*, Point Mugu S. P., Santa Monica Mts, Ventura Co., UCR)

***Lecanora intricata*** (Schrad.) Ach. 📖 🌿

(Herre 1950a; Ryan, Lumbsch et al. 2004; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan 32179b*, Kerckhoff Lake, Sierra N. F., Madera Co., ASU)

***Lecanora jamesii*** J. R. Laund. 📖 🌿

(Tønsberg [1998], but without mention of CA material; *T. Tønsberg TT28939*, Mendocino Co., BG)

***Lecanora kofae*** B. D. Ryan & T. H. Nash 📖 🌿

(Ryan, Lumbsch et al. 2004)

**Note:** This species has also been collected in Arizona.

***Lecanora latens*** Printzen 📖 🌿

(Printzen 2001; Ryan, Lumbsch et al. 2004; Tucker et al. 2006 [Pinnacles]; *P. van den Boom 29447*, S of Morro Bay, San Luis Obispo Co., ASU; *B. Ryan 26027*, Arroyo Seco Cyn, Agua Tibia Wilderness, Riverside Co., ASU; CA endemic)

***Lecanora laxa*** (Śliwa & Wetmore) Printzen 📖 🌿

(Printzen 2001; Martínez & Aragón 2004; Ryan, Lumbsch et al. 2004; Knudsen & La Doux 2006; Knudsen 2007b; Knudsen & Kramer 2007; Tucker 2010; Knudsen & Kocourková 2012a; *B. Ryan 26159*, Chilao Cpgd, Angeles N. F., San Gabriel Mts, Los Angeles Co., ASU)

**Synonyms:** [\*L. varia\* subsp. \*laxa\*](#)

***Lecanora melaena*** (Hedl.) Fink 📖 🌿

(Herre 1944b; TJ; Ryan, Lumbsch et al. 2004)

**Note:** This species also occurs in other western states.

***Lecanora mellea*** W. A. Weber 📖 🌿

(Weber 1975a; TJ; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; Ryan & Nash 1997; Brodo et al. 2001 [p. 374]; Ryan, Lumbsch et al. 2004; Robertson 2005a; Carlberg et al. 2007; Knudsen et al. 2009; *W. Weber*, Univ. Colo. Lich. Exs. 462, SE of Sacramento between Sloughhouse and Bridge House, Sacramento Co., SBBG [=type]; *T. Nash 22854*, 30 km E of Redding, Shasta Co., ASU; *B. Ryan 15451*, Woodward-Tehachapi Rd, 13 km NW of Tehachapi, Kern Co., ASU; *K. Knudsen 9074.1*, Green Valley, Cuyamaca S. P., Cuyamaca Mts, San Diego Co., UCR)

***Lecanora meridionalis*** H. Magn. 📖 🌿

(Wetmore 1985; Bratt 1999; Ryan, Lumbsch et al. 2004; Tucker et al. 2004; Tucker 2010; *C. Bratt 12349*, Pinnacles Nat. Monument, San Benito Co., SBBG; *B. Ryan 26411*, along Hwy 39 below Crystal Lake, San Gabriel Mts, Los Angeles Co., ASU)

***Lecanora mughicola*** Nyl. 📖 🌿

(Knudsen & Kramer 2007; *K. Knudsen*, 1797.1, San Jacinto Mts, San Jacinto Mts Wilderness, Riverside Co., UCR)

**Lecanora munzii** K. Knudsen & Lendemer 📄 🌿

(Knudsen & Kocourková 2009b, 2009c; Knudsen & Lendemer 2009c; Lendemer 2010a, citing *N. Amer. Exsiccati* 352; Knudsen & Kocourková 2011; Villella 2012; *K. Knudsen* 6150, Weir Cyn, Santa Ana Mts, Orange Co., UCR)

**Lecanora muralis** (Schreb.) Rabenh. 📄 🌿

(Tuckerman 1866; Bolander 1870; Orcutt 1885; Hasse 1895, 1896, 1903a; Orcutt 1903 [including *L. muralis* var. *catalinae* Stizenb., a nomen nudum; examination of material in NYBG annotated as this taxon by Hasse showed that it fits well within typical *L. muralis* var. *muralis* as delimited by Ryan, Lumbsch et al. 2004]; Hasse 1905; McClatchie 1897; Orcutt 1907; Herre 1942a, 1945, 1950a; Volk 1963; Baltzo 1970; Pinelli & Jordan 1978; TJ; Baltzo 1989; von Reis 1991; Bowler et al. 1996; Tucker & Bratt 1996; Hill 1997; Robertson et al. 1998; Doell et al. 1999; Bourell 2000; Brodo et al. 2001 [p. 383, with color photograph]; Knight et al. 2002; Robertson 2002c; Riefner et al. 2003; Robertson 2003a, 2003b; Ryan, Lumbsch et al. 2004 [as s. l.]; Tucker et al. 2004; Benson 2005; Robertson 2005a; Robertson & Beyer 2005; Carlberg et al. 2007; Knudsen 2007b; Knudsen et al. 2009; Knudsen & Kocourková 2009c, 2010f; Tucker 2010; Knudsen & Kocourková 2012a; Lendemer 2012; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [\*L. muralis\* var. \*diffracta\*](#), [\*L. muralis\* var. \*catalinae\*](#), [\*L. saxicola\*](#), [\*Protoparmeliopsis muralis\*](#)

**Lecanora muralis** subsp. **dubyi** (Müll. Arg.) Poelt 📄 🌿

(Ryan, Lumbsch et al. 2004 [as s. l.]; *B. Ryan* 32095, 32096, near entrance to San Joaquin Experimental Forest, Madera Co., ASU)

**Note:** This subspecies occasionally grows side by side with subsp. *muralis* and remains distinct; it occurs sporadically in CA.

**Lecanora muralis** var. **versicolor** (Pers.) Tuck. 🌿

**Synonyms:** [\*L. saxicola\* var. \*versicolor\*](#)

**Lecanora neodegelii** B. D. Ryan & T. H. Nash 📄 🌿

(Villella 2010)

**Note:** This species also occurs in the interior western U. S.

**Lecanora novomexicana** H. Magn. 📄 🌿

(Hebert & Meyer 1984; Ryan & Nash 1991; Brodo et al. 2001 [p. 384, with color photograph]; Robertson 2003b; Ryan, Lumbsch et al. 2004; *B. Ryan* 12753, 15 km S of Tom's Place, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU)

**Note:** The report by Hebert & Meyer is almost certainly based on misidentifications, *fide* T. Nash.

**Lecanora orae-frigidae** R. Sant. 📄 🌿

(Williams & Sillett 2007 [as “cf.”]; Glacy et al. 2011)

**Lecanora oreinoides** (Körb.) Hertel & Rambold 🌿

(*S. Tucker* 34378, Lotusland, Montecito, Santa Barbara Co., SBBG)

**Note:** This species occurs throughout the U. S.

**Lecanora orizabana** Vain. 📄 🌿

(Lumbsch et al. 2003; Ryan, Lumbsch et al. 2004; *T. Nash* 11317b, Summit Trail near Freezeout Meadow, Sequoia N. F., Tulare Co., WIS; *B. Ryan* 26206b, Mt. Mooney Rd, San Gabriel Mts, Los Angeles Co., ASU)

**Lecanora pacifica** Tuck. 📄 🌿

(Tuckerman 1862; Orcutt 1885; Hasse 1895; McClatchie 1897; Hasse 1898a; Orcutt 1903, 1907; Herre 1910; Hasse 1913b; Merrill 1923; Keissler 1926; Fink 1935; Herre 1942a, 1950a; TJ; Brodo 1984; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; von Reis 1991; Tucker & Bratt 1995, 1996; Wright 1997; McGee 1998; Brodo et al. 2001; Baltzo 2002; Ryan, Lumbsch et al. 2004; Tucker et al. 2004; Knudsen 2007b; Williams & Sillett 2007 [as “cf.”]; Knudsen 2009; Knudsen & Kocourková 2010f; Tucker 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a; *B. Ryan* 24862b, Rd to Etna Summit, city of Etna, Siskiyou Co., ASU; *W. Weber* S-1884, Mission Cyn, Santa Barbara, Santa Barbara Co., ASU; *K. Knudsen* 4742, UC Dawson Reserve, Hedionda Creek, San Diego Co.,

UCR)

**Lecanora peltastictoides** Hasse 📖 🌿

(Hasse 1914; TJ; Knudsen 2003c [color photograph on back cover of CALS Bulletin 10(2)]; Knudsen & Lendemer 2006b; *H. Hasse 861*, Palm Springs, Riverside Co., ASU)

**Note:** Knudsen (2003c) initially thought this might belong in *Aspicilia*, but revised his opinion later (Knudsen & Lendemer 2006b).

**Lecanora peninsularis** K. Knudsen, Lendemer, & Elix 📖 🌿

(Knudsen et al. 2011; Villella 2012; *K. Knudsen 3455*, Idyllwild near Inspiration Point, San Jacinto Mts, Riverside Co., UCR)

**Lecanora percrenata** H. Magn. 📖 🌿

(Knudsen et al. 2012; Knudsen & Kocourková 2012c; *K. Knudsen 12855.1*, Berdoo Cyn, Joshua Tree N. P., Little San Bernardino Mts, Riverside Co., UCR)

**Note:** Description, but no CA report, is in Śliwa 2007. It is very rare in CA.

**Lecanora phaerophthalma** Poelt var. **phaerophthalma** 📖 🌿

(Knight et al. 2002; Ryan, Lumbsch et al. 2004; *B. Ryan 24530*, edge of Emigrant Wilderness, Huckleberry Trail through Kennedy Meadows, Tuolumne Co., ASU)

**Lecanora phaeophora** (Stizenb.) H. Magn. 📖 🌿

(TJ; Ryan, Lumbsch et al. 2004; Kocourková et al. 2010; CA endemic)

**Synonyms:** [\*Biatora phaeophora\*](#), [\*Lecidea phaeophora\*](#)

**Lecanora phryganitis** Tuck. 📖 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1872, 1882; Hulting 1896; Herre 1906, 1907, 1910; Fink 1935 [p. 309]; Lamb 1939; Herre 1945; Weber 1976; TJ; Ryan 1989b; Riefner, Bowler, & Ryan 1995; West & Doell 1995; Magney 1999; Brodo et al. 2001 [pp. 385–386, with color photograph]; Stone & Villella 2010; Glacy et al. 2011; *W. Weber*, Univ. Colo. Lich. Exs. 475, Point Reyes, Marin Co., ASU, BRY, SBBG; CA endemic)

**Synonyms:** [\*Polycauliona phryganitis\*](#)

**Lecanora pinguis** Tuck. 📖 🌿

(Tuckerman 1864, 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1882; Hasse 1898a; Herre 1907; Hasse 1910a; Herre 1910; Hasse 1913b; Fink 1935 [p. 308]; Herre 1945; Volk 1963; TJ; Ryan 1989b; von Reis 1991; McGee 1995; Brodo et al. 2001 [p. 386, with color photograph]; Baltzo 2002; Robertson 2005b; Stone & Villella 2010; Glacy et al. 2011; *S. Tucker 6229*, S of Univ. of Calif. Marine Station, Bodega Bay, Sonoma Co., SBBG; CA endemic)

**Note:** It does not occur in Sonoran region of CA, so reports such as those by Hasse and a Mexican collection by Rundel (ASU) are likely incorrect; they may be *L. xanthosora*, *vide* Ryan, Lumbsch et al. (2004).

**Lecanora plumosa** Müll. Arg. 📖 🌿

(Ryan, Lumbsch et al. 2004; Knudsen & Kocourková 2012a; *T. Nash 11427*, seaside cliffs 19 km N of Fort Bragg, Mendocino Co., ASU; *B. Ryan 31191*, Santa Rosa Isl., Santa Barbara Co., ASU, WIS)

**Lecanora polytropa** (Hoffm.) Rabenh. 📖 🌿

(McClatchie 1897; Hasse 1898a, 1906, 1913b; Fink 1935; Herre 1942a, 1942c, 1950a; Sigal 1975; TJ; Sigal 1989; Brodo et al. 2001 [p. 387, with color photograph]; Robertson 2003b; Ryan, Lumbsch et al. 2004; Robertson & Beyer 2005; Knudsen 2007b; Knudsen & Kramer 2007; Tucker 2010; Benson et al. 2012; *B. Ryan 11123*, Lassen Volcanic N. P., Shasta Co., ASU; *B. Ryan 11025*, 15 km S of Tom's Place, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU; *K. Knudsen 480*, Black Mtn, San Jacinto Mts, Riverside Co., UCR)

**Synonyms:** [\*L. varia\* var. \*illusoria\*](#), [\*L. varia\* var. \*polytropa\*](#)

**Lecanora pringlei** (Tuck.) I. M. Lamb 📖 🌿



(Lamb 1939; TJ; Ryan, Lumbsch et al. 2004 [as subsp. *pringlei*]; Glacy et al. 2011; *H. Hasse s.n.*, Topanga Cyn, Santa Monica Mts, Los Angeles Co., MIN; *H. Thiers 34497*, Mt. Elwell summit, Lakes Basin Recreation Area, Plumas Co., ASU)



**Synonyms:** [Lecidea pringlei](#)

**Lecanora pseudargentata** Lumbsch  

(Ryan, Lumbsch et al. 2004; *H. Hasse Exs. 193*, Santa Monica Mts, Los Angeles Co., ASU, det. H. Lumbsch)

**Lecanora pseudistera** Nyl.  

(Ryan, Lumbsch et al. 2004; Tucker et al. 2006; Knudsen 2007b; Knudsen & Kramer 2007; Knudsen & Kocourková 2009c; *B. Ryan 32109*, Brown's Creek, Sierra N. F., Madera Co., ASU; *B. Ryan 26585*, San Gabriel Wilderness, S-facing slope of Waterman Mtn, Los Angeles Co., ASU)

**Lecanora pseudomellea** B. D. Ryan  

(Ryan & Nash 1993; Ryan, Lumbsch et al. 2004; Benson 2005; Robertson & Beyer 2005; *B. Ryan 13588a*, 25 km E of Monitor Pass, Sierra Nevada, Alpine Co., ASU; *K. Knudsen 1056*, Herkey Creek in May Valley, San Jacinto Mts, Riverside Co., UCR)

**Note:** According to Ryan & Nash (1993), the name *L. cascadiensis* has sometimes been misapplied to *L. pseudomellea* as well as to *L. sierrae*.

**Lecanora pulicaris** (Pers.) Ach.  

(Brodo 1984; Sigal 1989; Ellyson & Sillett 2003; Ryan, Lumbsch et al. 2004; *B. Ryan 25444*, edge of Marble Mtn Wilderness, Siskiyou Co., ASU; *B. Ryan 26201a*, along Mt. Mooney Rd, San Gabriel Mts, Los Angeles Co., ASU)

**Synonyms:** [L. coilocarpa](#), [L. subfusca var. chlarona](#), [L. subfusca var. coilocarpa](#) (synonymy *vide* Esslinger & Egan 1995)

**Lecanora reagens** Norman 

(*C. Bratt 6083*, W of summit at Sonora Pass, Tuolumne Co., SBBG, det. E. Timdal)



**Note:** This species has also been collected in Colorado and Montana.

**Lecanora rupicola** (L.) Zahlbr.  



(Herre 1945; Volk 1963; Baltzo 1970; Sigal 1975; TJ; Baltzo 1989; Sigal 1989; Ryan & Nash 1991; von Reis 1991; Riefner, Bowler, & Ryan 1995; Bowler et al. 1996; Bourell 2000 [as “cf.”]; Brodo et al. 2001 [pp. 387–388, with color photograph]; Robertson 2003b; Ryan, Lumbsch et al. 2004; Robertson 2005b, 2005c; Robertson & Beyer 2005; Knudsen & Kramer 2007; Knudsen et al. 2009; Stone & Villeda 2010; Glacy et al. 2011; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan 24018*, Huckleberry Trail through Kennedy Meadows, Stanislaus N. F., Tuolumne Co., ASU; *K. Knudsen 8340*, Big Bear Dam, end of Big Bear Valley, San Bernardino Mts, San Bernardino Co., UCR)

**Synonyms:** [L. glaucoma](#), [L. sordida](#) (synonymy *vide* Zahlbruckner 1928, p. 528)

**Note:** Many collections need verification.

**Lecanora saligna** (Schrad.) Zahlbr.  

(Wetmore 1985; Ryan & Nash 1991; Śliwa & Wetmore 2000; Printzen 2001; Ryan, Lumbsch et al. 2004; Knudsen & Kramer 2007; *B. Ryan 12545b*, 15 km S of Tom's Place, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU; *T. Nash 11236*, Onyx Summit, San Bernardino Mts, San Bernardino Co., ASU)

**Lecanora semitensis** (Tuck.) Zahlbr.  

(Lendemer et al. 2010; *B. Ryan 11339*, 1 km W of Lassen Volcanic N. P., Shasta Co., ASU; *B. Ryan 24350*, 5 km SW of Fraser Flat Cpgd, Stanislaus N. F., Tuolumne Co., ASU, SBBG, UCR)

**Synonyms:** [L. muralis var. semitensis](#), [L. saxicola var. semitensis](#)

**Lecanora sierrae** B. D. Ryan & T. H. Nash  

(Ryan & Nash 1993; Tucker & Bratt 1995; Hill 1997 [as “?”]; Brodo et al. 2001; Robertson 2003b [as “cf.”]; Ryan, Lumbsch et al. 2004; Benson 2005; Robertson & Beyer 2005; Knudsen & Kramer 2007; Knudsen et al. 2009; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan 11027*, 15 km S of Tom's Place, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU; *B. Ryan 26257*, start of Pacific Crest Trail, San Gabriel Wilderness, Los Angeles Co., ASU)

**Note:** *L. cascadiensis* auct. non H. Magn. has been misapplied to *L. sierrae* (Ryan & Nash 1993).

**Lecanora simeonensis** K. Knudsen & Lendemer  

(Lendemer & Knudsen 2009; Glacy et al. 2011; Knudsen & Kocourková 2011; Villella 2012; *K. Knudsen 6467*, San Carpoforo Creek, San Simeon S. P., San Luis Obispo Co., UCR; *K. Knudsen 13516*, Newport Beach Ecol. Reserve, Newport Beach, Orange Co., UCR)

***Lecanora stenotropa*** Nyl. 📖 🌿

(Ryan, Lumbsch et al. 2004; Knudsen & Kramer 2007; *K. Knudsen 1467*, Lily Rock, San Jacinto Mts, Riverside Co., UCR)

***Lecanora strobilina*** (Spreng.) Kieffer 📖 🌿

(Giralt & Gómez-Bolea 1991; Śliwa & Wetmore 2000; Printzen 2001; Tucker 2002; Ryan, Lumbsch et al. 2004; Tucker et al. 2004; Benson 2005; Knudsen 2007b; Knudsen & Kocourková 2009a; Tucker 2010; *S. Tucker 31844a*, Indian Valley Cpgd, North Fork of Yuba River, 10 mi. W of Downieville, Tahoe N. F., Sierra Co., SBBG; *S. Tucker 34394*, Lotusland Estate, Montecito, Santa Barbara Co., ASU, SBBG, det. C. Printzen; *W. Weber L-36579*, Del Mar, NE of Torrey Pines S. P., San Diego Co., ASU)

**Misapplied names:** [\*L. conizaeoides\*](#) *fide* Śliwa & Wetmore (2000), *B. Ryan* collections from CA Channel Is. *fide* Śliwa & Wetmore (2000)

***Lecanora subcarnea*** (Lilj.) Ach. 📖 🌿

(Hasse 1903a; TJ; Dickhäuser et al. 1995; Riefner, Bowler, & Ryan 1995, [based on *B. Ryan* and *R. Riefner* collections from CA Channel Is., and Mt. Tamalpais, Marin Co.]; Bowler et al. 1996; Ryan, Lumbsch et al. 2004; Knudsen & Kocourková 2010a [citing a Hasse collection, *Lich. Exs. 217* as *L. sordida* from Santa Monica Range, FH]; Glacy et al. 2011; Knudsen & Kocourková 2012a; *C. Bratt 6259*, Santa Cruz Isl., Santa Barbara Co., SBBG)

***Lecanora subimmergens*** Vain. 📖 🌿

(Ryan, Lumbsch et al. 2004; Knudsen 2007b; Knudsen & Kocourková 2009c; Knudsen & Kocourková 2012a; *K. Knudsen 5048*, Golden Gate Nat. Recreation Area, Sweeney Ridge, San Mateo Co., UCR; *K. Knudsen 6045*, Weir Cyn, Santa Ana Mts, Orange Co., UCR)

***Lecanora subrugosa*** Nyl. 📖 🌿

(Brodo 1984; Ryan, Lumbsch et al. 2004; Tucker et al. 2004; Tucker 2010; Knudsen & Kocourková 2012a; *S. Tucker 38256*, Univ. of Calif., Santa Cruz campus, Santa Cruz, Santa Cruz Co., SBBG; *B. Ryan 26206a*, Mt. Mooney Rd, San Gabriel Mts, Los Angeles Co., ASU; *B. Ryan 31396*, Prisoner's Harbor, Santa Cruz Isl., Santa Barbara Co., ASU)

***Lecanora subsaligna*** M. Brand & van den Boom 📖 🌿

(Van den Boom & Brand 2008, based on collection from Morro Bay, San Luis Obispo Co.)

***Lecanora substrobilina*** Printzen 📖 🌿

(Printzen 2001; Ryan, Lumbsch et al. 2004; Williams & Sillett 2007; Knudsen & Kocourková 2012a; *B. Ryan 31415*, 0.5 km below pass adjacent to Black Mtn, Santa Rosa Isl., Santa Barbara Co., ASU, SBBG, det. C. Printzen)

***Lecanora symmicta*** (Ach.) Ach. 📖 🌿

(Hasse 1898a, 1903a [as “*simmictica*”, a lapsus]; Herre 1910; Hasse 1913b; Merrill 1923; Herre 1945; Volk 1963; Jordan 1968; Lindsay 1973; von Reis 1991; Tucker & Bratt 1996; Brodo et al. 2001 [pp. 388–389, with color photograph]; Baltzo 2002; Ryan, Lumbsch et al. 2004; Tucker et al. 2004; Tucker 2010; Benson et al. 2012; *S. Tucker 14997*, Gasquet Mtn Rd, Six Rivers N. F., Del Norte Co., SBBG)

**Synonyms:** [\*L. symmicta\* var. \*sepincola\*](#), [\*L. varia\* var. \*sepincola\*](#), [\*L. varia\* var. \*symmicta\*](#), [\*Lecidea symmicta\*](#)

***Lecanora utahensis*** H. Magn. 📖 🌿

(Ryan, Lumbsch et al. 2004; Knudsen 2012b; *C. Bratt 7211*, Hollister Ranch, western end of Santa Ynez Mts, Santa Barbara Co., SBBG; *K. Knudsen 3448.2*, South Peak [White Mtn], San Bernardino Mts, San Bernardino Co., UCR)

***Lecanora varia*** (Hoffm.) Ach. 📖 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1882; Hasse 1895; McClatchie 1897; Hasse 1898a, 1903a, 1903d; Orcutt 1903; Herre 1907; Orcutt 1907; Hasse 1908b; Herre 1910; Hasse 1913b; Moxley

1921; Herre 1945, 1950a; TJ; Hale & Cole 1988; von Reis 1991; Bratt 1993; Hill 1997 [as “group”]; Printzen 2001; Benson 2005; *H. Hasse 504*, Santa Catalina Isl., Los Angeles Co., det. C. Printzen, ASU)

**Note:** Ryan, Lumbsch et al. (2004) remarked that occurrence of this species in the Sonoran area is dubious; Printzen (2001, p. 407) said that *H. Hasse 504* from Santa Catalina Isl. is the only N. Amer. collection that he had seen, and that it might possibly be mislabeled and have originated elsewhere; most reports prior to Printzen's are misidentifications of other *Lecanora* species.

***Lecanora verrucariicola*** B. D. Ryan 📖 🌿

(Ryan, Lumbsch et al. 2004; Knudsen & Kocourková 2012a; *K. Knudsen 4708*, northern tip of Espera Bluffs, San Luis Obispo Co., UCR)

**Note:** This species is also in Baja California and Sinaloa, Mexico.

***Lecanora viriduloflava*** B. de Lesd. 📖 🌿

(Ryan, Lumbsch et al. 2004; *T. Nash 19041*, Hastings Natural History Reserve, Carmel Valley, Monterey Co., ASU; *B. Ryan 26656b*, 32 km NNE of Hollister, Merced Co., ASU)

***Lecanora xanthosora*** B. D. Ryan & Poelt 📖 🌿

(Ryan 1989b; Bowler et al. 1996; Ryan, Lumbsch et al. 2004; *C. Wetmore 73431*, Santa Catalina Isl., Los Angeles Co., ASU, MIN)

**Misapplied names:** *L. pinguis*

**Note:** Collections under this name from south of San Luis Obispo Co. are misidentified and are probably *L. xanthosora*.

***Lecanora xylophila*** Hue 🌿

(*T. Nash 38641*, San Nicolas Isl., Ventura Co., ASU; not in Ryan, Lumbsch et al. 2004)

**Note:** Other records of this species are from Washington, Alaska, and the East Coast of N. Amer.

***Lecanora zosteræ*** (Ach.) Nyl. 📖 🌿

(Ryan, Lumbsch et al. 2004; McCune & Rosentreter 2007 [pp. 38–39]; Knudsen 2009; Knudsen & Kocourková 2012a; *K. Knudsen 6894*, San Miguel Isl., Santa Barbara Co., UCR)

***Lecanora albella* var. *cancriformis*** (Hoffm.) Tuck. 📖 🌿

(Herre 1910)

=[\*L. caesiorubella\*](#)

***Lecanora alphoplaca*** (Wahlenb.) Ach. 📖 🌿

(TJ)

=[\*Lobothallia alphoplaca\*](#), but misidentifications of *L. praeradiosa* for CA

***Lecanora alpina*** Sommerf. 📖 🌿

(Herre 1910; Fink 1935; Herre 1942a, 1950b; TJ)

=[\*Bellemerea alpina\*](#)

***Lecanora angelica*** (Stizenb.) Hasse 📖 🌿

(Hasse 1898a)

=[\*Mobergia angelica\*](#)

***Lecanora aterrima*** (Anzi) Hasse 📖 🌿

(Hasse 1898a)

**Note:** This is a name of dubious application; it is not a synonym of *Microthelia aterrima* or *Rinodina aterrima*, both of which are synonyms of *Lichenothelia scopularia*.

***Lecanora athroocarpa*** (Duby) Nyl. 📖 🌿

(Tuckerman 1866, 1872; Willey 1873a; Tuckerman 1882; Hasse 1896; McClatchie 1897; Hasse 1903a; Orcutt 1903, 1907)

=[\*Lecania fuscella\*](#)

***Lecanora atra*** (Huds.) Ach. 📖 🌿

(TJ for references)

=[\*Tephromela atra\*](#) and *T. nashii* (for reports from south coast rocks)

***Lecanora atrocinerea*** (Dicks.) Link non Hepp 📖 🌿

- (Hasse 1898a [as *L. atrocinerea* Nyl.])  
=*Rinodina atrocinerea*, but misidentifications for CA  
**Note:** Nylander used this name in 1870 and 1896, and Hasse is likely to have accepted Nylander's usage of the name, rather than Hepp's.
- Lecanora atrynea* (Ach.) Röhl. 📖 🌿  
(Hasse 1903c)  
=[\*L. cenisia\*](#)
- Lecanora atrynea* var. *cenisia* (Ach.) Nyl. 📖 🌿  
(Herre 1910)  
=[\*L. cenisia\*](#)
- Lecanora aurantiaca* (Lightf.) Nyl. 📖 🌿  
(Hasse 1898a)  
=[\*Caloplaca flavorubescens\*](#)
- Lecanora badia* (Hoffm.) Ach. 📖 🌿  
(Hasse 1896; Orcutt 1903, 1907; Herre 1912b; TJ)  
=[\*Protoparmelia badia\*](#)
- Lecanora bockii* (Fr.) Rabenh. 📖 🌿  
(Hasse 1906, but probably misidentifications; no material seen from Sonoran region or elsewhere in CA, *fide* Kainz & Rambold 2004)  
=[\*Rimularia gibbosa\*](#)
- Lecanora bolanderi* Tuck. 📖 🌿  
(Tuckerman 1864, 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1882; Herre 1906, 1907, 1910; Hue 1909a; Zahlbruckner 1928; Fink 1935; Lamb 1939; Herre 1942c, 1945; Volk 1963; TJ; Ryan 1989a)  
=[\*Cladidium bolanderi\*](#)
- Lecanora brunonis* Tuck. 📖 🌿  
(TJ for references)  
=[\*Lecania brunonis\*](#)
- Lecanora caesiorubella* subsp. *merrillii* Imshaug & Brodo 📖 🌿  
(Imshaug & Brodo 1966; Lindsay 1973; Hale & Cole 1988; Baltzo 1989; von Reis 1991; Tucker & Bratt 1995; Bowler et al. 1996; Bratt 1997; Bourell 2000; Brodo et al. 2001; Baltzo 2002; Rotter 2010)  
=[\*L. caesiorubella\*](#)
- Lecanora calcarea* (L.) Sommerf. 📖 🌿  
(Hasse 1896; McClatchie 1897; Hasse 1903e; Orcutt 1903; Herre 1907; Orcutt 1907; Hasse 1908b; Herre 1910; Hasse 1913b; Fink 1935; Volk 1963; TJ)  
=[\*Circinaria calcarea\*](#), but misidentifications for CA, since unlike European material.  
**Note:** According to Owe-Larsson et al. (2008), Hasse's material is *Aspicilia contorta*.
- Lecanora calcarea* var. *contorta* (Hoffm.) Hepp 📖 🌿  
(McClatchie 1897; Hasse 1898a, 1903e; Herre 1910)  
=[\*Circinaria contorta\*](#), but name is misapplied to CA collections, because unlike European material.
- Lecanora callopisma* Ach. 📖 🌿  
(Hasse 1898a)  
=[\*Caloplaca aurantia\*](#), but apparent misidentifications for N. Amer.
- Lecanora cancriformis* (Hoffm.) Vain. 📖 🌿  
(Merrill 1923)  
=[\*L. caesiorubella\*](#)
- Lecanora cascadenis* H. Magn. 📖 🌿  
(Weber 1975b; TJ)  
=[\*L. garovaglii\* subsp. \*cascadenis\*](#)
- Lecanora cerina* (Ehrh. ex Hedw.) Ach. 📖 🌿

- (Hasse 1898a)  
 =[Caloplaca cerina](#) (synonymy *fide* Zahlbruckner 1931, p. 85)
- Lecanora cerinella* (Flörke) Zahlbr. 📖 🌿  
 (Stizenberger 1895)  
 =[Candelariella aurella](#)
- Lecanora cervina* Ach. 📖 🌿  
 (Tuckerman 1872, 1877, 1882; McClatchie 1897; Orcutt 1903, 1907; TJ)  
 =[Acarospora cervina](#), but probably misidentifications
- Lecanora cervina* var. *thamnina* Tuck. 📖 🌿  
 (Tuckerman 1872)  
 =[Acarospora thamnina](#)
- Lecanora chlorophana* (Wahlenb.) Ach. 📖 🌿  
 (Tuckerman 1872, 1882; Hasse 1895; McClatchie 1897; Hasse 1905; Orcutt 1903, 1907; TJ)  
 =[Pleopsidium chlorophanum](#) (but CA records are at least in part misidentifications)
- Lecanora chrysoleuca* (Sm.) Ach. 📖 🌿  
 (Hasse 1898a; Sigal 1975; TJ)  
 =[Rhizoplaca chrysoleuca](#)
- Lecanora cinerea* (L.) Sommerf. 📖 🌿  
 (Tuckerman 1866; Bolander 1870; Tuckerman 1882; Orcutt 1885; Hasse 1895; McClatchie 1897;  
 Hasse 1898a, 1903a; Orcutt 1903; Hasse 1905; Orcutt 1907; Herre 1910; Hasse 1913b; Merrill 1923;  
 Herre 1950a; Volk 1963; Baltzo 1970; TJ)  
 =[Aspicilia cinerea](#)
- Lecanora cinerea* var. *gibbosa* Nyl. 📖 🌿  
 (Tuckerman 1882; Hasse 1895, 1896; McClatchie 1897; Orcutt 1903; Hasse 1905; Orcutt 1907; TJ)  
 =[Aspicilia gibbosa](#), but uncertainly applied in CA
- Lecanora cinereorufescens* (Ach.) Hepp 📖 🌿  
 (Herre 1942a, 1950a; TJ)  
 =[Bellemerea cinereorufescens](#)
- Lecanora cinnabarina* Ach. 📖 🌿  
 (Hasse 1898a)  
 =[Caloplaca cinnabarina](#) (but misidentification for CA)
- Lecanora coilocarpa* (Ach.) Nyl. 📖 🌿  
 (Hasse 1898a; Herre 1910; Hasse 1913b; Moxley 1921; Herre 1942a, 1950a; Thomson & Ketchledge  
 1958; Volk 1963; Sigal 1975; TJ)  
 =[L. pulicaris](#)
- Lecanora confragosa* (Ach.) Röhl. 📖 🌿  
 (Hasse 1898a)  
 =[Rinodina confragosa](#) (synonymy *fide* Zahlbruckner 1931, p. 500)
- Lecanora conizaeoides* Nyl. *ex* Cromb. 📖 🌿  
 (Weber 1967a; Rotter 2010; Benson et al. 2012; W. Weber, Univ. Colo. Lich. Exs. 180, Cameron Park,  
 El Dorado Co., but name misapplied to *L. confusa* *fide* Weber [1981] and to *L. strobilina* [Śliwa &  
 Wetmore 2000])
- Lecanora conradii* (Körb.) Hasse 📖 🌿  
 (Hasse 1898a)  
 =[Rinodina conradii](#), but J. Sheard (personal communication, Oct 2004) said that he has seen no CA  
 specimens of *R. conradii*, and that the S CA reports are almost certainly *R. intermedia*.
- Lecanora constipans* Nyl. 📖 🌿  
 (Hue 1891; Hulting 1896; Fink 1935)  
 =[Edrudia constipans](#) (synonymy *fide* Esslinger & Tucker 2009)
- Lecanora contorta* (Hoffm.) J. Steiner 📖 🌿

- (Herre 1942a, 1942c, 1950a; TJ; Robertson 2003b)  
=[Circinaria contorta](#)
- Lecanora demissa* (Körb.) Zahlbr. 📖 🌿  
(Weber et al. 1987; Bowler et al. 1996; Tucker & Bratt 1996 [citing *B. Ryan* collection]; Arup & Grube 1999, proposing transfer to *Caloplaca*; Robertson 2004)  
=[Caloplaca demissa](#)
- Lecanora diffracta* Ach. 📖 🌿  
(Fink 1935; TJ)  
=part of *L. muralis* complex (but many CA records of “*L. diffracta*” are referable to *L. mellea*, *fide* B. Ryan)
- Lecanora dimera* Nyl. 📖 🌿  
(McClatchie 1897; Hasse 1898a, 1903a)  
=[Lecania dubitans](#)
- Lecanora distans* (Pers. ex Ach.) Nyl. 📖 🌿  
(Hasse 1898a; McClatchie 1897; Hasse 1913b [latter two as *L. subfusca* var. *distans*])  
=[L. populicola](#)  
**Note:** Hasse's record may have been based on a misidentification, since this species was not mentioned for S CA in Ryan, Lumbsch et al. 2004.
- Lecanora elegans* (Link) Ach. 📖 🌿  
(Hasse 1898a)  
=[Xanthoria elegans](#)
- Lecanora epilutescens* (Zahlbr.) Hasse 📖 🌿  
(Hasse 1903e)  
=[Acarospora strigata](#)
- Lecanora epulotica* (Ach.) Nyl. var. *subepulotica* Nyl. 📖 🌿  
(McClatchie 1897; Hasse 1898a)  
=[Hymenelia epulotica](#)
- Lecanora erysibe* (Ach.) Nyl. 📖 🌿  
(Herre 1944b; misidentifications, *fide* B. Ryan)
- Lecanora erysibe* var. *sincerior* Nyl. 📖 🌿  
(Hasse 1898a, 1903a; all CA and other N. Amer. collections appear to be misidentifications, *fide* B. Ryan)
- Lecanora erythrantha* Tuck. 📖 🌿  
(Fink 1935 [as “*erythantha*”])  
=[Caloplaca erythrantha](#) (synonymy *fide* Esslinger & Tucker 2009; probable misidentification for CA, since this is a tropical species)
- Lecanora exigua* (Ach.) Röhl. 📖 🌿  
(Hasse 1898a)  
=[Rinodina exigua](#), but probably misidentifications
- Lecanora fecunda* Tuck. 📖 🌿  
(Tuckerman 1866; Bolander 1870)  
=[Arthonia pruinata](#)
- Lecanora ferruginea* (Huds.) Link 📖 🌿  
(Hasse 1898a)  
=[Caloplaca ferruginea](#)
- Lecanora franciscana* Tuck. 📖 🌿  
(Tuckerman 1877)  
=[Lecania turicensis](#)
- Lecanora frustulosa* (Dicks.) Ach. 📖 🌿  
(Tuckerman 1882; Herre 1950a; Sigal 1975; TJ)

**Note:** Continental N. Amer. records are referable to *L. argopholis*.

*Lecanora fuscata* (Schrad.) Th. Fr. 🍄 🌿

(TJ for references)

=[\*Acarospora fuscata\*](#)

*Lecanora fuscata* var. *oligocarpa* (Nyl.) Tuck. 🍄 🌿

(Tuckerman 1882; Hasse 1896; McClatchie 1897; Hasse 1898a; Orcutt 1903, 1907)

=[\*Acarospora oligospora\*](#)

*Lecanora fuscata* var. *rufescens* (Ach.) Tuck. 🍄 🌿

(Tuckerman 1882)

=[\*Myriospora smaragdula\*](#)

*Lecanora fuscoatra* (Bayrh.) Nyl. 🍄 🌿

(Hasse 1898a, but CA collections are probably misidentified)

*Lecanora gelida* (L.) Ach. 🍄 🌿

(Fink 1935)

=[\*Placopsis gelida\*](#)

*Lecanora gibbosa* (Ach.) Nyl. 🍄 🌿

(Hasse 1898b, 1908b; Herre 1910; Hasse 1913b; Fink 1935; Herre 1950a; TJ)

=[\*Aspicilia gibbosa\*](#), but uncertainly applied in CA

*Lecanora gibbosula* H. Magn. 🍄 🌿

(Thomson & Ketchledge 1958 [as “cf.”]; Baltzo 1970 [“sensu Herre”]; TJ)

=[\*Aspicilia gibbosa\*](#), but this name is not accepted and has been misapplied to *Aspicilia confusa* and perhaps other *Aspicilia* species

*Lecanora glaucocarpa* (Wahlenb.) Ach. 🍄 🌿

(TJ for references)

=[\*Acarospora glaucocarpa\*](#)

*Lecanora glaucocarpa* var. *depauperata* Cromb. 🍄 🌿

(Hasse 1903e, 1906)

=[\*Acarospora glaucocarpa\*](#)

*Lecanora glaucocarpa* f. *pruinifera* Cromb. 🍄 🌿

(Hasse 1903e, 1906)

=[\*Acarospora glaucocarpa\*](#)

*Lecanora glaucoma* (Hoffm.) Ach. 🍄 🌿

(Tuckerman 1866; Bolander 1870; Hasse 1898a)

=[\*L. rupicola\*](#)

*Lecanora glaucomela* Tuck. 🍄 🌿

(Tuckerman 1872, p. 118; Willey 1873a; Tuckerman 1882, p. 198; Fink 1935)

=[\*Pertusaria glaucomela\*](#)

*Lecanora glaucophana* Nyl. ex Hasse 🍄 🌿

(Hasse 1898a; TJ)

=[\*Rhizoplaca glaucophana\*](#)

*Lecanora glaucopsina* Nyl. 🍄 🌿

(Tuckerman 1872; Hasse 1898a; Zahlbruckner 1902; Hasse 1913b; Fink 1935)

=[\*Aspicilia glaucopsina\*](#)

*Lecanora gyalectodes* Nyl. 🍄 🌿

(Nylander 1900; Hasse 1903c; TJ)

=[\*Topelia gyalectodes\*](#)

*Lecanora hallii* (Tuck.) Hasse 🍄 🌿

(Hasse 1898a)

=[\*Rinodina hallii\*](#)

*Lecanora holophaea* (Mont.) Nyl. 🍄 🌿

- (Hasse 1898a; Fink 1935)  
=[Solenopsis holophaea](#) (but probably misidentifications, since Hasse described the spores as brown and 1--3-septate; also this species was not mentioned for CA in Ryan & Timdal 2002)
- Lecanora lacustris* (With.) Nyl. 📖 🌿  
(Hasse 1915a)  
=[Ionaspis lacustris](#)
- Lecanora laevata* (Ach.) Nyl. 📖 🌿  
(Hasse 1898a, 1903a, 1913b; Merrill 1923; Herre 1942c; Thomson & Ketchledge 1958; Volk 1963; Baltzo 1970; TJ)  
=[Aspicilia laevata](#)
- Lecanora lusca* f. *lignicola* (Ach.) Zahlbr. 📖 🌿  
(Hasse 1914)  
=[Aspicilia gibbosa](#), but uncertainly applied in CA
- Lecanora marginalis* Hasse 📖 🌿  
(Hasse 1910b, 1913b; Fink 1935; TJ)  
=[Rhizoplaca marginalis](#)
- Lecanora marginata* (Schaer.) Hertel & Rambold 📖 🌿  
**Misapplied names:** [Lecidea amylacea](#) (Fink 1935)  
**Note:** According to Hertel & Rambold (1985), Fink's report of *Lecidea amylacea* from CA was probably based on a misidentification.
- Lecanora melanaspis* (Ach.) Ach. 📖 🌿  
(Tuckerman 1872, 1882, 1884; Hasse 1896; McClatchie 1897; Orcutt 1907; Fink 1935; TJ)  
=[Lobothallia melanaspis](#)
- Lecanora melanaspis* var. *alphoplaca* (Wahlenb.) Th. Fr. 📖 🌿  
(Hasse 1912, 1913b)  
=misidentifications of *Lobothallia praeradiosa*
- Lecanora melanophthalma* (DC.) Ramond 📖 🌿  
(Hasse 1898a; Fink 1935; Herre 1942a, 1950a; Sigal 1975; TJ)  
=[Rhizoplaca melanophthalma](#)
- Lecanora mniaraea* Ach. 📖 🌿  
(Hasse 1898a)  
=[Rinodina mniaraea](#)
- Lecanora mniaroeiza* Nyl. 📖 🌿  
(Hue 1891; TJ)  
=[Rinodina mniaraea](#)
- Lecanora muralis* var. *catalinae* Stizenb. (nom. nud.) 📖 🌿  
(Hasse 1903a)  
=[L. muralis](#)  
**Note:** Examination of material in NY annotated as this taxon by Hasse showed that it fits well within typical *L. muralis* var. *muralis* as delimited by Ryan, Lumbsch et al. (2004). B. D. Ryan, previous to 1998, used the name *Lecanora* "catalinae" to refer to this taxon.
- Lecanora muralis* var. *diffRACTA* (Ach.) Rabenh. 📖 🌿  
(TJ; CA reports are mostly *L. mellea*)
- Lecanora muralis* var. *semitensis* (Tuck.) Tuck. 📖 🌿  
(Tuckerman 1882; McClatchie 1897)  
=[L. semitensis](#)
- Lecanora murorum* Ach. 📖 🌿  
(Hasse 1898a)  
=[Caloplaca saxicola](#)
- Lecanora murorum* subsp. *tegaris* Ach. 📖 🌿



- (Hasse 1898a)  
 =[Caloplaca saxicola](#)  
*Lecanora mutabilis* (Ach.) Nyl. non Sommerf. 📖 🌿  
 (Herre 1942c; TJ)  
 =[Megaspora verrucosa](#)  
**Note:** The Herre report was mistakenly interpreted in TJ as *L. mutabilis* Sommerf., which =*L. intricata*.
- Lecanora nephaea* Sommerf. 📖 🌿  
 (Herre 1944b; TJ)  
 =[Protoparmelia nephaea](#) (but based on a misidentification of a different species of *Lecanora*, fide S. Tucker)
- Lecanora nevadensis* H. Magn. 📖 🌿  
 (Ryan & Nash 1993)  
 =[L. garovaglii subsp. cascadensis](#) (synonymy fide Ryan, Lumbsch et al. 2004)
- Lecanora nigromarginata* H. Magn. 📖 🌿  
 (Wetmore 1985)  
 =probable misidentifications of *Rhizoplaca melanophthalma*, fide B. Ryan
- Lecanora obpallens* Nyl. 📖 🌿  
 (Hasse 1897; McClatchie 1897; Hasse 1898a; Nylander 1900; Hasse 1903a)  
 =[Acarospora obpallens](#)
- Lecanora oculata* (Dicks.) Ach. subsp. *glaucomela* Cromb. 📖 🌿  
 (Tuckerman 1872, p. 118, footnote; Willey 1873a; Tuckerman 1882, p. 198)  
 =[Pertusaria glaucomela](#)
- Lecanora oligospora* Nyl. 📖 🌿  
 (Tuckerman 1872)  
 =[Acarospora oligospora](#)
- Lecanora oreina* Ach. 📖 🌿  
 (Hasse 1898a)  
 =[Dimelaena oreina](#)
- Lecanora orosthea* (Ach.) Ach. 📖 🌿  
 (Fink 1935; but dubiously reported for CA, fide T. Nash [personal communication])
- Lecanora pallescens* (L.) Schaer. 📖 🌿  
 (TJ for references; misapplied to various *Ochrolechia* spp. in CA)
- Lecanora pallescens* var. *rosella* Tuck. 📖 🌿  
 (Tuckerman 1882; Hasse 1908a; misapplied to various *Ochrolechia* spp. in CA)
- Lecanora pallida* (Schreb.) Rabenh. 📖 🌿  
 (TJ for references)  
 =[L. albella](#) (synonymy fide Purvis et al. 1992; CA reports based on probable misidentifications of *L. caesiorubella* or possibly *L. subcarnea*)
- Lecanora pallida* var. *cancriformis* Tuck. 📖 🌿  
 (Hasse 1896, 1903a; Orcutt 1903)  
 =[L. caesiorubella](#)
- Lecanora peliscypha* Nyl. 📖 🌿  
 (Tuckerman 1866; Willey 1873a; Hasse 1906)  
 =[Acarospora peliscypha](#) Th. Fr. (synonymy fide Zahlbruckner [1928: pp. 80–81])  
**Note:** Nylander and Th. Fries both published their names in 1861 in Sweden; Zahlbruckner (1928, p. 81) listed the Th. Fries name, *Acarospora peliscypha*, first, and the Nylander name, *Lecanora peliscypha*, later in the same paragraph under synonyms. Both names undoubtedly refer to the same taxon. Hasse's determination was not repeated in his definitive 1913b paper, so his and other early reports are in doubt for CA.
- Lecanora pellodella* Nyl. 📖 🌿

- (Hasse 1898a; Nylander 1900)  
=[Caloplaca pellodella](#)
- Lecanora peltasticta* (Zahlbr.) Hasse 📖 🌿  
(Hasse 1903e)  
=[Acarospora strigata](#)
- Lecanora peltata* (Ramond) Steud. 📖 🌿  
(Herre 1945; TJ)  
=[Rhizoplaca peltata](#)
- Lecanora phaeobola* Tuck. 📖 🌿  
(Tuckerman 1872; Willey 1873a; Tuckerman 1882; Hasse 1895; Orcutt 1909; Hasse 1913a, 1913b; TJ; Hertel 1988; *H. Hasse Exs. 126*, Mill Creek Cyn, San Bernardino Range, 1901 [*ex* Herb. Hasse, MIN])  
=[Protoparmelia ochrococca](#)
- Lecanora piniperda* Körb. 📖 🌿  
(Brodo et al. 2001; illegitimate name;  
=[L. albellula](#), *fide* Printzen [2001] and Ryan, Lumbsch et al. [2004])
- Lecanora pleiospora* Nyl. 📖 🌿  
(Hasse 1897)  
=[Acarospora thelococcoides](#)
- Lecanora pleistospora* Nyl. 📖 🌿  
(Hasse 1897, 1898a)  
=[Acarospora thelococcoides](#)
- Lecanora populicola* (DC.) Duby 🌿  
**Synonyms:** [L. distans](#), [L. subfusca var. distans](#)  
**Note:** These reports are questionable; [L. populicola](#) was not mentioned for CA, by Ryan, Lumbsch et al. (2004).
- Lecanora praecrenata* Nyl. 📖 🌿  
(Hasse 1898a, 1898b, 1913b; Fink 1935)  
=[Aspicilia praecrenata](#)  
**Note:** The large (20  $\mu$ m) globular spores occurring fewer than 8 per ascus preclude this belonging in *Lecanora*.
- Lecanora pringlei* subsp. *brandegeei* (Tuck.) B. D. Ryan 📖 🌿  
**Synonyms:** [Lecidea brandegeei](#) (Hasse 1895; McClatchie 1897; Hasse 1898a; Orcutt 1903, 1907; Fink 1935)  
**Note:** Published reports by Hasse, McClatchie, and Orcutt from S CA are based on misidentifications, *fide* Ryan, Lumbsch et al. 2004.
- Lecanora privigna* (Ach.) Nyl. var. *clavus* (Th. Fr.) Tuck. 📖 🌿  
(Tuckerman 1882; McClatchie 1897)  
=[Sarcogyne clavus](#)
- Lecanora privigna* var. *pruinosa* Tuck. 📖 🌿  
(Hasse 1895)  
=[Sarcogyne regularis](#) for CA reports
- Lecanora privigna* var. *revertens* Tuck. 📖 🌿  
(Tuckerman 1882; Hasse 1896; McClatchie 1897; Hasse 1898a; Orcutt 1903, 1907; TJ)  
=[Polysporina simplex](#)
- Lecanora pyracea* (Ach.) Nyl. 📖 🌿  
(Hasse 1898a)  
=[Caloplaca pyracea](#)
- Lecanora ramulicola* (H. Magn.) Printzen & P. May 📖 🌿  
(Printzen & May 2002 for description, but CA not cited; Williams & Sillett 2007)  
=[L. filamentosa](#), but probably a misidentification as this species has been reported only in

Massachusetts and West Virginia.

*Lecanora reagens* (Zahlbr.) Hasse non Norman 🍄 🌿

(Hasse 1903e [as “*Lecanora (Acarospora) reagens* A. Zahlbr. sp. nov.”, a nomen nudum not separately published by Zahlbruckner, not mentioned in Zahlbruckner 1928])

=[\*Acarospora nodulosa\*](#)

*Lecanora rediunta* Stizenb. 🍄 🌿

(Stizenberger 1895 [as “*redimita* Stiz.”]; Hasse 1896, 1897; McClatchie 1897; Orcutt 1909)

=[\*Schismatomma rediunta\*](#)

*Lecanora roboris* Dufour ex Nyl. 🍄 🌿

(Hasse 1898a, 1903d)

=[\*Rinodina roboris\*](#), but misidentifications for CA

*Lecanora rubina* (Vill.) Ach. 🍄 🌿

(Tuckerman 1882; Hasse 1905, 1913b; Herre 1942a, 1945, 1950a; TJ)

=[\*Rhizoplaca chrysoleuca\*](#)

*Lecanora rubina* var. *heteromorpha* Ach. 🍄 🌿

(Herre 1950a)

=[\*Rhizoplaca peltata\*](#)

*Lecanora rubina* var. *melanophthalma* (DC.) Th. Fr. 🍄 🌿

(Hasse 1908b)

=[\*Rhizoplaca melanophthalma\*](#)

*Lecanora rubina* var. *opaca* (Ach.) Th. Fr. 🍄 🌿

(Bolander 1870; McClatchie 1897; Hasse 1905, 1913b)

=[\*Rhizoplaca melanophthalma\*](#)

*Lecanora rufescens* Ach. 🍄 🌿

(Hasse 1898a)

=[\*Acarospora rufescens\*](#), a name misapplied to several species

*Lecanora rugosa* Nyl. 🍄 🌿

(Hasse 1906; Merrill 1923; Fink 1935);

=[\*L. chlarotera\*](#)

*Lecanora rugosella* Zahlbr. 🍄 🌿

(TJ; Brodo 1984)

=[\*L. chlarotera\*](#)

*Lecanora sambuci* (Pers.) Nyl. 🍄 🌿

(Hasse 1905; but CA collections are misidentifications)

*Lecanora saxicola* Ach. 🍄 🌿

(Hasse 1908b)

=[\*L. muralis\*](#)

*Lecanora saxicola* var. *diffracta* Fr. 🍄 🌿

(Hasse 1908b [but misidentifications])

*Lecanora saxicola* subsp. *semitensis* (Tuck.) Zahlbr. 🍄 🌿

(Tuckerman 1877 [*L. semitensis* Tuck. “subsp. nov.” with the species implied to be, but not explicitly stated to be, *L. saxicola*]; Fink 1935; TJ; Ryan, Lumbsch et al. 2004)

=[\*L. semitensis\*](#)

*Lecanora saxicola* var. *semitensis* Tuck. 🍄 🌿

(Hasse 1898a, Herre 1910, Hasse 1913b)

=[\*L. semitensis\*](#) (but Herre's and most other CA records are probably misidentifications)

*Lecanora saxicola* var. *versicolor* (Pers.) Tuck. 🍄 🌿

(Hasse 1913b)

=[\*L. muralis\* var. \*versicolor\*](#)

*Lecanora schleicheri* (Ach.) Nyl. 🍄 🌿

- (TJ for references)  
=[\*Acarospora schleicheri\*](#)
- Lecanora scotopholis* (Tuck.) Timdal 📖 🌿  
(Sigal 1989; Tucker & Bratt 1996)  
=[\*Miriquidica scotopholis\*](#) (synonymy *fide* Nash, Kainz et al. 2004)
- Lecanora simplex* (Taylor) Nyl. 📖 🌿  
(Hasse 1898a)  
=[\*Polysporina simplex\*](#)
- Lecanora simplex* f. *complicata* Cromb. 📖 🌿  
(Hasse 1903e, 1906)  
=[\*Polysporina simplex\*](#)
- Lecanora smaragdula* (Wahlenb. *ex* Ach.) Nyl. 📖 🌿  
(Hasse 1898a)  
=[\*Myriospora smaragdula\*](#)
- Lecanora sophodes* Ach. 📖 🌿  
(Hasse 1898a)  
=[\*Rinodina sophodes\*](#), but misidentifications for N. Amer.
- Lecanora sophodopsella* Nyl. 📖 🌿  
(Hasse 1898a, but not in Hasse [1913b] nor in Zahlbruckner [1928], so probably an error)
- Lecanora sordida* (Pers.) Th. Fr. 📖 🌿  
(Tuckerman 1882; McClatchie 1897; Hasse 1903a; Herre 1907, 1910; Hasse 1913b; Merrill 1923; TJ)  
=[\*L. rupicola\*](#) or *L. subcarnea* (*H. Hasse Lich. Exs. 217* [FH])
- Lecanora sordida* var. *bicineta* (Ramond) Th. Fr. 📖 🌿  
(Hasse 1908b)  
=[\*L. bicineta\*](#)
- Lecanora spodophaeiza* Nyl. 📖 🌿  
(Hasse 1903a, 1903e; Fink 1935; TJ)  
=[\*Lecania aipospila\*](#) (synonymy *fide* Esslinger & Tucker 2009, but CA specimens almost certainly are misidentified)
- Lecanora spraguei* Tuck. 📖 🌿  
(Hasse 1898a)  
=[\*Candelariella spraguei\*](#)
- Lecanora squamulosa* (Schrad.) Hook. 📖 🌿  
(Hasse 1898a)  
=[\*Acarospora squamulosa\*](#), but name has been misapplied to several taxa
- Lecanora stenospora* Stizenb. *ex* Hasse 📖 🌿  
(Hasse 1897, 1898a)  
=[\*Pleopsidium stenosporum\*](#) (Knudsen 2011b)  
**Note:** This name is the earliest of three homonyms: *Lecanora stenospora* Hue =*Lecania* sp., from Balearic Is. in Europe, while *L. stenospora* Zahlbr. =*Aspicilia stenospora* Hue from Korea.
- Lecanora subdispersa* Nyl. *ex* Hasse 📖 🌿  
(Hasse 1898a)  
=[\*Toninia subdispersa\*](#)
- Lecanora subfusca* (L.) Ach. 📖 🌿  
(TJ for references; Hale & Cole 1988; Ellyson & Sillett 2003)  
=[\*L. allophana\*](#) and other species of *Lecanora*
- Lecanora subfusca* var. *allophana* Ach. 📖 🌿  
(Orcutt 1903; Hasse 1905; Orcutt 1907; Hasse 1908a)  
=[\*L. allophana\*](#)
- Lecanora subfusca* var. *argentata* Ach. 📖 🌿

- (McClatchie 1897; Hasse 1913b)  
=[L. argentata](#)
- Lecanora subfusca* var. *campestris* (Schaer.) Nyl. 📖 🌿  
(Hasse 1896; McClatchie 1897; Hasse 1898a, 1903a; Orcutt 1903, 1907; Herre 1910; Hasse 1913b; Fink 1935; Volk 1963)  
=[L. campestris](#)
- Lecanora subfusca* var. *chlarona* Ach. 📖 🌿  
(Herre 1910)  
=[L. pulicaris](#)
- Lecanora subfusca* var. *coilocarpa* Ach. 📖 🌿  
(Hasse 1896; McClatchie 1897; Orcutt 1903; Hasse 1913b)  
=[L. pulicaris](#)
- Lecanora subfusca* var. *distans* (Pers.) D. Dietr. 📖 🌿  
(McClatchie 1897; Hasse 1913b)  
=[L. populicola](#), but probably a misidentification since this species was not mentioned in Ryan, Lumbsch et al. 2004
- Lecanora subolivascens* Nyl. 📖 🌿  
(Nylander 1900; TJ)  
=[Caloplaca demissa](#) (synonymy *fide* Esslinger 2011)
- Lecanora subpallida* G. Merr. 📖 🌿  
(Evans 1927; TJ)  
=*L. subpallens*, but a misidentification
- Lecanora subpyraceella* Nyl. 📖 🌿  
(Hasse 1897, 1898a; Nylander 1900) probably  
=[Caloplaca luteominia](#) var. [luteominia](#), *fide* Wetmore (2006)
- Lecanora supertegens* (Arnold) Zahlbr. 📖 🌿  
(Sigal & Toren 1976; TJ)  
=[Aspicilia supertegens](#)
- Lecanora symmicta* var. *sepincola* (Ach.) Th. Fr. 📖 🌿  
(TJ)  
=[Lecanora symmicta](#)
- Lecanora symmicta* f. *occidentalis* Zahlbr. 📖 🌿  
(Hasse 1903a; Keissler 1926)  
=[L. confusa](#)
- Lecanora syringeae* Ach. 📖 🌿  
(Hasse 1898a)  
=[Lecania fuscella](#)
- Lecanora tegularis* (Ehrh.) Röhl. 📖 🌿  
(Hasse 1898a)  
=[Caloplaca saxicola](#)
- Lecanora thamnitis* Tuck. 📖 🌿  
(Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1882; Zahlbruckner 1903–1907; Herre 1906; Fink 1935; Lamb 1939; Herre 1942c; TJ)  
=[Cladidium bolanderi](#)
- Lecanora thamnoplaca* Tuck. 📖 🌿  
(Tuckerman 1884; Hasse 1911a, 1912; Fink 1935; Herre 1945; TJ)  
=[Lobothallia alphoplaca](#)
- Lecanora thelococcoides* Nyl. 📖 🌿  
(Nylander 1891 [for “California inferior”]; Hue 1892)  
=[Acarospora thelococcoides](#)

- Lecanora thysanota* (Tuck.) G. Merr. 📖 🌿  
(Hasse 1898a)  
=[Dimelaena thysanota](#)
- Lecanora varia* var. *illusoria* Ach. 📖 🌿  
(Hasse 1913b; Wheeler 1938)  
=[L. polytropa](#)
- Lecanora varia* subsp. *laxa* Śliwa & Wetmore 🌿  
(Śliwa & Wetmore 2000)  
=[L. laxa](#)
- Lecanora varia* var. *polytropa* (Hoffm.) Nyl. 📖 🌿  
(Hasse 1903c, as “*polytrophia*”)  
=[L. polytropa](#)
- Lecanora varia* var. *sepincola* (Ach.) Link 📖 🌿  
(McClatchie 1897; Hasse 1905, 1908b; Herre 1910)  
=[L. symmicta](#)
- Lecanora varia* var. *symmicta* Ach. 📖 🌿  
(McClatchie 1897; Hasse 1905, 1908b)  
=[L. symmicta](#)
- Lecanora variabilis* (Pers.) Ach. 📖 🌿  
(Hasse 1898a)  
=[Caloplaca variabilis](#)
- Lecanora ventosa* (L.) Ach. 📖 🌿  
(McClatchie 1897; Hasse 1898a)  
=name misapplied to [Ophioparma rubricosa](#)
- Lecanora verrucosa* (Ach.) Laurer 📖 🌿  
(Tuckerman 1872; Willey 1873a; Tuckerman 1882; Fink 1935; TJ)  
=[Megasporea verrucosa](#)
- Lecanora vitellina* (Erhr.) Ach. 📖 🌿  
(Hasse 1898a)  
=[Candelariella vitellina](#) (synonymy *fide* Zahlbruckner 1928, p. 804)
- Lecanora vitellina* var. *aurella* Ach. 📖 🌿  
(Hasse 1898a)  
=[Candelariella aurella](#)
- Lecanora xanthophana* Nyl. 📖 🌿  
(Tuckerman 1866; Bolander 1870; TJ for more references)  
=name misapplied to [Acarospora socialis](#)

## LECIDEA Ach.

- Lecidea aitema** Ach. 📖 🌿  
(Herre 1944b [*C. L. Brown*, Marin Co.]; TJ)  
**Note:** The only U. S. collections of this species are from Illinois and northeastern U. S.
- Lecidea albofuscescens** Nyl. 📖 🌿  
(Williams & Sillett 2007; *S. Tucker 14939*, entrance to Samoa Coast Guard Station, Samoa Peninsula W of Arcata, Humboldt Co., SBBG)
- Lecidea atrobrunnea** (Ramond *ex* Lam. & DC.) Schaer. 📖 🌿  
(Tuckerman 1872, 1882; McClatchie 1897; Hasse 1898a, 1905, 1908b; Herre 1912b; Hasse 1913b; Fink 1935; Herre 1942a, 1945, 1950a; Thomson & Ketchledge 1958; Volk 1963; Baltzo 1970; Sigal 1975; TJ; Hale & Cole 1988; Baltzo 1989; Sigal 1989; von Reis 1991; Tucker & Bratt 1995, 1996; Wright 1997; Robertson et al. 1998 [as “*cf.*”]; Doell et al. 1999; Brodo et al. 2001 [pp. 392–393, with color photograph]; Leuckert & Hertel 2003; Robertson 2003a, 2003b; Blauman 2004a; Hertel &

Printzen 2004; Benson 2005; Robertson 2005a; Robertson & Beyer 2005; Carlberg et al. 2007; Benson et al. 2012)

**Note:** Many collections are misidentifications.

**Lecidea atrobrunnea** (Ramond *ex* Lam. & DC.) Schaer. subsp. **atrobrunnea** 📖 🌿  
(Hertel & Printzen 2004; Knudsen & Kramer 2007; Knudsen et al. 2009)

**Lecidea atrobrunnea** subsp. **saxosa** Hertel & Leuckert 📖 🌿  
(Hertel & Printzen 2004; Knudsen & Kramer 2007)

**Synonyms:** [\*Lecidea syncarpa\*](#)

**Lecidea atrobrunnea** subsp. **stictica** Hertel & Leuckert 📖 🌿  
(Knudsen & Kramer 2007)

**Synonyms:** [\*L. protabacina\*](#) Nyl. *ex* Hasse (*fide* Hertel & Printzen [2004])

**Note:** Records in Hertel & Printzen 2004. Records for *L. protabacina* other than those of Hasse should be compared with *L. perlatolica*.

**Lecidea auriculata** Th. Fr. 📖 🌿

(Hasse 1898a, 1905; Herre 1907; Fink 1935; Lowe 1939; Thomson & Ketchledge 1958; Volk 1963; TJ; Hale & Cole 1988; von Reis 1991; Bratt 1997 [as “cf.”]; Robertson 2003b; Benson 2005; Robertson & Beyer 2005; Carlberg et al. 2007)

**Synonyms:** [\*L. sarcogyniza\*](#)

**Note:** According to Hertel & Printzen (2004), *L. auriculata* is reported from central and N CA.

**Lecidea brodoana** Hertel & Leuckert 📖 🌿

(Hertel & Printzen 2004; Stone & Villella 2010; *S. Sharnoff 1303.11*, Honey Run Rd SW of Paradise, Butte Co., det. H. Hertel, ASU; CA endemic)

**Lecidea californica** Zahlbr. 📖 🌿

(Zahlbruckner 1925; Magnusson 1935b; TJ; *B. Ryan 11030*, 15 km S of Tom's Place, Eastern Brook Lakes watershed, Sierra Nevada, Inyo N. F., Inyo Co., ASU)

**Synonyms:** [\*L. bullata\*](#)

**Lecidea carnulenta** (Tuck.) Fink 📖 🌿

(Herre 1942c [on *Acacia* bark, LaVeaga Park, Santa Cruz, Santa Cruz Co.]; TJ)

**Note:** Herre's report needs verification; Printzen (1995) questioned the taxonomic placement of this species. This species has also been collected in Washington and midwestern U. S.

**Lecidea cascadensis** H. Magn. 📖 🌿

(Hill 1997 [as “?”]; *T. Weier 647*, northern bank of Cosumnes River, Hsu Bridge SR49 E, El Dorado Co., UC; det. W. Weber)

**Note:** This species has also been collected in Oregon and Washington.

**Lecidea cinerata** Zahlbr. 📖 🌿

(Zahlbruckner 1900; Hasse 1903e, 1913b; Fink 1935; Magnusson 1935b; C. Culberson & Hertel 1972; TJ; Hertel & Printzen 2004; Knudsen 2007b; Knudsen & Kramer 2007; Knudsen & Kocourková 2009c; *T. Weier 1381*, East Fork Carson River, Alpine Co., SBBG; *B. Ryan 26172b*, Mt. Mooney Rd, San Gabriel Mts, Los Angeles Co., ASU; CA endemic)

**Lecidea confluens** (Weber) Ach. 📖 🌿

(Thomson 1997; Knudsen 2007b, 2012c; *S. Sharnoff 4005*, Salt Point S. P., Gerstle Cove, Sonoma Co., UCR; *S. Selva 87*, oceanside rocks, near College Cove Beach off Old Stagecoach Rd, 1 mi. from Trinidad, Humboldt Co., WIS, det. J. Thomson)

**Note:** This species has also been collected in Washington, Alaska, and Colorado.

**Lecidea cruciaria** Tuck. 📖 🌿

(Orcutt 1903; Herre 1910; Hertel & Printzen 2004; Knudsen & Kocourková 2012a; S. Tucker 6205, 8 km S of Ione, Amador Co., ASU, SBBG, det. H. Hertel; *W. Weber L-42789*, Santa Catalina Isl., Los Angeles Co., ASU)

**Lecidea diducens** Nyl. 📖 🌿

(Hasse 1913b; TJ; Robertson 2003b; Hertel & Printzen 2004; Knudsen & Kramer 2007; Knudsen &

Kocourková 2012a; *C. Bratt 7415*, Santa Cruz Isl., Santa Barbara Co., SBBG; *B. Ryan 26172a*, along Mt. Mooney Rd, San Gabriel Mts, Los Angeles Co., ASU)

**Synonyms:** [L. auriculata var. diducens](#)

**Lecidea enalla** Nyl. 🍄 🌿

**Synonyms:** [L. myriocarpella](#) (synonymy *fide* Printzen 1995)

**Note:** No collections of *L. enalla* from N. Amer. are known. It was described from Scandinavia. Several collections of *L. myriocarpella* are known from Oregon.

**Lecidea erythrophaea** Flörke *ex* Sommerf. 🍄 🌿

(Lowe 1939; TJ; Hertel & Printzen 2004 [had seen no CA collections dated later than 1915]; Knudsen & Kocourková 2010a, citing Hasse collections from Santa Monica Mts, FH)

**Lecidea fuscoatra** Nyl. 🍄 🌿

(Hasse 1898a, 1913b; Fink 1935; Magnusson 1935b; TJ; Baltzo 1989; von Reis 1991; Benson 2005; Knudsen 2012a; *S. Benson 202*, Frog Cyn, Pinnacles Nat. Monument, San Benito Co., SBBG)

**Lecidea fuscoatra** (L.) Ach. 🍄 🌿

(Tuckerman 1882, 1888; Hasse 1905, 1908b; Fink 1935; Magnusson 1935b; Herre 1942a, 1950a; TJ; Baltzo 1989; Sigal 1989; Hill 1997 [as “?”]; Hertel & Printzen 2004; Benson 2005 [“var. grisella”]; Knudsen 2007b; Knudsen & Kramer 2007; Knudsen & Kocourková 2009a, 2009c, 2012a; *B. Ryan 25658*, near Ash Creek Bridge over Klamath River on Hwy 96, N of Yreka, Siskiyou Co., ASU; *S. Tucker 6172b*, 1 mi. N of Blue Rock Spring S. P., SE of Vallejo, Solano Co., SBBG; *B. Ryan 26520*, Trail from Windy Gap, San Gabriel Wilderness, Los Angeles Co., ASU)

**Synonyms:** [L. fumosa](#) (Herre 1910, possible misidentification, see under *L. fumosa*), [L. grisella](#), [Buellia fuscoatra](#)

**Lecidea fuscoatrina** Hertel & Leuckert 🍄 🌿

(Hertel & Printzen 2004; Knudsen & Kramer 2007; Knudsen & Kocourková 2009b; *R. Egan 13514*, 11 km ESE of Yorkville, Mendocino Co., MIN, ASU, det. H. Hertel; *C. Wetmore 50932*, western end of Little Baldy Saddle, Sequoia N. P., Tulare Co., ASU, det. H. Hertel; *C. Bratt 11598*, Santa Catalina Isl., Los Angeles Co., SBBG)

**Lecidea hassei** Zahlbr. 🍄 🌿

(Zahlbruckner 1912b; Hasse 1913b; Fink 1935 [p. 202]; Magnusson 1935b; TJ; Robertson 2003b; Hertel & Printzen 2004; Knudsen & Kramer 2007; *S. Tucker 37999b*, Univ. of Calif. Station, Crooked Creek Rd, Bristlecone Pine Forest, Inyo N. F., Mono Co., SBBG; *B. Ryan 25797*, along Magee Palomar Trail near Eagle Crag, Agua Tibia Wilderness, San Diego Co., ASU; CA endemic)

**Synonyms:** [L. antoniensis](#)

**Lecidea holopolia** (Tuck.) Zahlbr. 🍄 🌿

(Hasse 1915b; Fink 1935; TJ; Hertel & Printzen 2004; *B. Ryan 25157*, Marble Mtn Wilderness, Siskiyou Co., ASU; *S. Tucker 38775*, Lake Almanor, Plumas Co., SBBG, det. A. Fryday; *B. Ryan 26190*, San Gabriel Mts, Los Angeles Co.)

**Synonyms:** [Biatora holopolia](#)

**Lecidea kingmanii** (Hasse) Hertel & S. Ekman 🍄 🌿

(Hertel & Printzen 2004 [p. 293]; known by these authors only from type in San Gabriel Mts; CA endemic)

**Synonyms:** [Bacidia kingmanii](#)

**Lecidea laboriosa** Müll. Arg. 🍄 🌿

(Hertel 1997; Hertel & Printzen 2004; Knudsen & La Doux 2005, 2006; Knudsen & Lendemer 2005a; Knudsen 2006a; Tucker et al. 2006; Knudsen 2007b; Knudsen & Kramer 2007; Knudsen 2009; Knudsen et al. 2009; Knudsen & Kocourková 2009a; Knudsen & Kocourková 2009c; Glacy et al. 2011; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *S. Tucker 38000*, Univ. of Calif. Station, Crooked Creek Rd, Bristlecone Pine Forest, Inyo N. F., Mono Co., SBBG; *B. Ryan 14897*, Big Morongo Cyn Rd, Morongo Valley, San Bernardino Co., ASU)

**Synonyms:** [L. santae-monicae](#), [L. violascens](#) (synonymy *fide* Knudsen & Lendemer 2005a)



**Misapplied names:** [L. diducens](#)

**Lecidea laticida** (Ach.) Ach. 📖 🌿

(Tuckerman 1888; Hasse 1895, 1896; McClatchie 1897; Hasse 1898a, 1903b; Orcutt 1903, 1907; Herre 1910; Hasse 1913b; Merrill 1923; Fink 1935; TJ; Brodo et al. 2001 [p. 393, with color photograph]; Thomson 2003)

**Synonyms:** [L. declinans](#), [L. laticida var. declinans](#), [L. laticida var. declinascens](#), [L. polycarpa](#)

**Note:** According to Hertel & Printzen (2004) this taxon is expected at highest elevations in the Sonoran region. R. Anderson (1964) doubted the Herre report, but Rambold found the taxon common in western U. S., *fide* B. Ryan.

**Lecidea laticida** (Ach.) Ach var. **laticida** 📖 🌿

(Robertson 2003b; Benson 2005; *S. Tucker 38001*, Univ. of Calif. Station, Crooked Creek Rd, Bristlecone Pine Forest, Inyo N. F., Mono Co., SBBG; *C. Bratt 5360*, Pine Mtn Ridge, Los Padres N. F., Ventura Co., SBBG)

**Lecidea laticida** var. **pantherina** (DC.) Ach. 📖 🌿

(Benson 2005)

**Synonyms:** [L. pantherina](#), [L. variegata](#)

**Note:** Esslinger's list includes this variety, citing Hertel & Andreev, 1973, *Bryol.* 106:539 (with reports from Alaska and Kamtchatka, not CA). In *Species Fungorum* *L. laticida* var. *pantherina* is listed in synonymy with *L. lactea*, which is not reported from CA; it occurs in Washington and northward, and is circumboreal.

**Lecidea leucothallina** Arnold 📖 🌿

(Ryan & Nash 1991; *B. Ryan 12718*, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU)

**Note:** This species has been collected in Washington and interior western U. S.

**Lecidea lithophila** (Ach.) Ach. 📖 🌿

(Herre 1910; Hasse 1913b; Fink 1935; TJ; *T. Nash 44065*, Cuyamaca Peak, Cuyamaca S. P., San Diego Co., ASU)

**Synonyms:** [L. pruinosa](#)

**Note:** This species has been collected in Oregon and interior western and midwestern U. S.

**Lecidea mannii** Tuck. 📖 🌿

(Tuckerman 1888; Hasse 1898a, 1908a, 1915b; Herre 1910; Fink 1935; Magnusson 1935b; Volk 1963; Baltzo 1970; Hertel 1973; TJ; Baltzo 1989; von Reis 1991; Bowler et al. 1996; Hill 1997 ["?"]; Hertel & Printzen 2004; Benson 2005; Knudsen 2007b; *C. Bratt 9098*, Eagle Rock Picnic Area, El Dorado N. F., El Dorado Co., SBBG; *B. Ryan 26287*, Eagles Roost, San Gabriel Mts, Los Angeles Co., ASU)

**Synonyms:** [L. atrolutescens](#)

**Lecidea mutabilis** Fée 📖 🌿

(Hasse 1915b; Fink 1935; TJ)

**Synonyms:** [Biatora mutabilis](#)

**Note:** This species has been collected in southeastern U. S. and the neotropics.

**Lecidea nylanderi** (Anzi) Th. Fr. 📖 🌿

(Lowe 1939; TJ)

**Synonyms:** [Biatora nylanderi](#)

**Note:** This species occurs in midwestern and eastern U. S.

**Lecidea pacifica** Herre 📖 🌿

(Herre 1910; Fink 1935; Magnusson 1935b; TJ; not in Hertel & Printzen 2004 for S CA; *A. Herre 635*, Peters Creek, Santa Cruz Mts, Santa Cruz Co., F, MICH, MIN, NEB)

**Lecidea paddensis** (Tuck.) Zahlbr. 📖 🌿

(Sigal & Toren 1976; TJ)

**Note:** This species has also been collected in Oregon and Washington.

**Lecidea perlatolica** Hertel & Leuckert 📖 🌿

(Hertel & Printzen 2004; *B. Ryan 24576*, edge of Emigrant Wilderness, Cooper Peak, Tuolumne Co.,

ASU; *B. Ryan* 26583, Waterman Mtn, San Gabriel Wilderness, Los Angeles Co., ASU)

**Misapplied names:** [L. protabacina](#) auct. (records other than those based on Hasse collections)

***Lecidea plana*** (J. Lahm) Nyl. 📖 🌿

(Zahlbruckner 1902; Hasse 1903e, 1913b; Fink 1935; TJ; Ryan & Nash 1991; not reported for S CA by Hertel & Printzen [2004]; *S. Tucker* 37720, 45 mi. W of Willows, Inner Coast Range, Mendocino N. F., Glenn Co., SBBG; *C. Wetmore* 50098, N of Park Headquarters, Sequoia N. P., Tulare Co., MIN)

**Synonyms:** [Lecidea latypea](#), [Buellia parasema var. latypea](#)

***Lecidea tessellata*** Flörke 📖 🌿

(Tuckerman 1888; McClatchie 1897; Hasse 1898a, 1905, 1906; Herre 1910; Hasse 1913b; Baltzo 1970; Sigal 1975; TJ; Weber et al. 1987; Sigal 1989; Ryan & Nash 1991; von Reis 1991; Tucker & Bratt 1996; Hill 1997; Wright 1997; Brodo et al. 2001 [pp. 393–394, color photograph]; Knight et al. 2002; Riefner et al. 2003; Robertson 2003a, 2003b; Hertel & Printzen 2004; Benson 2005; Robertson & Beyer 2005; Carlberg et al. 2007; Knudsen & Kramer 2007; Robertson & Robertson 2008; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Glacy et al. 2011; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan* 12495, 27 km W of Redding, Shasta Co., ASU; *B. Ryan* 23340, SW of Fallen Leaf Lake, El Dorado Co., ASU; *T. Nash* 44029, Cuyamaca Peak, Cuyamaca S. P., San Diego Co., ASU)

**Synonyms:** [L. pavimentans](#), [L. spilota](#)

***Lecidea torquens*** Müll. Arg. 📖 🌿

(*B. Ryan* 12542, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU)

**Note:** This species belongs in *Lecanora*, *fide* Printzen 1995.

***Lecidea truckeei*** Herre 📖 🌿

(Herre 1945; TJ; Knudsen 2007b; Knudsen et al. 2009; *K. Knudsen* 2839, San Jacinto Mts, Riverside Co., UCR; not a CA endemic, also in Nevada [Herre 1911a])

**Synonyms:** [Lecidea schizopeltica](#)

***Lecidea xanthococcoides*** Zahlbr. 📖 🌿

(Zahlbruckner 1900; Hasse 1913b; Fink 1935 [p. 210]; TJ; *S. Tucker* 37145, Pollard Flat on Sacramento River, 1 mi. N of Lemoine, Shasta Co., SBBG; CA endemic)

**Synonyms:** [Biatora xanthococcoides](#)

*Lecidea ablephora* Nyl. ex Hasse 📖 🌿

(Hasse 1898a; TJ)

=[Ramonia ablephora](#)

*Lecidea admiscens* Nyl. ex Hasse 📖 🌿

(Hasse 1898a; Fink 1935)

=[Trapeliopsis glaucopholis](#) (Printzen & McCune 2004)

*Lecidea alboatra* Hoffm. 📖 🌿

(Hasse 1898a; Orcutt 1903, 1907)

=[Buellia alboatra](#)

*Lecidea alboatra* var. *ambigua* Ach. 📖 🌿

(Hasse 1895; Orcutt 1903, 1907)

=[Buellia alboatra](#)

*Lecidea alboatra* var. *saxicola* Ach. 📖 🌿

(Hasse 1898a)

=[Buellia sequax](#)

*Lecidea aliena* Nyl. 📖 🌿

(Nylander 1858; Hue 1891; Hasse 1898a)

=[Buellia oidalea](#), *fide* Hasse (1898a, p. 15)

*Lecidea aliena* var. *pulchella* Schrad. 📖 🌿

(Hasse 1898a)

=[Catolechia wahlenbergii](#), but probably a misidentification

*Lecidea alpestris* Sommerf. 🍄 🌿

(Hasse 1898a)

**Note:** This was probably based on misidentifications as suggested in TJ, because spores were described as 1--3-septate by Hasse (1898a); also no material was seen from Sonoran region [including that part of S CA collected by Hasse] by Hertel & Printzen (2004).

*Lecidea amylacea* Ach. (nom. illeg. because the name had been used previously for another taxon) 🍄 🌿

(Fink 1935; TJ)

**Note:** According to Hertel & Rambold (1985), Fink's report of *Lecidea amylacea* from CA was probably based on a misidentification.

*Lecidea aniptiza* Stirt. 🍄 🌿

(Herre 1944b [based on *C. L. Brown* 257, Larkspur, Marin Co., FM]; TJ)

=[\*Micarea denigrata\*](#) (but Brown collection was a misidentification of *Micarea prasina*, fide S. Tucker)

*Lecidea anthracophila* Nyl. 🍄 🌿

(Hasse 1898a; TJ)

=[\*Hypocenomyce anthracophila\*](#)

*Lecidea antoniensis* H. Magn. 🍄 🌿

(Magnusson 1935b; TJ)

=[\*L. hassei\*](#)

*Lecidea aromatica* Turner ex Sm. 🍄 🌿

(Tuckerman 1888; Hasse 1896; McClatchie 1897; Hasse 1898a, 1903b; Orcutt 1903, 1907)

=[\*Toninia aromatica\*](#)

*Lecidea arthoniza* Nyl. apud Hasse 🍄 🌿

(Nylander 1898; Hasse 1898a)

=[\*Arthonia intexta\*](#) Almq.

*Lecidea assimilata* Nyl. 🍄 🌿

(Hasse 1915b; Fink 1935; TJ)

=[\*Micarea assimilata\*](#)

*Lecidea atroalbula* Zahlbr. 🍄 🌿

(Hasse 1898a)

=*Rhizocarpon simillimum* (Anzi) Lettau

**Note:** The identity of Hasse's specimen is uncertain. Ozenda & Clauzade (1970, p. 422) grouped *L. atroalbula* with *Rhizocarpon simillimum*, but that species was not recorded for CA by Feuerer & Timdal (2004, p. 465).

*Lecidea atrolutescens* Nyl. 🍄 🌿

(Hasse 1898a; Fink 1935)

=[\*L. manni\*](#)

*Lecidea atropurpurea* (Schaer.) Leight. 🍄 🌿

(Hasse 1898a)

=[\*Catinaria atropurpurea\*](#)

*Lecidea auriculata* var. *diducens* (Nyl.) Th. Fr. 🍄 🌿

(Hasse 1908b [as f.]; Herre 1910, 1950a; Volk 1963)

=[\*L. diducens\*](#)

*Lecidea austrocalifornica* Zahlbr. 🍄 🌿

(Zahlbruckner 1925 ["California"]; Magnusson 1935b; Benson 2005)

=[\*Mycobilimbia austrocalifornica\*](#)

**Misapplied names:** *L. subplebeja* Nyl. ex Hasse non Vain. (Hasse 1897, 1903e)

*Lecidea berengeriana* (A. Massal.) Nyl. 🍄 🌿

(Thomson 1979, 1997; Hertel & Printzen 2004; Benson 2005; Knudsen & Kocourková 2010a, citing a Hasse collection [as *Toninia* sp.] from Santa Monica Mts, FH)

=[\*Mycobilimbia berengeriana\*](#)

*Lecidea bolacina* (Tuck.) Hasse 📖 🌿

(Hasse 1898a)

=[\*Buellia bolacina\*](#)

*Lecidea botryosa* (Fr.) Th. Fr. 📖 🌿

(Lowe 1939)

=[\*Hertelidea botryosa\*](#) (synonymy *fide* Printzen 2004)

*Lecidea brandegeei* Tuck. 📖 🌿

(Hasse 1895; McClatchie 1897; Hasse 1898a; Orcutt 1903, 1907; Fink 1935)

=[\*Lecanora pringlei\* subsp. \*brandegeei\*](#)

**Note:** Published reports by Hasse, McClatchie, Orcutt and Fink from S CA were based on misidentifications, *fide* Ryan, Lumbsch et al. 2004; epithets honoring T. S. Brandegee should be spelled *brandegeei*.

*Lecidea bullata* Hasse 📖 🌿

(Hasse 1912)

=[\*L. californica\*](#)

*Lecidea cadubriae* (A. Massal.) Nyl. 📖 🌿

(Hasse 1909; Fink 1935; Herre 1942c; TJ)

=[\*Lecanora cadubriae\*](#)

**Note:** Hasse's collection was misidentified, *fide* Lowe (1939).

*Lecidea caeruleonigricans* (Lightf.) Schaer. 📖 🌿

(McClatchie 1897; Herre 1907;

=[\*Toninia sedifolia\*](#)

*Lecidea catalinaria* Stizenb. 📖 🌿

(Hasse 1897; McClatchie 1897; Hasse 1898a, 1903b, 1913b; Merrill 1923; Fink 1935; Magnusson 1935b; Herre 1944b; TJ)

=[\*Lecidella asema\*](#)

*Lecidea caulescens* Anzi 📖 🌿

(Tuckerman 1872; Willey 1873a)

=[\*Toninia squalida\*](#)

*Lecidea caulophylla* (Tuck.) Zahlbr. 📖 🌿

(Zahlbruckner 1925; Herre 1942a, 1950a; TJ)

**Synonyms:** [\*Biatora caulophylla\*](#), [\*Psora caulophylla\*](#)

**Note:** According to Esslinger (2011) and G. Schneider (1980), this species belongs in *Lecanora*. According to B. Ryan (unpubl. study), the type collection is fragmentary, and the taxon is uncertain.

*Lecidea cinnabarina* Sommerf. 📖 🌿

(Riddle 1918; Fink 1935; Herre 1942c; TJ)

=[\*Ramboldia cinnabarina\*](#)

*Lecidea coarctata* (Turner ex Sm.) Nyl. 📖 🌿

(Hasse 1898a; Herre 1910 [including form *ornata* (Sommerf.) Th. Fr., but Herre's report was based on misidentifications of *Trapelia involuta*]; Hasse 1913b; Merrill 1923)

=[\*Trapelia coarctata\*](#)

*Lecidea coarctata* f. *elachista* (Ach.) Schaer. 📖 🌿

(Herre 1910 [as “elacista”])

=*Trapelia* sp.

*Lecidea coarctata* f. *obtegens* Th. Fr. 📖 🌿

(Hasse 1913b)

=[\*Trapelia obtegens\*](#)

**Note:** Knudsen asserts that Hasse's determination was incorrect.

*Lecidea colludens* Nyl. 📖 🌿

(Hasse 1898a; TJ)

- =*Rhizocarpon hochstetteri*, but probably misidentifications for CA
- Lecidea contigua* Fr. 📖 🌿  
(Orcutt 1909)  
=[\*Porpidia macrocarpa\*](#) (synonymy *fide* Esslinger 2011, but probably misidentifications for CA)
- Lecidea crenata* (Taylor) Stizenb. 📖 🌿  
(Hasse 1898a, 1913b; TJ)  
=[\*Psora crenata\*](#)
- Lecidea cumulata* Sommerf. 📖 🌿  
(Hasse 1895; Orcutt 1903, 1907)  
=[\*Toninia cumulata\*](#), but excluded from *Toninia*; misidentifications for N. Amer.
- Lecidea cyrtella* Ach. 📖 🌿  
(Hasse 1898a)  
=[\*Lecania cyrtella\*](#)
- Lecidea cyrtidia* Tuck. 📖 🌿  
(Hasse 1903e; Herre 1944b)  
=[\*Micarea erratica\*](#)
- Lecidea decipiens* (Hedw.) Ach. 📖 🌿  
(Herre 1910; Hasse 1913b; TJ)  
=[\*Psora decipiens\*](#)
- Lecidea declinans* (Nyl.) Nyl. 📖 🌿  
(Hasse 1898a)  
=[\*L. lapicida\*](#)
- Lecidea demissa* (Rutstr.) Ach. 📖 🌿  
(Baltzo 1970; TJ)  
=[\*Lecidoma demissum\*](#)
- Lecidea dialyta* Nyl. 📖 🌿  
(Nylander 1869)  
=[\*Chrimofulvea dialyta\*](#)
- Lecidea disciformis* (Fr.) Nyl. 📖 🌿  
(Hasse 1898a)  
=[\*Buellia disciformis\*](#)
- Lecidea dolodes* Nyl. 📖 🌿  
(Hasse 1897; McClatchie 1897; Hasse 1903e; Fink 1935; TJ)  
=[\*Schaereria dolodes\*](#)
- Lecidea effusa* (Sm.) Leight. 📖 🌿  
(Hasse 1908a; but this CA record is a misidentification)
- Lecidea elabens* Fr. 📖 🌿  
(Hasse 1913b; Jordan 1968; TJ)  
=[\*Ramboldia elabens\*](#) (synonymy *fide* Kantvilas & Elix 2007)
- Lecidea elaeochroma* (Ach.) Ach. 📖 🌿  
(Herre 1945)  
=[\*Lecidella elaeochroma\*](#)
- Lecidea enteroleuca* auct. 📖 🌿  
(Tuckerman 1866; Bolander 1870; Hasse 1896; McClatchie 1897; Hasse 1903b, 1903d; Orcutt 1903; Hasse 1905; Orcutt 1907; Hasse 1908b; Herre 1910; Hasse 1913b, 1915b; Herre 1950a; Thomson & Ketchledge 1958; TJ)  
=a species of *Lecidella*
- Lecidea enteroleuca* Fr. var. *achrista* Tuck. 📖 🌿  
(Hasse 1908b)  
=[\*Lecidella elaeochroma\*](#)

*Lecidea enteroleuca* Fr. var. *aequata* Tuck. 📖 🌿  
(Hasse 1903e; Herre 1910; Hasse 1913b)

=[\*Lecidella carpathica\*](#)

*Lecidea enteroleuca* Fr. var. *ambigua* Fink 📖 🌿  
(Hasse 1903e; Orcutt 1903)

=[\*Lecidella elaeochroma\*](#)

*Lecidea enteroleuca* Fr. var. *flavida* Fr. 📖 🌿  
(Orcutt 1903)

=[\*Lecidella elaeochroma\*](#)

*Lecidea enteroleuca* Fr. var. *pilularis* (Th. Fr.) Fink 📖 🌿  
(Hasse 1908a, 1913b)

=*Lecidella* spp. *fide* Esslinger (2011)

*Lecidea enteroleuca* Fr. var. *theioplaca* Tuck. 📖 🌿  
(Tuckerman 1866, 1872, 1888; Hasse 1898a; Herre 1910; Hasse 1913b)

=*Lecidella* spp. *fide* Esslinger & Tucker 2009, p. 444.

*Lecidea euphorea* (Flörke) Nyl. 📖 🌿  
(Hasse 1898a, 1913b; Fink 1935; Jordan 1968)

=[\*Lecidella euphorea\*](#)

*Lecidea flexuosa* (Fr.) Nyl. 📖 🌿  
(Hasse 1898a, 1908b, 1913b; Thomson & Ketchledge 1958; TJ)

=[\*Trapeliopsis flexuosa\*](#)

*Lecidea franciscana* (Tuck.) Hasse 📖 🌿  
(Hasse 1898a)

=[\*Lecania franciscana\*](#)

*Lecidea friesii* Ach. 📖 🌿  
(Hasse 1913b; Lowe 1939; TJ)

=[\*Hypocenomyce friesii\*](#)

*Lecidea fumosa* (Hoffm.) Ach. 📖 🌿  
(Herre 1910; Hasse 1913b; Merrill 1923)

=[\*Lecidea fuscoatra\*](#)

**Note:** Herre's statement that his material was C- (rather than C+ red), if correct, implies that he may have misidentified it.

*Lecidea fuscescens* Sommerf. 📖 🌿  
(Hasse 1909, 1913b; Fink 1935; Lowe 1939; Herre 1942c, 1950a; TJ)

=[\*Lecanora fuscescens\*](#)

*Lecidea fuscorubens* Nyl. 🌿  
(Herre 1944b [C. L. Brown 153, 4 mi. NW of Mill Valley, Marin Co., Oct. 23, 1942, F], based on a misidentification of *Porpidia thomsonii*, *fide* S. Tucker)

=[\*Clauzadea monticola\*](#) (synonymy *fide* Esslinger 2011)

*Lecidea geographica* (L.) Tuck. 📖 🌿  
(Hasse 1898a)

=[\*Rhizocarpon geographicum\*](#)

*Lecidea glaucopholis* Nyl. *ex* Hasse 📖 🌿  
(Hasse 1898a; Fink 1935; TJ)

=[\*Trapeliopsis glaucopholis\*](#)

*Lecidea glebulosa* (Sm.) Jatta 📖 🌿  
(Hasse 1898a; Herre 1912b; Hasse 1913b; Merrill 1923; Fink 1935; TJ)

=[\*Trapeliopsis wallrothii\*](#)

**Note:** CA reports are misidentifications of other species of *Trapeliopsis*.

*Lecidea globifera* Ach. 📖 🌿

- (Hasse 1898a; Herre 1910; Hasse 1913b; Baltzo 1970; Sigal 1975; TJ; Timdal 1986)  
 =[Psora globifera](#)  
**Note:** Herre (1910) report is probably a misidentification of another *Psora*.
- Lecidea glomerulosa* (DC.) Steud. 📖 🌿  
 (Baltzo 1970; Lindsay 1973; TJ)  
 =[Lecidella euphorea](#) fide Esslinger (2011)  
**Note:** This synonymy has been questioned by Thomson (1997) and Santesson (1993).
- Lecidea goniophila* (Flörke) Schaer. 📖 🌿  
 (Herre 1910; Hasse 1913b; Merrill 1923; Fink 1935; Herre 1950a; Thomson & Ketchledge 1958)  
 =*Lecidella* sp.; most collections are *Lecidella anomaloides*
- Lecidea granosa* (Tuck.) Herre 📖 🌿  
 (Herre 1907)  
 =[Bacidia granosa](#), but misidentifications for CA
- Lecidea granulosa* (Hoffm.) Ach. 📖 🌿  
 (Hasse 1908b, 1915b; TJ)  
 =[Trapeliopsis granulosa](#)
- Lecidea granulosa* var. *phyllizans* Zahlbr. 📖 🌿  
 (Zahlbruckner 1902; Herre 1907, 1910; Hasse 1913b; TJ)  
 =[Trapeliopsis glaucopholis](#) (Printzen & McCune 2004)
- Lecidea grisella* Flörke ex Schaer. 📖 🌿  
 (Herre 1910; Fink 1935; Weber et al. 1987)  
 =[Lecidea fuscoatra](#)
- Lecidea griseoatra* (Flot.) Schaer. 📖 🌿  
 (Hasse 1915b; Fink 1935)  
 =[Miriquidica griseoatra](#) (synonymy fide Esslinger & Tucker 2009)
- Lecidea halonia* Ach. 📖 🌿  
 (Hasse 1898a)  
 =[Buellia halonia](#)
- Lecidea humosa* (Hoffm.) Nyl. 📖 🌿  
 (Herre 1944b, based on *C. L. Brown*, Marin Co.)  
 =[Placynthiella uliginosa](#)
- Lecidea insularis* Nyl. 📖 🌿  
 (Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Anderson 1964; Hertel 1973; TJ)  
 =[Rimularia insularis](#)
- Lecidea intumescens* (Flot.) Nyl. 📖 🌿  
 (Herre 1910; Fink 1935; Herre 1950a; TJ)  
 =[Rimularia insularis](#)
- Lecidea lapicida* var. *declinans* Nyl. 📖 🌿  
 (Hasse 1903b)  
 =[L. lapicida](#)
- Lecidea lapicida* var. *declinascens* Nyl. 📖 🌿  
 (Hasse 1896; Orcutt 1903)  
 =[L. lapicida](#)
- Lecidea latypea* Ach. 📖 🌿  
 (Hasse 1898a, 1913b; Herre 1910; Merrill 1923; Fink 1935; Herre 1950a; TJ)  
 =[Lecidea plana](#), fide Esslinger (2011) except for the Herre (1910) report, a *Lecidella* sp.
- Lecidea latypiza* Nyl. 📖 🌿  
 (Hasse 1895; McClatchie 1897; Orcutt 1907; TJ)  
 =[Lecidella latypiza](#) (synonymy fide Knoph & Mies 1995, but CA not mentioned)
- Lecidea lenticularis* Ach. f. *acrustacea* Hepp 📖 🌿

- (Hasse 1898a)  
=[\*Catillaria lenticularis\*](#)
- Lecidea lepidastra* (Tuck.) Hasse 📖 🌿  
(Hasse 1898a; TJ)  
=[\*Buellia lepidastra\*](#)
- Lecidea leucophaea* (Flörke ex Rabenh.) Th. Fr. 📖 🌿  
(Hasse 1898a, 1912; TJ)  
=[\*Miriquidica leucophaea\*](#)
- Lecidea lucida* (Ach.) Ach. 📖 🌿  
(Herre 1944b; TJ; McCune 1985)  
=[\*Psilolechia lucida\*](#)  
**Note:** The Herre report was based on misidentification of a nonlichenized fungus, *fide* S. Tucker.
- Lecidea lurida* (Ach.) DC. 📖 🌿  
(Hasse 1898a; Baltzo 1970; TJ)  
=[\*Romjularia lurida\*](#)
- Lecidea luridella* Tuck. 📖 🌿  
(Hasse 1898a, 1913b; Merrill 1923; Herre 1942a, 1942c, 1950a; Anderson 1964; TJ)  
=[\*Psora luridella\*](#), but Herre's reports were probably based on misidentifications of another species of *Psora*
- Lecidea macrocarpa* (DC.) Steud. 📖 🌿  
(Thomson 1979)  
=[\*Porpidia macrocarpa\*](#), but probably misidentifications
- Lecidea massata* Tuck. 📖 🌿  
(TJ for references)  
=[\*Toninia massata\*](#)
- Lecidea meiocarpa* Nyl. 📖 🌿  
(Stizenberger 1895; Hasse 1915a; TJ)  
=[\*Biatora meiocarpa\*](#)  
**Note:** Printzen (1995) said that old reports of this species from CA are misidentifications.
- Lecidea melancheima* Tuck. 📖 🌿  
(McClatchie 1897; Hasse 1903e; Herre 1910)  
=[\*Ramboldia elabens\*](#) (synonymy *fide* Kantvilas & Elix 2007)
- Lecidea misella* (Nyl.) Nyl. 📖 🌿  
(Fink 1935)  
=[\*Micarea misella\*](#)
- Lecidea montagnei* Flot. 📖 🌿  
(Hasse 1898a)  
=[\*Rhizocarpon disporum\*](#)
- Lecidea morio* Fr. 📖 🌿  
(Tuckerman 1888; Hasse 1896; McClatchie 1897; Orcutt 1903; Hasse 1906; Orcutt 1907)  
=[\*Sporastatia testudinea\*](#)
- Lecidea myriocarpa* (DC.) Röhl. 📖 🌿  
(Stizenberger 1895)  
=[\*Buellia punctata\*](#)
- Lecidea myriocarpella* (G. Merr.) Zahlbr. 🌿  
(B. Ryan 27097, Hastings Natural History Reserve, Monterey Co., ASU)  
=[\*L. enalla\*](#) (synonymy *fide* Printzen 1995)
- Lecidea myriocarpoides* Nyl. 📖 🌿  
(Hasse 1913b; Fink 1935; TJ)  
=[\*Mycobilimbia austrocalifornica\*](#)



- Lecidea naegelia* (Hepp) Hasse 📖 🌿  
(Hasse 1898a; Nylander 1900)  
=[\*Lecania naegelia\*](#)
- Lecidea novomexicana* (B. de Lesd.) W. A. Weber ex R. A. Anderson 📖 🌿  
(Anderson 1962, 1964; Baltzo 1970; TJ)  
=[\*Psora nipponica\*](#)
- Lecidea oidalea* Nyl. 📖 🌿  
(Tuckerman 1860)  
=[\*Buellia oidalea\*](#) (Nyl.) Tuck.
- Lecidea olivacea* (Hoffm.) A. Massal. 📖 🌿  
(Herre 1910; Fink 1935; Volk 1963)  
=[\*Lecidella elaeochroma\*](#)
- Lecidea orosthea* (Ach.) Ach. 📖 🌿  
(TJ; but dubious for CA, *fide* T. Nash)  
=[\*Lecanora orosthea\*](#)
- Lecidea pantherina* (Ach.) Th. Fr. 📖 🌿  
=[\*L. lapicida\*](#) var. [\*pantherina\*](#); Hertel (1973) retains it as a separate variety
- Lecidea parasema* Ach. 📖 🌿  
(Herre 1910, 1950a; Volk 1963; TJ)  
=[\*Lecidella elaeochroma\*](#) (synonymy *fide* Esslinger 2011)
- Lecidea parasema* Ach. var. *tabescens* (Körb.) Leight. 📖 🌿  
(Hasse 1903e)  
=[\*Lecidella elaeochroma\*](#)
- Lecidea parissima* Nyl. 📖 🌿  
(Hasse 1903e)  
=[\*Micarea denigrata\*](#)
- Lecidea parmeliarum* Sommerf. 📖 🌿  
(Hasse 1898a)  
=[\*Abrothallus parmeliarum\*](#)
- Lecidea parvifolia* Pers. 📖 🌿  
(Hasse 1898a; Fink 1935; TJ)  
=[\*Phyllopsora parvifolia\*](#), unlikely for CA; Hasse collection was on charred conifer bark, so possibly referable to *Hypocenomyce* sp.
- Lecidea pavementans* H. Magn. 📖 🌿  
(Volk 1963)  
=[\*L. tessellata\*](#)
- Lecidea petraea* (Wulfen) Ach. 📖 🌿  
(Hasse 1898a)  
=[\*Rhizocarpon petraeum\*](#)
- Lecidea phaeophora* Stizenb. 📖 🌿  
(Hasse 1897, 1898a, 1913b; Merrill 1923; Fink 1935)  
=[\*Lecanora phaeophora\*](#)
- Lecidea platycarpa* Ach. 📖 🌿  
(Hasse 1896; Orcutt 1903, 1907; Herre 1910; Hasse 1913b; Fink 1935; Thomson & Ketchledge 1958)  
=[\*Porpidia macrocarpa\*](#), but probably misidentifications
- Lecidea plebeia* Nyl. 📖 🌿  
(Hasse 1906; TJ; Jordan 1968; Lindsay 1973 [on *Cupressus*]; TJ; Baltzo 2002 [repeated Jordan report])
- Lecidea polycarpa* Flörke 📖 🌿  
(Hasse 1906; Herre 1907; Hasse 1908b; Herre 1942a, 1942c, 1950a)  
=[\*L. lapicida\*](#) var. [\*pantherina\*](#)

- Lecidea prasina* (Fr.) Hasse 📖 🌿  
(Hasse 1898a)  
=[Micarea prasina](#)
- Lecidea pringlei* Tuck. 📖 🌿  
(Tuckerman 1883a, 1888; TJ)  
=[Lecanora pringlei](#)
- Lecidea protabacina* Nyl. ex Hasse 📖 🌿  
(Hasse 1903e, 1905, 1913b; Fink 1935; Volk 1963; TJ; Robertson 2003b; Benson 2005; Leuckert & Hertel 2003)  
=[L. atrobrunnea subsp. stictica](#) (synonymy for Hasse records *fide* Hertel & Printzen 2004)
- Lecidea pruinosa* Ach. 📖 🌿  
(Fink 1935)  
=[L. lithophila](#)
- Lecidea pullata* (Tuck.) Hasse 📖 🌿  
(Hasse 1898a)  
=[Buellia punctata](#)
- Lecidea quadricolor* (Dicks.) Borrer 📖 🌿  
(Anderson 1964)  
=[Trapeliopsis granulosa](#)
- Lecidea querneae* (Dicks.) Ach. 📖 🌿  
(Hasse 1898a; Herre 1910; Hasse 1913b; Fink 1935; Thomson & Ketchledge 1958; Volk 1963; Jordan 1968; TJ)  
=[Pyrrhospora querneae](#)
- Lecidea ramulicola* H. Magn. 1953, nom. illeg., non H. Magn. 1952 📖 🌿  
(Magnusson 1953)  
=[Lecanora cadubriae](#)
- †*Lecidea resinae* Nyl. 📖 🌿  
(Hasse 1898a)  
=[Sarea resinae](#)
- Lecidea rubiformis* (Ach.) Wahlenb. 📖 🌿  
(Hasse 1908b, 1913b; Herre 1942a, 1950a)  
=[Psora rubiformis](#), but misidentifications for CA *fide* B. Ryan
- Lecidea rufonigra* (Tuck.) Nyl. 📖 🌿  
(Hasse 1913b; Herre 1950a; Sigal 1975; TJ)  
=[Psorula rufonigra](#)
- Lecidea ruginosa* Tuck. 📖 🌿  
(TJ)  
=[Toninia ruginosa](#)
- Lecidea russellii* Tuck. 📖 🌿  
(TJ)  
=[Psora russellii](#)
- Lecidea russula* Ach. 📖 🌿  
(Hasse 1915b; Herre 1942c; TJ)  
=[Ramboldia russula](#); but CA reports may be based on misidentifications of *Ramboldia cinnabarina* or *R. gowardiana*.
- Lecidea sanguineoatra* sensu Nyl. 📖 🌿  
(Hasse 1910b; TJ)  
=[Mycobilimbia hypnorum](#)
- Lecidea sanguineoatra* (Wulfen) Ach. f. *corticola* Stizenb. 📖 🌿  
(Stizenberger 1895)

- =[\*Mycobilimbia hypnorum\*](#)  
*Lecidea santae-monicae* H. Magn. 📖 🌿  
(Magnusson 1935b [based on a *H. Hasse* collection, Santa Monica Mts]; TJ)  
=[\*L. laboriosa\*](#)
- Lecidea sarcogyniza* Nyl. 📖 🌿  
(Hasse 1906)  
=[\*L. auriculata\*](#)
- Lecidea scalaris* (Ach. ex Lilj.) Ach. 📖 🌿  
(Baltzo 1970; Pinelli & Jordan 1978; TJ)  
=[\*Hypocenomyce scalaris\*](#)
- Lecidea schizopeltica* Hertel & Leuckert 📖 🌿  
(Hertel & Printzen 2004; Knudsen et al. 2009; *H. Hasse*, Tehachapi Mts, NY)  
=[\*L. truckeei\*](#) (Lendemmer & Knudsen 2007)
- Lecidea scotopholis* (Tuck.) Herre 📖 🌿  
(Hasse 1898a; Herre 1910; Hasse 1913b; Merrill 1923; Sigal 1975; TJ; Hebert & Meyer 1984; Weber et al. 1987)  
=[\*Miriquidica scotopholis\*](#) (Nash, Kainz et al. 2004)
- Lecidea semitensis* (Tuck.) Hasse 📖 🌿  
(Hasse 1898a; TJ)  
=[\*Buellia concinna\*](#)
- Lecidea silacea* Ach. 📖 🌿  
(Herre 1912b; TJ)  
**Note:** This species is unlikely to occur in CA. It is primarily European; there is one collection known from Washington, another from Hawaii. The identity of Herre's material is not known.
- Lecidea speirea* (Ach.) Ach. 📖 🌿  
(Fink 1935; TJ)  
=[\*Porpidia speirea\*](#), but probably misidentifications
- Lecidea spilota* Fr. 📖 🌿  
(Tuckerman 1872)  
=[\*L. tessellata\*](#)
- Lecidea spuria* Schaer. 📖 🌿  
(Hasse 1898a)  
=[\*Buellia spuria\*](#)
- Lecidea squalida* Ach. 📖 🌿  
(Hasse 1896; Orcutt 1903, 1907)  
=[\*Toninia squalida\*](#)
- Lecidea squalida* var. *caulescens* (Anzi) Nyl. 📖 🌿  
(Hasse 1896; Orcutt 1903, 1907)  
=[\*Toninia squalida\*](#)
- Lecidea squalida* var. *persimilans* (Nyl.) Hasse 📖 🌿  
(Hasse 1897, 1898a)  
=[\*Toninia squalida\*](#)
- Lecidea stellulata* Taylor 📖 🌿  
(Hasse 1898a)  
=[\*Buellia stellulata\*](#)
- Lecidea sublugens* Nyl. 📖 🌿  
(Hasse 1898a)  
=[\*Schismatomma rediunta\*](#) (synonymy *fide* Zahlbruckner 1924, p. 508)
- Lecidea subplebeia* Nyl., *nom illeg.*, non Vain. 📖 🌿  
(Hasse 1897; McClatchie 1897; Hasse 1903e, 1913b; Fink 1935 [p. 201]; TJ)

- =[\*Carbonea latypizodes\*](#) *fide* Esslinger 2011  
**Note:** Esslinger (2011) accepted *L. subplebeja* Vain., which is a corticolous species described from Brazil and not recorded for CA.
- Lecidea sylvana* (Körb.) Th. Fr. 📖 🍄  
(Hasse 1896; Orcutt 1903, 1907; Hasse 1915b; TJ)  
=[\*Biatora globulosa\*](#)
- Lecidea symmicta* (Ach.) Ach. 📖 🍄  
(TJ; Bratt 1993)  
=[\*Lecanora symmicta\*](#)
- Lecidea syncarpa* Zahlbr. 📖 🍄  
(Ryan & Nash 1991)  
=[\*L. atrobrunnea\*](#) *subsp. saxosa* (synonymy *fide* Hertel & Printzen 2004)
- Lecidea tenebrosa* Flot. 📖 🍄  
(TJ)  
=name misapplied to [\*Schaereria fuscocinerea\*](#)
- Lecidea theioplaca* Fée 📖 🍄  
(Thomson & Ketchledge 1958; misidentifications for *Lecidella* spp.)
- Lecidea tornoënsis* Nyl. 📖 🍄  
(Fink 1935; Lowe 1939)  
=[\*Japewia tornoënsis\*](#)
- Lecidea tricolor* Nyl. 📖 🍄  
(Hasse 1898a, misapplication)  
=[\*Cliostomum griffithii\*](#)
- Lecidea triphragmia* Nyl. 📖 🍄  
(Hasse 1898a)  
=[\*Buellia triphragmia\*](#)
- Lecidea triphragmioides* (Anzi) Nyl. 📖 🍄  
(Hasse 1898b [as *triphragmoides*])  
=[\*Buellia triphragmioides\*](#)
- Lecidea turgidula* Fr. 📖 🍄  
(Tuckerman 1872; Willey 1873a; Hasse 1898a, 1913b; Lowe 1939; Anderson 1964; TJ)  
=[\*Biatora turgidula\*](#)  
**Note:** Early reports through those of Hasse are probably based on misidentifications, *fide* C. Printzen.
- Lecidea uliginosa* (Schrad.) Ach. 📖 🍄  
(Herre 1912b; Hasse 1915b; Herre 1944b [as var. *fuliginea* Ach.]; Jordan 1968; TJ)  
=[\*Placynthiella uliginosa\*](#)
- Lecidea varians* Ach. 📖 🍄  
(Hasse 1898a, 1913b; Herre 1944b; TJ; Hertel & Printzen 2004; Tucker et al. 2004)  
=[\*Pyrrhospora varians\*](#)
- Lecidea variegata* Fr. 📖 🍄  
(Hasse 1898a, 1905)  
=[\*L. lapicida\*](#) var. [\*pantherina\*](#)
- Lecidea vernalis* (L.) Ach. 📖 🍄  
(Hasse 1913b; TJ)  
=[\*Biatora vernalis\*](#), but unlikely in southern CA, *fide* C. Printzen (personal communication)
- Lecidea vesicularis* Ach. 📖 🍄  
(Hasse 1898a)  
=[\*Toninia sedifolia\*](#)
- Lecidea violascens* H. Magn. 📖 🍄  
(Magnusson 1935b; TJ)

=[\*L. laboriosa\*](#)

*Lecidea viridans* (Flot.) Lamy 📖 🌿

(Anderson 1962)

=[\*Lecidella viridans\*](#)

*Lecidea viridescens* (Schrad.) Ach. 📖 🌿

(Hasse 1908a, 1913b; Fink 1935)

=[\*Trapeliopsis viridescens\*](#)

*Lecidea vorticosa* (Flörke) Körb. 📖 🌿

(Hasse 1913b)

=[\*Carbonea vorticosa\*](#), but probably a misidentification, *fide* R. Anderson (1964)

*Lecidea vulgata* Zahlbr. 📖 🌿

(Herre 1950a)

=[\*Lecidella stigmatea\*](#)

*Lecidea wallrothii* Flörke *ex* Spreng. 📖 🌿

(Herre 1950a; TJ)

=[\*Trapeliopsis wallrothii\*](#) (but misidentifications for CA)

## LECIDELLA Körb.

***Lecidella anomaloides*** (A. Massal.) Hertel & H. Kilius 📖 🌿

**Misapplied names:** *Lecidea goniophila* (Herre 1910; Hasse 1913b; Merrill 1923; Fink 1935; Herre 1950a; Thomson & Ketchledge 1958)

**Note:** This species was not mentioned for the Sonoran part of CA by Knoph & Leuckert (2004).

***Lecidella asema*** (Nyl.) Knoph & Hertel 📖 🌿

(Knoph & Leuckert 1994; Bowler et al. 1996; Tucker & Bratt 1996; Bratt 1997; Wright 1997; Brodo et al. 2001 [color photograph on p. 187]; Doell 2002; Knoph & Leuckert 2004; Robertson 2004; Robertson 2005b, 2005c; Carlberg et al. 2007; Knudsen 2007b; Robertson & Robertson 2008; Knudsen 2009; Knudsen et al. 2009; Knudsen & Kocourková 2009a, 2009c, 2010f; Tucker 2010; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [\*Lecidea catalinaria\*](#), [\*Lecidella elaeochromoides\*](#), [\*L. subincongrua\* var. \*elaeochromoides\*](#)

***Lecidella carpathica*** Körb. 📖 🌿

(Sigal 1975; TJ; Weber et al. 1987; Sigal 1989; von Reis 1991; Knoph & Leuckert 1994, 2004; Tucker et al. 2004; Benson 2005; Knudsen 2007b; Knudsen & Kramer 2007; Tucker 2010; Glacy et al. 2011; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [\*Lecidea enteroleuca\* var. \*aequata\*](#)

***Lecidella elaeochroma*** (Ach.) Hazsl. 📖 🌿

(TJ; Hale & Cole 1988; Ryan & Nash 1991; von Reis 1991; Knoph & Leuckert 1994; Wright 1997; Knoph & Leuckert 2004; Robertson 2004; Tucker et al. 2004; Benson 2005; Knudsen 2009; Knudsen et al. 2009; Tucker 2010; Knudsen & Kocourková 2012a)

**Synonyms:** [\*Lecidea elaeochroma\*](#), [\*L. enteroleuca\* var. \*achrista\*](#), [\*L. enteroleuca\* var. \*ambigua\*](#), [\*L. enteroleuca\* var. \*flavida\*](#), [\*L. olivacea\*](#), [\*L. parasema\*](#), [\*L. parasema\* var. \*tabescens\*](#)

***Lecidella elaeochroma* var. *soralifera*** (Erichsen) Clauz. & Cl. Roux 🌿

(*B. Ryan 24876*, Rd to Etna Summit, 2.5 mi. SW of town of Etna, Siskiyou Co., SBBG)

***Lecidella euphorea*** (Flörke) Hertel 📖 🌿

(Baltzo 1989; Tucker & Bratt 1995; Baltzo 2002; Knoph & Leuckert 1994, 2004; Tucker et al. 2004; Benson 2005; Knudsen et al. 2009; Tucker 2010)

**Synonyms:** [\*Lecidea euphorea\*](#), [\*Lecidea glomerulosa\*](#), [\*Lecidella glomerulosa\*](#)

**Note:** Esslinger (2011) includes *Lecidella glomerulosa* as a synonym, but Santesson (1993) and Thomson (1997) treat it separately.

***Lecidella granulosa*** (Nyl.) Knoph & Leuckert 📖 🌿

(Knoph & Leuckert 1994; Knudsen & Kocourková 2012a; *B. Ryan 31420*, Santa Rosa Isl., Santa

Barbara Co., ASU)

**Lecidella latypiza** (Nyl.) M. Choisy 🍄 🌿

**Synonyms:** [Lecidea latypiza](#)

**Note:** According to Knoph & Leuckert (1994) in the U. S. this species occurs only in Texas. The reports for CA are probably misdeterminations, based on Hasse's failure to repeat his 1895 report in his summarizing paper (1913b).

**Lecidella meiococca** (Nyl.) Leuckert & Hertel 🍄 🌿

(Knoph & Leuckert 1994; Knudsen & Kocourková 2012a)

**Lecidella patavina** (A. Massal.) Knoph & Leuckert 🍄 🌿

(Knudsen & Kocourková 2012c; Knudsen et al. 2012 [with photo]; *K. Knudsen 2619*, Joshua Tree N. P., San Bernardino Co., UCR)

**Lecidella scabra** (Taylor) Hertel & Leuckert 🍄 🌿

(Knoph & Leuckert 2004; Knudsen & Kocourková 2010f; Knudsen & Kocourková 2012a; *T. Nash 37061*, West Anacapa Isl., Ventura Co., ASU; *J. Marsh 6583*, Santa Catalina Isl., Los Angeles Co., ASU; *S. Tucker 37420B*, Morro Bay S. P., San Luis Obispo Co., SBBG)

**Lecidella stigmatea** (Ach.) Hertel & Leuckert 🍄 🌿

(TJ; Sigal 1989; Bowler & Riefner 1990; Ryan & Nash 1991; Knoph & Leuckert 1994; Brodo et al. 2001 [pp. 394–395, with color photograph]; Knight et al. 2002; Knoph & Leuckert 2004; Robertson 2005c; Robertson & Beyer 2005; Knudsen 2007b; Knudsen & Kramer 2007; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Tucker 2010; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *T. Nash 32359*, Santa Cruz Isl., Santa Barbara Co., det. K. Knudsen, ASU)

**Synonyms:** [Lecidea vulgata](#)

**Misapplied names:** [Lecidella viridans](#)

**Lecidella viridans** (Flot.) Körb. 🍄 🌿

(Hertel 1970a; TJ; Knoph & Leuckert 2004)

**Synonyms:** [Lecidea viridans](#) (Anderson 1962)

**Note:** According to Knudsen & Kocourková (2012a) a Nash collection cited by Knoph & Leuckert (2004) is representative of *Lecidella stigmatea*.

*Lecidella elaeochromoides* (Nyl.) Knoph & Hertel 🍄 🌿

(Bratt 1987; distinct species, *fide* Knoph 1990; Knoph & Leuckert 1994; Knoph et al. 1995; Stone & Villella 2010)

=[L. asema](#)

**Note:** This is considered a distinct species, *fide* Knoph 1990.

*Lecidella glomerulosa* (DC.) M. Choisy 🍄 🌿

=[L. euphorea](#) *fide* Esslinger (2011), but synonymy has been questioned by Santesson (1993) and Thomson (1997)

*Lecidella subincongrua* var. *elaeochromoides* (Nyl.) Hertel & Leuckert 🍄 🌿

(Hertel 1970a, 1971a; TJ; McGee 1995)

=[L. asema](#)

**LECIDOMA** Gotth. Schneid. & Hertel

**Lecidoma demissum** (Rutstr.) Gotth. Schneid. & Hertel 🍄 🌿

(Hale & Cole 1988; Brodo et al. 2001 [p. 395, with color photograph])

**Synonyms:** [Biatora atrorufa](#), [Lecidea demissa](#)

**LECIOGRAPHA** A. Massal.

\**Leciographa parasitica* (Flörke) A. Massal. 🍄 🌿

(Fink 1935)

**Note:** The report by Weber et al. (1987, as *Leciographa* cf. *parasitica* A. Massal.) probably referred to

*Dactylospora parasitica* (Flörke) Zopf, *vide* Egan 1989. Hafellner (2004) said that a reinvestigation is needed to verify these collections by Weber.

#### LEIMONIS R. C. Harris

**Leimonis erratica** (Körb.) R. C. Harris & Lendemer 📖 🌿

(Harris 2009)

**Synonyms:** [\*Micareia erratica\*](#)

**Note:** Most U. S. collections of this species are from the Midwest or eastern U. S.

#### LEIOPHLOEA S. Gray = [ANISOMERIDIUM](#)

*Leiophloea parvula* (Zahlbr.) Riedl 📖 🌿

(Riedl 1962b)

= [\*Anisomeridium biforme\*](#)

#### LEMPHOLEMMA Körb.

**Lempholemma botryosum** (A. Massal.) Zahlbr. 📖 🌿

(Schultz 2009)

**Note:** This species has also been collected in Arizona.

**Lempholemma chalazanum** (Ach.) B. de Lesd. 📖 🌿

(TJ; Schultz 2004; Knudsen 2007b; Knudsen & Kocourková 2010f, 2012a)

**Synonyms:** [\*Collema chalazanum\*](#)

**Note:** According to Schultz (2004, p. 321), *Lempholemma chalazanum* was distributed by H. Hasse under the names *Psorotichia segregata* (Nyl.) Hasse (*H. Hasse Exs. 245*) and *Collemopsis segregata* Nyl. (*H. Hasse Exs. 892*). This soil crust is rare in S CA, found only one place on West Anacapa Isl. (Knudsen & Kocourková 2012a).

**Lempholemma cladodes** (Tuck.) Zahlbr. 📖 🌿

(Benson 2005, from Pinnacles N. P., San Benito Co.)

**Note:** This species has been collected in Arizona and eastward.

**Lempholemma polyanthes** (Bernh.) Malme 📖 🌿

(Goward 1999; Schultz 2004; McCune & Geiser 2009; Knudsen & Kocourková 2010a, citing a Hasse collection; *K. Knudsen 431*, above Cottonwood Falls, Laguna Mts, San Diego Co., UCR)

**Synonyms:** [\*L. myriococcum\*](#), [\*Collema myriococcum\*](#)

*Lempholemma confertum* (Nyl.) Zahlbr. 📖 🌿

**Synonyms:** [\*Collema confertum\*](#) (Hasse 1898a; Orcutt 1909; TJ; probably misidentifications)

**Note:** This species was not mentioned for the Sonoran region by Schultz 2004.

*Lempholemma myriococcum* (Ach.) Th. Fr. 📖 🌿

(Orcutt 1909; TJ)

= [\*L. polyanthes\*](#)

#### LEPRARIA Ach.

**Lepraria adhaerens** K. Knudsen, Elix, & Lendemer 📖 🌿

(Knudsen 2007b; Knudsen et al. 2007; Knudsen & Elix 2008; Knudsen & Kocourková 2009a, 2009c; McCune & Geiser 2009; Glacy et al. 2011; Lendemer 2012; type is *K. Knudsen et al. 2700*, Torrey Pines S. P., San Diego Co., UCR; SBBG collections from Kern, Orange, San Benito, Ventura counties)

**Lepraria alpina** (B. de Lesd.) Treliach & Baruffo 📖 🌿

(Knudsen & Kramer 2007 [from San Jacinto Mts Wilderness]; Knudsen & Elix 2008; Knudsen et al. 2009)

**Synonyms:** [\*L. cacuminum\*](#)

**Lepraria borealis** Loht. & Tønsberg 📖 🌿

(Knudsen & Kramer 2007 [from San Jacinto Mts Wilderness]; Knudsen et al. 2009; Knudsen &

Kocourková 2009c; *K. Knudsen 7065*, San Jacinto Mts Wilderness, Riverside Co., UCR)

**Lepraria caesioalba** (B. de Lesd.) J. R. Laund. 📖 🌿

(Tønsberg 2004; Knudsen & Kramer 2007 [chemotypes I, II, III, IV]; Knudsen et al. 2009; Knudsen & Kocourková 2009a, 2009c; Lendemer 2012; collections known from El Dorado, Kern, Los Angeles, Madera, Mariposa, Mono, Monterey, Nevada, Placer, Riverside, San Benito, San Diego, San Luis Obispo, Santa Cruz, Siskiyou, Tuolumne, Yuba counties, ASU, SBBG)

**Lepraria diffusa** (J. R. Laund.) Kukwa var. **chrysodetoides** (J. R. Laund.) Kukwa 📖 🌿

(Tønsberg 2004; Williams & Sillett 2007)

**Lepraria eburnea** J. R. Laund. 📖 🌿

(Tønsberg 2004; Williams & Sillett 2007; Lendemer 2012 [Palomar Mtn, San Diego Co.]; collections known from Nevada and Plumas counties, SBBG)

**Lepraria elobata** Tønsberg 📖 🌿

(Tønsberg 2004; *C. Bratt 133*, Orcutt Hills S of Santa Maria, Santa Barbara Co., SBBG)

**Lepraria friabilis** Lendemer, K. Knudsen & Elix 📖 🌿

(Lendemer et al. 2008; Knudsen et al. 2009)

**Lepraria lecanorica** Tønsberg 📖 🌿

(Kocourková et al. 2008)

**Lepraria lobificans** auct. 📖 🌿

(Brodo et al. 2001 [pp. 396–397, with color photograph]; Baltzo 2002; Tucker 2002; Tønsberg 2004; Williams & Sillett 2007; Glacy et al. 2011; Lendemer 2010b; Benson et al. 2012; Knudsen & Kocourková 2012a; collections known from El Dorado, Los Angeles, Monterey, San Luis Obispo, Santa Barbara, and Tuolumne counties, ASU, SBBG)

**Lepraria membranacea** (Dicks.) Vain. 📖 🌿

(Jordan 1968; Lindsay 1973; TJ; Benson et al. 2012)

**Synonyms:** [\*Lepruloma membranaceum\*](#)

**Lepraria neglecta** (Nyl.) Erichsen 📖 🌿

(Baltzo 1970; TJ; Baltzo 1989; Ryan & Nash 1991; Robertson 2003b; Knudsen & Kocourková 2012a; *S. Tucker 37988B*, Crooked Creek Rd, Bristlecone Pine Reserve, Inyo N. F., Mono Co., SBBG; collections known from El Dorado, Inyo, Madera, San Diego, Siskiyou, Tuolumne counties, ASU, SBBG)

**Lepraria pacifica** Lendemer 📖 🌿

(Lendemer 2011 [including all West-Coast species of *Lepraria* containing divaricatic acid]; Benson et al. 2012; Lendemer 2012)

**Misapplied names:** [\*L. crassissima\*](#), [\*L. incana\*](#)

**Lepraria rigidula** (B. de Lesd.) Tønsberg 📖 🌿

(Kocourková & Knudsen 2007; Lendemer 2012; *K. Knudsen 7064*, San Jacinto Mts Wilderness, Riverside Co., UCR)

**Lepraria terricola** Lendemer 📖 🌿

(Lendemer 2010b, 2012; *C. Bratt 3082*, Santa Cruz Isl., Santa Barbara Co., SBBG; other SBBG collections from Los Angeles, and San Diego counties; CA endemic)

**Lepraria texta** K. Knudsen, Elix, & Lendemer 📖 🌿

(Knudsen 2007b; Knudsen & Elix 2008; Saag et al. 2009; Knudsen & Kocourková 2009c, based on *K. Knudsen 3407*, Fremont Cyn, Santa Ana Mts, Orange Co., UCR; Lendemer 2010b; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *K. Knudsen 5127*, Santa Monica Mts, Ventura Co., UCR; CA endemic)

**Lepraria vouauxii** (Hue) J. R. Laund. 📖 🌿

(description but not in CA *vide* Tønsberg 2004; Knudsen, Elix, & Lendemer 2006; Williams & Sillett 2007; Knudsen & Elix 2008; Knudsen & Kocourková 2009a; *K. Knudsen 2658.2*, Cabrillo Nat. Monument, Point Loma, San Diego Co., SBBG, UCR)

**Lepraria xerophila** Tønsberg 📖 🌿



(Knudsen 2009; Knudsen & Kocourková 2009a, 2009c, 2010f; Lendemer 2010b; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a; Lendemer 2012; *W. Weber*, Univ. Colo. Lich. Exs. 455, headland between Cottonwood Cyn and Mills Landing, Santa Catalina Isl., Los Angeles Co., SBBG; SBBG has collections from Los Angeles, San Diego, San Luis Obispo, Santa Barbara, and Ventura counties)

**Misapplied names:** [\*Lepruloma membranaceum\*](#) (Rotter 2010), *Siphula* sp. (Weber 1975a)

*Lepraria cacuminum* (A. Massal.) Loht. 📖 🌿

(Knudsen & Elix 2008)

=[\*L. alpina\*](#)

*Lepraria candelaris* (L.) Fr. 📖 🌿

(Jordan 1968; Lindsay 1973; TJ)

=name misapplied to [\*Chrysothrix xanthina\*](#)

*Lepraria chlorina* (Ach.) Ach. 📖 🌿

(Benson 2005, but probably an error for *Chrysothrix granulosa* or *C. xanthina*)

*Lepraria crassissima* (Hue) Lettau 📖 🌿

(Ryan & Nash 1991, based on *B. Ryan 12911*, Eastern Brook Lakes watershed, Inyo Co., ASU)

**Note:** *L. crassissima* is only in Europe, not in N. Amer., *fide* Lendemer (2011). The identity of *B. Ryan 12911* is not known.

*Lepraria incana* (L.) Ach. 📖 🌿

(Ryan & Nash 1991; von Reis 1991; Tønsberg 2004; Williams & Sillett 2007)

=[\*L. pacifica\*](#) (Pacific Coast records)

**Note:** *Lepraria incana* has been reported from Inyo, San Diego, and Siskiyou counties (see ASU).

According to Lendemer (2011) *L. incana* does not occur in N. Amer. CA specimens formerly identified as *L. incana* were used by Lendemer in the description of the new species, *L. pacifica*.

*Lepraria santamonicae* K. Knudsen & Elix 📖 🌿

(Knudsen 2007b; Knudsen & Elix 2007, 2008; Saag et al. 2009; Knudsen & Kocourková 2009c; McCune & Geiser 2009; Lendemer 2010b, 2012; *K. Knudsen 6046*, Weir Cyn, Orange Co., UCR; SBBG collections from Orange, San Diego, and Ventura counties)

=[\*Leprocaulon santamonicae\*](#)

**LEPROCAULON** Nyl. *ex* Lamy

**Leprocaulon albicans** (Th. Fr.) Nyl. *ex* Hue 📖 🌿

(von Reis 1991; Goward 1999; Ryan 2002)

**Synonyms:** [\*Stereocaulon albicans\*](#)

**Leprocaulon americanum** Lendemer & Hodkinson 📖 🌿

(Knudsen & Kocourková 2012a; Lendemer & Hodkinson 2013)

**Misapplied names:** [\*L. microscopicum\*](#)

**Note:** According to Brodo et al. (2001, p. 398), this species is limited to coastal Oregon and Washington. Its range is discussed by Tucker (2002).

**Leprocaulon knudsenii** Lendemer & Hodkinson 📖 🌿

(Knudsen & Kocourková 2012a; Lendemer & Hodkinson 2013; CA endemic)

**Leprocaulon santamonicae** (K. Knudsen & Elix) Lendemer & Hodkinson 📖 🌿

(Lendemer & Hodkinson 2013; Knudsen & Elix 2007; Knudsen & Kocourková 2012a; CA endemic)

**Synonyms:** [\*Lepraria santamonicae\*](#)

**Leprocaulon subalbicans** (I. M. Lamb) I. M. Lamb & A. M. Ward 📖 🌿

(Riefner, Bowler, & Ryan 1995 [based on *R. Riefner*, San Diego Co.]; Goward 1999; Ryan 2002; Robertson 2003b)

**Note:** Range is Colorado north to British Columbia, according to Brodo et al. 2001. According to Ryan (2002), southern CA material similar to *L. subalbicans* may not belong in this genus.

**Leprocaulon terricola** (Lendemer) Lendemer & Hodkinson 📖 🌿

(Knudsen & Kocourková 2012a; Lendemer & Hodkinson 2013 CA endemic)

*Leprocaulon microscopicum* (Vill.) Gams ex D. Hawksw. 📖 🌿

(Lamb & Ward 1974; TJ; Bratt 1993; Bowler et al. 1996; Hill 1996; Bratt 1997; Goward 1999; Robertson 2002b; Ryan 2002; Knudsen 2007b, 2009; Knudsen & Kocourková 2009a, 2010f)  
=[\*L. americanum\*](#)

**Note:** California records of *L. microscopicum* have proven to be based on *L. americanum*.

*LEPROLOMA* Nyl. ex Cromb. =[\*\*LEPRARIA\*\*](#) (synonymy *vide* Ekman & Tønsberg 2002)

*Leproloma membranaceum* (Dicks.) Vain. 📖 🌿

(von Reis 1991; Tucker & Bratt 1995; Baltzo 2002; Robertson 2002a; Benson 2005; Rotter 2010)  
=[\*Lepraria membranacea\*](#) (synonymy in Ekman & Tønsberg 2002)

**Note:** For other records that have proven to be based on *Lepraria xerophila*, the name *Leproloma membranaceum* can be considered as misapplied.

**LEPTOCHIDIUM** M. Choisy

**Leptochidium albociliatum** (Desm.) M. Choisy 📖 🌿

(Pinelli & Jordan 1978; TJ; Thomson 1984; Baltzo 1989; von Reis 1991; Goward et al. 1994; Tucker & Bratt 1995; Bowler et al. 1996; Doell & Wright 1996; Tucker & Bratt 1996; Hill 1997; Wright 1997; McGee 1998; Brodo et al. 2001 [pp. 399–400, with color photograph]; Baltzo 2002; Nash 2002a; Robertson 2003a; Blauman 2004a; Jovan & McCune 2004; Benson 2005; Robertson 2005a; Carlberg et al. 2007; Rosentreter et al. 2007 [with photograph]; Knudsen et al. 2009; Knudsen & Kocourková 2009b; Glacy et al. 2011; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [\*Leptogium albociliatum\*](#), [\*Polychidium albociliatum\*](#)

**LEPTOGIUM** (Ach.) Gray

**Leptogium arsenei** Sierk 📖 🌿

(Tucker & Bratt 1996 [citing Ryan & Nash collections]; Jørgensen & Nash 2004; Knudsen & La Doux 2006; Knudsen & Kocourková 2009c; *T. Nash 7254*, Mt. San Jacinto, Banning-Idyllwild Rd, Riverside Co., !Jørgensen, ASU, WIS; *D. Largent 4518*, Big Flat Cpgd, Shasta-Trinity N. F., Trinity Co., det. J. Thomson, WIS)

**Leptogium biatorinum** (Nyl.) Leight. 📖 🌿

(Jørgensen & Tønsberg 1999; Jørgensen & Nash 2004; Knudsen & Kocourková 2010a, citing *H. Hasse 94* from Santa Monica Mts, Los Angeles Co., SBBG; *C. Bratt s.n.*, 1982, Wagon Cave, Santa Lucia Mts, Monterey Co., ASU, SBBG, det. M. Schultz)

**Synonyms:** [\*L. nanum\*](#)

**Leptogium burnetiae** C. W. Dodge 📖 🌿

(Hale 1979 [map]; Smith 1980; Hinds & Hinds 2007 [p. 286, color photograph only]; *P. Bowler 659*, Hastings Natural History Reserve, Monterey Co., UCI)

**Leptogium burnetiae** var. **hirsutum** (Sierk) P. M. Jørg. 🌿

(*B. Ryan 32123*, Minarets Rd, Sierra N. F., Madera Co., ASU; *S. Tucker 36335*, Jasper Ridge, San Mateo Co., SBBG; other collections from Contra Costa, Fresno, Humboldt, Kern, Los Angeles, Mendocino, Riverside, Santa Barbara counties, ASU, MSC, WIS)

**Leptogium californicum** Tuck. 📖 🌿

(Tuckerman 1882; McClatchie 1897; Hasse 1898a, 1905; Herre 1906; Orcutt 1909; Herre 1910; Hasse 1913b; Fink 1935; Herre 1945; Thomson & Ketchledge 1958; Sierk 1964; Jordan 1968; Baltzo 1970; Sigal 1975; Pinelli & Jordan 1978; TJ; Baltzo 1989; Sigal 1989; Goward et al. 1994; Tucker & Bratt 1995; Bowler et al. 1996; Brodo et al. 2001 [p. 408]; Baltzo 2002; Jørgensen & Nash 2004; Benson 2005 [as “cf.”]; Carlberg et al. 2007; Knudsen et al. 2009; Knudsen & Kocourková 2009b, 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Leptogium cellulosum** P. M. Jørg. & Tønsberg 📖 🌿

(Anonymous 2002; Martin et al. 2002; Jovan & McCune 2004; McCune & Geiser 2009; *T. Carlberg 00758*, Mad River Ridge, between Ruth Lake and coastal fog zone, Trinity Co., Six Rivers N. F. Herb.)

**Leptogium denticulatum** Nyl. sensu Sierk 📖 🌿

(*T. Baroni*, near Leggett, Mendocino Co., det. J. Thomson, WIS)

**Note:** According to Jørgensen & Nash (2004), Sonoran (including S CA) material fits the description by Sierk (1964) but does not correspond well to the type.

**Leptogium gelatinosum** (With.) J. R. Laund. 📖 🌿

(Goward et al. 1994; Hill 1997; Brodo et al. 2001 [p. 405, with color photograph]; Tucker 2002 [discussed known collections from Napa and Sonoma counties in central CA]; Jørgensen & Nash 2004; Jovan & McCune 2004)

**Synonyms:** [\*L. scotinum\*](#), [\*L. sinuatum\*](#)

**Leptogium insigne** P. M. Jørg. & Tønsberg 📖 🌿

(Carlberg 2012, based on *T. Carlberg 02755*, from Del Norte Co., Herb. Carlberg)

**Misapplied names:** [\*L. brebissonii\*](#)

**Leptogium intermedium** (Arnold) Arnold 📖 🌿

(Benson et al. 2012; *T. Carlberg 01935*, Coon Mtn, Six Rivers N. F., Del Norte Co., Herb. Carlberg; *T. Carlberg 02451, 02457*, Presidio of San Francisco, San Francisco Co., CAS)

**Leptogium laceroides** (B. de Lesd.) P. M. Jørg. 📖 🌿

(Jørgensen & Nash 2004; *C. Bratt 4583, 4589*, Goodchild Ranch, South Fork, Upper La Brea Cyn, Santa Barbara Co., ASU, SBBG)

**Leptogium lichenoides** (L.) Zahlbr. 📖 🌿

(Sierk 1964; Jordan 1968; Baltzo 1970; Pinelli & Jordan 1978; TJ; Smith 1980; Weber et al. 1987; Baltzo 1989; Goward et al. 1994; Tucker & Bratt 1995; Bowler et al. 1996; Hill 1997; Wright 1997; Brodo et al. 2001 [pp. 405–406, with color photograph]; Baltzo 2002; Robertson 2003a; Blauman 2004a; Jørgensen & Nash 2004; Jovan & McCune 2004; Benson 2005 [as “cf.”]; Robertson 2005a; Robertson & Beyer 2005; Carlberg et al. 2007; Hinds & Hinds 2007 [p. 293, color photograph only]; Rosentreter et al. 2007 [with photograph]; Villella 2010; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [\*L. lacerum\*](#), [\*L. lacerum\* subsp. \*pulvinatum\*](#), [\*L. pulvinatum\*](#)

**Leptogium milligranum** Sierk 📖 🌿

(Sierk 1964; TJ; Brodo et al. 2001 [pp. 406–407, with color photograph]; Thomson 2003; Tucker et al. 2004; Hinds & Hinds 2007 [p. 294, color photograph only]; *B. Ryan 26910*, Arroyo Seco Cpgd, Los Padres N. F., Monterey Co., ASU; *S. Tucker 34116*, New Melones Reservoir, Tuolumne Co., ASU, SBBG)

**Misapplied names:** [\*L. chloromelum\* var. \*stellans\*](#)

**Leptogium palmatum** (Huds.) Mont. 📖 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1872, 1882; McClatchie 1895; Hasse 1898a; Herre 1906, 1907; Orcutt 1909; Herre 1910; Hasse 1913b; Fink 1935; Herre 1945; Sierk 1964; Jordan 1968; Baltzo 1970; Lindsay 1973; Sigal 1975; TJ; Thomson 1984; Jørgensen & Nash 2004; Benson 2005; Williams & Sillett 2007; Robertson & Robertson 2008; Knudsen & Kocourková 2009c; McCune & Geiser 2009; Villella 2010; Glacy et al. 2011)

**Synonyms:** [\*L. corniculatum\*](#), synonymy *fide* Jørgensen & Nash 2004

**Leptogium platynum** (Tuck.) Herre 📖 🌿

(Herre 1910; Fink 1935; Herre 1945; Sierk 1964; TJ; Goward et al. 1994; Brodo et al. 2001 [pp. 407–408, with color photograph]; Jørgensen & Nash 2004; Robertson 2005a; McCune & Geiser 2009; Clark 2011)

**Leptogium plicatile** (Ach.) Leight. 📖 🌿

(Herre 1910; Hasse 1913b; Sierk 1964; TJ; Jørgensen & Nash 2004; Knudsen & Kocourková 2009b, 2009c; Schultz 2009; Clark 2011)

**Synonyms:** [\*Collemodium plicatile\*](#), [\*C. turgidum\*](#), [\*Homodium microdium\*](#), [\*L. microdium\*](#)

**Leptogium polycarpum** P. M. Jørg. & Goward  

(Brodo et al. 2001 [p. 408, with color photograph, in north coastal CA]; Tucker 2002; Carlberg 2003 [based on Carlberg collections]; Jovan & McCune 2004; *T. Carlberg 01796*, Titus Creek, Klamath N. F., Siskiyou Co., Herb. Carlberg; *T. Carlberg 02888*, Mooreville Ridge Rd, Plumas N. F., Plumas Co., CHSC)

**Leptogium pseudofurfuraceum** P. M. Jørg. & Wallace  

(Jørgensen 1997; Brodo et al. 2001 [pp. 408–410, with color photograph]; Baltzo 2002; Tucker 2002; Jørgensen & Nash 2004; Jovan & McCune 2004; Benson 2005)

**Note:** Many if not all reports of *L. furfuraceum* from N. Amer. belong here. Reports of *L. hildenbrandii* from CA may be based in part on *L. pseudofurfuraceum*.

**Leptogium rivale** Tuck.  

(Tuckerman 1877, 1882; Sierk 1964; TJ; Goward et al. 1994; Brodo et al. 2001 [p. 343]; Glavich & Geiser 2007; Glavich 2009; McCune & Geiser 2009)

**Synonyms:** [\*Polychidium rivale\*](#)

**Note:** This is a semi-aquatic lichen.



**Leptogium saturninum** (Dicks.) Nyl.  

(Herre 1906, 1910; Sierk 1964; Pinelli & Jordan 1978; TJ; Smith 1980; Thomson 1984; Hale & Cole 1988; Goward et al. 1994; Brodo et al. 2001 [p. 411, with color photograph]; Thomson 2003; Jørgensen & Nash 2004; Jovan & McCune 2004; Hinds & Hinds 2007 [p. 295, color photograph only])



**Synonyms:** [\*L. myochroum\*](#)

**Leptogium siskiyouensis** Stone & Ruchty  

(Stone & Ruchty 2008 [collections from Monterey and Trinity Co.]; McCune & Geiser 2009; Clark 2011; Villella 2012; *T. Carlberg 00916*, Mad River Ridge, Six Rivers N. F., Trinity Co., Herb. Carlberg)

**Leptogium subaridum** P. M. Jørg. & Goward  

(Carlberg 2003; Aragón et al. 2004; McCune & Geiser 2009; *T. Carlberg 00883*, Mad River Ridge, Six Rivers N. F., Trinity Co., Herb. Carlberg; *C. Bratt 12356*, Pinnacles Nat. Monument, San Benito Co., SBBG; *T. Nash 7065*, Banning-Idyllwild Rd, Mt. San Jacinto Mts, Riverside Co., ASU)

**Leptogium subtile** (Schrad.) Torss.  

(Baltzo 2002; *W. Jordan 420*, San Francisco watershed, San Mateo Co., 1967, SFSU; *S. Tucker 34455*, Carmel Valley Rd by front gate of Hastings Natural History Reserve, 15 mi. NW of junction with Arroyo Seco Rd W of Greenfield, Monterey Co., SBBG, det. B. Ryan)

**Synonyms:** [\*L. minutissimum\*](#)



**Leptogium tenuissimum** (Dicks.) Körb.  

(Herre 1910; Hasse 1913b, 1915b; Fink 1935; Sierk 1964; Jordan 1968; TJ; Goward et al. 1994; Baltzo 2002; Jørgensen & Nash 2004; Jovan & McCune 2004; Robertson 2005c; Carlberg et al. 2007; Hinds & Hinds 2007 [p. 296, color photograph only]; Knudsen 2007b; Knudsen & Kocourková 2009c; Villella 2010; Glacy et al. 2011; Knudsen et al. 2012; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *J. Shevock 15168*, Kern Plateau, Tulare Co., CAS)

**Misapplied names:** [\*Leptogium rhyparodes\*](#)

**Leptogium teretiusculum** (Wallr.) Arnold  

(Jørgensen & Nash 2004; Jovan & McCune 2004; Carlberg et al. 2007; Hinds & Hinds 2007 [p. 297, color photograph only]; Schultz 2009; Glacy et al. 2011; *H. Thiers 33756*, Hwy 49 between Auburn & Nevada City, Nevada Co., SFSU; *T. Carlberg 01866*, Pine Flat Mtn, Six Rivers N. F., Del Norte Co.; *T. Carlberg 01932*, Lizard Rock, Sutter Buttes, Sutter Co., Herb. Carlberg; *C. Bratt 5260*, Pine Ridge, San Luis Obispo Co., SBBG, det. M. Schultz; *H. Thiers 33592*, Cachuma Reservoir, Fremont Cpgd, Santa Barbara Co., SFSU)

**Leptogium albociliatum** Desm.  

(Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1882; McClatchie 1895, 1897; Hasse

- 1898a, 1905; Herre 1906, 1907; Orcutt 1909)  
=[Leptochidium albociliatum](#)
- Leptogium brebissonii* Mont. 📖 🍄  
(Jovan & McCune 2004; *B. Ryan* 26655, Hwy 152, 32 km NNE of Hollister, Merced Co., ASU)  
=name misapplied to [Leptogium insigne](#)  
**Note:** T. Carlberg says the Ryan collection is a jelly fungus (personal communication).
- Leptogium burgessii* (L.) Mont. 📖 🍄  
(Fink 1935, but based on misidentifications)
- Leptogium chloromelum* (Sw. ex Ach.) Nyl. var. *stellans* Tuck. 📖 🍄  
(Herre 1906, 1907, 1910)  
=[L. milligranum](#) for Herre records
- Leptogium corniculatum* (Dicks.) Körb. 📖 🍄  
(Baltzo 1989; Sigal 1989; von Reis 1991; Goward et al. 1994; Doell & Wright 1996; Tucker & Bratt 1996; Hill 1997; Wright 1997; Brodo et al. 2001 [p. 403, with color photograph]; Baltzo 2002; Robertson 2003a; Blauman 2004a; Jovan & McCune 2004; Robertson 2005a)  
=[L. palmatum](#) (synonymy *fide* Jørgensen & Nash 2004)
- Leptogium cristatellum* (Tuck.) Herre 📖 🍄  
(Herre 1912b)  
=[Collema tenax var. corallinum](#)
- Leptogium cyanescens* (Rabenh.) Körb. 📖 🍄  
(Carlberg 2002, based on *T. Carlberg* collection, Six Rivers N. F., Del Norte Co., Six Rivers N. F. Herb.; color photograph on back cover of CALS Bulletin 9 [2], 2002)  
**Note:** Collections are misidentifications, *fide* a U. S. Forest Service report (Stone & Ruchty 2006), according to T. Carlberg.
- Leptogium fragile* (Taylor) Nyl. 📖 🍄  
(Fink 1935 [p. 168])  
=[Collema fragile](#) (synonymy *fide* Esslinger 2011, but CA records are based on misidentifications)
- Leptogium furfuraceum* (Harm.) Sierk 📖 🍄  
(Sierk 1964; Jordan 1968; Baltzo 1970; Pinelli & Jordan 1978; TJ; Baltzo 1989; Goward et al. 1994; Doell & Wright 1996; Tucker & Bratt 1996)  
=misidentifications for N. Amer., at least in part, of *L. pseudofurfuraceum*, *fide* Jørgensen (1997)
- Leptogium hildenbrandii* (Garov.) Nyl. 📖 🍄  
(Hasse 1898a; Orcutt 1909; Herre 1910; Fink 1935)  
=misidentifications for N. Amer. [at least north of Mexico] probably at least in part of *L. pseudofurfuraceum* *fide* Jørgensen (1997)
- Leptogium lacerum* (Sw.) S. Gray 📖 🍄  
(Hasse 1898a; Orcutt 1909; Hasse 1913b)  
=[L. lichenoides](#)
- Leptogium lacerum* subsp. *pulvinatum* Hoffm. 📖 🍄  
(Hasse 1903c)  
=[L. lichenoides](#)
- Leptogium microdium* (Nyl. ex Hasse) Zahlbr. 📖 🍄  
(Fink 1935 [p. 168])  
=[L. plicatile](#) (synonymy *fide* Esslinger 2011)
- Leptogium minutissimum* (Flörke) Fr. 📖 🍄  
(Hasse 1903c, 1915b; Fink 1935; Sierk 1964; Jordan 1968; Baltzo 1970; TJ; Thomson 1984)  
=[L. subtile](#)
- Leptogium muscicola* (Sw.) Fr. 📖 🍄  
(Tuckerman 1866; Bolander 1870; Hasse 1903c; TJ for more references)  
=[Polychidium muscicola](#)

*Leptogium myochroum* Tuck. 📖 🌿

(Hasse 1895; McClatchie 1897; Orcutt 1903, 1907)

=[\*L. saturninum\*](#)

*Leptogium nanum* Herre 📖 🌿

(Herre 1956; McCune & Geiser 2009)

=[\*L. biatorinum\*](#)

*Leptogium papillosum* (B. de Lesd.) C. W. Dodge 📖 🌿

(Hale 1979; Hale & Cole 1988; misidentifications, at least in part, of *L. pseudofurfuraceum*)

*Leptogium pulvinatum* (Huds.) Mont. 📖 🌿

(Hasse 1905)

=[\*L. lichenoides\*](#)

*Leptogium rhyarodes* Nyl. 📖 🌿

(Tuckerman 1882; Zahlbruckner 1902; Hasse 1903c; Herre 1910; Hasse 1913b; Fink 1935; TJ)

=[\*Leptogium tenuissimum\*](#) (synonymy *vide* Esslinger & Tucker 2009), but misidentifications for N.

Amer.

*Leptogium schraderi* (Bernh.) Nyl. 📖 🌿

(Fink 1935)

**Synonyms:** [\*Collemodium schraderi\*](#)

=misidentifications for CA

*Leptogium scotinum* (Ach.) Fr. 📖 🌿

(Tuckerman 1872; Willey 1873a; Herre 1906, 1910; Fink 1935 [p. 167])

=[\*L. gelatinosum\*](#) (synonymy *vide* Esslinger 2011)

*Leptogium sinuatum* (Huds.) A. Massal. 📖 🌿

(Sierk 1964; TJ; Thomson 1984)

=[\*L. gelatinosum\*](#)

## LEPTORHAPHIS Körb.

**Leptorhaphis atomaria** (Ach.) Szatala 📖 🌿

**Misapplied names:** *L. epidermidis* (Aptroot 1997)

#*Leptorhaphis epidermidis* (Ach.) Th. Fr. 📖 🌿

(Aptroot 1997)

**Note:** Aptroot (1997) recorded this species for CA. He later (Aptroot 2002) corrected the identification to *L. atomaria* but did not mention CA records.

## LETHARIA (Th. Fr.) Zahlbr.

**Letharia columbiana** (Nutt.) J. W. Thoms. 📖 🌿

(Thomson 1969; Baltzo 1970; Lindsay 1973; Pinelli & Jordan 1978; TJ; Baltzo 1989; Tucker & Bratt 1995; Goward 1999; Brodo et al. 2001 [p. 412, with color photograph]; Ryan 2002; Jovan & McCune 2004; Benson 2005; Robertson 2005a; Robertson & Beyer 2005; Knudsen et al. 2009; Knudsen & Kocourková 2010a, citing a Hasse collection; Villella 2010)

**Synonyms:** [\*Chlorea californica\*](#), [\*C. vulpina\* var. \*californica\*](#), [\*L. californica\*](#), [\*L. californica\* var. \*fovatoretigera\*](#)

**Letharia gracilis** Krokken *ex* McCune & Altermann 📖 🌿

(McCune & Altermann 2009 [based on a collection from Siskiyou Co.]; McCune & Geiser 2009; Villella 2012; *R. Rosentreter 16567*, Siskiyou Mts, Del Norte Co., SBBG; also reported in Tuolumne Co.)

**Letharia vulpina** (L.) Hue 📖 🌿

(Hasse 1908b; Herre 1910; Hasse 1913b; Herre 1942a, 1945, 1950a; Schade 1955; Jordan 1968; Lindsay 1973; Pinelli & Jordan 1978; TJ; Sigal & Nash 1983; Riefner, Bowler, & Ryan 1995; Tucker & Bratt 1995, 1996; Wright 1997; Goward 1999; Brodo et al. 2001 [p. 412, with color photograph];

Baltzo 2002; Ryan 2002; Robertson 2003b; Blauman 2004a; Jovan & McCune 2004; Robertson 2004; Benson 2005; Robertson & Beyer 2005; Knudsen 2007b; Knudsen & Kramer 2007; Williams & Sillett 2007; Knudsen et al. 2009; Villella 2010)

**Synonyms:** *Chlorea vulpina*, *Evernia vulpina*

*Letharia californica* (Lév.) Hue 📖 🌿

(Hue 1899)

=[\*L. columbiana\*](#)

*Letharia californica* var. *fovatoretigera* Räsänen 📖 🌿

(Räsänen 1944)

=[\*L. columbiana\*](#)

## LICHENOCHORA Hafellner

\***Lichenochora verrucicola** (Wedd.) Nik. Hoffm. & Hafellner 📖 🌿

(Knudsen 2006c, 2007a; Knudsen et al. 2009; Kocourková et al. 2012; *S. Tucker 35933*, Figueroa Mtn, Santa Barbara Co., SBBG, lichenicole on *Aspicilia cuprea*, det. K. Knudsen; *K. Knudsen 2934.2*, on *Aspicilia* sp., Palomar Mtn, San Diego Co., UCR)

\***Lichenochora xanthoriae** Triebel & Rambold 📖 🌿

(Knudsen 2006a; Kocourková et al. 2012; *K. Knudsen 3305*, on *Xanthoria elegans* apothecia, Cactus Flats, San Bernardino Co., UCR, first report for CA)

## LICHENOCONIUM Petr. & Syd.

\***Lichenoconium cargillianum** (Linds.) D. Hawksw. 📖 🌿

(Cole & Hawksworth 2004; Kocourková et al. 2012; *C. Wetmore 50445*, Sequoia N. P., Tulare Co., on *Letharia vulpina*, MIN)

\***Lichenoconium erodens** M. S. Christ. & D. Hawksw. 📖 🌿

(Kocourková & Knudsen 2007; Knudsen et al. 2009, on *Lecanora* species, Riverside and Santa Barbara counties, UCR; Knudsen & Kocourková 2009b; Knudsen & Kocourková 2012a; Kocourková et al. 2012)

**Note:** This is common on a wide variety of hosts including *Evernia* and *Xanthoparmelia*.

\***Lichenoconium lecanorae** (Jaap) D. Hawksw. 📖 🌿

(Diederich 2003; Hawksworth 2003 [cited it for UK only but included a color photograph, p. 196]; Diederich 2004; Knudsen & Kocourková 2009c, 2010a; Knudsen & Kocourková 2012a; Kocourková et al. 2012 [on *Niebla homalea*, Santa Rosa Isl., and *Xanthoparmelia* sp., Los Angeles Co.]

\***Lichenoconium lichenicola** (P. Karst.) Petr. & Syd. 📖 🌿

(Etayo et al. 2007; Knudsen & Kocourková 2009c; Knudsen & Kocourková 2012a; Kocourková et al. 2012 [on *Physcia dimidiata*, *Kocourková s.n.*, Santa Rosa Isl., PRM, UCR])

\***Lichenoconium usneae** (Anzi) D. Hawksw. 📖 🌿

(Diederich 2003, 2004; Kocourková et al. 2012 [on a wide variety of hosts including *Ramalina*])

\***Lichenoconium xanthoriae** M. S. Christ. 📖 🌿

(Knudsen & Kocourková 2009b; Kocourková et al. 2012; *K. Knudsen 10433*, Santa Ana Mts, Riverside Co., UCR, on *Xanthoria tenax* and other Teloschistaceae)

## LICHENODIPLIS Dyko & D. Hawksw.

\***Lichenodiplis dendrographae** Diederich & van den Boom 📖 🌿

(Diederich 2003, 2004; Kocourková et al. 2012; *K. Knudsen 7349*, Los Osos, San Luis Obispo Co., UCR; CA endemic on *Dendrographa leucophaea* from the type locality in Morro Bay S. P., San Luis Obispo Co.)

\***Lichenodiplis lecanorae** (Vouaux) Dyko & D. Hawksw. 📖 🌿

(Diederich 2003; Knudsen & Kocourková 2009b; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *S. Tucker 34307* pr. p., Hope Ranch, Santa Barbara Co., SBBG, on *Pertusaria*, det. D.

Hawksworth)

- \***Lichenodiplus lecanoricola** (M. S. Cole & D. Hawksw.) Diederich 📖 🌿  
(Diederich 2003, 2004; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *T. Nash* 32764, Santa Rosa Isl., ASU; *M. Seaward* 115593, Point Reyes, Marin Co., on apothecia of *Caloplaca* and *Lecanora* spp. on bark, UCR)
- \***Lichenodiplus rinodinicola** Kocourk. & K. Knudsen 📖 🌿  
(Knudsen & Kocourková 2009b; Kocourková et al. 2012; only known from type on *Rinodina* sp., Santa Monica Mts, Los Angeles Co.)

**LICHENOMPHALIA** Redhead, Lutzoni, Moncalvo, & Vilgalys (Redhead et al. 2002)

- Lichenomphalia umbellifera** (L.: Fr.) Redhead, Lutzoni, Moncalvo, & Vilgalys 📖 🌿  
(Redhead et al. 2002; *C. Bratt* 10386, SE of Santa Maria, Santa Barbara Co., SBBG; *D. Desjardin* 1294, Lanphere Dunes, Humboldt Co., SFSU, det. B. Ryan; *S. Hammer* 987, Van Damme S. P., Mendocino Co., det. B. Ryan; *H. Saylor* 2453, Jackson S. F., Amador Co., SFSU, det. B. Ryan; *H. Saylor* 2770, Calaveras Big Tree S. P., Calaveras Co., SFSU, det. B. Ryan; *H. Thiers* collections, identified as *Botrydina botryoides*, Humboldt Co., Mendocino Co., SFSU)  
**Synonyms:** [Botrydina botryoides](#), [Omphalina ericetorum](#), [O. umbellifera](#)

**LICHENOSTIGMA** Hafellner

- \***Lichenostigma amplum** Calat. & Hafellner 📖 🌿  
(Kocourková & Knudsen 2008 [on *Buellia venusta*]; Knudsen & Kocourková 2009a [Santa Rosa Isl. on *Buellia maritima*]; Knudsen & Kocourková 2012a; Kocourková et al. 2012)
- \***Lichenostigma anaticum** Halici & Kocakaya 📖 🌿  
(Lendemer, Kocourková, & Knudsen 2009b; Kocourková et al. 2012)
- \***Lichenostigma bolacinae** Nav.-Ros., Calat. & Hafellner 📖 🌿  
(Kocourková & Knudsen 2008; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *K. Knudsen* 6235, on *Caloplaca bolacina*, Weir Cyn, Santa Ana Mts, Orange Co., UCR; *J. Kocourková & K. Knudsen s.n.*, on *Caloplaca bolacina*, Santa Rosa Isl., Santa Barbara Co., UCR)
- \***Lichenostigma cosmopolites** Hafellner & Calat. 📖 🌿  
(Diederich 2003; Calatayud et al. 2004; Kocourková 2000, pp. 97–98; Knudsen 2007a; Knudsen et al. 2009; Knudsen & Kocourková 2009b, 2009c; Knudsen & Kocourková 2012a; Kocourková et al. 2012; Rajakaruna et al. 2012, on serpentine, San Benito Co.; Santa Barbara Co. and southward on *Xanthoparmelia* spp.)
- \***Lichenostigma elongatum** Nav.-Ros. & Hafellner 📖 🌿  
(Hafellner et al. 2002; Diederich 2003; Calatayud et al. 2004; Kocourková et al. 2012; Rajakaruna et al. 2012, on serpentine, San Benito Co.; on species of *Aspicilia* and *Lobothallia*)
- \***Lichenostigma lecanorae** Calat. & Nav.-Ros. 🌿  
(*S. Tucker* 38020a, Crooked Creek Rd, Bristlecone Pine Forest, Mono Co., SBBG; *S. Tucker* 38838, 2 mi. W of Ebbetts Pass, Stanislaus N. F., Alpine Co., SBBG)
- \***Lichenostigma maureri** Hafellner 📖 🌿  
(Esslinger & Egan 1995 [under New records, based on *Eisen*, 1876, foothills above Tollhouse in Fresno, Fresno Co., UPS, on *Letharia columbiana*, det. R. Santesson]; Kocourková et al. 2012; *S. Tucker* 35382, road from Potter Valley to Lake Pillsbury, Lake Co. on *Usnea scabrata*, SBBG, det. Calatayud et al.)  
**Note:** Calatayud et al. (2004) report it on *Usnea* in Sonoran region.
- Lichenostigma radicans** Calat. & Barreno 📖 🌿  
(Knudsen & Kocourková 2008b, 2012a; Kocourková et al. 2012)
- \***Lichenostigma rugosum** G. Thor 📖 🌿  
(Knudsen & Kocourková 2008b, 2009c [on *Diploschistes* spp.], 2012a; Glacy et al. 2011; Kocourková et al. 2012)



\***Lichenostigma saxicola** K. Knudsen & Kocourk. 📷 🌿

(Knudsen & Kocourková 2010c; Kocourková et al. 2012 [on a wide range of crustose lichens, Los Angeles and San Bernardino counties])

\***Lichenostigma subradians** Hafellner, Calat. & Nav.-Ros. 📷 🌿

(Knudsen & La Doux 2005; Knudsen 2007a, [photograph, on *A. socialis*]; Knudsen & Kocourková 2009a, 2009c [on *A. socialis*], 2012a; Kocourková et al. 2012; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *K. Knudsen 12637.1*, Joshua Tree N. P., Riverside Co.)

**Note:** This species is parasitic on *Acarospora obnubila*, *A. socialis* and other yellow species.

**LICHENOTHELIA** D. Hawksw.

#**Lichenothelia calcarea** Henssen 📷 🌿

(Henssen 1987)

\***Lichenothelia convexa** Henssen 📷 🌿

(Henssen 1987; Kocourková & Knudsen 2011a)

**Note:** This species is opportunistically lichenicolous on saxicolous lichens.

#**Lichenothelia intermixta** Henssen 📷 🌿

(Henssen 1987)

\***Lichenothelia renobalesiana** D. Hawksw. & V. Atienza 📷 🌿

(Knudsen & Kocourková 2009b; Kocourková & Knudsen 2009d; *K. Knudsen et al. 9660.2* on *Verrucaria muralis*, Santa Monica Mts, Los Angeles Co., UCR)

\***Lichenothelia scopularia** (Nyl.) D. Hawksw. 📷 🌿

(Lendemer et al. 2010; *H. Thiers 364*, Pacific Summit, near Mosquito Lake, Alpine Co., ID, SBBG; *T. Weier 569*, Burnside Lake, Alpine Co., SBBG, UC; *K. Knudsen 2123*, Menifee Hills, Wildomar, Riverside Co., UCR)

**Synonyms:** [\*Microthelia aterrima\*](#), [\*Rinodina aterrima\*](#)

#**Lichenothelia tenuissima** Henssen 📷 🌿

(Bowler et al. 1996; Rajakaruna et al. 2012, on serpentine, San Benito Co.; nonlichenized fungus *fide* A. Henssen [1987])

**LICHINELLA** Nyl.

**Lichinella americana** Henssen 🌿

(cited by Schultz [2006] for Arizona and Baja California; *C. Bratt L-1671*, over moss, Wagon Cave, just off Fort Hunter Liggett Reservation, Santa Lucia Mts, Los Padres N. F., Monterey Co., SBBG)

**Lichinella cribellifera** (Nyl.) P. P. Moreno & Egea 📷 🌿

(Tucker et al. 2006; Schultz 2006, 2008; Knudsen 2007b; Schultz 2009; *C. Bratt 8315*, Big Rocks on Branch Creek Rd, N of Cuyama River, San Luis Obispo Co., SBBG, det. M. Schultz; other collections from San Benito, San Bernardino, Los Angeles Co., SBBG)

**Lichinella flexa** Henssen, Büdel & T. H. Nash 📷 🌿

(Schultz 2006, 2008; *S. Tucker 34156*, Big Rocks, Los Padres N. F., San Luis Obispo Co., SBBG, det. M. Schultz)

**Lichinella granulosa** M. Schultz 📷 🌿

(Schultz 2006, 2008, 2009)

**Lichinella iodopulchra** (Croz.) P. P. Moreno & Egea 📷 🌿

(Schultz 2006; *D. Toren 6869*, on basalt rock, Hell's Peak, Lake Co., mixed with *L. robustoides*, SFSU, det. M. Schultz)

**Misapplied names:** *Thyrea pulvinata*, *T. confusa*

**Lichinella minnesotensis** (Fink) Essl. 📷 🌿

(Schultz 2006, cited *C. Wetmore 14593*, Riverside Co.; Schultz 2008, 2009)

**Lichinella nigritella** (Lettau) P. P. Moreno & Egea 📷 🌿

(Bratt 1999; Doell et al. 1999; Tucker 1999; Brodo et al. 2001 [pp. 414–415, with color photograph];

Tucker 2002; Blauman 2004a; Robertson 2004; Benson 2005; Schultz 2006, 2008; Carlberg et al. 2007; Knudsen 2007b; Schultz 2009; Vilella 2010)

**Synonyms:** [\*Gonohymenia nigritella\*](#), [\*Thyrea nigritella\*](#)

**Lichinella robustoides** Henssen 📖 🌿

(Schultz 2008; Knudsen & Kocourková 2012a; *J. Shevock 14643*, below Paradise Ridge, Tulare Co., ASU; *C. Bratt 6263B*, Santa Cruz Isl., Santa Barbara Co., ASU, SBBG, det. B. Büdel)

**Lichinella stipatula** Nyl. 📖 🌿

(Henssen 1963f [reporting *W. Weber* collection]; TJ; Baltzo 1989 [repeated Henssen report]; Bratt 1999; Goward 1999; Robertson 2001; Knudsen & Kocourková 2012a)

**LLIMONAEA** Egea & Torrente

*Llimonaea californica* (Tuck.) Sparrius 📖 🌿

(Sparrius 2004 [citing *W. Weber* & *C. Bratt*, Univ. Colo. Lich. Exs. 661, Christy Ranch, western end of Santa Cruz Isl., Santa Barbara Co., SBBG]; Glacy et al. 2011)

=[\*Schizopelte crustosa\*](#)

*Llimonaea cerebriformis* (Egea & Torrente) Sparrius 📖 🌿

(Sparrius 2004, from Channel Is.; Knudsen & Kocourková 2009b; Ertz & Tehler 2011; *J. & R. Robertson 5436*, rocky headlands along Hwy 1, ~3 km S of Stinson Beach, Mt. Tamalpais S. P., Marin Co.)

=[\*Sparria cerebriformis\*](#)

*Llimonaea occulta* Egea & Torrente ined. 📖 🌿

(von Reis [1991] based on misidentifications of *Lecanographa hypothallina*, *fide* Tucker [1999]; not in N. Amer.)

**LLIMONIELLA** Hafellner & Nav.-Ros.

\***Llimoniella acarosporicola** (Kocourk. & K. Knudsen) Diederich & Ertz 📖 🌿

(Diederich, Ertz, & Etayo 2010; Kocourková et al. 2012; *K. Knudsen 9236*, Fremont Cyn, Orange Co., UCR)

**Synonyms:** [\*Gelatinopsis acarosporicola\*](#)

**LOBARIA** (Schreb.) Hoffm.

**Lobaria amplissima** (Scop.) Forss. 📖 🌿

(Tønsberg & Goward 2001; McCune & Geiser 2009)

**Note:** Most collection records are from eastern U. S. and Europe.

**Lobaria hallii** (Tuck.) Zahlbr. 📖 🌿

(Jordan 1973; TJ; Thomson 1984; Hale & Cole 1988; Goward et al. 1994; Wright 1997, 1998; Brodo et al. 2001 [p. 416, with color photograph]; Wright 2001a; Jovan & McCune 2004; McCune & Geiser 2009; *H. Thiers 44189*, Jackson S. F. near Mendocino, Mendocino Co., SFSU, ! S. Tucker)

**Lobaria oregana** (Tuck.) Müll. Arg. 📖 🌿

(Jordan 1973; TJ; Hale & Cole 1988; Goward et al. 1994; Brodo et al. 2001 [p. 417, with color photograph]; Ellyson & Sillett 2003; Jovan & McCune 2004; Williams & Sillett 2007; McCune & Geiser 2009)

**Synonyms:** [\*Sticta oregana\*](#)

**Lobaria pulmonaria** (L.) Hoffm. 📖 🌿

(Herre 1907, 1910, 1945; Thomson & Ketchledge 1958; Jordan 1968, 1973; Lindsay 1973; Malachowski 1975; TJ; Hale & Cole 1988; Goward et al. 1994; Wright 1998; Brodo et al. 2001 [p. 417, with color photograph]; Wright 2001a; Baltzo 2002; Robertson 2002a; Ellyson & Sillett 2003; Robertson 2003a; Thomson 2003; Blauman 2004a; Jovan & McCune 2004; Robertson 2005c; Hinds & Hinds 2007 [p. 302, color photograph only]; Williams & Sillett 2007; McCune & Geiser 2009)

**Synonyms:** [\*Sticta pulmonaria\*](#)

**Lobaria scrobiculata** (Scop.) DC. 📖 🌿

(Herre 1907, 1910; Jordan 1968, 1973; Malachowski 1975; TJ; Thomson 1984; Hale & Cole 1988; Goward et al. 1994; Wright 1997, 1998; Brodo et al. 2001 [p. 421, with color photograph]; Wright 2001a; Baltzo 2002; Robertson 2002a; Ellyson & Sillett 2003; Hinds & Hinds 2007 [p. 304, color photograph only]; Williams & Sillett 2007; McCune & Geiser 2009; Glacy et al. 2011)

**Synonyms:** [Sticta scrobiculata](#), [S. verrucosa](#)

**LOBOTHALLIA** (Clauz. & Cl. Roux) Hafellner

**Lobothallia alphoplaca** (Wahlenb.) Hafellner 📖 🌿

(Doell et al. 1999; Brodo et al. 2001 [pp. 422–423, with color photograph]; Robertson & Robertson 2002; Tucker 2002; Robertson 2003b, 2004; Robertson & Beyer 2005; Villella 2010)

**Synonyms:** [Lecanora alphoplaca](#), [L. melanaspis var. alphoplaca](#), [L. thamnoplaca](#)

**Note:** J. Poelt (personal communication to B. Ryan) indicated that many western U. S. collections of *L. praeradiosa* are misidentified as *L. alphoplaca*.

**Lobothallia melanaspis** (Ach.) Hafellner 📖 🌿

(Tuckerman 1872, 1882, 1884; Hasse 1896; McClatchie 1897; Orcutt 1907; Fink 1935; TJ)

**Synonyms:** [Lecanora melanaspis](#)

**Note:** This species is not found in the Sonoran part of CA, *fide* Ryan 2004; at least some reports are probably misidentifications of *L. praeradiosa* or *Lecanora garovaglii* s. l.

**Lobothallia praeradiosa** (Nyl.) Hafellner 📖 🌿

(Doell et al. 1999; Brodo et al. 2001 [p. 423, with color photograph]; Knight et al. 2002; Tucker 2002; Ryan 2004)

**Note:** *Lobothallia praeradiosa* is very common in the Great Basin and adjacent areas.

**LOPADIUM** Körb.

**Lopadium disciforme** (Flot.) Kullhjem 📖 🌿

(Williams & Sillett 2007; *T. Nash 11380*, hill above Hendy Woods S. P., Mendocino Co., ASU; *S. Tucker 13441*, Castle Rock S. P., Santa Cruz Co., SBBG)

**Lopadium dodgei** Herre 📖 🌿

(Herre 1950b [type on *Quercus agrifolia*, Pacific Grove, Monterey Co.]; TJ; CA endemic)

**LOXOSPOROPSIS** Henssen

**Loxosporopsis corallifera** Brodo, Henssen & Imshaug 📖 🌿

(Brodo & Henssen 1995; Goward 1999; Brodo et al. 2001 [pp. 426–427, with color photograph]; Robertson 2002a; Ellyson & Sillett 2003; Williams & Sillett 2007)

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

**MARCHANDIOMYCES** Diederich & D. Hawksw.

\***Marchandiomyces corallinus** (Roberge) Diederich & D. Hawksw. 📖 🌿

(Kocourková et al. 2008; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *C. Bratt 3298b*, Lockwood Valley Rd, Ventucopa area, Santa Barbara Co. on *Lecanora pacifica*, det. M. Christiansen, SBBG)

**Note:** Collections of this lichenicole were made on various lichens including *Teloschistes* from Santa Rosa Isl. (PRM, UCR).

**MARONEA** A. Massal.

**Maronea polyphaea** H. Magn. 📖 🌿

(Harris 2006; Nash & Ryan 2008; Knudsen & Kocourková 2010a [citing Hasse collections from Ventura Co.], 2012a; *H. Hasse L-79269*, Santa Monica Mts, Los Angeles Co., ASU; *S. Tucker 35679*,

Santa Cruz Isl., Santa Barbara Co., ASU, SBBG; *J. & R. Robertson 6100*, on chaparral, Daley Ranch, San Diego Co., UC)

**Misapplied names:** [\*M. constans\*](#), [\*M. constans\* var. \*sublecidina\*](#)

*Maronea constans* (Nyl.) Hepp 🍄 🌿

(Robertson & Robertson 2002; Fink 1935 [reported it only from eastern U. S.]

=name misapplied to [\*Maronea polyphaea\*](#)

*Maronea constans* var. *sublecidina* Zahlbr. 🍄 🌿

(Hasse 1913a; Fink 1935; TJ)

=name misapplied to [\*Maronea polyphaea\*](#)

## MASSALONGIA Körb.

**Massalongia carnos**a (Dicks.) Körb. 🍄 🌿

(Hasse 1913b; Fink 1935; Herre 1944b, 1945; Henssen 1963b; TJ; Thomson 1984; Goward et al. 1994; Brodo et al. 2001 [pp. 427–428, with color photograph]; Knudsen & Kramer 2007; Rosentreter et al. 2007 [with photograph]; McCune & Geiser 2009; *B. Ryan 24078*, ESE of Pinecrest, Tuolumne Co., ASU; *C. Bratt 7751*, Nacimiento-Ferguson Rd, Santa Lucia Mts, Monterey Co., SBBG)

**Massalongia microphylliza** (Nyl. ex Hasse) Henssen 🍄 🌿

(Henssen 1963b; TJ; Goward et al. 1994; Nash 2002a; Knudsen & Kocourková 2010a, citing Hasse collections; *H. Hasse*, Santa Monica Mts, Los Angeles Co., 1 July 1906, ASU; *B. Ryan 30978*, Santa Catalina Isl., Los Angeles Co., ASU)

**Synonyms:** [\*Pannularia microphylliza\*](#), [\*Parmeliella ruderatula\*](#), [\*Placynthium dubium\*](#), [\*P. microphyllizum\*](#)

## MEGALARIA Hafellner

**Megalaria columbiana** (G. Merr.) S. Ekman 🍄 🌿

(combination made in Ekman & Tønsberg [1996]; Williams & Sillett 2007; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [\*Catillaria columbiana\*](#)

**Misapplied names:** [\*M. laureri\*](#)

*Megalaria laureri* (Hepp ex Th. Fr.) Hafellner 🍄 🌿

(Baltzo 2002)

**Synonyms:** [\*Biatora laureri\*](#) (Tuckerman 1882), [\*Catillaria laureri\*](#) (Herre 1912b; Fink 1935; Volk 1963; Jordan 1968; Lindsay 1973)

**Note:** Tucker (2002) indicated that many of the reports could be misidentifications of *M. columbiana*; [\*M. laureri\*](#) is only in northeastern U. S. and eastern Canada, *fide* Ekman & Tønsberg (1996) and Brodo et al. (2001, p. 429, with color photograph). All reports may be referable to *M. columbiana*.

## MEGASPORA (Clauz. & Cl. Roux) Hafellner & V. Wirth

**Megaspora verrucosa** (Ach.) Hafellner & V. Wirth 🍄 🌿

(Tucker & Bratt 1995; Brodo et al. 2001 [pp. 429–430, with color photograph]; Thomson 2003; Rosentreter et al. 2007 [with photograph]; Knudsen & Kocourková 2010a, citing a Hasse collection [*Lich. Exs. 244*] as *Pertusaria wulfenii*, FH)

**Synonyms:** *Lecanora mutabilis*, *Lecanora mutabilis* (Ach.) Nyl. non Sommerf., [\*Lecanora verrucosa\*](#), [\*Megaspora verrucosa\* var. \*mutabilis\*](#), [\*Pachyospora verrucosa\*](#)

**Note:** These reports are probably from montane areas in central and N CA.

*Megaspora verrucosa* var. *mutabilis* (Ach.) Nimis & Roux 🍄 🌿

(Nash & Ryan 2008; Knudsen et al. 2009)

=[\*Megaspora verrucosa\*](#)

## MELANELIA Essl.

**Melanelia disjuncta** (Erichsen) Essl. 📷 🌿

(TJ; Tucker & Bratt 1996; Brodo et al. 2001 [p. 433, with color photograph]; Esslinger 2002; Thomson 2003; Robertson & Beyer 2005; Hinds & Hinds 2007 [p. 307, color photograph only])

**Synonyms:** [Montanelia disjuncta](#), [Parmelia disjuncta](#)

**Note:** This species was transferred to *Montanelia* by Divakar et al. (2012) but the transfer was not accepted by Esslinger.

**Melanelia hepatizon** (Ach.) A. Thell 📷 🌿

(Brodo et al. 2001 [pp. 435–436, with color photograph and map that show it in a small area in the Sierra Nevada]; the same report was cited by Tucker [2002])

**Melanelia panniformis** (Nyl.) Essl. 📷 🌿

(Brodo et al. 2001 [p. 437, color photograph but no CA report]; Tucker 2002; Robertson 2004; *S. Tucker 35502*, on rock, Bloody Rock trailhead near Lake Pillsbury, Lake Co., SBBG, det. T. Esslinger)

**Synonyms:** [Parmelia prolixa var. panniformis](#), [Montanelia panniformis](#)

**Note:** This species was transferred to *Montanelia* by Divakar et al. (2012) but the transfer was not accepted by Esslinger.

**Melanelia stygia** (L.) Essl. 📷 🌿

(TJ, as misidentifications; Ryan & Nash 1991; discussed in Tucker 2002; *B. Ryan 12619, 12838*, 15 km S of Tom's Place, Eastern Brook Lakes watershed, Inyo N. F., Inyo Co., ASU)

**Synonyms:** [Parmelia stygia](#) (Hasse 1903c; Herre 1946)

**Note:** All CA collections of *M. stygia* need re-examination.

**Melanelia tominii** (Oxner) Essl. 📷 🌿

(Doell et al. 1999; Brodo et al. 2001 [p. 441, with color photograph]; Esslinger 2002; Tucker 2002; Robertson 2003b; Thomson 2003; Benson 2005; collections known from Inyo and San Bernardino counties, ASU, SBBG)

**Synonyms:** [M. substygia](#), [Montanelia tominii](#)

**Note:** This species was transferred to *Montanelia* by Divakar et al. (2012) but the transfer was not accepted by Esslinger.

*Melanelia elegantula* (Zahlbr.) Essl. 📷 🌿

(TJ; Goward et al. 1994; Tucker & Bratt 1995; Bourell 2000; Brodo et al. 2001 [pp. 433–434, with color photograph]; Esslinger 2002; Robertson 2002a, 2003a; Jovan & McCune 2004; Robertson & Beyer 2005; Knudsen 2007b; Knudsen & Kramer 2007; Glacy et al. 2011)

=[Melanohalea elegantula](#)

*Melanelia exasperata* (De Not.) Essl. 📷 🌿

(Hinds & Hinds 2007 [p. 309, p. 309, color photograph only]; misidentifications for CA, *fide* TJ and B. Ryan)

**Synonyms:** [Parmelia aspera](#), [P. aspidota](#), [P. exasperata](#), [P. olivacea var. aspidota](#)

*Melanelia exasperatula* (Nyl.) Essl. 📷 🌿

(TJ; Tucker & Bratt 1995; Brodo et al. 2001 [p. 434, with color photograph]; Thomson 2003; Jovan & McCune 2004; Benson 2005; Robertson & Beyer 2005; Hinds & Hinds 2007 [p. 310, color photograph only])

=[Melanohalea exasperatula](#)

*Melanelia fuliginosa* (Fr. ex Duby) Essl. 📷 🌿

(Baltzo 1989; Goward et al. 1994; Jovan & McCune 2004)

=[Melanelixia fuliginosa](#)

*Melanelia glabra* (Schaer.) Essl. 📷 🌿

(TJ; Baltzo 1989; von Reis 1991; McGee 1995; Doell & Wright 1996; Tucker & Bratt 1996; Wright 1997; Brodo et al. 2001 [p. 435, with color photograph]; Esslinger 2002; Jovan & McCune 2004; Benson 2005; Carlberg et al. 2007; Knudsen & Kramer 2007; Robertson et al., for Sonoma Co.)

=[Melanelixia glabra](#)

*Melanelia glabratula* (Lamy) Essl. 📷 🌿

- (TJ; Bratt 1999; Brodo et al. 2001 [p. 434]; Esslinger 2002)  
=[Melanelixia fuliginosa](#)
- Melanelia glabroides* (Essl.) Essl. 📷 🌿  
(TJ; Baltzo 1989; Esslinger 2002; Benson 2005; Carlberg et al. 2007)  
=[Melanelixia glabroides](#)
- Melanelia incolorata* (Parrique) Essl. 📷 🌿  
(Baltzo 1989; Ryan & Nash 1991)  
=[Melanohalea elegantula](#)
- Melanelia infumata* (Nyl.) Essl. 📷 🌿  
(TJ; Hinds & Hinds 2007 [p. 314, color photograph only])  
=[Melanohalea infumata](#)
- Melanelia multispora* (A. Schneid.) Essl. 📷 🌿  
(TJ; Hale & Cole 1988; Baltzo 1989; von Reis 1991; Goward et al. 1994; Tucker & Bratt 1996; Wright 1997; Brodo et al. 2001 [p. 436, with color photograph]; Baltzo 2002; Esslinger 2002; Benson 2005)  
=[Melanohalea multispora](#)
- Melanelia sorediata* (Ach.) Goward & Ahti 📷 🌿  
**Synonyms:** [Parmelia sorediata](#), [Parmelia olivacea var. sorediata](#)  
**Note:** According to Brodo et al. (2001, p. 438, color photograph) and Tucker (2002), the species does not occur in California, so the Herre records of *P. sorediata* may represent misidentifications.
- Melanelia subargentifera* (Nyl.) Essl. 📷 🌿  
(TJ; Hale & Cole 1988; Baltzo 1989; von Reis 1991; Goward et al. 1994; Doell & Wright 1996; Hill 1997; Wright 1997; Brodo et al. 2001 [p. 439, with color photograph]; Esslinger 2002; Thomson 2003; Jovan & McCune 2004; Benson 2005; Carlberg et al. 2007)  
=[Melanelixia subargentifera](#)
- Melanelia subaurifera* (Nyl.) Essl. 📷 🌿  
(TJ; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; von Reis 1991; Goward et al. 1994; McGee 1998; Brodo et al. 2001 [pp. 439–440, with color photograph]; Baltzo 2002; Doell 2002; Esslinger 2002; Robertson 2002a, 2003a; Thomson 2003; Jovan & McCune 2004; Tucker et al. 2004; Hinds & Hinds 2007 [p. 320, color photograph only])  
=[Melanelixia subaurifera](#)
- Melanelia subelegantula* (Essl.) Essl. 📷 🌿  
(TJ; Hale & Cole 1988; Baltzo 1989; Goward et al. 1994; Tucker & Bratt 1995; Jovan & McCune 2004; Benson 2005)  
=[Melanohalea subelegantula](#)
- Melanelia subolivacea* (Nyl.) Essl. 📷 🌿  
(TJ; Baltzo 1989; Goward et al. 1994; Tucker & Bratt 1995, 1996; Brodo et al. 2001 [pp. 440–441, with color photograph]; Esslinger 2002; Robertson 2002a, 2003a; Jovan & McCune 2004; Benson 2005; Robertson 2005c; Robertson & Beyer 2005; Knudsen & Kramer 2007)  
=[Melanohalea subolivacea](#)
- Melanelia substygia* (Räsänen) Essl. 📷 🌿  
(Thomson 1984; Ryan & Nash 1991)  
=[M. tominii](#)

**MELANELIXIA** O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch (Blanco et al. 2004a)

**Melanelixia californica** A. Crespo & Divakar 📷 🌿

(Divakar et al. 2010, citing material from San Diego Co.; Villella 2012)

**Melanelixia fuliginosa** (Fr. ex Duby) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch 📷 🌿

(Hinds & Hinds 2007 [p. 310, color photograph only]; Williams & Sillett 2007; Benson et al. 2012)

**Synonyms:** [Melanelia fuliginosa](#), [M. glabratula](#), [Parmelia fuliginosa](#), [P. glabratula](#)

**Melanelixia glabra** (Schaer.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch 📷 🌿

(Knudsen et al. 2009; McCune & Geiser 2009)

**Synonyms:** [Melanelia glabra](#), [Parmelia glabra](#), [P. olivacea var. glabra](#)

**Melanelixia glabroides** (Essl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch 📷 🌿

(McCune & Geiser 2009; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [Melanelia glabroides](#), [Parmelia glabroides](#) (Esslinger 1977a)

**Melanelixia subargentifera** (Nyl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch 📷 🌿

(Villella 2010)

**Synonyms:** [Melanelia subargentifera](#) (TJ; Hale & Cole 1988; Baltzo 1989; von Reis 1991; Goward et al. 1994; Doell & Wright 1996; Hill 1997; Wright 1997; Brodo et al. 2001 [p. 439, with color photograph]; Esslinger 2002; Thomson 2003; Jovan & McCune 2004; Carlberg et al. 2007), [Parmelia conspurcata](#), [P. subargentifera](#)

**Melanelixia subaurifera** (Nyl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch 📷 🌿

(Williams & Sillett 2007; Tucker 2010)

**Synonyms:** [Melanelia subaurifera](#) (TJ; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; von Reis 1991; Goward et al. 1994; McGee 1998; Brodo et al. 2001 [pp. 439–440, with color photograph]; Baltzo 2002; Doell 2002; Esslinger 2002; Robertson 2002a, 2003a; Thomson 2003; Jovan & McCune 2004; Hinds & Hinds 2007 [p. 320, color photograph only]; Rotter 2010; Glacy et al. 2011), [Parmelia subaurifera](#)

**MELANOHALEA** O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch (Blanco et al. 2004a)

**Melanohalea elegantula** (Zahlbr.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch 📷 🌿

(Knudsen & Werth 2008; Knudsen et al. 2009; Knudsen & Kocourková 2009a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [Melanelia elegantula](#), [M. incolorata](#), [Parmelia elegantula](#)

**Melanohalea exasperatula** (Nyl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch 📷 🌿

(Villella 2010)

**Synonyms:** [Melanelia exasperatula](#), [Parmelia exasperatula](#)

**Melanohalea infumata** (Nyl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch 📷 🌿

**Synonyms:** [Melanelia infumata](#), [Parmelia infumata](#)

**Melanohalea multispora** (A. Schneid.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch 📷 🌿

(McCune & Geiser 2009)

**Synonyms:** [Melanelia multispora](#), [Parmelia multispora](#), [Parmelia olivacea var. multispora](#), [P. olivacea var. polyspora](#)

**Melanohalea subelegantula** (Essl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch 📷 🌿

**Synonyms:** [Melanelia subelegantula](#), [Parmelia subelegantula](#)

**Melanohalea subolivacea** (Nyl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch 📷 🌿

(Knudsen & La Doux 2006; Knudsen et al. 2009; Villella 2010)

**Synonyms:** [Melanelia subolivacea](#), [Parmelia subolivacea](#)

**Melanohalea olivacea** (L.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch 📷 🌿

**Synonyms:** *Melanelia olivacea* (L.) Essl. (TJ as misidentifications for CA reports; discussed in Tucker [2002]; mostly Alaska, Canada, in Brodo et al. 2001 [p. 437, with color photograph]), [Parmelia olivacea](#), [Phycia olivacea](#)

**Note:** Several reports in TJ were judged to be based on misidentifications. According to Brodo et al. (2001, p. 437, with color photograph), *M. olivacea* occurs in Alaska and across Canada.

**MELASPILEA** Nyl.

**Melaspilea constrictella** (Stirt.) A. L. Sm. 📷 🌿

(Fink 1935; TJ; Ryan & Nimis 2004 [as “aff.”]; x all based on the reports of *O. constrictella* by McClatchie [1897] and Hasse [1906])

**Synonyms:** [Opegrapha constrictella](#)

**Note:** The species is poorly known; “the identity of N. Amer. material needs clarification and specimens should only very tentatively be given this name” *fide* Ryan & Nimis (2004).

## **MENEGAZZIA** A. Massal.

### **Menegazzia subsimilis** (H. Magn.) R. Sant. 🍄 🌿

(Bjerke 2003 for description, but CA not cited; Hinds & Hinds 2007 [p. 321, color photograph only]; Williams & Sillett 2007; McCune & Geiser 2009)

### **Menegazzia terebrata** (Hoffm.) A. Massal. 🍄 🌿

(Lindsay 1973; Tucker 1973; Malachowski 1975; TJ; Hale & Cole 1988; Goward et al. 1994; Brodo et al. 2001 [pp. 441–443, with color photograph]; Wright 2001a; Robertson 2002a; Ellyson & Sillett 2003)

## **MERISMATIUM** Zopf

### \***Merismatium decolorans** (Rehm *ex* Arnold) Triebel 🍄 🌿

(Knudsen & Kocourková 2010a; Kocourková et al. 2012 [on Santa Monica Mts, Los Angeles Co., on *Cladonia nashii* squamules as a parasite])

## **METAMELANEA** Henssen

### **Metamelanea melambola** (Tuck.) Henssen 🍄 🌿

(Henssen 1989)

**Synonyms:** [\*Pyrenopsis melambola\*](#)

**Note:** According to Schultz (2004, p. 360), Hasse's specimens under this name were misidentified.

## **MICAREA** Fr.

### **Micarea assimilata** (Nyl.) Coppins 🌿

**Synonyms:** [\*Lecidea assimilata\*](#)

**Note:** This species has been collected in western U. S. and Alaska.

### **Micarea cinerea** (Schaer.) Hedl. 🍄 🌿

(Williams & Sillett 2007)

**Note:** This species has been collected in Nova Scotia and Europe.

### **Micarea deminuta** Coppins 🍄 🌿

(Fryday & Coppins 2008; Knudsen 2007b)

### **Micarea denigrata** (Fr.) Hedl. 🍄 🌿

(Wetmore 1985, based on *C. Wetmore 50360* and *J. Blakeman 102*, both Tulare Co., MIN; Knudsen 2007b; Fryday & Coppins 2008; Knudsen et al. 2009; Tucker 2010; Knudsen & Kocourková 2012a; A. Herre 1280, Los Gatos, Santa Clara Co., det. C. Printzen; Herre called it *Catillaria globulosa*)

**Synonyms:** [\*Lecidea parissima\*](#)

### **Micarea elachista** (Körb.) Coppins & R. Sant. 🌿

(*S. Tucker 37920*, Jasper Ridge, San Mateo Co., SBBG)

**Note:** This species is found primarily in Europe.

### **Micarea hedlundii** Coppins 🍄 🌿

(Williams & Sillett 2007)

**Note:** This species has been collected in Michigan, eastern Canada, and Europe.

### **Micarea lignaria** (Ach.) Hedl. 🍄 🌿

**Synonyms:** [\*Bacidia milliaria\*](#), [\*B. milliaria f. lignaria\*](#), [\*Biatora milliaria\*](#), [\*Bilimbia lignaria\*](#)

**Note:** According to Fryday & Coppins (2008), *M. lignaria* is widespread and may occur in CA.

### **Micarea micrococca** (Körb.) Gams *ex* Coppins 🍄 🌿

(Fryday & Coppins 2008; Knudsen & Kocourková 2009a, 2009c; *K. Knudsen 2721, 2737*, Palomar S. P., San Diego Co., on *Pseudotsuga*, UCR)

**Misapplied names:** [\*M. prasina\*](#)



**Micarea misella** (Nyl.) Hedl. 📖 🌿

(TJ; *C. Wetmore 50218*, Atwell Mill Ranger Station, Sequoia N. P., Tulare Co., MIN)

**Synonyms:** [Lecidea misella](#)

**Micarea nitschkeana** (J. Lahm ex Rabenh.) Harm. 📖 🌿

(Fryday & Coppins 2008; Knudsen & Kocourková 2012a; *S. Tucker 34445B*, Hastings Natural History Reserve, Monterey Co., SBBG; *S. Tucker 35777B*, Santa Cruz Isl., Santa Barbara Co., SBBG; *T. Tønsberg 25364*, San Miguel Isl., Santa Barbara Co., ASU; *S. Tucker 35068, 35643A*, Los Osos, San Luis Obispo Co., SBBG)

**Micarea peliocarpa** (Anzi) Coppins & R. Sant. 📖 🌿

(*T. Tønsberg 14700*, Del Norte Co., BG)

**Note:** According to Fryday & Coppins (2008), *M. peliocarpa* is widespread and may occur in CA.

**Micarea prasina** Fr. 📖 🌿

(TJ; Carlberg et al. 2007; Williams & Sillett 2007; Benson et al. 2012; *J. Major, 1966*, Shingle Springs, El Dorado Co., UCD; *S. Tucker 31681*, Clear Lake S. P., Lake Co., SBBG; *S. Tucker 35980B*, 17-Mile Drive, Monterey Peninsula, Monterey Co., SBBG)

**Synonyms:** [Biatora prasina](#), [Catillaria prasina](#), [Lecidea prasina](#)

**Misapplied names:** [Lecidea aniptiza](#) (Herre 1944b [for *C. L. Brown 257*])

**Note:** According to Fryday & Coppins (2008), reports of *M. prasina* from the Sonoran area [such as those by McClatchie and Hasse] are referable to *M. micrococca*.

**Micarea punctella** (Willey) Fryday & Coppins 📖 🌿

(Fryday & Coppins 2008, based on *H. Hasse* collection, det. B. Coppins & A. Fryday)

**Synonyms:** [Biatora punctella](#)

**Micarea synotheoides** (Nyl.) Coppins 📖 🌿

(Tønsberg & Coppins 2000; Williams & Sillett 2007)

**Micarea xanthonica** Coppins & Tønsberg 📖 🌿

(Coppins & Tønsberg 2001)

*Micarea erratica* (Körb.) Hertel 📖 🌿

(Hasse 1903e; Fryday & Coppins 2008; Knudsen 2007b)

=[Leimonis erratica](#)

**Note:** R. Harris (1997, 2009) mentioned he had seen one CA collection, and said that CA collections labeled as this appear very similar to *Lecidea cyrtidia*. The material of Herre (1944b) should be re-examined; see under *Lecidea chalybeiza*.

## MICROCALICIUM Vain.

†**Microcalicium ahneri** Tibell 📖 🌿

(Goward 1999; Peterson & Rikkinen 1999; Rikkinen 2003; Tibell & Ryan 2004)

\***Microcalicium arenarium** (Hampe ex A. Massal.) Tibell 📖 🌿

(Goward 1999; Tibell & Ryan 2004, on *Psilolechia*; Kocourková et al. 2012; rare in CA)

\***Microcalicium conversum** Tibell 📖 🌿

(Tibell & Ryan 2004; Kocourková et al. 2012; a parasite on *Calicium viride* Pers. and *Chaenotheca subroscida*)

\***Microcalicium disseminatum** (Ach.) Vain. 📖 🌿

(Tucker 1997; Wright 1997; Goward 1999; Rikkinen 2003; Tibell & Ryan 2004; Williams & Sillett 2007; Kocourková et al. 2012)

**Synonyms:** [Mycocalicium disseminatum](#)

MICROGLAENA Körb. *nom. illeg.* = [THELENELLA](#)

*Microglæna hassei* Zahlbr. 📖 🌿

(Zahlbruckner 1902; Hasse 1903f, 1913b; Fink 1935; TJ)

=[Thelenella hassei](#)

**Note:** Hasse (1903f) said that his collections of *Microglæna hassei* were distributed as *Pyrenula thelemorpha*.

*Microglæna subcorallina* Hasse 📖 🌿

(Hasse 1913b; Fink 1935; Herre 1944b; TJ)

=[\*Thelenella modesta\*](#)

*Microglæna sychnognioides* Zahlbr. 📖 🌿

(Zahlbruckner 1902; Hasse 1903f, 1913b; Fink 1935; TJ)

=[\*Thelenella sychnognioides\*](#)

**MICROPHIALE** (Stizenb.) Zahlbr.

*Microphiale diluta* (Pers.) Zahlbr. 📖 🌿

(Herre 1944b [*C. L. Brown*, Larkspur, Marin Co., 21 Mar 1943, F, ! S. Tucker]; Esslinger 2011)

=[\*Coenogonium pineti\*](#)

*Microphiale lutea* (Dicks.) Zahlbr. 📖 🌿

(Herre 1944b; Esslinger 2011)

=[\*Coenogonium luteum\*](#)

**MICROTHELIA** Körb.

\**Microthelia aterrima* (Kremp. ex Anzi) Zahlbr. 📖 🌿

(Herre 1942a, 1950a; TJ; Weber et al. 1987)

=[\*Lichenothelia scopularia\*](#)

*Microthelia micula* (Flot.) Körb. 📖 🌿

(Herre 1944b; TJ)

=name misapplied to [\*Anisomeridium polypori\*](#) fide Kocourková (2000, p. 142)

**MINUTOEXCIPULA** V. Atienza & D. Hawksw.

\****Minutoexcipula mariana*** V. Atienza 📖 🌿

(Diederich 2003, 2004; Kocourková et al. 2012; *S. Tucker 34307*, Hope Ranch, Santa Barbara, Santa Barbara Co., on *Pertusaria xanthodes*, SBBG, det. P. Diederich)

\****Minutoexcipula tuckerae*** V. Atienza & D. Hawksw. 📖 🌿

(Diederich 2003, 2004; Kocourková et al. 2012; *S. Tucker 34417*, Lotusland Estate, Montecito, Santa Barbara, Santa Barbara Co., on *Pertusaria xanthodes*, SBBG, det. P. Diederich)

**MIRIQUIDICA** Hertel & Rambold

***Miriquidica deusta*** (Stenh.) Hertel & Rambold 📖 🌿

(Nash, Kainz et al. 2004; *W. Weber L-42723*, Santa Catalina Isl., Los Angeles Co., ASU; *C. Wetmore 50284*, Shepherd Peak, Sequoia N. P., Tulare Co., MIN)

***Miriquidica garovaglii*** (Schaer.) Hertel & Rambold 🌿

(*C. Bratt 9741*, E of Snapper Tower, near Box Cyn, San Clemente Isl. ASU, SBBG, det. A. Fryday)

**Note:** This species has also been collected in Arizona and Colorado.

***Miriquidica griseoatra*** (Flot.) Hertel & Rambold 🌿

**Synonyms:** [\*Lecidea griseoatra\*](#)

***Miriquidica leucophaea*** (Flörke ex Rabenh.) Hertel & Rambold 🌿

**Synonyms:** [\*Lecidea leucophaea\*](#)

**Note:** This species has also been collected in Alaska and eastern U. S.

***Miriquidica scotopholis*** (Tuck.) B. D. Ryan & Timdal 📖 🌿

(Nash, Kainz et al. 2004; Lendemer & Knudsen 2008a; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Glacy et al. 2011; Lendemer 2012 *H. Hasse 808*, Elsinore, Riverside Co., NYBG; *W. Weber*, Univ. Colo. Lich. Exs. 690, San Joaquin Experimental Range, 28 mi. N of Fresno, Madera Co., SBBG)

**Synonyms:** [\*Biatora scotopholis\*](#), [\*Lecanora scotopholis\*](#), [\*Lecidea scotopholis\*](#), [\*M. mexicana\*](#), [\*Psora\*](#)

[scotopholis](#), [Psorula scotopholis](#)

**Note:** This species is known from the central coast of CA (*Bolander*, Oakland), but most old records from southern CA (e.g., Hasse, Merrill) appear to be based on misidentifications of species of *Lecidea*.

*Miriquidica mexicana* Rambold, Sipman, & Hertel 📖 🌿

(Knudsen & Owe-Larsson 2005)

=[M. scotopholis](#) (synonymy *vide* Lendemer & Knudsen 2008a)

**MOBERGIA** H. Mayrhofer & Sheard

**Mobergia angelica** (Stizenb.) H. Mayrhofer & Sheard 📖 🌿

(Mayrhofer et al. 1992; Bowler et al. 1996; Bratt 1997; Mayrhofer & Sheard 2004; Knudsen 2007b, 2009; Knudsen & Kocourková 2010f, 2012a)

**Synonyms:** [Lecanora angelica](#), [Rinodina angelica](#), [R. bolodes](#), [R. dirinoides](#)

**Mobergia calculiformis** (W. A. Weber) H. Mayrhofer & Sheard 📖 🌿

(Mayrhofer et al. 1992; Spjut 1995, both based on *C. R. Orcutt* collection from San Diego; Mayrhofer & Sheard 2004)

**Synonyms:** [Rinodina platyloba](#)

**MOELLEROPSIS** Gyeln.

**Moelleropsis nebulosa** (Hoffm.) Gyeln. subsp. **nebulosa** 📖 🌿

(Jørgensen 2001a, 2002 [Santa Cruz Isl.]; Knudsen & Kramer 2007 [San Jacinto Mts Wilderness]; Knudsen & Kocourková 2012a, citing a collection from Santa Cruz Isl.)

**Note:** This is a leprose cyanolichen.

**MONTANELIA** Divakar et al. =[MELANELIA](#)

**Note:** This genus was not accepted by Esslinger.

*Montanelia disjuncta* (Erichsen) Divakar, A. Crespo, Wedin, & Essl. 📖 🌿

(Divakar et al. 2012)

=[Melanelia disjuncta](#)

*Montanelia panniformis* (Nyl.) Divakar, A. Crespo, Wedin, & Essl. 📖 🌿

(Divakar et al. 2012)

=[Melanelia panniformis](#)

*Montanelia tominii* (Oxner) Divakar, A. Crespo, Wedin, & Essl. 📖 🌿

(Divakar et al. 2012)

=[Melanelia tominii](#)

**MUELLERELLA** Hepp *ex* Müll. Arg.

\***Muellerella erratica** (A. Massal.) Hafellner & V. John 🌿

**Synonyms:** [M. pygmaea var. athallina](#)

**Misapplied names:** [M. lichenicola](#)

**Note:** A report of *M. lichenicola* (Knudsen 2007b) was revised to *M. erratica* by Knudsen & Kocourková (2009b).

\***Muellerella lecanactidis** Diederich & van den Boom 📖 🌿

(Diederich 2003 [type is from Morro Bay]; Triebel & Kainz 2004 [p. 674]; Knudsen & Kocourková 2009a; Kocourková et al. 2012; *K. Knudsen 3261.2*, Point Loma, San Diego Co., parasitic on *Lecanactis* and *Sigridea*; CA endemic)

\***Muellerella lichenicola** (Sommerf. *ex* Fr.) D. Hawksw. 📖 🌿

(Hafellner et al. 2002; Diederich 2003; Triebel & Kainz 2004; Knudsen & Kocourková 2012a, citing Santa Rosa Isl. collection on *Lecanora*; Kocourková et al. 2012; *K. Knudsen 11122*, Point Lobos State Reserve, Monterey Co., UCR)

**Note:** A determination by Knudsen (2007b) was re-determined as *M. erratica* in Knudsen &

Kocourková (2009b).

\***Muellerella pygmaea** (Körb.) D. Hawksw. var. **pygmaea** 📍 🌿

(Triebel et al. 1991; Riefner, Bowler, & Ryan 1995; Triebel & Kainz 2004; Knudsen & Werth 2008; Knudsen & Kocourková 2012c; Kocourková et al. 2012)

\***Muellerella ventosicola** (Mudd) D. Hawksw. 📍 🌿

(Knudsen et al. 2009; *K. Knudsen 9136*, Cuyamaca Peak, San Diego Co., on *Rhizocarpon* spp., UCR)

**Synonyms:** [M. pygmaea var. ventosicola](#)

\***Muellerella pygmaea** var. **athallina** (Müll. Arg.) Triebel 📍 🌿

(Triebel & Kainz 2004; Knudsen & Werth 2008; Kocourková et al. 2012)

=[M. erratica](#)

\***Muellerella pygmaea** var. **ventosicola** (Mudd) Triebel 📍 🌿

(Triebel & Kainz 2004; Kocourková et al. 2012)

=[M. ventosicola](#)

## MULTICLAVULA R. Petersen

**Multiclavula corynoides** (Peck) R. H. Peterson 📍 🌿

(*J. Robertson 10160e*, Lucas Valley Rd, Big Rock Trail, Marin Co. Apr. 4, 2008, SBBG)

**Multiclavula mucida** (Fr.) R. Petersen 🌿

(*D. Toren 1718*, Mt. San Hedrin Rd near Lake Pillsbury, Lake Co., ASU; *L. Sigal 3123*, Redding Rd, Tehama Co., ASU)

## MYCOBILIMBIA Rehm

**Mycobilimbium austrocalifornica** Nyl. 📍 🌿

(Knudsen 2005c; Knudsen 2007b; CA endemic)

**Synonyms:** [Lecidea austrocalifornica](#) (“California” in Zahlbr. 1925), [L. myriocarpoides](#),

**Note:** The name *Lecidea subplebeia* has been misapplied to this taxon in CA *vide* Knudsen.

**Mycobilimbium berengeriana** (A. Massal.) Hafellner & V. Wirth 📍 🌿

(Thomson 2003; *J. Robertson 425b*, Jasper Ridge Biological Preserve, on sandstone outcrop along Short Creek Trail, San Mateo Co., UC)

**Synonyms:** [Lecidea berengeriana](#)

**Mycobilimbium hypnorum** (Lib.) Kalb & Hafellner 🌿

**Synonyms:** [Lecidea sanguineoatra](#), [L. sanguineoatra f. corticola](#)

**Note:** This species is widespread in the U. S.

**Mycobilimbium lurida** (Ach.) Hafellner & Türk 📍 🌿

(Hafellner & Türk 2001; Timdal 2008)

=[Romjularia lurida](#)

## MYCOBLASTUS Norman

**Mycoblastus affinis** (Schaer.) T. Schauer 📍 🌿

(Lindsay 1973; TJ; Robertson 2002a; Williams & Sillett 2007; *S. Tucker 35209, 35244*, Pygmy Forest near Fort Bragg, Mendocino Co., SBBG)

**Misapplied names:** *M. alpinus* (sterile collections)

**Mycoblastus caesius** (Coppins & P. James) Tønsberg 📍 🌿

(Williams & Sillett 2007; *T. Tønsberg TT14735*, Del Norte Co., BG)

**Note:** This species has been collected in Washington.

**Mycoblastus sanguinarius** (L.) Norman 📍 🌿

(Lindsay 1973; TJ; Brodo et al. 2001 [pp. 446–447, with color photograph]; Robertson 2002a; Ellyson & Sillett 2003; Williams & Sillett 2007)

**Synonyms:** [Heterothecium sanguinarium](#)

**Mycoblastus alpinus** (Fr.) Kernst. 📍 🌿

(Hale & Cole 1988)

**Note:** All determinations for CA are misidentifications of *M. affinis*, *fide* B. Ryan. *M. alpinus* is almost always sterile, and therefore is difficult to recognize as being a *Mycoblastus*.

*Mycoblastus tornoënsis* (Nyl.) R. A. Anderson 📖 🌿

(Anderson & Carmer 1974; TJ)

=[\*Japewia tornoënsis\*](#)

## MYCOCALICIUM Vain.

**Mycocalicium albonigrum** (Nyl.) Fink 📖 🌿

(Fink 1935; Lindsay 1973; TJ; Ryan & Nash 1991; Baltzo 2002; Rikkinen 2003; Tibell 2008)

**Synonyms:** [\*Calicium albonigrum\*](#), [\*C. parietinum\* var. \*albonigrum\*](#)

†**Mycocalicium sequoiae** Bonar 📖 🌿

(Bonar 1971; the species was omitted in TJ; Wetmore 1985 [based on *J. Blakeman* 282, Sequoia N. P., Tulare Co., 28 July 1985, MIN]; Tibell & Titov 1995; Rikkinen 2003; Villella 2012; CA endemic)

†**Mycocalicium subtile** (Pers.) Szatala 📖 🌿

(Pinelli & Jordan 1978; TJ; Weber et al. 1987; Tucker 1997; Baltzo 2002; Rikkinen 2003; Thomson 2003; Benson 2005; Carlberg et al. 2007; Tibell 2008; Knudsen & Kocourková 2012a)

**Synonyms:** [\*M. parietinum\*](#), [\*Calicium parietinum\*](#), [\*C. subtile\*](#)

**Mycocalicium victoriae** (C. Knight ex F. Wils.) Tibell 📖 🌿

(Tibell 2008; Knudsen & Kocourková 2012a; *T. Nash* 32497, Santa Cruz Isl., Santa Barbara Co., ASU)

\***Mycocalicium disseminatum** (Ach.) Fink 📖 🌿

(Fink 1935; TJ)

=[\*Microcalicium disseminatum\*](#)

**Mycocalicium microcephalum** (Sm.) Fink 📖 🌿

(TJ; see under *Sphinctrina microcephala*)

=[\*Sphinctrina anglica\*](#)

†**Mycocalicium parietinum** (Ach. ex Schaer.) D. Hawksw. 📖 🌿

(TJ)

=[\*M. subtile\*](#)

## MYCOMICROTHELIA Keissler

†**Mycomicrothelia dothideaspora** (Cooke & Harkn.) D. Hawksw. 📖 🌿

(Hawksworth 1985)

†**Mycomicrothelia inaequalis** (Fabre) D. Hawksw. 📖 🌿

(Hawksworth 1985)

## MYCOPORELLUM Müll. Arg.

**Mycoporellum californicum** Zahlbr. 📖 🌿

(Zahlbruckner 1912b; Hasse 1915a; Fink 1935)

=[\*Mycoporum californicum\*](#) (Aptroot 2002)

\***Mycoporellum epistigmellum** Hasse 📖 🌿

(Hasse 1913b; *H. Hasse*, Santa Monica Mts, Los Angeles Co., Lichenes Exsiccati, Sullivant Moss Soc. 2202, MIN; *T. Nash* 38916, San Nicolas Isl., Ventura Co., ASU)

=[\*Stigmatidium epistigmellum\*](#)

**Mycoporellum hassei** Zahlbr. 📖 🌿

(Hasse 1912, 1913b; Merrill 1923; Fink 1935; Riedl 1962a [collection from Santa Catalina Isl.])

=[\*Mycoporum eschweileri\*](#) (*fide* Aptroot 1997)

**Mycoporellum lacteum** (Ach.) R. C. Harris 📖 🌿

(*H. Hasse*, May, 1911, Santa Catalina Isl., Los Angeles Co., Lichenes Exsiccati, Sullivant Moss Soc. 113, MU)

=[Mycoporum eschweileri](#) (Aptroot 2002)

*Mycoporellum sparsellum* (Nyl.) Müll. Arg. 📖 🌿

(Fink 1935; Riedl 1962a [Farlow collection, San Diego Co.]; but invalid name and based on misidentifications)

=[Mycoporum sparsellum](#)

**MYCOPOROPSIS** Riedl

*Mycoporopsis californica* (Zahlbr.) Riedl 📖 🌿

(Riedl 1963)

=[Mycoporum californicum](#)

**MYCOPORUM** Flot. ex Nyl.

**Mycoporum antecellens** (Nyl.) R. C. Harris 📖 🌿

(Tucker 2010; *S. Tucker* 34375 pr. p., Montecito, Santa Barbara Co., SBBG; *S. Tucker* 34498, 34574, Hastings Natural History Reserve, Monterey Co., SBBG, det. A. Aptroot)

**Synonyms:** [Arthopyrenia antecellens](#)

**Mycoporum californicum** (Zahlbr.) R. C. Harris 📖 🌿

(R. Harris 1975; TJ; R. Harris 1995; Aptroot 2002; Tucker 2010)

**Synonyms:** [Mycoporellum californicum](#), [Mycoporopsis californica](#), [Tomasellia californica](#)

**Mycoporum eschweileri** (Müll. Arg.) R. C. Harris 📖 🌿

(Aptroot 2002; Tucker 2010; *S. Tucker* 34358, 34761, Santa Barbara, Santa Barbara Co., ASU, SBBG, det. A. Aptroot)

**Synonyms:** [Mycoporellum hassei](#), [M. lacteum](#), [Tomasellia eschweileri](#), [Tomasellia lactea](#)

**Mycoporum sparsellum** Nyl. 🌿

**Synonyms:** [Mycoporellum sparsellum](#)

**Note:** This species occurs most commonly in southeastern U. S.

*Mycoporum compositum* (A. Massal.) R. C. Harris 🌿

(error for CA, based on Fink [1935])

**Synonyms:** [M. ohiense](#), [M. pycnocarpum](#), *Dermatina* “pyrenocarpa” of Fink

*Mycoporum ohiense* Nyl. ex Fink 📖 🌿

(Fink 1935; TJ)

=[M. compositum](#); error for CA, based on Fink report

*Mycoporum pycnocarpum* (Nyl.) Zahlbr. 📖 🌿

(Fink 1935)

=[M. compositum](#) (error for CA, based on Fink report)

**MYRIOSPORA** Nägeli ex Uloth

**Myriospora hassei** (Herre) K. Knudsen & L. Arcadia 📖 🌿

(Arcadia & Knudsen 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [Acarospora dispersa](#), [A. dispersa](#), [A. hassei](#), [A. particularis](#), [A. smaragdula](#) var. [lesdainii](#), [Silobia hassei](#)

**Misapplied names:** [A. smaragdula](#) var. [smaragdula](#)

**Myriospora scabrida** (Hedl. ex H. Magn.) K. Knudsen & L. Arcadia 📖 🌿

(Arcadia & Knudsen 2012; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [Acarospora scabrida](#), [Silobia scabrida](#)

**Myriospora smaragdula** (Wahlenb. ex Ach.) Nägeli ex Uloth 📖 🌿

(Arcadia & Knudsen 2012)

**Synonyms:** [Acarospora smaragdula](#), [Lecanora fuscata](#) var. [rufescens](#), [Lecanora smaragdula](#)

*Myriospora heppii* (Nägeli ex Körb.) Hue 📖 🌿

(Harris & Knudsen 2006, for name change; Knudsen 2008; Knudsen & Kocourková 2010a)  
=[Caeruleum heppii](#)

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

## NAETROCYMBE Körb.

**Naetrocymbe herrei** K. Knudsen & Lendemer  

(Knudsen & Lendemer 2009b [based on collections on rock from San Luis Obispo Co. and Point Lobos in San Francisco Co.]; Vilella 2012)

**Synonyms:** [Arthopyrenia herrei](#)

**Naetrocymbe punctiformis** (Pers.) R. C. Harris  

(Glacy et al. 2011; Knudsen & Kocourková 2012a)


**Synonyms:** [Arthopyrenia epidermidis](#), [A. padi](#), [A. punctiformis](#), [Pyrenula punctiformis](#), [Verrucaria epidermidis](#), [V. punctiformis](#)

**Naetrocymbe saxicola** (A. Massal.) R. C. Harris  

(Lendemer et al. 2010)



**Note:** This species has been found in North Carolina and Europe.

**NEOFUSCELIA** Essl. = **XANTHOPARMELIA** (Blanco et al. 2004b)

*Neofuscelia loxodes* (Nyl.) Essl.  

(TJ; Baltzo 1989; Goward et al. 1994; Doell et al. 1999; Brodo et al. 2001 [p. 450, with color photograph]; Esslinger 2002)

=[Xanthoparmelia loxodes](#)

*Neofuscelia subhosseana* (Essl.) Essl.  

(Weber et al. 1987; Hale & Cole 1988; Goward et al. 1994; Brodo et al. 2001 [p. 451, with color photograph]; Esslinger 2002; Benson 2005)

=[Xanthoparmelia subhosseana](#)

*Neofuscelia verruculifera* (Nyl.) Essl.  

(TJ; Hale & Cole 1988; von Reis 1991; Goward et al. 1994; Bowler et al. 1996; Esslinger 2002; Robertson 2002c, 2003a; Tucker et al. 2004; Robertson 2005b; Carlberg et al. 2007; Knudsen & Kocourková 2009b, 2009c; Benson et al. 2012; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. McCune 18866*, Shasta River cyn, 10 km NNE of Yreka, Siskiyou Co., ASU; *S. Tucker 37597*, Mt. Tamalpais, Marin Co., SBBG; *C. Bratt 10135*, San Clemente Isl., Los Angeles Co., SBBG)



=[Xanthoparmelia verruculifera](#).

## NEOLAMYA Theiss. & Syd.

\***Neolamya xanthoparmeliae** Kocourk.  

(Kocourková 2009; Kocourková et al. 2012; a rare lichenicole on *Xanthoparmelia mexicana* from Riverside Co.)

## NEPHROMA Ach.

**Nephroma bellum** (Spreng.) Tuck.  

(TJ; Hale 1979 [p. 135]; Brodo et al. 2001 [pp. 452–453, with color photograph, did not show it in CA, but in adjacent southern Oregon; collections discussed in Tucker 2002]; Ellyson & Sillett 2003; Jovan & McCune 2004; Hinds & Hinds 2007 [p. 237, color photograph only]; Williams & Sillett 2007; *H. Thiers* collection, San Francisco watershed, San Mateo Co., CAS, ! S. Tucker)

**Nephroma helveticum** Ach.  

(Tuckerman 1882; Hasse 1903c; Herre 1910; Pinelli & Jordan 1978; TJ; Tucker & Bratt 1995, 1996; Robertson 2002a; Wetmore & Nash 2002; Ellyson & Sillett 2003; Robertson 2003a; Jovan & McCune

2004; Brodo et al. 2001 [p. 453, color photograph but no CA report]; Hinds & Hinds 2007 [p. 328, color photograph only])

**Synonyms:** [\*Nephromium helveticum\*](#)

***Nephroma helveticum*** subsp. ***sipeanum*** (Gyeln.) Goward & Ahti 📖 🌿

(Brodo et al. 2001 [p. 454])

**Synonyms:** [\*N. helveticum\* var. \*sipeanum\*](#)

***Nephroma laevigatum*** Ach. 📖 🌿

(Tuckerman 1872; Fink 1935; Herre 1942c; Wetmore 1960; Jordan 1968; Lindsay 1973; Malachowski 1975; TJ; Hale & Cole 1988; Goward et al. 1994; McGee 1995; West & Doell 1995; Wright 1997, 1998; Brodo et al. 2001 [p. 455, with color photograph]; McGee 2001; Baltzo 2002; Robertson 2002a, 2003a; Williams & Sillett 2007; McCune & Geiser 2009; Benson & Hillyard 2012)

**Synonyms:** [\*N. lusitanicum\*](#), [\*Nephromium lusitanicum\*](#)

***Nephroma parile*** (Ach.) Ach. 📖 🌿

(Tucker & Kowalski 1975; Pinelli & Jordan 1978; TJ; Thomson 1984; Bowler et al. 1996; Wright 1998; Brodo et al. 2001 [pp. 456–457, with color photograph]; Robertson 2005c; Hinds & Hinds 2007 [p. 329, color photograph only]; Knudsen & Kocourková 2012a)

**Note:** This lichen is rare throughout CA.

***Nephroma resupinatum*** (L.) Ach. 📖 🌿

(Herre 1910; Wetmore 1960; Jordan 1968; Lindsay 1973; Pinelli & Jordan 1978; TJ; Thomson 1984; Goward et al. 1994; Wright 1997, 1998; Brodo et al. 2001 [p. 457, with color photograph]; Baltzo 2002; Robertson 2002a; Blauman 2004a; Jovan & McCune 2004; Hinds & Hinds 2007 [p. 330, color photograph only]; Williams & Sillett 2007)

**Synonyms:** [\*Nephroma rameum\*](#), [\*Nephromium tomentosum\* var. \*rameum\*](#)

*Nephroma helveticum* var. *sipeanum* (Gyeln.) Wetmore 📖 🌿

(Wetmore 1960; TJ)

=[\*N. helveticum\* subsp. \*sipeanum\*](#)

*Nephroma lusitanicum* Schaer. 📖 🌿

(Tuckerman 1882; Herre 1910; Gyelnik 1931; Fink 1935; Thomson & Ketchledge 1958)

=[\*N. laevigatum\*](#) Ach.

*Nephroma occultum* Wetmore 📖 🌿

(Zavarzin & Timdal 2004 [an incorrect reference cited a CA report in “Tavares et al. 1996”, which actually referred to a 1996 article by Reynolds on this species in Washington state])

*Nephroma rameum* (Schaer.) A. Massal. 📖 🌿

(Fink 1935)

=[\*N. resupinatum\*](#) (synonymy *fide* Esslinger & Tucker 2009)

**NEPHROMIUM** Nyl. =**NEPHROMA**

*Nephromium helveticum* (Ach.) Nyl. 📖 🌿

(Herre 1906, 1907)

=[\*Nephroma helveticum\*](#)

*Nephromium lusitanicum* (Schaer.) Nyl. 📖 🌿

(Herre 1906, 1907)

=[\*Nephroma laevigatum\*](#)

*Nephromium tomentosum* (Hoffm.) Nyl. var. *rameum* Nyl. 📖 🌿

(Herre 1906, 1907)

=[\*Nephroma resupinatum\*](#)

**NEPHROMOPSIS** Müll. Arg.

*Nephromopsis californica* Gyeln. 📖 🌿

(Gyelnik 1931; Herre 1942a, 1950a, 1956)



=[Tuckermannopsis orbata](#)

*Nephromopsis ciliaris* (Ach.) Hue 📖 🌿

(Herre 1910)

=[Tuckermannopsis ciliaris](#)

*Nephromopsis platyphylla* (Tuck.) Herre 📖 🌿

(Herre 1910; Zahlbruckner 1910; Herre 1912a, 1940, 1942b, 1950a)

=[Tuckermannopsis platyphylla](#)

## NESOLECHIA A. Massal.

\***Nesolechia oxyspora** (Tul.) A. Massal. 📖 🌿

(Doré et al. 2006 [work partly based on J. & R. Robertson collections from Lake Co.]; Kocourková 2000, p. 107; Kocourková et al. 2012; *S. Tucker* 28798 pr. p., Bartlett Springs Rd, Lake Co., SBBG, on *Flavopunctelia flaventior*, det. D. Triebel as *Phacopsis oxyspora* var. *defecta*; *S. Tucker* 37157 pr. p., Pollard Flat SW of Dunsmuir, Shasta Co., on *Parmelia sulcata*, SBBG, det. P. Diederich; *S. Tucker* 31759, Austin Creek, Armstrong Redwoods S. P., Sonoma Co., SBBG, on *Platismatia herrei*, det. D. Triebel; *C. Bratt* 7184B, Anita Cyn, Hollister Ranch, on *Hypotrachyna*, SBBG, det. P. Diederich)

**Synonyms:** [\*Phacopsis oxyspora\*](#) [\*P. oxyspora\*](#) var. [\*fusca\*](#),

**Note:** This species is frequent on *Xanthoparmelia* spp. in southern CA.

## NIEBLA Rundel & Bowler

**Niebla cedrosensis** J. E. Marsh & T. H. Nash 📖 🌿

(Bowler & Marsh 2004)

**Note:** This species is common in Baja California.

**Niebla cephalota** (Tuck.) Rundel & Bowler 📖 🌿

(TJ; Hale & Cole 1988; Bratt 1993; Bowler & Riefner 1995; West & Doell 1995; Bowler et al. 1996; Goward 1999; Brodo et al. 2001 [pp. 457–458, with color photograph]; Tucker 2002; Bowler & Marsh 2004; Geiser et al. 2004; Jovan & McCune 2004; Tucker et al. 2004; Glavich et al. 2005a, 2005b; Knudsen 2007b, 2009; McCune & Geiser 2009; Knudsen & Kocourková 2010f; Rotter 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [\*Desmazieria cephalota\*](#), [\*Ramalina ceruchis\*](#) f. [\*cephalota\*](#), [\*Roccella ceruchis\*](#) f. [\*cephalota\*](#), [\*Vermilacinia cephalota\*](#)

**Niebla ceruchis** (Ach.) Rundel & Bowler 📖 🌿

(TJ; von Reis 1991; Bowler & Riefner 1995; Riefner, Bowler, & Ryan 1995; Bowler et al. 1996; Bowler & Marsh 2004; Knudsen 2007b, 2009; Knudsen & Kocourková 2009a, 2010a [citing a Hasse collection], 2010f, 2012a)

**Synonyms:** [\*Desmazieria ceruchis\*](#), [\*Ramalina ceruchis\*](#), [\*Niebla cerebrata\*](#), [\*Vermilacinia cerebrata\*](#), [\*V. corrugata\*](#), [\*V. howei\*](#), [\*V. leopardina\*](#), [\*V. nylanderii\*](#), [\*V. zebrina\*](#)

**Niebla ceruchoides** Rundel & Bowler 📖 🌿

(Weber 1989a; Bowler et al. 1994; Bowler & Riefner 1995; Bowler et al. 1996; Brodo et al. 2001; Tucker 2002; Bowler & Marsh 2004; Knudsen 2007b, 2009; Knudsen & Kocourková 2010f, 2012a; W. Weber, Univ. Colo. Lich. Exs. 658, below summit of Mt. Diablo, Santa Cruz Isl., Santa Barbara Co., ASU, SBBG; *T. Nash* 32905A, Lich. Exs. 173, Twin Faults area, Santa Rosa Isl., Santa Barbara Co., ASU, MSC, SBBG, WIS)

**Synonyms:** [\*Vermilacinia acicularis\*](#), [\*V. ceruchoides\*](#), [\*V. pumila\*](#)

**Niebla combeoides** (Nyl.) Rundel & Bowler 📖 🌿

(TJ; Hale & Cole 1988; von Reis 1991; Bratt 1993; Bowler & Riefner 1995; McGee 1995; Brodo et al. 2001 [p. 458, with color photograph]; Doell 2002; Tucker 2002; Bowler & Marsh 2004; Knudsen 2009; Knudsen & Kocourková 2010f)

**Synonyms:** [\*Ramalina combeoides\*](#), [\*Roccella combeoides\*](#), [\*Vermilacinia combeoides\*](#)

**Niebla homalea** (Ach.) Rundel & Bowler 📖 🌿

(TJ; Hale & Cole 1988; von Reis 1991; Bratt 1993; Bowler & Riefner 1995; McGee 1995; West & Doell 1995; Bowler et al. 1996; Spjut 1996; Brodo et al. 2001; Doell 2002; Bowler & Marsh 2004; Robertson 2005b; Knudsen 2007b, 2009; Knudsen & Kocourková 2009a, 2010f; Glacy et al. 2011; Knudsen & Kocourková 2012a; *Vězda*, 1981, Lich. Exs. 1755)

**Synonyms:** [\*N. caespitosa\*](#), [\*N. cornea\*](#), [\*N. dactylifera\*](#), [\*N. disrupta\*](#), [\*N. dissecta\*](#), [\*N. eburnea\*](#), [\*N. fimbriata\*](#), [\*N. flagelliforma\*](#), [\*N. halei\*](#), [\*N. infundibula\*](#), [\*N. laminaria\*](#), [\*N. palmeri\*](#), [\*N. ramosissima\*](#), [\*N. siphonoloba\*](#), [\*N. sorediata\*](#), [\*N. sorocarpia\*](#), [\*N. testudinaria\*](#), [\*N. undulata\*](#), [\*Ramalina homalea\*](#), [\*R. homalea\*](#) var. [\*disrupta\*](#), [\*R. testudinaria\*](#)

**Misapplied names:** [\*Roccella homalea\*](#)

**Niebla isidiaescens** Bowler, J. E. Marsh, T. H. Nash & Riefner 📖 🌿

(Bowler et al. 1994; Bowler & Riefner 1995; Bowler et al. 1996; Spjut 1996; Bowler & Marsh 2004; Knudsen & Kocourková 2010f, 2012a)

**Niebla laevigata** Rundel & Bowler 📖 🌿

(Bowler et al. 1994; Bowler & Riefner 1995; Bowler et al. 1996; Brodo et al. 2001 [p. 460, with color photograph]; Doell 2002; Tucker 2002; Bowler & Marsh 2004; Knudsen 2009; Knudsen & Kocourková 2010f, 2012a)

**Synonyms:** [\*Vermilacinia laevigata\*](#), [\*V. paleoderma\*](#)

**Niebla polymorpha** Bowler, J. E. Marsh, T. H. Nash & Riefner 📖 🌿

(Bowler et al. 1994; Bowler & Riefner 1995; Bowler & Marsh 2004; Knudsen & Kocourková 2012a)

**Synonyms:** [\*Vermilacinia polymorpha\*](#)

**Niebla procera** Rundel & Bowler 📖 🌿

(Bowler et al. 1994; Bowler & Riefner 1995; Bowler et al. 1996; Brodo et al. 2001; Tucker 2002; Bowler & Marsh 2004; Knudsen 2009; Knudsen & Kocourková 2012a)

**Synonyms:** [\*Vermilacinia procera\*](#)

**Niebla robusta** (R. Howe) Rundel & Bowler 📖 🌿

(Rundel & Bowler 1978; Bowler & Riefner 1995; Bowler et al. 1996; Bowler & Marsh 2004; Knudsen 2009; Knudsen & Kocourková 2010f, 2012a)

**Synonyms:** [\*Ramalina combeoides\*](#) var. [\*robusta\*](#), [\*Vermilacinia robusta\*](#)

**Niebla tuberculata** Riefner, Bowler, J. E. Marsh & T. H. Nash 📖 🌿

(Bowler & Riefner 1995; Riefner, Bowler, Marsh, & Nash 1995; Bowler & Marsh 2004; CA endemic)

**Synonyms:** [\*Vermilacinia tuberculata\*](#)

**Niebla caespitosa** Spjut 📖 🌿

(Spjut 1996)

=[\*N. homalea\*](#), divaricatic acid race

**Niebla cerebra** Spjut 📖 🌿

(Spjut 1996)

=[\*N. ceruchis\*](#)

**Niebla cornea** Spjut 📖 🌿

(Spjut 1996)

=[\*N. homalea\*](#), sekikaic acid race

**Niebla dactylifera** Spjut 📖 🌿

(Spjut 1996)

=[\*N. homalea\*](#), sekikaic acid race

**Niebla disrupta** (Nyl.) Spjut 📖 🌿

(Spjut 1996)

=[\*N. homalea\*](#), sekikaic acid race

**Niebla dissecta** Spjut 📖 🌿

(Spjut 1996; Bratt 1999)

=[\*N. homalea\*](#), sekikaic acid race

**Niebla eburnea** Spjut 📖 🌿

- (Spjut 1996)  
 =[N. homalea](#), divaricatic acid race
- Niebla fimbriata* Spjut 🍄 🌿  
 (Spjut 1996)  
 =[N. homalea](#), sekikaic acid race
- Niebla flaccescens* (Nyl.) Rundel & Bowler 🍄 🌿  
 (TJ; misidentifications, *fide* Spjut 1996; only in Peru and Chile)  
**Synonyms:** [Ramalina flaccescens](#)
- Niebla flagelliforma* Spjut 🍄 🌿  
 (Spjut 1996)  
 =[N. homalea](#), divaricatic acid race
- Niebla halei* Spjut 🍄 🌿  
 (Spjut 1996)  
 =[N. homalea](#), divaricatic acid race
- Niebla infundibula* Spjut 🍄 🌿  
 (Spjut 1996)  
 =[N. homalea](#), divaricatic acid race
- Niebla laminaria* Spjut 🍄 🌿  
 (Spjut 1996; Bratt 1997, 1999)  
 =[N. homalea](#), divaricatic acid race
- Niebla palmeri* Spjut 🍄 🌿  
 (Spjut 1996)  
 =[N. homalea](#), sekikaic acid race
- Niebla ramosissima* Spjut 🍄 🌿  
 (Spjut 1996)  
 =[N. homalea](#), divaricatic acid race
- Niebla siphonoloba* Spjut 🍄 🌿  
 (Spjut 1996)  
 =[N. homalea](#), sekikaic acid race
- Niebla sorediata* Spjut 🍄 🌿  
 (Spjut 1996; Bratt 1999)  
 =[N. homalea](#), divaricatic acid race
- Niebla sorocarpia* Spjut 🍄 🌿  
 (Spjut 1996; Bratt 1999)  
 =[N. homalea](#), divaricatic acid race
- Niebla testudinaria* (Nyl.) Spjut 🍄 🌿  
 (Spjut 1996; Bratt 1997, 1999)  
 =[N. homalea](#), divaricatic acid race
- Niebla tigrina* (Follmann) Rundel & Bowler 🍄 🌿  
**Synonyms:** [Vermilacinia tigrina](#) (Spjut 1996 [from Channel Is. and San Diego area])  
**Note:** This taxon was not included in the treatment of *Niebla* for the Sonoran region by Bowler & Marsh 2004.
- Niebla undulata* Spjut 🍄 🌿  
 (Spjut 1996)  
 =[N. homalea](#), divaricatic acid race

#### NISSLIA Auersw.

- \***Niesslia peltigericola** (D. Hawksw.) Etayo & Sancho 🍄 🌿  
 (Lendemer et al. 2010; Kocourková et al. 2012; Lendemer collection from Yosemite N. P., Mariposa Co., on *Peltigera didactyla*, NY)

## NIGROPUNCTA D. Hawksw.

### \**Nigropuncta rugulosa* D. Hawksw. 🍄 🌿

(Kocourková et al. 2012; *H. Thiers* collection from CA on *Sphaerophorus globosus*, WIS, *fide* Alstrup & Cole 1998)

## NODOBRYORIA Common & Brodo

### *Nodobryoria abbreviata* (Müll. Arg.) Common & Brodo 🍄 🌿

(Common & Brodo 1995; Tucker & Bratt 1996; Goward 1999; Brodo et al. 2001 [pp. 460–461, with color photograph]; Robertson 2002a; Ryan 2002; Jovan & McCune 2004; Robertson & Beyer 2005; Knudsen & Kramer 2007; Knudsen et al. 2009 citing Sigal & Ryan [1983] and suggesting the species may be extinct in the Cuyamaca Mts of San Diego Co.; McCune & Geiser 2009)

**Synonyms:** [\*Bryoria abbreviata\*](#)

### *Nodobryoria oregana* (Tuck.) Common & Brodo 🍄 🌿

(Common & Brodo 1995; Goward 1999; Brodo et al. 2001 [p. 461, with color photograph]; Jovan & McCune 2004; doubtful in southern CA, *fide* Ryan 2002; McCune & Geiser 2009)

**Synonyms:** [\*Alectoria oregana\*](#), [\*Bryoria oregana\*](#)

### *Nodobryoria subdivergens* (Å. E. Dahl) Common & Brodo 🍄 🌿

(Goward 1999, but this species is arctic, reaching south to western Montana)

## NORMANDINA Nyl.

### *Normandina pulchella* (Borrer) Nyl. 🍄 🌿

(Baltzo 1970; Lindsay 1973; Sigal & Toren 1974; Tucker & Kowalski 1975; Pinelli & Jordan 1978; TJ; Hale & Cole 1988; Baltzo 1989; Tucker & Bratt 1996; Wright 1997; McGee 1998; Brodo et al. 2001 [pp. 461–462, with color photograph]; McGee 2001; Baltzo 2002; Robertson 2003a; Tønsberg 2004; Tucker et al. 2004; Hinds & Hinds 2007 [p. 331, color photograph only]; Knudsen & Kocourková 2012a)

**Synonyms:** [\*N. jungermanniae\*](#)

### *Normandina jungermanniae* Nyl. 🍄 🌿

(Tuckerman 1872; Willey 1873a)

=[\*N. pulchella\*](#)

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

## OBRYZUM Wallr.

### \**Obryzum corniculatum* Wallr. 🍄 🌿

(Diederich 2008; Kocourková et al. 2012; on collection of *Leptogium* from San Benito Co. in central CA)

## OCELLULARIA G. Meyer

### *Ocellularia subtilis* (Tuck.) Riddle 🍄 🌿

(Lindsay 1973)

=[\*Thelotrema subtile\*](#), but misidentifications

**Note:** According to Fink (1935), range for this species is the east coast of U. S. to Florida and W to Texas.

## OCHROLECHIA A. Massal.

### *Ochrolechia africana* Vain. 🍄 🌿

(Brodo 1991; Wright 1997; Brodo et al. 2001 [pp. 464–465, with color photograph]; Roemer et al. 2004; Knudsen et al. 2009; Knudsen & Kocourková 2012a)

### *Ochrolechia arborea* (Kreyer) Almb. 🍄 🌿

(Roemer et al. 2004; Williams & Sillett 2007; Knudsen & Kocourková 2009b; Benson et al. 2012; Knudsen & Kocourková 2012a; *T. Tønsberg TT18408, TT18411*, Hollister Ranch, Santa Barbara Co.)  
**Note:** Collections are known from Marin Co. S to Santa Barbara Co.

**Ochrolechia farinacea** G. E. Howard 🍄 🌿

(Brodo 1991; Wright 1997)

**Note:** This species has been collected in central and northern coastal CA.

**Ochrolechia gowardii** Brodo 🍄 🌿

(Robertson & Robertson 2008, from Yuba Co.; *R. Robertson 9759*, SFSU Sierra Nevada Field Station, 6 mi. NE of Sierra City on Hwy 49, Sierra Co., UC; *C. Wetmore 24405*, Manila, 5 mi. S of Arcata, Humboldt Co., MIN)

**Ochrolechia juvenalis** Brodo 🍄 🌿

(Brodo 1991; Wright 1997; Brodo et al. 2001 [p. 466, with color photograph]; Ellyson & Sillett 2003; Blauman 2004a; Williams & Sillett 2007; Glacy et al. 2011; *T. Nash 11405*, 8 km E of Navarro on State Hwy. 138, Mendocino Co., ASU; *S. Tucker 35445B*, Pillsbury Lake, Lake Co., SBBG, det. B. Ryan)

**Ochrolechia laevigata** (Räsänen) Verseggy *ex* Brodo 🍄 🌿

(Brodo 1991; Brodo et al. 2001 [pp. 466–467, with color photograph]; Roemer et al. 2004; Williams & Sillett 2007; *H. Hasse 170*, Santa Monica Range, Los Angeles Co., ASU; *S. Tucker 15027B*, Gasquet, Del Norte Co., SBBG; *T. Nash 11456*, 39 km N of Fort Bragg on U. S. Hwy 1, Mendocino Co., ASU)

**Ochrolechia mahuensis** Räsänen 🍄 🌿

(Knudsen 2012b, for montane collections from S CA)

**Note:** This is a chemical segregate of *Ochrolechia androgyna*, based on work in Europe by Kukwa.

**Ochrolechia mexicana** Vain. 🍄 🌿

(Tucker & Bratt 1995; Wright 1997 [but based on misidentifications]; shown in CA on map in Roemer et al. 2004; Knudsen & Kocourková 2012a; *B. Ryan 27102b*, Hastings Natural History Reserve, Monterey, ASU)

**Ochrolechia oregonensis** H. Magn. 🍄 🌿

(Magnusson 1939; Jordan 1968; Howard 1970; TJ; Brodo 1991; Tucker & Bratt 1996; Hill 1997; Brodo et al. 2001 [p. 467, with color photograph]; Baltzo 2002; Blauman 2004a; Robertson 2005a, 2005c; Williams & Sillett 2007; Glacy et al. 2011)

**Synonyms:** [\*O. californica\*](#)

**Ochrolechia pseudopallescens** Brodo 🍄 🌿

(Roemer et al. 2004; collections known from Humboldt, Los Angeles [Santa Catalina Isl.], Plumas, San Diego, and Yuba counties, ASU, SBBG)

**Ochrolechia subathallina** H. Magn. 🍄 🌿

(Jovan & McCune 2004; collections known from Humboldt, Lake, Marin, Mendocino, and Siskiyou Co., ASU, MIN, OSC, SBBG, WIS)

**Ochrolechia subpallescens** Verseggy 🍄 🌿

(Verseggy 1962; Jordan 1968; Baltzo 1970; TJ; Baltzo 1989; Brodo 1991; Tucker & Bratt 1995; Hill 1997; McGee 1998; Brodo et al. 2001 [p. 467]; Baltzo 2002; Robertson 2002a, 2003a; Blauman 2004a; Roemer et al. 2004; Tucker et al. 2004; Benson 2005; Robertson 2005c; Knudsen 2007b; Knudsen & Kocourková 2009a; Stone & Villella 2010; Knudsen & Kocourková 2012a)

**Ochrolechia szatalaënsis** Verseggy 🍄 🌿

(Brodo 1991; Ellyson & Sillett 2003)

**Misapplied names:** [\*O. upsaliensis\*](#) (Herre 1910; *I. Brodo 20530*, Horse Mtn, Humboldt Co., CANL)

**Ochrolechia tartarea** (L.) A. Massal. 🍄 🌿

(Herre 1910, 1945; Verseggy 1962; Volk 1963; Howard 1970; TJ; von Reis 1991; Stone & Villella 2010; Glacy et al. 2011; *B. Ryan 22011*, Kehoe Beach, Point Reyes, Marin Co., ASU; *S. Tucker 13502*, Point Sal Ridge W of Santa Maria, Santa Barbara Co., SBBG)

**Ochrolechia upsaliensis** (L.) A. Massal. 🍄 🌿

(Herre 1910; Volk 1963; Howard 1970; TJ; Baltzo 1989; Brodo et al. 2001 [p. 468, with color photograph]; Tucker 2002; Blauman 2004a; Benson 2005; Rosentreter et al. 2007 [with photograph]; Robertson 2005c; Glacy et al. 2011; collections known from Lake, Marin, Mendocino, San Benito, and Tehama counties, ASU, SBBG)

**Misapplied names:** *O. farinacea*, *O. szatalaënsis* fide Brodo (1991), for some Herre collections, *O. oregonensis* fide S. Tucker for some Herre collections.

*Ochrolechia androgyna* (Hoffm.) Arnold 📖 🌿

(Brodo 1991; Ryan & Nash 1991; Brodo et al. 2001 [p. 465, with color photograph]; Roemer et al. 2004; Williams & Sillett 2007; Knudsen et al. 2009; *T. Nash 32291*, Santa Cruz Isl., Santa Barbara Co., ASU)

**Note:** Knudsen & Kocourková (2012a) say that the Nash collection is misnamed, and that CA collections of this species need re-examination. In N. Amer., *O. androgyna* has been verified only for Alaska and Maine collections. Montane collections from S CA are *O. mahuensis* (Knudsen 2012b).

*Ochrolechia californica* Verseghe 📖 🌿

(Verseghe 1962; Howard 1970; Lindsay 1973; TJ)

=*O. oregonensis*

*Ochrolechia frigida* (Sw.) Lynge f. *thelephoroides* (Ach.) Lynge 📖 🌿

(Howard 1970; TJ)

=misidentifications for N. Amer., fide Brodo 1991

*Ochrolechia inversa* (Nyl.) J. R. Laund. 📖 🌿

(Williams & Sillett 2007 [as cf. *inversa*]; not verified)

**Note:** This sterile crustose species has been reported previously in England.

*Ochrolechia pallescens* (L.) A. Massal. 📖 🌿

(TJ; Weber et al. 1987; Hale & Cole 1988; Baltzo 2002 [quoting W. Jordan report])

=misidentifications for N. Amer., fide Brodo (1991)

*Ochrolechia pallescens* var. *rosella* (Tuck.) Zahlbr. 📖 🌿

(Howard 1970; TJ)

=misidentifications

*Ochrolechia parella* (L.) A. Massal. 📖 🌿

(Herre 1942c, 1945; Howard 1970; TJ)

**Note:** According to Brodo (1991), N. Amer. reports are based on misidentifications. Roemer et al. (2004) reported a taxon in CA which they called "*Ochrolechia* aff. *parella*", but Knudsen & Kocourková (2012a) re-identified this specimen as *O. subpallescens* growing on rock.

*Ochrolechia rosella* (Müll. Arg.) Verseghe 📖 🌿

(Lindsay 1973; TJ)

=*O. trochophora*, fide Esslinger 2011

*Ochrolechia subsidiata* Brodo 📖 🌿

(Williams & Sillett 2007 [as cf. *subsidiata*]; not verified)

**Note:** This species has been found commonly in Arizona, Texas, New Mexico, and Mexico.

*Ochrolechia trochophora* (Vain.) Oshio 📖 🌿

(Ellyson & Sillett 2003)

=misidentifications for CA, discussed in Tucker (2002)

**OMPHALARIA** Girard & Dunal ex Nyl.

*Omphalaria symphorea* (Ach.) Tuck. 📖 🌿

(Hasse 1906)

=*Synalissa symphorea*

**OMPHALINA** Quélet = **LICHENOMPHALIA**

*Omphalina ericetorum* (Pers.: Fr.) M. T. Lange 📖 🌿

=[\*Lichenomphalia umbellifera\*](#) (Redhead et al. 2002)

*Omphalina umbellifera* (L.: Fr.) Quélet 📖 🌿

(Brodo et al. 2001 [p. 470, with color photograph]; Redhead et al. 2002)

=[\*Lichenomphalia umbellifera\*](#)

**OMPHALODISCUS** Schol. =[\*\*UMBILICARIA\*\*](#)

*Omphalodiscus decussatus* (Vill.) Schol. 📖 🌿

(Llano 1950; TJ; Thomson 1984)

=[\*Umbilicaria decussata\*](#)

*Omphalodiscus krascheninnikovii* (Savicz) Schol. 📖 🌿

(Llano 1950; Sigal & Toren 1974; Sigal 1975; TJ; Thomson 1984)

=[\*Umbilicaria krascheninnikovii\*](#)

*Omphalodiscus virginis* (Schaer.) Schol. 📖 🌿

(Llano 1950; TJ; Thomson 1984)

=[\*Umbilicaria virginis\*](#)

**OPEGRAPHA** Ach.

\***Opegrapha anomea** Nyl. 📖 🌿

(Ertz et al. 2004; Ertz & Egea 2008; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *T. Nash* 32588, Santa Rosa Isl., Santa Barbara Co., ASU, det. Ertz; *S. Tucker* 35850, Santa Cruz Isl., Santa Barbara Co., SBBG, det. P. Diederich, both on *Pertusaria amara*; *K. Knudsen* 11075, Soda Springs Trail, Monterey Co., UCR)

**Synonyms:** [\*O. pertusariae\*](#)

**Opegrapha erosa** Egea & Torrente 📖 🌿

(Ertz & Egea 2008 cited specimens from central coastal CA; *S. Junak* 413D, San Nicolas Isl., Ventura Co., SBBG; *C. Bratt* 3806, Point Lobos, Monterey Co., SBBG; CA endemic)

\***Opegrapha hellespontica** Vondrák & Kocourk. 📖 🌿

(Kocourková & Knudsen 2009d; Kocourková et al. 2012; *K. Knudsen* 9981, on *Caloplaca luteominia*, Limekiln S. P., Santa Lucia Mts, Monterey Co., UCR; *K. Knudsen* 10128, San Simeon S. P., San Luis Obispo Co., UCR)

**Opegrapha herbarum** Mont. 📖 🌿

(Lindsay 1973; TJ; Bourell 2000; Tucker et al. 2004; Ertz & Egea 2008; Knudsen 2009; Knudsen & Kocourková 2010a [citing Hasse collections under name of *O. lichenoides*], 2010f; Stone & Villella 2010; Tucker 2010; Knudsen & Kocourková 2012a; Benson et al. 2012; Villella & Carlberg 2012, foliicolous on *Picea sitchensis*; *A. Herre* 878, Point Lobos, San Francisco, San Francisco Co., ASU; *C. Bratt* 8558 from Santa Cruz Isl., ASU, det. D. Ertz; *S. Tucker* 14974, Crescent City, Del Norte Co., SBBG; *S. Tucker* 36502, San Simeon S. P., San Luis Obispo Co., SBBG; *K. Knudsen* 10518, Santa Rosa Isl., Santa Barbara Co., UCR)

**Synonyms:** [\*O. atrorimalis\*](#)

**Misapplied names:** *O. betulina*, [\*O. rufescens\*](#) (Williams & Sillett 2007)

**Note:** Pentecost & James (1992) and Smith et al. (2009) include *O. protuberans* as a questionable synonym of *O. herbarum*.

**Opegrapha niveoatra** (Borrer) J. R. Laund. 📖 🌿

(Ertz & Egea 2008; Knudsen & Kocourková 2010a [citing a Hasse collection under name of *O. impolita chiodectonoides*], 2012a; *T. Nash* 11202, W of Univ. of Calif. campus near beach bluffs, Goleta, Santa Barbara Co., ASU; *S. Tucker* 35745, Christy Ranch, Santa Cruz Isl., Santa Barbara Co., ASU, SBBG; *W. Weber* 77611, Point Lobos State Reserve, Monterey Co., ASU)

\***Opegrapha pulvinata** Rehm 📖 🌿

(Diederich 2003; Kocourková et al. 2012; *J. Robertson s.n.*, Mt. Tamalpais S. P., Marin Co., ASU)

**Note:** This species has been collected in interior western U. S. and Iowa.

**Opegrapha soreidiifera** P. James 🍄 🌿

(*T. Tønnsberg TT14737*, Del Norte Co., BG; *T. Tønnsberg TT28910*, Humboldt Co., BG)

**Note:** This species is known from Sweden.

\***Opegrapha sphaerophorica** Isbrand & Alstrup 🍄 🌿

(Alstrup & Cole 1998; Kocourková et al. 2012; on “*Sphaerophorus tuckermanii*”, i.e. *S. globosus* var. *gracilis* from Mendocino Co.)

**Opegrapha umbellulariae** Zahlbr. 🍄 🌿

(Zahlbruckner 1902; Hasse 1903f, 1913b; Fink 1935; TJ; von Reis 1991; Tucker et al. 2004; Ertz & Egea 2008; Knudsen & Kocourková 2010a, citing a Hasse collection; *H. Hasse*, Santa Monica Mts, Los Angeles Co., 1898, ! S. C Tucker, MIN; *B. Ryan 30984*, Santa Catalina Isl., Los Angeles Co., ASU; *S. Tucker 38276*, campus of Univ. of Calif., Santa Cruz, Santa Cruz Co., SBBG; CA endemic)

**Opegrapha vulgata** Ach. 🍄 🌿

(Tuckerman 1866; Bolander 1870; McClatchie 1897; Zahlbruckner 1902; Hasse 1903b, 1903f; Orcutt 1903, 1907; Hasse 1913b; Merrill 1923; TJ; Ertz & Egea 2008; Knudsen & Kocourková 2010a [citing a Hasse collection], 2012a; *H. Hasse* collection, Santa Monica Mts, CA, 1900, misidentified as *Opegrapha lyncea*, a European species, MIN; *A. Herre 2253*, 8 Sept. 1949, Pacific Grove, Monterey Co., CAS; *B. Ryan 31287*, Santa Rosa Isl., Santa Barbara Co., SBBG)

**Opegrapha xerica** Egea & Torrente 🍄 🌿

(Ertz & Egea 2008; Knudsen & Kocourková 2010a, citing a Hasse collection [*Lich. Exs.* 39], as *O. atrorimalis*; Tucker 2010; *S. Tucker 33716*, San Nicolas Isl., Ventura Co., ASU, SBBG)

*Opegrapha abnormis* Ach. 🍄 🌿

(Herre 1912a)

=[Arthothelium abnorme](#)

*Opegrapha astra* Tuck. 🍄 🌿

(McClatchie 1897; Hasse 1898a [as *O. astraca*]; TJ; may be based on misdeterminations)

*Opegrapha atra* Pers. 🍄 🌿

(Hasse 1898a; Herre 1912a; Volk 1963; Lindsay 1973; TJ; Tucker et al. 2004; Ertz & Egea 2008; Knudsen 2009; Knudsen & Kocourková 2010a, citing a Hasse collection [as *O. scripta* f. *victa*] from Santa Monica Mts, MIN; Stone & Villella 2010; Benson et al. 2012)

=[Arthonia atra](#) (Knudsen & Kocourková 2012a)

*Opegrapha atra* f. *chlorina* Jatta 🍄 🌿

(Hasse 1913b)

=[Alyxoria varia](#)

*Opegrapha atrorimalis* Nyl. 🍄 🌿

(TJ for references)

=[Opegrapha herbarum](#)

*Opegrapha betulina* Sm. non Pers. 🍄 🌿

(Hasse 1903b; Merrill 1923; Fink 1935; Herre 1942c)

=name misapplied to [Opegrapha herbarum](#)

*Opegrapha brattiae* Egea & Ertz 🍄 🌿

(Bratt 1993; Ertz & Egea 2008; Knudsen 2009)

=[Lecanographa brattiae](#)

*Opegrapha calcarea* Turner ex Sm. & Sowerby 🍄 🌿

(Fink 1935; TJ)

=name misapplied to [Lecanographa brattiae](#)

*Opegrapha candida* Müll. Arg. 🍄 🌿

(Volk 1963; TJ, but unlikely for CA; found in southeastern U. S.)



*Opegrapha chevallieri* Leight. 🍄 🌿

(Hasse 1913b; Merrill 1923)

=name misapplied to [Lecanographa brattiae](#)





**Note:** See Tucker 2008 p. 449.

*Opegrapha constrictella* Stirt.    
(McClatchie 1897; Hasse 1906)



=[\*Melaspilea constrictella\*](#)

*Opegrapha crassispora* Egea & Torrente  

**Note:** Ertz & Egea in a preliminary draft for 2008, cited specimens from Marin, Santa Barbara, and Ventura counties; these probably included *T. Nash 38692* from San Nicolas Isl., Ventura Co., det. D. Ertz, ASU; and *T. Nash 41409* from San Miguel Isl., det. D. Ertz, ASU, WIS. These specimens should be checked.



*Opegrapha diaphora* (Ach.) Ach.    
(TJ for references)

=[\*Alyxoria varia\*](#)



\**Opegrapha glaucomaria* (Nyl.) Källsten    
(Baltzo 2002; no CA reports in Ertz & Egea 2008)

=[\*Phacographa glaucomaria\*](#)



**Note:** The Baltzo report was probably a misidentification, *vide* K. Knudsen in Kocourková et al. (2012a).

*Opegrapha hassei* Zahlbr.    
(TJ for references)

=[\*Lecanographa hypothallina\*](#)

*Opegrapha hypothallina* (Zahlbr.) Tehler    
(Tehler 1993c)



=[\*Lecanographa hypothallina\*](#)

*Opegrapha lichenoides* Pers.    
(TJ)


=[\*Alyxoria varia\*](#)

*Opegrapha ochrocheila* Nyl.    
(Williams & Sillett 2007 [as “cf.”]; Ertz & Egea 2008)

=[\*Alyxoria ochrocheila\*](#)



*Opegrapha pertusariae* (Vouaux) Hafellner    
(Hafellner et al. 2002)

=[\*O. anomea\*](#)


\**Opegrapha physciaria* (Nyl.) D. Hawksw. & Coppins    
(Cole & Hawksworth 2001)

=[\*Stigmidium epistigmellum\*](#)

**Note:** *C. Bratt 5141* on *Caloplaca rosei*, Santa Barbara Isl., Santa Barbara Co., SBBG, det. M. Cole; this specimen was examined by D. Ertz (Ertz & Egea 2008) who found no *Opegrapha* but only *Stigmidium cerinae* and another undeterminable lichenicole unrelated to *Opegrapha*.

*Opegrapha prosiliens* Stirt. non Mont. & Bosch    
(TJ for references)

=[\*Opegrapha herbarum\*](#)

*Opegrapha protuberans* Zahlbr.    
(Lindsay 1973; TJ; Baltzo 2002; Williams & Sillett 2007)

=[\*Opegrapha herbarum\*](#)

*Opegrapha pulicaris* (Hoffm.) Schrad.    
(Hasse 1913b; Merrill 1923; Lindsay 1973; TJ)

=[\*Alyxoria varia\*](#)

*Opegrapha rimalis* Pers. *ex* Ach.    
(TJ for references)

=[\*Alyxoria varia\*](#)

*Opegrapha rufescens* Pers. 📖 🌿

(Williams & Sillett 2007)

=name misapplied to [Opegrapha herbarum](#), keyed in Sonoran Flora)

*Opegrapha rupestris* Pers. 📖 🌿

(Brodo et al. 2001 [p. 472], but this report may have been based on Herre and Fink reports)

**Synonyms:** [O. saxicola](#) (Herre 1907, 1910; Fink 1935; TJ)

**Note:** This is a saxicolous form of *O. herbarum*, *fide* D. Ertz.

*Opegrapha saxicola* Ach. 📖 🌿

(Herre 1907, 1910; Fink 1935; TJ; W. Weber, Univ. Colo. Lich. Exs. 198, San Clemente Isl., Los Angeles Co.)

=[Opegrapha herbarum](#) for CA records

**Note:** Herre's specimens (1907, 1910) represent a saxicolous form of *O. herbarum*, *fide* D. Ertz & Egea 2008.

*Opegrapha varia* Pers. 📖 🌿

(Bolander 1870; McClatchie 1897; von Reis 1991; Tucker et al. 2004; Ertz & Egea 2008; Tucker 2010)

=[Alyxoria varia](#)

*Opegrapha varia* f. *chlorina* Jatta 📖 🌿

(Zahlbruckner 1900 [as *O. varia* var. *lichenoides* (Pers.) Hepp f. *chlorina* Jatta]; Hasse 1903f [as *O. varia* var. *lichenoides* (Pers.) Hepp f. *chlorina* Jatta])

=[Alyxoria varia](#)

## OPHIOPARMA Norman

**Ophioparma rubricosa** (Müll. Arg.) S. Ekman 📖 🌿

(Wright 1997; Brodo et al. 2001 [p. 473, with color photograph]; Tucker 2002; Kalb et al. 2004; Robertson 2004; Robertson 2005a; Williams & Sillett 2007; Robertson & Robertson 2008; Villella 2010; Glacy et al. 2011)

**Synonyms:** [Bacidia herrei](#), [Haematomma californicum](#), [H. pacificum](#), [O. herrei](#)

**Misapplied names:** [Haematomma ventosum](#), [Lecanora ventosa](#)

*Ophioparma herrei* (Zahlbr.) Kalb & Staiger 📖 🌿

(Kalb & Staiger 1995)

=[O. rubricosa](#)

*Ophioparma lapponica* (Räsänen) Hafellner & R. W. Rogers 📖 🌿

(Fink 1935)

**Note:** The Fink report was based on misidentifications *fide* P. May (1997) who showed *O. lapponica* only for the Arctic. There are no confirmed records from the Sonoran region of S CA *fide* Kalb et al. 2004.

*Ophioparma ventosa* (L.) Norman 📖 🌿

(no confirmed records of this from the Sonoran region *fide* Kalb et al. 2004)

**Synonyms:** [Haematomma ventosum](#) (Fink 1935), [Lecanora ventosa](#) (McClatchie 1897; Hasse 1898a, but name was misapplied to *Ophioparma rubricosa*)

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

## PACHYOSPORA A. Massal.

*Pachyospora verrucosa* (Ach.) A. Massal. 📖 🌿

(Hale & Cole 1988)

=[Megasporea verrucosa](#)

## PANNARIA Delise

**Pannaria conoplea** (Ach.) Bory 📖 🌿

(Herre 1910; Hale & Cole 1988; Robertson 2002a; Brodo et al. 2001 [p. 476, with color photograph] showed it along north CA coast; Jørgensen 2001a [p. 692]; Tucker et al. 2004; Hinds & Hinds 2007 [p. 332, color photograph only]; *S. Tucker 35446*, Soda Springs Station, Lake Co., SBBG, det. P. Jørgensen)

**Synonyms:** [P. lanuginosa](#), [P. pityrea](#) auct. [synonymy *fide* Esslinger 2011], [P. rubiginosa var. conoplea](#), [P. rubiginosa var. lanuginosa](#)

**Note:** Jørgensen (2001a, p. 692) indicated that this occurs at high elevations.

**Pannaria malmei** C. W. Dodge 🍄 🌿

(Jørgensen 2001a; *J. Lendemer 5795*, Golden Gate Nat. Recreation Area, Sweeney Ridge, San Mateo Co., UCR)

**Pannaria rubiginella** P. M. Jørg. 🍄 🌿

(Jørgensen & Sipman [2004], citing an *L. Tibell* collection from San Mateo Co.; McCune & Geiser 2009; *S. Tucker 34735B*, Cone Peak, Monterey Co., SBBG, det. P. Jørgensen, Oct. 2004 [previously identified as *P. subcrustacea*])

**Pannaria bolanderi** Tuck. 🍄 🌿

(Tuckerman 1872; Willey 1873a)

=[Peltula bolanderi](#)

**Pannaria brunnea** (Sw.) A. Massal. 🍄 🌿

(Hasse 1903c)

=[Protopannaria pezizoides](#)

**Pannaria cyanolepra** Tuck. 🍄 🌿

(Tuckerman 1866, 1872; Bolander 1870; Willey 1873a)

=[Fuscopannaria cyanolepra](#)

**Pannaria guepinii** (Delise) Tuck. 🍄 🌿

(Tuckerman 1872 [as *P. guepini*])

=[Peltula euploca](#)

**Pannaria hookeri** (Borrer ex Sm.) Nyl. 🌿

**Note:** Jørgensen (personal communication) said that *Pannaria hookeri* is not likely to occur in CA. Collections from the high mountains are probably *Fuscopannaria hookerioides*, and low elevation ones, especially on heavy metal rocks, are probably *F. thiersii*.

**Pannaria isidiata** Degel. 🍄 🌿

(Thomson & Ketchledge 1958)

=[Vestergrenopsis isidiata](#) (but that report based on a misidentification of *Koerberia sonomensis*, *fide* Henssen 1963c)

**Pannaria lanuginosa** (Hoffm.) Körb. 🍄 🌿

(McClatchie 1895; Herre 1910; early reports by Herre and McClatchie were probably misidentifications)

=[Pannaria conoplea](#)

**Pannaria lepidiota** (Sommerf.) Th. Fr. 🍄 🌿

(Hasse 1896)

=[Fuscopannaria praetermissa](#)

**Pannaria lepidiota var. coralliphora** Tuck. 🍄 🌿

(Herre 1907)

=[Fuscopannaria laceratula](#) (synonymy *fide* Jørgensen 2001a, p. 683)

**Note:** Although Herre (1910) and subsequent workers spelled the epithet “corallophora”, Tuckerman (1882, p. 123) originally published it as “coralliphora”.

**Pannaria lepidiota var. cyanolepra** (Tuck.) Tuck. 🍄 🌿

(Tuckerman 1882; Hasse 1896; McClatchie 1897; Herre 1907; Orcutt 1903, 1907)

=[Fuscopannaria cyanolepra](#)

**Pannaria leucophaea** (Vahl) P. M. Jørg. 🍄 🌿

- (Hale & Cole 1988; Baltzo 1989; Sigal 1989)  
=[Vahliella leucophaea](#)
- Pannaria leucosticta* (Tuck.) Tuck. ex Nyl. 📖 🌿  
(Herre 1912b; Lindsay 1973)  
=[Fuscopannaria leucosticta](#)  
**Note:** Jørgensen (2001a) did not report this species in CA, and said that it is replaced in West by *F. leucostictoides*.
- Pannaria leucostictoides* Ohlsson 📖 🌿  
(Ohlsson 1973; TJ; Hale & Cole 1988; Baltzo 1989; Goward et al. 1994)  
=[Fuscopannaria leucostictoides](#)
- Pannaria microphylla* (Sw.) A. Massal. 📖 🌿  
(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Hasse 1896, Orcutt 1907; Sigal 1975)  
=[Vahliella leucophaea](#)
- Pannaria microphylla* f. *californica* Tuck. 📖 🌿  
(Tuckerman 1882; Hasse 1895; McClatchie 1897; Orcutt 1907)  
=[Vahliella californica](#)
- Pannaria nigra* (Huds.) Nyl. 📖 🌿  
(Hasse 1896; McClatchie 1897; Orcutt 1903, 1907)  
=[Placynthium nigrum](#)
- Pannaria pezizoides* (Weber) Trevis. 📖 🌿  
(Hasse 1913b; TJ; Goward et al. 1994; Wright 1997 [“?”]; discussed by Tucker 2002; Brodo et al. 2001 [pp. 477–478, color photograph])  
=[Protopannaria pezizoides](#)  
**Note:** This is a northern species extending southward to Washington on the West Coast, *fide* Jørgensen 2001a. Neither Jørgensen (2001a) nor Brodo et al. (2001) included CA in its distribution.
- Pannaria pityrea* auct. 📖 🌿  
(Lindsay 1973; Tucker & Kowalski 1975; Pinelli & Jordan 1978; TJ)  
=[Pannaria conoplea](#) (synonymy *fide* Esslinger 2011)
- Pannaria praetermissa* Nyl. 📖 🌿  
(Baltzo 1989)  
=[Fuscopannaria praetermissa](#)
- Pannaria pulveracea* P. M. Jørg. & Henssen 📖 🌿  
(Jørgensen 1978)  
=[Fuscopannaria pulveracea](#)
- Pannaria rubiginosa* (Ach.) Bory 📖 🌿  
(Tuckerman 1882; Jordan 1968; TJ; McGee 1995, 1998; Wright 1998; Brodo et al. 2001 [p. 478, with color photograph]; McGee 2001; Baltzo 2002; Robertson 2005c; Hinds & Hinds 2007 [p. 334, color photograph only]; McCune & Geiser 2009)  
**Note:** Misidentifications for CA, replaced in warmest parts of the Pacific Coast by *P. malmei* C. W. Dodge (Jørgensen 2001a) and in coastal CA by *P. rubiginella* (P. M. Jørgensen, personal communication).
- Pannaria rubiginosa* var. *conoplea* (Ach.) Körb. 📖 🌿  
(Hasse 1898a)  
=[Pannaria conoplea](#)
- Pannaria rubiginosa* var. *lanuginosa* (Hoffm.) Zahlbr. 📖 🌿  
(Fink 1935)  
=[Pannaria conoplea](#)
- Pannaria saubinetii* (Mont.) Nyl. 📖 🌿  
(Weber 1965b; Goward et al. 1994)  
=[Vahliella saubinetii](#)

**Note:** Many old collections under this name may be *Fuscopannaria pacifica* (Jørgensen 2001a, p. 686).

*Pannaria sonomensis* Tuck. 📖 🌿

(Tuckerman 1877; Hasse 1906; Fink 1935)

=[\*Koerberia sonomensis\*](#)

*Pannaria tavaresii* P. M. Jørg. 📖 🌿

(Jørgensen [2001a] did not mention CA for this species)

**PANNULARIA** Nyl.

*Pannularia lepidiota* (Th. Fr.) Nyl. 📖 🌿

(Hasse 1898a)

=[\*Fuscopannaria praetermissa\*](#)

*Pannularia lepidiota* var. *cyanolepra* (Tuck.) Hasse 📖 🌿

(Hasse 1898a)

=[\*Fuscopannaria cyanolepra\*](#)

*Pannularia microphylla* Nyl. 📖 🌿

(Hasse 1898a)

=[\*Vahliella leucophaea\*](#)

*Pannularia microphylliza* Nyl. ex Hasse 📖 🌿

(Hasse 1898a)

=[\*Massalongia microphylliza\*](#)

*Pannularia nigra* (Huds.) Nyl. 📖 🌿

(Hasse 1898a)

=[\*Placynthium nigrum\*](#)

*Pannularia triseptata* (Nyl.) Cromb. 📖 🌿

(Hasse 1898a)

=[\*Placynthium nigrum\*](#)

**PARASCHISMATOMMA** Ertz & Tehler

**Paraschismatomma ochroleucum** (Zahlbr.) K. Knudsen, Ertz, & Tehler 📖 🌿

(Ertz & Tehler 2011; *H. Hasse Exs. 147*, Santa Catalina Isl., Los Angeles Co., Apr., 1915, SBBG; CA endemic)

**Synonyms:** [\*Chiodecton ochroleucum\*](#), [\*Platygrapha plurilocularis\*](#), [\*Schismatomma pluriloculare\*](#)

**Note:** This species may possibly have been extirpated.

**PARMELIA** Ach.

**Parmelia barrenoae** Hodkinson, Lendemer, & Essl. 📖 🌿

(Hodkinson et al. 2010 from Yosemite N. P.; *K. Knudsen 413*, San Mateo Wilderness Area, Santa Ana Mts, Riverside Co., UCR)

**Note:** This species is close to *P. sulcata*.

**Parmelia hygrophila** Goward & Ahti 📖 🌿

(Goward & Ahti 1983; Hill 1997; Brodo et al. 2001 [pp. 481–482, with color photograph]; Wright 2001a; Nash & Elix 2002; Ellyson & Sillett 2003; Blauman 2004a; Jovan & McCune 2004; Benson 2005; Robertson & Beyer 2005; Williams & Sillett 2007; McCune & Geiser 2009; Villella 2010; Benson et al. 2012; collections are known from Butte, El Dorado, Fresno, Plumas, San Diego, Sierra, Siskiyou, Tulare, and Tuolumne counties, ASU, SBBG)

**Parmelia pseudosulcata** Gyeln. 📖 🌿

(Goward et al. 1994; Carlberg 2003 [based on *Isaacs & Bergman 042*, intersection of Rd 30 and FR 23, Mad River Ranger District, Six Rivers N. F., Trinity Co.]; Jovan & McCune 2004; Williams & Sillett 2007; McCune & Geiser 2009)

**Parmelia saxatilis** (L.) Ach. 📖 🌿

(Bolander 1870; McClatchie 1897; Hasse 1898a; Herre 1906, 1910; Hasse 1913b; Berry 1941; Herre 1946, 1950a; Baltzo 1970; Lindsay 1973; Malachowski 1975; Pinelli & Jordan 1978; TJ; Hale & Cole 1988; Baltzo 1989; Tucker & Bratt 1995, 1996; Wright 1997; Brodo et al. 2001 [p. 483, with color photograph]; Wright 2001a; Nash & Elix 2002; Robertson 2002a, 2003a; Blauman 2004a; Jovan & McCune 2004; Tucker et al. 2004; Robertson 2005b, 2005c; Hinds & Hinds 2007 [color photograph, p. 339, only]; Williams & Sillett 2007; Glacy et al. 2011)

**Synonyms:** [\*P. kerguelensis\*](#) (Hale & Cole 1988; chemotype of *P. saxatilis*, *fide* Stenroos 1991)

**Parmelia squarrosa** Hale 📖 🌿

(Hale 1971; TJ; Hale & Cole 1988; Goward et al. 1994; Wright 2001a; Brodo et al. 2001 [p. 484, with color photograph]; Robertson 2002a; Ellyson & Sillett 2003; Thomson 2003; Hinds & Hinds 2007 [color photograph, p. 339, only]; Williams & Sillett 2007; McCune & Geiser 2009)

**Parmelia sulcata** Taylor 📖 🌿

(Berry 1941; Herre 1946; Thomson & Ketchledge 1958; Jordan 1968; Baltzo 1970; Lindsay 1973; Pinelli & Jordan 1978; TJ; Sigal & Nash 1983; Baltzo 1989; von Reis 1991; Goward et al. 1994; Tucker & Bratt 1995; Bowler et al. 1996; Doell & Wright 1996; Tucker & Bratt 1996; Hill 1997; Wright 1997; McGee 1998; Bourell 2000; Brodo et al. 2001 [p. 484, with color photograph]; Wright 2001a; Baltzo 2002; Nash & Elix 2002; Robertson 2002a, 2003a; Thomson 2003; Blauman 2004a; Jovan & McCune 2004; Tucker et al. 2004; Benson 2005; Robertson 2005a, 2005b, 2005c; Hinds & Hinds 2007 [color photograph, p. 340, only]; Knudsen & Kramer 2007; Williams & Sillett 2007; Knudsen et al. 2009; Rotter 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a)

*Parmelia andreana* Mull. Arg. 📖 🌿

(W. Culberson 1955; Thomson & Ketchledge 1958)

=[\*Flavopunctelia flaventior\*](#)

*Parmelia arnoldii* Du Rietz 📖 🌿

(Thomson & Ketchledge 1958; Hale 1965; Jordan 1968; Baltzo 1970; Lindsay 1973; Malachowski 1975)

=[\*Parmotrema arnoldii\*](#)

*Parmelia arseneana* Gyeln. 📖 🌿

(Baltzo 1970)

=[\*Xanthoparmelia novomexicana\*](#) (synonymy *fide* Nash & Elix 2004, p. 590)

*Parmelia aspera* A. Massal. 📖 🌿

(Herre 1946)

=[\*Melanelia exasperata\*](#), but misidentifications for CA

*Parmelia aspidota* (Ach.) Poetsch 📖 🌿

(Herre 1950a)

=[\*Melanelia exasperata\*](#), but misidentifications for CA

*Parmelia bahiana* Nyl. 📖 🌿

(Hasse 1896; Orcutt 1903, 1907)

=misidentifications

*Parmelia bolliana* Müll. Arg. 📖 🌿

(W. Culberson & C. Culberson 1956; W. Culberson 1962; TJ)

=[\*Punctelia bolliana\*](#)

*Parmelia borreri* (Sm.) Turner 📖 🌿

(Herre 1907, 1910; Berry 1941; Herre 1946; W. Culberson 1962; Jordan 1968; Hale & Cole 1988; Riefner, Bowler, & Ryan 1995; Bowler et al. 1996; Doell & Wright 1996; Wright 2001a; Baltzo 2002)

=[\*Punctelia borreri\*](#)

*Parmelia californica* Gyeln. 📖 🌿

(Gyelnik 1934)

- =[Flavopunctelia flaventior](#)  
*Parmelia caperata* (L.) Ach. 📖 🌿  
(TJ for references)  
=[Flavoparmelia caperata](#)
- Parmelia caperata* var. *incorrupata* (J. P. Moore) E. C. Berry 📖 🌿  
(Herre 1942b)  
=[Flavopunctelia praesignis](#)
- Parmelia cetrarioides* (Delise ex Duby) Nyl. 📖 🌿  
(Berry 1941; Herre 1942c, 1945, 1946)  
=[Cetrelia cetrarioides](#)  
**Note:** Herre determinations should be checked, because Herre misapplied the name to Sonoran specimens of *Flavoparmelia praesignis*, *fide* Nash (2002b).
- Parmelia cetrata* Ach. 📖 🌿  
(Herre 1946; TJ)  
=[Parmotrema cetratum](#), but CA collections are probably misidentifications of *P. reticulatum*
- Parmelia cirrhata* Fr. 📖 🌿  
(Herre 1945, 1946)  
**Note:** The identity of Herre specimens is uncertain. The name *P. cirrhata* would now pertain to some species of *Everniastrum*, but that genus does not occur in CA.
- Parmelia concreta* Stizenb. 📖 🌿  
(McClatchie 1897; Hasse 1898a; Orcutt 1909; TJ)  
=*Flavoparmelia* sp.
- Parmelia conspersa* (Ehrh. ex Ach.) Ach. 📖 🌿  
(Tuckerman 1882; Orcutt 1885; Eckfeldt 1893; Hasse 1895; McClatchie 1895; Hasse 1896; Hulting 1896; McClatchie 1897; Hasse 1898a, 1903a; Orcutt 1903; Herre 1906; Orcutt 1907; Herre 1910; Hasse 1913b; Moxley 1921; Merrill 1923; Berry 1941; Herre 1945, 1946; Thomson & Ketchledge 1958; Hale 1964)  
=[Xanthoparmelia conspersa](#)  
**Note:** Herre's 1910 material is mixed with other species with a pale underside such as *X. mexicana* and *X. plittii*, *fide* T. Nash (personal communication).
- Parmelia conspersa* var. *stenophylla* Ach. 📖 🌿  
(McClatchie 1897; Hasse 1898a, 1913b)  
=[Xanthoparmelia stenophylla](#)
- Parmelia conspersa* var. *subconspersa* (Nyl.) Gyeln. 📖 🌿  
(Herre 1946; TJ)  
=[Flavoparmelia rutidota](#), but misidentifications for CA
- Parmelia conspurcata* (Schaer.) Vain. 📖 🌿  
(Herre 1906, 1907, 1910; Fink 1935; Berry 1941; Herre 1946)  
=[Melanelixia subargentifera](#) (synonymy *fide* Esslinger 2011)  
**Note:** The identity of Berry's (1941) material is in doubt, because he reported that his material was C-, while *M. subargentifera* is C+ red.
- Parmelia corrugis* Müll. Arg. 📖 🌿  
(Hue 1895, cited in TJ)  
=*Parmotrema*, but Hue's material was from Mexico
- Parmelia crinita* Ach. 📖 🌿  
(Lindsay 1973; Malachowski 1975; Tucker & Kowalski 1975)  
=[Parmotrema crinitum](#)
- Parmelia cristifera* Taylor 📖 🌿  
(Fink 1935; Berry 1941; Herre 1946)  
=[Parmotrema cristiferum](#)

- Parmelia cumberlandia* (Gyeln.) Hale 📖 🌿  
(Hale 1969; Baltzo 1970; Sigal 1975)  
=[\*Xanthoparmelia cumberlandia\*](#)
- Parmelia dierythra* Hale 📖 🌿  
(Nash 1974; Nash & Zavada 1977)  
=[\*Xanthoparmelia dierythra\*](#)  
**Note:** According to Nash & Elix (2004) S CA reports are based on misidentifications.
- Parmelia disjuncta* Erichsen 📖 🌿  
(Thomson & Ketchledge 1958; Esslinger 1977a; Thomson 1984)  
=[\*Melanelia disjuncta\*](#)
- Parmelia dubia* (Wulfen) Schaer. 📖 🌿  
(Thomson & Ketchledge 1958)  
=[\*Punctelia subrudecta\*](#), fide Esslinger 2011  
**Note:** This name was misapplied; *P. subrudecta* is not in CA. Material from CA under this name is *Punctelia jeckeri*.
- Parmelia elegantula* (Zahlbr.) Szatala 📖 🌿  
(Ahti 1969; Baltzo 1970; Esslinger 1977a; Sigal & Nash 1983; Thomson 1984)  
=[\*Melanohalea elegantula\*](#)
- Parmelia enteromorpha* Ach. 📖 🌿  
(TJ for references)  
=[\*Hypogymnia enteromorpha\*](#)
- Parmelia exasperata* De Not. 📖 🌿  
(Hasse 1903a, 1908a; Herre 1910, 1912a; Hasse 1913b; Wheeler 1938; Berry 1941; Herre 1946, 1950a)  
=[\*Melanelia exasperata\*](#), but misidentifications for CA
- Parmelia exasperatula* Nyl. 📖 🌿  
(Hale 1969; Esslinger 1977a; TJ; Thomson 1984)  
=[\*Melanohalea exasperatula\*](#)
- Parmelia flaventior* Stirt. 📖 🌿  
(TJ for references)  
=[\*Flavopunctelia flaventior\*](#)
- Parmelia flavicans* (Tuck.) Tuck. 📖 🌿  
(Tuckerman 1882; Hasse 1906; Herre 1906, 1910; Fink 1935)  
=[\*Flavoparmelia caperata\*](#)
- Parmelia fuliginosa* (Fr. ex Duby) Nyl. 📖 🌿  
(Herre 1910, 1946)  
=[\*Melanelixia fuliginosa\*](#) (synonymy fide Esslinger 2011)
- Parmelia furfuracea* (L.) Ach. 📖 🌿  
(Berry 1941; Herre 1946)  
=[\*Pseudevernia intensa\*](#), but misidentifications for CA
- Parmelia glabra* (Schaer.) Nyl. 📖 🌿  
(McClatchie 1897; Hasse 1898a; Herre 1910; Hasse 1913b; Fink 1935; Herre 1946; Thomson & Ketchledge 1958; Anderson 1962; Ahti 1966; Baltzo 1970; Esslinger 1977a; Pinelli & Jordan 1978; Sigal & Nash 1983)  
=[\*Melanelixia glabra\*](#)
- Parmelia glabratula* (Lamy) Nyl. 📖 🌿  
(Baltzo 1970; Esslinger 1977a; Thomson 1984)  
=[\*Melanelixia fuliginosa\*](#)
- Parmelia glabroides* Essl. 📖 🌿  
(Esslinger 1977a)



- =[\*Melanelixia glabroides\*](#)  
*Parmelia herreana* Zahlbr. 📖 🌿  
(Zahlbruckner 1930; Berry 1941; Herre 1945, 1946)  
=[\*Flavoparmelia caperata\*](#) fide Esslinger 2011
- Parmelia herrei* Zahlbr. 📖 🌿  
(Herre 1906, 1907, 1910; Fink 1935; Berry 1941; Herre 1946)  
=[\*Parmotrema herrei\*](#)
- Parmelia hypoleucina* J. Steiner 📖 🌿  
(W. Culberson 1973)  
=[\*Parmotrema hypoleucinum\*](#)
- Parmelia hypotropa* Nyl. s. l. 📖 🌿  
(Hale 1965; W. Culberson 1973; W. Culberson & C. Culberson 1973)  
=[\*Parmotrema hypotropum\*](#) s. l.
- Parmelia infumata* Nyl. 📖 🌿  
(Imshaug 1957)  
=[\*Melanohalea infumata\*](#)
- Parmelia ioannis-simae* Gyeln. 📖 🌿  
(Baltzo 1970)  
=[\*Xanthoparmelia taractica\*](#), but CA records are likely to be *X. coloradoënsis* fide Esslinger & Egan (1995)
- Parmelia isidiotyla* Nyl. 📖 🌿  
(Anderson 1962; Baltzo 1970)  
=[\*Xanthoparmelia loxodes\*](#)
- Parmelia kerguelensis* F. Wils. 📖 🌿  
(Hale & Cole 1988)  
=chemotype of *P. saxatilis*
- Parmelia kernstockii* Lynge & Zahlbr. 📖 🌿  
(Du Rietz 1925; Herre 1946)  
=[\*Flavopunctelia flaventior\*](#)
- Parmelia kurokawae* Hale 📖 🌿  
(Hale 1967; Nash 1974)  
=[\*Xanthoparmelia lavicola\*](#)
- Parmelia laevigata* (Sm.) Ach. 📖 🌿  
(Hue 1895; Hasse 1903a; Merrill 1923)  
=[\*Hypotrachyna laevigata\*](#)  
**Note:** Hue's (1895) report was from the Sierra de la Laguna in southern Baja California, Mexico. Hasse's report of *Parmelia laevigata* was not repeated in his definitive 1913b publication, so presumably he changed his mind about its identity.
- Parmelia lanata* (L.) Wallr. 📖 🌿  
(Tuckerman 1882; Hasse 1903c; Fink 1935; Herre 1945, 1946)  
=[\*Pseudephebe pubescens\*](#)
- Parmelia lineola* E. C. Berry 📖 🌿  
(Herre 1942b, 1945, 1946; Baltzo 1970)  
=[\*Xanthoparmelia lineola\*](#)
- Parmelia lophyrea* Ach. 📖 🌿  
(Herre 1946; Fink 1935)  
=[\*Hypogymnia lophyrea\*](#) (synonymy fide Miadlikowska et al. 2011)
- Parmelia loxodes* Nyl. 📖 🌿  
(Esslinger 1973a, 1977a)  
=[\*Xanthoparmelia loxodes\*](#)

*Parmelia mexicana* Gyeln. 📖 🌿

(Hale 1969; Baltzo 1970)

=[\*Xanthoparmelia mexicana\*](#)

*Parmelia multispora* A. Schneid. 📖 🌿

(Hasse 1910a, 1913b; Fink 1935; Berry 1941; Ahti 1966; Jordan 1968; Baltzo 1970; Lindsay 1973; TJ)

=[\*Melanohalea multispora\*](#)

*Parmelia olivacea* (L.) Ach. 📖 🌿

(TJ for references)

=[\*Melanohalea olivacea\*](#), but misidentifications, possibly, of *P. subolivacea*

*Parmelia olivacea* var. *aspidota* Ach. 📖 🌿

(TJ for references)

=[\*Melanelia exasperata\*](#), but misidentifications

*Parmelia olivacea* var. *glabra* (Schaer.) Linds. 📖 🌿

(Berry 1941; Herre 1942c)

=[\*Melanelixia glabra\*](#)

*Parmelia olivacea* var. *multispora* A. Schneid. 📖 🌿

(Herre 1946)

=[\*Melanohalea multispora\*](#)

*Parmelia olivacea* var. *polyspora* Herre 📖 🌿

(Herre 1910, 1946)

=[\*Melanohalea multispora\*](#)

**Note:** TJ, following Esslinger (1977a), merged this taxon with *P. multispora* [= *Melanelia multispora*] but the protologue of that taxon indicates that it has 50–100 spores per ascus whereas, according to Herre, *Parmelia olivacea* var. *polyspora* has fewer than 25 spores per ascus. Esslinger (1977a) gave a spore number of 12–32 per ascus for *M. multispora*, and quoted Ahti (1966) who said that Schneider's number in the type description (A. Schneider 1898) was obviously erroneous.

*Parmelia olivacea* var. *prolixa* Ach. 📖 🌿

(Tuckerman 1882)

=misidentifications of *N. verruculifera*, *fide* Esslinger (1977a, p. 138)

*Parmelia olivacea* var. *sorediata* Ach. 📖 🌿

(McClatchie 1897; Hasse 1898a)

=[\*Melanelia sorediata\*](#), rather than *M. olivacea* as in TJ.

*Parmelia olivaria* (Ach.) Th. Fr. 📖 🌿

(Herre 1912a, Merrill 1923; Herre 1946; Thomson & Ketchledge 1958; TJ)

=[\*Cetrelia olivetorum\*](#)

*Parmelia olivetorum* Nyl. 📖 🌿

(McClatchie 1897; Hasse 1898a, 1903a, 1913b; Fink 1935; TJ)

=[\*Cetrelia olivetorum\*](#)

*Parmelia omphalodes* (L.) Ach. 📖 🌿

(Herre 1946; Tucker 2002)

**Synonyms:** [\*P. saxatilis\* var. \*omphalodes\*](#) (Herre 1910)

**Note:** Although Herre's collection was from the higher elevations (~600 m) in Santa Cruz Co., the species is boreal, so this was probably a misidentification *fide* Tucker (2002). Brodo et al. (2001, color photograph and map on p. 482) showed it in Washington but not in CA.

*Parmelia ophioglossa* Taylor 📖 🌿

(Taylor 1847)

=[\*Heterodermia leucomela\*](#)

*Parmelia perforata* (Jacq.) Ach. 📖 🌿

(Tuckerman 1866; Bolander 1870; Herre 1906, 1907, 1910; Berry 1941; Herre 1945, 1946)

=[\*Parmotrema perforatum\*](#), but based on misidentifications for CA

*Parmelia perlata* (Huds.) Ach. 📖 🌿

(TJ for references)

=[\*Parmotrema perlatum\*](#)

*Parmelia perlata* subsp. *ciliata* Nyl. 📖 🌿

(Hasse 1898a)

=[\*Parmotrema perlatum\*](#)

*Parmelia perlata* var. *flavicans* Tuck. 📖 🌿

(Tuckerman 1866; Bolander 1870)

=[\*Flavoparmelia caperata\*](#)

*Parmelia physodes* (L.) Ach. 📖 🌿

(TJ for references)

=[\*Hypogymnia physodes\*](#)

**Note:** Herre's (1946) description included fertile material, which is unusual in this species but was described also by McCune (2002); Herre's description, however, may apply in part to other species in *Hypogymnia*.

*Parmelia physodes* var. *enteromorpha* (Ach.) Tuck. 📖 🌿

(Hasse 1903a, 1908b)

=[\*Hypogymnia enteromorpha\*](#)

*Parmelia praesignis* Nyl. 📖 🌿

(Herre 1946; TJ)

=[\*Flavopunctelia praesignis\*](#)

*Parmelia prolixa* (Ach.) Carroll 📖 🌿

(Hasse 1903c, 1905; Fink 1935; Herre 1946)

=misidentifications

*Parmelia prolixa* var. *panniformis* Nyl. 📖 🌿

(Hasse 1906)

=[\*Melanelia panniformis\*](#) (but this report may be a misidentification)

*Parmelia pubescens* (L.) Vain. 📖 🌿

(Berry 1941; Herre 1942a, 1946, 1950a; TJ)

=[\*Pseudephebe pubescens\*](#)

*Parmelia quercina* (Willd.) Vain. 📖 🌿

(Berry 1941; Herre 1942a, 1946, 1950a; Smith 1980; Sigal & Nash 1983)

=[\*Parmelina coleae\*](#)

*Parmelia reticulata* Taylor 📖 🌿

(Thomson & Ketchledge 1958; TJ)

=[\*Parmotrema reticulatum\*](#)

*Parmelia revoluta* Flörke 🌿

=[\*Hypotrachyna revoluta\*](#)

*Parmelia rutidota* Hook. f. & Taylor 📖 🌿

(Lindsay 1973)

=[\*Flavoparmelia rutidota\*](#), but CA reports are probably misidentifications as this species occurs mostly in southeastern U. S.

*Parmelia saxatilis* var. *omphalodes* (L.) Herre 📖 🌿

(Herre 1910)

=[\*P. omphalodes\*](#)

*Parmelia sorediata* (Ach.) Th. Fr. 📖 🌿

(Herre 1906; Fink 1935; Herre 1946)

=[\*Melanelia sorediata\*](#)

*Parmelia soredica* Nyl. 📖 🌿

(Herre 1906, 1907, 1910; Moxley 1921; Fink 1935; Berry 1941; Herre 1945, 1946; W. Culberson

1955; Thomson & Ketchledge 1958; TJ)

=[Flavopunctelia soledica](#)

**Note:** Herre's reports are probably based on misidentifications, perhaps of more than one taxon. His comment that apothecia were common in the material would not apply to either *Flavopunctelia flaventior* or *F. soledica*.

*Parmelia sphaerosporella* Müll. Arg. 📖 🌿

(Zahlbruckner 1902; Hasse 1903c; Fink 1935; Herre 1945, 1946; Tucker 1973; TJ)

=[Ahtiana sphaerosporella](#)

*Parmelia stenophylla* (Ach.) Du Rietz 📖 🌿

(Imshaug 1957 [reported from Mono Pass, Mono Co., Piute Pass, Fresno Co., and Kearsarge Pass, Kings Canyon N. P.]

=[Xanthoparmelia stenophylla](#)

*Parmelia stuppea* Taylor 📖 🌿

(Taylor 1847; Hale 1965; Jordan 1968; Baltzo 1970)

=[Parmotrema stuppeum](#)

*Parmelia stygia* (L.) Ach. 📖 🌿

(Hasse 1903c; Herre 1946)

=[Melanelia stygia](#), but misidentifications for CA

*Parmelia subargentifera* Nyl. 📖 🌿

(Jordan 1968; Baltzo 1970; Esslinger 1977a)

=[Melanelixia subargentifera](#)

*Parmelia subaurifera* Nyl. 📖 🌿

(Hale 1969; Baltzo 1970; Lindsay 1973; Esslinger 1977a)

=[Melanelixia subaurifera](#)

*Parmelia subcapitata* Nyl. ex Hasse 📖 🌿

(McClatchie 1897; Hasse 1913b; Fink 1935; TJ)

=[Flavoparmelia subcapitata](#)

*Parmelia subconspersa* Nyl. 📖 🌿

(Hasse 1913b)

=[Flavoparmelia rutidota](#), but misidentifications for CA

*Parmelia subelegantula* Essl. 📖 🌿

(Esslinger 1977a; Pinelli & Jordan 1978)

=[Melanohalea subelegantula](#)

*Parmelia subhosseana* Essl. 📖 🌿

(Esslinger 1977a; TJ)

=[Xanthoparmelia subhosseana](#)

*Parmelia sublaevigata* Nyl. 📖 🌿

(Berry 1941; Herre 1946)

=*Hypotrachyna sublaevigata* (synonymy *fide* Esslinger 2011)

**Note:** Herre (1946) suggested that the single Orcutt collection cited by Berry may actually have been collected in Baja California. Nash et al. (2002, p. 250) cite this species in Chihuahua and Sinaloa, Mexico.

*Parmelia subolivacea* Nyl. 📖 🌿

(Pinelli & Jordan 1978; Sigal & Nash 1983)

=[Melanohalea subolivacea](#)

*Parmelia subramigera* Gyeln. 📖 🌿

(Nash 1974)

=[Xanthoparmelia subramigera](#)

*Parmelia subrudecta* Nyl. 📖 🌿

(Jordan 1968)

=[\*Punctelia subrudecta\*](#), but CA material is *P. jeckeri*

*Parmelia taractica* Kremp. 📖 🌿

(Baltzo 1970; Hale 1979)

=[\*Xanthoparmelia taractica\*](#), but not in N. Amer.

**Note:** Hale (1979) used this name in a broad sense to include *X. coloradoënsis* and *X. somloënsis*, and Baltzo's CA report likely used it in the same sense.

*Parmelia tiliacea* Flörke 📖 🌿

(TJ for references)

=name misapplied to [\*Parmelina coleae\*](#)

*Parmelia verruculifera* Nyl. 📖 🌿

(Esslinger 1973a, 1977a)

=[\*Xanthoparmelia verruculifera\*](#)

*Parmelia vittata* (Ach.) Nyl. 📖 🌿

(Merrill 1923)

=[\*Hypogymnia vittata\*](#), but misidentifications for CA

*Parmelia weberi* Hale 📖 🌿

(Nash & Elix 2004; *C. Wetmore 16894*, Palm Cyn, Riverside Co., MIN; *C. Wetmore 14609*, San Jacinto Mts, Riverside Co., MIN)

=[\*Xanthoparmelia weberi\*](#)

**PARMELIELLA** Müll. Arg.

***Parmeliella parvula*** P. M. Jørg. 📖 🌿

(Williams & Sillett 2007; *T. Tønsberg TT14689* pr. p., Del Norte Co., BG)

***Parmeliella triptophylla*** (Ach.) Müll. Arg. 📖 🌿

(Jovan & McCune 2004; Brodo et al. 2001 [p. 485, color photograph but no CA report]; Hinds & Hinds 2007 [color photograph, p. 341, only]; *W. Weber L-81082*, Santa Cruz Isl., Santa Barbara Co., ASU)

**Note:** This species has been collected widely in the U. S.

*Parmeliella cyanolepra* (Tuck.) Herre 📖 🌿

(Herre 1910; Sigal 1975; TJ; Sigal 1989; West & Doell 1995; Wright 1997; Robertson et al. 1998; McGee 1999; Robertson 2003a, 2004; Benson 2005; Carlberg et al. 2007)

=[\*Fuscopannaria cyanolepra\*](#)

*Parmeliella lepidiota* (Sommerf.) Vain. 📖 🌿

(Herre 1910; Hasse 1913b; Fink 1935)

=[\*Fuscopannaria praetermissa\*](#)

*Parmeliella lepidiota* var. *corallophora* (Tuck.) Herre 📖 🌿

(Herre 1910; Hasse 1913b; Fink 1935; Thomson & Ketchledge 1958)

=[\*Fuscopannaria laceratula\*](#) (*fide* Jørgensen 2001a [p. 683])

**Note:** The name *P. lepidiota* f. *corallophora* (sic) has been misapplied to *Fuscopannaria coralloidea* P. M. Jørg., *fide* Jørgensen (2001a, p. 681).

*Parmeliella lepidiota* var. *cyanolepra* Tuck. 📖 🌿

(Hasse 1913b)

=[\*Fuscopannaria cyanolepra\*](#)

*Parmeliella microphylla* (Sw.) Müll. Arg. 📖 🌿

(Orcutt 1903; Hasse 1913b; Herre 1910; an invalid name, *fide* Jørgensen 2001a)

=[\*Vahliella leucophaea\*](#)

*Parmeliella praetermissa* (Nyl.) P. James 📖 🌿

(Jordan 1968; Baltzo 1970; Lindsay 1973; TJ; Thomson 1984)

=[\*Fuscopannaria praetermissa\*](#)

*Parmeliella ruderatula* (Nyl.) Hasse 📖 🌿

(Hasse 1913b; TJ)

=[\*Massalongia microphylliza\*](#), *fide* Jørgensen (personal communication).

*Parmeliella saubinetii* (Mont.) Zahlbr. 📖 🌿

(Volk 1963; Lindsay 1973; Ohlsson 1973; TJ)

=[\*Vahliella saubinetii\*](#), which is not reported for CA by Jørgensen (2001a)

**Note:** According to Jørgensen (2001a, p. 688), *Fuscopannaria pacifica* has been misidentified as *P. saubinetii*.

*Parmeliella sonomensis* (Tuck.) Hasse 📖 🌿

(Hasse 1913b)

=[\*Koerberia sonomensis\*](#)

## PARMELINA Hale

**Parmelina coleae** Argüello & A. Crespo 📖 🌿

(Argüello et al. 2007; Knudsen et al. 2009; McCune & Geiser 2009)

**Misapplied names:** [\*P. quercina\*](#) for N. Amer., [\*Parmelia quercina\*](#), [\*P. tiliacea\*](#)

*Parmelina quercina* (Willd.) Hale 📖 🌿

(Hale 1976b; Pinelli & Jordan 1978; TJ; Hale & Cole 1988; Baltzo 1989; Bowler & Riefner 1990; Hill 1997; Wright 1997, 2001a; Brodo et al. 2001 [p. 486, with color photograph]; Nash & Elix 2002; Robertson 2003a; Jovan & McCune 2004; Benson 2005; Robertson 2005a; Carlberg et al. 2007)

=[\*P. coleae\*](#)

## PARMELIOPSIS Nyl.

**Parmeliopsis ambigua** (Wulfen) Nyl. 📖 🌿

(Tucker 1973; Sigal & Toren 1976; Pinelli & Jordan 1978; TJ; Thomson 1984; Hale & Cole 1988; Ryan & Nash 1991; Brodo et al. 2001 [p. 489, with color photograph]; Jovan & McCune 2004; Robertson & Beyer 2005)

**Parmeliopsis hyperopta** (Ach.) Arnold 📖 🌿

(Sigal & Toren 1976; Pinelli & Jordan 1978; TJ; Hale & Cole 1988; Brodo et al. 2001 [p. 489, with color photograph]; Wright 2001a; Jovan & McCune 2004; Hinds & Hinds 2007 [color photograph, p. 346, only]; *B. Ryan 25156*, edge of Marble Mtn Wilderness, about 1 mi. along trail from Lovers Camp, Siskiyou Co., SBBG)

## PARMOTREMA A. Massal.

**Parmotrema arnoldii** (Du Rietz) Hale 📖 🌿

(TJ; Hale & Cole 1988; Baltzo 1989; Brodo et al. 2001 [p. 492, with color photograph]; Wright 2001a; Baltzo 2002; Nash & Elix 2002; Robertson 2002a; Ellyson & Sillett 2003; Thomson 2003; Jovan & McCune 2004; Tucker et al. 2004; Robertson 2005c; Hinds & Hinds 2007 [color photograph, p. 349, only]; Williams & Sillett 2007; Rotter 2010; Tucker 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [\*Parmelia arnoldii\*](#)

**Parmotrema austrosinense** (Zahlbr.) Hale 📖 🌿

(Hale & Cole 1988; von Reis 1991; Riefner, Bowler, & Ryan 1995; Brodo et al. 2001 [pp. 492–493, with color photograph]; Wright 2001a; Nash & Elix 2002; Jovan & McCune 2004; Tucker 2010)

**Parmotrema crinitum** (Ach.) M. Choisy 📖 🌿

(Hale & Cole 1988; West & Doell 1995; Wright 2001a; Brodo et al. 2001 [p. 494, with color photograph]; Robertson 2002a; Ellyson & Sillett 2003; Robertson 2005b; Hinds & Hinds 2007 [color photograph, p. 350, only]; Williams & Sillett 2007; McCune & Geiser 2009)

**Synonyms:** [\*Parmelia crinita\*](#) (Lindsay 1973)

**Parmotrema cristiferum** (Taylor) Hale 📖 🌿

(TJ; Nash & Elix 2002)

**Synonyms:** [Parmelia cristifera](#) (Fink 1935; Berry 1941; Herre 1946; Brodo et al. 2001 [p. 495, color photograph but no CA report]; *L. Ross* 282, Wood Cyn NW of Camp Pendleton, San Diego Co., ASU)

**Parmotrema eurysacum** (Hue) Hale 📖 🌿

(*B. Ryan* 30959, Santa Catalina Isl., Los Angeles Co., ASU)

**Note:** This species has been more commonly collected in Arizona, Texas, Arkansas, and southeastern U. S.

**Parmotrema herrei** (Zahlbr.) Spielmann & Marcelli 📖 🌿

(Marcelli et al. 2011)

**Synonyms:** [Parmelia herrei](#)

**Parmotrema hypoleucinum** (J. Steiner) Hale 📖 🌿

(TJ; Bratt 1987, 1997; Hale & Cole 1988; Riefner, Bowler, & Ryan 1995; Bowler et al. 1996; Tucker 1999; Bourell 2000; Brodo et al. 2001 [p. 496]; Wright 2001a; Nash & Elix 2002; Knudsen 2009; Knudsen & Kocourková 2010f; Tucker 2010; Knudsen & Kocourková 2012a)

**Synonyms:** [Parmelia hypoleucina](#)

**Parmotrema hypotropum** (Nyl.) Hale 📖 🌿

(Wright 2001a; Nash & Elix 2002; *T. Nash* 6920, Torrey Pines S. P., San Diego Co., ASU; Brodo et al. 2001 [p. 497, color photograph but no CA report]; Knudsen & Kocourková 2009a; *T. Nash* 19614, 2 km N of Stinson Beach, Marin Co., ASU)

**Synonyms:** [Parmelia hypotropa](#) (W. Culberson & C. Culberson 1973)

**Note:** The Marin Co. material should be re-examined, because *P. hypotropum* is reported only in extreme southern part of CA *fide* Nash & Elix 2002.

**Parmotrema perlatum** (Huds.) M. Choisy 📖 🌿

(Hinds & Hinds 2007 [color photograph, p. 352, only]; Knudsen 2009; McCune & Geiser 2009; Knudsen & Kocourková 2010f; Rotter 2010; Tucker 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [Parmelia perlata](#), [P. perlata subsp. ciliata](#), [Parmotrema chinense](#)

**Parmotrema reticulatum** (Taylor) M. Choisy 📖 🌿

(Hale & Cole 1988; Hinds & Hinds 2007 [color photograph, p. 353, only]; Knudsen & Kocourková 2012a)

**Synonyms:** [Parmelia reticulata](#) (Thomson & Ketchledge 1958; TJ), [Rimelia reticulata](#) (Bowler et al. 1996; Bourell 2000; Wright 2001a; Brodo et al. 2001 [pp. 642–643, with color photograph]; Nash & Elix 2002)

**Parmotrema stuppeum** (Taylor) Hale 📖 🌿

(TJ; Baltzo 1989; von Reis 1991; Doell & Wright 1996; Bratt 1999; Brodo et al. 2001 [pp. 500–501, with color photograph]; Wright 2001a; Baltzo 2002; Nash & Elix 2002; Robertson 2003a; Thomson 2003; Tucker et al. 2004; Hinds & Hinds 2007 [color photograph, p. 354, only]; McCune & Geiser 2009; Rotter 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [Parmelia stuppea](#)

*Parmotrema cetratum* (Ach.) Hale 📖 🌿

**Synonyms:** *Parmelia acanthifolia* (Hue 1895), [P. cetrata](#) (Herre 1946)

**Note:** Hue's report was from Mexico, and Herre's report was probably based on a misidentification.

*Parmotrema chinense* (Osbeck) Hale & Ahti 📖 🌿

(Hale & Cole 1988; Baltzo 1989; McGee 1995; West & Doell 1995; Bowler et al. 1996; Doell & Wright 1996; McGee 1998; Wright 1998; Tucker 1999; Brodo et al. 2001 [pp. 493–494, with color photograph]; McGee 2001; Wright 2001a; Baltzo 2002; Nash & Elix 2002; Ellyson & Sillett 2003; Robertson 2003a; Jovan & McCune 2004; Tucker et al. 2004; Knudsen 2007b; Williams & Sillett 2007)

=[P. perlatum](#)

*Parmotrema perforatum* (Jacq.) A. Massal. 📖 🌿

**Synonyms:** [Parmelia perforata](#) (Tuckerman 1866; Bolander 1870; Herre 1906, 1907, 1910; Berry

1941; Herre 1945, 1946; Brodo et al. 2001 [p. 498, color photograph but no CA report])

**Note:** Herre's comments (1946) on his material suggest that the specimens were misidentified; geographic distribution includes eastern U. S. and Mexico but not CA, *fide* Nash & Elix (2002).

*Parmotrema praesorediosum* (Nyl.) Hale 🍄 🌿

(Brodo et al. 2001 [color photograph and map on p. 499 showed it in a small area in inland central CA, an unlikely range extension for this species from southeastern U. S.]; discussed in Tucker 2002; Nash & Elix 2002 [p. 327] indicated it in Mexico, not in CA)

**PECCANIA** A. Massal. *ex* Arnold

**Peccania arizonica** (Tuck.) Herre 🍄 🌿

(Herre 1942c [A. Herre, on soil between rocks, foothills near Stanford, San Mateo Co.]; TJ; Knudsen 2006a; Tretiach & Schultz 2008; *S. Tucker 36279*, Mojave Natural Preserve, Granite Mts, San Bernardino Co., SBBG)

**Peccania cernohorskyi** (Servít) Czeika & Guttova 🍄 🌿

(Schultz 2009 [“perhaps”], two collections in San Jacinto Mts and southern Sierra Nevada)

**Peccania subnigra** (B. de Lesd.) Wetmore 🍄 🌿

(Tretiach & Schultz 2008; *C. Bratt 12585A, 12586D*, Kelbaker Rd, SE of Baker, San Bernardino Co., SBBG, det. M. Schultz)

**Peccania texana** (Tuck.) Wetmore 🌿

(*C. Wetmore 14878*, Death Valley, Inyo Co., MIN; *C. Wetmore 16883*, Palm Cyn, Riverside Co., MIN)

**Peccania tiruncula** (Nyl.) Henssen 🍄 🌿

(Tretiach & Schultz 2008; *H. Hasse 1278*, Palm Springs, Riverside Co., ASU, NY; *T. Nash 8470*, SW of Parker Dam on Colorado River, San Bernardino Co., ASU)

**PELTIDEA** Ach.

*Peltidea canina* (L.) Hoffm. 🍄 🌿

(Hansen 1895)

=[\*Peltigera canina\*](#)

**PELTIGERA** Willd.

**Peltigera apthosa** (L.) Willd. 🍄 🌿

(Bolander 1870; Lindsay 1973; TJ; Hale & Cole 1988; Goward et al. 1994; Wright 1997; Brodo et al. 2001 [pp. 504–505, with color photograph]; *W. B. Cooke 26751*, Smith River trail, Del Norte Co., 7–8-1950, MU; *H. Thiers HDT-30898*, Soda Creek Ranger Station, road to Lake Pillsbury, Lake Co., ASU)

**Note:** Collections should be compared to *P. leucophlebia* and *P. britannica*; distinctions were clarified in Goward et al. 1994.

**Peltigera britannica** (Gyeln.) Holt.-Hartw. & Tønsberg 🍄 🌿

(McCune & Geiser 1997; Brodo et al. 2001 [p. 506]; *S. Tucker 15030*, Gasquet Mtn Rd, Del Norte Co., SBBG)

**Peltigera canina** (L.) Willd. 🍄 🌿

(Bolander 1870; McClatchie 1895; Hasse 1895, 1896; McClatchie 1897; Hasse 1898a; Orcutt 1903; Herre 1906; Orcutt 1907, 1909; Herre 1910; Hasse 1913b; Herre 1950a; Imshaug 1957; Jordan 1968; Lindsay 1973; Malachowski 1975; Pinelli & Jordan 1978; TJ; Thomson 1984; Tucker & Bratt 1995; Doell & Wright 1996; Tucker & Bratt 1996; McGee 1998; Brodo et al. 2001 [pp. 506–507, with color photograph]; Baltzo 2002; Robertson 2002a, 2003a, 2004; Tucker et al. 2004; Hinds & Hinds 2007 [color photograph, p. 359, only]; not reported in S CA by Vitikainen 2004)

**Synonyms:** [\*Peltidea canina\*](#)

**Peltigera collina** (Ach.) Schrad. 🍄 🌿

(Baltzo 1970; Lindsay 1973; Pinelli & Jordan 1978; TJ; Thomson 1984; Baltzo 1989; Goward et al. 1994; Tucker & Bratt 1995, 1996; Wright 1997; Brodo et al. 2001 [p. 507, with color photograph];



McGee 2001; Baltzo 2002; Robertson 2003a, 2003b; Blauman 2004a; Jovan & McCune 2004; Tucker et al. 2004; Vitikainen 2004; Robertson 2005a, 2005c; Williams & Sillett 2007; Glacy et al. 2011; Knudsen & Kocourková 2012a)

**Synonyms:** [\*P. scutata\*](#)

***Peltigera degenii*** Gyeln.  

(Tucker & Bratt 1996; Hinds & Hinds 2007 [color photograph, p. 360, only]; McCune & Geiser 2009; *B. Ryan* 27126a, Hastings Natural History Reserve, Monterey Co., ASU; *S. Tucker* 37924, Jasper Ridge Biological Preserve W of Stanford Univ., San Mateo Co., SBBG, det. B. McCune)

***Peltigera didactyla*** (With.) J. R. Laund.  

(Hale & Cole 1988; Ryan & Nash 1991; Goffinet & Hastings 1994; Goward et al. 1994; Brodo et al. 2001 [pp. 507–509, with color photograph]; Vitikainen 2004; Hinds & Hinds 2007 [color photograph, p. 361, only])

**Synonyms:** [\*P. canina\* var. \*sorediifera\*](#), [\*P. canina\* var. \*spuria\*](#), [\*P. sorediata\*](#), [\*P. spuria\*](#)

***Peltigera fibrilloides*** (Gyeln.) Vitik.  

(Vitikainen 2004; *T. Nash* 7252, Banning-Idyllwild Rd, Mt. San Jacinto, Riverside Co., ASU)

**Note:** This species has been found more commonly in Arizona and Mexico.

***Peltigera gowardii*** Lendemer & H. O'Brien  

(Lendemer & O'Brien 2011, for West Coast segregate; Peterson 2012)

**Misapplied names:** [\*P. hydrothyria\*](#), [\*Hydrothyria venosa\*](#)

***Peltigera horizontalis*** (Huds.) Baumg.  

(central CA on map in Vitikainen 2004; Hinds & Hinds 2007 [color photograph, p. 364, only]; *J. Shevock* 12665, Redwood Creek, Monarch Wilderness, Fresno Co., ASU)

***Peltigera kristinssonii*** Vitik.  

(McCune & Geiser 2009; Brodo et al. 2001 [pp. 510–511, color photograph but no CA report]; *C. Bratt* 3341, Manzanita Creek above Nira, Figueroa Mtn, Santa Barbara Co., SBBG, det. B. McCune; *B. Ryan* 25489, Sulfur Springs Cpgd, Siskiyou Co., ASU)

***Peltigera leptoderma*** Nyl.  



(Herre 1944b)

**Note:** Herre's collection should be re-examined, as no other collections from N. Amer. have been located.



***Peltigera leucophlebia*** (Nyl.) Gyeln.  

(Hale & Cole 1988; Goward et al. 1994; Brodo et al. 2001 [pp. 512–513 with color photograph]; Hinds & Hinds 2007 [color photograph, p. 366, only]; *C. Bratt et al.* 7550, Pacific Crest Trail, Plumas Co., SBBG; *R. Darrow* 5103, Willow Creek Cyn, Humboldt Co., ASU; *B. Ryan* 25482, Marble Mtn Wilderness, Siskiyou Co., ASU)

**Synonyms:** [\*P. aphthosa\* var. \*leucophlebia\*](#), [\*P. aphthosa\* var. \*variolosa\*](#)

***Peltigera malacea*** (Ach.) Funck  

(Hale 1979 [map on p. 52]; omitted in TJ; discussed in Tucker [2002]; Brodo et al. 2001 [p. 513, color photograph but no CA report]; Hinds & Hinds 2007 [color photograph, p. 367, only]; Villella 2010; *B. Ryan* 25642a, N of Yreka, Siskiyou Co., ASU; *B. Ryan* 3, Sonora, Tuolumne Co., ASU)

***Peltigera membranacea*** (Ach.) Nyl.  

(Thomson 1950; Jordan 1968; Lindsay 1973; Pinelli & Jordan 1978; TJ; Thomson 1984; Hale & Cole 1988; Goward et al. 1994; Tucker & Bratt 1996; Brodo et al. 2001 [p. 513, with color photograph]; Baltzo 2002; Robertson 2003a; Jovan & McCune 2004; Robertson 2004; Vitikainen 2004; Robertson 2005a; Hinds & Hinds 2007 [color photograph, p. 368, only])

***Peltigera monticola*** Vitik.  

(Vitikainen 2004; *B. Ryan* 25843, Agua Tibia Wilderness, along Magee Palomar Trail, San Diego Co., ASU)

***Peltigera neckeri*** Hepp ex Müll. Arg.  

(Carlberg 2003 [based on *Isaacs/Bergman* 51, Six Rivers N. F., Trinity Co.]; Brodo et al. 2001 [p. 514,

color photograph but no CA report]; Hinds & Hinds 2007 [color photograph, p. 369, only]; *S. Tucker 6263B*, Skyline Blvd, Santa Cruz Co., SBBG, det. B. Ryan; *S. Tucker 38622*, Riverside Park, E of Sonora, Tuolumne Co., SBBG)

***Peltigera neopolydactyla*** (Gyeln.) Gyeln. 📷 🌿

(Goward et al. 1994; Brodo et al. 2001 [p. 516, with color photograph]; Robertson 2002a; reports discussed in Tucker [2002]; Carlberg 2003 [based on *T. Carlberg 801*, Yurok Experimental Forest, Six Rivers N. F., Del Norte Co.]; Williams & Sillett 2007; McCune & Geiser 2009)

**Note:** The name *P. dolichorrhiza* may have been misapplied to this taxon (Thomson 1950).

***Peltigera pacifica*** Vitik. 📷 🌿

(Robertson & Robertson 2008, [in Siskiyou Mts]; Brodo et al. 2001 [p. 517, color photograph but no CA report]; *S. Tucker 31804*, Oregon Creek near Downieville, Yuba Co., SBBG; *K. Knudsen 10214*, Limekiln S. P., Santa Lucia Mts, Monterey Co., UCR)

***Peltigera polydactylon*** (Neck.) Hoffm. 📷 🌿

(Thomson 1984; Hale & Cole 1988; Baltzo 2002; discussed by Tucker 2002; Vitikainen 2004 [for southern coast of CA]; Brodo et al. 2001 [p. 518, color photograph but no CA report]; Hinds & Hinds 2007 [color photograph, p. 370, only])

**Synonyms:** [\*P. polydactyla\*](#)

**Note:** Many collections are probably misidentifications, *fide* B. Ryan.

***Peltigera ponojensis*** Gyeln. 📷 🌿

(Goward et al. 1994; McCune & Geiser 1997; Brodo et al. 2001 [p. 518, with color photograph]; Tucker 2002; Carlberg 2003 [based on *T. Carlberg 748*, Grizzly Creek, Shasta-Trinity N. F., Trinity Co.]; Robertson 2003b; Vitikainen 2004 [for central CA]; Benson 2005; Robertson & Beyer 2005; McCune & Geiser 2009; Villella 2010; *J. Shevock 18534*, Fresno Co., UC)

***Peltigera praetextata*** (Flörke *ex* Sommerf.) Zopf 📷 🌿

(Malachowski 1975; TJ; Hale & Cole 1988; von Reis 1991; Goward et al. 1994; Tucker & Bratt 1996; Brodo et al. 2001 [pp. 518–520, with color photograph]; Robertson 2002a; Jovan & McCune 2004; Vitikainen 2004; Hinds & Hinds 2007 [color photograph, p. 372, only]; Knudsen et al. 2009)

**Synonyms:** [\*P. canina f. innovans\*](#), [\*P. canina f. sorediata\*](#)

***Peltigera retifoveata*** Vitik. 🌿

(*B. Ryan 32038b*, Madera Co., ASU)

**Note:** Other collections are known only from western Canada, Alaska, and northern Europe.

***Peltigera rufescens*** (Weiss) Humb. 📷 🌿

(Tuckerman 1866; McClatchie 1897; Hasse 1898a; Herre 1906; Orcutt 1909; Herre 1910; Hasse 1913b; TJ; Hale & Cole 1988; Goward et al. 1994; Brodo et al. 2001 [pp. 520–521, with color photograph]; Vitikainen 2004; Benson 2005; Robertson & Beyer 2005; Hinds & Hinds 2007 [color photograph, p. 373, only]; Rosentreter et al. 2007 with photograph; Knudsen & Kocourková 2009b; Knudsen & Kocourková 2012c)

**Synonyms:** [\*Peltigera canina var. rufescens\*](#)

***Peltigera scabrosa*** Th. Fr. 📷 🌿

(TJ; Brodo et al. 2001 [p. 521, color photograph but no CA report]; *S. Tucker 34730*, Cone Peak Rd, Monterey Co., SBBG; *C. Wetmore 50784*, near Ladybug Cpgd E of South Fork Ranger Station, Sequoia N. P., Tulare Co., MIN)

**Misapplied names:** [\*P. pulverulenta\*](#) (Herre 1942a, 1950a)

***Peltigera venosa*** (L.) Hoffm. 📷 🌿

(Tuckerman 1866; Bolander 1870; Hasse 1898a; Orcutt 1909; Herre 1942c; Thomson 1950; TJ; Thomson 1984; Hale & Cole 1988; Goward et al. 1994; Wright 1997; Brodo et al. 2001 [pp. 521–522, with color photograph]; Vitikainen 2004 [for central CA])

*Peltigera aphthosa* var. *leucophlebia* Nyl. 📷 🌿

(Thomson 1984)

=[\*P. leucophlebia\*](#)

*Peltigera aphthosa* var. *variolosa* (A. Massal.) J. W. Thoms. 📖 🌿

(Thomson 1950; TJ)

=[\*P. leucophlebia\*](#)

*Peltigera canina* f. *innovans* (Körb.) J. W. Thoms. 📖 🌿

(Thomson 1950 [as *P. canina* var. *rufescens* f. *innovans*]; Pinelli & Jordan 1978 [as *P. canina* var. *rufescens* f. *innovans*])

=[\*P. praetextata\*](#)

*Peltigera canina* var. *rufescens* Weiss 📖 🌿

(Thomson 1984)

=[\*P. rufescens\*](#)

*Peltigera canina* f. *sorediata* Schaer. 📖 🌿

(McClatchie 1897; Hasse 1898a, 1913b; Thomson 1950)

=[\*P. praetextata\*](#)

*Peltigera canina* var. *sorediifera* Tuck. 📖 🌿

(Tuckerman 1872)

=[\*P. didactyla\*](#)

*Peltigera canina* var. *spuria* (Ach.) Schaer. 📖 🌿

(Tuckerman 1882; McClatchie 1897; Thomson 1950)

=[\*P. didactyla\*](#)

*Peltigera dolichorrhiza* (Nyl.) Nyl. 📖 🌿

**Synonyms:** [\*P. polydactyla\* var. \*dolichorrhiza\*](#) (Thomson 1950)

**Note:** According to Vitikainen (2004, p. 397), this species occurs in Mexico S of the Sonoran zone, and is similar to *P. neopolydactyla*. This is probably a misidentification for CA.

*Peltigera hydrothyria* (J. L. Russell) Miadl. & Lutzoni 📖 🌿

(nomenclatural change by Miadlikowska & Lutzoni 2000, CA not mentioned; Glavich & Geiser 2007; Poulsen & Carlberg 2007; Glavich 2009; McCune & Geiser 2009)

=[\*P. gowardii\*](#) for western collections

**Note:** Western populations under this name were found to be molecularly distinct from eastern populations and have been segregated as *P. gowardii*, *fide* Lendemer & O'Brien (2011).

*Peltigera polydactyla* Hoffm. 📖 🌿

(Bolander 1870; Tuckerman 1882; Jordan 1968; Lindsay 1973; Pinelli & Jordan 1978; TJ)

=[\*P. polydactylon\*](#)

*Peltigera polydactyla* var. *dolichorrhiza* Nyl. 📖 🌿

(Thomson 1950)

=[\*P. dolichorrhiza\*](#), but probably a misidentification for CA

*Peltigera polydactyla* var. *typica* J. W. Thoms. 📖 🌿

(Thomson 1950)

=[\*P. polydactylon\*](#)

*Peltigera pulverulenta* (Taylor) Kremp. 📖 🌿

(Herre 1942a, 1950a)

=[\*P. scabrosa\*](#) Th. Fr. for N. Amer. collections

*Peltigera scutata* (Dicks.) Duby 📖 🌿

(Tuckerman 1882; Herre 1906, 1910; Hasse 1913b; Thomson 1950; Jordan 1968)

=[\*P. collina\*](#)

*Peltigera sorediata* (Schaer.) Fink 📖 🌿

(Orcutt 1909 [as *P. sorediata* Schaer.]; Fink 1935 [p. 189])

=[\*P. didactyla\*](#) (synonymy *fide* Esslinger & Tucker 2009)

*Peltigera spuria* (Ach.) DC. 📖 🌿

(Hasse 1913b; Herre 1942c; TJ)

=[\*P. didactyla\*](#)

## PELTOSPHAERIA Berl.

### **Peltosphaeria californica** Petr. 📖 🌿

(Pettrak 1951; Barr 1985; Riedl 1962b)

**Note:** According to R. Harris (1995, pp. 84–86), this taxon might belong in *Julella*; see Aptroot & van den Boom (1995) for discussion of *Julella* and *Peltosphaeria*. The type, supposedly at W, has not been seen by either R. Harris or M. Barr (personal communication from R. Harris).

## PELTULA Nyl.

### **Peltula bolanderi** (Tuck.) Wetmore 📖 🌿

(Wetmore 1970; Sigal & Toren 1974, 1976; TJ; Sigal 1989; Robertson et al. 1998; Robertson & Robertson 2001; Büdel & Nash 2002; Carlberg et al. 2007; Knudsen 2007b; Knudsen & Kocourková 2009a, 2009c; Schultz 2009; Knudsen & Kocourková 2010f; Stone & Villella 2010; Glacy et al. 2011; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [Endocarpiscum bolanderi](#), [Heppia bolanderi](#), [Pannaria bolanderi](#)

### **Peltula corticola** Büdel & R. Sant. 📖 🌿

(Büdel et al. 2008, citing *C. Bratt 3475*, Islay Cyn, Santa Cruz Isl., Santa Barbara Co., SBBG, det. Schultz; Knudsen & Kocourková 2012a)

### **Peltula cylindrica** Wetmore 📖 🌿

(Brodo et al. 2001 [p. 523, with color photograph]; Tucker 2002; *W. Jordan 3208*, Pine Flat, NNE of Geyserville, Sonoma Co., 29 Sept 1979, MIN, WIS, ! S. Tucker)

### **Peltula euploca** (Ach.) Poelt 📖 🌿

(Baltzo 1970; Wetmore 1970; Sigal & Toren 1974; TJ; Hebert & Meyer 1984; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; von Reis 1991; Bowler et al. 1996; Bratt 1997; Doell et al. 1999; McGee 1999; Tucker 1999; Robertson & Robertson 2001; Brodo et al. 2001 [p. 523, with color photograph]; Robertson 2001; Büdel & Nash 2002; Knight et al. 2002; Blauman 2004a; Benson 2005; Robertson 2005c; Carlberg et al. 2007; Knudsen 2007b; Knudsen & Kocourková 2009c; McCune & Geiser 2009; Schultz 2009; Stone & Villella 2010; Tucker 2010; Villella 2010; Glacy et al. 2011; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [Dermatocarpon guepinii](#), [Endocarpiscum guepinii](#), [Heppia guepinii](#), [Pannaria guepinii](#)

### **Peltula farinosa** Büdel 📖 🌿

(Büdel & Nash 2002; Knudsen & Kocourková 2012a; *T. Nash 32451b*, Santa Cruz Isl., Santa Barbara Co., ASU)

### **Peltula michoacanensis** (B. de Lesd.) Wetmore 📖 🌿

(Wetmore 1970; TJ; Büdel & Nash 2002; *C. Wetmore 14595*, Palm Desert, Riverside Co., ASU, MIN)

### **Peltula obscurans** (Nyl.) Gyeln. var. **obscurans** 📖 🌿

(Wetmore 1970; TJ; von Reis 1991; Doell et al. 1999; Brodo et al. 2001 [p. 523]; Büdel & Nash 2002; Knudsen & Kocourková 2009c)

**Misapplied names:** *Heppia hassei* (in part)

### **Peltula obscurans** (Nyl.) Gyeln. var. **deserticola** (Zahlbr.) Wetmore 📖 🌿

(Wetmore 1970; TJ; Büdel & Nash 2002; Knudsen & Kocourková 2010a, citing a Hasse collection [*Lich. Exs. 60*] from Santa Monica Mts, FH; Knudsen & Kocourková 2012a)

### **Peltula obscurans** (Nyl.) Gyeln. var. **hassei** (Zahlbr.) Wetmore 📖 🌿

(Wetmore 1970; TJ; Brodo et al. 2001 [p. 523, with color photograph]; Büdel & Nash 2002; Knight et al. 2002; Robertson 2004; Benson 2005; Carlberg et al. 2007; Knudsen 2007b; Knudsen & Kocourková 2009c, 2010f; Tucker 2010; Knudsen & Kocourková 2012a)

**Synonyms:** [Heppia hassei](#) (Zahlbruckner 1902; Hasse 1903c; Herre 1910; Hasse 1913b; Fink 1935)

### **Peltula omphaliza** (Nyl.) Wetmore 📖 🌿

(Wetmore 1970; Sigal 1975; TJ; Sigal 1989; Bratt 1999; Doell et al. 1999; Büdel & Nash 2002; Knudsen & Kocourková 2009b; Tucker 2010; Knudsen & Kocourková 2012a)

**Synonyms:** [Heppia omphaliza](#)

**Peltula patellata** (Bagl.) Swinscow & Krog 📖 🌿

(Bratt 1999; Brodo et al. 2001 [pp. 524–525, with color photograph]; Robertson 2001; Büdel & Nash 2002; Tucker 2002; Riefner et al. 2003; Knudsen 2007b; Knudsen & Kocourková 2012a; *C. Wetmore 14624a*, Chino Cyn, western edge of Palm Springs, San Jacinto Mts, Riverside Co., ASU)

**Synonyms:** [P. polyspora](#), [Heppia leptopholis](#), [H. polyspora](#), [H. terrena](#)

**Peltula placodizans** (Zahlbr.) Wetmore 📖 🌿

(Büdel & Nash 2002; *C. Bratt 12204*, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Peltula richardsii** (Herre) Wetmore 📖 🌿

(Wetmore 1970; TJ; Brodo et al. 2001 [p. 525, with color photograph]; Büdel & Nash 2002; Rosentreter et al. 2007 [with photograph]; *K. Knudsen 12614*, Joshua Tree N. P., Mojave Desert, Riverside Co., UCR)

**Peltula sonorensis** Büdel & T. H. Nash 🌿

(*C. Wetmore 73811, 73868*, Santa Rosa Isl., MIN)

**Peltula tortuosa** (Nees) Wetmore 📖 🌿

(Büdel & Nash 2002)

**Note:** Other collections of this species are all from southeastern U. S.

**Peltula zahlbruckneri** (Hasse) Wetmore 📖 🌿

(Wetmore 1970; Sigal & Toren 1974; TJ; Brodo et al. 2001 [p. 523]; Robertson 2001 [San Diego Co. report]; Büdel & Nash 2002; Robertson & Robertson 2002 [reporting collections from Sonoma, Lake, and Napa counties]; Carlberg et al. 2007; Knudsen & Kocourková 2010a, citing a Hasse collection; *J. Larson*, Univ. Colo. Lich. Exs. 610, Madera Co., SBBG; color photograph on back cover of CALS Bulletin 7[2], 2000)

**Synonyms:** [Heppia zahlbruckneri](#)

*Peltula polyspora* (Tuck.) Wetmore 📖 🌿

(Wetmore 1970; TJ; Hale & Cole 1988; Bowler & Riefner 1990)

=[P. patellata](#)

**PERTUSARIA DC.**

**Pertusaria albescens** (Huds.) M. Choisy & Werner 📖 🌿

(TJ; Dibben 1980; Baltzo 1989; Hill 1997; Lumbsch et al. 1999; Baltzo 2002 [as “cf.”]; Lumbsch & Nash 2002; Tucker et al. 2004; Knudsen et al. 2009; *A. Herre* labeled as *Pertusaria globulifera* (Turner) Massal., on oaks along summit of range, Page Mill Rd, Santa Clara Co., 16 Oct 1903, verified and name updated by S. Tucker, CAS; *A. Herre 639* labeled as *Pertusaria globulifera*, between Kelseyville & Middletown, Lake Co., 23 Apr 1939, CAS, verified and name updated by S. Tucker)

**Synonyms:** [P. globulifera](#)

**Pertusaria amara** (Ach.) Nyl. 📖 🌿

(Herre 1910; Volk 1963; Jordan 1968; Lindsay 1973; TJ; Dibben 1980; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; von Reis 1991; Bowler et al. 1996; Tucker & Bratt 1996; Hill 1997; Wright 1997; McGee 1998; Lumbsch et al. 1999; Bourell 2000; Brodo et al. 2001 [pp. 527–528, with color photograph]; Baltzo 2002; Robertson 2002a, 2003a; Blauman 2004b; Tucker et al. 2004; Knudsen 2007b; Williams & Sillett 2007; Knudsen et al. 2009; Rotter 2010; Stone & Villella 2010; Tucker 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Pertusaria borealis** Erichsen 🌿

(*T. Tønberg TT14706*, Del Norte Co., BG)

**Note:** Most collections of this species are from Alaska, eastern Canada, and Scandinavia.

**Pertusaria brattiae** Lumbsch & T. H. Nash 📖 🌿

(Lumbsch et al. 1999; Lumbsch & Nash 2002; Knudsen 2009; Knudsen & Kocourková 2010f; Knudsen & Kocourková 2012a; *C. Bratt 9194*, West Anacapa Isl. Cpgd, Ventura Co., SBBG)

**Pertusaria californica** Dibben 📖 🌿

(Dibben 1980; Hale & Cole 1988; McGee 1995; West & Doell 1995; Lumbsch et al. 1999; Lumbsch &

Nash 2002; Robertson 2005b; Knudsen & Kocourková 2010f; Stone & Villella 2010; Glacy et al. 2011; Knudsen & Kocourková 2012a; *W. Weber*, Univ. Colo. Lich. Exs. 473, ocean headlands S of Stinson Beach, Marin Co., ASU, SBBG; *T. Nash 40728*, Trinidad Head, Humboldt Co., ASU; *T. Nash 37062*, West Anacapa Isl., Ventura Co., ASU)

***Pertusaria chiodectonoides*** Bagl. ex A. Massal. 📖 🌿

(TJ; Dibben 1980; Baltzo 1989; Lumbsch & Nash 2002; Knudsen 2009; Knudsen & Kocourková 2010a, citing Hasse collections [as *P. nolens*] from Santa Monica Mts)

**Synonyms:** *P. nolens* (Hasse 1909, 1913b; Fink 1935; Herre 1944b; Volk 1963; Baltzo 1970)

***Pertusaria coccodes*** (Ach.) Nyl. 🌿

(*T. Tønshberg TT14730*, Del Norte Co., BG; *K. Knudsen 11128.1*, Point Lobos State Reserve, Monterey Co., UCR)

**Note:** This is primarily a European species.

***Pertusaria consocians*** Dibben 📖 🌿

(Lumbsch & Nash 2002)

**Note:** This species occurs mainly in the midwestern U. S.

***Pertusaria excludens*** Nyl. 🌿

(*B. Ryan 23548*, on rock, western end of Heather Lake, Desolation Wilderness, El Dorado Co., ASU, det. A. Fryday)

***Pertusaria flavicunda*** Tuck. 📖 🌿

(Tuckerman 1877, 1882; Orcutt 1885; Eckfeldt 1893; Hasse 1896; McClatchie 1897; Hasse 1898a; Hasse 1903b, 1903d; Orcutt 1903, 1909; Zahlbruckner 1911; Hasse 1913b; Merrill 1923; TJ; Dibben 1980; Bratt 1987; Hale & Cole 1988; McGee 1995; Bowler et al. 1996; Bratt 1997; Lumbsch et al. 1999; Brodo et al. 2001 [pp. 528–529, with color photograph]; Lumbsch & Nash 2002; Knudsen 2007b, 2009; Knudsen & Kocourková 2009a, 2010f, 2012a)

***Pertusaria glaucomela*** (Tuck.) Nyl. 📖 🌿

(Hue 1891; TJ; Dibben 1980)

**Synonyms:** *Lecanora glaucomela* (Tuckerman 1872; Willey 1873a; Tuckerman 1882; Fink 1935), *L. oculata* subsp. *glaucomela*, *Pertusaria subpupillaris*

**Note:** This species is common in Oregon and Washington.

***Pertusaria hymenea*** (Ach.) Schaer. 📖 🌿

(TJ; Dibben 1980; Wright 1997; Lumbsch et al. 1999; Baltzo 2002; *S. Tucker 36361*, Jasper Ridge Biological Preserve, San Mateo Co., SBBG; *C. Bratt 4460-A*, Santa Cruz Isl., Santa Barbara Co., SBBG; *A. Herre* collection labeled as *Pertusaria wulfenii*, Devil's Cyn, Santa Cruz Mts, Santa Clara Co., 8 Sept 1906, annotated by S. Tucker, CAS)

**Synonyms:** *P. wulfenii* (Tuckerman 1866; Bolander 1870; Tuckerman 1882; Hasse 1896; McClatchie 1897; Hasse 1898a, 1903b; Herre 1907; Hasse 1908b; Orcutt 1909; Herre 1910; Hasse 1913b; Merrill 1923; Volk 1963; Jordan 1968)

***Pertusaria islandica*** Bratt, Lumbsch, & Schmitt 📖 🌿

(Schmitt et al. 2008; Knudsen 2009; Knudsen & Kocourková 2012a; *T. Nash 41330*, San Miguel Isl., Santa Barbara Co., ASU)

***Pertusaria lecanina*** Tuck. 📖 🌿

(Tuckerman 1872, 1882; Willey 1873a; Hasse 1895; McClatchie 1897; Hasse 1898a; Orcutt 1903; Hasse 1906; Orcutt 1907, 1909; Herre 1910; Hasse 1913b; Moxley 1921; Fink 1935; Volk 1963; Jordan 1968; TJ; Dibben 1980; Baltzo 1989; von Reis 1991; Lumbsch et al. 1999; Tucker 1999; Baltzo 2002; Lumbsch & Nash 2002; Tucker et al. 2004; Knudsen & Kocourková 2010a [citing a Hasse collection], 2010f; Tucker 2010; Knudsen & Kocourková 2012a)

***Pertusaria leioplaca*** DC. 📖 🌿

(Tuckerman 1872; Hasse 1903e; Herre 1910; Hasse 1913b; Moxley 1921; Volk 1963; Jordan 1968; TJ; Tucker & Bratt 1996; Lumbsch et al. 1999; Bourell 2000; Baltzo 2002; Lumbsch & Nash 2002; Tucker et al. 2004; Knudsen & Kocourková 2010a, citing a *H. Hasse* collection; Tucker 2010 [as “cf.”])

**Synonyms:** [\*P. leucostoma\*](#) (Dibben 1980)

***Pertusaria moreliensis*** B. de Lesd. 📖 🌿

(Lumbsch & Nash 2002; Knudsen & Kocourková 2012a; *T. Nash 32031*, Santa Catalina Isl., Los Angeles Co., ASU, det. H. Lumbsch)

**Note:** This species is primarily in Arizona and Mexico.

***Pertusaria occidentalis*** Bratt, Lumbsch, & Schmitt 📖 🌿

(Schmitt et al. 2008; Knudsen 2009; Knudsen & Kocourková 2012a; *T. Nash 38700*, western end of San Nicolas Isl., Ventura Co., ASU)

***Pertusaria ophthalmiza*** (Nyl.) Nyl. 📖 🌿

(Dibben 1980; Hale & Cole 1988; Lumbsch et al. 1999; Brodo et al. 2001 [p. 530, with color photograph]; Lumbsch & Nash 2002; Ellyson & Sillett 2003; Williams & Sillett 2007; Glacy et al. 2011; *S. Tucker 35031*, Ben Bow Recreation Area on Hwy 101, Humboldt Co., SBBG; *B. Ryan 11277*, Santa Monica Mts, Los Angeles Co., ASU)

**Synonyms:** [\*Sclerophyton occidentale\*](#)

**Note:** This lichen is parasitized by *Dactylospora parasitica* based on isotype *vide* L. Sparrius, e-mail to T. Nash.

***Pertusaria pseudocorallina*** (Lilj.) Arnold 📖 🌿

(Riefner 1990, based on *R. Riefner 83432*, Coon Creek Cyn, Montana de Oro S. P., San Luis Obispo Co., WIS, SBBG, UCI; reported from Mexico, not CA, by Lumbsch & Nash 2002)

***Pertusaria pupillaris*** (Nyl.) Th. Fr. 🌿

(*T. Tønberg TTI4694, 14694*, Del Norte Co., BG)

**Note:** This species is European.

***Pertusaria pustulata*** (Ach.) Duby 📖 🌿

(Tuckerman 1872; Hasse 1895; McClatchie 1897; Hasse 1898a; Orcutt 1903, 1907; Herre 1910; Hasse 1913b; Volk 1963; TJ; Dibben 1980; Hale & Cole 1988; Lumbsch & Nash 2002; Tucker et al. 2004; Knudsen & Kocourková 2010a, citing a Hasse collection; Tucker 2010; *C. Bratt 6420*, Santa Cruz Isl., Santa Barbara Co., SBBG; *S. Tucker 6141b*, Alum Rock S. P., San Jose, Santa Clara Co., SBBG)

***Pertusaria rubefacta*** Erichsen 📖 🌿

(Dibben 1980; McGee 1998 [as “cf.”]; Lumbsch et al. 1999; Lumbsch & Nash 2002; Tucker et al. 2004; Knudsen & Kocourková 2012a; *W. Weber 666*, Los Osos Oaks Reserve, San Luis Obispo Co., SBBG; *T. Nash 32619*, Santa Rosa Isl., Santa Barbara Co., ASU)

***Pertusaria subambigens*** Dibben 📖 🌿

(Dibben 1980; Baltzo 2002; Brodo et al. 2001 [p. 532, with color photograph]; Tucker 2002; *S. Tucker 28994*, Pygmy Forest, Mendocino Co., SBBG; *S. Tucker 37556*, Rock Spring, Mt. Tamalpais, Marin Co., SBBG)

**Misapplied names:** [\*P. ambigens\*](#) for N. Amer. records

***Pertusaria tejocotensis*** B. de Lesd. 📖 🌿

(Lumbsch & Nash 2002; Knudsen & Kocourková 2012a; *T. Nash 32452a*, Santa Cruz Isl., Santa Barbara Co., ASU)

**Note:** This species has most commonly been collected in Arizona, Texas, and Mexico.

***Pertusaria velata*** (Turner) Nyl. 📖 🌿

(Bolander 1870; Herre 1910; Fink 1935; TJ; Baltzo 2002; Lumbsch & Nash 2002; Tucker 2002; Brodo et al. 2001 [p. 534, color photograph but no CA report]; Tucker et al. 2004; Knudsen 2007b; Knudsen & Kocourková 2010f; Tucker 2010; Glacy et al. 2011; Knudsen & Kocourková 2012a; *B. Ryan 21997*, San Bruno Mtn, San Mateo Co., ASU; *A. Herre* collection, Devil's Cyn, Peters Creek, Santa Cruz Mts, Santa Clara Co., 27 August 1930, CAS, as *P. velata*, was re-identified as *P. albescens* by S. Tucker)

**Synonyms:** [\*P. santamonicae\*](#) (Dibben 1980)

***Pertusaria wulfenioides*** B. de Lesd. 🌿

(*T. Nash 32507*, Santa Cruz Isl., Santa Barbara Co., ASU)

**Note:** This species is common in Arizona and Mexico.

**Pertusaria xanthodes** Müll. Arg. 📖 🌿

(Dibben 1980; Lumbsch & Nash 2002; Brodo et al. 2001 [p. 535, color photograph but no CA report]; Knudsen & Kocourková 2009a, 2010a, the latter citing a Hasse collection; Tucker 2010; Knudsen & Kocourková 2012a; *S. Tucker 34419b*, Lotusland Estate, Montecito, Santa Barbara Co., SBBG; *B. Ryan 31138*, Santa Rosa Isl., Santa Barbara Co., ASU)

**Pertusaria ambigens** (Nyl.) Tuck. 📖 🌿

(Hasse 1903e, 1906; Fink 1935; Jordan 1968; TJ)

=[\*P. subambigens\*](#) for N. Amer. records

**Pertusaria communis** Lam. & DC. 📖 🌿

(Tuckerman 1882)

=*P. pertusa* (L.) Tuck., but misidentifications for N. Amer.

**Pertusaria globulifera** (Turner) Nyl. 📖 🌿

(Zahlbruckner 1902; Hasse 1903e, 1903f [as *P. globifera*]; Herre 1910; Fink 1935; TJ)

=[\*P. albescens\*](#) (synonymy *fide* Esslinger 2011)

**Pertusaria leucostoma** A. Massal. 📖 🌿

(Dibben 1980)

=[\*P. leioplaca\*](#)

**Pertusaria multipuncta** (Turner) Nyl. 📖 🌿

(Tuckerman 1882; McClatchie 1895; Herre 1907; Merrill 1923; Herre 1942c; Jordan 1968; Lindsay 1973; TJ; Baltzo 2002)

=misidentifications, mostly of *P. amara*, for N. Amer. records

**Pertusaria nolens** Nyl. 📖 🌿

(Hasse 1909, 1913b; Fink 1935; Herre 1944b; Volk 1963; Baltzo 1970)

=[\*P. chiodectonoides\*](#)

**Pertusaria panyrga** (Ach.) A. Massal. (TJ, error, not in N. Amer.) 📖 🌿

**Pertusaria pertusa** var. *rupestris* (DC.) Dalla Torre & Sarnth. 📖 🌿

(Herre 1910)

=*P. pertusa* (L.) Tuck.

**Note:** Dibben (1980) asserted that N. Amer. reports were misidentifications.

**Pertusaria raesaenenii** Erichsen 📖 🌿

(Lindsay 1973; TJ)

=misidentifications for N. Amer.

**Pertusaria rupestris** (DC.) Schaer. 📖 🌿

(Thomson & Ketchledge 1958)

=misidentifications for N. Amer. records, *fide* Dibben (1980)

**Pertusaria santamonicae** Dibben 📖 🌿

(Dibben 1980; Bratt 1987, 1997; Hill 1996; Stone & Villella 2010)

=[\*P. velata\*](#) (synonymy *fide* Archer & Messuti (1997), although the range of *P. velata* is restricted to the eastern half of U. S., *fide* Brodo et al. 2001, p. 534)

**Pertusaria subpupillaris** Vězda 🌿

(Vězda, 1966, Lich. Sel. Exs. 491)

=[\*P. glaucomela\*](#)

**Pertusaria wulfenii** DC. 📖 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1882; Hasse 1896; McClatchie 1897; Hasse 1898a, 1903b [as *P. wolfeni*]; Herre 1907; Hasse 1908b; Orcutt 1909; Herre 1910; Hasse 1913b; Merrill 1923; Volk 1963; Jordan 1968)

=[\*P. hymenea\*](#)

**PEZIZELLA** P. Karst.

\***Pezizella epithallina** (W. Phillips & Plowr.) Sacc. 📖 🌿



(Lendemer et al. 2010; Kocourková et al. 2012; *Lendemer 19680-A* Yosemite N. P., Mariposa Co., on *Peltigera didactyla*, NY)

#### PHACOGRAPHA Hafellner (Hafellner 2009)

\**Phacographa glaucomaria* (Nyl.) Hafellner 📖 🌿

**Synonyms:** [Opegrapha glaucomaria](#)

**Note:** There are no CA reports in Ertz & Egea 2008. The Baltzo (2002) report of *Opegrapha glaucomaria* was probably a misidentification, *vide* K. Knudsen in Kocourková et al. (2012a).

#### PHACOPSIS Tul.

\**Phacopsis vulpina* Tul. 📖 🌿

(Willey 1873b; Diederich 2003; Persoh & Kainz 2004; Kocourková et al. 2012; *S. Tucker 14848B*, Mt. Shasta, Siskiyou Co., SBBG, on *Letharia vulpina*, det. D. Triebel; *S. Tucker 14898B*, Mt. Shasta, Siskiyou Co., SBBG, on *Letharia columbiana*, det. D. Triebel; *S. Tucker 34113A* pr. p., American River Cyn near Kyburz, El Dorado Co., SBBG, on *Letharia vulpina*, det. P. Diederich)

\**Phacopsis oxyspora* (Tul.) Triebel & Rambold 📖 🌿

(Diederich 2003)

=[Nesolechia oxyspora](#)

*Phacopsis oxyspora* var. *fusca* Triebel & Rambold 📖 🌿

(Stone & Villella 2010)

=[Nesolechia oxyspora](#)

#### PHACOTHECIUM Trevis.

\**Phacothecium varium* (Tul.) Trevis. 📖 🌿

**Synonyms:** [Opegrapha physciaria](#) (Hafellner 2009)

#### PHAEOCALICIUM A. F. W. Schmidt

†*Phaeocalicium curtisii* (Tuck.) Tibell 📖 🌿

(TJ; Tibell & Ryan 2004; *S. Tucker 38515* pr. p., Sugar Pine Point S. P., western shore of Lake Tahoe, El Dorado Co., SBBG)

**Synonyms:** [Calicium curtisii](#) (McClatchie 1897; Hasse 1898a; Orcutt 1909; Hasse 1915b; Fink 1935; Lindsay 1973)

†*Phaeocalicium populneum* (Brond. ex Duby) A. F. W. Schmidt 📖 🌿

(TJ; Goward 1999; Rikkinen 2003; Thomson 2003)

**Synonyms:** [Calicium populneum](#) (Herre 1910)

†*Phaeocalicium tremulicola* (Norrl. ex Nyl.) Tibell 🌿

**Synonyms:** [Stenocybe tremulicola](#) Norrl. ex Nyl.

**Note:** According to E. Peterson (personal communication), collections should be re-examined and compared to *P. populneum*.

#### PHAEOGRAPHIS Müll. Arg.

*Phaeographis dendritica* (Ach.) Müll. Arg. 📖 🌿

(Jordan 1968; TJ; Baltzo 2002; Staiger & Kalb 2004; *S. Tucker 34421*, Lotusland Estate, Montecito, Santa Barbara, Santa Barbara Co., ASU, SBBG; *S. Tucker 28928*, Point Reyes, Marin Co., SBBG; *D. Kowalski* collection, Mendocino Co., 1972, ASU, CHSC; *T. Nash 18898*, Point Lobos, Monterey Co., ASU)

*Phaeographis smithii* (Leight.) B. de Lesd. 📖 🌿

(Staiger & Kalb 2004 [for central CA coast]; *T. Tønshberg TT14729*, Del Norte Co., BG; *S. Tucker 14969A*, S of Crescent City, Del Norte Co., ASU, SBBG)

*Phaeographis erumpens* (Nyl.) Müll. Arg. 📖 🌿

(Robertson 2001, based on *L. Braun* collection)

**Note:** Other collections under this name from Marin and Mendocino counties, are referable to *Graphis britannica*, det. B. Staiger & K. Kalb (personal communication to Ryan in 2003).

*Phaeographis eulectra* (Tuck.) Zahlbr. 📖 🌿

(Herre 1944b; Tucker & Kowalski 1975; TJ)

=[\*Graphis eulectra\*](#)

**Note:** CA reports are misidentifications, although the species is known from eastern U. S.

*Phaeographis inusta* (Ach.) Müll. Arg. 📖 🌿

(Herre 1910; Fink 1935; Volk 1963; Tucker 1973; TJ)

=probable misidentifications (Staiger, personal communication to Ryan, 2003)

## PHAEOPHYSCIA Moberg

**Phaeophyscia ciliata** (Hoffm.) Moberg 📖 🌿

(Esslinger 1978; Hale & Cole 1988; Goward et al. 1994; Brodo et al. 2001 [p. 540, with color photograph]; Thomson 2003; Jovan & McCune 2004; McCune & Geiser 2009)

**Synonyms:** [\*Physcia ciliata\*](#) (TJ; Weber et al. 1987), [\*Physcia ciliata f. ciliata\*](#) (Thomson 1963)

**Misapplied names:** *Physcia obscura* (some early CA collections)

**Phaeophyscia constipata** (Norrl. & Nyl.) Moberg 📖 🌿

(Benson 2005; *S. Tucker 6143*, Alum Rock Park, San Jose, Santa Clara Co., SBBG; *B. Ryan 13682*, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU)

**Phaeophyscia decolor** (Kashiw.) Essl. 📖 🌿

(Esslinger 1978; Wetmore 1985; Hale & Cole 1988; Riefner, Bowler, & Ryan 1995; Magney 1999; Brodo et al. 2001 [pp. 541–542, with color photograph]; Esslinger 2004; Benson 2005; Knudsen & Kramer 2007; Knudsen et al. 2009; *C. Wetmore 50421* as *P. endococcina* (Körb.) Essl., Giant Forest, Sequoia N. P., Tulare Co., 6 May 1984, MIN; *B. Ryan 25235*, Marble Mtn Wilderness, Siskiyou Co., ASU; *T. Nash 11292*, Lower Peppermint Cpgd, Sequoia N. F., Tulare Co., ASU)

**Note:** Esslinger (2004, p. 407) distinguishes *P. decolor* from *P. endococcina* by differences in spores and medullary pigments.

**Phaeophyscia endococcina** (Körb.) Moberg 📖 🌿

(Wetmore 1983, 1985; Ryan & Nash 1991)

**Note:** Esslinger (1978) stated that he had not seen *P. endococcina* from N. Amer. According to Esslinger (2011), *P. endococcina* is distinct from *P. decolor*, but Moberg (1977) regarded *P. decolor* as a synonym of *P. endococcina* for European material.

**Phaeophyscia erythrocardia** (Tuck.) Essl. 🌿

(*T. Nash 7253*, Mt. San Jacinto, Riverside Co., ASU)

**Synonyms:** [\*Physcia obscura var. erythrocardia\*](#)

**Note:** This species has also been collected in Arizona and Wisconsin.

**Phaeophyscia hirsuta** (Mereschk.) Essl. 📖 🌿

(Weber et al. 1987; Hale & Cole 1988; von Reis 1991; Goward et al. 1994; Doell & Wright 1996; Robertson et al. 1998 [as “cf.”]; Tucker 1999; Esslinger 2004; Jovan & McCune 2004; Tucker et al. 2004, 2006; Knudsen 2007b; Knudsen & Kramer 2007; Knudsen 2009; Knudsen et al. 2009; Knudsen & Kocourková 2009c; McCune & Geiser 2009; Tucker 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [\*P. cernohorskyi\*](#), [\*Physcia ciliata f. fibrillosa\*](#)

**Phaeophyscia hirtella** Essl. 📖 🌿

(Robertson 2001 [p. 34]; Thomson 2003; Hinds & Hinds 2007 [color photograph, p. 380, only])

**Note:** According to Brodo et al. (2001), distribution is eastern temperate in U. S. but Thomson [2003] cited the species from CA and New Mexico as well. It is unlikely to occur in the Sonoran part of CA, *fide* T. Esslinger.

**Phaeophyscia hispidula** (Ach.) Essl. 📖 🌿

(Brodo et al. 2001 [p. 542, with color photograph]; Benson 2005; Hinds & Hinds 2007 [color photograph, p. 381, only]; *T. Nash 7251*, Mt. San Jacinto, Riverside Co., ASU)

**Synonyms:** *Physcia setosa* (Thomson 1963; TJ)

**Phaeophyscia kairamoi** (Vain.) Moberg 📷 🌿

(Riefner, Bowler, & Ryan 1995; Magney 1999; Hinds & Hinds 2007 [color photograph, p. 382, only]; *B. Ryan* collections are from Inyo, Los Angeles, Monterey, and Santa Barbara counties, ASU)

**Note:** According to Esslinger (2004), this taxon is known for the Sonoran region from one locality in Arizona.

**Phaeophyscia nigricans** (Flörke) Moberg 📷 🌿

(Wetmore 1985; not reported for S CA by Esslinger [2004]; *P. van den Boom 29354*, S of Kelso, Mojave Desert, San Bernardino Co., ASU; *C. Wetmore 16761*, 10 mi. N of Independence, Inyo Co., MIN)

**Phaeophyscia orbicularis** (Neck.) Moberg 📷 🌿

(Hale & Cole 1988; Baltzo 1989; Ryan & Nash 1991; von Reis 1991 [latter based on misidentifications, *fide* Tucker 1999]; Goward et al. 1994; Doell & Wright 1996; Brodo et al. 2001 [pp. 542–543, with color photograph]; Baltzo 2002; Esslinger 2004; Jovan & McCune 2004; Tucker et al. 2004; Benson 2005; Knudsen & La Doux 2005; Carlberg et al. 2007; Hinds & Hinds 2007 [color photograph, p. 383, only]; Knudsen & Kocourková 2009b; Tucker 2010; Glacy et al. 2011; *B. Ryan 12848*, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU; *P. van den Boom 28947*, Figueroa Mtn, Santa Barbara Co., ASU)

**Synonyms:** *Physcia obscura* [in some early publications for CA, *P. obscura* may have alternatively referred to *Phaeophyscia ciliata*], *Physcia orbicularis*

**Phaeophyscia pusilloides** (Zahlbr.) Essl. 📷 🌿

(Carlberg et al. 2007; Hinds & Hinds 2007 [color photograph, p. 384, only]; *S. Tucker 38624*, North Fork of Tuolumne River, Tuolumne Co., SBBG, det. T. Esslinger)

**Phaeophyscia sciastra** (Ach.) Moberg 📷 🌿

(Riefner, Bowler, & Ryan 1995; Magney 1999; Brodo et al. 2001 [p. 544, with color photograph]; Esslinger 2004 [showed it in central CA on map]; Knudsen & La Doux 2005, 2006; Knudsen 2006a; Hinds & Hinds 2007 [color photograph, p. 386, only]; Knudsen & Kocourková 2009c; Villella 2010; *B. Ryan 11325*, W of Lassen Volcanic N. P., Shasta Co., ASU; *C. Wetmore 14791*, on granitic rock, Los Padres N. F. near Frazier Park, Kern Co., MIN; *K. Knudsen 5234.2*, Eureka Peak, Mojave Desert, San Bernardino Co., UCR)

*Phaeophyscia cernohorskyi* (Nádv.) Essl. 📷 🌿

(Esslinger 1978; Hale & Cole 1988; Bowler et al. 1996; Weber 1989a; Tucker & Bratt 1996; Bourell 2000; Brodo et al. 2001 [pp. 539–540, with color photograph]; Robertson 2001, 2003a; Thomson 2003; Carlberg et al. 2007; W. Weber, Univ. Colo. Lich. Exs. 668, Santa Cruz Isl., Santa Barbara Co., ASU, WIS, UPS)

=*P. hirsuta* (synonymy *fide* Esslinger 2011)

**PHAEOPYXIS** Rambold & Triebel

\***Phaeopyxis punctum** (A. Massal.) Rambold, Triebel, & Coppins 📷 🌿

(Kocourková et al. 2012; *T. Tønsberg TT 14891*, Humboldt Co., on *Cladonia* sp., BG)

**PHAEORRHIZA** H. Mayrhofer & Poelt

**Phaeorrhiza nimbose** (Fr.) H. Mayrhofer & Poelt 📷 🌿

(Rosentreter et al. 2007 [with photograph]; *H. Imshaug 18116*, Mono Pass, Fresno-Inyo counties, MSC)

**Phaeorrhiza sareptana** (Tomin) H. Mayrhofer & Poelt 📷 🌿

(Ryan & Nash 1991; *B. Ryan 12575*, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., SBBG)

## PHAEOSPOROBOLUS D. Hawksw. & Hafellner

### \**Phaeosporobolus alpinus* R. Sant., Alstrup & D. Hawksw. 📖 🌿

(Knudsen & Kocourková 2009b; Kocourková et al. 2012; *J. Kocourková s.n.*, Santa Monica Mts, Ventura Co., on corticolous *Pertusaria* sp., UCR)

**Note:** This species also occurs on a wide variety of species.

### \**Phaeosporobolus usneae* D. Hawksw. & Hafellner 📖 🌿

(Diederich 2003, 2004; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *S. Tucker 34113B*, American River Cyn near Kyburz, El Dorado Co. on *Letharia vulpina*, det. P. Diederich, SBBG; *S. Tucker 6267D*, Skyline Blvd, on *Usnea fulvoreaegens*, Santa Cruz Co., det. P. Diederich, SBBG; *S. Tucker 14848B* pr. p., Mt. Shasta, Siskiyou Co., on *Letharia vulpina*, SBBG; *C. Bratt 5697*, Santa Cruz Isl., Santa Barbara Co., on *Ramalina subleptocarpha*, SBBG; other known collections are from Lassen, Monterey, Nevada, and Shasta counties, SBBG, on a wide variety of species; all det. P. Diederich)

## PHAEOTREMA Müll. Arg.

### *Phaeotrema californicum* (Tuck.) Zahlbr. 📖 🌿

(Zahlbruckner 1924; Fink 1935; TJ)

= [\*Schizopelte crustosa\*](#)

## PHLOEOPECCANIA J. Steiner

### *Phloeopeccania pulvinulina* J. Steiner 📖 🌿

(Schultz 2008; *C. Wetmore 16870B*, S of Cathedral City, Riverside Co., MIN)

**Note:** This species has also been collected in Arizona and Texas.

## PHLYCTIS Wallr.

### *Phlyctis argena* (Spreng.) Flot. 📖 🌿

(Hasse 1898a; Orcutt 1909; Hasse 1913b; Fink 1935; Jordan 1968; Baltzo 1989; Lindsay 1973; TJ; Hale & Cole 1988; Bratt 1999; Brodo et al. 2001 [pp. 545–546, with color photograph]; Baltzo 2002; Thomson 2003; Tønsberg 2004)

**Note:** Tønsberg (2004) showed this species along coastal S CA.

### *Phlyctis speirea* G. Merr. 📖 🌿

(Tønsberg 2004; Knudsen & Kocourková 2010a, citing a Hasse collection [as *P. argena*]; Knudsen & Kocourková 2012a; *H. Hasse*, San Gabriel Mts, NY; *C. Bratt 5681b*, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Note:** Tønsberg (2004) reported that this species occurs in the Channel Is. and coastal S CA.

### *Phlyctis agelaea* (Ach.) Flot. 📖 🌿

(Hasse 1903e, 1913b; Fink 1935; Herre 1944b; TJ; Hale & Cole 1988; *H. Hasse*, Santa Monica Mts, Los Angeles Co., 1 July 1902)

**Note:** S CA specimens are apparently misidentifications, probably of *P. speirea*, *fide* Tønsberg 2004. Distribution of this species is “eastern boreal”, *fide* Brodo et al. (2001, p. 546).

## PHOMA Sacc.

### \**Phoma cladoniicola* Diederich, Kocourk. & Etayo 📖 🌿

(Knudsen & Kocourková 2009b, 2010f; Knudsen & Kocourková 2012a; Kocourková et al. 2012)

**Note:** This species bleaches the squamules of *Cladonia chlorophaea*, and has been found on West Anacapa Isl. and in the Santa Monica Mts.

### \**Phoma physciicola* Keissler 📖 🌿

(Diederich 2003, 2004; Kocourková et al. 2012; *S. Tucker 35931*, Figueroa Mtn, Santa Barbara Co., SBBG, on *Physcia*, det. P. Diederich; also found on *Physconia* spp.)

### \**Phoma cytospora* (Vouaux) D. Hawksw. 📖 🌿

(Diederich 2003, 2004; *K. Knudsen 9243*, Santa Ana Mts, Orange Co., on *Flavopunctelia flaventior*,

UCR; *K. Knudsen 12114*, San Simeon S. P., San Luis Obispo Co., on *Flavoparmelia caperata*, UCR)  
=[\*Briancoppinsia cytospora\*](#)

## PHYLLISCUM Nyl.

### **Phylliscum demangeonii** (Moug. & Mont.) Nyl. 🍄🌿

(Henssen 1977; TJ; Goward et al. 1994; Robertson & Robertson 2001 [based on *J. & R. Robertson 3776*, on shaded vertical serpentine, Mt. Tamalpais S. P., Marin Co., UC]; Baltzo 2002 [based on *H. Thiers 15283*, San Francisco watershed, San Mateo Co., SFSU]; Thomson 2003; Hinds & Hinds 2007 [color photograph, p. 388, only])

### **Phylliscum tenue** Henssen 🍄🌿

(Henssen 1963a, 1977; TJ)

**Note:** This species has been collected in Alaska by John Thomson.

## PHYLLOPSORA Müll. Arg.

### *Phyllopsora parvifolia* (Pers.) Müll. Arg. 🍄🌿

**Synonyms:** [\*Biatora parvifolia\*](#) (McClatchie 1897)

=misidentifications for CA

## PHYSCIA (Schreb.) Michx.

### **Phyiscia adscendens** (Fr.) H. Olivier 🍄🌿

(Thomson & Ketchledge 1958; Thomson 1963; Jordan 1968; Baltzo 1970; Lindsay 1973; Sigal 1975; Pinelli & Jordan 1978; TJ; Thomson 1984; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; Sigal 1989; Bowler & Riefner 1990; von Reis 1991; Goward et al. 1994; Bowler et al. 1996; Doell & Wright 1996; Tucker & Bratt 1996; Hill 1997; Wright 1997; McGee 1998; Robertson et al. 1998; Bourell 2000; Brodo et al. 2001 [p. 549, with color photograph]; McGee 2001; Robertson 2001; Wright 2001a; Baltzo 2002; Moberg 2002; Robertson 2003a, 2003b; Thomson 2003; Jovan & McCune 2004; Tucker et al. 2004; Benson 2005; Robertson 2005a, 2005b, 2005c; Carlberg et al. 2007; Hinds & Hinds 2007 [color photograph, p. 390, only]; Knudsen 2007b; Knudsen et al. 2009; Knudsen & Kocourková 2009a, 2009c; Rotter 2010; Tucker 2010; Villella 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

### **Phyiscia aipolia** (Ehrh. ex Humb.) Fűrnr. 🍄🌿

(Hasse 1898a, 1903a; Herre 1906, 1910; Hasse 1913b; Merrill 1923; Herre 1950a; Thomson & Ketchledge 1958; Jordan 1968; Baltzo 1970; Lindsay 1973; Pinelli & Jordan 1978; TJ; Wetmore 1983; Thomson 1984; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; von Reis 1991; Tucker & Bratt 1995; Doell & Wright 1996; Tucker & Bratt 1996; Moberg 1997; Wright 1997; Bourell 2000; Brodo et al. 2001 [pp. 549–550, with color photograph]; Wright 2001a; Baltzo 2002; Moberg 2002; Robertson 2003a; Thomson 2003; Jovan & McCune 2004; Benson 2005; Carlberg et al. 2007; Hinds & Hinds 2007 [color photograph, p. 391, only]; Knudsen et al. 2009; Villella 2010; Knudsen & Kocourková 2012a)

**Synonyms:** [\*P. stellaris\* var. \*aipolia\*](#)

### **Phyiscia albinea** (Ach.) Nyl. 🍄🌿

(Thomson 1963; TJ; Hale & Cole 1988; Baltzo 1989; Tucker & Bratt 1995 [but based on a misidentification of *P. clementei*]; Bourell 2000; Wright 2001a; *B. Ryan 25403*, edge of Marble Mtn Wilderness, Siskiyou Co., ASU)

**Note:** All southern CA material is misidentified, *vide* Nash (2002b, p. 509), but collections from Sierra Nevada and N CA may be correct.

### **Phyiscia biziana** (A. Massal.) Zahlbr. 🍄🌿

(Thomson 1963; TJ; Hale & Cole 1988; Tucker & Bratt 1996; Tucker 1999; Brodo et al. 2001 [pp. 552–553, with color photograph]; Wright 2001a; Moberg 2002; Robertson 2003a; Jovan & McCune 2004; Benson 2005; Knudsen & La Doux 2005; Robertson & Beyer 2005; Knudsen & La Doux 2006; Knudsen & Kramer 2007; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Villella 2010;

Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Phyrcia caesia** (Hoffm.) Fűrnr. 📖 🌿

(Hasse 1915b; Moxley 1918; Chamberlain 1919; Merrill 1923; Thomson 1963; Pinelli & Jordan 1978; TJ; Wetmore 1983; Hale & Cole 1988; Ryan & Nash 1991; Wright 1997; Doell et al. 1999; Brodo et al. 2001 [p. 553, with color photograph]; Wright 2001a; Moberg 2002; Thomson 2003; Jovan & McCune 2004; Benson 2005; Robertson & Beyer 2005; Hinds & Hinds 2007 [color photograph, p. 393, only]; Knudsen & Kramer 2007; Rotter 2010; Tucker 2010; Benson et al. 2012)

**Phyrcia clementei** (Sm.) Lyngø 📖 🌿

(Thomson 1963; TJ; Hale & Cole 1988; Bowler et al. 1996; Doell & Wright 1996; Brodo et al. 2001 [p. 551]; Wright 2001a; Moberg 2002; Knudsen & Kocourková 2009b; Tucker 2010; *W. Weber L-42848*, San Clemente Isl., Los Angeles Co., ASU)

**Synonyms:** [P. astroidea](#)

**Misapplied names:** [P. americana](#)

**Note:** This species may be easily confused with *Diploicia canescens*, but differs by having a lower cortex, which *D. canescens* lacks.

**Phyrcia dimidiata** (Arnold) Nyl. 📖 🌿

(Wetmore 1985; Moberg 1997; Wright 2001a; Moberg 2002; Jovan & McCune 2004; Benson 2005; Knudsen & La Doux 2005; Robertson & Beyer 2005; Carlberg et al. 2007; Knudsen 2007b; Knudsen & Kramer 2007; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.; Benson et al. 2012; *B. Ryan 26360*, San Gabriel Wilderness, Los Angeles Co., ASU; *B. Ryan 26911*, Arroyo Seco Cpgd, Los Padres N. F., Monterey Co., ASU; *T. Nash 8101*, W of Sonora Pass, Tuolumne Co., ASU)

**Phyrcia dubia** (Hoffm.) Lettau 📖 🌿

(Imshaug 1957; Thomson 1963; TJ; Thomson 1984; Hale & Cole 1988; Ryan & Nash 1991; von Reis 1991; Goward et al. 1994; Doell & Wright 1996; Moberg 1997; McGee 1998; Doell et al. 1999; Tucker 1999; Bourell 2000; Brodo et al. 2001 [p. 554, with color photograph]; Wright 2001a; Baltzo 2002; Moberg 2002; Robertson 2003a, 2003b; Thomson 2003; Jovan & McCune 2004; Tucker et al. 2004 [as “cf.”]; Benson 2005; Robertson 2005b; Robertson & Beyer 2005; Carlberg et al. 2007; Hinds & Hinds 2007 [color photograph, p. 394, only]; Tucker 2010)

**Synonyms:** [P. intermedia](#), [P. teretiuscula](#)

**Phyrcia duplicorticata** W. A. Weber & J. W. Thoms. 📖 🌿

(Weber & Thomson 1975; Weber 1976; TJ; *W. Weber*, Univ. Colo. Lich. Exs. 476, E of junction Nicasio-Point Reyes Rd, Marin Co., SBBG, UPS; *B. Ryan 26200*, San Gabriel Mts, Los Angeles Co., ASU; CA endemic)

**Phyrcia erumpens** Moberg 📖 🌿

(Robertson & Robertson 2001 [*J. Robertson 4392*, Mt. Tamalpais, Marin Co., verified by T. Esslinger]; Wright 2001a [referring to Robertson collection]; Hill 2002; Tucker et al. 2004; Robertson 2005c; Glacy et al. 2011; *S. Tucker 38375*, campus of Univ. of Calif., Santa Cruz, Santa Cruz Co., SBBG)

**Phyrcia halei** J. W. Thoms. 📖 🌿

(Wetmore 1985; Riefner, Bowler, & Ryan 1995; Magney 1999 [same collection as Riefner]; Wright 2001a [cited same *Riefner* collection]; Brodo et al. 2001 [p. 555, color photograph but no CA report]; Moberg 2002 [reported it from Baja California including a collection on the U. S. border]; *T. Carlberg 497*, Six Rivers N. F., Mad River Rock, Del Norte Co.)

**Note:** The Tulare Co. collection reported by Riefner, Bowler, & Ryan (1995) was later re-identified as *P. tribacia* by S. Tucker on the basis of soredia present; *P. halei* is esorediate.

**Phyrcia leptalea** (Ach.) DC. 📖 🌿

(Thomson 1963; Baltzo 1970; TJ; Wright 2001a; Hinds & Hinds 2007 [color photograph, p. 395, only])

**Synonyms:** [P. semipinnata](#) (Baltzo 1989)

**Note:** The Thomson record, which is based on a S CA specimen, is probably misidentified because CA

coastal material is likely to be referable to *P. villosula*. The Baltzo and Wright reports are from central CA; their collections may be at SFSU.

**Physcia magnussonii** Frey 📖 🌿

(Magney 1999; Wright 2001a [both citing *S. Tucker 35403*, “The Slides”, 8.6 mi. from Lake Pillsbury, Lake Co., SBBG, ! T. Esslinger])

**Note:** This species has also been collected in Oregon, Utah, and Idaho.

**Physcia mexicana** B. de Lesd. 📖 🌿

(Baltzo 1970; Hebert & Meyer 1984; TJ; Baltzo 1989; Wright 2001a, who cited Baltzo collection from Contra Costa Co.; *B. Ryan 24755*, 31 km NW of Coarsegold, Madera Co., ASU)

**Note:** CA collections may be misidentifications for *P. biziana*, *fide* Nash 2002b.

**Physcia millegrana** Degel. 📖 🌿

(Thomson 1963; Hale 1969; TJ; Baltzo 1989; von Reis 1991, but based on misidentifications of *P. tribacia*, *fide* Tucker [1999]; Brodo et al. 2001 [p. 555, with color photograph]; Wright 2001a; Thomson 2003; Hinds & Hinds 2007 [color photograph, p. 395, only]; Glacy et al. 2011; Knudsen & Kocourková 2012a; *T. Nash 32860*, Santa Rosa Isl., Santa Barbara Co., ASU; *L. Ross 286*, Wood Cyn NW of Camp Pendleton, San Diego Co., ASU, re-det. *P. tribacia* by S. Tucker)

**Physcia neglecta** Moberg 📖 🌿

(in Sonoran part of Mexico but not reported from CA, *fide* Moberg 2002; Knudsen & Kocourková 2012a; *T. Nash 32601b*, Santa Rosa Isl., pass on main road SE of Black Mtn, Santa Barbara Co., ASU; *K. Knudsen 9242*, Santa Ana Mts, Orange Co., UCR)

**Note:** This species is common in Mexico.

**Physcia phaea** Moberg 📖 🌿

(Thomson 1963; Baltzo 1970; Pinelli & Jordan 1978; TJ; Hale & Cole 1988; Baltzo 1989; Ryan & Nash 1991; von Reis 1991; Goward et al. 1994; Bowler et al. 1996; Bratt 1997; Moberg 1997; Wright 1997; Doell et al. 1999; Tucker 1999; Brodo et al. 2001 [p. 556, with color photograph]; Wright 2001a; Moberg 2002; Robertson 2003a; Thomson 2003; Benson 2005; Hinds & Hinds 2007 [color photograph, p. 396, only]; Knudsen et al. 2009; Knudsen & Kocourková 2009a, 2010f, 2012a)

**Synonyms:** *P. melops*, *P. cascadenis*

**Misapplied names:** *P. callosa* Nyl. for CA material

**Physcia poncinsii** Hue 📖 🌿

(Moberg 2002; Tucker 2010; *S. Tucker 7966*, Rocky Nook City Park, Santa Barbara, Santa Barbara Co., SBBG, det. T. Esslinger; *T. Nash 34115*, Santa Catalina Isl., Los Angeles Co., ASU)

**Physcia stellaris** (L.) Nyl. 📖 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1882; Hasse 1895, 1898a; Orcutt 1903; Hasse 1903a, 1905; Herre 1906; Orcutt 1907; Herre 1910; Hasse 1913b; Moxley 1921; Merrill 1923; Imshaug 1957; Thomson 1963; Baltzo 1970; Sigal 1975; Pinelli & Jordan 1978; TJ; Hale & Cole 1988; Baltzo 1989; Sigal 1989; Bowler & Riefner 1990; von Reis 1991; Bowler et al. 1996; Doell & Wright 1996; Tucker & Bratt 1996; Wright 1997; Brodo et al. 2001 [p. 558, with color photograph]; Wright 2001a; Moberg 2002; Robertson 2003a; Jovan & McCune 2004; Benson 2005; Robertson 2005a; Carlberg et al. 2007; Hinds & Hinds 2007 [color photograph, p. 397, only]; Knudsen et al. 2009; Knudsen & Kocourková 2010a, citing a Hasse collection; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Note:** Some early CA collections should be re-examined, because it is often difficult to distinguish this from *P. biziana*.

**Physcia subalbinea** Nyl. 🌿

(*J. Lendemer 4293*, San Jacinto Mts, San Bernardino S. F., Riverside Co., UCRC; *J. Lendemer 19617*, Tuolumne River cyn, Yosemite N. P., Tuolumne Co., NY)

**Note:** This species has been collected also in northern Canada and in Europe.

**Physcia subtilis** Degel. 📖 🌿

(Wetmore 1985; Riefner, Bowler, & Ryan 1995; Wright 2001a; Knudsen & Kocourková 2012a; *T. Nash 32814*, Santa Rosa Isl., ASU, det. R. Moberg)

**Note:** Most previous CA records are probably misidentifications for *P. halei*, *fide* Nash 2002b.

**Physcia tenella** (Scop.) DC. 📖 🌿

(Herre 1910; Merrill 1923; Thomson 1963; Baltzo 1970; Pinelli & Jordan 1978; TJ; Sigal & Nash 1983; Baltzo 1989; Goward et al. 1994; McGee 1995; Bowler et al. 1996; Doell & Wright 1996; Tucker & Bratt 1996; Wright 1997; McGee 1998; Brodo et al. 2001 [pp. 559–560, with color photograph]; Wright 2001a; Baltzo 2002; Robertson 2003a; Thomson 2003; Jovan & McCune 2004; Benson 2005; Williams & Sillett 2007; Knudsen 2009; Knudsen et al. 2009; Tucker 2010; Villella 2010)

**Synonyms:** [\*P. hispida\*](#), [\*P. stellaris\* var. \*hispida\*](#), [\*P. stellaris\* subsp. \*tenella\*](#)

**Physcia tenella** (Scop.) DC. f. **tenella** 📖 🌿

(Bratt 1997; Wright 2001a; Hinds & Hinds 2007 [color photograph, p. 399, only])

**Physcia tenella** subsp. **marina** (Nyl.) D. Hawksw. 📖 🌿

(Riefner, Bowler, & Ryan 1995, based on collection from San Luis Obispo Co.; Bowler et al. 1996; Wright 2001a [cited same *Riefner* collection, plus a Santa Barbara collection in Thomson 1963]; *B. Ryan 26415a*, near Crystal Lake, San Gabriel Wilderness, Los Angeles Co., ASU)

**Synonyms:** [\*P. subobscura\*](#)

**Physcia tenellula** Moberg 📖 🌿

(Moberg 1997; Wright 2001a [distinction from *P. tenella* explained]; Moberg 2002; Knudsen & Kocourková 2010f; Tucker 2010; Knudsen & Kocourková 2012a)

**Note:** Reports of *P. tenella* from the Sonoran parts of southern CA belong here, *fide* R. Moberg. *P. tenellula* has lobes 0.5–1.0 wide and fine black or white hairs on the upper surface, while *P. tenella* has lobes 0.2–0.5 mm wide and lacks such hairs.

**Physcia tribacia** (Ach.) Nyl. 📖 🌿

(Orcutt 1903; Hasse 1906; Herre 1906; Orcutt 1907; Herre 1910; Hasse 1913b; Moberg 1997; Bratt 1999; Doell et al. 1999; Tucker 1999; Bourell 2000; Robertson 2001; Wright 2001a; Baltzo 2002; Moberg 2002; Robertson 2003b; Tucker et al. 2004; Benson 2005; Knudsen 2007b; Knudsen & Kocourková 2009c; McCune & Geiser 2009; Rotter 2010; Tucker 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Misapplied names:** [\*P. callosa\*](#) sensu Thomson for N. Amer. material, [\*P. millegrana\*](#) (von Reis 1991 *fide* Tucker [1999])

**Physcia undulata** Moberg 📖 🌿

(Knudsen & Kocourková 2012a; *T. Nash 32934*, Santa Rosa Isl., Santa Barbara Co., ASU)

**Physcia villosula** Moberg 🌿

(in Baja California but not reported from CA, *fide* Moberg 2002; *S. Tucker 35681*, ridge on Islay Cyn Rd, Santa Cruz Isl., Santa Barbara Co., SBBG, det. R. Moberg)

**Note:** This species is otherwise reported only from Baja California, Mexico.

**Physcia adglutinata** (Flörke) Nyl. 📖 🌿

(Hasse 1895; McClatchie 1897; Hasse 1898a, 1906; Herre 1906; Orcutt 1907; Herre 1910; Hasse 1913b; TJ)

=[\*Hyperphyscia adglutinata\*](#)

**Physcia alba** (Fée) Müll. Arg. 📖 🌿

(Baltzo 1970; TJ; Baltzo 1989; von Reis 1991)

**Note:** According to Tucker (1999) the Baltzo (1989) and von Reis records are based on misidentifications. According to Moberg (1997, p. 166) this taxon occurs only in northern S. Amer. He suggested that the name *P. alba* may have been misapplied to *P. aipolia*.

**Physcia alba** var. **obsessa** (Mont.) J. W. Thoms. 📖 🌿

(Thomson 1963)

=*P. integrata* var. *obsessa* (Mont.) Nyl., but misidentifications for N. Amer.

**Physcia albicans** (Pers.) J. W. Thoms. 📖 🌿

(Thomson 1963; TJ)



=[\*Heterodermia albicans\*](#), but probably based on a misidentification

*Physcia americana* G. Merr. 📖 🌿

(Hale 1979; Riefner, Bowler, & Ryan 1995 [based on a San Luis Obispo Co. collection that needs verification]; same cited by Wright [2001a]; Thomson 2003; Jovan & McCune 2004)

**Misapplied names:** [\*P. tribacoides\*](#) for N. Amer. material.

**Note:** According to Brodo et al. (2001, p. 551, color photograph) this species occurs only in eastern U. S. The Riefner collection from San Luis Obispo Co. has been re-identified as *P. clementei* by K. Knudsen.

*Physcia aquila* (Ach.) Nyl. 📖 🌿

(McClatchie 1897; Hasse 1898a)

=*Anaptychia runcinata* (With.) J. R. Laund. (misidentifications for CA)

*Physcia astroidea* (Clemente) Nyl. 📖 🌿

(Hasse 1903c, 1913b)

=[\*P. clementei\*](#)

*Physcia callosa* Nyl. 📖 🌿

(Nylander 1869; Willey 1873a; Fink 1935; Herre 1942c; Thomson & Ketchledge 1958; Jordan 1968; Baltzo 1970; TJ; Wetmore 1983; Bratt 1987; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; von Reis 1991; Tucker & Bratt 1995; McGee 1995; West & Doell 1995; Bowler et al. 1996; Doell & Wright 1996; Robertson et al. 1998; Robertson 2003a; Brodo et al. 2001 [p. 554, color photograph, mislabeled *P. callosa*]; Carlberg et al. 2007)

**Note:** Most reports represent misidentifications of *P. tribacia*, a soraliolate taxon, based on Thomson's (1963) misinterpretation of the name. The explanation in Nash (2002b, p. 509) is unclear; Moberg (1997) said that Thomson based his interpretation of *P. callosa* on material of *P. tribacia* in a Bolander collection at US, while Nylander described *P. callosa* from a dissimilar portion of the same collection that was sent to Nylander at Helsinki for determination. The Bolander type in Nylander's herbarium [not seen by Thomson] contains a mixture of *P. phaea* [apotheciate and esorediate] and *P. tribacia* [soraliolate].

*Physcia cascadiensis* H. Magn. 📖 🌿

(Thomson 1963; TJ; Baltzo 1989; Wright 2001a)

=[\*P. phaea\*](#) (synonymy *vide* Moberg [1997] and Nash [2002b, p. 509] for CA material)

*Physcia chrysophthalma* var. *pubera* Nyl. 📖 🌿

(Tuckerman 1860)

=[\*Teloschistes flavicans\*](#)

**Note:** Specimens should be compared with *T. californicus*, which also is puberulent.

*Physcia ciliaris* (L.) Ach. 📖 🌿

(Hasse 1895, 1898a, 1905; Orcutt 1907; Hasse 1908b; TJ)

=[\*Anaptychia ciliaris\*](#); misidentifications for N. Amer.

*Physcia ciliaris* var. *erinacea* (Ach.) Nyl. 📖 🌿

(Nylander 1858–1860; TJ)

=[\*Heterodermia erinacea\*](#)

*Physcia ciliata* (Hoffm.) Du Rietz 📖 🌿

(TJ)

=[\*Phaeophyscia ciliata\*](#)

*Physcia ciliata* (Hoffm.) Du Rietz f. *ciliata* 📖 🌿

(Thomson 1963)

=[\*Phaeophyscia ciliata\*](#)

*Physcia ciliata* f. *fibrillosa* J. W. Thoms. 📖 🌿

(Thomson 1963)

=[\*Phaeophyscia hirsuta\*](#)

*Physcia comosa* (Eschw.) A. Massal. 📖 🌿

(Hasse 1903a; misidentifications)

*Physcia crispa* Nyl. 📖 🌿

(Hasse 1895; McClatchie 1897; Hasse 1898a; Orcutt 1903, 1907; Hasse 1913b; Merrill 1923)

**Note:** Early reports from CA were probably misidentifications. The species is tropical and subtropical; Moberg 2002 [reported one collection from Baja California Sur].

*Physcia elaeina* (Sm.) A. L. Sm. 📖 🌿

(Thomson 1963)

=[\*Hyperphyscia adglutinata\*](#)

*Physcia erinacea* (Ach.) Tuck. 📖 🌿

(Tuckerman 1860, 1866; Bolander 1870; Willey 1873a; Tuckerman 1882; Orcutt 1885; Hue 1892; Hasse 1895; McClatchie 1897; Hasse 1898a, 1903d; Orcutt 1903; Herre 1906, 1907; Orcutt 1907; TJ)

=[\*Heterodermia erinacea\*](#)

*Physcia grisea* (Lam.) Zahlbr. 📖 🌿

(Thomson & Ketchledge 1958; Thomson 1963)

=[\*Physconia grisea\*](#), but misidentifications of other species of *Physconia*, for N. Amer. reports.

*Physcia hispida* (Schreb.) Tuck. 📖 🌿

(Tuckerman 1882; Eckfeldt 1893; Hasse 1895; McClatchie 1895, 1897; Hasse 1903a, 1906; Orcutt 1907; Hasse 1913b; Wheeler 1938)

=[\*P. tenella\*](#)

*Physcia intermedia* Vain. 📖 🌿

(Imshaug 1957)

=[\*P. dubia\*](#)

*Physcia isidiigera* (Zahlbr.) Fink 📖 🌿

(Fink 1935)

=[\*Physconia isidiigera\*](#)

*Physcia leucomela* (L.) Michx. 📖 🌿

(Tuckerman 1847; Nylander 1858–1860; Tuckerman 1882; Hue 1890; Hasse 1906; Herre 1906)

=[\*Heterodermia leucomela\*](#)

*Physcia lychnea* (Ach.) Nyl. 📖 🌿

(Hulting 1896; Hasse 1898a)

=[\*Xanthoria candelaria\*](#)

*Physcia melops* Nyl. 📖 🌿

(Imshaug 1957)

=[\*P. phaea\*](#)

*Physcia muscigena* (Ach.) Nyl. 📖 🌿

(Hasse 1898a; Herre 1906, 1910; Imshaug 1957; Thomson 1963; Baltzo 1970)

=[\*Physconia muscigena\*](#)

*Physcia obscura* (Ehrh.) Nyl. 📖 🌿

(Tuckerman 1882; Hasse 1895; McClatchie 1895, 1897; Hasse 1898a; Orcutt 1907; Herre 1910; Hasse 1913b; Moxley 1918; Chamberlain 1919)

**Note:** The Herre citation probably referred to *Phaeophyscia orbicularis*, since he mentioned soredia as present. The citations by Hasse and others from southern CA described an esorediate species with densely black rhizinate lower surface, which probably referred to *Phaeophyscia ciliata*. Although *P. obscura* was used broadly in early CA publications for *Phaeophyscia ciliata*, *P. orbicularis*, and perhaps other species, the most likely referent is *P. orbicularis*, *fide* Moberg (1977) and T. Esslinger (personal communication).

*Physcia obscura* var. *erythrocardia* Tuck. 📖 🌿

(Tuckerman 1860)

=[\*Phaeophyscia erythrocardia\*](#)

*Physcia olivacea* Ach. 📖 🌿

(Orcutt 1885)

**Note:** The provenance of this name is not clear, since it is not in Esslinger or Zahlbruckner; in TJ it was listed as a synonym of *Melanelia olivacea* which occurs in Alaska and Canada but is not reported for CA.

*Physcia orbicularis* (Neck.) Poetsch 📖 🌿

(Thomson & Ketchledge 1958; Baltzo 1970; Esslinger 1977b; TJ)

=[\*Phaeophyscia orbicularis\*](#)

*Physcia parietina* (L.) Nyl. 📖 🌿

(Hasse 1898a)

=[\*Xanthoria parietina\*](#)

*Physcia parietina* var. *polycarpa* (Hoffm.) A. Massal. 📖 🌿

(Tuckerman 1860)

=[\*Xanthoria polycarpa\*](#)

*Physcia parietina* var. *ramulosa* Tuck. 📖 🌿

(Tuckerman 1860)

=[\*Xanthoria polycarpa\*](#)

*Physcia polycarpa* (Hoffm.) Linds. 📖 🌿

(Hasse 1898a)

=[\*Xanthoria polycarpa\*](#)

*Physcia pulverulenta* (Schreb.) Fürnr. 📖 🌿

(Hasse 1895; McClatchie 1897; Hasse 1898a, 1905; Herre 1906; Orcutt 1907; Herre 1910; Hasse 1913b, 1915b; Thomson & Ketchledge 1958; Thomson 1963; Jordan 1968; Baltzo 1970)

=[\*Physconia distorta\*](#)

**Note:** N. Amer. reports of *P. distorta* are misidentifications. Most collections are presumably *Physconia americana*, or other species of *Physconia* if soredia or isidia are present.

*Physcia pulverulenta* subsp. *isidiigera* Zahlbr. 📖 🌿

(Hasse 1906; Herre 1906, 1907; Hasse 1908b; Herre 1910; Hasse 1913b)

=[\*Physconia isidiigera\*](#)

*Physcia pulverulenta* var. *leucoleiptes* Tuck. 📖 🌿

(Tuckerman 1882; Hasse 1896; McClatchie 1897; Orcutt 1903, 1907; Hasse 1913b)

=[\*Physconia leucoleiptes\*](#)

*Physcia pulverulenta* f. *muscigena* Hasse 📖 🌿

(Hasse 1895; Orcutt 1903, 1907; Hasse 1908b, 1913b)

=[\*Physconia muscigena\*](#)

*Physcia pulverulenta* var. *subvenusta* Nyl. 📖 🌿

(Hasse 1908b)

=[\*Physconia venusta\*](#), but misidentifications for N. Amer.

*Physcia pulverulenta* f. *deminuta* Cromb. 📖 🌿

(Hasse 1908b, as *P. pulverulenta* var. *subvenusta* Nyl. f. *deminuta* Cromb.)

=[\*Physconia venusta\*](#), but misidentifications for N. Amer.

*Physcia pulverulenta* f. *panniformis* Cromb. 📖 🌿

(Hasse 1908b, as *P. pulverulenta* var. *subvenusta* Nyl. f. *panniformis* Cromb.)

=[\*Physconia venusta\*](#), but misidentifications for N. Amer.

*Physcia pulverulenta* subsp. *pityrea* Nyl. 📖 🌿

(Hasse 1908b, 1908b, 1913b)

=[\*Physconia pulverulenta\*](#), but misidentifications for N. Amer.

*Physcia pulverulenta* f. *venusta* (Ach.) Sandst. 📖 🌿

(Thomson 1963; Baltzo 1970)

=[\*Physconia venusta\*](#), but misidentifications for N. Amer.

*Physcia semipinnata* (J. F. Gmel.) Moberg 📖 🌿

(Baltzo 1989 [based on collections from Mt. Diablo, Contra Costa Co. in central CA])

=[\*P. leptalea\*](#)

*Physcia setosa* (Ach.) Nyl. 📷 🍄

(Thomson 1963; TJ)

=[\*Phaeophyscia hispidula\*](#)

*Physcia speciosa* Wulfen 📷 🍄

(Bolander 1870)

=[\*Heterodermia speciosa\*](#)

**Note:** *H. speciosa* occurs in the eastern half of the U. S., and on the western coast of Canada to Alaska.

*Physcia stellaris* var. *aipolia* (Ehrh. ex Humb.) Nyl. 📷 🍄

(Tuckerman 1882; Hasse 1895, 1896; McClatchie 1897; Orcutt 1903, 1907)

=[\*P. aipolia\*](#)

*Physcia stellaris* var. *hispidula* Schreb. 📷 🍄

(Tuckerman 1866; Orcutt 1903, 1907)

=[\*P. tenella\*](#)

*Physcia stellaris* subsp. *tenella* Nyl. 📷 🍄

(Hasse 1903c)

=[\*P. tenella\*](#)

*Physcia subobscura* Nyl. 📷 🍄

(Thomson 1963; TJ)

=[\*P. tenella\* subsp. \*marina\*](#)

*Physcia teretiuscula* (Ach.) Lynge 📷 🍄

(Imshaug 1957; Thomson 1963)

=[\*P. dubia\*](#)

*Physcia tribacoides* Nyl. 📷 🍄

(Thomson & Ketchledge 1958; Thomson 1963; TJ)

=misapplied name for N. Amer. material.

*Physcia venusta* (Ach.) Nyl. 📷 🍄

(Fink 1935)

=[\*Physconia venusta\*](#) (but misidentifications for N. Amer.)

*Physcia villosa* (Ach.) Duby 📷 🍄

(Howe 1910b, 1910c; misapplied to taxon later described as a *Teloschistes*)

## **PHYSICIELLA** Essl.

**Physciella chloantha** (Ach.) Essl. 📷 🍄

(Knight et al. 2002; Esslinger 2004; Jovan & McCune 2004; Tucker et al. 2004; Hinds & Hinds 2007 [color photograph, p. 400, only]; Tucker 2010; *S. Tucker 35865*, Santa Cruz Isl., intersection of Ridge Rd and Valley Rd, 0.25 mi. W of Univ. of Calif. Biological Station, Santa Barbara Co., SBBG; *S. Tucker 38317a*, campus of Univ. of Calif., Santa Cruz, Santa Cruz Co., SBBG, det. T. Esslinger)

**Note:** Moberg (1995) placed this taxon in *Phaeophyscia* as *P. chloantha* (Ach.) Moberg. He asserted that pycnoconidial shape and presence of atranorin (which align it with *Phaeophyscia*) are more important characters than structure of the lower cortex (diagnostic for *Physciella*, *vide* Esslinger).

**Physciella melanchra** (Hue) Essl. 📷 🍄

(Riefner, Bowler, & Ryan [1995], based on *R. Riefner 89–226*, Morro Bay, San Luis Obispo Co., WIS, ! S. Tucker; Wright 2001a; Jovan & McCune 2004; Hinds & Hinds 2007 [color photograph, p. 401, only])

**Note:** This species is common in the central U. S. and occasional in Arizona.

## **PHYSCONIA** Poelt

**Physconia americana** Essl. 📷 🍄

(Esslinger 1994; Tucker & Bratt 1995, 1996; Hill 1997; Wright 1997; Tucker 1999; Esslinger 2000; Brodo et al. 2001 [p. 561, with color photograph]; Esslinger 2002; Jovan 2003; Robertson 2003a; Jovan & McCune 2004; Benson 2005; Robertson 2005a, 2005c; Carlberg et al. 2007; Knudsen et al. 2009; Villella 2010; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Misapplied names:** [\*Physcia pulverulenta\* var. \*subvenusta\*](#), [\*P. pulverulenta\* f. \*deminuta\*](#), [\*P. pulverulenta\* f. \*panniformis\*](#), [\*P. pulverulenta\* f. \*venusta\*](#), [\*P. venusta\*](#), [\*Physconia distorta\*](#) (N. Amer. records), [\*P. venusta\*](#) (N. Amer. records)

***Physconia californica*** Essl. 📖 🌿

(Esslinger 2000, 2002; Benson 2005; Knudsen et al. 2009; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan 27038*, Hastings Natural History Reserve, Monterey Co., ASU; *K. Knudsen 4225*, Santa Ana Mts, San Diego Co., UCR; *C. Wetmore 50340*, Buckeye Flat Cpgd, Sequoia N. P., Tulare Co., MIN)

***Physconia enteroxantha*** (Nyl.) Poelt 📖 🌿

(Hale & Cole 1988; Baltzo 1989; Goward et al. 1994; Tucker & Bratt 1995; Bowler et al. 1996; Doell & Wright 1996; Tucker & Bratt 1996; Wright 1997; Robertson et al. 1998; Tucker 1999; Esslinger 2000; Brodo et al. 2001 [p. 564, with color photograph]; Robertson 2001; Esslinger 2002; Jovan 2003; Robertson 2003b; Jovan & McCune 2004; Benson 2005; Robertson & Beyer 2005; Carlberg et al. 2007; Knudsen 2009; Knudsen et al. 2009; Knudsen & Kocourková 2010a, citing a Hasse collection, *Lich. Exs. 68* “*Physconia pulverulenta pityrea*”; Knudsen & Kocourková 2010f, 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

***Physconia fallax*** Essl. 📖 🌿

(Esslinger 2000, 2002; Jovan 2003; Jovan & McCune 2004; Knudsen 2007b; Knudsen et al. 2009; Knudsen & Kocourková 2012a; *B. Ryan 26510b*, trail from Windy Gap parking lot (Hwy 2), San Gabriel Wilderness, Los Angeles Co., ASU; *B. Ryan 32068b*, North Fork Ranger Station, Sierra N. F., Madera Co., ASU; *S. Tucker 38693B*, Pinnacles Nat. Monument, San Benito Co., SBBG, det. T. Esslinger)

***Physconia isidiigera*** (Zahlbr.) Essl. 📖 🌿

(Esslinger 1994; Bowler et al. 1996; Doell & Wright 1996; Tucker & Bratt 1996; Wright 1997; McGee 1998; Robertson et al. 1998; Tucker 1999; Bourell 2000; Esslinger 2000; Brodo et al. 2001 [pp. 564–565, with color photograph]; Robertson 2001; Baltzo 2002; Esslinger 2002; Jovan 2003; Robertson 2003a, 2003b; Blauman 2004a; Jovan & McCune 2004; Tucker et al. 2004; Benson 2005; Robertson & Beyer 2005; Carlberg et al. 2007; Knudsen 2007b, 2009; Knudsen et al. 2009; Knudsen & Kocourková 2009c, 2010f; Villella 2010; Glacy et al. 2011 [as “cf.”]; Knudsen & Kocourková 2012a)

**Synonyms:** [\*Physcia isidiigera\*](#), [\*P. pulverulenta\* subsp. \*isidiigera\*](#), [\*Physconia grisea\* f. \*isidiigera\*](#)

***Physconia isidiomuscigena*** Essl. 📖 🌿

(Esslinger 2000, 2002; Jovan 2003; Robertson 2003b; Knudsen & Kramer 2007; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *W. Weber 82149*, Santa Rosa Plateau Preserve, Santa Ana Mts W of Murrieta, Riverside Co., ASU; *S. Tucker 38009*, Univ. of Calif. Station, Crooked Creek Rd, Bristlecone Pine Forest, Inyo N. F., Mono Co., SBBG)

***Physconia kurokawae*** Kashiw. 📖 🌿

(*H. Hasse 161*, Santa Monica Mts, NY)

**Note:** According to Esslinger (2002, p. 381) this is a chemical variant of *P. leucoleiptes*, varying greatly in presence of gyrophoric acid, the critical acid. The species is rare in CA but common in central U. S.

***Physconia leucoleiptes*** (Tuck.) Essl. 📖 🌿

(Esslinger 1994, 2000, 2002; Jovan 2003; Jovan & McCune 2004; Hinds & Hinds 2007 [color photograph, p. 404, only]; *K. Knudsen 11733*, Malibu Creek S. P., Santa Monica Mts, Los Angeles Co., UCR; *B. Ryan 32003*, Roush Meadow, Sierra N. F., Madera Co.)

**Synonyms:** [\*Physcia pulverulenta\* var. \*leucoleiptes\*](#) Tuck.

**Note:** This species is common in the central U. S.

**Physconia muscigena** (Ach.) Poelt 📖 🌿

(TJ; Thomson 1984; Hale & Cole 1988; Baltzo 1989; Ryan & Nash 1991; Goward et al. 1994; Esslinger 2000; Brodo et al. 2001 [p. 565, with color photograph]; Esslinger 2002; Robertson 2003b; Knudsen & Kramer 2007; Rosentreter et al. 2007 [with photograph]; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan 11329*, W of Lassen Volcanic N. P., Shasta Co., ASU; *S. Tucker 6347b*, Searsville Lake near Woodside, San Mateo Co., SBBG; *K. Knudsen 1466*, Lily Rock, San Jacinto Mts, Riverside Co., UCR)

**Synonyms:** [Physcia muscigena](#), [P. pulverulenta f. muscigena](#)

**Physconia perisidiosa** (Erichsen) Moberg 📖 🌿

(Doell & Wright 1996; Tucker & Bratt 1996; Tucker 1999; Esslinger 2000; Brodo et al. 2001 [pp. 565–566, with color photograph]; Robertson 2001; Esslinger 2002; Jovan 2003; Jovan & McCune 2004; Benson 2005; Carlberg et al. 2007; Rosentreter et al. 2007 [with photograph]; Knudsen & Kocourková 2010a, citing a Hasse collection)

*Physconia detersa* (Nyl.) Poelt 📖 🌿

(Smith 1980; Thomson 1984; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; Bowler & Riefner 1990; von Reis 1991; Tucker & Bratt 1995; Thomson 2003; Brodo et al. 2001 [p. 563, color photograph]; name misapplied to other soraliolate species of *Physconia* in CA)

*Physconia distorta* (With.) J. R. Laund. 📖 🌿

(Hale & Cole 1988; Baltzo 1989; Sigal 1989; von Reis 1991)

=[P. americana](#) for N. Amer. material

*Physconia grisea* (Lam.) Poelt 📖 🌿

(TJ; Sigal & Nash 1983; Baltzo 1989, 2002; name misapplied to other soraliolate N. Amer. *Physconia* spp.)

*Physconia grisea* f. *isidiigera* (Zahlbr.) J. W. Thoms. 📖 🌿

(Sigal 1989)

=[P. isidiigera](#)

*Physconia pulverulenta* (Schreb.) Poelt 📖 🌿

(Sigal 1975; Pinelli & Jordan 1978; TJ; Baltzo 2002)

=[P. americana](#) for N. Amer. material

*Physconia thomsonii* Essl. 🌿

(synonymy but no CA report in Esslinger 2002 [p. 96])

=[Anaptychia elbursiana](#) fide Esslinger (2002, p. 96)

*Physconia venusta* (Ach.) Poelt 📖 🌿

(von Reis [1991], but misidentifications, fide Tucker [1999])

=[P. americana](#) for N. Amer. records

**Synonyms:** [Physcia pulverulenta f. deminuta](#), [P. pulverulenta f. panniformis](#), [P. pulverulenta var. subvenusta](#), [P. pulverulenta f. venusta](#), [P. venusta](#) (Ach.) Nyl.

**PILOPHORON** Th. Fr.

*Pilophoron aciculare* (Ach.) Th. Fr. 📖 🌿

(Tuckerman 1872; Krog 1968; Hale 1969; Jahns 1970; Tucker 1973)

=[Pilophorus acicularis](#)

**PILOPHORUS** Th. Fr.

**Pilophorus acicularis** (Ach.) Th. Fr. 📖 🌿

(Hale & Cole 1988; Goward 1999; Brodo et al. 2001 [pp. 567–568, with color photograph]; McCune & Geiser 2009; *L. Sigal s.n.*, North CA Coast Range Preserve, near Branscomb, Mendocino Co., ASU)

**Synonyms:** [Pilophoron aciculare](#) (Tuckerman 1872; Krog 1968; Hale 1969; Tucker 1973; TJ; Doell 1994; Robertson & Robertson 2002)

## PLACIDIOPSIS Beltr.

### **Placidiopsis cinerascens** (Nyl.) Poelt 📖 🌿

(Breuss & McCune 1994; Breuss 2002; Robertson & Robertson 2008; *S. Tucker 35406*, 9 mi. N of Lake Pillsbury, Lake Co., SBBG; *C. Bratt 4770*, Minarets Dist., Madera Co., SBBG; *K. Knudsen 9548*, Henderson Cyn, Anza-Borrego S. P., Colorado Desert, San Diego Co., UCR)

### **Placidiopsis cervinula** (Nyl.) Vain. 📖 🌿

(Thomson 1987; misidentifications for N. Amer., *fide* Breuss & McCune 1994 [p. 368 under *P. cinerascens*], although Breuss & McCune did not cite the same collections as Thomson)

## PLACIDIUM A. Massal.

### **Placidium acarosporoides** (Zahlbr.) Breuss 📖 🌿

(Breuss 1996; Breuss & Bratt 2001 [reporting collections from Inyo and Riverside counties]; Breuss 2002; Knight et al. 2002; Knudsen 2006a; *H. Hasse, s.n.*, Santa Catalina Isl., Los Angeles Co., ASU; *C. Bratt 5053*, Cottonwood Creek, Cuyama Valley, Santa Barbara Co., SBBG; *S. Tucker 36293*, lava beds 13 mi. E of Baker, San Bernardino Co., SBBG)

**Synonyms:** [Catapyrenium acarosporoides](#), [Dermatocarpon acarosporoides](#), [D. contumescens](#)

### **Placidium andicola** (Breuss) Breuss 📖 🌿

(Doell et al. 1999, based on *J. Robertson 1944*, Cove Springs, Granite Mts, San Bernardino Co.; *K. Knudsen 13411*, Joshua Tree N. P., Mojave Desert, San Bernardino Co., UCR)

### **Placidium arboreum** (Schwein. ex Michener) Lendemer 📖 🌿

(Hinds & Hinds 2007 [color photograph, p. 408, only])

**Synonyms:** [P. tuckermanii](#), [Catapyrenium tuckermanii](#) (synonymy *fide* Lendemer & Yahr 2004)

### **Placidium californicum** Breuss 📖 🌿

(Breuss & Bratt 2001; Breuss 2002; *C. Bratt 8241*, San Nicolas Isl., Ventura Co., ASU, SBBG; *K. Knudsen 841.2*, Rouse Ridge, San Jacinto Mts, San Bernardino Co., UCR)

### **Placidium chilense** (Räsänen) Breuss 📖 🌿

(Bratt 1999; Breuss & Bratt 2001; Carlberg et al. 2007; *C. Bratt 9861*, Chukit Cyn, San Clemente Isl., Los Angeles Co., SBBG)

**Note:** This species is more common in Arizona, New Mexico and Texas.

### **Placidium fingens** (Breuss) Breuss 📖 🌿

(Breuss & Bratt 2001; Breuss 2002; *L. Sigal s.n.*, Hell's Peak, Lake Co., ASU)

**Note:** This species also occurs, rarely, in Arizona.

### **Placidium lachneum** (Ach.) B. de Lesd. 📖 🌿

(Breuss & Bratt 2001; Breuss 2002; *B. Ryan 12582*, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU)

**Synonyms:** [Catapyrenium lachneum](#)

### **Placidium michelii** (A. Massal.) Breuss 📖 🌿

(Breuss 2002)

**Note:** This species is also found in Arizona, New Mexico, and Texas.

### **Placidium pilosellum** (Breuss) Breuss 📖 🌿

(Breuss 1996; Breuss & Bratt 2001; Breuss 2002; *S. Tucker 33676*, San Nicolas Isl., Ventura Co., SBBG; *T. Nash 7053*, Ocotillo Wells, San Diego Co., ASU)

**Synonyms:** [Catapyrenium pilosellum](#)

### **Placidium squamulosum** (Ach.) Breuss 📖 🌿

(Doell et al. 1999; Breuss & Bratt 2001; Robertson 2001; Breuss 2002; Knight et al. 2002; Tucker 2002; Riefner et al. 2003; Robertson 2003b; Knudsen 2006a; Hinds & Hinds 2007 [color photograph, p. 409, only]; Knudsen 2007b; Rosentreter et al. 2007 [with photograph]; Knudsen & Kocourková 2009c; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [Catapyrenium squamulosum](#)

**Misapplied names:** *Dermatocarpon hepaticum* for CA records

*Placidium lacinulatum* (Ach.) Breuss 📖 🌿

(Bratt 1999; Doell et al. 1999; Breuss & Bratt 2001; Brodo et al. 2001 [pp. 569–570, with color photograph]; Robertson 2001; Breuss 2002; Robertson 2004; Robertson & Beyer 2005; Tucker et al. 2006; Carlberg et al. 2007; Rosentreter et al. 2007 [with photograph]; Knudsen & Kocourková 2009c, 2010f; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

=[\*Clavascidium lacinulatum\*](#)

*Placidium lacinulatum* var. *erythrostratum* Breuss 📖 🌿

(Breuss 2000, 2002; Knudsen et al. 2009)

=[\*Clavascidium lacinulatum\* var. \*erythrostratum\*](#)

*Placidium rufescens* (Ach.) A. Massal. 📖 🌿

**Synonyms:** [\*Dermatocarpon rufescens\*](#), [\*Endocarpon rufescens\*](#)

**Note:** This species was not mentioned for CA by Breuss (2002) or Breuss & Bratt (2001) so early CA reports are in doubt.

*Placidium tuckermanii* (Ravenel ex Mont.) Breuss 📖 🌿

(Brodo et al. 2001 [p. 570]; Breuss & Bratt 2001 [not known with certainty for CA]; Tucker 2002 [repeating Thomson's records from N CA])

=[\*P. arboreum\*](#) (synonymy *vide* Lendemer & Yahr 2004)

## PLACOCARPUS Trevis.

\***Placocarpus americanus** K. Knudsen, Breuss, & Kocourk. 📖 🌿

(Knudsen, Breuss, & Kocourková 2009; Kocourková et al. 2012; *K. Knudsen 10711*, Santa Monica Mts, Ventura Co., UCR, on *Lecanora muralis*)

*PLACODIUM* (Ach.) DC. =[CALOPLACA](#)

*Placodium aurantiacum* (Lightf.) Anzi 📖 🌿

(Tuckerman 1866, 1882; Orcutt 1885; McClatchie 1895; Hasse 1896; McClatchie 1897; Hasse 1903a, 1903d; Orcutt 1903)

=[\*Caloplaca flavorubescens\*](#)

*Placodium bolacinum* Tuck. 📖 🌿

(TJ for references)

=[\*Caloplaca bolacina\*](#)

*Placodium callopismum* (Ach.) Mérat 📖 🌿

(Tuckerman 1866; Bolander 1870)

=[\*Caloplaca aurantia\*](#), but apparent misidentifications for N. Amer.

*Placodium candicans* Schaer. 📖 🌿

(Hasse 1903c; misidentifications for N. Amer. records)

*Placodium cerinum* (Ehrh. ex Hedw.) Nägeli ex Hepp 📖 🌿

(TJ for references)

=[\*Caloplaca cerina\*](#)

*Placodium cerinum* var. *pyraceum* (Ach.) Branth. & Rostr. 📖 🌿

(McClatchie 1895, 1897)

=[\*Caloplaca pyracea\*](#)

*Placodium cerinum* var. *sideritis* Tuck. 📖 🌿

(Hasse 1903a)

=[\*Caloplaca sideritis\*](#)

*Placodium cinnabarinum* Anzi 📖 🌿

(TJ for references)

=[\*Caloplaca cinnabarina\*](#), but misidentifications for CA

*Placodium cladodes* Tuck. 📖 🌿

(Willey 1873a)



- =[Caloplaca cladodes](#)  
*Placodium constipans* Nyl. 📖 🌿  
(Nylander 1888)  
=[Edrudia constipans](#)  
*Placodium coralloides* Tuck. 📖 🌿  
(Tuckerman 1864, 1866, 1882; Bolander 1870; Willey 1873a; McClatchie 1895, 1897; Hasse 1903a, 1903c, 1903d, 1905; Herre 1906, 1907)  
=[Caloplaca coralloides](#)  
*Placodium elegans* (Link) DC. 📖 🌿  
(McClatchie 1897; Hasse 1905)  
=[Xanthoria elegans](#)  
*Placodium epixanthum* Nyl. 📖 🌿  
(Hasse 1903c)  
=[Candelariella aurella](#) (synonymy *fide* Zahlbruckner 1928)  
*Placodium eugyrum* Tuck. 📖 🌿  
(Hasse 1908a)  
=[Caloplaca eugyra](#); but misidentification for CA  
**Note:** Wetmore & Kärnefelt (1998) question the CA record. According to Zahlbruckner (1931) the species is restricted to Texas.  
*Placodium ferrugineum* (Huds.) Hepp 📖 🌿  
(TJ for references)  
=[Caloplaca ferruginea](#)  
*Placodium ferrugineum* f. *bolanderi* Tuck. 📖 🌿  
(Tuckerman 1882)  
=[Caloplaca luteominia](#) var. *bolanderi*  
*Placodium ferrugineum* var. *festivum* (Ach.) A. L. Sm. 📖 🌿  
(Hasse 1903a, 1903c)  
=[Caloplaca crenularia](#); but misidentifications for CA  
*Placodium ferrugineum* var. *wrightii* Tuck. 📖 🌿  
(Hasse 1903a, 1903c)  
=[Caloplaca wrightii](#)  
*Placodium festivum* (Ach.) Hepp 📖 🌿  
(Hasse 1903c)  
=[Caloplaca crenularia](#) (but misidentifications)  
*Placodium fulgens* (Sw.) Körb. 📖 🌿  
(Hasse 1913b; Fink 1935)  
=[Fulgensia fulgens](#) (but probably misidentifications of *F. desertorum* or *F. subbracteata*)  
*Placodium luteominium* Tuck. 📖 🌿  
(TJ for references)  
=[Caloplaca luteominia](#) var. *luteominia*  
*Placodium microphyllum* Tuck. 📖 🌿  
(Tuckerman 1882; Hasse 1903c [as “*microphyllum*”])  
=[Caloplaca microphyllina](#)  
*Placodium murorum* (Hoffm.) DC. 📖 🌿  
(TJ for references)  
=[Caloplaca saxicola](#)  
*Placodium murorum* var. *gyalolechioides* (Müll. Arg.) Hasse 📖 🌿  
(Hasse 1896; Orcutt 1903, 1907)  
=[Caloplaca saxicola](#)  
*Placodium murorum* var. *miniatum* Tuck. 📖 🌿

(Hasse 1895; Orcutt 1903, 1907)

=[Caloplaca saxicola](#)

*Placodium murorum* var. *obliterascens* Nyl. 📖 🌿

(Hasse 1906)

=[Caloplaca saxicola](#)

*Placodium peliophyllum* Tuck. 📖 🌿

(Tuckerman 1872; Willey 1873a; Tuckerman 1882)

=[Caloplaca peliophylla](#)

*Placodium subpyraceellum* Nyl. 📖 🌿

(McClatchie 1897)

=[Caloplaca subpyraceella](#)

*Placodium teicholytum* Ach. 📖 🌿

(Hasse 1903c)

=[Caloplaca teicholyta](#) (but misidentifications for N. Amer., *fide* Wetmore 1996 and Esslinger 2011)

*Placodium vitellinum* (Ehrh.) Hepp 📖 🌿

(Bolander 1870; TJ for references)

=[Candelariella vitellina](#)

*Placodium vitellinum* var. *aurellum* Ach. 📖 🌿

(Tuckerman 1882)

=[Candelariella aurella](#)

**PLACOLECANIA** (J. Steiner) Zahlbr.

*Placolecania candicans* (Dicks.) Zahlbr. 📖 🌿

(Hasse 1910a, 1913b; Merrill 1923)

=misidentifications for N. Amer. records

*Placolecania crenata* Herre 📖 🌿

(Herre 1910)

=[Solenopsora crenata](#) var. *crenata*

*Placolecania hassei* Zahlbr. ex Hasse 📖 🌿

(Hasse 1914)

=[Lecania hassei](#)

**PLACOPSIS** (Nyl.) Linds.

**Placopsis gelida** (L.) Linds. 📖 🌿

(Lamb 1947; TJ; Hale & Cole 1988; Brodo et al. 2001 [p. 572]; *H. Thiers 33523*, between Branscomb and Westport, Mendocino Co., ASU)

**Synonyms:** [Lecanora gelida](#)

**Placopsis lambii** Hertel & V. Wirth 📖 🌿

(Brodo et al. 2001 [p. 572, with color photograph]; Tucker 2002 [with reference to report of Brodo et al.])

**Note:** This species has also been collected in Oregon, Washington, and Montana.

**PLACOPYRENIUM** Breuss

**Placopyrenium bucekii** (Nádv. & Servít) Breuss 📖 🌿

(Breuss 2009, from San Luis Obispo Co.)

**Note:** Other reported collections of this species are from Europe.

**Placopyrenium caeruleopulvinum** (J. W. Thoms.) Breuss 📖 🌿

(Breuss 2002, 2009; Knudsen 2003a; *T. Nash 8449*, 3 km SW of Parker Dam on Colorado River, San Bernardino Co., ASU, WIS; *S. & S. Sharnoff 1623.27*, Big Rocks, Los Padres N. F., N of Hwy 166 on forest ridge to ridgetop, San Luis Obispo Co., ASU, CMN)

**Synonyms:** [Catapyrenium caeruleopulvinum](#) (Thomson 1987)

**Placopyrenium conforme** Breuss  

(McCune & Geiser 2009)

**Note:** This species has also been collected in Oregon.

**Placopyrenium fuscillum** (Turner) Gueidan & Cl. Roux  

**Synonyms:** [Verrucaria fuscilla](#)

**Note:** Breuss (2008) says only in Mexico in Sonoran region; *V. canella* is similar. This species has also been collected in Montana, Colorado, Alaska, and midwestern U. S.

**Placopyrenium heppioides** (Zahlbr.) Breuss  



(Breuss 2002, 2009; Knudsen & Kocourková 2009b; CA endemic, but may be extinct, *fide* Breuss 2009)

**Synonyms:** [Catapyrenium heppioides](#) (Thomson 1987), [Dermatocarpon heppioides](#) (Zahlbruckner 1912b; Hasse 1915a; Fink 1935; Herre 1944b; TJ; Knudsen 2003a)

**Placopyrenium lecideoides** (A. Massal.) Gueidan & Cl. Roux 

(*K. Knudsen 4282*, Bridle Ridge, San Antonio Creek, foothills of Santa Ynez Mts, Santa Barbara Co., UCR)

**Synonyms:** [Dermatocarpon lecideoides](#), [Verrucaria lecideoides](#)

**\*Placopyrenium noxium** Breuss  

(Knudsen & La Doux 2005 [parasite on *Staurothele areolata*]; Knudsen 2006a; Breuss 2009; Knudsen & Kocourková 2009b, 2009c, [on *Aspicilia* spp.]; Kocourková et al. 2012)

**Note:** Collections of this species are known from Orange, San Bernardino, and Ventura counties.

**Placopyrenium stanfordii** (Herre) K. Knudsen  

(Knudsen & Lendemer 2006b; Breuss 2009; Knudsen & Kocourková 2009b; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *K. Knudsen 11241*, near Lake Elinor Dam, Santa Monica Mts, Ventura Co., UCR; CA endemic)

**Synonyms:** [P. zahlbruckneri](#); [Catapyrenium zahlbruckneri](#), [Dermatocarpon zahlbruckneri](#), [Verrucaria stanfordii](#)



**Note:** The Nevada report of *V. stanfordii* (Herre 1911a) applies to a different species, *fide* Breuss 2009.

*Placopyrenium zahlbruckneri* (Hasse) Breuss  

(Breuss 2002; Tucker et al. 2006; Knudsen & Lendemer 2006a)



=[P. stanfordii](#)

## PLACYNTHIELLA Elenkin



**Placynthiella dasaea** (Stirt.) Tønsberg  

(Knudsen & Kocourková 2010g, on wood, Clark Mts, San Bernardino Co.)

**Note:** This species has also been collected in central, eastern, and southeastern U. S.

**Placynthiella hyporhoda** (Th. Fr.) Coppins & P. James  

(Knudsen 2007b; Printzen & Knudsen 2008; Knudsen & Kocourková 2009c; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *K. Knudsen 1978*, Castro Crest, Santa Monica Mts, Ventura Co., UCR)

**Placynthiella icmalea** (Ach.) Coppins & P. James  

(Wetmore 1985 [based on *J. Blakeman 69*, Grant Grove, Kings Canyon N. P., Tulare Co., 19 July 1985, MIN]; Benson 2005; Knudsen 2005c, 2007b; Williams & Sillett 2007; Glacy et al. 2011; Knudsen & Kocourková 2012a; *R. Schoeninger 398*, Fraser Point, Santa Cruz Isl., Santa Barbara Co., SBBG; *K. Knudsen 9833*, Laguna Trail, Point Reyes Nat. Seashore, Marin Co., UCR)

**Placynthiella knudsenii** Lendemer  

(Lendemer 2004; Ryan, Hertel, & Lendemer 2004; Knudsen 2005c; Knudsen & Magney 2006; *K. Knudsen 389*, Wildomar, Menifee Hills, Riverside Co., ASU, UCR; *K. Knudsen 4611*, Morro Bay S. P., San Luis Obispo Co., UCR; CA endemic)

**Placynthiella oligotropha** (J. R. Laund.) Coppins & P. James  

(Brodo et al. 2001 [p. 572, color photograph but no CA report]; Rosentreter et al. 2007 [with

photograph]; Glacy et al. 2011; *B. Ryan 23782a*, edge of Desolation Wilderness, ~3 mi. SW of Meeks Bay, El Dorado Co., ASU; *T. Nash 11395*, hills above Hendy Woods S. P., Mendocino Co., ASU)

**Placynthiella uliginosa** (Schrad.) Coppins & P. James 🍄 🌿

(Baltzo 2002; Ryan, Hertel, & Lendemer 2004; Benson 2005; Robertson & Beyer 2005; Carlberg et al. 2007; Knudsen 2007b; Knudsen & Kocourková 2009c; *S. Tucker 35294*, Pygmy Forest, Mitchell Creek Dr., Mendocino Co., SBBG, det. B. Ryan; *K. Knudsen 927*, San Jacinto Mts, Riverside Co., ASU; *S. Benson 105*, Anvil Rock, Pinnacles Nat. Monument, San Benito Co., SBBG)

**Synonyms:** [Lecidea humosa](#), [L. uliginosa](#)

**PLACYNTHIUM** (Ach.) Gray

**Placynthium asperellum** (Ach.) Trevis. 🍄 🌿

(Schultz 2009; Hinds & Hinds 2007 [color photograph, p. 411, only]; *B. Ryan 24531*, Kennedy Meadows, Emigrant Wilderness, Tuolumne Co., ASU)

**Note:** This species has also been collected in Arizona, Colorado, Alaska, and midwestern U. S.

**Placynthium flabellosum** (Tuck.) Zahlbr. 🍄 🌿

(Henssen 1963a; TJ; Schultz 2009; Hinds & Hinds 2007 [color photograph, p. 411, only])

**Placynthium nigrum** (Huds.) Gray 🍄 🌿

(Herre 1910; Hasse 1913b; Fink 1935; Henssen 1963e; Sigal 1975; TJ; Sigal 1989; Brodo et al. 2001 [p. 573, with color photograph]; Baltzo 2002; Schultz 2002; Robertson 2004; Tucker et al. 2004; Hinds & Hinds 2007 [color photograph, p. 412, only]; Knudsen & Kocourková 2009b; Schultz 2009; Knudsen & Kocourková 2012a)

**Synonyms:** [Pannaria nigra](#), [Pannularia nigra](#), [Pannularia triseptata](#)

**Note:** This species has also been collected in New York and North Carolina.

**Placynthium pannariellum** (Nyl.) H. Magn. 🍄 🌿

(Schultz 2009)

**Note:** This species has been collected in British Columbia and Europe.

**Placynthium tantaleum** (Hepp) Hue 🌿

(*T. Nash 34131*, Santa Cruz Isl., Santa Barbara Co., ASU)

**Note:** This species has also been collected in Arizona and Bavaria.

*Placynthium dubium* Herre 🍄 🌿

(Herre 1910; Fink 1935; Thomson & Ketchledge 1958; TJ)

=[Massalongia microphylliza](#)

*Placynthium microphyllizum* (Nyl. ex Hasse) Hasse 🍄 🌿

(Hasse 1913b)

=[Massalongia microphylliza](#)

*Placynthium sonomense* (Tuck.) Herre 🍄 🌿

(Herre 1912b)

=[Koerberia sonomensis](#)

**PLATISMATIA** W. L. Culb. & C. F. Culb.

**Platismatia glauca** (L.) W. L. Culb. & C. F. Culb. 🍄 🌿

(W. Culberson & C. Culberson 1968; Lindsay 1973; Malachowski 1975; Pinelli & Jordan 1978; TJ; Smith 1980; Sigal & Nash 1983; Sweet 1983; Thomson 1984; Hale & Cole 1988; Goward et al. 1994; Tucker & Bratt 1995; Hill 1997; Wright 1997; McGee 1998; Brodo et al. 2001 [p. 574, with color photograph]; Wright 2001a; Baltzo 2002; Ryan 2002; Robertson 2002a; Ellyson & Sillett 2003; Blauman 2004a; Jovan & McCune 2004; Robertson 2005a, 2005c; Hinds & Hinds 2007 [color photograph, p. 414, only]; Williams & Sillett 2007; Knudsen et al. 2009; McCune & Geiser 2009; Villella 2010; Benson et al. 2012)

**Synonyms:** [Cetraria glauca](#)

**Note:** This species occurs in northern CA and throughout the Sierra Nevada. It was found in the

Cuyamaca Mts of San Diego Co. in 1983 by Sigal & Nash (1983) but may now be extinct in that area *fide* Knudsen et al. 2009.

**Platismatia herrei** (Imshaug) W. L. Culb. & C. F. Culb. 🍄 🌿

(W. Culberson & C. Culberson 1968; Lindsay 1973; Malachowski 1975; TJ; Smith 1980; Sweet 1983; Hale & Cole 1988; Goward et al. 1994; Hill 1997; Wright 1997; Brodo et al. 2001 [pp. 574–576, with color photograph]; Wright 2001a; Robertson 2002a; Baltzo 2002; Ellyson & Sillett 2003; Blauman 2004a; Jovan & McCune 2004; Robertson 2005a, 2005c; Williams & Sillett 2007; McCune & Geiser 2009)

**Synonyms:** [\*Cetraria herrei\*](#), *C. tuckermanii* Herre non Oakes in Tuckerman

**Note:** This species occurs in coastal N CA and the Sierra Nevada.

**Platismatia lacunosa** (Ach.) W. L. Culb. & C. F. Culb. 🍄 🌿

(W. Culberson & C. Culberson 1968; TJ; Hale & Cole 1988; Goward et al. 1994; Wright 2001a; Brodo et al. 2001 [p. 576, with color photograph])

**Synonyms:** [\*Cetraria lacunosa\*](#)

**Note:** This species is reported in Brodo et al. from NW coastal California. The Hasse (1913b) report for S CA is probably based on misidentifications.

**Platismatia norvegica** (Lynge) W. L. Culb. & C. F. Culb. 🍄 🌿

(Goward et al. 1994; McCune & Geiser 1997; Wright 2001a [repeated McCune & Geiser's report]; Brodo et al. 2001 [p. 576, color photograph but no CA report]; Ellyson & Sillett 2003; McCune & Geiser 2009)

**Note:** This species occurs in extreme NW coastal CA.

**Platismatia stenophylla** (Tuck.) W. L. Culb. & C. F. Culb. 🍄 🌿

(W. Culberson & C. Culberson 1968; Lindsay 1973; Hale 1979; TJ; Sweet 1983; Hale & Cole 1988; Tucker & Bratt 1995 [as “cf.”]; Riefner, Bowler, & Ryan 1995; Brodo et al. 2001 [pp. 576–577, with color photograph]; Wright 2001a; Blauman 2004a; Jovan & McCune 2004; Williams & Sillett 2007; McCune & Geiser 2009)

**Synonyms:** [\*Cetraria stenophylla\*](#), [\*Cetraria lacunosa\* var. \*stenophylla\*](#)

**Note:** This species occurs in NW coastal CA.

**PLATYGRAPHA** Nyl.

*Platygrapha californica* (Tuck.) Nyl. 🍄 🌿

(Tuckerman 1872 [p. 195], 1888 [p. 116]; Hue 1891)

=[\*Sigridea californica\*](#)

*Platygrapha hypothallina* Zahlbr. 🍄 🌿

(Zahlbruckner 1900, 1907; Hasse 1903b, 1903f)

=[\*Lecanographa hypothallina\*](#)

*Platygrapha plurilocularis* Zahlbr. 🍄 🌿

(Zahlbruckner 1902; Hasse 1903b, 1903f)

=[\*Paraschismatomma ochroleucum\*](#) (Ertz & Tehler 2011)

**PLATYSMA** Hoffm.

*Platysma orbatum* Nyl. 🍄 🌿

(Hue 1890)

=[\*Tuckermannopsis orbata\*](#)

*Platysma sepincola* (Ehrh.) Hoffm. 🍄 🌿

(Hasse 1898a; Orcutt 1909)

=[\*Tuckermannopsis sepincola\*](#)

**PLECTOCARPON** Fée

\***Plectocarpon lichenum** (Sommerf.) D. Hawksw. 🍄 🌿

(Ertz & Diederich 2008; Kocourková et al. 2012)

**Note:** This species is lichenicolous on *Lobaria* and *Pseudocyphellaria* spp.; it has been reported from Monterey Co.

\***Plectocarpon nashii** Hafellner 📖 🌿

(Hafellner et al. 2002 [on *Niebla robusta*]; Ertz & Diederich 2008; Knudsen & Kocourková 2010f, 2012a; Kocourková et al. 2012; CA endemic)

**Note:** This species is known only from the type on *Niebla robusta* on West Anacapa Isl.

**PLEOPSISIDIUM** Körb.

**Pleopsidium chlorophanum** (Wahlenb.) Zopf 📖 🌿

(Robertson et al. 1998 [as “cf.”]; Bratt 1999; Doell et al. 1999; Bourell 2000; Robertson 2003b; Knudsen 2004b; Knudsen & Kocourková 2012a)

**Synonyms:** [Acarospora chlorophana](#), [Lecanora chlorophana](#)

**Note:** According to Hafellner (1993), many records, including all from lowland areas, are almost certainly misidentifications, because this species is arctic/alpine in Europe. *P. chlorophanum* was collected once in CA: *C. Bratt 3436*, on Santa Cruz Isl., ASU, SBBG, *fide* K. Knudsen (2005d, 2008).

**Pleopsidium flavum** (Bellardi) Körb. 📖 🌿

(Brodo et al. 2001 [pp. 578–579, with color photograph]; Knight et al. 2002; Robertson 2003b; Knudsen 2004b; Benson 2005; Robertson & Beyer 2005; Carlberg et al. 2007; Knudsen & Kramer 2007; Knudsen 2008; Knudsen et al. 2009; Tucker 2010; Villella 2010)

**Synonyms:** [Acarospora flava](#), [A. oxytona](#)

**Note:** Nearly all CA material of *Pleopsidium* is *P. flavum* *fide* Knudsen (2005d, 2008).

**Pleopsidium stenosporum** (Stizenb. ex Hasse) K. Knudsen 📖 🌿

(Knudsen 2011b, known from *H. Hasse 368*, in San Gabriel Mts, ASU)

**Synonyms:** [Acarospora stenospora](#), [Lecanora stenospora](#)

**POLYBLASTIA** A. Massal.

*Polyblastia cupularis* A. Massal. 🌿

**Synonyms:** [P. intercedens](#), [P. intercedens var. aethioboloides](#), [Verrucaria intercedens](#), [Verrucaria intercedens var. aethioboloides](#)

**Note:** According to O. Breuss (personal communication to T. Nash) *Polyblastia* does not occur in the Sonoran region. The identity of CA records is unknown.

*Polyblastia intercedens* (Nyl.) Lönnr. 📖 🌿

(Herre 1912a [on sandstone, Alum Rock Park, Inner Coast Range, Santa Clara Co., 450 ft. elev.]; Hasse 1913b; Fink 1935; TJ)

= [P. cupularis](#)

*Polyblastia intercedens* var. *aethioboloides* (Nyl.) Hasse 📖 🌿

(Hasse 1913b)

= [P. cupularis](#)

**POLYBLASTIOPSIS** Zahlbr.

*Polyblastiopsis inductula* (Nyl.) Fink 📖 🌿

(Fink 1935; TJ)

= [Thelenella inductula](#)

*Polyblastiopsis lactea* (A. Massal.) Zahlbr. 📖 🌿

(Orcutt 1903, 1907 [as *Pyrenula lactea*, from San Diego]; TJ)

= [Julella lactea](#) var. [lactea](#) (but probably misidentifications)

**Note:** R. Harris (personal communication) said that he has seen no material from CA that could be called *Julella lactea*.

## POLYCAULIONA Hue

*Polycauliona bolanderi* (Tuck.) Hue 📖 🌿

(Hue 1909a)

=[\*Cladidium bolanderi\*](#)

*Polycauliona constipans* (Nyl.) Hue 📖 🌿

(Hue 1909a, 1909b)

=[\*Edrudia constipans\*](#)

*Polycauliona coralloides* (Tuck.) Hue 📖 🌿

(Hue 1909a; Rudolph 1955; Bowler et al. 1996)

=[\*Caloplaca coralloides\*](#)

*Polycauliona phryganitis* (Tuck.) Hue 📖 🌿

(Hue 1909a, 1909b)

=[\*Lecanora phryganitis\*](#) Tuck.

*Polycauliona thamnitis* (Tuck.) Hue 📖 🌿

(Hue 1909a)

=[\*Cladidium bolanderi\*](#)

## POLYCHIDIUM (Ach.) Gray

**Polychidium muscicola** (Sw.) Gray 📖 🌿

(Herre 1910; Hasse 1913b; Fink 1935; TJ; Wetmore 1983; Thomson 1984; Tucker & Bratt 1996; Goward 1999; Brodo et al. 2001 [p. 580, with color photograph]; Ryan & Schultz 2002; Jovan & McCune 2004; Robertson 2004; Carlberg et al. 2007; McCune & Geiser 2009)

**Synonyms:** [\*Leptogium muscicola\*](#) (Tuckerman 1866; Bolander 1870; TJ for more references)

*Polychidium albociliatum* (Desm.) Zahlbr. 📖 🌿

(TJ for early references; Smith 1980)

=[\*Leptochidium albociliatum\*](#)

*Polychidium dendriscum* (Nyl.) Henssen 📖 🌿

(Malachowski 1975; discussed by Tucker 2002; only in SE Alaska, *vide* Brodo et al. 2001, p. 579)

*Polychidium rivale* (Tuck.) Fink 📖 🌿

(Fink 1935)

=[\*Leptogium rivale\*](#)

## POLYCOCCUM Sauter ex Körb.

\***Polycoccum kernerii** J. Steiner 📖 🌿

(Knudsen 2012a; Kocourková et al. 2012; *K. Knudsen 13648*, Sierra N. F., Sierra Nevada, Mariposa Co., UCR, on *Lecidea fuscoatra*; also on *L. tessellata* in Arizona)

\***Polycoccum microsticticum** (Leight. ex Mudd) Arnold 📖 🌿

(Kocourková et al. 2012; *W. Weber & R. Santesson 17833*, Irvine Ranch, Coyote Cyn, Orange Co., UPS)

**Note:** This taxon was not reported for the Sonoran region or S CA in particular by Calatayud (2004) although five other species were reported. It occurs on a variety of hosts. The spelling “*microsticticum*” follows Hawksworth (2003, p. 216). Hasse (1906), who possibly misapplied the name *Verrucaria conturmatula* to this taxon, reported two-celled spores, which would be correct for *Polycoccum* but not for *Verrucaria*.

\***Polycoccum pulvinatum** (Eitner) R. Sant. 📖 🌿

(Knudsen & Kocourková 2012a; *J. Kocourková 8161*, Scorpion Cyn, Santa Cruz Isl., Santa Barbara Co., forming galls on *Physcia* sp., UCR)

## POLYSPORINA Vězda

\***Polysporina arenacea** (H. Magn.) K. Knudsen & Kocourk. 📖 🌿

(Knudsen & Kocourková 2008a, 2009b, 2012a; Kocourková et al. 2012; *K. Knudsen* 8055, Granite Mts, San Bernardino Co., UCR; other Knudsen collections from Santa Barbara and San Luis Obispo counties, UCR, on various crusts)

**Synonyms:** [Acarospora arenacea](#)

**Polysporina gyrocarpa** (H. Magn.) N. S. Golubk. 📖 🌿

(Knudsen & Kocourková 2009b, 2009d; *K. Knudsen* 9705, Granite Mts, San Bernardino Co., UCR)

**Synonyms:** [P. oligospora](#)

**Misapplied names:** *P. cyclocarpa* (Knudsen 2007b)

**Polysporina simplex** (Taylor) Vězda 📖 🌿

(Tucker & Jordan 1979; Bratt 1987, 1997; Doell et al. 1999; Robertson 2001, 2003b; Tucker et al. 2004; Benson 2005; Robertson 2005a; Knudsen 2007b; Knudsen & Kramer 2007; Knudsen 2008; Knudsen & Kocourková 2009a, 2009b, 2009c; Tucker 2010; Glacy et al. 2011; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [Acarospora simplex f. complicata](#), [Biatorella revertens](#), [B. simplex](#), [Lecanora privigna var. revertens](#), [L. simplex](#), [L. simplex f. complicata](#), [Sarcogyne simplex](#)

\***Polysporina subfuscens** (Nyl.) K. Knudsen & Kocourk. 📖 🌿

(Knudsen & Kocourková 2008a; Knudsen et al. 2009; Knudsen & Kocourková 2009a, 2009b, 2009c, 2012a; Kocourková et al. 2012; *K. Knudsen* 8521.3, 8523, Santa Cruz Isl., Santa Barbara Co., UCR)

**Misapplied names:** [P. bicolor](#), [P. lapponica](#), [Sarcogyne lapponica](#)

**Note:** This lichenicolous is found on species of *Acarospora*, *Buellia*, *Caloplaca*, *Candelariella* and *Lecidea*.

**Polysporina urceolata** (Anzi) Brodo 📖 🌿

(Knudsen 2006a, 2008; Knudsen & Kocourková 2009b; *S. Tucker* 38026, on dolomite, Patriarch Grove, White Mts, Mono Co., det. K. Knudsen, SBBG; *K. Knudsen* 3293, near Cactus Flats, San Bernardino Mts, San Bernardino Co., UCR)

\***Polysporina bicolor** (H. Magn.) K. Knudsen & Kocourk. 🌿

(*K. Knudsen* 9270, Santa Ana Mts, Orange Co., UCR)

**Note:** This name has been misapplied to *P. subfuscens*.

\***Polysporina lapponica** (Ach. ex Schaer.) Degel. 📖 🌿

(Knudsen 2005b, 2005c, 2006a, 2007b; Knudsen & La Doux 2005; Knudsen & Kramer 2007; Knudsen 2008; Knudsen & Kocourková 2009b)

**Synonyms:** [Sarcogyne bicolor](#) (synonymy *fide* K. Knudsen)

**Note:** This name has been misapplied to *P. subfuscens*.

**Polysporina oligospora** (H. Magn.) K. Knudsen 📖 🌿

(Knudsen & Lendemer 2005a; Knudsen & Kocourková 2009b)

=[P. gyrocarpa](#)

**PORINA** Müll. Arg.

**Porina linearis** (Leight.) Zahlbr. 📖 🌿

**Synonyms:** [Trichothelium lineare](#)

**Misapplied names:** [Verrucaria circumspersella](#) (Hasse 1906)

**Note:** This record is based on a Hasse collection that was annotated as *Porina linearis* by O. Breuss, *fide* Nash (2002b, p. 509); [P. linearis](#) was not included in S CA by Aptroot 2002.

**Porina peregrina** Tretiach & McCarthy 📖 🌿

(Aptroot 2002 [p. 405], based on a single collection, *P. Nimis* 18316, Santa Rosa Isl., Santa Barbara Co., ASU, MIN; CA endemic)

**Porina aenea** (Wallr.) Zahlbr. 📖 🌿

(Aptroot 2002; Tucker 2010; *T. Nash* 33058, Santa Rosa Isl., Santa Barbara Co., ASU, det. P. Aptroot)

=[Pseudosagedia aenea](#)

**Porina carpinea** (Pers.) Zahlbr. 📖 🌿



(Herre 1910; Fink 1935; TJ)

=[\*Pseudosagedia aenea\*](#)

**Note:** Some *A. Herre* collections were misidentified; some have been re-determined as *Anisomeridium biforme* by S. Tucker.

*Porina cestrensis* (Tuck. ex E. Michener) Müll. Arg. 🍄 🌿

(Aptroot 2002)

=[\*Pseudosagedia cestrensis\*](#)

*Porina chlorotica* (Ach.) Müll. Arg. 🍄 🌿

(TJ; von Reis 1991; Tucker 1999; Aptroot 2002; Benson et al. 2012 [as “cf.”])

=[\*Pseudosagedia chlorotica\*](#)

*Porina cinerea* (Pers.) Zahlbr. (nom. illeg.) 🍄 🌿

(Hasse 1906; Fink 1935)

=[\*Strigula stigmatella\*](#)

*Porina hibernica* P. James & Swinscow 🍄 🌿

**Note:** According to R. Harris (1995) this taxon does not occur in N. Amer.; according to Aptroot (2002, pp. 403–404), the name was misapplied to *P. cestrensis*.

*Porina plumbaria* (Stizenb.) Hasse 🍄 🌿

(Hasse 1913b; Merrill 1923; Fink 1935)

=[\*Arthopyrenia plumbaria\*](#)

## **POROCYPHUS** Körb.

**Porocyphus coccodes** (Flot.) Körb. 🍄 🌿

(Schultz 2002)

**Note:** This species has also been collected in Arizona, Alaska, and Europe.

## **PORPIDIA** Körb.

**Porpidia crustulata** (Ach.) Hertel & Knoph 🍄 🌿

(Wetmore 1985; Gowan 1989; Brodo et al. 2001 [p. 584, with color photograph]; Glacy et al. 2011; *S. Tucker 14866*, near Oroville, Butte Co., SBBG; *J. Lindsay 146* (as *Lecidea vorticosa*), near Etnersburg, Humboldt Co., det. S. Gowan, WIS)

**Porpidia grisea** Gowan 🍄 🌿

(Knoph & Rambold 2004; *L. Glacy s.n.*, Point Reyes Nat. Seashore on coastal rocks, Marin Co., UCR)

**Note:** This species has also been collected in Washington, Wyoming, and Alaska.

**Porpidia ochrolemma** (Vain.) Brodo & R. Sant. 🌿

(*B. Ryan 23331*, SW of Fallen Leaf Lake, El Dorado Co., ASU)

**Note:** This species has also been collected in Colorado, Greenland, and Europe.

**Porpidia soledizodes** (Lamy ex Nyl.) J. R. Laund. 🍄 🌿

(Knudsen & Kocourková 2009a; *K. Knudsen 5834*, Point Loma, Cabrillo Nat. Monument, San Diego Co., NY, UCR)

**Note:** This species has also been collected in Washington and eastern U. S.

**Porpidia thomsonii** Gowan 🍄 🌿

(Gowan 1989; Tucker et al. 2004 [as “cf.”; later changed to *P. crustulata*]; *R. Riefner 98–61*, Davies Valley near Jacumba Natural Area, Imperial Co., UCR; *R. Sherman 473*, Rim Trail, Patrick's Point S. P., Humboldt Co., WIS, det. S. Gowan)

**Misapplied names** (*fide* S. Tucker): [\*Lecidea fuscorubens\*](#) (Herre 1944b)

*Porpidia macrocarpa* (DC.) Hertel & A. J. Schwab 🍄 🌿

(Wetmore 1985)

**Synonyms:** [\*Lecidea contigua\*](#) (Orcutt 1909), [\*L. macrocarpa\*](#) (Thomson & Ketchledge 1958), [\*L. platycarpa\*](#) (Hasse 1896; Orcutt 1907; Herre 1910; Hasse 1913b; Fink 1935)

**Note:** Reports from CA are probably misidentifications, since nearly all are from S CA, and Knoph &

Rambold (2004) do not mention any reports for S CA, although they are known from Arizona. The name has often been misapplied to several species including *P. crustulata* and *P. thomsonii*.

*Porpidia speirea* (Ach.) Kremp. 🍄 🌿

**Synonyms:** [Lecidea speirea](#) (Fink 1935)

**Note:** The Fink report is probably based on a misidentification since the species is boreal, with Washington as the southernmost occurrence on the West Coast, *fide* Gowan (1989).

**PROTOBLASTENIA** (Zahlbr.) J. Steiner

**Protoblastenia rupestris** (Scop.) J. Steiner 🍄 🌿

(Tucker et al. 2004; Tucker 2010; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *R. Robertson* 8729, upper quarry, Univ. of Calif., Santa Cruz, Santa Cruz Co., UC; *S. Tucker* 38541, Santa Barbara Botanic Garden, Santa Barbara Co., SBBG)

**Note:** This species is widely distributed in the U. S.

*Protoblastenia querneae* (Dicks.) Clauz. 🍄 🌿

(Lindsay 1973; TJ)

=[Pyrrhospora querneae](#)

**PROTOPANNARIA** (Gyeln.) P. M. Jørg. & S. Ekman

*Protopannaria pezizoides* (Weber) P. M. Jørg. & S. Ekman 🍄 🌿

(not mentioned for CA by Jørgensen [2001a]; Hinds & Hinds 2007 [color photograph, p. 417, only])

**Synonyms:** [Pannaria brunnea](#) (Hasse 1903c), [P. pezizoides](#) (Hasse 1913b; Fink 1935; Goward et al. 1994; Wright 1997 [“?”]; discussed by Tucker 2002)

**Note:** There is no certain primary report of this species in CA, although it is known from southern Oregon.

**PROTOPARMELIA** M. Choisy

**Protoparmelia badia** (Hoffm.) Hafellner 🍄 🌿

(Ryan & Nash 1991; Riefner, Bowler, & Ryan 1995 [but based on misidentified material]; Bratt 1999; Magney 1999 [repeating earlier citations]; Robertson & Robertson 2002 [based on *J. & R. Robertson* 5049, serpentine outcrops near West Peak, Mt. Tamalpais S. P., Marin Co., UC]; discussed by Tucker 2002; Ryan, Nash, & Hafellner 2004; Benson 2005; Knudsen & Kocourková 2012a; *T. Nash* 11284b, near Pyles Boys Camp, 11 km N of Lower Peppermint Cpgd, Sequoia N. F., Tulare Co., ASU; *T. Nash* 33030, South Point, Santa Rosa Isl., Santa Barbara Co., det. J. Sheard, ASU)

**Synonyms:** [Lecanora badia](#)

**Protoparmelia hypotremella** Herk, Spier & V. Wirth 🍄 🌿

(Williams & Sillett 2007)

**Note:** This species occurs in central and northeastern U. S. and Canada. The collection reported by Williams & Sillett should be checked.

**Protoparmelia nephaea** (Sommerf.) R. Sant. *ex* Poelt & Obermayer 🍄 🌿

(Ryan, Nash, & Hafellner 2004 [based on Herre report for N CA]; *C. Bratt* 7617, Hollister Ranch, W end of Santa Ynez Mts, Santa Barbara Co., SBBG)

**Synonyms:** [Lecanora nephaea](#)

**Note:** This species has also been collected in Nevada, New York and Europe.

**Protoparmelia ochrococca** (Nyl.) P. M. Jørg., Rambold, & Hertel 🍄 🌿

(Ryan, Nash, & Hafellner 2004; Brodo & Aptroot 2005; Williams & Sillett 2007)

**Synonyms:** [Lecanora phaeobola](#)

\***Protoparmelia ryaniana** van den Boom, Sipman, & Elix 🍄 🌿

(van den Boom et al. 2008; Knudsen & Kocourková 2009a, 2010f, 2012a; Kocourková et al. 2012 [describing it as a juvenile parasite on *Dimelaena* and *Tephromela*]; *K. Knudsen* 12023, Santa Cruz Isl., Santa Barbara Co., UCR)

**PROTOPARMELIOPSIS** M. Choisy = [LECANORA](#)

*Protoparmeliopsis muralis* (Schreb.) M. Choisy 📖 🌿

(Weber et al. 1987)

= [Lecanora muralis](#)

**PSEUDEPHEBE** M. Choisy

**Pseudephebe minuscula** (Nyl. ex Arnold) Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; TJ; Thomson 1984; Hale & Cole 1988; Goward 1999; Brodo et al. 2001 [p. 587, with color photograph]; Ryan 2002; Robertson 2003b; Robertson & Beyer 2005; *J. & R. Robertson 1775*, Hull Mtn Rd 5 mi. S of summit, elev. 6800', Lake Co., UC; *B. Ryan 11331*, W of Lassen Volcanic N. P., Shasta Co., ASU; *B. Ryan 26593*, San Gabriel Wilderness, Los Angeles Co., SBBG)

**Synonyms:** [Alectoria minuscula](#)

**Pseudephebe pubescens** (L.) M. Choisy 📖 🌿

(Brodo & Hawksworth 1977; TJ; Thomson 1984; Hale & Cole 1988; Riefner, Bowler, & Ryan 1995; Goward 1999; Brodo et al. 2001 [pp. 587–588, with color photograph]; Ryan 2002; Robertson & Beyer 2005; Knudsen & Kramer 2007; McCune & Geiser 2009; *B. Ryan 12551*, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU)

**Synonyms:** [Parmelia lanata](#), [P. pubescens](#)

**PSEUDEVERNIA** Zopf

**Pseudevernia intensa** (Nyl.) Hale & W. L. Culb. 📖 🌿

**Misapplied names:** [Parmelia furfuracea](#) (Berry 1941; Herre 1946), [Evernia furfuracea](#)

**Note:** Most records of *Parmelia furfuracea* or *Evernia furfuracea* have proven to be *Pseudevernia intensa*; that species has been recorded from Arizona. The identity of the CA records is uncertain.

**PSEUDOCYPHELLARIA** Vain.

**Pseudocypbellaria anomala** Brodo & Ahti 📖 🌿

(Magnusson 1939; Herre 1942c; Thomson & Ketchledge 1958; Jordan 1968; Krog 1968; Lindsay 1973; Ohlsson 1973; Malachowski 1975; TJ; Hale & Cole 1988; Baltzo 1989; Goward et al. 1994; Tucker & Bratt 1996; Hill 1997; Wright 1997; McGee 1998; Brodo et al. 2001 [pp. 592–593, with color photograph]; Baltzo 2002; Ryan & Galloway 2002; Ellyson & Sillett 2003; Blauman 2004a; Tucker et al. 2004; Robertson 2005c; Williams & Sillett 2007; Knudsen & Kocourková 2009b; McCune & Geiser 2009; Glacy et al. 2011)

**Pseudocypbellaria anthraspis** (Ach.) H. Magn. 📖 🌿

(Jordan 1968; Krog 1968; Baltzo 1970; Lindsay 1973; Ohlsson 1973; Malachowski 1975; Pinelli & Jordan 1978; TJ; Hale & Cole 1988; Baltzo 1989; Goward et al. 1994; Doell & Wright 1996; Tucker & Bratt 1996; Wright 1997; Brodo et al. 2001 [p. 593, with color photograph]; Baltzo 2002; Ryan & Galloway 2002; Robertson 2002a; Ellyson & Sillett 2003; Robertson 2003a; Blauman 2004a; Jovan & McCune 2004; Tucker et al. 2004; Robertson 2005a, 2005c; Williams & Sillett 2007; McCune & Geiser 2009; Glacy et al. 2011)

**Synonyms:** [Sticta anthraspis](#), [Stictina anthraspis](#)

**Pseudocypbellaria crocata** (L.) Vain. 📖 🌿

(Jordan 1968; Tucker 1973; TJ; Hale & Cole 1988; Brodo et al. 2001 [pp. 594–595, with color photograph]; McGee 2001; Baltzo 2002; Ellyson & Sillett 2003; Jovan & McCune 2004; McCune & Geiser 2009)

**Pseudocypbellaria perpetua** McCune & Miadl. 📖 🌿

(Hinds & Hinds 2007 [color photograph, p. 422, only]; Williams & Sillett 2007)

**Note:** This species has been reported in Oregon, British Columbia, and widely in N. Amer.

**PSEUDOPARMELIA** Lyngé

***Pseudoparmelia caperata*** (L.) Hale 📖 🌿

(Hale 1976a; TJ; Bratt 1987; Weber et al. 1987)

=[\*Flavoparmelia caperata\*](#)

**PSEUDOSAGEDIA** (Müll. Arg.) M. Choisy

***Pseudosagedia aenea*** (Wallr.) Hafellner & Kalb 📖 🌿

(Knudsen & Kocourková 2012a)

**Synonyms:** [\*Porina aenea\*](#), [\*P. carpinea\*](#), [\*Trichothelium aeneum\*](#)

**Note:** This species has been reported from British Columbia, the East Coast of N. Amer. and Europe.

***Pseudosagedia cestrensis*** (Tuck. ex Michener) R. C. Harris 📖 🌿

(Knudsen & Kocourková 2012a; *S. Tucker* 35830, Santa Cruz Isl., Santa Barbara Co., SBBG, det. A. Aptroot; *T. Nash* 32479, Santa Cruz Isl., ASU, det. A. Aptroot)

**Synonyms:** [\*Porina cestrensis\*](#)

**Misapplied names:** [\*Porina hibernica\*](#)

***Pseudosagedia chlorotica*** (Ach.) Hafellner & Kalb 📖 🌿

(Knudsen & Kocourková 2012a; *T. Nash* 33020, Santa Rosa Isl., Santa Barbara Co., ASU, det. A. Aptroot; *von Reis SS-L45D*, San Luis Obispo Co., OBI, det. S. Tucker)

**Synonyms:** [\*Porina chlorotica\*](#), [\*Trichothelium chloroticum\*](#), [\*Verrucaria chlorotica\*](#), [\*V. chlorotica\*](#) f. [\*trachona\*](#)

***Pseudosagedia linearis*** (Leight.) Hafellner & Kalb 📖 🌿

**Synonyms:** [\*Trichothelium lineare\*](#)

**Misapplied names:** [\*Verrucaria circumspersella\*](#) (Hasse 1906)

**Note:** This species is also found in Europe.

**PSILOLECHIA** A. Massal.

***Psilolechia lucida*** (Ach.) M. Choisy 📖 🌿

(McCune 1985; Brodo et al. 2001 [pp. 596–597, with color photograph, map on p. 596 showed it around Los Angeles], discussed by Tucker [2002]; *T. Nash* 22845, Lassen Volcanic N. P., Shasta Co., ASU)

**Synonyms:** [\*Lecidea lucida\*](#)

**Note:** The Herre report of *Lecidea lucida* was based on misidentification of a nonlichenized fungus, *vide* S. Tucker.

**PSORA** Hoffm.

***Psora brunneocarpa*** Timdal 📖 🌿

(Timdal 2002; Knudsen & Kocourková 2012a; *T. Nash* 33008, Santa Rosa Isl., Santa Barbara Co., det. E. Timdal, ASU)

**Note:** This species is more common in Mexico.

***Psora californica*** Timdal 📖 🌿

(Timdal 1986; Baltzo 1989; Brodo et al. 2001 [p. 601]; Timdal 2002; Riefner et al. 2003; Knudsen & Kocourková 2009c; *B. Ryan* 24779, S of Coulterville, Madera Co., ASU; *W. Weber* L-80233, ridge leading to Mt. Diablo, Santa Cruz Isl., SBBG; *E. Timdal s.n.*, Los Pinos Camp Rd, Santa Ana Mts, Riverside Co., ASU)

**Note:** Other Timdal collections are from Butte, Colusa, Contra Costa, Lake, Los Angeles, Madera, Marin, Napa, Placer, Plumas, San Diego, San Luis Obispo, San Mateo, Santa Clara, Shasta, Sierra, Siskiyou, Solano, Sonoma, Stanislaus, Tehama, and Tuolumne counties.

***Psora cerebriformis*** W. A. Weber 📖 🌿

(Timdal 1986; Goward et al. 1994; Brodo et al. 2001 [p. 598, with color photograph]; Rosentreter et al. 2007 [with photograph]; *R. Riefner* 99–99, campgrounds, Inyo Co., UCR)

**Note:** Timdal collections are known from Inyo, Mono, and Siskiyou counties.

**Psora crenata** (Taylor) Reinke 📖 🌿

(Timdal 1986; Brodo et al. 2001 [p. 599, with color photograph]; Timdal 2002; Rosentreter et al. 2007 [with photograph])

**Synonyms:** [\*Biatora crenata\*](#), [\*Lecidea crenata\*](#)

**Psora decipiens** (Hedw.) Hoffm. 📖 🌿

(Timdal 1986; Hale & Cole 1988; Bowler et al. 1996; Doell et al. 1999; Brodo et al. 2001 [p. 599, with color photograph]; Robertson 2001; Timdal 2002; Robertson 2003b, 2004; Hinds & Hinds 2007 [color photograph, p. 424, only]; Knudsen 2007b; Rosentreter et al. 2007 [with photograph])

**Synonyms:** [\*Biatora decipiens\*](#), [\*Lecidea decipiens\*](#)

**Note:** Timdal collections are known from Inyo, Lake, Los Angeles, Monterey, Riverside, San Bernardino, San Diego, Stanislaus, and Tulare counties.

**Psora globifera** (Ach.) A. Massal. 📖 🌿

(Fink 1935; Timdal 1986; Baltzo 1989; Sigal 1989; Goward et al. 1994; Doell et al. 1999; Brodo et al. 2001 [p. 599, with color photograph]; Knight et al. 2002; Timdal 2002; Robertson 2003b; Benson 2005; Robertson 2005a; Carlberg et al. 2007; Glacy et al. 2011)

**Synonyms:** [\*Biatora globifera\*](#), [\*Lecidea globifera\*](#)

**Note:** Timdal collections are known from Fresno, Lake, Lassen, Los Angeles, Modoc, San Mateo, Sierra, Siskiyou, Tehama, and Tulare counties.

**Psora hyporubescens** Timdal 📖 🌿

(Timdal 2002 [p. 424] cited *H. Hasse 902*, San Gabriel Mts, Mt. Wilson, Los Angeles Co., 1907, FH, and *H. Hasse Lich. Exs. 108*, Elsinore, Riverside Co., ASU, MU, SBBG; *H. Thiers 48931*, Frank Raines County Park, Del Puerto Cyn, Stanislaus Co., ASU, CA endemic)

**Note:** Timdal collections are known from Contra Costa, Los Angeles, Mendocino, Riverside, San Bernardino, Siskiyou, Stanislaus, and Tulare counties.

**Psora icterica** (Mont.) Müll. Arg. 📖 🌿

(Rosentreter et al. 2007 [with color photograph, for extreme S CA]; *C. Bratt 12586C*, off Kelbaker Rd, S of Baker, Mojave Desert, San Bernardino Co., SBBG)

**Note:** This species is widespread in the U. S. and Mexico.

**Psora luridella** (Tuck.) Fink 📖 🌿

(Fink 1935; Hale & Cole 1988; Timdal 2002; Knudsen & La Doux 2006; Knudsen 2007b; Knudsen & Kocourková 2009a, 2009c; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [\*Biatora luridella\*](#), [\*Lecidea luridella\*](#)

**Note:** Collections are known from Inyo, Kern, Lake, Los Angeles, Madera, Modoc, Mono, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, Santa Clara, Siskiyou, Sonoma, Stanislaus, Ventura, and Yolo counties (ASU).

**Psora montana** Timdal 📖 🌿

(Rosentreter et al. 2007 [with photograph]; *R. Rosentreter 14595*, Santa Margarita Ecol. Reserve, S of Temecula, Riverside Co., SRP)

**Note:** This species occurs in Oregon and interior western U. S.

**Psora nipponica** (Zahlbr.) Gotth. Schneid. 📖 🌿

(Timdal 1986; Hale & Cole 1988; Baltzo 1989; Goward et al. 1994; Tucker & Bratt 1995; Hill 1997; Brodo et al. 2001 [p. 601, with color photograph]; Timdal 2002; Riefner et al. 2003; Blauman 2004a; Benson 2005; Robertson & Beyer 2005; Knudsen & Kramer 2007; Glacy et al. 2011; *A. Herre L-1595*, Ocean Beach, San Diego Co., SBBG; *B. Ryan 24049*, Stanislaus N. F., Tuolumne Co., ASU)

**Synonyms:** [\*Lecidea novomexicana\*](#), [\*Psora novomexicana\*](#)

**Note:** Timdal reported collections from Alpine, Butte, Contra Costa, Fresno, Lake, Lassen, Los Angeles, Madera, Mariposa, Mendocino, Modoc, Placer, Riverside, San Diego, Shasta, Siskiyou, Sonoma, Stanislaus, Tehama, Trinity, Tulare, and Tuolumne counties.

**Psora pacifica** Timdal 📖 🌿

(Timdal 1986; Weber et al. 1987; Bratt 1999; Brodo et al. 2001 [p. 602, with color photograph]; Robertson 2001; Robertson & Robertson 2001; Timdal 2002; Benson 2005; Knudsen 2007b; Glacy et al. 2011; Knudsen & Kocourková 2012a)

**Note:** Timdal reported collections from Los Angeles, Madera, Marin, Mariposa, Riverside, San Benito, San Diego, San Mateo, Santa Barbara, Santa Clara, Stanislaus, and Ventura counties.

**Psora peninsularis** Timdal 📖 🌿

(Timdal 2002; *C. Bratt 7470*, Pinnacles Nat. Monument, San Benito Co., SBBG; *C. Bratt 9815*, San Clemente Isl., Los Angeles Co., ASU)

**Note:** This species also occurs in Mexico.

**Psora pruinosa** Timdal 📖 🌿

(Timdal 2002; Robertson 2003b; *C. Bratt 6074*, Chino Cyn, NW of Palm Springs, Riverside Co., SBBG; *C. Wetmore 73277*, Santa Catalina Isl., Los Angeles Co., ASU)

**Note:** This species also occurs in Mexico.

**Psora russellii** (Tuck.) A. Schneid. 📖 🌿

(Timdal 1986; Hale & Cole 1988; Doell et al. 1999; Brodo et al. 2001 [p. 603]; Timdal 2002; Benson 2005; Knudsen 2007b)

**Synonyms:** [Biatora russellii](#), [Lecidea russellii](#)

**Note:** This species has been collected widely in S CA and the Sierra Nevada, in interior western and midwestern U. S.

**Psora tuckermanii** R. A. Anderson *ex* Timdal 📖 🌿

(Timdal 1986; Goward et al. 1994; Bratt 1999; McGee 1999; Brodo et al. 2001 [pp. 603–604, with color photograph]; Knight et al. 2002; Timdal 2002; Benson 2005; Robertson & Beyer 2005; Knudsen 2006a; Carlberg et al. 2007; Rosentreter et al. 2007 [with photograph]; Knudsen & Werth 2008)

**Note:** Timdal reported collections from Inyo, Mono, and Tuolumne counties.

*Psora caulophylla* (Tuck.) Fink 📖 🌿

(Fink 1935)

=[Lecidea caulophylla](#)

*Psora friesii* (Ach.) Hellb. 📖 🌿

(Fink 1935 [“doubtfully reported”])

=[Hypocenomyce friesii](#)

*Psora lurida* (Ach.) DC. 📖 🌿

(Fink 1935)

=[Romjularia lurida](#)

*Psora novomexicana* B. de Lesd. 📖 🌿

(Hale 1979)

=[P. nipponica](#)

*Psora rubiformis* (Ach.) Hook. 📖 🌿

(Fink 1935)

**Synonyms:** [Lecidea rubiformis](#) (Hasse 1908b, 1913b; Herre 1942b, 1950a; misidentifications for CA, *fide* B. Ryan)

*Psora scotopholis* (Tuck.) Fink 📖 🌿

(Fink 1935)

=[Miriquidica scotopholis](#) (synonymy *fide* Esslinger 2011)

**PSORINIA** Gotth. Schneid.

*Psorinia conglomerata* (Ach.) Gotth. Schneid. 📖 🌿

**Synonyms:** [Biatora conglomerata](#) (Fr.) Hasse (Hasse 1906)

**Note:** Timdal (2002) reported the species from Arizona but not CA. Hasse reported it in 1906 but not in his comprehensive 1913 publication, so he probably changed his mind about it.

## PSOROMA Michx.

### **Psoroma cinnamomeum** Malme

(Jørgensen 2001a, 2002 [only on Prince Isl. near San Miguel Isl., Santa Barbara Co.]

**Note:** Other records of this species are all from South America and the Falkland Is.

### **Psoroma hypnorum** (Vahl) Gray

(Hale 1979, shown on map in extreme northern CA; discussed by Tucker [2002]; Carlberg 2003 [based on *T. Carlberg 00651*, Broken Rib Mtn, Six Rivers N. F., Del Norte Co., Six Rivers N. F. Herb.]; not reported for CA by Jørgensen [2001a, 2002] or by Brodo et al. [2001, p. 604, with color photograph] although Brodo et al. reported it in southern Oregon)

## PSOROTICHIA A. Massal.

### **Psorotichia hassei** Fink *ex* J. Hedrick

(Hedrick 1933 [based on *H. Hasse* collection, 1650 m., San Jacinto Mts]; Fink 1935 [p. 149]; TJ; Schultz 2008; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *T. Nash 38775b*, Theodolite Rd, San Nicolas Isl., Ventura Co., ASU; *K. Knudsen 2453*, Anza-Borrego S. P., San Diego Co., UCR)

**Misapplied names:** *P. arnoldiana* (Hasse 1913b), *Collemopsis arnoldiana* (Hasse 1906)

### **Psorotichia montinii** (A. Massal.) Forss.

(Schultz 2008; Knudsen & Kocourková 2009c, 2010a; Schultz 2009; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *K. Knudsen 13086*, Joshua Tree N. P., San Bernardino Co., UCR)

**Note:** Knudsen & Kocourková (2010a) cited a Hasse collection under Hasse's name *Pyrenopsis polycoccum* from the Santa Monica Mts.

### **Psorotichia schaeferi** (A. Massal.) Arnold

(Hasse 1913b; Fink 1935; TJ; Thomson 2003; Schultz 2008; Knudsen & Kocourková 2009a, 2009b, 2009c, 2012a; *T. Nash 38752*, San Nicolas Isl., Ventura Co., ASU; *K. Knudsen 8148*, San Simeon S. P., San Luis Obispo Co., UCR)

**Synonyms:** [\*Collemopsis schaeferi\*](#)

### *Psorotichia arnoldiana* (Hepp) Körb.

(Hasse 1913b; misapplied to the taxon that was later described as *P. hassei*)

### *Psorotichia phaeococca* (Tuck.) Hasse

(Hasse 1913b)

=[\*Pyrenopsis phaeococca\*](#)

### *Psorotichia segregata* (Nyl.) Hasse

(Hasse 1913b; Fink 1935; TJ)

**Synonyms:** [\*Collemopsis segregata\*](#)

**Note:** According to Schultz (2004 [p. 321], 2007), the name *Psorotichia segregata* (Nyl.) Hasse was misapplied by Hasse to specimens of *Lempholemma chalazanum* (Hasse Exs. 892).

### *Psorotichia squamulosa* Zahlbr.

(Zahlbruckner 1902; Hasse 1903f, 1913b; Fink 1935; Herre 1944b; TJ)

=[\*Gloeoheppia squamulosa\*](#), *fide* Schultz (2007, 2008)

## PSORULA Gotth. Schneid.

### **Psorula rufonigra** (Tuck.) Gotth. Schneid.

(Hale & Cole 1988; Sigal 1989; von Reis 1991 [latter is a misidentification *fide* Tucker 1999]; Hinds & Hinds 2007 [color photograph, p. 427, only]; *T. Nash 18963*, E side of Pinnacles Nat. Monument, San Benito Co., ASU; *B. Ryan 32137*, Minarets Rd, Sierra N. F., Madera Co., ASU; not in southern CA, *fide* Timdal 2002, p. 435)

**Synonyms:** [\*Lecidea rufonigra\*](#)

### *Psorula scotophilis* (Tuck.) Gotth. Schneid.

(Weber 1989a; *W. Weber*, Univ. Colo. Lich. Exs. 690, San Joaquin Experimental Range, 28 mi. N of Fresno, Madera Co.; Bowler et al. 1996)

=[\*Miriquidica scotopholis\*](#)

## **PTERYGIOPSIS** Vain.

**Pterygiopsis concordatula** (Nyl.) P. M. Jørg. 📖 🌿  
(Schultz 2009 [as cf. *concordatula*])

## **PTYCHOGRAPHA** Nyl.

**Ptychographa xylographoides** Nyl. 📖 🌿

(McCune 1997 [for description, from Oregon]; Williams & Sillett 2007; Tucker 2009a, for a description)

**Note:** This species has been collected in Oregon and Scotland.

## **PUNCTELIA** Krog

**Punctelia borreri** (Sm.) Krog 📖 🌿

(Hale & Cole 1988; Riefner, Bowler, & Ryan 1995 [based on *R. Riefner 86–98*, San Luis Obispo Co., ! S. Tucker, and *R. Riefner 89–114*, Los Angeles Co., ! S. Tucker]; Bowler et al. 1996; Doell & Wright 1996; Wright 2001a; Tucker 2002; Aptroot 2003; Egan & Aptroot 2004; Tucker et al. 2004; McCune & Geiser 2009; Knudsen & Kocourková 2012a; *Shevock 12137*, W of Hatchet Mtn, along CA Hwy 299, Shasta Co., UC, det. B. Ryan)

**Synonyms:** [\*Parmelia borreri\*](#)

**Note:** Many of the early CA reports are misidentifications of *Punctelia jeckeri*.

**Punctelia jeckeri** (Roum.) Kalb 📖 🌿

(Lendemer & Hodkinson 2010; Tucker 2010; photograph in Brodo et al. 2001 [p. 609, mislabeled as *P. subrudecta*]; Knudsen & Kocourková 2012a; *S. Tucker 31745*, Armstrong Redwoods S. P., N of Guerneville, Sonoma Co., SBBG; *K. Knudsen 1363*, Boden Cyn, San Diego Co., UCR)

**Synonyms:** [\*P. ulophylla\*](#)

**Misapplied names:** [\*P. perreticulata\*](#), [\*P. subrudecta\*](#) in CA

**Punctelia punctilla** (Hale) Krog 📖 🌿

(Riefner 1989; Riefner, Bowler, & Ryan 1995 [*R. Riefner 89–20*, *87–69*, Ventura Co., ! S. Tucker]; Magney 1999; Wright 2001a [cited *Riefner* collections]; Egan & Aptroot 2004; Knudsen & Magney 2006; Knudsen 2007b; Tucker 2010; *C. Bratt 9771*, Middle Ranch Cyn, San Clemente Isl., Los Angeles Co., SBBG; *S. Benson 285A*, Anvil Rock, High Peaks Trail, Pinnacles Nat. Monument, SBBG)

**Punctelia stictica** (Duby) Krog 📖 🌿

(Hale & Cole 1988; West & Doell 1995; Bowler et al. 1996; Robertson et al. 1998; Wright 2001a; Brodo et al. 2001 [pp. 608–609, with color photograph]; Baltzo 2002; Robertson 2003a; Egan & Aptroot 2004 [citing San Clemente Isl. collection]; Robertson 2005b, 2005c; McCune & Geiser 2009; Glacy et al. 2011; *W. Weber L-42871*, San Clemente Isl., Los Angeles Co., ASU; *S. Tucker 37604*, Trail to Mtn Theater, Mt. Tamalpais, Marin Co., SBBG)

**Punctelia bolliana** (Müll. Arg.) Krog 📖 🌿

(Tucker 2002 [negative report for CA]; Thomson 2003; in midwestern and eastern U. S., not in CA, *fide* Brodo et al. 2001 [p. 606])

**Synonyms:** [\*Parmelia bolliana\*](#)

**Punctelia perreticulata** (Räsänen) G. Wilh. & Ladd 📖 🌿

(Adler & Ahti 1996; Wright 2001a; Tucker 2002; Aptroot 2003; Thomson 2003; Egan & Aptroot 2004; Tucker et al. 2004; Hinds & Hinds 2007 [color photograph, p. 430, only]; Knudsen 2007b; Knudsen et al. 2009; McCune & Geiser 2009; Tucker 2009a; Benson et al. 2012)

=name misapplied to [\*Punctelia jeckeri\*](#)

**Synonyms:** *Parmelia perreticulata*

**Note:** The names *Punctelia perreticulata*, *P. dubia* and *P. borreri* (Herre 1946) have been misapplied



to *P. jeckeri* in CA. *P. perreticulata* occurs only in restricted areas in the Ozark region.

*Punctelia subrudecta* (Nyl.) Krog 📖 🌿

(Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; von Reis 1991; Goward et al. 1994; Bowler et al. 1996; Doell & Wright 1996; Tucker & Bratt 1996; Hill 1997; McGee 1998; Robertson et al. 1998; Tucker 1999; Brodo et al. 2001; Wright 2001a; Baltzo 2002; Robertson 2003a; Jovan & McCune 2004; Benson 2005; Robertson 2005a; not confirmed for N. Amer. by Aptroot [2003])

=name misapplied to [\*Punctelia jeckeri\*](#)

*Punctelia ulophylla* (Ach.) Herk & Aptroot 📖 🌿

(Tucker et al. 2006)

=[\*P. jeckeri\*](#)

## PYCNORA Hafellner

***Pycnora praestabilis*** (Nyl.) Hafellner 📖 🌿

(*B. Ryan 12558*, Eastern Brook Lakes watershed, 15 km S of Tom's Place, Sierra Nevada, Inyo Co., ASU)

**Note:** This species has been collected in Oregon and Black Hills, South Dakota.

***Pycnora sorophora*** (Vain.) Hafellner 📖 🌿

(Williams & Sillett 2007 [det. C. Printzen])

**Note:** This species has been collected in New York, Canada, and Europe.

***Pycnora xanthococca*** (Sommerf.) Hafellner 📖 🌿

(Williams & Sillett 2007 [det. L. Sparrius]; *B. Ryan 12548*, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU)

**Synonyms:** [\*Hypocenomyce xanthococca\*](#)

## PYRENOCOLLEMA Reinke

***Pyrenocollema prosperellum*** (Nyl.) R. C. Harris 📖 🌿

(*S. Tucker 6210A*, on rock, near Ione, Amador Co., SBBG, det. [as "cf."] R. C. Harris)

**Note:** This species has been collected in midwestern U. S., but rarely.

*Pyrenocollema elegans* R. Sant. 📖 🌿

(*R. Santesson 1992*, from Santa Catalina Isl.)

=[\*Collemopsidium elegans\*](#)

*Pyrenocollema halodytes* (Nyl.) R. C. Harris 📖 🌿

(R. Harris 1975 [pp. 127–128]; TJ; von Reis 1991)

=[\*Collemopsidium halodytes\*](#)

*Pyrenocollema imshaugii* R. C. Harris ined. 📖

(R. Harris 1975 [p. 128]; TJ)

=*Collemopsidium* sp. (R. Harris, personal communication)

## PYRENODESMIA A. Massal. =[CALOPLACA](#)

*Pyrenodesmia aurantiaca* (Lightf.) C. W. Dodge & G. E. Baker 📖 🌿

(Rudolph 1955)

=[\*Caloplaca flavorubescens\*](#)

*Pyrenodesmia bolacina* (Tuck.) E. Rud. ined. 📖

(Rudolph 1955)

=[\*Caloplaca bolacina\*](#)

*Pyrenodesmia bolanderi* (Tuck.) E. Rud. ined. 📖

(Rudolph 1955)

=[\*Caloplaca luteominia\* var. \*bolanderi\*](#)

*Pyrenodesmia californica* (Zahlbr.) E. Rud. ined. 📖

(Rudolph 1955)

- =[Caloplaca californica](#)  
*Pyrenodesmia cerina* (Ehrh. ex Hedw.) E. Rud. ined. 📖  
 (Rudolph 1955)  
 =[Caloplaca cerina](#)  
*Pyrenodesmia ferruginea* (Huds.) E. Rud. ined. 📖  
 (Rudolph 1955)  
 =[Caloplaca ferruginea](#)  
*Pyrenodesmia festiva* (Ach.) E. Rud. ined. 📖  
 (Rudolph 1955)  
 =[Caloplaca crenularia](#) (but misidentifications for N. Amer., *fide* Wetmore [1996])  
*Pyrenodesmia flavovirescens* (Wulfen) E. Rud. ined. 📖  
 (Rudolph 1955)  
 =[Caloplaca flavovirescens](#)  
*Pyrenodesmia fraudans* (Th. Fr.) E. Rud. ined. 📖  
 (Rudolph 1955)  
 =[Caloplaca fraudans](#)  
*Pyrenodesmia laeta* (H. Magn.) E. Rud. ined. 📖  
 (Rudolph 1955)  
 =[Caloplaca luteominia var. luteominia](#)  
*Pyrenodesmia luteominia* (Tuck.) E. Rud. ined. 📖  
 (Rudolph 1955)  
 =[Caloplaca luteominia var. luteominia](#)  
*Pyrenodesmia pellodella* (Nyl.) E. Rud. ined. 📖  
 (Rudolph 1955)  
 =[Caloplaca pellodella](#)  
*Pyrenodesmia pyracea* (Ach.) E. Rud. ined. 📖  
 (Rudolph 1955)  
 =[Caloplaca pyracea](#)  
*Pyrenodesmia sideritis* (Tuck.) E. Rud. ined. 📖  
 (Rudolph 1955)  
 =[Caloplaca sideritis](#)  
*Pyrenodesmia stanfordensis* (H. Magn.) E. Rud. ined. 📖  
 (Rudolph 1955)  
 =[Caloplaca stanfordensis](#)  
*Pyrenodesmia subpyraceella* (Nyl.) E. Rud. ined. 📖  
 (Rudolph 1955)  
 =[Caloplaca subpyraceella](#)  
*Pyrenodesmia teicholyta* (Ach.) E. Rud. ined. 📖  
 (Rudolph 1955)  
 =[Caloplaca teicholyta](#) (misidentifications for N. Amer., *fide* Wetmore [1996] and Esslinger [2011])  
*Pyrenodesmia variabilis* (Pers.) A. Massal. 📖 🌿  
 (Rudolph 1955)  
 =[Caloplaca variabilis](#)

## **PYRENOPSIS** (Nyl.) Nyl.

### **Pyrenopsis phaeococca** Tuck. 📖 🌿

(Hasse 1903c, 1906; Herre 1910; Fink 1935; Sigal 1975; TJ; Sigal 1989; Tucker 1999; Thomson 2003; Tucker 2010; *H. Hasse 1278*, San Meurette (sic), Riverside Co., ASU)

**Synonyms:** [Psorotichia phaeococca](#)

**Note:** According to Schultz (2008), material distributed by Hasse under this name and *P. homoeopsis*

from southern CA belongs elsewhere, mostly in *Psorotichia*. This species has been reported also from midwestern U. S.

**Pyrenopsis polycocca** (Nyl.) Tuck. 🍄🌿

(*H. Thiers 33963*, Fawn Cpgd, Trinity Wilderness Recreation Area, Trinity Co., ASU, reported in Tucker [2002])

**Note:** This collection should be checked; other collections of this species are from interior western and midwestern U. S.

**Pyrenopsis sanguinea** Anzi 🍄🌿

(Schultz 2009, from Mammoth Lakes)

**Note:** This is a European species.

**Pyrenopsis subareolata** Nyl. 🍄🌿

(Schultz 2009)

**Note:** This is a European species.

**Pyrenopsis triptococca** Nyl. 🍄🌿

(Schultz 2008 [citing Santa Cruz Isl.], 2009) his species has been collected in Mexico and Portugal.

*Pyrenopsis homoeopsis* Nyl. 🍄🌿

(Hasse 1903c; TJ)

**Note:** According to Schultz 2008, Hasse's material was misidentified, belongs primarily under *Psorotichia*.

*Pyrenopsis melambola* (Tuck.) Tuck. 🍄🌿

(Hasse 1906; Fink 1935; TJ)

=[\*Metamelanea melambola\*](#)

**Note:** Hasse collections under this name belong to different crustose taxa of Lichinaceae, *vide* Schultz (2004, p. 360).

*Pyrenopsis pulvinata* (Schaer.) Th. Fr. 🍄🌿

(TJ; Sigal 1975)

=[\*Euopsis pulvinata\*](#)

**PYRENULA** A. Massal.

**Pyrenula laevigata** (Pers.) Arnold 🍄🌿

(*S. Tucker 35016*, Patrick's Point S. P., Humboldt Co., SBBG; *S. Tucker 35273, 35288*, Pygmy Forest, Fort Bragg, Mendocino Co., SBBG)

**Note:** This species has also been collected in Oregon and the midwestern U. S.

**Pyrenula occidentalis** (R. C. Harris) R. C. Harris 🍄🌿

(Aptroot 2002; Williams & Sillett 2007; *D. T. Kowalski 13110*, Mendocino Co., [CHSC, SBBG] det. R. C. Harris)

**Synonyms:** [\*P. neglecta\* subsp. \*occidentalis\*](#)

**Note:** This species has also been collected in Oregon and Washington.

**Pyrenula pyrenuloides** (Mont.) R. C. Harris 🍄🌿

(R. Harris 1989; Aptroot 2002)

**Synonyms:** [\*Anthracothecium pyrenuloides\*](#), [\*Arthonia pyrenuloides\*](#)

**Note:** This species has also been collected in southeastern U. S.

**Pyrenula thelemorpha** Tuck. 🍄🌿

(Aptroot 2002)

**Synonyms:** [\*Anthracothecium thelemorphum\*](#), [\*Verrucaria thelemorpha\*](#)

**Note:** Hasse (1903f) said that his collections of *Microglæna hassei* (*Thelenella hassei*) were distributed as *Pyrenula thelemorpha*. This species is most common in southeastern U. S.

*Pyrenula cerasi* (Schrad.) Trevis. 🍄🌿

(McClatchie 1897)

=[\*Arthopyrenia cerasi\*](#)

*Pyrenula fallax* Nyl. 📖 🌿

(McClatchie 1897)

=[Arthopyrenia analepta](#); misidentifications for CA

*Pyrenula herrei* Fink ex J. Hedrick 📖 🌿

(Hedrick 1933; Fink 1935; Herre 1942c)

=name misapplied to [Arthopyrenia plumbaria](#)

*Pyrenula lactea* (A. Massal.) Tuck. 📖 🌿

(Orcutt 1903, 1907)

=[Julella lactea var. lactea](#), but probable misidentifications

*Pyrenula neglecta* R. C. Harris subsp. *occidentalis* R. C. Harris 📖 🌿

(R. Harris 1973; Tucker & Kowalski 1975; TJ)

=[P. occidentalis](#)

*Pyrenula plumbaria* Stizenb. 📖 🌿

(McClatchie 1897)

=[Arthopyrenia plumbaria](#)

*Pyrenula punctiformis* (Schrank) Trevis. 📖 🌿

(Orcutt 1903, 1907)

=[Naetrocymbe punctiformis](#)

## PYRRHOSPORA Körb.

**Pyrrhospora quernea** (Dicks.) Körb. 📖 🌿

(von Reis 1991; Bowler et al. 1996; Bratt 1997; Wright 1998; Bourell 2000; Brodo et al. 2001 [p. 615, with color photograph]; Baltzo 2002; Geiser et al. 2004; Ryan, Tønsberg et al. 2004; Tucker et al. 2004; Glavich et al. 2005a; Knudsen 2007b; Williams & Sillett 2007; Knudsen 2009; Knudsen & Kocourková 2009a, 2010f; Stone & Vilella 2010; Rotter 2010; Tucker 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [Biatora quernea](#), [Lecidea quernea](#), [Protoblastenia quernea](#)

**Pyrrhospora varians** (Ach.) R. C. Harris 📖 🌿

(Tucker 2002; Baltzo 2004; Tucker 2010; Knudsen & Kocourková 2012a; *C. Printzen s.n.*, Santa Cruz Isl., Santa Barbara Co., ASU; *S. Tucker 34404*, Lotusland Estate, Montecito, Santa Barbara Co., ASU, SBBG)

**Synonyms:** [Biatora varians](#), [Lecidea varians](#)

*Pyrrhospora cinnabarina* (Sommerf.) M. Choisy 📖 🌿

(Brodo et al. 2001 [pp. 614–615, with color photograph]; Tucker 2002; Spribille & Hauck 2003)

=[Ramboldia cinnabarina](#)

*Pyrrhospora elabens* (Fr.) Hafellner 📖 🌿

(Baltzo 2002; Ryan, Tønsberg et al. 2004)

=[Ramboldia elabens](#) (synonymy *fide* Kantvilas & Elix 2007)

*Pyrrhospora gowardiana* T. Sprib. & Hauck 📖 🌿

(Spribille & Hauck 2003; Williams & Sillett 2007)

=[Ramboldia gowardiana](#)

*Pyrrhospora russula* (Ach.) Hafellner 📖 🌿

(Wright 1997; Magney 1999)

=[Ramboldia russula](#)

**Note:** CA is out of range; CA reports may be based on misidentifications of *Ramboldia cinnabarina* or *R. gowardiana*.

*Pyrrhospora subcinnabarina* (Tønsberg) Hafellner 📖 🌿

(Tucker & Ryan 2006, based on *T. Tønsberg TT14709*, Del Norte Co., BG)

=[Ramboldia subcinnabarina](#)

## PYXINE Fr.

### **Pyxine mexicana** Kalb

(*L. Wheeler 1460*, Puddingstone, Los Angeles Co., SBBG)

**Note:** This species is common in Mexico.

### **Pyxine petricola** Nyl.

(*B. Ryan 21988*, San Bruno Mtn, S of San Francisco, San Mateo Co., ASU)

**Note:** This species is common in Mexico.

### **Pyxine subcinerea** Stirt.

(*J. Saprivot* collection, San Diego Co., UC, det. T. Esslinger)

**Note:** This species is found widely across the U. S. and in Mexico.

### *Pyxine sorediata* (Ach.) Mont.

(Hasse 1903c, 1913b)

=misidentifications of *Diploicia canescens*, based on examination of a *H. Hasse* collection (Clifton-by-the-Sea, CA, year not legible, MIN)

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

## RAMALINA Ach.

### **Ramalina asahinae** W. L. Culb. & C. F. Culb.

(*C. Bratt 8077*, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Note:** This species is common in Mexico.

### **Ramalina baltica** Lettau

(Riefner & Bowler 1994a; Bowler & Riefner 1995; *R. Riefner 87-17*, Avila Rd, San Luis Obispo Co., UCR)

**Note:** This is a European species.

### **Ramalina canariensis** J. Steiner

(Riefner & Bowler 1994b; Bowler & Riefner 1995; Bowler et al. 1996; Bourell 2000; Brodo et al. 2001 [p. 627]; Kashiwadani & Nash 2004; Knudsen 2009; Knudsen & Kocourková 2010f; Benson et al. 2012; Knudsen & Kocourková 2012a; *C. Bratt 1771*, Ridge Rd, Santa Cruz Isl., Santa Barbara Co., SBBG; *C. Bratt 10836*, Fort Hunter-Liggett, N of Paso Robles, Monterey Co., ASU, SBBG)

**Synonyms:** [R. evernioides](#)

### **Ramalina dilacerata** (Hoffm.) Hoffm.

(Hale & Cole 1988; Bowler & Riefner 1995; Goward 1999; Baltzo 2002; Tucker 2002; Jovan & McCune 2004; Tucker et al. 2004; Brodo et al. 2001 [p. 623, color photograph but no CA report]; *I. Tavares 1465*, Willits, Mendocino Co., UC, ! S. Tucker; *M. A. Howe*, Olema, Marin Co. 1894, UC, ! S. Tucker; *B. Ryan 22262*, Hendy Woods S. P., Mendocino Co., ASU; *S. Tucker 38423*, Univ. of Calif. campus, Santa Cruz, Santa Cruz Co., SBBG)

**Synonyms:** [R. minuscula](#), [Fistulariella minuscula](#)

### **Ramalina farinacea** (L.) Ach.

(Herre 1906, 1907, 1910; Hasse 1913b; Howe 1913; Merrill 1923; Wheeler 1938; Thomson & Ketchledge 1958; Jordan 1968; Baltzo 1970; Lindsay 1973; Malachowski 1975; Pinelli & Jordan 1978; TJ; Sigal & Nash 1983; Baltzo 1989; von Reis 1991; Bowler & Riefner 1995; Tucker & Bratt 1995; Bowler et al. 1996; Doell & Wright 1996; Tucker & Bratt 1996; Hill 1997; Wright 1997; McGee 1998; Goward 1999; Bourell 2000; Brodo et al. 2001 [p. 624, with color photograph]; Robertson 2001; Baltzo 2002; Robertson 2002a; Ellyson & Sillett 2003; Robertson 2003a; Jovan & McCune 2004; Kashiwadani & Nash 2004; Tucker et al. 2004; Benson 2005; Robertson 2005c; Hinds & Hinds 2007 [color photograph, p. 438, only]; Knudsen 2007b; Williams & Sillett 2007; Knudsen 2009; McCune & Geiser 2009; Knudsen & Kocourková 2010f; Rotter 2010; Tucker 2010; Glacy et al. 2011; Benson et al. 2012; Benson & Hillyard 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [R. calicaris](#) var. [farinacea](#), [R. reagens](#)

**Ramalina fraxinea** (L.) Ach. 📖 🌿

(Hulting 1896; Hasse 1910a; Herre 1910; Howe 1914; Fink 1935; TJ; Bowler & Riefner 1995; Riefner, Bowler, & Ryan 1995; Bourell 2000; Doell 2002; not mentioned for S CA by Kashiwadani & Nash 2004)

**Synonyms:** [R. calicaris var. fraxinea](#), [Roccella calicaris var. fraxinea](#)

**Note:** This species is coastal and rare, and the name is commonly misapplied *vide* Riefner, Bowler, & Ryan (1995). Several *R.* Riefner collections are at ASU and UCR.

**Ramalina intermedia** (Delise *ex* Nyl.) Nyl. 📖 🌿

(Hasse 1896, 1898a, 1903a; Orcutt 1903, 1907; Merrill 1923; Goward 1999; Kashiwadani & Nash 2004; Brodo et al. 2001 [p. 625, color photograph but no CA report]; Hinds & Hinds 2007 [color photograph, p. 439, only])

**Synonyms:** [Roccella intermedia](#)

**Ramalina lacera** (With.) J. R. Laund. 📖 🌿

(Bowler & Riefner 1995; Bowler et al. 1996; Brodo et al. 2001 [p. 628]; no southern CA material seen by Kashiwadani & Nash [2004] although they report it from Baja California; *B. Ryan 31141*, Santa Rosa Isl., Santa Barbara Co., SBBG; *S. Tucker 6369b*, Refugio Pass, Santa Ynez Mts, Santa Barbara Co., SBBG)

**Synonyms:** [Dievernia lacera](#), [Ramalina duriaei](#), [R. evernioides](#)

**Ramalina leptocarpha** Tuck. 📖 🌿

(Tuckerman 1858, 1866; Zahlbruckner 1910; Keissler 1926; Wheeler 1938; Herre 1945; Baltzo 1970; Weber 1970; Rundel & Bowler 1976; TJ; Hale & Cole 1988; Baltzo 1989; von Reis 1991; Bowler & Riefner 1995; Bowler et al. 1996; Doell & Wright 1996; Tucker & Bratt 1996; Hill 1997; McGee 1998; Bourell 2000; Brodo et al. 2001 [p. 625, with color photograph]; Baltzo 2002; Robertson 2003a; Jovan & McCune 2004; Kashiwadani & Nash 2004; Tucker et al. 2004; Benson 2005; Knudsen 2007b, 2009; Knudsen & Kocourková 2010f; Rotter 2010; Tucker 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a; *H. Hasse 1179*, as *Ramalina linearis* (Sw.) Ach., Santa Monica Mts, CA, 1900, MIN, identified as *R. leptocarpha* by S. Tucker)

**Synonyms:** *R. menziesii* Tuck. non Taylor

**Ramalina menziesii** Taylor non Tuck. 📖 🌿

(Tuckerman 1847; Nylander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1882; Orcutt 1885; Hue 1890; Hasse 1903d; Orcutt 1903; Herre 1906, 1907; Orcutt 1907; Herre 1910; Hasse 1913b; Howe 1914; Jordan 1968; Lindsay 1973; Malachowski 1975; TJ; Hale & Cole 1988; Baltzo 1989; von Reis 1991; Bowler & Riefner 1995; West & Doell 1995; Bowler et al. 1996; Doell & Wright 1996; Hill 1996; Tucker & Bratt 1996; Hill 1997; Wright 1997; McGee 1998; Goward 1999; Bourell 2000; Brodo et al. 2001 [pp. 625–626, with color photograph]; Baltzo 2002; Robertson 2002a, 2003a; Jovan & McCune 2004; Kashiwadani & Nash 2004; Benson 2005; Knudsen 2007b; McCune & Geiser 2009; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [R. reticulata](#), [R. retiformis](#), [Roccella reticulata](#)

**Ramalina pollinaria** (Westr.) Ach. 📖 🌿

(Eckfeldt 1893; Orcutt 1903, 1907; Hasse 1913b; Howe 1913; Merrill 1923; Fink 1935; Jordan 1968; Lindsay 1973; Hale & Cole 1988; von Reis 1991; Bowler & Riefner 1995; Riefner, Bowler, & Ryan 1995; West & Doell 1995; Bowler et al. 1996; McGee 1998; Wright 1998; Goward 1999; Bourell 2000; Brodo et al. 2001 [p. 629, with color photograph]; Baltzo 2002; Geiser et al. 2004; Jovan & McCune 2004; Kashiwadani & Nash 2004; Glavich et al. 2005a, 2005b; Hinds & Hinds 2007 [color photograph, p. 441, only]; Knudsen 2007b; Rotter 2010; Tucker 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [R. pollinaria f. humilis](#)

**Misapplied names:** *R. obtusata* (*R. Riefner* collections)

**Ramalina puberulenta** Riefner & Bowler 📖 🌿

(Riefner & Bowler 1994b; Doell & Wright 1996; McGee 1998; Robertson et al. 1998; Baltzo 2002;

Kashiwadani & Nash 2004; Tucker et al. 2004; Benson 2005; Doell 2007a; *T. Nash 19015*, Hastings Natural History Reserve, Carmel Valley, Monterey Co., ASU; *C. Bratt 12504*, Figueroa Mtn Rd, Los Padres N. F., Santa Barbara Co., SBBG; CA endemic)

**Ramalina roesleri** (Hochst. ex Schaer.) Hue 📖 🌿

(Lindsay 1973; Bowler & Rundel 1974 [collection from Humboldt Co.]; Malachowski 1975; Hale & Cole 1988; Bowler & Riefner 1995; Goward 1999; Brodo et al. 2001 [p. 629, with color photograph]; Robertson 2002a; Ellyson & Sillett 2003; Jovan & McCune 2004; Hinds & Hinds 2007 [color photograph, p. 442, only]; Williams & Sillett 2007; Benson et al. 2012; *L. Sigal s.n.*, Patrick's Point S. P., Humboldt S. P., ASU)

**Synonyms:** [\*Fistulariella roesleri\*](#)

**Ramalina sinensis** Jatta 📖 🌿

(Bowler & Riefner 1995; Riefner, Bowler, & Ryan 1995 [based on *R. Riefner 91–58*, Santa Ynez Recreation area, Santa Barbara Co.]; Goward 1999; discussed in Tucker [2002]; Jovan & McCune 2004; Brodo et al. 2001 [p. 630, color photograph but no CA report]; *C. Bratt 5864*, near Los Alamos, Santa Barbara Co., SBBG; *S. Tucker 35118a*, Santa Margarita Lake Recreation Area, E of San Luis Obispo, San Luis Obispo Co., SBBG)

**Note:** this species was not mentioned for S CA by Kashiwadani & Nash (2004), but its presence in northern and central CA is indicated by Goward (1999) and by Jovan & McCune (2004).

**Ramalina sonorensis** Kashiw. & T. H. Nash 📖 🌿

(Kashiwadani & Nash 2004, shown in CA on map; *B. Ryan 21908*, Rancho Las Flores near Los Alamos, Santa Barbara Co., ASU)

**Note:** This species is common in Baja California, Mexico.

**Ramalina subleptocarpha** Rundel & Bowler 📖 🌿

(Rundel & Bowler 1976; TJ; Hale & Cole 1988; von Reis 1991; Bowler & Riefner 1995; Goward 1999; Bourell 2000; Brodo et al. 2001 [p. 630, with color photograph]; Jovan & McCune 2004; Kashiwadani & Nash 2004; Tucker et al. 2004; Benson 2005; Knudsen 2009; Knudsen & Kocourková 2009b; McCune & Geiser 2009; Knudsen & Kocourková 2010f; Rotter 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [\*R. leptocarpha\* f. \*sorediata\*](#), [\*R. menziesii\* f. \*sorediata\*](#)

**Ramalina thrausta** (Ach.) Nyl. 📖 🌿

(Sanders 1997; Wright 1998; Goward 1999; Magney 1999; Anonymous 2002 [*S. Jovan*, Del Norte Co., discussed in Tucker 2002]; Jovan & McCune 2004; Hinds & Hinds 2007 [color photograph, p. 443, only]; McCune & Geiser 2009; *D. K. Smith 51*, S of Airport Rd, Mendocino Co., OSC; *T. Carlberg 00782*, Patrick Creek, Six Rivers N. F., Del Norte Co., Six Rivers N. F. Herb.)

**Note:** The citations by Sanders, Wright, Goward, and Magney are based on *W. Sanders*, Sonoma Co., UC. Brodo et al. (2001, p. 632) provide a color photograph but no CA report. This species is more common in Oregon and the upper midwestern U. S.

*Ramalina bistorta* Nyl. 📖 🌿

(Nylander 1870; Howe 1914; Fink 1935; TJ)  
=misidentifications

*Ramalina calicaris* (L.) Fr. 📖 🌿

(Eckfeldt 1893; Hasse 1913b; TJ)  
=misidentifications; not mentioned (including varieties) for CA by Kashiwadani & Nash (2004)

*Ramalina calicaris* var. *farinacea* (L.) Schaer. 📖 🌿

(TJ for references)  
=[\*R. farinacea\*](#)

*Ramalina calicaris* var. *fastigiata* (Pers.) Fr. 📖 🌿

(Hasse 1903c, 1906)  
=[\*R. fastigiata\*](#) (but early collections may be misidentifications)

*Ramalina calicaris* var. *fraxinea* (L.) Mont. 📖 🌿

- (McClatchie 1895)  
=[R. fraxinea](#)
- Ramalina canaliculata* (Fr.) Dietr. non Taylor 📖 🌿  
(Herre 1910; Hasse 1913b; Howe 1914; Moxley 1921)  
=[R. calicaris](#) (synonymy *vide* Esslinger & Tucker 2009; misidentifications for CA)
- Ramalina canaliculata* Taylor 📖 🌿  
(Taylor 1847; Howe 1914; not mentioned for CA by Kashiwadani & Nash 2004)
- Ramalina celastri* (Spreng.) Krog & Swinscow 📖 🌿  
**Synonyms:** [R. laevigata](#), [R. yemensis](#)  
**Note:** The early CA reports are misidentifications; the species is absent in CA and very rare in Mexico *vide* Kashiwadani & Nash (2004).
- Ramalina ceruchis* (Ach.) De Not. 📖 🌿  
(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1882; Orcutt 1885; Eckfeldt 1893; Hasse 1895; McClatchie 1897; Hasse 1898a, 1903a; Orcutt 1903; Herre 1906, 1907; Orcutt 1907; Herre 1910; Hasse 1913b; Howe 1913; Merrill 1923; Fink 1935; Wheeler 1938)  
=[Niebla ceruchis](#)
- Ramalina ceruchis* f. *cephalota* 📖 🌿  
(Tuckerman 1882; Stizenberger 1895; Hasse 1896, 1903a, 1903d; Herre 1906, 1907; Orcutt 1907; Herre 1910; Hasse 1913b; Wheeler 1938; Thomson & Ketchledge 1958)  
=[Niebla cephalota](#)
- Ramalina ceruchis* var. *tumidula* (Taylor) Nyl. 📖 🌿  
(Hasse 1914; Wheeler 1938)  
**Note:** This variety was not mentioned by Bowler & Marsh (2004).
- Ramalina cochlearis* Zahlbr. 📖 🌿  
(Wheeler 1938; TJ; Weber et al. 1987; not mentioned for CA by Kashiwadani & Nash 2004  
=misidentifications for *N. Amer.*)
- Ramalina combeoides* Nyl. 📖 🌿  
(Nylander 1870; Willey 1873a; Tuckerman 1882; Hue 1890; McClatchie 1897; Hasse 1898a, 1903a, 1903d; Herre 1906, 1907, 1910; Hasse 1913b; Howe 1913; Merrill 1923, as *Ramalina ceruchis combeoides*; Fink 1935; Wheeler 1938; Herre 1945; Thomson & Ketchledge 1958)  
=[Niebla combeoides](#)
- Ramalina combeoides* var. *robusta* R. Howe 🌿  
=[Niebla robusta](#) (Bowler & Marsh 2004)
- Ramalina complanata* (Sw.) Ach. 📖 🌿  
(Eckfeldt 1893 [based on *Palmer* collections from San Diego and near Roseville, 3–4 km W of San Diego, near ocean]; Hasse 1903c; Brodo et al. 2001 [p. 623, with color photograph]; discussed in Tucker 2002)  
**Note:** *E. Palmer 205*, 1888, San Diego, CAS, was redetermined as *Ramalina leptocarpha* Tuck. by S. Tucker. This species is not mentioned for S CA by Kashiwadani & Nash 2004.
- Ramalina crinita* Tuck. 📖 🌿  
(Tuckerman 1883b; Orcutt 1885; Eckfeldt 1893; Orcutt 1903, 1907; Hasse 1913b; Howe 1914; Herre 1945; *H. Hasse 115*, Point Loma near San Diego, San Diego Co., 1909, SBBG; *C. Bratt 12531*, Sunset Cliffs Park, Point Loma, San Diego, 2003, SBBG)  
=[Trichoramalina crinita](#)  
**Note:** CA was not mentioned in Kashiwadani & Nash (2004) who overlooked historical records.
- Ramalina duriaei* (De Not.) Bagl. 📖 🌿  
(Howe 1913; Fink 1935; Wheeler 1938; TJ; Hale & Cole 1988)  
=[R. lacera](#)
- Ramalina evernioides* Nyl. 📖 🌿  
(Hasse 1910b, 1913b; TJ; Bratt 1993)



=[R. lacera](#)

*Ramalina fastigiata* (Pers.) Ach. 🍄 🌿

(Riefner 1990; Bowler & Riefner 1995; Riefner, Bowler, & Ryan 1995; Bowler et al. 1996)

**Synonyms:** [R. calicaris var. fastigiata](#)

**Note:** According to Kashiwadani & Nash (2004, p. 441), reports of *R. fastigiata* from the Southwest most likely refer to *R. sinensis*.

*Ramalina flaccescens* Nyl. 🍄 🌿

(Howe 1913; Fink 1935; Herre 1945)

=[Niebla flaccescens](#)

**Note:** These reports are misidentifications for N. Amer., because *N. flaccescens* is known only from Peru and Chile *vide* Spjut (1996).

*Ramalina geniculata* Hook. f. & Taylor 🍄 🌿

(Hasse 1903c; Bowler & Riefner 1995; not mentioned for CA by Kashiwadani & Nash 2004)

**Synonyms:** [Fistulariella geniculata](#) (Bowler & Rundel 1977)

*Ramalina glauca* [as “cf.”] 🍄 🌿

(Rotter 2010)

**Note:** This name could not be identified.

*Ramalina homalea* Ach. 🍄 🌿

(Acharius 1810, 1814; Tuckerman 1847; Nylander 1858, 1858–1860; Tuckerman 1862, 1866; Bolander 1870; Nylander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1882; Hue 1890; Hasse 1896; Hulting 1896; McClatchie 1897; Hasse 1898a, 1903a; Orcutt 1903; Herre 1906, 1907; Orcutt 1907; Herre 1910; Zahlbruckner 1912a; Hasse 1913b; Howe 1913; Merrill 1923; Keissler 1928; Fink 1935; Wheeler 1938; Thomson & Ketchledge 1958; TJ)

=[Niebla homalea](#)

*Ramalina homalea* var. *disrupta* Nyl. 🍄 🌿

(Nylander 1870; Hue 1890; Howe 1913)

=[Niebla homalea](#)

*Ramalina inflata* (Hook. f. & Taylor) Hook. f. & Taylor 🍄 🌿

(Stizenberger 1895; Howe 1914; Bowler & Riefner 1995; not mentioned for S CA by Kashiwadani & Nash 2004)

**Synonyms:** [Fistulariella inflata](#) (Bowler & Rundel 1977)

*Ramalina laevigata* Fr. 🍄 🌿

(McClatchie 1895, 1897; Hasse 1898a)

=[R. celastri](#) (probable misidentifications for CA reports)

**Note:** These are probably misidentifications, since Zahlbruckner (1930) reported the species from S. Amer.

*Ramalina leptocarpha* f. *sorediata* Tuck. 🍄 🌿

(Baltzo 1970)

=[R. subleptocarpha](#)

*Ramalina linearis* (Sw.) Ach. 🍄 🌿

(Eckfeldt 1893; Hasse 1903c, 1906, 1914; Howe 1914; Fink 1935; TJ; not mentioned for S CA by Kashiwadani & Nash 2004; *H. Hasse 1179* as *Ramalina linearis* [Sw.] Ach., Santa Monica Mts, CA, 1900, MIN, identified as *R. leptocarpha* Tuck. by S. Tucker)

=misidentifications for CA

*Ramalina menziesii* Tuck. non Taylor 🍄 🌿

(TJ for references)

=[R. leptocarpha](#)

*Ramalina menziesii* f. *sorediata* Tuck. 🍄 🌿

(Eckfeldt 1893; Hasse 1915b)

=[R. subleptocarpha](#)

*Ramalina minuscula* (Nyl.) Nyl. 🍄 🌿

(Jordan 1968)

=[\*R. dilacerata\*](#)

*Ramalina obtusata* (Arnold) Bitter 🍄 🌿

(Goward 1999; not mentioned for CA by Kashiwadani & Nash 2004).

**Note:** *R. Riefner* 87–227, Santa Barbara Co. SBBG, and a *R. Riefner* collection from Los Angeles Co. are misidentifications of *R. pollinaria*.

*Ramalina peruviana* Ach. 🍄 🌿

(Bowler & Riefner 1995; Riefner, Bowler, & Ryan 1995, based on *R. Riefner*, San Diego Co., UCI; discussed in Tucker 2002; Brodo et al. 2001 [p. 629, color photograph but no CA report]; not mentioned for CA by Kashiwadani & Nash 2004)

*Ramalina pollinaria* (Westr.) Ach. f. *humilis* Anders 🍄 🌿

(Hasse 1908a)

=[\*R. pollinaria\*](#)

*Ramalina reagens* (B. de Lesd.) W. L. Culb. 🍄 🌿

(Bowler & Rundel 1978; Hale & Cole 1988)

=a chemical race of *R. farinacea* s. l.

*Ramalina reticulata* (Nöhden) Kremp. 🍄 🌿

(TJ for references)

=*R. menziesii* Taylor non Tuck.

*Ramalina retiformis* Menz. 🍄 🌿

(Tuckerman 1847; Torrey 1856; Nylander 1858, 1858–1860)

=*R. menziesii* Taylor non Tuck.

*Ramalina rigida* Pers. ex Ach. 🍄 🌿

(Herre 1906, 1910)

=misidentifications

*Ramalina scopulorum* (Retz.) Ach. var. *tenuissima* Hook. & Arnold 🍄 🌿

(Torrey 1856)

=[\*R. calicaris\*](#), but misidentifications for CA

*Ramalina stenospora* Müll. Arg. 🍄 🌿

(Howe 1914; Fink 1935; misidentifications for CA)

*Ramalina subampliata* (Nyl.) Fink 🍄 🌿

(Fink 1935 [as *R. subamplicata*])

**Note:** TJ overlooked Bowler & Rundel (1973) and therefore used the spelling “*subamplicata*”. Fink evidently based his report on Hue (1895), but overlooked that the record was from Baja California. Records from N. Amer. are based on misidentifications, *fide* Bowler & Rundel (1973).

*Ramalina testudinaria* Nyl. 🍄 🌿

(Nylander 1870; Willey 1873a; Hue 1890; Howe 1913; Fink 1935; TJ)

=[\*Niebla homalea\*](#)

*Ramalina testudinaria* var. *intermedia* Müll. Arg. 🍄 🌿

(Müller 1882; Howe 1913)

**Note:** Spjut (1996, p. 140) lists this variety as a synonym under *Niebla testudinaria*.

*Ramalina usnea* (L.) R. Howe 🍄 🌿

(Hale 1979 [p. 208]; Brodo et al. 2001 [pp. 620, 625]; Tucker 2002 [rejecting CA reports])

**Note:** According to Kashiwadani & Nash (2004), this species occurs at high elevations in the southern states of Mexico.

*Ramalina yemensis* (Ach.) Nyl. 🍄 🌿

(Hasse 1913b; Howe 1914; Fink 1935; Herre 1945)

=[\*R. celastri\*](#) (possible misidentifications for CA reports)

**RAMBOLDIA** Kantvilas & Elix (Kalb et al. 2008)

**Ramboldia cinnabarina** (Sommerf.) Kalb, Lumbsch, & Elix 🍄

**Synonyms:** [Lecidea cinnabarina](#), [Pyrrhospora cinnabarina](#)

**Misapplied names:** [Lecidea russula](#), [Pyrrhospora russula](#)

**Ramboldia elabens** (Fr.) Kantvilas & Elix 🍄

**Synonyms:** [Lecidea elabens](#), [L. melancheima](#), [Pyrrhospora elabens](#)

**Ramboldia gowardiana** (T. Sprib. & Hauck) Kalb, Lumbsch, & Elix 🍄

(*S. Tucker 35349*, Lake Co., SBBG; *S. Tucker 14922*, Trinity Co., SBBG)

**Synonyms:** [Pyrrhospora gowardiana](#)

**Ramboldia subcinnabarina** (Tønsberg) Kalb, Lumbsch, & Elix 🍄

(*T. Tønsberg TTI4709*, Del Norte Co., BG)

**Synonyms:** [Pyrrhospora subcinnabarina](#)

**Note:** This species occurs in the Pacific Northwest and Alaska.

**Ramboldia russula** (Ach.) Kalb, Lumbsch, & Elix 🍄

**Synonyms:** [Lecidea russula](#), [Pyrrhospora russula](#)

**Note:** This species is out of range in CA; the reports could be misidentifications of *Ramboldia cinnabarina* *fide* Tucker (2002) or *R. gowardiana*.

**RAMONIA** Stizenb.

**Ramonia ablephora** (Nyl. *ex* Hasse) R. C. Harris 🍄

(R. Harris 1993; Ryan & Nimis 2004; Knudsen & Lendemer 2005a; Knudsen 2007b; Knudsen & Lendemer 2008; Lendemer, Knudsen, & Coppins 2009; Knudsen & Kocourková 2010a; CA endemic)

**Synonyms:** [Lecidea ablephora](#)

**Note:** This species is known from only three sites, in San Jacinto and Santa Monica mts.

**Ramonia extensa** Lendemer 🍄

(Lendemer, Knudsen, & Coppins 2009 [based on L. Sigal collection from Lake Co.]; Villella 2012)

**Ramonia gyalectiformis** (Zahlbr.) Vězda 🍄

(TJ; Sigal 1989; R. Harris 1988; Knudsen & Lendemer 2005a, 2008; CA endemic)

**Synonyms:** [Bacidia gyalectiformis](#), [Biatora gyalectiformis](#), [Bilimbia gyalectiformis](#)

**Note:** Knudsen & Lendemer consider this distinct on the basis of small spores (18--25 x 5--6  $\mu$ m) and inland distribution, versus slightly larger spores (23--27 x 7--8  $\mu$ m) and coastal distribution in *R. ablephora*. *R. gyalectiformis* is known from two collections in the San Jacinto Mts.

**Ramonia vermispora** Lendemer & K. Knudsen 🍄

(Lendemer & Knudsen 2008b; Villella 2012)

**RECONDITELLA** Matzer & Hafellner

\***Reconditella physconiarum** Matzer & Hafellner 🍄

(Lendemer, Kocourková, & Knudsen 2009a; Kocourková et al. 2012, on *Physconia isidiigera*, Riverside Co.)

**REINKELLA** Darb.

**Reinkella californica** Räsänen 🍄

(Räsänen 1949; TJ)

=[Hubbsia californica](#) (not found north of Mexico at present, *fide* Tehler [2002])

**Reinkella parishii** Hasse 🍄

(Weber 1967a; Follmann 1979; Bowler et al. 1996; *W. Weber*, Univ. Colo. Lich. Exs. 176)

=[Schizopelte parishii](#)

**Reinkella subcrustacea** Räsänen 🍄

(Räsänen 1949; TJ; Follmann 1979; Tehler 2002)

=[Schizopelte parishii](#)

**RHIZOCARPON** Ramond *ex* DC.

**Rhizocarpon alpicola** (Wahlenb.) Rabenh. 🍄

**Synonyms:** [Buellia alpicola f. microspora](#)

**Note:** This species is more common in Scandinavia and Russia.

**Rhizocarpon badioatrum** (Flörke *ex* Spreng.) Th. Fr. 🍄

(*B. Ryan 25089*, Marble Mtn Wilderness, Siskiyou Co., ASU; *B. Ryan 32182b*, Powerhouse Rd, Sierra Nevada, Madera Co., ASU, det. Feuerer; *K. Knudsen 8334*, Big Bear Dam, San Bernardino Mts, San Bernardino Co., UCR)

**Rhizocarpon bolanderi** (Tuck.) Herre 🍄

(Herre 1910; Hasse 1913b; Merrill 1923; Fink 1935; Gelting 1954; Thomson & Ketchledge 1958; Thomson 1968b; Sigal 1975; TJ; Hale & Cole 1988; Baltzo 1989; Sigal 1989; Ryan & Nash 1991; Hill 1997 [as “?”]; Feuerer & Timdal 2004; Benson 2005; Knudsen & Kramer 2007; Knudsen et al. 2009; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [Buellia bolanderi](#) (TJ for early references)

**Rhizocarpon cinereovirens** (Müll. Arg.) Vain. 🍄

(*B. Ryan 25067*, 8 km SW of town of Scott's Bar, Klamath N. F., Siskiyou Co., ASU)

**Note:** This species has also been collected in Washinton, Alaska, Wyoming, midwestern and northeastern U. S.

**Rhizocarpon concentricum** (Davies) Beltr., non auct. 🍄

(Riefner, Bowler, & Ryan [1995] based on *R. Riefner* collection from San Luis Obispo Co.; Thomson 1997; Magney 1999; not mentioned for S CA by Feuerer & Timdal 2004)

**Note:** The collection on which Riefner, Bowler, & Ryan (1995) was based was one by Riefner from Montana de Oro S. P., San Luis Obispo Co., but it was misidentified, *vide* K. Knudsen. Magney's report (1999) was based on a C. Bratt collection from San Bernardino Co., but this collection is missing in the SBBG database, so it was probably misidentified. Thomson's report, indicated on his map in Del Norte or Humboldt Co. in extreme northern CA, is likely correct.

**Rhizocarpon cookeanum** H. Magn. 🍄

(*B. Ryan 23923*, Ione-Sutter Creek Rd, Amador Co., ASU)

**Note:** This species has also been collected in Washington and other western states.

\***Rhizocarpon dimelaenae** Timdal 🍄

(Feuerer & Timdal 2004; Kocourková et al. 2012; *K. Knudsen 11484*, Santa Rosa Mtn, Riverside Co., UCR)

**Note:** This forms a juvenile parasite on *Dimelaena oreina*.

**Rhizocarpon disporum** (Nägeli *ex* Hepp) Müll. Arg. 🍄

(Fink 1935; Herre 1942a, 1950a; TJ; Hale & Cole 1988 [in which asci are mistakenly described as two-spored---they are 1-spored despite the name]; Brodo et al. 2001 [pp. 634–635, with color photograph]; Knight et al. 2002; Feuerer & Timdal 2004; Knudsen & La Doux 2005; Knudsen 2006a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [Buellia petraea var. montagnei](#), [Lecidea montagnei](#)

**Rhizocarpon distinctum** Th. Fr. 🍄

(Herre 1910; Hasse 1913b; TJ; Benson 2005 [*S. Benson 201-B*, Condor Trail, Pinnacles Nat. Monument, San Benito Co., SBBG]; Knudsen & Kocourková 2012c; *K. Knudsen 11160.2*, Santa Monica Mts, Ventura Co., UCR)

**Synonyms:** [R. ambiguum](#), [R. subpostumum](#)

**Note:** This species was not mentioned for S CA by Feuerer & Timdal (2004), but has been collected farther north, in El Dorado, San Luis Obispo, San Benito, Santa Cruz, and Siskiyou counties (MIN, SBBG, WIS).

\***Rhizocarpon effiguratum** (Anzi) Th. Fr. 🍄

(Anderson 1965; Thomson 1968b; TJ; Kocourková et al. 2009; Kocourková et al. 2012; *K. Knudsen 11499*, Santa Rosa Mtn, Riverside Co., on *Pleopsidium flavum*, UCR)

**Note:** This species occurs in Arizona and other interior western states.

**Rhizocarpon eupetraeum** (Nyl.) Arnold  

(Feuerer & Timdal 2004; *B. Ryan 11340*, 1 km W of Lassen Volcanic N. P., Shasta Co., ASU)

**Synonyms:** [R. intermedium](#)

**Note:** Other Ryan collections are known from El Dorado, Inyo, Los Angeles, Shasta, Siskiyou, Solano, and Tuolumne counties (ASU, SBBG).



**Rhizocarpon geminatum** Körb.  

(Herre 1910; Hasse 1913b; TJ; Ryan & Nash 1991; Feuerer & Timdal 2004; Knudsen & La Doux 2005; Knudsen & Kramer 2007; *B. Ryan 11244*, Tioga Pass, Tuolumne Co., ASU; *B. Ryan 25519*, edge of Marble Mtn Wilderness, Siskiyou Co., ASU; *D. Toren 1511*, near Hell's Peak, 20 km NW of Lakeport, Lake Co., ASU)

**Rhizocarpon geographicum** (L.) DC.  

(Herre 1907, 1910; Hasse 1913b; Herre 1942a, 1945, 1950a; Sigal 1975; TJ; Hale & Cole 1988; Sigal 1989; Tucker & Bratt 1995; McGee 1995; Wright 1997; Brodo et al. 2001 [p. 635, with color photograph]; Feuerer & Timdal 2004; Benson 2005; Robertson 2005a; Robertson & Beyer 2005; Knudsen & Kramer 2007; Glacy et al. 2011; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [Buellia geographica](#) (TJ for references), [Lecidea geographica](#); see CA record of *R. tinei*



**Rhizocarpon grande** (Flörke ex Flot.) Arnold  

(Volk 1963; Sigal 1975; TJ; Hale & Cole 1988; Sigal 1989; Feuerer & Timdal 2004; Robertson & Beyer 2005; *B. Ryan 24227*, on Hwy 108 3.5 km E of Pigeon Flat, E of Dardanelle, Tuolumne Co., ASU; *B. Ryan 25031*, Gold Flat, Klamath N. F., Siskiyou Co., ASU; *H. Imshaug 17796*, W end of Big Bear Lake, San Bernardino Mts, San Bernardino Co., MSC)

**Synonyms:** [Buellia petraea var. grandis](#)

**Misapplied names:** [R. confervoides](#) (Merrill 1923)

**Note:** Feuerer (1991) treated *R. grande* as a synonym and chemical race of *R. eupetraeum*. Timdal, however, considered the two distinct, *fide* Feuerer & Timdal (2004, p. 462).

**Rhizocarpon lecanorinum** (Körb.) Anders  

(Herre 1942a, 1950a; TJ; Brodo et al. 2001 [p. 636, with color photograph]; Glacy et al. 2011; *B. Ryan 32183b*, near Kerckhoff Lake, Sierra N. F., Madera Co., ASU; *B. Ryan 26521*, San Gabriel Wilderness, Los Angeles Co., ASU; *B. Ryan 11122*, W of Lassen Volcanic N. P., Shasta Co., ASU)

**Synonyms:** [R. geographicum var. lecanorinum](#), [Buellia geographica var. lecanorina](#)

**Note:** Many collections of this species are reported from the Sierra Nevada (ASU, NY, MIN, WIS) as well as Siskiyou Co., reported by Brodo et al. 2001.



**Rhizocarpon macrosporum** Räsänen  

(Thomson 1968b; TJ; Brodo et al. 2001 [p. 637, with color photograph]; Feuerer & Timdal 2004; Knudsen & Kramer 2007; Knudsen & Kocourková 2010a, citing a Hasse collection [*Lich. Exs.* 72, as *R. geographicum*] from the Santa Monica Mts; *B. Ryan 26133*, Chilao Cpgd, Angeles N. F., San Gabriel Mts, Los Angeles Co., ASU; *B. Ryan 32184*, Sierra N. F., Madera Co., ASU571983; *T. Nash 11483*, Spyrock Rd, 81 km N of Ukiah, Mendocino Co., ASU)

**Rhizocarpon oederi** (Weber) Körb.  

(Fink 1935; Thomson 1968b; TJ)

**Note:** The Thomson report should be checked, because the species is otherwise reported from northeastern U. S., Canada, and Europe.

**Rhizocarpon petraeum** (Wulfen) A. Massal.  

(Herre 1910; Hasse 1913b; Herre 1942a, 1950a; TJ; not mentioned for southern CA by Feuerer & Timdal [2004], but Herre reports are from northern CA)

**Synonyms:** [Buellia petraea](#), [B. petraea f. albinea](#), [B. petraea var. vulgaris](#), [Lecidea petraea](#)

**Note:** Feuerer (1991) asserted that *R. concentricum* is a synonym of *R. petraeum*.

**Rhizocarpon polycarpum** (Hepp) Th. Fr.  

(*B. Ryan 23322*, Bayview Cpgd, SW of Emerald Bay, El Dorado Co., ASU)

**Note:** This species occurs also in Oregon, Washington, many other parts of the U. S.

\***Rhizocarpon pusillum** Runemark 📍 🌿

(Thomson 1979, 1997; Benson & Hillyard 2012 [as “cf.”]; Kocourková et al. 2012)

**Note:** According to Feuerer & Timdal (2004), this species is lichenicolous on *Sporastatia testudinea* in Arizona; they do not mention CA.

\***Rhizocarpon renneri** Poelt 📍 🌿

(Kocourková et al. 2012; *C. Bratt & E. Timdal 6098*, W of Sonora Pass summit at Haigh Overlook on Hwy 108, Tuolumne Co., on *Dimelaena oreina*, SBBG)

**Rhizocarpon riparium** Räsänen 📍 🌿

(Ryan & Nash 1991; Robertson 2003b; Feuerer & Timdal 2004; *B. Ryan 32184*, Sierra N. F., Madera Co., ASU520195; *T. Nash 11257*, Onyx Summit, San Bernardino Mts, San Bernardino Co., ASU)

**Rhizocarpon saanaëense** Räsänen 🌿

**Synonyms:** [\*R. sublucidum\*](#)

**Note:** This species has been collected also in Colorado and Europe.

**Rhizocarpon saurinum** (W. A. Weber) Bungartz 📍 🌿

(Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Note:** This species has also been collected in Colorado and Utah.

**Rhizocarpon sulphurosum** (Tuck. ex Willey) Lendemer 📍 🌿

(Lendemer et al. 2010, at Yosemite N. P.; *B. Ryan 25565*, N of Yreka, Siskiyou Co., SBBG)

**Synonyms:** *Buellia bolanderi* var. *sulphurosum*, [\*R. bolanderi\* var. \*sulphurosum\*](#)

**Rhizocarpon superficiale** (Schaer.) Vain. 📍 🌿

(Ryan & Nash 1991; Feuerer & Timdal 2004; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan 12866b*, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co.; *B. Ryan 23431*, Desolation Wilderness, El Dorado Co.; *B. Ryan 26591*, Waterman Mtn, San Gabriel Wilderness, Los Angeles Co., all ASU)

\***Rhizocarpon viridiatrum** (Wulfen) Körb. 📍 🌿

(Herre 1910; Hasse 1913b; Fink 1935; Runemark 1956; Thomson & Ketchledge 1958; Sigal 1975; TJ; Sigal 1989; Ryan & Nash 1991; Feuerer & Timdal 2004; Kocourková et al. 2012; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *H. Hasse 76443*, Topanga Cyn, Santa Monica Mts, Los Angeles Co., ASU; *K. Knudsen 13633.2*, Clear Creek Management Area, summit of San Benito Mtn, San Benito Co., UCR)

**Note:** This forms a juvenile parasite on *Acarospora* and *Aspicilia* species.

*Rhizocarpon ambiguum* (Schaer.) Zahlbr. 📍 🌿

(Fink 1935)

=[\*R. distinctum\*](#)

*Rhizocarpon athalloides* (Nyl.) Hasse 📍 🌿

(Hasse 1913b; Fink 1935; TJ; *H. Hasse Lich. Exs. 246*, Santa Monica Range, Los Angeles Co., March, 1915; Feuerer & Timdal 2004 [say on soil in S CA])

=[\*Diploschistella athalloides\*](#)

*Rhizocarpon bolanderi* var. *sulphurosum* (Tuck. ex Willey) Zahlbr. 📍 🌿

(Feuerer & Timdal 2004 for N CA)

=[\*R. sulphurosum\*](#)

*Rhizocarpon confervoides* DC. 📍 🌿

(Merrill 1923)

=misidentifications

*Rhizocarpon ferax* H. Magn. 📍 🌿

(Baltzo 1989; TJ)

**Note:** This report is likely based on a misidentification, because the species has otherwise been collected in Northwest Territories of Canada and in Iceland.

*Rhizocarpon geographicum* var. *lecanorinum* Körb. 📍 🌿

(Hasse 1913b [as f. *lecanorinum* Floerke])

=[\*R. lecanorinum\*](#)

*Rhizocarpon intermedium* Degel. 📖 🌿

(Ryan & Nash 1991)

=[\*R. eupetraeum\*](#)

*Rhizocarpon obscuratum* (Ach.) A. Massal. 📖 🌿

(Riefner, Bowler, & Ryan 1995, discussed by Tucker 2002; Stone & Villella 2010; *B. Ryan* 25559, N of Yreka, Siskiyou Co., ASU)

**Note:** The Riefner collection from San Luis Obispo Co. that was the basis of the report in Riefner, Bowler, & Ryan (1995) has been re-examined by K. Knudsen and called a misidentification. This species has commonly been found on rock at high elevations in Colorado and northeastern U. S. Feuerer & Timdal (2004) did not mention it as present in S CA.

*Rhizocarpon oidaleum* (Nyl.) Fink 📖 🌿

(Merrill 1923; Fink 1935; Volk 1963)

=[\*Buellia oidalea\*](#)

*Rhizocarpon penichrum* (Tuck.) G. Merr. 📖 🌿

(Merrill 1923; Fink 1935)

=[\*Buellia penichra\*](#)

*Rhizocarpon sublucidum* Räsänen 📖 🌿

(Runemark 1956)

=[\*R. saanaense\*](#)

*Rhizocarpon subpostumum* (Nyl.) Arnold 📖 🌿

(Knudsen & Kocourková 2009b)

=[\*R. distinctum\*](#)

*Rhizocarpon tinei* (Tornab.) Runemark 📖 🌿

(Volk 1963)

=[\*R. geographicum\*](#) (although Runemark [1956] regarded it as distinct)

## **RHIZOPLACA** Zopf

**Rhizoplaca chrysoleuca** (Sm.) Zopf 📖 🌿

(Hale & Cole 1988; Ryan & Nash 1991; McCune 1987; Sigal 1989; Doell et al. 1999; Brodo et al. 2001 [p. 639, with color photograph]; Ryan 2002; Robertson 2003b; Benson 2005; Robertson & Beyer 2005; Knudsen & Kramer 2007; Knudsen et al. 2009; Villella 2010)

**Synonyms:** [\*Lecanora chrysoleuca\*](#), [\*L. rubina\*](#)

**Rhizoplaca glaucophana** (Nyl. ex Hasse) W. A. Weber 📖 🌿

(Hebert & Meyer 1984; McCune 1987; Ryan 2002, from Santa Barbara and Los Angeles areas; Knudsen et al. 2009 from San Diego Co.; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *J. Larson*, Univ. Colo. Lich. Exs. 606, San Joaquin Experimental Range, Madera Co., ASU, SBBG)

**Synonyms:** [\*Harpidium glaucophanum\*](#), [\*Lecanora glaucophana\*](#)

**Rhizoplaca haydenii** (Tuck.) W. A. Weber 🌿

(*C. Bratt* 12592, Kelbaker Rd near lava beds SE of Baker, San Bernardino Co., SBBG)

**Note:** This species is common in Wyoming and Idaho.

**Rhizoplaca marginalis** (Hasse) W. A. Weber 📖 🌿

(Hebert & Meyer 1984; McCune 1987; Brodo et al. 2001 [p. 638]; Ryan 2002 [in San Bernardino Co.]; *W. Weber*, Univ. Colo. Lich. Exs. 192, 477; *B. Ryan* 14849, Death Valley Nat. Monument, Inyo Co., ASU; *K. Knudsen* 14590.2, Big Rock Creek, S fork, San Gabriel Mts, Los Angeles Co., UCR; CA endemic)


**Synonyms:** [\*Lecanora marginalis\*](#)

**Rhizoplaca melanophthalma** (DC.) Leuckert & Poelt 📖 🌿

(Hale & Cole 1988; McCune 1987; Sigal 1989; Tucker & Bratt 1995; Doell et al. 1999; Brodo et al.

2001 [p. 640, with color photograph]; Knight et al. 2002; Ryan 2002; Robertson 2003b; Benson 2005; Robertson & Beyer 2005; Knudsen 2006a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [\*Lecanora melanophthalma\*](#), [\*L. rubina\* var. \*melanophthalma\*](#), [\*L. rubina\* var. \*opaca\*](#)

**Rhizoplaca peltata** (Ramond) Leuckert & Poelt  

(McCune 1987; Brodo et al. 2001 [pp. 640–641, with color photograph]; Knight et al. 2002; Ryan 2002; Knudsen & Werth 2008; *C. Bratt 12591*, Kelbaker Rd, near lava beds, San Bernardino Co., SBBG)



**Synonyms:** [\*Lecanora peltata\*](#), [\*L. rubina\* var. \*heteromorpha\*](#)

**Note:** This species is common in Washington, Oregon, and interior western U. S.

**Rhizoplaca subdiscrepans** (Nyl.) R. Sant.  

(Ryan 2002; Knudsen & La Doux 2006; Hinds & Hinds 2007 [color photograph, p. 444, only]; *B. Ryan 13705*, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU; *B. Ryan 14802*, NNE of Big Bear Village, San Bernardino Co., ASU; *K. Knudsen 3577*, Joshua Tree N. P., Mojave Desert, San Bernardino Co., UCR)

## RHYMBOCARPUS Zopf



\***Rhymbocarpus boomii** Etayo & Diederich  

(Diederich & Etayo 2004; Kocourková et al. 2012 [on *Dendrographa conformis* from CA Channel Is.])

\***Rhymbocarpus cruciatus** (Sherwood, D. Hawksw. & Coppins) Etayo & Diederich  

(Diederich 2003; Diederich & Etayo 2004; Knudsen & Kocourková 2009a; Kocourková et al. 2012; *J. Kocourková s.n.*, Point Loma, San Diego Co., UCR, on *Diploicia canescens*)

## RIMELIA Hale & Fletcher = [PARMOTREMA](#)

*Rimelia cetrata* (Ach.) Hale & Fletcher  



(Brodo et al. 2001 [p. 642] and Tucker 2002 said that reports are probably misidentifications of *Parmotrema reticulatum*, as this species occurs only in eastern U. S.)

*Rimelia reticulata* (Taylor) Hale & Fletcher  

(Bowler et al. 1996; Bourell 2000; Wright 2001a; Brodo et al. 2001 [pp. 642–643, with color photograph]; Nash & Elix 2002)

= [\*Parmotrema reticulatum\*](#)

## RIMULARIA Nyl.

\***Rimularia insularis** (Nyl.) Rambold & Hertel  

(Bowler et al. 1996; Robertson & Robertson 2002 [based on *J. & R. Robertson 5118*, silica rock outcrops in chaparral, 1.5 km E of intersection of Hwy 1 and Panoramic Hwy, Marin Co.]; Kainz & Rambold 2004 [lichenicolous on *Lecanora rupicola* group]; Robertson 2005c; Glacy et al. 2011; Kocourková et al. 2012; *W. Weber L-42825*, San Clemente Isl., Los Angeles Co., ASU; *J. Lendemmer 5845*, Mt. Tamalpais S. P., Marin Co., UCR; color photograph on back cover of CALS Bulletin 8 [2], 2001)

**Synonyms:** [\*Lecidea insularis\*](#), [\*L. intumescens\*](#)



**Note:** This lichen acts initially as a juvenile parasite.

*Rimularia gibbosa* (Ach.) Coppins, Hertel, & Rambold  

**Synonyms:** [\*Lecanora bockii\*](#) (Hasse 1906)

**Note:** The only CA record, by Hasse, is based on a probable misidentification since he did not repeat the record in his definitive publication (1913b); no material was seen from the Sonoran region or elsewhere in CA by Kainz & Rambold (2004).

## RINODINA (Ach.) Gray

**Rinodina archaea** (Ach.) Arnold  

(Wetmore 1985; Sheard 2004, 2010 [pp. 38–39]; *B. Ryan 26407a*, San Gabriel Wilderness, Los



Angeles Co., ASU; *C. Wetmore 50377*, N of Colony Mill, Tulare Co., MIN)

**Synonyms:** [R. lignicola](#)

**Rinodina aurantiaca** Sheard  

(Sheard & Mayrhofer 2002; Sheard 2004, 2010 [pp. 45–47])



**Note:** The type is *B. Ryan 25080b*, SW of Scott's Bar, Klamath N. F., Siskiyou Co., ASU.

**Rinodina badiexcipula** Sheard  

(Sheard & Mayrhofer 2002; Sheard 2004, 2010 [pp. 49–51]; *S. Tucker 34110a*, 3 mi. E of Kyburz, El Dorado Co., SBBG; *S. Tucker 35461a*, Soda Springs Ranger Station, near Lake Pillsbury, Lake Co., SBBG; *K. Knudsen 2725.2*, Palomar Mtn, San Diego Co., UCR)

**Misapplied names:** [R. succedens](#) (Nyl.) Arnold (Hasse 1913b)

**Note:** The type is *T. Tønsberg 14696*, along US route 199 just S of the Oregon-CA border (BG).



**Rinodina bischoffii** (Hepp) A. Massal.  

(Fink 1935; TJ; Hale & Cole 1988; Sheard 2004; Knudsen 2006a; Sheard 2010 [pp. 52–54]; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *H. Hasse s.n.*, Topanga Cyn, Los Angeles Co., ASU; *I. Tavares 912*, Hastings Natural History Reserve, Carmel Valley, Monterey Co., UC; *T. Weier 598*, on cement reservoir, Univ. of Calif. campus, Davis, Yolo Co., SBBG)

**Rinodina bolanderi** H. Magn.  

(Magnusson 1947; TJ; Hale & Cole 1988; Bowler et al. 1996; Brodo et al. 2001 [pp. 645–646, with color photograph]; Sheard 2004; Benson 2005; Knudsen 2009; Knudsen & Kocourková 2009a, 2010f; Sheard 2010 [pp. 54–56]; Stone & Vilella 2010; Benson et al. 2012; Knudsen & Kocourková 2012a; *T. Nash 32108*, Empire Landing, Santa Catalina Isl., Los Angeles Co., ASU)

**Note:** The type is a Bolander collection from San Francisco (H-Nyl.-28731).



**Rinodina brouardii** B. de Lesd.  

(Sheard 2010 [pp. 57–58]; Knudsen & Kocourková 2012a; *C. Bratt 5707*, Ridge Rd E of Centinella, Santa Cruz Isl., Santa Barbara Co., SBBG, det. J. Sheard)

**Rinodina californiensis** Sheard  

(Sheard & Mayrhofer 2002; Sheard 2004, 2010 [pp. 60–62]; color photograph in Sharnoff online; Knudsen & Kocourková 2012a; *B. Ryan 25696*, Rd to Walker Gulch, Siskiyou Co., ASU; *I. Tavares 875*, Carmel Valley, Monterey Co., ASU; *B. Ryan 26482*, trail from Windy Gap, San Gabriel Wilderness, Los Angeles Co., ASU)

**Note:** Type is *I. Tavares 1323*, Sonoma Co., UC.



**Rinodina capensis** Hampe  

(Sheard 2004, 2010 [pp. 63–66]; Tucker 2010; Knudsen & Kocourková 2012a; *S. Tucker 35460a*, Soda Springs Ranger Station, Lake Co., ASU, SBBG; *B. Ryan 26207a*, Mt. Mooney Rd, San Gabriel Mts, Los Angeles Co., ASU; *B. Ryan 32102*, Brown's Creek, Sierra N. F., Madera Co., ASU; *S. Tucker 6396B*, Martin Rd, Bonny Doon, Santa Cruz Co., ASU, SBBG)

**Synonyms:** [R. corticola](#)

**Rinodina castanomela** (Nyl.) Arnold  

(Knudsen & Kocourková 2010g; *K. Knudsen 11167*, on silicate rock, Clark Mts, Mojave Desert, San Bernardino Co., UCR)

**Rinodina colobina** (Ach.) Th. Fr.  

(Wetmore 1985; Sheard 2010 [pp. 70–72]; *S. Tucker 31704*, Clear Lake S. P., Lake Co., SBBG, ! J. Sheard; *B. Ryan 25887*, Magee Palomar Trail near Eagle Crag, Agua Tibia Wilderness, San Diego Co., ASU)

**Rinodina confragosa** (Ach.) Körb.  

(Hasse 1903d, 1908b; Herre 1910; Hasse 1913b; Fink 1935; Thomson & Ketchledge 1958; TJ; Doell et al. 1999; Thomson 2003; Sheard 2004; Benson 2005; Sheard 2010 [pp. 75–77]; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *W. Weber 35988*, Arcata, Humboldt Co., ASU; *S. Tucker 36253*, Mojave Natural Preserve, Granite Mts, San Bernardino Co., SBBG)

**Synonyms:** [Lecanora confragosa](#)

**Rinodina confragosula** (Nyl.) Müll. Arg. 📖 🌿

(Sheard 2010 [pp. 77–79]; Tucker 2010; *S. Tucker 37872*, Santa Barbara Botanic Garden, Santa Barbara Co., SBBG, det. J. Sheard)

**Rinodina degeliana** Coppins 📖 🌿

(Sheard 2010 [pp. 60–61]; *T. Tønsberg 12821, 14713b*, Del Norte Co., BG)

**Rinodina destituta** (Nyl.) Zahlbr. 📖 🌿

(Sheard 2010 [pp. 82–84])

**Note:** Sheard (2010) cited a Knudsen collections from Orange Co. that was depauperate and atypical. The species has been otherwise reported only from the eastern half of the U. S.

**Rinodina disjuncta** Sheard & Tønsberg 📖 🌿

(Tønsberg 1992; Giralt et al. 1995 [“high rainfall areas” of western N. Amer., from CA to Alaska“]; Sheard 1995, 2010 [pp. 85–87, citing collections from Humboldt, Del Norte, and Mariposa counties])

**Rinodina endospora** Sheard 📖 🌿

(Sheard & Mayrhofer 2002; Sheard 2004 [p. 482]; Knudsen 2007b; Sheard 2010 [pp. 91–93]; Knudsen & Kocourková 2012a; *B. Ryan 11102a*, 27 km W of Redding, Shasta Co., ASU; *B. Ryan 26644*, Coffee Cpgd, ENE of Porterville, Sequoia N. F., Tulare Co., ASU; *K. Knudsen 5272*, Mandeville Cyn, Santa Monica Mts, Los Angeles Co., ASU; CA endemic)

**Note:** Type is *G. Howard s.n.*, Santa Clara Co., Mt. Hamilton Range, UC.

**Rinodina exigua** (Ach.) S. Gray 📖 🌿

(Hasse 1903b, 1908b; Herre 1910; Hasse 1913b; Jordan 1968; TJ; von Reis 1991; Wright 1997; McGee 1998; Baltzo 2002; Sheard 2010 [pp. 94–96]; *S. Tucker 34586D*, Hastings Natural History Reserve, Monterey Co., SBBG, det. J. Sheard; *B. Ryan 24832a*, Rd to Mt. Etna summit, Siskiyou Co., ASU; *C. Wetmore 50299*, Shepherd Peak, Sequoia N. P., Tulare Co., MIN; *B. Ryan 26475b*, San Gabriel Wilderness, Los Angeles Co., ASU)

**Synonyms:** *Lecanora exigua*

**Note:** According to J. Sheard (personal communication), some early CA reports were based on misidentifications.

**Rinodina flavosoralifera** Tønsberg 📖 🌿

(Knudsen 2012c, based on *S. Sharnoff 4043*, Mt. Tamalpais, W. Ridge Rd, 1 km NW of Rock Spring, Marin Co., UCR)

**Rinodina freyi** H. Magn. 📖 🌿

(Benson 2005; Knudsen et al. 2009; Sheard 2010 [pp. 98–102]; *S. Tucker 34060*, El Dorado Co., SBBG, det. J. Sheard; *S. Tucker 28852C*, Bates Cyn, Cuyama Valley, Santa Barbara Co., SBBG)

**Rinodina gennarii** Bagl. 📖 🌿

(Sheard 2004; Tucker et al. 2004; Knudsen 2007b; Knudsen & Kocourková 2009a, 2009c; Sheard 2010 [pp. 102–103, showing western coastal distribution]; Tucker 2010; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *T. Nash 11424*, near Albion, Mendocino Co., ASU; *S. Tucker 28822*, Pacheco Pass, Merced Co., SBBG; *S. Tucker 34221A*, Diablo Canyon Power Plant, San Luis Obispo Co., SBBG; all det. J. Sheard)

**Rinodina griseosoralifera** Coppins 📖 🌿

(Sheard 2004; Knudsen 2009; Sheard 2010 [pp. 108–109]; Knudsen & Kocourková 2012a; *T. Tønsberg TT 28951*, Mendocino Co., BG; *S. Tucker 37795*, Sugarloaf Ridge S. P. near Santa Rosa, Sonoma Co., SBBG, det. J. Sheard; *S. Tucker 38781*, E side of Lake Almanor, Plumas Co., SBBG)

**Note:** This species is coastal and extends from S CA to Alaska.

**Rinodina hallii** Tuck. 📖 🌿

(Tuckerman 1874, 1882; McClatchie 1897; Zahlbruckner 1907; Herre 1910; Hasse 1913b; Fink 1935; Herre 1945; Magnusson 1947; Jordan 1968; Lindsay 1973; TJ; Hale & Cole 1988; Baltzo 1989; Bowler et al. 1996; Wright 1997; Bourell 2000; Baltzo 2002; Sheard 2010 [pp. 110–112]; Knudsen & Kocourková 2012a; *A. Herre 548*, Santa Cruz Mts, Santa Cruz Co., ASU; *H. Hasse s.n.*, San Gabriel Mts, Los Angeles Co., MIN; *W. Weber L-42902*, San Clemente Isl., Los Angeles Co., ASU)

**Synonyms:** [Lecanora hallii](#)

**Note:** This species is common along the CA coast and Sierras, north to British Columbia.

**Rinodina herrei** H. Magn. 📖 🌿

(Magnusson 1953; TJ; Weber 1981 [Univ. Colo. Lich. Exs. 199, 206]; Sheard 2004; Knudsen & Kocourková 2009a; Sheard 2010 [pp. 113–114]; Tucker 2010; Benson et al. 2012; Knudsen & Kocourková 2012a; *H. Hasse 518* [as *R. sophodes* var. *exigua*], Santa Monica Mts, 1899, MIN, det. J. Sheard; *J. Blakeman 278*, Redwood Cyn, Kings Canyon N. P., Tulare Co., MIN; *C. Wetmore 73273*, 0.8 km NW of airfield, Santa Catalina Isl., Los Angeles Co., MIN; *S. Tucker 10967*, Cold Springs Cyn, Santa Ynez Mts, Santa Barbara Co., SBBG)

**Note:** The type was collected by H. Magnusson, Point San Pedro, San Mateo Co. (UPS).

**Rinodina innata** Sheard 📖 🌿

(Sheard & Mayrhofer 2002; Sheard 2004, 2010 [pp. 116–118]; Knudsen & Kocourková 2012a; *S. Tucker 6344b*, Menlo Park, San Mateo Co., ASU, det. J. Sheard)

**Note:** The type is *J. Sheard 51281a*, Santa Cruz Isl., Santa Barbara Co. (ASU); distribution to Baja California.

**Rinodina intermedia** Bagl. 📖 🌿

(Magnusson 1947; TJ; Mayrhofer et al. 2001; Sheard 2004; Knudsen 2007b; Knudsen & Kocourková 2009a, 2009c; Sheard 2010 [pp. 118–119]; Knudsen & Kocourková 2012a; *L. Sigal s.n.*, San Bruno Mtn, SE of San Francisco, San Mateo Co., ASU; *S. Tucker 35678*, Santa Cruz Isl., Santa Barbara Co., SBBG; *R. Riefner 9122*, Point Loma, San Diego Co., ASU)

**Synonyms:** [R. sabulosa](#)

**Rinodina juniperina** Sheard 📖 🌿

(Sheard & Mayrhofer 2002; Sheard 2004, 2010 [pp. 120–122]; Knudsen & Werth 2008; *T. Nash 7075*, Banning-Idyllwild Rd, Mt. San Jacinto, Riverside Co., ASU; *P. van den Boom 29531*, Joshua Tree N. P., Riverside Co., ASU)

**Rinodina laevigata** (Ach.) Malme 📖 🌿

(Sheard 2004; Knudsen & Kramer 2007; Sheard 2010 [pp. 122–123]; *B. Ryan 25685*, road to Walker Gulch, Siskiyou Co., ASU; *B. Ryan 32166a*, Rock Creek Cpgd, Sierra N. F., Madera Co., ASU; *S. Tucker 34586e*, Hastings Natural History Reserve, Monterey Co., ASU; *C. Bratt 9667*, Chukit Cyn, San Clemente Isl., Los Angeles Co., SBBG, det. J. Sheard)

**Note:** This species is very common throughout the length of CA, N to Alaska.

**Rinodina luridata** (Körb.) H. Mayrhofer, Scheid. & Sheard 📖 🌿

(Bowler et al. 1996; Bourell 2000; Sheard 2004, 2010 [pp. 127–128]; *H. Hasse s.n.*, Pasadena, Los Angeles Co., ASU; *W. Weber 42652*, San Clemente Isl., Los Angeles Co., ASU)

**Synonyms:** [R. euryspora](#)

**Rinodina macrospora** Sheard 📖 🌿

(Sheard & Mayrhofer 2002; Tucker et al. 2004 [as “cf.”]; Sheard 2010 [pp. 128–129, reporting a single collection by van den Boom from Point Lobos, Monterey Co.]

**Rinodina marysvillensis** H. Magn. 📖 🌿

(Tucker 1973; TJ; Hale & Cole 1988; Sheard 2004, 2010 [pp. 132–134]; Knudsen & Kocourková 2012a; *T. Nash 11546*, S of Crescent Beach, Del Norte Co., ASU; *W. Weber*, Univ. Colo. Lich. Exs. 474, Sutter Creek, Amador Co.; *J. Sheard 5038a*, Santa Rosa Isl., Santa Barbara Co., ASU)

**Note:** This species extends along the coast throughout CA and northward.

**Rinodina milvina** (Wahlenb.) Th. Fr. 📖 🌿

(Sheard 2004 [reports a single S CA collection from San Bernardino Co.]; Sheard 2010 [pp. 136–138]; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan 24639*, edge of Carson-Iceberg Wilderness, Alpine Co., ASU; *A. Herre 539*, Searsville Ridge, San Mateo Co., ASU; *K. Knudsen 9150*, Cuyamaca S. P., Cuyamaca Mts, San Diego Co., UCR)

**Rinodina mniaraea** (Ach.) Körb. 📖 🌿

(TJ; Wetmore 1983, based on *C. Wetmore 14815*, above Tenaya Lake near Tioga Pass, Yosemite N. P.,

Mariposa Co., 24 June 1966, MIN ! J. Sheard; Sheard 2010 [pp. 138–142]; *R. Rosentreter 14618*, Madera Cyn, Coronado N. F., Santa Rita Mts, Santa Cruz Co., SRP; *C. Wetmore 14815*, Tenaya Lake, Tioga Pass, Yosemite N. P., Mariposa Co., MIN)

**Synonyms:** *Lecanora mniaraea*, *Lecanora mniaroeiza*

\***Rinodina obnascens** (Nyl.) Oliv. 📖 🌿

(Sheard 2010 [pp. 143–145]; Kocourková et al. 2012; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *S. Tucker 6349A*, Jasper Ridge, San Mateo Co. on serpentine, SBBG; *L. Sigal s.n.*, Cuesta Ridge, San Luis Obispo Co. on serpentine, ASU, SFSU, both dets. J. Sheard)

**Note:** This species is initially lichenicolous on rock crusts, esp. *Aspicilia*, then develops an independent thallus; in central CA.

**Rinodina oleae** Bagl. 📖 🌿

(Sheard 2010 [pp. 145–146]; *S. Tucker 36561*, Goleta Beach, Santa Barbara Co., SBBG; *S. Tucker 34424*, Montecito, Santa Barbara Co., SBBG)

**Rinodina olivaceobrunnea** C. W. Dodge & G. E. Baker 📖 🌿

(Sheard 2010 [pp. 146–152]; *B. Ryan 13666*, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU; *S. Tucker 38056b*, White Mtn Rd, N of Schulman Grove, Mono Co., SBBG)

**Rinodina orculata** Poelt & M. Steiner 📖 🌿

(Sheard 2010 [pp. 149–152, cited collections from Central and northern CA and northward]; *S. Tucker 35375C*, Lake Pillsbury, Lake Co., SBBG, det. J. Sheard)

**Rinodina oregana** H. Magn. 📖 🌿

(Hale & Cole 1988; Sheard 2004, 2010 [pp. 152–154, cited coastal and Sierra Nevada distribution in CA]; *B. McCune 18870*, Shasta River cyn, Siskiyou Co., ASU; *S. Tucker 34599*, corral by entrance road to Hastings Natural History Reserve, Monterey Co., ASU, SBBG; *H. Hasse s.n.*, Tehachapi Mts, Kern Co., MIN; *R. Meyer 93740B-a*, Madera Co., FSC, det. J. Sheard)

**Rinodina oxydata** (A. Massal.) A. Massal. 📖 🌿

(Sheard 2004, 2010 [pp. 154–156]; Knudsen & Kocourková 2012a; *H. Hasse 249*, Santa Monica Range, Los Angeles Co., SBBG, ASU; *S. Tucker 35321B*, Sage Hill Cpgd, E of Lake Cachuma, S. Barbara Co., ASU, SBBG, det. J. Sheard)

**Rinodina pacifica** Sheard 📖 🌿

(Sheard & Mayrhofer 2002; Knudsen & Kocourková 2009b; Sheard 2010 [pp. 157–159]; Tucker 2010; Knudsen & Kocourková 2012a; *S. Tucker 14987*, Del Norte Beach, S of Crescent City, Del Norte Co., SBBG; *W. Weber 42995*, Santa Catalina Isl., Los Angeles Co., ASU)

\***Rinodina parasitica** H. Mayrhofer & Poelt 📖 🌿

(Sheard 2004; Knudsen 2007b; Sheard 2010 [pp. 161–162]; Kocourková et al. 2012; *B. Ryan 24648b*, end of Clark Fork Rd, edge of Carson-Iceberg Wilderness, Alpine Co., ASU; *B. Ryan 25107*, edge of Marble Mtn Wilderness, Siskiyou Co., ASU)

**Note:** This species is initially a juvenile parasite on *Aspicilia* species, but later becomes an independent thallus.

**Rinodina poeltiana** Giralt & Obermayer 📖 🌿

(Sheard 2004, 2010 [pp. 164–167]; Knudsen & Kocourková 2012a; *J. Sheard 5131*, Santa Cruz Isl., 7 km SSE of Prisoner's Harbor, Santa Barbara Co., SBBG, ASU)

**Rinodina polyspora** Th. Fr. 📖 🌿

(Brodo et al. 2001 [p. 647]; Tucker 2002; Sheard 2010 [pp. 166–167]; *S. Tucker 38632*, Riverside Park, North Fork of Tuolumne River, Tuolumne Co., SBBG, det. J. Sheard)

**Rinodina pycnocarpa** H. Magn. 📖 🌿

(Knudsen & Kocourková 2012c)

**Rinodina pyrina** (Ach.) Arnold 📖 🌿

(Sheard 2004, 2010 [pp. 170–173]; *S. Tucker 31667a*, Clear Lake S. P., Soda Bay, S side of Clear Lake, near Lakeport, Lake Co., SBBG; *T. Nash 22848a*, 30 km E of Redding, Shasta Co., ASU)

**Rinodina rinodinoides** (Anzi) H. Mayrhofer & Scheid. 📖 🌿

(Sheard 2004, 2010 [pp. 173–174]; *S. Tucker 35927*, Davey Brown trailhead, Figueroa Mtn, Los Padres N. F., Santa Barbara Co., SBBG)

**Synonyms:** [\*Buellia rinodinoides\*](#)

**Note:** According to J. Sheard, early reports of this species by Hasse and Fink were misidentifications.

**Rinodina santae-monicae** H. Magn. 📖 🌿

(Magnusson 1947; TJ; Wright 1997; Bourell 2000; Sheard & Mayrhofer 2002; Sheard 2004; Tucker et al. 2004; Knudsen et al. 2009; Knudsen & Kocourková 2009b; Sheard 2004, 2010 [pp. 178–181]; Tucker 2010; Knudsen & Kocourková 2012a)

**Note:** This species is common throughout CA. Sheard (2010) said it has been easily confused with *R. freyi*. The type is *H. Hasse s.n.*, Santa Monica Range, 1914 (SBBG).

**Rinodina straussii** J. Steiner 📖 🌿

(Sheard 2010 [p. 190], cited *P. van den Boom 28967*, Granite Mts, San Bernardino Co.; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [\*R. constrictula\*](#)

**Rinodina terricola** Sheard & K. Knudsen 📖 🌿

(Sheard et al. 2011; *K. Knudsen 9320*, Fremont Cyn, Orange Co., UCR)

**Note:** The type is *K. Knudsen 6203*, Weir Cyn, Santa Ana Mts, Orange Co. (UCR).

**Rinodina trevisanii** (Hepp) Körb. 🌿

(*S. Tucker 14918A* pr. p., East Weaver Cpgd, 2 mi. N of Weaverville, Trinity N. F., Trinity Co., SBBG, det. J. Sheard)

**Rinodina zwackhiana** (Kremp.) Körb. 📖 🌿

(Knudsen 2006c; Sheard 2010 [pp. 208–210]; *K. Knudsen 1607*, Sugarloaf, San Bernardino Mts, San Bernardino Co., UCR)

**Rinodina angelica** Stizenb. 📖 🌿

(Hasse 1895, 1896; McClatchie 1897; Hasse 1903b; Orcutt 1903, 1907; Hasse 1913b; Merrill 1923; Fink 1935; Magnusson 1947; Anderson 1962; TJ)

=[\*Mobergia angelica\*](#)

**Rinodina ascociscana** Tuck. 📖 🌿

(Hasse 1915b; Fink 1935; Magnusson 1947; TJ)

**Note:** According to J. Sheard (personal communication), CA reports are based on misidentifications. This species has an Appalachian-Great Lakes distribution.

**Rinodina aterrima** Kremp. ex Anzi 📖 🌿

(Willey 1873b; Tuckerman 1882; Fink 1935; TJ)

=[\*Lichenothelia scopularia\*](#) (TJ; Esslinger 2011)

=misidentifications for N. Amer., *fide* J. Sheard (2010, p. 211)

**Rinodina bolodes** Tuck. ex Fink 📖 🌿

(Orcutt 1885, 1903, 1907; Hedrick 1934; Fink 1935; Herre 1944b; Magnusson 1947; TJ)

=[\*Mobergia angelica\*](#)

**Rinodina californica** H. Magn. 📖 🌿

(Magnusson 1927; Fink 1935; TJ)

=[\*Dimelaena californica\*](#)

**Rinodina chrysmelaena** Tuck. 📖 🌿

(Herre 1944b; TJ)

=misidentifications for CA, *fide* J. Sheard

**Note:** This species is Appalachian in distribution.

**Rinodina conradii** Körb. 📖 🌿

(Tuckerman 1882; Hasse 1896; McClatchie 1897; Orcutt 1903, 1907; Hasse 1913b; Merrill 1923; Fink 1935; Magnusson 1947; TJ; Hale & Cole 1988; Bowler et al. 1996; Bratt 1997; Benson 2005)

**Note:** According to J. Sheard (personal communication, Oct. 2004), the S CA reports are almost certainly referable to *R. intermedia*.

- Rinodina constrictula* H. Magn. 📖 🌿  
 (Sheard 2004; *P. van den Boom* 28967, S of Kelso, Mojave Desert, San Bernardino Co., ASU, det. J. Sheard)  
 =[\*R. straussii\*](#)
- Rinodina corticola* (Arnold) Arnold 📖 🌿  
 (Volk 1963; TJ)  
 =[\*R. capensis\*](#) (synonymy *fide* J. Sheard 2004 [p. 479])
- Rinodina dirinoides* Zahlbr. 📖 🌿  
 (Hasse 1915a; Fink 1935; TJ)  
 =[\*Mobergia angelica\*](#)
- Rinodina euryspora* Zahlbr. *ex* Hasse 📖 🌿  
 (Hasse 1915a; Fink 1935; TJ)  
 =[\*R. luridata\*](#)
- Rinodina lignicola* Sheard 📖 🌿  
 (Sheard & Mayrhofer 2002 [p. 473]; Sheard 2004)  
 =[\*R. archaea\*](#)
- Rinodina metaboliza* Vain. 📖 🌿  
 (*B. Ryan* 25692a, road to Walker Gulch, 4.8 km NE of town of Seiad Valley, Siskiyou Co., ASU; Sheard 2010 [not citing any CA collections])
- Rinodina microbola* Tuck. *ex* Fink 📖 🌿  
 (Hedrick 1934; Fink 1935; Herre 1944b)  
 =[\*Buellia microbola\*](#)
- Rinodina orbata* (Ach.) Vain. 📖 🌿  
 (Fink 1935)  
 =[\*R. turfacea\*](#), but not in CA
- Rinodina oreina* (Ach.) A. Massal. 📖 🌿  
 (TJ for references)  
 =[\*Dimelaena oreina\*](#)
- Rinodina platyloba* Willey nom. nudum 📖 🌿  
 (Fink 1935; TJ)  
 =[\*Mobergia calculiformis\*](#)
- Rinodina radiata* Tuck. 📖 🌿  
 (TJ for references)  
 =[\*Dimelaena radiata\*](#)
- Rinodina radiata* var. *fimbriata* Tuck. 📖 🌿  
 (McClatchie 1895; Hasse 1908a, 1913b)  
 =[\*Buellia tesserata\*](#)
- Rinodina riparia* Sheard 📖 🌿  
 (H. Hasse collection was a misidentification of *R. endospora*, *fide* Sheard 2010, p. 175)
- Rinodina roboris* (Dufour *ex* Nyl.) Arnold 📖 🌿  
 (Herre 1910; Hasse 1913b; Fink 1935; Magnusson 1947; Thomson & Ketchledge 1958; TJ)  
 =misidentifications for *N. Amer.* *fide* J. Sheard (2010, p. 212)  
**Note:** *H. Hasse* material is referable to *R. hallii*; specimens in Herre (1910) are referable to *R. badiexcipula* in part.
- Rinodina sabulosa* Tuck. 📖 🌿  
 (Tuckerman 1866, 1872; Bolander 1870; Willey 1873a; TJ)  
 =[\*R. intermedia\*](#)
- Rinodina septentrionalis* Malme 📖 🌿  
 (*B. Ryan* 32163a, along Rock Creek, NW of Rock Creek Cpgd, Sierra N. F., Madera Co., ASU; *S. Tucker* 28807 pr. p. with *R. polyspora*, Clear Lake, Lake Co., SBBG, det. J. Sheard)

**Note:** Sheard (2010) did not report this species in CA.

*Rinodina sophodes* (Ach.) A. Massal. 📖 🌿

(TJ for references)

=misidentifications for N. Amer., *fide* Esslinger (2011)

*Rinodina sophodes* var. *atrocinerea* (Dicks.) Tuck. 📖 🌿

(McClatchie 1897 [based on *H. Hasse* collections]; *H. Hasse*, Santa Monica Mts, CA, 1902, MIN 2042)

=*R. atrocinerea*, but misidentifications for N. Amer., *fide* Sheard (2010, p. 211)

*Rinodina succedens* Nyl. 📖 🌿

(Hasse 1896, 1903e; Orcutt 1907; Hasse 1908b, 1913b; Fink 1935)

=[R. sophodes](#)

**Note:** N. Amer. records of Hasse are misidentifications of *R. badiexcipula* and *R. oregana* (Sheard 2010 [pp. 51, 152]).

*Rinodina tephraspis* (Tuck.) Herre 📖 🌿

(Hasse 1910a; Herre 1910; Fink 1935; Volk 1963; Sigal 1975, 1989; Robertson et al. 1998 [as “cf.”]; Thomson 2003)

=misidentifications for CA, *fide* Sheard & Mayrhofer (2002)

**Note:** Herre's material was *R. milvina*, *fide* Sheard (2010, p. 196).

*Rinodina thysanota* Tuck. 📖 🌿

(TJ for references)

=[Dimelaena thysanota](#)

*Rinodina turfacea* (Wahlenb.) Körb. 📖 🌿

(Hasse 1913b; Merrill 1923; Wheeler 1938)

**Synonyms:** [R. orbata](#) (Fink 1935)

**Note:** Brodo et al. (2001, p. 647, with color photograph) mapped this taxon only in the Rocky Mountains and Canada. Sheard (personal communication) regarded CA reports as probable misinterpretations of *R. mniaraea*.

*Rinodina turfacea* var. *mniaraea* (Ach.) Arnold 📖 🌿

(Tuckerman 1882; McClatchie 1897; Hasse 1913b)

=[R. mniaraea](#) (but CA specimens reported by Tuckerman [1882] are *R. bolanderi*, *fide* Magnusson [1947])

## ROCCELLA DC.

*Roccella decipiens* Darb. 📖 🌿

(Darbishire 1898; TJ; Tehler 2002; Knudsen & Kocourková 2009a; *W. Weber L-42600*, San Clemente Isl., Los Angeles Co., ASU)

**Synonyms:** [R. babingtonii](#) (*fide* Tehler 2002 [p. 453]), [R. fimbriata](#)

*Roccella gracilis* Bory 🌿

(*C. Bratt 4104*, Santa Barbara Isl., Santa Barbara Co., SBBG)

**Synonyms:** [R. difficilis](#), [R. peruensis](#) (synonymy *fide* Tehler 2006)

*Roccella babingtonii* Mont. 📖 🌿

(Hale 1969; Egan 1977; TJ; Hale & Cole 1988; Riefner, Bowler, & Ryan 1995; Bowler et al. 1996; Magney 1999; Brodo et al. 2001 [p. 648, color photograph])

**Note:** Tehler (2002, p. 453) asserted that *R. babingtonii* Mont. is referable to the fertile esorediate *R. decipiens*, not the sterile soresdiate *R. gracilis*.

*Roccella calicaris* var. *fraxinea* (L.) Mont. 📖 🌿

(Hasse 1903b; Merrill 1923)

=[Ramalina fraxinea](#)

*Roccella ceruchis* Ach. 📖 🌿

(Hasse 1903b [an error for *Ramalina ceruchis*, *fide* Spjut 1996, p. 202])

- =[\*Niebla ceruchis\*](#)  
*Roccella ceruchis* f. *cephalota* Tuck. 📖 🌿  
(Hasse 1903b)  
=[\*Niebla cephalota\*](#)
- Roccella combeoides* Nyl. 📖 🌿  
(Hasse 1903b [an error for *Ramalina combeoides*, fide Spjut 1996, p. 202])  
=[\*Niebla combeoides\*](#)
- Roccella difficilis* Darb. 📖 🌿  
(Darbshire 1898; TJ; Tehler 2002)  
=[\*R. gracilis\*](#)
- Roccella fimbriata* Darb. 📖 🌿  
(Hale & Cole 1988; Riefner, Bowler, & Ryan 1995; Bowler et al. 1996; Bratt 1997; Magney 1999; Brodo et al.; Tehler 2002 [p. 452])  
=[\*R. decipiens\*](#)
- Roccella fuciformis* (L.) DC. 📖 🌿  
(Hasse 1898a, 1903a, 1903c, 1913b; Merrill 1923; Fink 1935)  
=misidentifications  
**Note:** Darbshire (1898) reported it only from Europe and Africa.
- Roccella fucoides* (Dicks.) Vain. 📖 🌿  
(Hasse 1913b)  
=[\*R. phycopsis\*](#) Ach. (synonymy fide Zahlbruckner 1924)  
**Note:** Hasse's collection is a misidentification for CA since that species is only in Europe.
- Roccella homalea* (Ach.) Hasse 📖 🌿  
(Hasse 1903a [an error for *Ramalina homalea* fide Spjut 1996, p. 202])
- Roccella intermedia* Del. ex Nyl. 📖 🌿  
(Hasse 1903a; lapsus for *Ramalina intermedia*)
- Roccella leucophaea* Tuck. 📖 🌿  
(Tuckerman 1858; Nylander 1858–1860; Tuckerman 1866, 1872; Willey 1873a; Tuckerman 1882, 1883b; Hasse 1896; Orcutt 1885; Hue 1890; Eckfeldt 1893; McClatchie 1897; Orcutt 1903, 1907)  
=[\*Dendrographa leucophaea\*](#)
- Roccella leucophaea* var. *minor* (Darb.) Tuck. 📖 🌿  
(Hasse 1896; McClatchie 1897; Orcutt 1903, 1907)  
=[\*Dendrographa leucophaea\*](#)
- Roccella montagnei* Bél. 📖 🌿  
(Hasse 1915b; Fink 1935; TJ)  
**Note:** These are probable misidentifications, since Darbshire (1898) did not report it from N. Amer.
- Roccella peruensis* Kremp. 📖 🌿  
(Darbshire 1898; TJ; Tehler 2002; Knudsen 2003a; Knudsen & Kocourková 2010f, 2012a)  
=[\*R. gracilis\*](#)
- Roccella phycopsis* (Ach.) Ach. 📖 🌿  
(Tuckerman 1882; Eckfeldt 1893; Fink 1935; TJ)  
**Synonyms:** [\*R. fucoides\*](#)  
**Note:** These records are probably based on misidentifications, as Darbshire (1898) reported *R. phycopsis* only from Europe, Africa, and Australia.
- Roccella reticulata* (Nöhden) Kremp. 📖 🌿  
(Hasse 1903a, lapsus for *Ramalina reticulata*)  
=*Ramalina menziesii* Taylor non Tuck.
- Roccella tinctoria* DC. 📖 🌿  
(TJ for references)  
=probable misidentifications, fide B. Ryan



**Note:** This is an eastern hemisphere species.

### ROCCELLINA Darb.

*Roccellina conformis* Tehler 📖 🌿

(Tehler 1983; Magney 1999 [based on Tehler report]; Brodo et al. 2001 [p. 648, with color photograph]; Tehler 2002; Knudsen & Kocourková 2012a; *W. Weber 42986*, Santa Catalina Isl., Los Angeles Co., ASU; *S. Tucker 35987*, Seventeen-Mile-Drive, Monterey Peninsula, Monterey Co., SBBG)

=[\*Dendrographa conformis\*](#)

*Roccellina franciscana* (Zahlbr. ex Herre) Follmann 📖 🌿

(Hale & Cole 1988; von Reis 1991; Riefner, Bowler, & Ryan 1995; Magney 1999; Tucker 1999; Brodo et al. 2001 [p. 648]; Baltzo 2002; Tehler 2002; Knudsen & Kocourková 2012a)

=[\*Dendrographa franciscana\*](#)

### ROMJULARIA Timdal

*Romjularia lurida* (Ach.) Timdal 📖 🌿

(described in Timdal 2008 but CA not mentioned)

**Synonyms:** [\*Biatora lurida\*](#), [\*Lecidea lurida\*](#), [\*Mycobilimbia lurida\*](#), [\*Psora lurida\*](#)

**Note:** This species has been collected in interior western and midwestern U. S. and Alaska.

### ROSELLINIELLA Vain.

\**Roselliniella cladoniae* (Anzi) Matzer & Hafellner 📖 🌿

(Kocourková et al. 2008; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *J. Kocourková s.n.*, Santa Cruz and Santa Rosa isls., Santa Barbara Co. on *Cladonia* species, UCR)

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

### SARCOGYNE Flot.

*Sarcogyne arenosa* (Herre) K. Knudsen & Standley 📖 🌿

(Knudsen 2005c, 2007b; Knudsen & Standley 2008; Knudsen & Kocourková 2009a, 2009c; Lendemer, Kocourková, & Knudsen 2009b; Tucker 2010; Knudsen & Kocourková 2012b; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *K. Knudsen 1224*, Laguna Mts, San Diego Co., UCR)

**Synonyms:** [\*Acarospora arenosa\*](#), [\*Acarospora glaucocarpa\* f. \*arenacea\*](#) H. Magn.

*Sarcogyne clavus* (DC.) Kremp. 📖 🌿

(Magnusson 1935a, 1936; TJ; Knudsen & Standley 2008; Knudsen & Werth 2008; *C. Bratt 12342*, Fiddymont Ranch, W of Roseville, Plumas Co., SBBG; *K. Knudsen 1166*, San Mateo Cyn above Tenaja Falls, Riverside Co., UCR)

**Synonyms:** [\*Biatorella clavus\*](#), [\*Lecanora privigna\* var. \*clavus\*](#), [\*S. privigna\* var. \*clavus\*](#)

*Sarcogyne crustacea* K. Knudsen & Kocourk. 📖 🌿

(Knudsen & Kocourková 2010b; *K. Knudsen 639*, San Jacinto Mts, Riverside Co., UCR)

**Synonyms:** [\*Biatorella terrena\*](#)

*Sarcogyne novomexicana* H. Magn. 📖 🌿

(Knudsen 2006a; Knudsen & Lendemer 2005a; Knudsen 2006a; Knudsen & Standley 2008; *K. Knudsen 3289*, Cactus Flats, San Bernardino Mts, San Bernardino Co., ASU)

*Sarcogyne plicata* H. Magn. 📖 🌿

(Magnusson 1935a; TJ; Knudsen & Kocourková 2009c; *K. Knudsen 1230*, San Antonio Creek, San Gabriel Mts, San Bernardino Co., UCR)

**Synonyms:** [\*Biatorella plicata\*](#)

*Sarcogyne privigna* (Ach.) A. Massal. 📖 🌿

(TJ; von Reis 1991; Wright 1997; Robertson 2003b; Knudsen 2006a, 2007b; Knudsen & Standley

2008; *T. Nash 32118*, Rippers Cove, Santa Catalina Isl., Los Angeles Co., ASU; *K. Knudsen 1223*, Laguna Mts, San Diego Co., UCR)

**Synonyms:** [\*Biatorrella hypophaea\*](#), [\*Biatorrella plicata\*](#), [\*Sarcogyne plicata f. pulvinata\*](#)

***Sarcogyne privigna*** auct. non (Ach.) A. Massal. 📖 🌿

(Knudsen & Standley 2008; Knudsen & Kocourková 2011, 2012a)

***Sarcogyne reebiae*** K. Knudsen 📖 🌿

(Knudsen 2007b; Knudsen & Standley 2008; Knudsen & Kocourková 2009c, based on *K. Knudsen 6435*, Weir Cyn, Santa Ana Mts, Orange Co.; Knudsen et al. 2011; *K. Knudsen 7128*, Malibu Creek S. P., Santa Monica Mts, Los Angeles Co., SBBG; CA endemic)

***Sarcogyne regularis*** Körb. (TJ; 📖 🌿

Brodo et al. 2001 [pp. 650–651, with color photograph]; Robertson 2003b; Tucker et al. 2004; Knudsen 2006a; Knudsen & Standley 2008; Knudsen 2009; Knudsen & Kocourková 2009b, 2009c; Tucker 2010; Knudsen & Kocourková 2012a; *S. Tucker 38279*, Univ. of Calif. campus, Santa Cruz, Santa Cruz Co., SBBG; *S. Tucker 38032*, Patriarch Grove, Bristlecone Pine Forest, Inyo N. F., Mono Co., SBBG; *T. Nash 38899*, San Nicolas Isl., Ventura Co., ASU)

**Misapplied names:** [\*Biatorrella pruinoso\*](#) (Hasse 1913b; [synonymy *fide* Esslinger 2011]), [\*Lecanora privigna var. pruinoso\*](#) (Hasse 1895; Orcutt 1907)

***Sarcogyne similis*** H. Magn. 📖 🌿

(Magnusson 1935a; TJ; Brodo et al. 2001 [pp. 650–651]; Robertson 2003b; Knudsen 2005c; Knudsen & Lendemer 2005a; Tucker et al. 2006; Knudsen 2006a, 2007b; Knudsen & Standley 2008; Knudsen & Kocourková 2009a, 2009c; Tucker 2010; *B. Ryan 32047*, North Fork Ranger Station, Sierra N. F., Madera Co., ASU; *B. Ryan 11177*, Mt. Diablo S. P., Contra Costa Co., ASU; *K. Knudsen 3882*, N of Hotspring Mtn, Cleveland N. F., San Diego Co., UCR)

**Synonyms:** [\*S. californica\*](#) (synonymy *fide* Knudsen & Lendemer 2005a)

**Note:** *Biatorrella clavus* was applied in part to *S. similis* by Herre (1910).

\****Sarcogyne sphaerospora*** J. Steiner 📖 🌿

(Lendemer, Kocourková, & Knudsen 2009a; Kocourková et al. 2012 [on *Candelariella rosulans*, San Bernardino Co.]

*Sarcogyne bicolor* H. Magn. 📖 🌿

(Magnusson 1935a; TJ)

=[\*Polysporina subfuscescens\*](#)

*Sarcogyne californica* H. Magn. 📖 🌿

(Magnusson 1935a; Thomson & Ketchledge 1958; TJ)

=[\*S. similis\*](#) (synonymy *fide* Knudsen & Lendemer 2005a)

**Note:** The name *Biatorrella simplex* was applied to this taxon in part by Hasse (1913b). Magnusson cited Hasse collections labeled *B. simplex* under several names. According to K. Knudsen (personal communication), *S. californica* differs from *S. similis* only in its apothecia being always immarginate and pulvinate by multiple divisions of the apothecia.

\****Sarcogyne lapponica*** (Ach. ex Schaer.) K. Knudsen & Kocourk. 📖 🌿

(Knudsen 2005b, 2005c, 2006a, 2007b; Knudsen & La Doux 2005; Knudsen & Kramer 2007; Knudsen 2008; Knudsen & Kocourková 2008a)

=[\*Polysporina subfuscescens\*](#)

*Sarcogyne plicata f. pulvinata* H. Magn. 📖 🌿

(Magnusson 1935a)

=[\*Sarcogyne privigna\*](#)

*Sarcogyne privigna* (Ach.) A. Massal. var. *clavus* (DC.) Körb. 📖 🌿

(Tuckerman 1882; McClatchie 1897; TJ)

=[\*S. clavus\*](#)

*Sarcogyne simplex* (Davies) Nyl. 📖 🌿

(Thomson & Ketchledge 1958; TJ)

=[\*Polysporina simplex\*](#)

## SARCOPYRENIA Nyl.

\***Sarcopyrenia bacillosa** (Nyl.) Nav.-Ros. & Hladún 🍄 🌿

(Navarro-Rosinés & Hladún 2004; Knudsen & Lendemer 2006a; Knudsen 2007a [photograph, on *Acarospora socialis*]; Knudsen & Kocourková 2009b; Kocourková et al. 2012; *K. Knudsen 5024.1*, Overview Park, Richmond, Contra Costa Co., UCR; *K. Knudsen 10990*, Mission Trails Regional Park, San Diego, San Diego Co., UCR; CA endemic)

**Synonyms:** [\*Hassea bacillosa\*](#), [\*Verrucaria bacillosa\*](#)

## SAREA Fr.

†**Sarea resinae** (Fr.) Kuntze 🍄 🌿

(Robertson 2002a; Tucker et al. 2004; Robertson 2005c; Nash 2008; Benson et al. 2012; Knudsen & Kocourková 2012a; *R. Robertson comm. Tucker 38449*, campus of Univ. of Calif., Santa Cruz, Santa Cruz Co., SBBG; *C. Wetmore 73920*, Santa Rosa Isl., Santa Barbara Co., MIN)

**Synonyms:** [\*Biatora resinae\*](#), [\*Biatorella resinae\*](#), [\*Lecidea resinae\*](#)

**Note:** This taxon was listed by Lamb (1963) as *Tromera resinae* Körb., a nonlichenized fungus.

## SCHAERERIA Körb.

**Schaereria cinereorufa** (Schaer.) Th. Fr. 🍄 🌿

(Schmull & Spribille 2005; *K. Knudsen 2822*, on Incense cedar, Palomar S. P., San Diego Co., UCR)

**Note:** Other collections of this species are from Colorado and Alaska.

**Schaereria corticola** Muhr & Tønsberg 🍄 🌿

(Tønsberg 1993; Blauman et al. 2006 [Castle Rock S. P., Santa Cruz Co.]

**Note:** According to Schmull & Spribille (2008), this bark-inhabiting species has not been reported in the Sonoran region but could occur in humid areas. The only other collection known is from Norway.

**Schaereria dolodes** (Nyl. ex Hasse) Schmull & T. Sprib. 🍄 🌿

(Schmull & Spribille 2005, 2008; *T. Nash 7996*, S of Pinecrest, Tuolumne Co., ASU, MIN; *W. Weber*, Univ. Colo. Lich. Exs. 478, Cpgd above Bullard Bar Dam, Yuba Co., ASU, SBBG, WIS, UPS; *H. Hasse*, San Gabriel Range, Los Angeles Co., NY)

**Synonyms:** [\*Lecidea dolodes\*](#) Nyl.

**Schaereria fuscocinerea** (Nyl.) Clauz. & Cl. Roux 🍄 🌿

(Hertel 2004; *T. Weier 1407.476*, 3.2 km S of Ione on Cal Hwy 88, just W of junction with Hwy 124, Amador Co., as *S. tenebrosa*, ASU)

**Misapplied names:** [\*Lecidea tenebrosa\*](#), [\*S. tenebrosa\*](#)

*Schaereria tenebrosa* (Flot.) Hertel & Poelt 🌿

(*T. Weier* collection from Amador Co., ASU)

=name misapplied to [\*Schaereria fuscocinerea\*](#)

## SCHISMATOMMA Flot. & Körb. ex A. Massal.

**Schismatomma rediunta** (Stizenb.) Tehler 🍄 🌿

(Tehler 1985, 1993b, 2002 [p. 456]; Tucker et al. 2004; Knudsen & Kocourková 2010a, citing Hasse collections, FH; *H. Hasse 88*, Santa Catalina Isl., Los Angeles Co., ASU; CA endemic)

**Synonyms:** [\*Dirina rediunta\*](#), [\*Lecanora rediunta\*](#), [\*Lecidea sublugens\*](#) (synonymy *fide* Zahlbruckner 1924, p. 508)

*Schismatomma abietinum* (Humb.) A. Massal. 🍄 🌿

(Fink 1935; misidentifications for CA)

=[\*Lecanactis abietina\*](#)

*Schismatomma californicum* (Tuck.) Zahlbr. 🍄 🌿

(Zahlbruckner 1911; Hasse 1913b; Merrill 1923; Herre 1945; Bratt 1987; von Reis 1991; Tehler 1985,

1993b)

=[Sigridea californica](#)

*Schismatomma cupressum* Herre 📖 🌿

(Herre 1952; Weber 1967a; Jordan 1968; Lindsay 1973; TJ; Weber 1981 [Univ. Colo. Lich. Exs. 195])

=[Dendrographa franciscana](#)

*Schismatomma decolorans* (Turner & Borrer ex Sm.) Clauz. & Vězda 📖 🌿

(Rotter 2010; Benson et al. 2012)

=[Dendrographa decolorans](#)

*Schismatomma hypothallinum* (Zahlbr.) Hasse 📖 🌿

(Hasse 1913b; Merrill 1923; Fink 1935; Herre 1945; TJ)

=[Lecanographa hypothallina](#)

*Schismatomma pluriloculare* (Zahlbr.) Zahlbr. 📖 🌿

(Hasse 1913b; Merrill 1923; Zahlbruckner 1924; Herre 1945; TJ; Knudsen & Kocourková 2010a, citing a Hasse collection on *Rhus* near Santa Monica, FH; *T. Nash 32119*, Santa Catalina Isl., Los Angeles Co., ASU)

=[Paraschismatomma ochroleucum](#)

## SCHIZOPELTE Th. Fr.

**Schizopelte californica** Th. Fr. 📖 🌿

(Fries 1875; Tuckerman 1882; Willey 1887; Hue 1892; Eckfeldt 1893; Darbishire 1898; Hasse 1903a, 1903d; Orcutt 1903, 1907; Zahlbruckner 1907; Hasse 1912, 1913b; Merrill 1923; Fink 1935; Herre 1945; Weber 1967a; C. Culberson 1972; TJ; Hale & Cole 1988; Riefner, Bowler, & Ryan 1995; Bowler et al. 1996; Hill 1996; Brodo et al. 2001; Tehler 2002; Robertson 2002b; Knudsen 2009; Knudsen & Kocourková 2009b, 2010f, 2012a; *W. Weber L-46203*, Univ. Colo. Lich. Exs. 175, San Clemente Isl., Los Angeles Co., ASU; *T. Nash 36988*, N of Diablo Cyn, across from Lion Rock, San Luis Obispo Co., ASU; CA endemic)

**Synonyms:** [Combea californica](#)

**Schizopelte crustosa** Ertz & Tehler 📖 🌿

(Ertz & Tehler 2011; Knudsen & Kocourková 2012a; *R. Robertson 9907*, Elephant Rock, sandstone outcrop in coastal prairie, Dillon Beach Rd W of Tomales, Marin Co., UC, as *Llimonaea californica*)

**Synonyms:** [Chiodecton californicum](#), [Llimonaea californica](#), [Phaeotrema californicum](#), [Sclerophyton californicum](#), [Thelotrema californicum](#)

**Note:** This species occurs also in Mexico, so it is not a CA endemic.

**Schizopelte parishii** (Hasse) Ertz & Tehler 📖 🌿

(Knudsen & Kocourková 2010f; Ertz & Tehler 2011; Knudsen & Kocourková 2012a; *B. Ryan 31235*, Lobo Cyn, Santa Rosa Isl., Santa Barbara Co., ASU)

**Synonyms:** [Hubbsia parishii](#) (Hasse) Tehler, Loht., Myllys, & Sundin (Tehler et al. 1997; Lohtander et al. 1998; Robertson & Robertson 2001 [but based on a misidentification]; Brodo et al. 2001 [pp. 341–342, with color photograph]; Tehler 2002; Tucker 2002 [repeated Robertson record]; Knudsen 2009; color photograph on back cover of CALS Bulletin 7 [2], 2000), [Reinkella parishii](#), [R. subcrustacea](#)

## SCLEROCOCCUM Fr.

\***Sclerococcum montagnei** Hafellner 📖 🌿

(Kocourková et al. 2012; *J. Lendemer 14843*, San Jacinto Mts, Riverside Co., on *Lecanora rupicola*, UCR)

\***Sclerococcum parmeliae** Etayo & Diederich 📖 🌿

(Kocourková & Knudsen 2009d; Kocourková et al. 2012)

**Note:** This lichenicole has been found on *Hypogymnia imshaugii* on chaparral in the Santa Ana Mts and also on a wide range of Parmeliaceae.

## **SCLEROPHORA** Chevall.

### **Sclerophora nivea** (Hoffm.) Tibell 🍄🌿

(*W. B. Cooke 26633 Lassen Volcanic N. P., CA, [det. A. W. Herre as Coniocybe pallida, MU]*)

**Note:** This species has been collected in midwestern U. S., Canada, and Europe.

## **SCLEROPHYTON** Eschw.

### **Sclerophyton californicum** (Tuck.) Hasse 🍄🌿

(Hasse 1909, 1913b; Merrill 1923; TJ; Weber 1989a; Egea & Torrente 1995a; Tucker 1997; Bratt 1999; Egea & Torrente 2002)

=[\*Schizopelte crustosa\*](#)

### **Sclerophyton cerebriforme** Egea & Torrente 🍄🌿

(Egea & Torrente 1995a; Bowler et al. 1996; Robertson & Robertson 2002; Egea & Torrente 2002)

=[\*Sparria cerebriformis\*](#)

### **Sclerophyton murex** Egea & Torrente ex Sparrius 🍄🌿

(Sparrius 2004)

=[\*Fulvophyton murex\*](#)

### **Sclerophyton occidentale** Herre 🍄🌿

(Herre 1940, 1942c; TJ; Egea & Torrente 1995a)

=[\*Pertusaria ophthalmiza\*](#)

## **SCOLICIOSPORUM** A. Massal.

### **Scoliciosporum pruinosum** (P. James) Vězda 🍄🌿

(Williams & Sillett 2007)

**Note:** This species has been collected in Maine and in Europe.

### **Scoliciosporum sarothamni** (Vain.) Vězda 🍄🌿

(Baltzo 2004; Ekman & Tønberg 2004; *T. Tønberg 18403*, Hollister Ranch, W of Gaviota S. P., Santa Barbara Co., ASU)

**Note:** Tønberg also collected this species in Washington.

### **Scoliciosporum umbrinum** (Ach.) Arnold 🍄🌿

(Ekman & Tønberg 2004; Knudsen & Kocourková 2010a, citing a *H. Hasse* collection [*Lich. Exs.* 232, FH]; Tucker 2010; Glacy et al. 2011; Knudsen & Kocourková 2012a; *S. Tucker 14982*, Del Norte Beach, Del Norte Co., SBBG; *K. Knudsen 7400*, Santa Rosa Isl., Santa Barbara Co., UCR)

**Synonyms:** [\*Bacidia umbrina\*](#), [\*Biatora umbrina\*](#)

## **SEGESTRIA** Fr.

### **Segestria leptalea** (Durieu & Mont.) R. C. Harris 🍄🌿

(Williams & Sillett 2007; *H. Hasse 786*, Santa Monica Mts, Los Angeles Co., MIN; *K. Knudsen 9969*, Limekiln S. P., Santa Lucia Mts, Monterey Co., NY)

## **SEIROPHORA** Poelt

### **Seiropora californica** (Sipman) Frödén 🍄🌿

(Frödén & Lassen 2004; Knudsen & Kocourková 2012a)

**Synonyms:** [\*Teloschistes californicus\*](#)

**Misapplied names:** *T. villosus*, [\*Physcia villosa\*](#) for N. Amer. collections

**Note:** This species also occurs in Baja California, Mexico.

## **SIGRIDEA** Tehler

### **Sigridea californica** (Tuck.) Tehler 🍄🌿

(Tehler 1993d; Bowler et al. 1996; Bratt 1997; Bourell 2000; Brodo et al. 2001 [p. 132]; Tehler 2002; Knudsen 2009; Knudsen & Kocourková 2009a, 2010a, the latter citing Hasse collections under the

names *Dirina hassei* and/or *Schismatomma californicum*; Stone & Villella 2010; Benson et al. 2012; Knudsen & Kocourková 2012a; *B. Ryan 31230*, Santa Rosa Isl., Santa Barbara Co., ASU; *S. Tucker 36519*, pines at entrance to San Simeon S. P., 5 mi. S of San Simeon, San Luis Obispo Co., SBBG; *C. Bratt L-1675*, Bayside Trail, Point Loma, San Diego Co., SBBG)

**Synonyms:** [Dirina californica](#), [D. hassei](#), [Platygrapha californica](#), [Schismatomma californicum](#)

**Note:** This species also occurs in Oregon.

**SILOBIA** M. Westb. & Wedin (Westberg et al. 2011)

*Silobia hassei* (Herre) K. Knudsen 📄 🌿

(Knudsen 2011a)

=[Myriospora hassei](#)

*Silobia scabrida* (Hedl. ex H. Magn.) M. Westb. 📄 🌿

(Westberg et al. 2011)

=[Myriospora scabrida](#)

**SIPHULA** Fr.

*Siphula simplex* (Taylor) Nyl. 📄 🌿

(Fink 1935)

=*S. ceratites*, but misidentified

**Note:** No CA collections are known. Fink (1935) reported this erroneously from CA, citing a Palmer specimen from Mexico.

*Siphula* sp. 📄

(Weber 1975a, Univ. Colo. Lich. Exs. 455, headland between Cottonwood Cyn and Mills Landing, Santa Catalina Isl., Los Angeles Co.)

=[Lepraria xerophila](#) (Tønsberg 2004)

**Note:** Weber remarked that this is the most abundant earth lichen in coastal southern CA.

**SKYTTEA** Sherwood, D. Hawksw. & Coppins

\***Skyttea pertusariicola** Diederich & Etayo 📄 🌿

(Diederich & Etayo 2004; Kocourková et al. 2009; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *T. Nash 38760*, Theodolite Rd, San Nicolas Isl., Ventura Co., ASU; *K. Knudsen 7672.2*, Santa Rosa Isl., on sterile *Pertusaria*, UCR; CA endemic)

\***Skyttea tavaresiae** R. Sant., Etayo, & Diederich 📄 🌿

(Diederich & Etayo 2000, citing San Miguel Isl.; Diederich 2003 [p. 77]; Diederich & Etayo 2004 [p. 695]; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *K. Knudsen 10021*, San Simeon S. P., San Luis Obispo Co., on *Pertusaria*, UCR)

**SKYTTELLA** D. Hawksw. & R. Sant.

\***Skyttella mulleri** (Willey) D. Hawksw. & R. Sant. 📄 🌿

(Hawksworth & Santesson 1988; Alstrup & Cole 1998, on *Peltigera* spp.; Diederich 2003; Kocourková et al. 2012)

**SOLENOPSORA** A. Massal.

**Solenopsora cladonioides** B. D. Ryan & Timdal 📄 🌿

(Ryan & Timdal 2002; Robertson 2002b; *C. Bratt 11464*, Santa Cruz Isl., Santa Barbara Co., ASU, SBBG)

**Note:** This species also occurs in Baja California, Mexico.

**Solenopsora crenata** (Herre) Zahlbr. var. **crenata** 📄 🌿

(Zahlbruckner 1928; Herre 1944b [*C. Brown*, Marin Co.]; TJ; Robertson & Robertson 2002 [based on their collections from Lake Co., Marin Co., and Sonoma counties, dets. B. Ryan]; Ryan & Timdal 2002; Robertson 2005c; Robertson & Robertson 2008; Knudsen & Kocourková 2010a, citing a Hasse

collection as *S. candicans* but possibly representing *S. crenata*; Knudsen & Kocourková 2012a; *C. Bratt 7930*, San Nicolas Isl., Ventura Co., SBBG; CA endemic; color photograph on back cover of CALS Bulletin 8 [2], 2001)

**Synonyms:** [\*Placolecania crenata\*](#)

**Solenopsora cyathiformis** (Szatala) van den Boom 📖 🌿

(van den Boom & Ryan 2004 [pp. 170–171]; *S. Tucker 35064*, on chaparral N of Baywood Middle School, Los Osos, San Luis Obispo Co., SBBG; CA endemic)

**Synonyms:** [\*Lecania cyathiformis\*](#)

*Solenopsora candicans* (Dicks.) J. Steiner 📖 🌿

(Fink 1935; TJ; Brodo et al. 2001 [p. 370]; misidentifications for N. Amer. records)

*Solenopsora hassei* (Zahlbr.) Zahlbr. 📖 🌿

(Zahlbruckner 1928; Fink 1935; TJ)

=[\*Lecania hassei\*](#)

*Solenopsora holophaea* (Mont.) Sampaio 📖 🌿

**Synonyms:** [\*Candelariella holophaea\*](#), [\*Lecanora holophaea\*](#) (Hasse 1898a; Fink 1935)

**Note:** Hasse (1898a) identified as *Lecanora holophaea* a taxon with brown, 1--3-septate spores and added “*Rinodins* Tuck.” in parentheses. Because spores of *Solenopsora holophaea* are 1 (rarely 3)-septate and colorless, the Hasse record likely refers to some other species, possibly in *Rinodina*. The Hasse record was repeated by Fink (1935) and TJ (under *Candelariella holophaea*). Ryan & Timdal (2002) did not mention the name under *Solenopsora* for CA.

## SOLORINA Ach.

**Solorina crocea** (L.) Ach. 📖 🌿

(Hale 1979; McCune & Goward 1995; McCune & Geiser 1997 [p. 268]; discussed by Tucker [2002])

**Note:** This species occurs throughout western U. S. and Alaska.

**Solorina spongiosa** (Ach.) Anzi 📖 🌿

(Tucker 2002; McCune & Geiser 2009; *J. Shevock 12531*, South Lake Rd, 0.7 mi. below South Lake, Inyo Co., UC, CAS, det. B. Ryan; color photograph, CALS Bulletin 11[1], 2004)

**Note:** This species occurs in interior western U. S. plus Alaska.

## SPARRIA Ertz & Tehler

**Sparria cerebriformis** (Egea & Torrente) Ertz & Tehler 📖 🌿

(Ertz & Tehler 2011; Knudsen & Kocourková 2012a)

**Synonyms:** [\*Sclerophyton cerebriforme\*](#), [\*Llimonaea cerebriformis\*](#)

**Note:** This species also occurs in Baja California, Mexico.

## SPHAERELLOTHECIUM Zopf

\***Sphaerellothecium abditum** Triebel 📖 🌿

(Triebel et al. 1991; Cáceres & Triebel 2004, on species of *Lecidea* including *L. atrobrunnea*; Knudsen et al. 2009; Kocourková et al. 2012; *B. Ryan 12445a*, Eastern Brook Lakes watershed, Inyo Co., ASU; *K. Knudsen 9135*, Cuyamaca Mts, San Diego Co., UCR)

\***Sphaerellothecium atryneae** (Arnold) Cl. Roux & Triebel 🌿

(*K. Knudsen 7112* [cf. *atryneae*], Malibu Creek S. P., Santa Monica Mts, Los Angeles Co., UCR; no spores)

\***Sphaerellothecium breussii** K. Knudsen, Kocourk. & Etayo 📖 🌿

(Knudsen et al. 2009, based on a lichenicole on *Placidium lacinulatum* [= *Clavascidium lacinulatum* from San Diego Co.]; Knudsen & Kocourková 2009b; Kocourková et al. 2012; *K. Knudsen 768*, Elsinore Peak, Cleveland N. F., Riverside Co., UCR)

\***Sphaerellothecium cladoniae** (Alstrup & Zhurb.) Hafellner 📖 🌿

(Knudsen & Kocourková 2010a; Kocourková et al. 2012, based on a collection on *Cladonia nashii*,

Los Angeles Co.)

\***Sphaerellothecium parmeliae** Diederich & Etayo 📖 🌿

(Diederich 2003, based on a Marin Co. collection; Cáceres & Triebel 2004, on *Parmelia saxatilis* and *P. sulcata*; Knudsen et al. 2009; Kocourková et al. 2012; *M. Cole 7901*, Rock Spring, Mt. Tamalpais, Marin Co., ASU)

\***Sphaerellothecium propinquellum** (Nyl.) Cl. Roux & Triebel 📖 🌿

(Diederich 2003; Kocourková et al. 2012; on apothecia of the *Lecanora subcarpineae* group; *P. van den Boom 29662*, near Museum, Sequoia N. P., Sierra Nevada, Tulare Co., ASU)

\***Sphaerellothecium reticulatum** (Zopf) Etayo 📖 🌿

(Kocourková et al. 2008, on *Parmelia*; S. Tucker 35088C pr. p., Los Osos, San Luis Obispo Co., on *Hypogymnia*, SBBG, det. P. Diederich; K. Knudsen 2856, San Jacinto Mts, Riverside Co., UCR)

**Synonyms:** [Echinothecium reticulatum](#)

\***Sphaerellothecium subtile** Triebel & Rambold 🌿

(*C. Bratt 11434b*, Santa Cruz Isl., Santa Barbara Co., SBBG)

**SPHAEROPHORUS** Pers.

**Sphaerophorus tuckermanii** Räsänen 📖 🌿

(Goward 1999; McCune & Geiser 2009; Wedin et al. 2009; Glacy et al. 2011; *R. Riefner 84–302*, Jediah Smith Redwood S. P., Del Norte Co., UCR; *K. Knudsen 9889*, Golden Gate Nat. Recreation Area, W of Rock Spring, Marin Co., UCR)

**Synonyms:** [S. globiferus](#), [S. globosus](#) pr. p., [S. globosus var. gracilis](#)

**Sphaerophorus venerabilis** Wedin, Hognabba, & Goward 📖 🌿

(McCune & Geiser 2009; Wedin et al. 2009; *J. Lindsay 299*, Samoa Peninsula, Humboldt Co., det. T. Nash, WIS)

*Sphaerophorus compressus* Ach. 📖 🌿

(Tuckerman 1872; TJ)

=*Bunodophoron melanocarpum* (Sw.) Wedin

**Note:** This Tuckerman citation, repeated in TJ, referred to a Canadian collection. The species is not found in CA.

*Sphaerophorus fragilis* (L.) Pers. 📖 🌿

(Herre 1942c)

=misidentifications

*Sphaerophorus globiferus* (L.) DC. 📖 🌿

(Tuckerman 1866; Bolander 1870)

=[S. tuckermanii](#)

*Sphaerophorus globosus* (Huds.) Vain. 📖 🌿

(Herre 1906, 1907, 1910; Thomson & Ketchledge 1958; Jordan 1968; Lindsay 1973; Malachowski 1975; TJ; Sweet 1983; Hale & Cole 1988; Goward 1999; Brodo et al. 2001 [p. 658, with color photograph]; Baltzo 2002; Robertson 2002a, 2003a; Blauman 2004a; Jovan & McCune 2004; Robertson 2005c; Hinds & Hinds 2007 [color photograph, p. 449, only]; Williams & Sillett 2007; Glacy et al. 2011; color photograph on front cover of CALS Bulletin 9 [1], 2002)

=[S. tuckermanii](#)

*Sphaerophorus globosus* var. *gracilis* (Müll. Arg.) Zahlbr. 📖 🌿

(Tibell & Ryan 2004 [cite its presence in coastal CA north of the Sonoran area])

=[S. tuckermanii](#)

**SPHINCTRINA** Fr.

\***Sphinctrina anglica** Nyl. 📖 🌿

(Tibell 2004; Kocourková et al. 2012, on a variety of lichens, especially *Protoparmelia* spp.)

**Synonyms:** [Mycocalicium microcephalum](#), [S. microcephala](#) (Sm.) Körb.



\***Sphinctrina leucopoda** Nyl. 📖 🌿

(Bratt 1986; von Reis 1991; Diederich 2003; Tibell 2004; Knudsen & Kocourková 2009b; Stone & Vilella 2010; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *C. Wetmore* 73792, East Point, Santa Rosa Isl., Santa Barbara Co., MIN, det. L. Tibell; *T. Nash* 32054, Santa Catalina Isl., Los Angeles Co., ASU; *T. Nash* 6910b, Torrey Pines S. P., San Diego Co., ASU)

**Note:** This species may be collected on a variety of hosts on both oaks and rock.

\***Sphinctrina tubaeformis** A. Massal. 📖 🌿

(Herre 1910; Robertson & Robertson 2002; Tibell 2004; Tucker 2010; Kocourková et al. 2012; *C. Bratt* 3032, Islay Cyn, Santa Cruz Isl., Santa Barbara Co., SBBG; *S. Tucker* 36326, Jasper Ridge Biological Preserve, Stanford Univ., Palo Alto, San Mateo Co., SBBG)

**Synonyms:** [S. microcephala](#) Nyl. non (Sm.) Körb.

\***Sphinctrina turbinata** (Pers.) De Not. 📖 🌿

(Hasse 1913b; TJ; Thomson 2003; Tibell 2004; Knudsen & Kocourková 2009a [on *Pertusaria flavicunda* and *P. xanthodes*], 2010a, the latter citing a Hasse collection misnamed *S. microcephala*, FH, MIN; Kocourková et al. 2012; *J. Lendemer* 5854, Mt. Tamalpais S. P., Marin Co., UCR)

**Synonyms:** [Calicium turbinatum](#), [S. gelasinata](#)

\***Sphinctrina gelasinata** (With.) Zahlbr. 📖 🌿

(Fink 1935)

=[S. turbinata](#) (synonymy *fide* Esslinger 2011)

\***Sphinctrina microcephala** Nyl. non (Sm.) Körb. 📖 🌿

(Hasse 1903c, 1913b [on *Pertusaria* sp.]; Merrill 1923; Fink 1935)

=[S. tubaeformis](#)

\***Sphinctrina microcephala** (Sm.) Körb. 📖 🌿

(Fink 1935)

=[S. anglica](#)

## SPIILONEMA Bornet

**Spilonema revertens** Nyl. 📖 🌿

(Henssen 1963f; TJ; Hebert & Meyer 1984; Weber et al. 1987; von Reis 1991; Doell et al. 1999; Goward 1999; Tucker 1999; Brodo et al. 2001 [p. 659, with color photograph]; Schultz 2002; Hinds & Hinds 2007 [color photograph, p. 427, only]; *A. Henssen* 13627a, Pine Ridge Summit near Arcata, Humboldt Co., ASU, UPS; *W. Weber* L-43139, Kearney Mesa, San Diego Co., ASU)

**Misapplied names:** [Ephebe pubescens](#) sensu Herre pr. p., [Ephebe solida](#) sensu Herre pr. p.

## SPORASTATIA A. Massal.

**Sporastatia polyspora** (Nyl.) Grumann 📖 🌿

(TJ; Thomson 1997; Tucker 2002 [based on Herre report])

**Synonyms:** [Biatorella cinerea](#)

**Note:** This species has been collected in Oregon, Washington, Canada, and Europe.

**Sporastatia testudinea** (Ach.) A. Massal. 📖 🌿

(Tuckerman 1888; McClatchie 1897; Hasse 1906; Orcutt 1907; Anderson 1965; TJ; Ryan & Nash 1991; Thomson 1997; Brodo et al. 2001 [p. 660, with color photograph]; Robertson & Robertson 2002 [based on *J. & R. Robertson* 1780, Hull Mtn Rd near summit, Lake Co., and *J. & R. Robertson* 7000, Anthony Peak, Mendocino Co.]; Robertson 2003b [based on collections at 10,000 ft., White Mts, Mono Co.]; Ryan & Nash 2004; Robertson & Beyer 2005; Knudsen & Kramer 2007; *B. Ryan* 26578, Waterman Mtn, San Gabriel Wilderness, Los Angeles Co., ASU; color photograph on front cover of CALS Bulletin 8 [2], 2001)

**Synonyms:** [Biatorella testudinea](#), [Lecidea morio](#)

## SQUAMARINA Poelt

**Squamarina lentigera** (W. A. Weber) Poelt 📷 🌿

(Hale 1969 [map on p. 204]; TJ; Ryan 2002 [p. 468] doubted Hale report for CA; Rosentreter et al. 2007 [with photograph, with distribution in extreme SE CA])

**Note:** The range is across the western and plains states, western Canada, and Alaska.

**STAUROTHELE** Norman

**Staurothele areolata** (Ach.) Lettau 📷 🌿

(Thomson 1991; Ryan & Nash 1991; Thomson 2002; Robertson 2004; Knudsen & La Doux 2005; Robertson & Beyer 2005; Knudsen 2006a; Knudsen & Kramer 2007; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *C. Bratt* 7356, N of Baldwin Lake, San Bernardino Co., SBBG; *B. Ryan* 12655, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU)

**Staurothele clopimoides** (Bagl. & Carestia) J. Steiner 📷 🌿

(Thomson 1991 [collection cited from Siskiyou Co.]; *B. Ryan* 25258, Marble Mtn Wilderness, Siskiyou Co., ASU; *J. Robertson* 9235, White Mtn Res. Sta., Rd to Bancroft Gate, Mono Co., SBBG)

**Staurothele drummondii** (Tuck.) Tuck. 📷 🌿

(Thomson 1991 [photo]; Brodo et al. 2001 [p. 662, with color photograph]; Thomson 2002; Robertson 2003b; Robertson & Beyer 2005; Knudsen 2006a; Tucker et al. 2006; Knudsen & Kocourková 2009b, 2012a; Weber 1975a; *W. Weber*, Univ. Colo. Lich. Exs. 427, Siskiyou Co., as *S. clopima*; *S. Tucker* 35411, Lake Pillsbury-Potter Valley Rd, Lake Co., SBBG; *S. Tucker* 34723, Point Sal, Santa Barbara Co., SBBG; *K. Knudsen* 3352, Cactus Flats, San Bernardino Mts, San Bernardino Co., UCR)

**Synonyms:** [\*S. fuscocuprea\*](#), [\*Endocarpon wilmsioides\*](#)

**Staurothele elenkinii** Oxner 📷 🌿

(Thomson 1991 [photo]; Knudsen & Kocourková 2009b; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan* 24368, on volcanic rock, Winter Sports Area, 5 km SW of Fraser Flat Cpgd, Tuolumne Co., ASU; *K. Knudsen* 11576, Point Mugu S. P., Santa Monica Mts, Ventura Co., UCR)

**Staurothele fissa** (Taylor) Zwackh 📷 🌿

(Ryan & Nash 1991; Thomson 1991; Brodo et al. 2001 [pp. 662–663, with color photograph]; Carlberg et al. 2007; Villella 2010; *B. Ryan* 24663, edge of Carson-Iceberg Wilderness, end of Clark Fork Rd, Alpine Co., ASU; *K. Knudsen* 9993, North Fork of San Jacinto river, San Jacinto Mts, Riverside Co., UCR)

**Staurothele monicae** (Zahlbr.) Wetmore 📷 🌿

(Thomson 1991, 2002; Knudsen & La Doux 2005, 2006; Knudsen 2006a, 2007b; *R. Rosentreter* 7251, along Chalone Creek, Pinnacles Nat. Monument, San Benito Mts, San Benito Co., SRP; *K. Knudsen* 5245, Eureka Peak, Little San Bernardino Mts, San Bernardino Co., UCR)

**Synonyms:** [\*Endocarpon monicae\*](#)

**Staurothele polygonia** B. de Lesd. 📷 🌿

(Thomson 1991 [reported an Alpine Co. collection]; Thomson 2002)

**Note:** This species has been reported in montane locations in Arizona, Utah, and New Mexico.

**Staurothele rupifraga** (A. Massal.) Arnold 🌿

**Synonyms:** [\*Verrucaria terebrata\*](#)

**Note:** Other collections of this species have been made in northernmost Canada and Europe.

**Staurothele diffractella** (Nyl.) Tuck. 📷 🌿

(Wright 1997 [as “cf.”]; Tucker 2002)

=*Endocarpon diffractellum* (Nyl.) Gueidan & Cl. Roux

**Note:** According to Brodo et al. (2001, pp. 661–662, with color photograph), this species is found only in eastern U. S.

**Staurothele fuscocuprea** (Nyl.) Zschacke 📷 🌿

(Ryan & Nash 1991)

=[\*S. drummondii\*](#)

## STENOCYBE (Nyl.) Körb.

†**Stenocybe major** (Nyl.) Körb. 🍄 🌿

(Zahlbruckner 1903–1907; Herre 1910; TJ; Goward 1999; Tibell & Ryan 2004)

†**Stenocybe pullatula** (Ach.) Stein 🍄 🌿

(Goward 1999; Rikkinen 2003; Tibell & Ryan 2004)

**Synonyms:** [S. byssacea](#)

†**Stenocybe byssacea** (Fr.) Körb. 🍄 🌿

(Hasse 1913b)

=[S. pullatula](#)

†**Stenocybe tremulicola** Norrl. ex Nyl. 🍄 🌿

(Zahlbruckner 1900; Hasse 1903c, 1913b; Fink 1935; TJ; *H. Hasse s.n.*, Santa Monica Mts, Los Angeles Co., MIN)

=[Phaeocalicium tremulicola](#)

## STEREOCAULON Hoffm.

**Stereocaulon glareosum** (Savicz) H. Magn. 🍄 🌿

(Goward 1999; *I. Brodo & Sharnoffs 25337*, Carson Pass, Sierra Nevada Mts, Alpine Co., CMN; *H. Imshaug 18057*, above Piute Pass, Sierra Nevada Mts, Fresno Co., MSC)

**Stereocaulon intermedium** (Savicz) H. Magn. 🍄 🌿

(Tucker 1973 [based on *S. Tucker 6453*. *Darlingtonia* bog along U. S. Hwy 199 and Ranger Lewis Rd, 2 mi. E of Gasquet, Del Norte Co., SBBG]; TJ; Hale & Cole 1988; West & Doell 1995; Goward 1999; Robertson 2004; Hinds & Hinds 2007 [color photograph, p. 458, only]; McCune & Geiser 2009; *C. Bratt 7547*, Pacific Crest Trail, Plumas Co., SBBG, det. C. Wetmore)

**Stereocaulon myriocarpum** Th. Fr. 🍄 🌿

(Lamb 1977; this reference was overlooked by TJ; Hale & Cole 1988; McCune & Geiser 2009; *S. Tucker 5425C* pr. p., redwood forest ~10 mi. E of Stewart's Point, Sonoma Co., SBBG)

**Note:** This species occurs also in interior western U. S. and western Canada.

**Stereocaulon paschale** (L.) Hoffm. 🍄 🌿

(Tuckerman 1866; Bolander 1870; Thomson 1984; Brodo et al. 2001 [p. 666 for color photograph but no CA report]; Hinds & Hinds 2007 [color photograph, p. 460, only])

**Stereocaulon rivulorum** H. Magn. 🍄 🌿

(Ryan & Nash 1991; Goward 1999; Brodo et al. 2001 [p. 667 for color photograph but no CA report]; Benson & Hillyard 2012 [as “cf.”, from Mt. Diablo]; Benson 2012a; *B. Ryan 12587*, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU)

**Note:** This species also occurs in western U. S. and Alaska.

**Stereocaulon sasakii** Zahlbr. var. **tomentosoides** I. M. Lamb 🍄 🌿

(Lamb 1977; Brodo et al. 2001 [p. 667, as *S. sasakii*, with color photograph]; discussed by Tucker [2002])

**Note:** This species also has been collected in Oregon, Washington, Arizona, and Alaska.

**Stereocaulon sterile** (Savicz) I. M. Lamb ex Krog 🍄 🌿

(Tucker 1973; Lamb 1977; TJ; Hale & Cole 1988; McCune & Geiser 2009; *R. Gankin L-1295*, N of Willow Creek on Cal Hwy 96, Humboldt Co., SBBG, det. I. M. Lamb; *H. Thiers 7713*, San Francisco watershed, San Mateo Co., ASU)

**Note:** This species has also been collected in Oregon and Alaska.

**Stereocaulon tomentosum** Fr. 🍄 🌿

(Tucker 1973 [based on *S. Tucker 5425C* pr. p., redwood forest ~10 mi. E of Stewart's Point, Sonoma Co., SBBG, det. I. M. Lamb]; TJ; Lamb 1977 [based on *Sipe* collection, Clear Lake, Modoc Co.]; Hale & Cole 1988; Goward 1999; discussed by Tucker [2002]; Hinds & Hinds 2007 [color photograph, p. 465, only]; McCune & Geiser 2009; Brodo et al. 2001 [p. 670, color photograph but no CA report])

**Stereocaulon vesuvianum** Pers. 🍄 🌿

(Goward 1999; Brodo et al. 2001 [p. 670, color photograph but no CA report])

**Synonyms:** [\*S. denudatum\*](#), [\*S. vesuvianum\* var. \*denudatum\*](#)

**Note:** This species has been reported mainly from Oregon, Washington, and Alaska.

*Stereocaulon albicans* Th. Fr. 📷 🍄

(Riddle 1910; Orcutt 1903; Fink 1935)

=[\*Leprocaulon albicans\*](#)

*Stereocaulon denudatum* Flörke 📷 🍄

(Riddle 1910; Fink 1935)

=[\*S. vesuvianum\*](#)

*Stereocaulon vesuvianum* var. *denudatum* (Flörke) I. M. Lamb 📷 🍄

(TJ; Tucker 2002; both based on report by Riddle 1910 [as *S. denudatum*])

=[\*S. vesuvianum\*](#)

**STICTA** (Schreb.) Ach.

***Sticta beauvoisii*** Delise 📷 🍄

(Hinds & Hinds 2007 [color photograph, p. 467, for synonymy only])

**Misapplied names:** [\*S. weigelii\*](#)

***Sticta fuliginosa*** (Hoffm.) Ach. 📷 🍄

(Tuckerman 1866; Bolander 1870; Tuckerman 1872, 1882; Herre 1906, 1907, 1910; Thomson & Ketchledge 1958; Jordan 1968; Baltzo 1970; Lindsay 1973; Malachowski 1975; TJ; Hale & Cole 1988; Baltzo 1989; Goward et al. 1994; Bowler et al. 1996; Doell & Wright 1996; Tucker & Bratt 1996; McGee 1998; Wright 1998; Brodo et al. 2001 [p. 672, with color photograph]; McGee 2001; Baltzo 2002; Robertson 2002a, 2003a; McDonald et al. 2003; Blauman 2004a; Galloway & Thomas 2004; Jovan & McCune 2004; Robertson 2005c; Hinds & Hinds 2007 [color photograph, p. 467, only]; Williams & Sillett 2007; McCune & Geiser 2009; Glacy et al. 2011; Knudsen & Kocourková 2012a)

**Note:** McDonald et al. (Bryologist 106: 61–79, 2003) asserts that the *Sticta* in California and the Pacific northwest commonly identified as *S. beauvoisii* or *S. weigelii* is closest to *S. beauvoisii* but may belong to a different taxon.

***Sticta limbata*** (Sm.) Ach. 📷 🍄

(Herre 1906, 1907, 1910; Thomson & Ketchledge 1958; Jordan 1968; Lindsay 1973; Malachowski 1975; TJ; Hale & Cole 1988; Goward et al. 1994; McGee 1995; West & Doell 1995; Wright 1998; Brodo et al. 2001 [p. 672, with color photograph]; McGee 2001; Baltzo 2002; Robertson 2002a; Robertson 2002a, 2003a; Galloway & Thomas 2004 [report it in San Francisco watershed, central CA]; Jovan & McCune 2004; Robertson 2005c; Williams & Sillett 2007; McCune & Geiser 2009; Glacy et al. 2011; color photograph on front cover of CALS Bulletin 7 [1], 2000; *C. Bratt 6109*, top of Nacimiento-Ferguson Rd, Santa Lucia Mts, Monterey Co., SBBG)

***Sticta saxicola*** K. Knudsen & Kocourk. 📷 🍄

(Knudsen & Kocourková 2010c)

***Sticta sylvatica*** (Huds.) Ach. 📷 🍄

(Hale 1979; Robertson 2002a; Galloway & Thomas 2004 [for S CA])

*Sticta anthraspis* Ach. 📷 🍄

(C. Harris 1903; Thomson & Ketchledge 1958; TJ)

=[\*Pseudocyphellaria anthraspis\*](#)

*Sticta laciniata* Ach. 📷 🍄

(Lindsay 1973; TJ; misidentifications for N. Amer.)

*Sticta oregana* Tuck. 📷 🍄

(C. Harris 1903; Fink 1935)

=[\*Lobaria oregana\*](#)

*Sticta pulmonaria* (L.) Birolì 📷 🍄

(Tuckerman 1866; Bolander 1870; McClatchie 1895; Herre 1906)

=[\*Lobaria pulmonaria\*](#)

*Sticta scrobiculata* (Scop.) Ach. 📖 🌿

(Tuckerman 1866; Bolander 1870; Herre 1906)

=[\*Lobaria scrobiculata\*](#)

*Sticta verrucosa* (Huds.) Fink 📖 🌿

(Fink 1935)

=[\*Lobaria scrobiculata\*](#)

*Sticta weigelii* (Ach.) Vain. 📖 🌿

(Hale 1979; Goward et al. 1994; Hinds & Hinds 2007 [color photograph, pp. 466–467, for synonymy as *S. beauvoisii* only]; McCune & Geiser 2009)

=[\*S. beauvoisii\*](#)

**STICTINA** Nyl.

*Stictina anthrasis* (Ach.) Nyl. 📖 🌿

(Hue 1890; Orcutt 1909; TJ)

=[\*Pseudocyphellaria anthrasis\*](#)

**STIGMIDIUM** Trevis.

\***Stigmidium californicum** K. Knudsen & Kocourk. 📖 🌿

(Knudsen & Kocourková 2010d, 2012a; Kocourková et al. 2012; on *Caloplaca*. *K. Knudsen 10915*, East Anacapa Isl., Ventura Co., UCR)

\***Stigmidium epistigmellum** (Nyl. ex Vouaux) Kocourk. & K. Knudsen 📖 🌿

(Kocourková & Knudsen 2009b, based on *H. Hasse 915*, Santa Monica Mts, Los Angeles Co., H-NYL; Knudsen & Kocourková 2010f [on maritime saxicolous *Caloplaca* species], 2012a; Kocourková et al. 2012; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *C. Bratt 5141*, Santa Barbara Isl., SBBG; *K. Knudsen 7793*, Santa Rosa Isl., UCR)

**Synonyms:** [\*Mycoporellum epistigmellum\*](#) Hasse

**Misapplied names:** [\*S. cerinae\*](#)

\***Stigmidium epixanthum** Hafellner 📖 🌿

(Hafellner et al. 2002; Diederich 2003; Triebel & Cáceres 2004 [on *Acarospora* and *Pleopsidium*]; Knudsen 2008 [p. 31, on *Acarospora socialis*]; Knudsen & Kocourková 2010a [citing a Hasse collection, *Exs. 127* on *Acarospora socialis*, FH]; Knudsen & Kocourková 2010f, 2012a; Kocourková et al. 2012; *S. Tucker 36312*, on *Pleopsidium*, lava beds near Baker, San Bernardino Co., SBBG, det. P. Diederich)

\***Stigmidium fuscatae** (Arnold) R. Sant. 📖 🌿

(Etayo & Breuss 1998; Diederich 2003; Knudsen & Kocourková 2009c; Kocourková et al. 2012)

\***Stigmidium hesperium** Kocourk. & K. Knudsen 📖 🌿

(Kocourková & Knudsen 2009c, 2012; Kocourková et al. 2012; on *Caloplaca coralloides*, Monterey Co.)

**Stigmidium lendemeri** Kocourk. & K. Knudsen 📖 🌿

(Kocourková et al. 2012; Kocourková & Knudsen 2012)

\***Stigmidium psorae** (Anzi) Hafellner 📖 🌿

(Knudsen 2006c; Kocourková et al. 2012; *K. Knudsen 5875*, Anza-Borrego S. P., San Diego Co., lichenicolous on *Psora crenata*)

\***Stigmidium pumilum** (Lettau) Matzer & Hafellner 📖 🌿

(Etayo et al. 2007; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *J. Kocourková & K. Knudsen s.n.*, Santa Rosa Isl., PRM; *K. Knudsen 4640*, Estero Bluffs S. P., N of Cayucos, San Luis Obispo Co., UCR)

**Note:** This species has been found on the apothecia of several species of *Physcia*.

\***Stigmidium ramalinae** (Müll. Arg.) Etayo & Diederich 📖 🌿

(Kocourková et al. 2010, based on collection on *Ramalina subleptocarpha* in Santa Monica Mts in Ventura Co.; Kocourková et al. 2012)

\***Stigmidium squamariae** (B. de Lesd.) Cl. Roux & Triebel 📖 🌿

(Knudsen & Kramer 2007 [based on *K. Knudsen 6844*, San Jacinto Mts, on *Lecanora polytropa*]; Knudsen et al. 2009; Knudsen & Kocourková 2009c, 2012a; Kocourková et al. 2012; Rajakaruna et al. 2012, on serpentine, San Benito Co.; other Knudsen collections from San Luis Obispo, San Diego counties)

\***Stigmidium tabacinae** (Arnold) Triebel 📖 🌿

(Etayo et al. 2007; Kocourková et al. 2012; *K. Knudsen 4479.1*, Granite Mts, San Bernardino Co. on *Toninia tristis*, UCR)

\***Stigmidium xanthoparmeliarum** Hafellner 📖 🌿

(Kocourková & Knudsen 2008, on *Xanthoparmelia mexicana*; Knudsen & Kocourková 2009c, 2012a; Kocourková et al. 2012; *J. Kocourková 909651*, Santa Ana Mts, Riverside Co., UCR)

\***Stigmidium cerinae** Cl. Roux & Triebel 📖 🌿

(Cole & Hawksworth 2001; Triebel & Cáceres 2004)

**Note:** According to Kocourková & Knudsen (2009b), CA collections under this name = *S. epistigmellum*.

## STRANGOSPORA Körb.

**Strangospora deplanata** (Almq.) Clauz. & Cl. Roux 📖 🌿

(Knudsen 2007b; Knudsen & Kramer 2007; Knudsen & Ryan 2008; Knudsen & Kocourková 2009c; *K. Knudsen 7159*, San Jacinto Mts, Riverside Co., ASU, UCR)

**Note:** Most reports of this species are from Minnesota and Wisconsin.

**Strangospora microhaema** (Norman) R. A. Anderson 📖 🌿

(Knudsen & Ryan 2008; *J. Blakeman 431*, Lower Funston meadow, Kern Cyn, Sequoia N. P., Tulare Co., MIN; *K. Knudsen 1039*, on *Sambucus*, Herkey Creek, San Jacinto Mts, Riverside Co., ASU, UCR)

**Note:** Most reports of this species are from midwestern U. S.

**Strangospora moriformis** (Ach.) Stein 📖 🌿

(Knudsen & Kramer 2007; Knudsen & Ryan 2008; *K. Knudsen 1500*, San Jacinto Mts, Riverside Co., UCR)

**Synonyms:** *Biatora moriformis*, *Biatorella moriformis*

**Note:** This species has been collected in western and midwestern U. S.

*Strangospora ochrophora* (Nyl.) R. A. Anderson 📖 🌿

(Thomson 2003; Knudsen & Ryan 2008)

= *Piccolia ochrophora*, but no CA collections have been found.

## STRIGULA Fr.

**Strigula stigmatella** (Ach.) R. C. Harris 📖 🌿

(R. Harris 1975; Aptroot 2002 [p. 475]; *K. Knudsen 11072*, Soda Springs Trail, Monterey Co., UCR)

**Synonyms:** *Porina cinerea*

**Misapplied names:** *Verrucaria cinerea* Pers. (Hasse 1906)

**Note:** Most collections of this species are from the midwestern, eastern and southeastern U. S.

## STROMATELLA Henssen

**Stromatella bermudana** (Riddle) Henssen 📖 🌿

(Schultz 2002; Knudsen 2004c; *K. Knudsen 472*, Above Cedar Springs Trail, San Jacinto Mts, Riverside Co., UCR)

**Note:** This species also occurs in Arizona.

## SULCARIA Bystrek

**Sulcaria badia** Brodo & D. Hawksw. 📖 🌿

(Brodo & Hawksworth 1977; TJ; Hale & Cole 1988; Peterson et al. 1998 [based on Mendocino Co. collection]; Magney 1999; Brodo et al. 2001 [p. 673, with color photograph]; Carlberg & Toren 2006; McCune & Geiser 2009; *B. Ryan 11305*, Along Manzanita Creek, Lassen Volcanic N. P., Shasta Co., ASU)

**Note:** This species also occurs in Oregon.

**Sulcaria isidiifera** Brodo 📖 🌿

(Brodo 1986; von Reis 1991; Riefner, Bowler, & Ryan 1995; Hill 1996; Magney 1999; Brodo et al. 2001 [p. 674]; *C. Bratt 6389*, Elfin Forest, Baywood, Los Osos, San Luis Obispo Co., SBBG; CA endemic in San Luis Obispo Co.)

**SYNALISSA** Fr.

*Synalissa symphorea* (Ach.) Nyl. 📖 🌿

(TJ; Goward 1999)

**Synonyms:** [Omphalaria symphorea](#), [S. symphorea var. sphaerospora](#)

**Note:** This is an accepted species, but no verified collections for CA are known. Hasse's 1906 report was not repeated in his definitive 1913b publication, so he apparently changed his determination. Herre based his report on a misidentification. Schultz (2002) did not mention this species for S CA.

*Synalissa symphorea* var. *sphaerospora* Nyl. 📖 🌿

(Herre 1944b [but based on a misidentification, *C. L. Brown 229*, Marin Co.]

= [S. symphorea](#)

**Note:** The location of the Brown specimen is not known to me.

**SYNECHOBLASTUS** Trevis. = **COLLEMA**

*Synechoblastus aggregatus* (Ach.) Th. Fr. 📖 🌿

(Fink 1935;

= [Collema fasciculare](#), but misidentifications for CA)

*Synechoblastus coccophorus* (Tuck.) Fink 📖 🌿

(Fink 1935)

= [Collema coccophorum](#) (synonymy *fide* Esslinger 2011)

*Synechoblastus fascicularis* (L.) A. L. Sm. 📖 🌿

(Fink 1935)

= [Collema fasciculare](#) (synonymy *fide* Esslinger 2011, but misidentifications for CA)

*Synechoblastus laciniatus* (Nyl.) Fink 📖 🌿

(Fink 1935)

= [Collema texanum](#) (synonymy *fide* Esslinger 2011)

*Synechoblastus leucocarpus* (Hook. f. & Taylor) Müll. Arg. 📖 🌿

(Fink 1935; misidentifications for N. Amer.)

**SYZYGOSPORA** G. W. Martin

\***Syzygospora bachmannii** Diederich & M. S. Christ. 📖 🌿

(Glacy et al. 2011, citing *Ahti 69211*, Elephant Rock, Marin Co., on *Cladonia artuata*; Kocourková et al. 2012)

\***Syzygospora physciacearum** Diederich 📖 🌿

(Diederich 1996; Tucker & Bratt 1996; Wright 1997; Bratt 1999; Diederich 2003, 2004; Knudsen & Kocourková 2009b; Tucker 2010; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *S. Tucker 35462, 35516*, Soda Springs Ranger Station near Lake Pillsbury, Lake Co., SBBG, on *Physconia* spp.; *S. Tucker 34366*, Santa Barbara Botanic Garden, Santa Barbara Co., SBBG; *S. Tucker 37163*, Pollard Flat SW of Dunsmuir, Shasta Co., SBBG, det. P. Diederich; *K. Knudsen 10831*, West Anacapa Isl., Ventura Co., UCR, on *Heterodermia namaquana*)

**TAENIOLELLA** S. Hughes

\***Taeniolella phaeophysciae** D. Hawksw. 📖 🌿

(Diederich 2003, 2004 [in San Luis Obispo Co.]; *S. Tucker 31712*, Clear Lake S. P., Lake Co., on *Phaeophyscia orbicularis*, det. D. Hawksworth, SBBG; Kocourková et al. 2012)

**TELOSCHISTES** Norman

**Teloschistes chrysophthalmus** (L.) Th. Fr. 📖 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Orcutt 1885; Hasse 1895; McClatchie 1895, 1897; Orcutt 1903; Herre 1910; Hasse 1913b; Moxley 1921; Merrill 1923; Rudolph 1955; Thomson & Ketchledge 1958; TJ; Weber et al. 1987; Hale & Cole 1988; von Reis 1991; Bowler et al. 1996; Doell & Wright 1996; Wright 1998; McGee 1999; Bourell 2000; Wright 2000; Brodo et al. 2001 [p. 674, with color photograph]; Robertson 2001; Baltzo 2002; Robertson 2003a; Thomson 2003; Frödén et al. 2004; Jovan & McCune 2004; Tucker et al. 2004; Hinds & Hinds 2007 [color photograph, p. 469, for synonymy only]; Robertson 2005b; Knudsen 2007b; Knudsen & Kocourková 2009c; Tucker 2010; Glacy et al. 2011; Knudsen & Kocourková 2012a)

**Teloschistes exilis** (Michx.) Vain. 📖 🌿

(Rudolph 1955; Hale 1969; TJ; Hale & Cole 1988; Riefner, Bowler, & Ryan 1995; West & Doell 1995; Wright 1998; Bratt 1999; Magney 1999; McGee 1999; Bourell 2000; Wright 2000; Brodo et al. 2001 [p. 675, with color photograph]; Robertson 2003a; Tucker 2010; Glacy et al. 2011)  
=misidentifications for *S CA*, *fide* Frödén et al. 2004

**Note:** According to Frödén et al. 2004, fertile specimens with red-orange disks are likely to be *T. flavicans*, while *T. exilis* has yellow to orange disks.

**Teloschistes flavicans** (Sw.) Norman 📖 🌿

(Eckfeldt 1893; Herre 1906, 1910; Hasse 1913b; Howe 1915; Merrill 1923; Hillman 1930; Rudolph 1955; Thomson & Ketchledge 1958; Jordan 1968; TJ; Hale & Cole 1988; von Reis 1991; McGee 1995; Riefner, Bowler, & Ryan 1995; West & Doell 1995; Bowler et al. 1996; Wright 1998; Magney 1999; Bourell 2000; Wright 2000; Brodo et al. 2001 [p. 675, with color photograph]; McGee 2001; Baltzo 2002; Frödén et al. 2004; Geiser et al. 2004; Jovan & McCune 2004; Tucker et al. 2004; Glavich et al. 2005a, 2005b; Robertson 2005b; Knudsen 2007b, 2009; McCune & Geiser 2009; Tucker 2010; Glacy et al. 2011; Benson et al. 2012; Benson & Hillyard 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [\*Physcia chrysophthalma\* var. \*pubera\*](#), [\*T. chrysophthalmus\* var. \*flavicans\*](#), [\*T. flavicans\* var. \*puberus\*](#)

*Teloschistes californicus* Sipman 📖 🌿

(Sipman 1993; Riefner, Bowler, & Ryan 1995; Bowler et al. 1996; Magney 1999; Wright 2000; Brodo et al. 2001 [p. 674]; Bratt 2003; Frödén et al. 2004)

=[\*Seiophora californica\*](#)

**Misapplied names:** *T. villosus*, *Physcia villosa* for N. Amer. collections

*Teloschistes candelarius* (L.) Fink var. *lacinosus* (Dufour) Fink 📖 🌿

(Fink 1935)

=[\*Xanthoria candelaria\*](#)

*Teloschistes candelarius* (L.) Fink var. *pygmaeus* (Bory) Fink 📖 🌿

(Fink 1935)

=[\*Xanthoria candelaria\*](#)

*Teloschistes chrysophthalmus* var. *flavicans*(Sw.) Tuck. 📖 🌿

(TJ for references)

=[\*T. flavicans\*](#)

*Teloschistes concolor* (Dicks.) Tuck. 📖 🌿

(Herre 1906)



=[Candelaria concolor](#)

*Teloschistes flavicans* var. *puberulus* Wallr. 📖 🌿

(Tuckerman 1866; TJ)

=[T. flavicans](#)

*Teloschistes lychneus* (Ach.) Tuck. 📖 🌿

(Tuckerman 1882; Hasse 1903a, 1908a)

=[Xanthoria candelaria](#)

*Teloschistes lychneus* f. *lacinosus* Schaer. 📖 🌿

(Hasse 1895; Herre 1906, 1907; Orcutt 1903, 1907)

=[Xanthoria candelaria](#)

*Teloschistes lychneus* var. *pygmaeus* Tuck. 📖 🌿

(Tuckerman 1882; Blankinship & Keeler 1892; Hasse 1903a, 1908a)

=[Xanthoria candelaria](#)

*Teloschistes parietinus* (L.) Norman 📖 🌿

(TJ for references)

=[Xanthoria parietina](#)

*Teloschistes parietinus* var. *ramulosus* (Tuck.) Tuck. 📖 🌿

(Tuckerman 1866, 1872)

=[Xanthoria polycarpa](#)

*Teloschistes parietinus* var. *polycarpus* (Hoffm.) Tuck. 📖 🌿

(Tuckerman 1866; Orcutt 1903, 1907)

=[Xanthoria polycarpa](#)

*Teloschistes parietinus* f. *terrestris* auct. 📖

(Hasse 1896; McClatchie 1897; Hasse 1903a)

=[Xanthoria parietina](#)

*Teloschistes polycarpus* (Hoffm.) Tuck. 📖 🌿

(Tuckerman 1882; Eckfeldt 1893; McClatchie 1897; Herre 1906)

=[Xanthoria polycarpa](#)

*Teloschistes ramulosus* Tuck. 📖 🌿

(Tuckerman 1882; Eckfeldt 1893; Hasse 1906; Herre 1906; Hasse 1908a; Fink 1935; TJ)

=[Xanthoria polycarpa](#) fide Lindblom (1997, 2004)

**Note:** According to Esslinger (2011) this is a synonym of *Xanthoria ramulosa*.

*Teloschistes villosus* auct. non (Ach.) Norman 📖 🌿

(Hasse 1910a; Howe 1910b, 1910c; Hasse 1913b; Howe 1915; Hillman 1930; Fink 1935; Rudolph 1955; TJ; Hale & Cole 1988)

=[Seiophora californica](#) (for N. Amer. records)

**Note:** *Teloschistes californicus* was based on N. Amer. records of *T. villosus* and *Physcia villosa* (Sipman 1993). Frödén & Lassen (2004) transferred *T. californicus* to *Seiophora*.

## TEPHROMELA M. Choisy

**Tephromela atra** (Huds.) Hafellner 📖 🌿

(Sigal 1989; von Reis 1991; Bowler et al. 1996; Tucker & Bratt 1996; Bratt 1997; Hill 1997; McGee 1998; Robertson et al. 1998; Bourell 2000; Brodo et al. 2001 [pp. 676–677, with color photograph]; Baltzo 2002; Nash, Kalb, & Rambold 2004; Robertson 2004; Tucker et al. 2004; Benson 2005; Robertson 2005c; Knudsen 2006a; Knudsen & Kocourková 2009a; Benson & Hillyard 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [Lecanora atra](#) (TJ for references)

**Tephromela nashii** Kalb 📖 🌿

(Weber 1989a; Bratt 1999; Nash, Kalb, & Rambold 2004; Knudsen 2007b, 2009; Knudsen & Kocourková 2012a; W. Weber, Univ. Colo. Lich. Exs. 669, Fraser Point, Santa Cruz Isl., Santa Barbara

Co., ASU, SBBG)

**Note:** Some collections from coastal S CA have been misidentified as *T. atra*.

*Tephromela armeniaca* (DC.) Hertel & Rambold 📖 🌿

(Ryan & Nash 1991)

**Note:** The report by Ryan and Nash was based on a misdetermination. This species is not in CA, *fide* Brodo et al. (2001, p. 676, with color photograph).

**TEXOSPORIUM** Nád. *ex* Tibell & Hofsten

**Texosporium sancti-jacobi** (Tuck.) Nád. 📖 🌿

(Nádvornik 1942; Tibell & Hofsten 1968; TJ; Hale & Cole 1988; McCune & Rosentreter 1992; Bratt 1999; Magney 1999; Bratt 2002; Knudsen 2003b; Riefner et al. 2003; Knudsen 2004c; Riefner & Rosentreter 2004; Tibell & Ryan 2004; Benson 2005; color photograph on back cover of CALS Bulletin 9 [2], 2002; Knudsen & Magney 2006; Knudsen 2007b, 2007c; Rosentreter et al. 2007 [with photograph]; Knudsen & Kocourková 2009a; *W. Weber L-43119*, Kearney Mesa on Clairemont Mesa Rd, San Diego Co., ASU; *C. Bratt 10044*, Ridge W of Aliso Cyn Cpgd, Cuyama Valley, Los Padres N. F., Santa Barbara Co., SBBG)

**Synonyms:** [\*Acolium sancti-jacobi\*](#), [\*Cyphelium sancti-jacobi\*](#), [\*Trachylia sancti-jacobi\*](#)

**THAMNOLIA** Ach. *ex* Schaer.

**Thamnia vermicularis** (Sw.) Ach. *ex* Schaer. 📖 🌿

(Wright 1992 [from Marin Co.]; Goward 1999; Tucker 2002 [repeated Wright record]; McCune & Geiser 2009)

**Note:** This species is common at high elevations in western and northeastern U. S.

**THELENELLA** Nyl.

**Thelenella harrisii** H. Mayrhofer 📖 🌿

(Mayrhofer 1987)

**Note:** Esslinger (2011) accepts both *T. harrisii* and *T. sychnogonioides*, although Mayrhofer considered them to be conspecific.

**Thelenella hassei** (Zahlbr.) H. Mayrhofer 📖 🌿

(Mayrhofer 1987; R. Harris 1995; Mayrhofer 2002; Knudsen & Kocourková 2009b; Tucker 2010; *H. Hasse s.n.*, on *Juglans californica*, etc., canyons of Santa Monica Mts, ix.1913; *Lichenes Exsiccati, Sullivant Moss Soc. 146*, MIN; *H. Hasse 1311*, Santa Catalina Isl., Los Angeles Co., ASU; *S. Tucker 38881*, Santa Barbara Botanic Garden, Santa Barbara Co., ASU, SBBG; CA endemic)

**Synonyms:** [\*Microglaena hassei\*](#) (Zahlbruckner 1902; Hasse 1903f, 1913b; Fink 1935)

**Thelenella inductula** (Nyl.) H. Mayrhofer 📖 🌿

(Mayrhofer 1987; R. Harris 1995; Mayrhofer 2002; Knudsen & Kocourková 2009b; Tucker 2010; *H. Hasse 435*, Santa Monica Mts, Los Angeles Co., ASU; *S. Tucker 7961*, Rocky Nook City Park, Santa Barbara, Santa Barbara Co., SBBG; *S. Tucker 38999*, Santa Barbara Botanic Garden, Santa Barbara Co., SBBG)

**Synonyms:** [\*Polyblastiopsis inductula\*](#), [\*Verrucaria inductula\*](#)

**Thelenella modesta** (Nyl.) Nyl. 📖 🌿

(Mayrhofer 1987; R. Harris 1995 [p. 163]; Mayrhofer 2002; Knudsen & Kocourková 2009b; Benson et al. 2012; *B. Hicks 1600*, Montara Mtn, San Mateo Co., ASU, det. H. Mayrhofer; *C. Bratt 4923*, Los Osos Oaks Reserve, San Luis Obispo Co., SBBG; *K. Knudsen 11571*, Point Mugu S. P., Santa Monica Mts, Ventura Co., UCR)

**Synonyms:** [\*Microglaena subcorallina\*](#) [\*Verrucaria subcorallina\*](#)

**Note:** The Benson et al. collections differ in several respects from European material.

**Thelenella muscorum** (Fr.) Vain. 🌿

(*T. Nash 32541*, Santa Cruz Isl., Santa Barbara Co., ASU; *J. & R. Robertson 3676*, Guenoc Winery,

over mosses in chaparral, Lake Co., ! I. Brodo)

**Synonyms:** [\*Chromatochlamys muscorum\* var. \*muscorum\*](#)

**Note:** This species has been found occasionally in many other parts of the U. S.

***Thelenella sychnognioides*** (Zahlbr.) R. C. Harris 📖 🌿

(R. Harris 1995; Mayrhofer 2002; Knudsen & Kocourková 2009b; *H. Hasse* 778, Santa Catalina Isl., Los Angeles Co., ASU)

**Synonyms:** [\*Microglaena sychnognioides\*](#)

**Note:** R. Harris (1995) and Mayrhofer (2002) both included *Thelenella harrisii* as a synonym of *T. sychnognioides*, but Esslinger keeps them separate. Mayrhofer (1987) merged *T. sychnognioides* with *T. hassei*, but later (Mayrhofer 2002) revised his opinion.

***Thelenella weberi*** H. Mayrhofer 📖 🌿

(Mayrhofer 1987; R. Harris 1995 [p. 164]; Mayrhofer 2002; *R. Foreman* L-44275, San Nicolas Isl., Ventura Co., ASU, det. H. Mayrhofer)

**THELIDIUM** A. Massal.

***Thelidium minutulum*** Körb. 📖 🌿

(Benson et al. 2012)

**Note:** This species has been reported in central and eastern U. S., Alaska, Canada, and Europe.

***Thelidium circumspersellum*** (Nyl.) Zschacke 📖 🌿

**Note:** Nash (2002b, p. 509) reported that a collection by Hasse (1906, as *Verrucaria circumspersella*) was annotated by O. Breuss as *Porina linearis* (Leight.) Zahlbr. Hasse (1906) reported paraphyses and 3-septate spores, neither of which are present in *Thelidium*.

***Thelidium microbolum*** (Tuck.) Hasse 📖 🌿

(Hasse 1913b; Fink 1935; Thomson & Ketchledge 1958; Tucker 1999, reporting a von Reis collection from San Luis Obispo Co.; *S. Tucker* 38547, Santa Barbara Botanic Garden, Santa Barbara Co., SBBG)

**Synonyms:** [\*Verrucaria microbola\*](#)

**Note:** The Hasse material, which was the only CA collection at the time, was annotated by O. Breuss as *Verrucaria* sp., *fide* Nash (2002b, p. 510).

**THELIGNYA** A. Massal.

***Thelignya lignyota*** (Wahlenb.) P. M. Jørg. & Henssen 🌿

(*Schultz* 2009, Yosemite N. P., Madera Co.)

**Note:** Other reports of this species are from Sweden.

**THELOCARPON** Nyl. *ex* Hue

***Thelocarpon hassei*** B. de Lesd. 📖 🌿

(de Lesdain 1930)

**Note:** No collections of this species could be located by Knudsen & Lumbsch 2008.

***Thelocarpon intermediellum*** Nyl. 📖 🌿

(Knudsen 2007b; Knudsen & Lumbsch 2008, found on *Lecanora muralis* in Santa Monica Mts, Ventura Co.; Knudsen & Kocourková 2010f; *K. Knudsen* 4003.2, Party Rock above Carlisle Valley, Santa Monica Mts, Ventura Co., UCR)

**Note:** This species is saprobic, rarely lichenized. Range includes Riverside, San Bernardino, Santa Barbara Co.

***Thelocarpon laureri*** (Flot.) Nyl. 📖 🌿

(Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Note:** This species has been reported in the eastern and midwestern U. S., eastern Canada, and Europe.

\****Thelocarpon lichenicola*** (Fuckel) Poelt & Hafellner 📖 🌿

(Knudsen & Lumbsch 2008; Kocourková et al. 2012; *K. Knudsen* 2710, Palomar S. P., Palomar Mtn,

San Diego Co., on *Lecanora* sp., SBBG, UCR; CA endemic)

*Thelocarpon albomarginatum* Herre 📖 🌿

(Herre 1912b; Fink 1935)

=name misapplied to [Acarospora elevata](#), fide K. Knudsen

## THELOMMA A. Massal.

**Thelomma californicum** (Tuck.) Tibell 📖 🌿

(Tibell 1976, 1978b, 1979 [Calic. Exs. 50]; von Reis 1991; Riefner, Bowler, & Ryan 1995; Brodo et al. 2001 [pp. 679–680, with color photograph]; Baltzo 2002; Doell 2002; Tibell & Ryan 2004; Tucker et al. 2004; *S. Tucker 6114*, McKerricher S. P., 6 mi. N of Fort Bragg, Mendocino Co., SBBG; *K. Knudsen 4915*, Montana de Oro S. P., San Luis Obispo Co., UCR)

**Synonyms:** [Acolium californicum](#), [Cyphelium andersonii](#), [C. farlowii](#), [C. californicum](#)

**Thelomma mammosum** (Hepp) A. Massal. 📖 🌿

(Tibell 1976, 1978a, 1978b [Calic. Exs. 24]; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; Bowler & Riefner 1990; von Reis 1991; Bowler et al. 1996; Bratt 1997; McGee 1999; Brodo et al. 2001 [p. 680, with color photograph]; Robertson 2001; Tibell & Ryan 2004; Robertson 2005c; Knudsen 2007b, 2009; Knudsen & Kocourková 2009c, 2010f; Glacy et al. 2011; Knudsen & Kocourková 2012a; Tibell *Calic. Exs. 178*)

**Synonyms:** [Acolium bolanderi](#), [Cyphelium bolanderi](#), [Cypheliopsis bolanderi](#)

**Note:** This species occurs along the CA coast from San Diego Co. to Del Norte Co.

**Thelomma occidentale** (Herre) Tibell 📖 🌿

(Weber et al. 1987; Tucker & Bratt 1996; Hill 1997 [as “cf.”]; McGee 1998; Robertson et al. 1998; Brodo et al. 2001 [p. 679]; Baltzo 2002; Rikkinen 2003; Blauman 2004a, 2004b; Tibell & Ryan 2004; Glacy et al. 2011; *B. Ryan 22279*, E of Boonville, Mendocino Co., ASU; *T. Nash 8020*, Cambria, San Luis Obispo Co., MIN, MSC)

**Synonyms:** [Cyphelium caliciforme](#), [C. occidentale](#)

**Thelomma ocellatum** (Körb.) Tibell 📖 🌿

(Tibell 1978a [Calic. Exs. 25], 1978b [comments on the Exsiccatae]; McCune & Rosentreter 1995; Rikkinen 2003; Tibell & Ryan 2004; Villella 2010; *B. Ryan 32201*, Benedict Meadow, Sierra N. F., Sierra Nevada, Madera Co., ASU)

**Thelomma santessonii** Tibell 📖 🌿

(Tibell 1976, 1978a, 1978b [comments on the exsiccatae]; Bratt 1999; Bourell 2000; Brodo et al. 2001 [p. 680]; Tibell & Ryan 2004; Knudsen 2007b, 2009; Knudsen & Kocourková 2009a, 2009c, 2010f, 2012a; Tibell [Calic. Exs. 19]; *B. Ryan 30934*, Santa Catalina Isl., Los Angeles Co., ASU; *C. Bratt 5321*, Point Sal on coast, Santa Barbara Co., SBBG)

*Thelomma carolinianum* (Tuck.) Tibell 📖 🌿

**Synonyms:** [Cyphelium carolinianum](#) (Hasse 1908b; Lindsay 1973; based on misidentifications, fide Tibell & Ryan 2004)

## THELOPSIS Nyl.

**Thelopsis isiaca** Stizenb. 📖 🌿

(Vězda 1968; TJ; R. Harris 1975, 1979; Tretiach et al. 2002; Knudsen & Kocourková 2010a, citing a Hasse collection [*Lich. Exs. 232*, on *Umbellularia*, in the Santa Monica Mts, Los Angeles Co., FH]; Knudsen & Kocourková 2012a; *C. Bratt 3382*, Santa Cruz Isl., Santa Barbara Co., ASU, SBBG)

**Synonyms:** [T. subporinella](#)

**Note:** This species also occurs in Mexico.

*Thelopsis subporinella* Nyl. 📖 🌿

(Hasse 1898b; Zahlbruckner 1903–1907; Hasse 1903f, 1913b; TJ)

=[T. isiaca](#)

## THELOTREMA Ach.

### **Thelotrema lepadinum** (Ach.) Ach. 📖 🌿

(Tuckerman 1882; Lindsay 1973; TJ; Hale & Cole 1988; Brodo et al. 2001 [p. 681, with color photograph]; Robertson 2002a [as *T. lapidum*]; Ellyson & Sillett 2003; Williams & Sillett 2007; Doell et al. 2009; *T. Nash 11388*, Hedy Woods S. P., Mendocino Co., ASU)

**Note:** This species occurs widely in the Pacific Northwest, Alaska, northeastern and southeastern U. S.

### **Thelotrema petractoides** P. M. Jørg. & Brodo 📖 🌿

(Glacy et al. 2011, citing *Lumbsch 19911a*, Point Reyes Nat. Seashore, Marin Co.)

**Note:** This species has also been collected in the Queen Charlotte Is., British Columbia.

### *Thelotrema californicum* Tuck. 📖 🌿

(Tuckerman 1877 [based on *E. Palmer* collection on bark, San Diego, herb. Willey]; Willey 1887; Tucker 1997)

= [\*Schizopelte crustosa\*](#)

### *Thelotrema subtile* Tuck. 📖 🌿

(not reported in CA; occurs in northeastern and eastern U. S., W to Texas)

**Synonyms:** [\*Ocellularia subtilis\*](#) (Lindsay 1973, based on a misidentification)

## THERMUTIS Fr.

### *Thermutis velutina* (Ach.) Flot. 📖 🌿

(Goward 1999; Carlberg et al. 2007)

**Note:** This species is difficult to distinguish from non-lichenized *Scytonema* sp., a filamentous cyanobacterium. Goward (1999) did not cite any specimens, but said the range extended into CA. The citation in Carlberg et al. (2007) dealt with a collection by Judy and Ron Robertson, which is likely correct. The Thiers collection was later re-identified as *Spilonema revertens* by S. Tucker. This species has been reported from Washington, Arizona, midwestern U.S., eastern Canada, and Europe.

## THOLURNA Norman

### *Tholurna dissimilis* (Norman) Norman 📖 🌿

(Goward 1999; Anonymous 2002 [cited *S. Jovan* collection, Fresno Co.]; Jovan & McCune 2004)

**Note:** This rare species has been collected in Oregon (Linn Co.), Washington, Canada, Alaska, and Scandinavia. No CA collections are known in herbaria.

## THROMBIUM Wallr.

### **Thrombium aoristum** (Nyl.) Arnold 📖 🌿

(Breuss 2002; Knudsen & Kocourková 2010a, citing a Hasse collection from the Santa Monica Mts, UCR, identified by O. Breuss)

### **Thrombium discordans** (Nyl.) Zahlbr. 📖 🌿

(Fink 1935; TJ; *T. Weier 2028*, Sierra Nevada foothills near town of Monolith, Kern Co., UC; CA endemic)

**Synonyms:** [\*Verrucaria discordans\*](#) (Hasse 1903f) Breuss (2002, p. 484) noted that Hasse's material, on oak bark, does not belong in *Thrombium* because the ascocarps are apothecia rather than perithecia, and the bark substrate is wrong.

### **Thrombium epigaeum** (Pers.) Wallr. 📖 🌿

(Fink 1935; TJ; not reported for S CA by Breuss 2002; Rosentreter et al. 2007 [with photograph]; Knudsen & Kocourková 2009a; Hasse 1913b; *H. Hasse*, Santa Monica Mts, ASU, *Lichenes Exsiccati*, *Sullivant Moss Soc.* 225; *L. Janeway 5374*, on soil, Butte Co., CSU, det. S. Tucker)

**Synonyms:** [\*Verrucaria epigaea\*](#)

**Note:** This species occurs throughout western and midwestern U. S.

## THYREA A. Massal.

**Thyrea confusa** Henssen 📖 🌿

(Knight et al. 2002; Schultz 2009, from San Bernardino Mts on steep roadcut; Hinds & Hinds 2007 [color photograph, p. 471, only])

**Note:** *D. Toren* 899 on basalt rock, Hell's Peak, Lake Co., SFSU, was reported as *T. pulvinata* (an unpublished name). These names were misapplied to Toren's collection of *Lichinella iodopulchra*, mixed with *L. robustoides*, fide M. Schultz.

*Thyrea nigritella* Lettau 📖 🌿

(Tucker & Kowalski 1975; TJ)

=[\*Lichinella nigritella\*](#)

**TICHOTHECIUM** Flot.

\**Tichothecium zahlbrucknerellae* Henssen 🌿

(Henssen 1977 [*Henssen 13671b*, gall on *Zahlbrucknerella calcarea*, on calcareous sandstone, Castle Rock, Santa Cruz Co.]

=[\*Endococcus zahlbrucknerellae\*](#)

**TOMASELLIA** A. Massal.

**Tomasellia americana** (Minks ex Willey) R. C. Harris 📖 🌿

(Tucker & Harris 1980; Aptroot 2002; Tucker 2010; *S. Tucker 34313*, Santa Barbara, Santa Barbara Co., ASU, SBBG, det. A. Aptroot)

*Tomasellia californica* (Zahlbr.) R. C. Harris 📖 🌿

(R. Harris 1975; TJ; R. Harris 1995; Aptroot 2002)

=[\*Mycoporum californicum\*](#)

*Tomasellia eschweileri* (Müll. Arg.) R. C. Harris 📖 🌿

(Tucker 1997)

=[\*Mycoporum eschweileri\*](#)

*Tomasellia lactea* (Ach.) R. C. Harris 📖 🌿

(R. Harris 1975; TJ)

=[\*Mycoporum eschweileri\*](#)

**TONINIA** A. Massal.

**Toninia aromatica** (Sm.) A. Massal. 📖 🌿

(Herre 1910; Hasse 1913b; Merrill 1923; Fink 1935; Sigal 1975; TJ; Sigal 1989; Timdal 1992; Bratt & Wright 1995; Timdal 2002; Knudsen 2007b, 2009; Knudsen & Kocourková 2010a [citing a Hasse collection under the name *T. cumulata*], 2012a; Knudsen & Kocourková 2012a; *T. Nash 38706*, San Nicolas Isl., Ventura Co., ASU)

**Synonyms:** [\*Lecidea aromatica\*](#)

**Note:** Timdal reported other collections from Santa Rosa I. and San Miguel I., Santa Barbara Co.

**Toninia bullata** (Meyen & Flot.) Zahlbr. 🌿

(*C. Bratt 2253*, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Note:** This species also has been collected in Colorado and Wyoming.

**Toninia candida** (Weber) Th. Fr. 🌿

(*J. Shevock 12329* & *D. York*, on marble outcrops on divide above Boyden Cave, Kings River Cyn, Fresno Co., ASU)

**Note:** This species has also been collected in interior western U. S.



**Toninia massata** (Tuck.) Herre 📖 🌿

(Herre 1910; Hasse 1913b; Fink 1935; TJ; Timdal 1992; Bratt & Wright 1995; Timdal 2002; Riefner et al. 2003; *C. Bratt L-1641*, Wagon Cave, just off Fort Hunter Liggett Reservation, Los Padres N. F., Monterey Co., SBBG; *B. Ryan 31537*, Santa Cruz Isl., Santa Barbara Co., ASU; *K. Knudsen 3410*, Santa Ana Mts, Orange Co., UCR)

**Synonyms:** [Lecidea massata](#)

**Toninia nashii** Timdal  

(Timdal 2002 [p. 493]; Knudsen 2009; Knudsen & Kocourková 2012a; *T. Nash 41464*, San Miguel Isl., Santa Barbara Co., ASU; CA endemic)

**Toninia ruginosa** (Tuck.) Herre  



(Herre 1910, 1912a; Hasse 1913b; Fink 1935; TJ; von Reis 1991; Robertson 2004)

**Synonyms:** [Lecidea ruginosa](#) (TJ for references); also see *T. caulescens*

**Toninia ruginosa** subsp. **pacifica** Timdal  

(Timdal 1992; Bratt & Wright 1995; Bowler et al. 1996; Timdal 2002; Benson 2005; Knudsen & Kocourková 2010a, citing a Hasse collection [as *T. caeruleonigricans*] from Santa Monica Mts; Benson et al. 2012; Knudsen & Kocourková 2012a; *W. Weber 1989a* [Univ. Colo. Lich. Exs. 663, as *Toninia pacifica*, nom. nud.]; *T. Nash 32222*, Santa Catalina Isl., Los Angeles Co., ASU)



**Note:** Timdal reported other collections from Alameda, Humboldt, Kern, Los Angeles, Riverside, San Bernardino, San Mateo, Santa Barbara, Stanislaus, and Trinity counties.

**Toninia ruginosa** (Tuck.) Herre subsp. **ruginosa**  

(Lamb 1954 [referred to CA type]; Timdal 1992; Bratt & Wright 1995; Timdal 2002; Knudsen & La Doux 2005, 2006; Knudsen & Kramer 2007; Rosentreter et al. 2007 [with photograph]; Glacy et al. 2011; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. McCune 21550*, Kern River Cyn, Tulare Co., ASU; *B. Ryan 26513*, San Gabriel Wilderness, Los Angeles Co., ASU)

**Note:** Timdal reported other collections of this species from Butte, Contra Costa, El Dorado, Kern, Lake, Los Angeles, Mariposa, Mendocino, Modoc, Riverside, Santa Clara, Shasta, Sierra, Siskiyou, Sonoma, Stanislaus, Tehama, Trinity, and Tuolumne counties.


**Synonyms:** [Toninia ruginosa](#) f. *nigricans*

**Toninia sedifolia** (Scop.) Timdal  

(Timdal 1992; Bratt & Wright 1995; Tucker & Bratt 1996; Doell et al. 1999; Brodo et al. 2001 [p. 684, with color photograph]; Knight et al. 2002; Timdal 2002; Robertson 2004; Tucker et al. 2004; Knudsen 2006a; Carlberg et al. 2007; Rosentreter et al. 2007 [with photograph]; Knudsen 2009; Knudsen & Kocourková 2012a; *B. Ryan 14873*, NE of Scotty's Castle, Death Valley, Inyo Co., ASU; *C. Wetmore 14580*, above Palm Desert, San Jacinto Mts, San Bernardino S. F., Riverside Co., ASU)

**Synonyms:** [Lecidea caeruleonigricans](#), [L. vesicularis](#), [T. caeruleonigricans](#)



**Note:** Timdal reported other collections of this species from Butte, Lake, Los Angeles, Monterey, Riverside, San Benito, Santa Barbara, Santa Clara, Stanislaus, Tulare, and Ventura counties.

**Toninia squalida** (Ach.) A. Massal.  

(Herre 1910; Sigal 1975; TJ; Sigal 1989; Timdal 1992; Bratt & Wright 1995; *C. Wetmore 51174*, Sequoia N. P., Tulare Co., MIN; *S. Tucker 6349b*, Jasper Ridge near Palo Alto, San Mateo Co., SBBG)

**Synonyms:** [Lecidea caulescens](#), [L. squalida](#), [L. squalida](#) var. *caulescens*, [L. squalida](#) var. *persimilans*, [T. caulescens](#), [T. squalida](#) f. *caulescens*, [T. squalida](#) var. *persimilans*, [T. squarrosa](#), [T. squarrosa](#) subsp. *persimilans*

**Note:** Timdal reported other collections of this species from Lake and Modoc counties.

**Toninia subdispersa** (Nyl. ex Hasse) K. Knudsen  

(Knudsen 2007b; Knudsen & Lendemer 2007a; Knudsen & Kocourková 2009a, 2010f, 2012a; Kocourková et al. 2012; *K. Knudsen 6692*, San Miguel Isl., Santa Barbara Co., UCR, ASU, parasitic on *Lecania* spp.)

**Synonyms:** [Lecanora subdispersa](#), [T. talparum](#)

**Note:** According to Knudsen (2007b), neither Nylander nor Hasse recognized that this species was lichenicolous, despite its usual presence among squamules of *Lecania brunonis*, its host. Timdal reported other collections of this species from Los Angeles, Madera, Santa Barbara, and Tehama counties.

**Toninia submexicana** B. de Lesd.  

(Timdal 1992; Bratt & Wright 1995; Magney 1999 [cited latter]; Timdal 2002; Knudsen 2007b;

Knudsen & Kocourková 2010a, citing a Hasse collections under the name *T. caeruleonigricans*. *K. Knudsen 3428*, Wildomar, Menifee Hills, Riverside Co., UCR)

**Note:** Timdal reported other collections of this species from Los Angeles, San Mateo, and Santa Barbara counties.

**Toninia subtalparum** van den Boom 📄 🌿

(van den Boom 2004, on *Lecania dudleyi*; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *K. Knudsen 7741*, Santa Rosa Isl., Santa Barbara Co., UCR)

**Toninia tristis** (Th. Fr.) Th. Fr. 📄 🌿

(Sigal & Toren 1976; TJ; Bowler et al. 1996; Carlberg et al. 2007; Etayo et al. 2007; Knudsen & Werth 2008; Knudsen & Kocourková 2009c; Benson et al. 2012; *K. Knudsen 10309*, Santa Ana Mts, Orange Co., UCR)

*Toninia athallina* (Hepp) Timdal 📄 🌿

**Synonyms:** *Catillaria athallina* (Thomson 1997)

**Note:** Thomson's "Catalina Islands" report is doubtful because this species is mainly arctic/alpine, reported from Canada, Europe and Colorado. Timdal (2002) does not report it from the Sonoran area of CA.

*Toninia caeruleonigricans* (Lightf.) Th. Fr. 📄 🌿

(Herre 1910; Hasse 1913b; Herre 1945; TJ; von Reis 1991)

=[\*T. sedifolia\*](#)

*Toninia caulescens* Anzi 📄 🌿

(Herre 1910; Fink 1935; TJ)

=[\*T. squalida\*](#)

*Toninia cumulata* (Sommerf.) Th. Fr. 📄 🌿

(Hasse 1913b; Fink 1935; TJ)

**Synonyms:** *Lecidea cumulata* (Hasse 1895; Orcutt 1903, 1907)

**Note:** This species represents misidentifications for N. Amer.; it is not mentioned for Sonoran area or CA by Timdal [2002].

*Toninia ruginosa* (Tuck.) Herre f. *nigricans* I. M. Lamb 📄 🌿

(Lamb 1954)

=[\*T. ruginosa\* subsp. \*ruginosa\*](#) fide E. Timdal (personal communication)

*Toninia squalida* f. *caulescens* (Anzi) I. M. Lamb 📄 🌿

(Lamb 1954 [said that name was misapplied by Herre 1910 to *T. ruginosa*])

=[\*T. squalida\*](#)

*Toninia squalida* var. *persimilans* Nyl. 📄 🌿

(Lamb 1954)

=[\*T. squalida\*](#)

*Toninia squarrosa* (Ach.) Th. Fr. 📄 🌿

(Hasse 1913b; Fink 1935)

=[\*T. squalida\*](#)

*Toninia squarrosa* subsp. *persimilans* Hasse 📄 🌿

(Hasse 1913b; Fink 1935 [as *T. squarrosa* f. *persimilans* (Nyl.) Hasse]; Lamb 1954)

=[\*T. squalida\*](#)

\**Toninia talparum* Timdal 📄 🌿

(Timdal 1992; Bratt & Wright 1995; Timdal 2002)

=[\*T. subdispersa\*](#)

\**Toninia verrucarioides* (Nyl.) Timdal 📄 🌿

(Timdal 1992; Bratt & Wright 1995; Magney 1999 cited latter; not in Timdal [2002] for S CA; *Herre 149*, Santa Cruz Mts near Stanford Univ., Santa Clara Co., MIN)

**Note:** The Herre collection has been re-identified as *T. aromatica*. The Bratt collection has not been located.



## TOPELIA P. M. Jørg. & Vězda

### **Topelia californica** P. M. Jørg. & Vězda 📖 🌿

(Jørgensen & Vězda 1984; Baltzo 2002 [det. R. Harris]; Nash & Nimis 2002 [p. 502]; Tucker et al. 2004; Ryan & Lumbsch 2008; Stone & Vilella 2010; Knudsen & Kocourková 2012a; *S. Tucker* 38266, campus of Univ. of Calif., Santa Cruz, Santa Cruz Co., SBBG; *T. Nash* 32268, Santa Cruz Isl., Santa Barbara Co., ASU; CA endemic)

### **Topelia gyalectodes** (Nyl.) B. D. Ryan & Lumbsch 📖 🌿

(Ryan & Lumbsch 2008; Knudsen et al. 2008; *H. Hasse*, Malibu Cyn, Santa Monica Mts, NY; CA endemic)

**Synonyms:** [\*Lecanora gyalectodes\*](#) Nyl.

**Note:** Ryan, Lumbsch et al. (2004, p. 177) used the binomial *Topelia gyalectoides* (sic) in discussing species not belonging in *Lecanora*, but did not validate the combination there. It was validated in Ryan & Lumbsch 2008.

## TORNABEA Østh.

### **Tornabea scutellifera** (With.) J. R. Laund. 📖 🌿

(Nimis & Tretiach 1997, 2002; Knudsen & Kocourková 2012a; *T. Nash* 32757, Santa Rosa Isl., Santa Barbara Co., ASU)

**Note:** This species is more common in Europe and Chile.

## TRACHYLIA Tuck.

### *Trachylia chloroconium* (Tuck.) Tuck. 📖 🌿

(Hasse 1903c)

=[\*Cyphelium chloroconium\*](#)

### *Trachylia sancti-jacobi* (Tuck.) Nyl. 📖 🌿

(Hue 1892)

=[\*Texosporium sancti-jacobi\*](#)

### *Trachylia tympanella* (Ach.) Fr. 📖 🌿

(Hasse 1898a; Orcutt 1909)

=[\*Cyphelium inquinans\*](#)

## TRAPELIA M. Choisy

### **Trapelia coarctata** (Turner *ex* Sm.) M. Choisy 📖 🌿

(Hertel 1970b; Doell 2002; Lumbsch & Kainz 2004; Robertson 2004; Carlberg et al. 2007; Knudsen 2007b; Knudsen & Kocourková 2009c, 2012a; *B. Ryan* 21972, San Bruno Mtn, SE of San Francisco, San Mateo Co., ASU; *W. Weber* 82146, Santa Rosa Plateau Preserve, S end of Santa Ana Mts, W of Murrieta, Riverside Co., SBBG)

**Synonyms:** [\*Biatora coarctata\*](#), [\*Lecidea coarctata\*](#)

### **Trapelia corticola** Coppins & P. James 📖 🌿

(Williams & Sillett 2007; *T. Tønsberg* TT14894, Humboldt Co., BG)

**Note:** This species has been reported in Washington, eastern U. S., and Canada.

### **Trapelia glebulosa** (Sm.) J. R. Laund. 📖 🌿

(Knudsen 2007b; Knudsen & Kocourková 2009a, 2009c, 2010f, 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *S. Tucker* 28817, E of summit of Pacheco Pass, Merced Co., SBBG; *S. Tucker* 35561b, Big Rocks, Sierra Madre Mts, San Luis Obispo Co., SBBG; *C. Bratt* 11476, Santa Cruz Isl., Santa Barbara Co., SBBG; *K. Knudsen* 1577.2, Castro Crest, Los Angeles Co., UCR)

**Synonyms:** [\*T. involuta\*](#), [\*Lecidea coarctata\*](#)

### **Trapelia obtogens** (Th. Fr.) Hertel 📖 🌿

(TJ; Rajakaruna et al. 2012, on serpentine, San Benito Co.; not listed for CA by Lumbsch & Kainz [2004]; *K. Knudsen* 13609, New Idria, San Benito Co., UCR; *K. Knudsen* 13655, Cold Cyn near

Pigeon Gulch, Sierra N. F., Sierra Nevada, Mariposa Co., UCR)

**Synonyms:** [Lecidea coarctata f. obtegens](#)

**Trapelia placodioides** Coppins & P. James 📷 🌿

(Knudsen 2006c; Knudsen & Kocourková 2009c; *T. Nash 37118*, West Anacapa Isl., Ventura Co., ASU; *K. Knudsen 2749*, Palomar S. P., San Diego Co., ASU, UCR)

**Note:** This species has been collected in the midwestern, eastern and southeastern U. S.

*Trapelia involuta* (Taylor) Hertel 📷 🌿

(Hertel 1973; Weber et al. 1987; TJ; Hill 1997; Brodo et al. 2001 [pp. 685–686, with color photograph]; Thomson 2003; Lumbsch & Kainz 2004; Benson 2005)

=[T. glebulosa](#)

**TRAPELIOPSIS** Hertel & Gotth. Schneid.

**Trapeliopsis bisorediata** McCune & Camacho 📷 🌿

(description in McCune et al. [2002] but CA not cited; Knudsen 2007b; Printzen & McCune 2008; Knudsen & Kocourková 2009c; *K. Knudsen 760*, Menifee Hills, Wildomar, Riverside Co., ASU, UCR, det. C. Printzen)

**Trapeliopsis flexuosa** (Fr.) Coppins & P. James 📷 🌿

(Weber et al. 1987; Brodo et al. 2001 [p. 686, with color photograph]; Doell 2002; Blauman 2004a; Printzen & McCune 2004; Robertson 2004; Tucker et al. 2004; Benson 2005; Robertson 2005a; Robertson & Beyer 2005; Carlberg et al. 2007; Knudsen 2007b; Williams & Sillett 2007; Knudsen 2009; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Stone & Villella 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a; *T. Nash 11932*, Hendy Woods S. P., Mendocino Co., ASU; *T. Nash 32324*, Santa Cruz Isl., Santa Barbara Co., ASU)

**Synonyms:** [Biatora flexuosa](#), [Lecidea flexuosa](#)

**Trapeliopsis glaucopholis** (Nyl. ex Hasse) Printzen & McCune 📷 🌿

(Printzen & McCune 2004; Knudsen 2005c; Tucker et al. 2006; Knudsen 2007b; Rosentreter et al. 2007 [with photograph]; Robertson & Robertson 2008; Knudsen & Kocourková 2009c; Glacy et al. 2011; Knudsen & Kocourková 2012a; *S. Tucker 34749*, Bear Mtn, El Tejon Mts, Kern Co., SBBG; *S. Tucker 34188*, Big Rocks, San Luis Obispo Co., SBBG; *C. Bratt 9851*, Upper Cave Cyn, San Clemente Isl., Los Angeles Co., SBBG)

**Synonyms:** [Biatora granulosa var. phyllizans](#), [Lecidea admiscens](#), [L. glaucopholis](#), [L. granulosa var. phyllizans](#), [T. californica](#)

**Misapplied names:** [T. wallrothii](#) (in part); [Lecidea glebulosa](#) (Hasse Exs. 107)

**Trapeliopsis granulosa** (Hoffm.) Lumbsch 📷 🌿

(Weber et al. 1987; Brodo et al. 2001 [p. 687, with color photograph]; Blauman 2004a; Printzen & McCune 2004; Robertson 2004; Tucker et al. 2004; Benson 2005; Carlberg et al. 2007; Knudsen 2007b; Knudsen & Kramer 2007; Rosentreter et al. 2007 [with photograph]; Glacy et al. 2011; *B. Ryan 23509*, Desolation Wilderness, El Dorado Co., ASU; *K. Knudsen 944*, North Fork of San Jacinto River, San Jacinto Mts, Riverside Co., UCR)

**Synonyms:** [Biatora granulosa](#), [Biatora granulosa var. corallina](#), [Lecidea granulosa](#), [L. quadricolor](#)

**Note:** This species is usually only at high elevation, at least south of the San Francisco Bay area.

**Trapeliopsis steppica** McCune & Camacho 📷 🌿

(McCune et al. 2002; Printzen & McCune 2004; Robertson 2004; Rosentreter et al. 2007 [with photograph]; Knudsen & Kocourková 2009b, 2009c; *C. Bratt 1543*, Santa Cruz Isl., Santa Barbara Co., SBBG; *K. Knudsen 7118*, Malibu Creek S. P., Santa Monica Mts, Los Angeles Co., UCR)

**Misapplied names:** *T. wallrothii* (in part)

*Trapeliopsis californica* McCune & Camacho 📷 🌿

(McCune et al. 2002; Robertson 2004; Benson 2005)

=[Trapeliopsis glaucopholis](#)

*Trapeliopsis viridescens* (Schrad.) Coppins & P. James 🌿

**Synonyms:** [\*Biatora viridescens\*](#), [\*Lecidea viridescens\*](#)

**Note:** All reports are from S CA, but Printzen & McCune (2004) did not mention this species as occurring in S CA.

*Trapeliopsis wallrothii* (Flörke ex Spreng.) Hertel & Gotth. Schneid. 📖 🌿

(Weber et al. 1987; Wright 1997; Robertson et al. 1998; McGee 1999; Brodo et al. 2001 [p. 687, with color photograph]; Robertson 2001; Blauman 2004a; Benson 2005; Robertson 2005a, 2005c; Carlberg et al. 2007)

**Synonyms:** [\*Biatora glebulosa\*](#), [\*Lecidea glebulosa\*](#), [\*Lecidea wallrothii\*](#)

**Note:** CA records of this taxon are based on misidentifications of *T. glaucopholis* and *T. steppica*.

## TREMELLA Pers.

\***Tremella dendrographae** Diederich & Tehler 📖 🌿

(Diederich 1996, 2003, 2004; Tucker 1997; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *T. Nash 32972*, Santa Rosa Isl., Santa Barbara Co., on *Dendrographa* spp., ASU)

**Note:** The type is *C. Bratt 5863*, Morro Bay S. P., San Luis Obispo Co., SBBG.

\***Tremella lethariae** Diederich 📖 🌿

(Diederich 2003, 2004, on *Letharia vulpina* in Tulare Co.; Kocourková et al. 2012; *K. Knudsen 11480*, Santa Rosa Mtn, Riverside Co., UCR)

\***Tremella nieblae** Diederich & van den Boom 📖 🌿

(Diederich 2007; Diederich 2008; Knudsen & Kocourková 2012a; Kocourková et al. 2012; type is *van den Boom 29018* on *Niebla cephalota*, Point Lobos State Reserve, Monterey Co.; *K. Knudsen 7837*, Santa Rosa Isl., Santa Barbara Co., UCR)

\***Tremella parmeliarum** Diederich 📖 🌿

(Diederich 2003, 2004; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *S. Tucker 34441*, Lotusland Estate, Montecito, Santa Barbara Co., ASU, SBBG, on *Parmotrema hypoleucinum*, det. P. Diederich; *S. Chaney 9258*, Anacapa Isl., Ventura Co., SBBG)

\***Tremella phaeophysciae** Diederich & M. S. Christ. 📖 🌿

(Diederich 2003, 2004; Kocourková et al. 2012; *S. Tucker 31712* pr. p., Clear Lake, Lake Co., on *Phaeophyscia orbicularis*, SBBG, det. P. Diederich; *P. van den Boom 28980*, Coon Creek trail, Montana de Oro S. P., San Luis Obispo Co., ASU)

\***Tremella ramalinae** Diederich 📖 🌿

(Diederich 2003, 2004, 2007; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *S. Tucker 34509B*, Hastings Natural History Reserve, Monterey Co., on *Ramalina farinacea* and *R. menziesii*, SBBG, det. P. Diederich; *S. Tucker 35762C*, Santa Cruz Isl., Santa Barbara Co., on *Ramalina pollinaria*, SBBG, det. P. Diederich)

## TREMOLECIA M. Choisy

**Tremolecia atrata** (Ach.) Hertel 📖 🌿

(Robertson & Robertson 2001, 2002; Robertson 2005a; Robertson & Beyer 2005; color photograph on back cover of CALS Bulletin 7 [2], 2000; *J & R. Robertson 4581*, near West Peak, Mt. Tamalpais S. P., Marin Co., UC; *J & R. Robertson 6985*, on granite, Black Butte, Glenn Co., UC; *J. Robertson 8926b*, Joseph Creek, Modoc Co., SBBG)

**Note:** This species also occurs in western and eastern U. S. and Alaska.

## TRICHORAMALINA Rundel & Bowler

**Trichoramalina crinita** (Tuck.) Rundel & Bowler 📖 🌿

(Rundel & Bowler 1974; TJ; Bowler & Riefner 1995; Bratt 2003; color photograph on front cover of CALS Bulletin 10 [1], 2003)

**Synonyms:** [\*Ramalina crinita\*](#)

**Note:** This species is more common in Baja California, Mexico.

*Trichoramalina melanothrix* (Laurer) Rundel & Bowler 🍄

(cited in Rundel & Bowler [1974], but unclear reference to CA, from Baja only [*fide* R. Riefner, personal comm.]; this taxon is not mentioned in R. Howe papers or in Kashiwadani & Nash [2004])

**TRICHOTHELIUM** Müll. Arg.

*Trichothelium aeneum* (Wallr.) R. C. Harris 🍄

(Williams & Sillett 2007)

= [\*Pseudosagedia aenea\*](#)

*Trichothelium chloroticum* (Ach.) R. C. Harris 🍄

(Tucker 1999)

= [\*Pseudosagedia chlorotica\*](#)

*Trichothelium lineare* (Leight.) R. C. Harris 🍄

= [\*Pseudosagedia linearis\*](#)

**Note:** Hasse (1906) misapplied the name *Verrucaria circumspersellum* to this taxon, *fide* Nash (2002b, pp. 509–510).

**TRIMMATOSTROMA** Corda

\***Trimmatostroma dendrographae** Diederich, Ertz, U. Braun & Heuchert 🍄

(Diederich, Braun et al. 2010; Kocourková et al. 2012; *S. Sharnoff* 4066, Point Lobos State Reserve, Carmel, Monterey Co., UCR, on *Dendrographa* spp. and on *Paraschismatomma ochroleucum*)

**TRIMMATOTHELE** Norman ex Zahlbr.

*Trimmatothele umbellulariae* Herre 🍄

(Herre 1912a [on *Umbellularia* bark, Inner Coast Range, 450 ft. elev., Santa Clara Co.]; Fink 1935; Volk 1963, based on *H. Thiers* 835, Phoenix Lake, Marin Co., SFSU, but this collection is *Anisomeridium biforme*, *fide* Lendemer & Knudsen [2007])

**TUCKERMANNOPSIS** Gyeln.

**Tuckermannopsis americana** (Spreng.) Hale 🍄

(Glacy et al. 2011)

**Note:** This species is widely distributed in the Midwest, Alaska, and eastern U. S.

**Tuckermannopsis chlorophylla** (Willd.) Hale 🍄

(Hale & Cole 1988; Baltzo 1989; von Reis 1991; Tucker & Bratt 1995, 1996; Hill 1997; Wright 1997; McGee 1998; Brodo et al. 2001 [p. 692, with color photograph]; Baltzo 2002; Blauman 2004a; Ellyson & Sillett 2003; Esslinger 2004; Jovan & McCune 2004; Williams & Sillett 2007; Rotter 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [\*Cetraria chlorophylla\*](#), [\*C. scutata\*](#) auct. non (Wulfen) Poetsch, [\*C. sepincola\* var. \*chlorophylla\*](#)

**Tuckermannopsis ciliaris** (Ach.) Gyeln. 🍄

(Tucker & Bratt 1995 [but based on a misidentification of *T. orbata*])

**Synonyms:** [\*Cetraria ciliaris\*](#) (Hale 1979 [for central and northern CA]), [\*Nephromopsis ciliaris\*](#) (Herre 1910)

**Tuckermannopsis orbata** (Nyl.) M. J. Lai 🍄

(Hale & Cole 1988; Baltzo 1989; Doell & Wright 1996; Hill 1997; Wright 1997; Brodo et al. 2001 [p. 694, with color photograph]; Kärnefelt & Thell 2001; Baltzo 2002; Robertson 2002a; Blauman 2004a; Esslinger 2004; Printzen & McCune 2004; Tucker et al. 2004; Robertson 2005c; Hinds & Hinds 2007 [color photograph, p. 476, only]; Williams & Sillett 2007; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [\*Cetraria orbata\*](#), [\*Nephromopsis californica\*](#), [\*Platysma orbatum\*](#)

**Misapplied names:** [\*Cetraria ciliaris\*](#)

**Tuckermannopsis platyphylla** (Tuck.) Hale 📖 🌿

(Hale & Cole 1988; von Reis 1991; Tucker & Bratt 1995; Wright 1997; Tucker 1999; Brodo et al. 2001 [pp. 694–695, with color photograph]; Kärnefelt & Thell 2001; Robertson 2002a; Robertson & Beyer 2005; Villella 2010)

**Synonyms:** [Cetraria platyphylla](#), [Nephromopsis platyphylla](#)

**Note:** This species occurs in N CA, but the Hasse reports of *C. platyphylla* and others from S CA are probably based on misidentifications, perhaps of *T. orbata*.

**Tuckermannopsis sepincola** (Ehrh.) Hale 📖 🌿

(Brodo et al. 2001 [p. 696, showed it in N CA, with color photograph]; records discussed in Tucker [2002]; Hinds & Hinds 2007 [color photograph, p. 476, only]; *E. B. Copeland* collection, Jonesville, Butte Co., October 1942, CAS, ! S. Tucker)

**Synonyms:** [Cetraria scutata](#), [Cetraria sepincola](#), [Platysma sepincola](#)

**Note:** According to Goward et al. (1994) the range is from British Columbia to Washington. N CA records appear correct but S CA records (McClatchie; Hasse) are based on misidentifications.

**Tuckermannopsis canadensis** (Räsänen) Hale 📖 🌿

(von Reis 1991)

=[Vulpicida canadensis](#)

**Tuckermannopsis merrillii** (Du Rietz) Hale 📖 🌿

(Baltzo 1989; von Reis 1991; Tucker & Bratt 1995)

=[Kaernefeltia merrillii](#)

**Tuckermannopsis pallidula** (Tuck. ex Riddle) Hale 📖 🌿

(Hale & Cole 1988)

=[Ahtiana pallidula](#)

**TURGIDOSCULUM** Kohlm. & E. Kohlm.

#**Turgidosculum ulvae** (G. M. Reed) Kohlm. & E. Kohlm. 📖 🌿

(McCune & Geiser 1997; McGee 1999)

=a fungal parasite of an alga

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

**UMBILICARIA** Hoffm.

**Umblicaria americana** Poelt & T. H. Nash 📖 🌿

(Poelt & Nash 1993; Brodo et al. 2001 [p. 696, with color photograph]; Hestmark 2004; *J. Shevock 16524*, North Fork of Kern River, Golden Trout Wilderness, Tulare Co., ASU; *C. Bratt 404*, West Big Pine ridge, San Rafael Mts, Santa Barbara Co., ASU, SBBG)

**Misapplied names:** [U. murina](#), [U. vellea](#) (applied to some low-elevation collections)

**Umblicaria angulata** Tuck. 📖 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; McClatchie 1897; Llano 1950, 1956; TJ; Thomson 1984; Hale & Cole 1988; Goward et al. 1994; Hestmark 2004; McCune & Geiser 2009; *A. Menzies s. n.*, Monterey Co., FH [type]; *H. Bolander 265*, Mt. Maywood Yosemite N. P., Mariposa Co., MIN; *C. Bratt 7732*, Bates Cyn Rd, Sierra Madre Mts, Santa Barbara Co., ASU, SBBG)

**Synonyms:** [Gyrophora angulata](#)

**Misapplied names:** [U. semitensis](#) (McCune & Curtis 2012)

**Umblicaria arctica** (Ach.) Nyl. 📖 🌿

(TJ; *C. Bratt 7553*, Long Lakes Basin, Plumas N. F., Plumas Co., SBBG, det. B. McCune)

**Synonyms:** [Gyrophora arctica](#)

**Note:** This species has been collected in western U. S. and Canada, Alaska, and Scandinavia.

**Umblicaria cinereorufescens** (Schaer.) Frey 📖 🌿

(Wetmore 1985; *B. Ryan 32134*, Minarets Rd, Sierra N. F., Madera Co., ASU; *T. Nash 22837*, Lassen

Volcanic N. P., Shasta Co., ASU)

**Umbilicaria decussata** (Vill.) Zahlbr. 🍄 🌿

(Imshaug 1957; Hale 1969; Brodo et al. 2001 [pp. 701–702, with color photograph]; *B. Ryan 13687*, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU)

**Synonyms:** [Gyrophora decussata](#), [Omphalodiscus decussatus](#)

**Umbilicaria deusta** (L.) Baumg. 🍄 🌿

(Sigal & Toren 1976; TJ; Wetmore 1983; Hale & Cole 1988; Tucker 2002; Hinds & Hinds 2007 [color photograph, p. 480, only]; McCune & Geiser 2009; Brodo et al. 2001 [p. 702, with color photograph] did not show it in CA; *C. Wetmore 14810*, Tenaya Lake, Tioga Pass, Yosemite N. P., Mariposa Co., MIN)

**Umbilicaria hirsuta** (Sw. ex Westr.) Hoffm. 🍄 🌿

(Bolander 1870; Llano 1950; TJ; Thomson 1984; Hale & Cole 1988; Hestmark 2004; Hinds & Hinds 2007 [color photograph, p. 481, only]; McCune & Geiser 2009; *I. M. Johnston 3229*, Telegraph Peak, San Antonio Mts, Los Angeles Co., ASU, det. G. Hestmark)

**Synonyms:** [Gyrophora grisea](#), [G. hirsuta](#), [G. hirsuta var. grisea](#), [U. hirsuta var. grisea](#)

**Umbilicaria hyperborea** (Ach.) Hoffm. 🍄 🌿

(Tuckerman 1882; Llano 1950; TJ; Wetmore 1983; Thomson 1984; Hale & Cole 1988; Tucker & Bratt 1995; Brodo et al. 2001 [p. 703, with color photograph]; Hestmark 2004; Kärnefelt & Thell 2001; Robertson & Beyer 2005; Hinds & Hinds 2007 [color photograph, p. 482, only]; Knudsen & Kramer 2007; *B. Ryan 24177*, Burst Rock, edge of Emigrant Wilderness, Sierra Nevada, Tuolumne Co., ASU)

**Synonyms:** [Gyrophora hyperborea](#)

**Umbilicaria krascheninnikovii** (Savicz) Zahlbr. 🍄 🌿

(Imshaug 1957; Hale 1969; Hale & Cole 1988; Sigal 1989; Ryan & Nash 1991; Goward et al. 1994; Riefner, Bowler, & Ryan 1995; Brodo et al. 2001 [pp. 703–704, with color photograph]; Robertson 2003b; Hestmark 2004; Robertson & Beyer 2005; McCune & Geiser 2009; *B. Ryan 23477*, Pacific Crest Trail, Desolation Wilderness, El Dorado Co., ASU)

**Synonyms:** [Gyrophora reticulata](#), [Omphalodiscus krascheninnikovii](#)

**Umbilicaria lambii** Imshaug 🍄 🌿

(Peterson 1997, 2003; McCune & Geiser 2009; *E. Peterson 2485, 2539*, near Sanger Peak, Del Norte Co., OSC, ! B. McCune)

**Umbilicaria nylanderiana** (Zahlbr.) H. Magn. 🍄 🌿

(Goward et al. 1994; *B. Ryan 24139*, Burst Rock, edge of Emigrant Wilderness, Tuolumne Co., ASU)

**Note:** This high-elevation species has also been collected in Washington, western Canada, and Alaska.

**Umbilicaria phaea** var. **coccinea** Llano 🍄 🌿

(Llano 1950; TJ; McCune & Geiser 1997; Brodo et al. 2001 [p. 706]; Villella 2010; *B. Ryan 25620*, Siskiyou Co.; *E. Peterson* collection, Siskiyou Co., Herb. Peterson)

**Umbilicaria phaea** Tuck. var. **phaea** 🍄 🌿

(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1882; Hansen 1895; Hasse 1895; McClatchie 1895, 1897; Orcutt 1903, 1907; Llano 1950; Thomson & Ketchledge 1958; Baltzo 1970; Sigal 1975; Pinelli & Jordan 1978; TJ; Smith 1980; Thomson 1984; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; Sigal 1989; von Reis 1991; Tucker & Bratt 1995; Bowler et al. 1996; Doell & Wright 1996; Hill 1997; Wright 1997; Doell et al. 1999; Brodo et al. 2001 [p. 706, with color photograph]; Robertson 2003a; Blauman 2004a; Hestmark 2004; color photograph on front cover of CALS Bulletin 9 [2], 2002; Blauman 2004b; Benson 2005; Knudsen & La Doux 2005; Robertson 2005a; Carlberg et al. 2007; Knudsen & Kramer 2007; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Villella 2010; Glacy et al. 2011; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [Gyrophora phaea](#)

**Note:** *U. phaea* is the most common *Umbilicaria* in CA, found throughout the state.

**Umbilicaria polyphylla** (L.) Baumg. 🍄 🌿

(Llano 1950; Jordan 1968; TJ; Hale & Cole 1988; Baltzo 1989; Ryan & Nash 1991; Goward et al. 1994; Robertson et al. 1998; Brodo et al. 2001 [pp. 706–707, with color photograph]; Hestmark 2004; Benson 2005; Hinds & Hinds 2007 [color photograph, p. 484, only]; *B. Ryan* 23483, Desolation Wilderness, Sierra Nevada, El Dorado Co., ASU)

**Synonyms:** [Gyrophora polyphylla](#)

**Umbilicaria polyrhiza** (L.) Fr. 🍄 🌿

(Hale 1969; Sigal & Toren 1976; Hale & Cole 1988; Baltzo 1989; Goward et al. 1994; Robertson 2005a; *B. Ryan* 24131, Burst Rock, edge of Emigrant Wilderness, Sierra Nevada, Tuolumne Co., ASU)

**Synonyms:** [Actinogyra polyrhiza](#), [Gyrophora diabolica](#), [G. polyrhiza](#)

**Umbilicaria proboscidea** (L.) Schrad. 🍄 🌿

(Ryan & Nash 1991; Brodo et al. 2001 [p. 707, with photograph, map shows range extending S to CA/Oregon border]; Tucker 2002; Hinds & Hinds 2007 [color photograph, p. 485, only]; *B. Ryan* 22180, E of town of Mammoth Lakes, Mono Co., ASU)

**Umbilicaria rigida** (Du Rietz) Frey 🍄 🌿

(Peterson 1997, 2003; Brodo et al. 2001 [pp. 707–708, with color photograph]; Tucker 2002; *E. Peterson* 2494, 2540, trail to Sanger Peak, Del Norte Co., OSC, ! B. McCune)

**Umbilicaria semitensis** Tuck. 🍄 🌿

(Tuckerman 1872; Willey 1873a; Tuckerman 1882; Eckfeldt 1893; Hasse 1895; McClatchie 1897; Orcutt 1903, 1907; Hasse 1908a or b; Herre 1911b; Hasse 1913b; Fink 1935; McCune & Curtis 2012)

**Synonyms:** [Gyrophora semitensis](#)

**Note:** McCune & Curtis distinguished between this species and *U. angulata*.

**Umbilicaria torrefacta** (Lightf.) Schrad. 🍄 🌿

(Llano 1950; TJ; Thomson 1984; Hale & Cole 1988; Tucker & Bratt 1995; Brodo et al. 2001 [p. 708, with color photograph]; Hestmark 2004; Robertson & Beyer 2005; Hinds & Hinds 2007 [color photograph, p. 486, only]; *B. Ryan* 24221, E of Dardanelle, Sierra Nevada, Tuolumne Co., ASU; *K. Knudsen* 488.3, Black Mtn, San Jacinto Mts, Riverside Co., UCR)

**Synonyms:** [Gyrophora erosa](#), [G. torrefacta](#)

**Umbilicaria vellea** (L.) Hoffm. 🍄 🌿

(TJ; Smith 1980; Thomson 1984; Poelt & Nash 1993; Tucker 2002; *J. Shevock* 13958, North Fork of Kings River Drainage, on Cow Creek below Rock Creek Rd, Fresno Co., ASU)

**Note:** This species is arctic/alpine and rare, only on high peaks in Arizona in Sonoran zone, *fide* Hestmark (2004). CA reports are all from central or northern CA. Collections should be compared with *U. americana*.

**Umbilicaria virginis** Schaer. 🍄 🌿

(Imshaug 1957; Hale 1969; Sigal & Toren 1976; Hale & Cole 1988; Brodo et al. 2001 [pp. 708–709, with color photograph]; Robertson 2003b; Hestmark 2004; Robertson & Beyer 2005; Knudsen & Kramer 2007; *B. Ryan* 24140, Burst Rock, edge of Emigrant Wilderness, Tuolumne Co., ASU)

**Synonyms:** [Gyrophora rugifera](#), [Omphalodiscus virginis](#), [U. rugifera](#)

*Umbilicaria hirsuta* var. *grisea* (Sw. ex Westr.) Th. Fr. 🍄 🌿

(Tuckerman 1882; McClatchie 1897)

=[U. hirsuta](#)

*Umbilicaria murina* DC. 🍄 🌿

(Tuckerman 1872; Willey 1873a; misidentifications of *U. americana*)

*Umbilicaria rugifera* Nyl. 🍄 🌿

(Tuckerman 1872; Willey 1873a; Tuckerman 1882; McClatchie 1897)

=[U. virginis](#)

**UNGUICULARIOPSIS** Rehm

\***Unguiculariopsis lettaui** (Grumann) Coppins 🍄 🌿

(Kocourková et al. 2009; Kocourková et al. 2012; parasymbiont on *Evernia prunastri*, Point Reyes,

Marin Co.)

\***Unguiculariopsis thallophila** (P. Karst.) W. Y. Zhuang 📖 🌿

(Etayo et al. 2007; Kocourková et al. 2012; K. Knudsen 2073, San Bernardino Mts, San Bernardino Co., on *Lecanora subrugosa*, UCR)

**URCEOLARIA** Hook. = **DIPLOSCHISTES**

*Urceolaria actinostoma* Ach. 📖 🌿

(Hasse 1898a)

= **Diploschistes actinostomus**

*Urceolaria albissima* (Ach.) Fink 📖 🌿

(Fink 1935)

= **Diploschistes diacapsis**

*Urceolaria gypsacea* Ach. 📖 🌿

(Hasse 1895, 1896, 1898a, 1903b; Orcutt 1903, 1907)

= **Diploschistes gypsaceus**

*Urceolaria scruposa* (Schreb.) Ach. 📖 🌿

(Bolander 1870; Tuckerman 1872; Hasse 1895, 1896, 1898a, 1903b, 1905)

= **Diploschistes scruposus**

*Urceolaria scruposa* subsp. *bryophylla* Nyl. 📖 🌿

(Hasse 1903e)

= **Diploschistes muscorum subsp. muscorum**

*Urceolaria scruposa* var. *gypsacea* (Ach.) Körb. 📖 🌿

(McClatchie 1897)

= **Diploschistes gypsaceus**

**USNEA** Dill. ex Adans.

**Usnea baileyi** (Stirt.) Zahlbr. 📖 🌿

(Clerc 2008; *H. Hasse s.n.*, San Gabriel Mts, Los Angeles Co., ASU, MIN)

**Note:** This rare species has been collected in southeastern U. S.

**Usnea brattiae** P. Clerc 📖 🌿

(Clerc 2008; Knudsen & Kocourková 2012a; *P. Clerc s.n.*, Haypress Reservoir, Santa Catalina Isl., Los Angeles Co., ASU)

**Note:** This species also occurs on Cedros Isl., Mexico.

**Usnea cavernosa** Tuck. 📖 🌿

(Motyka 1936–1938; Thomson & Ketchledge 1958; TJ; Thomson 1984; Hale & Cole 1988; Baltzo 1989; Tavares 1997b; Wright 1997, 2001b; Goward 1999; Brodo et al. 2001 [p. 714, with color photograph]; Baltzo 2002; Jovan & McCune 2004; Hinds & Hinds 2007 [color photograph, p. 492, only]; McCune & Geiser 2009; *S. Tucker 14932a*, near Gasquet, Del Norte Co., SBBG; *C. Bratt 7302*, Santa Rita Cyn Rd SW of Templeton, San Luis Obispo Co., SBBG)

**Usnea ceratina** Ach. 📖 🌿

(Herre 1910; Hasse 1913b; Herre 1945; Lindsay 1973; TJ; Hale & Cole 1988; von Reis 1991; Clerc & Herrera-Campos 1997; Goward 1999; Brodo et al. 2001 [p. 715, with color photograph]; Wright 2001b; Tucker 2002; Robertson 2003a; Ellyson & Sillett 2003; Robertson 2003b; Blauman 2004a; Jovan & McCune 2004; Tucker et al. 2004; Robertson 2005c; Williams & Sillett 2007; Clerc 2008; McCune & Geiser 2009; Glacy et al. 2011; Knudsen & Kocourková 2012a; *C. Bratt 1516a*, Santa Cruz Isl., Santa Barbara Co., ASU, SBBG, det. P. Clerc; *T. Nash 37002*, N of Crowbar Cyn, Montana de Oro S. P., San Luis Obispo Co., ASU)

**Synonyms:** **U. barbata var. ceratina**, **U. plicata var. megathamnia**, **U. californica** (fide Clerc 2008)

**Usnea chaetophora** Stirt. 📖 🌿

(Halonen et al. 1998; Wright 2001b; Ellyson & Sillett 2003; Jovan & McCune 2004; Williams & Sillett



2007)

**Note:** This species has been collected in Washington, British Columbia, Alaska, northeastern U. S., and Scandinavia.

**Usnea cirrhosa** Motyka 📷 🌿

(Clerc 2008)

**Note:** This species has been collected in Arizona, New Mexico, and Texas.

**Usnea cornuta** Körb. subsp. **cornuta** 📷 🌿

(Clerc & Herrera-Campos 1997; Tavares 1997b [intermediates between *U. cornuta* and *U. fragilescens*]; Halonen et al. 1998; Goward 1999; Bourell 2000; Wright 2001b; Tucker 2002; Ellyson & Sillett 2003; Jovan & McCune 2004; Tucker et al. 2004; Williams & Sillett 2007; Clerc 2008; McCune & Geiser 2009; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a; *R. Rosentreter 10121*, W of Crescent City, Redwood N. P., Del Norte Co., SRP; *P. Clerc s.n.*, below Black Jack Mtn, Santa Catalina Isl., Los Angeles Co., ASU)

**Usnea cornuta** subsp. **brasiliensis** (Zahlbr.) P. Clerc 📷 🌿

(Clerc 2008; Rotter 2010; *K. Knudsen 2580.2*, St. Elijo Lagoon, Pacific Coast, San Diego Co., UCR)

**Synonyms:** [U. brasiliensis](#)

**Usnea dasaea** Stirt. 📷 🌿

(Clerc & Herrera-Campos 1997; Tavares 1997b; Clerc 2008; Knudsen 2009; Knudsen & Kocourková 2012a; *P. Clerc s.n.*, Ridge Rd, Santa Cruz Isl., Santa Barbara Co., ASU; *K. Knudsen 6786.2*, San Miguel Isl., Santa Barbara Co., UCR; *S. Tucker 34602A*, Hastings Natural History Reserve, Carmel Valley, Monterey Co., SBBG)

**Note:** This species is more common in southeastern U. S., Mexico, and the Caribbean.

**Usnea dimorpha** (Müll. Arg.) Motyka 🌿

(*B. Ryan 27617a*, near entrance to Hollister Ranch, western end of Santa Ynez Mts, Santa Barbara Co., ASU)

**Note:** This species has been collected in Arizona, but is most common in Florida and Georgia.

**Usnea esperantiana** P. Clerc 📷 🌿

(Halonen et al. 1998; Bratt 1999; Goward 1999; Herrera-Campos et al. 2001; Ellyson & Sillett 2003; Jovan & McCune 2004; Clerc 2008; Knudsen 2009; McCune & Geiser 2009; Tucker 2010; Knudsen & Kocourková 2012a; *C. Printzen s.n.*, Santa Cruz Isl., Santa Barbara Co., ASU; *C. Bratt s.n.*, Refugio Pass, Santa Ynez Mts, Santa Barbara Co., ASU)

**Note:** This species has also been collected in Oregon, Washington, and Mexico.

**Usnea filipendula** Stirt. 📷 🌿

(Pinelli & Jordan 1978; TJ; Tavares 1997b; Wright 1997; McGee 1998; Goward 1999; Brodo et al. 2001 [p. 718, with color photograph]; Wright 2001b; Baltzo 2002; Robertson 2002a; Ellyson & Sillett 2003; Thomson 2003; Blauman 2004a; Jovan & McCune 2004; Tucker et al. 2004; Hinds & Hinds 2007 [color photograph, p. 495, only]; Williams & Sillett 2007; Rotter 2010; Glacy et al. 2011; *B. Ryan 11146*, Hastings Natural History Reserve, Carmel Valley, Monterey Co., ASU; *S. Tucker 31881b*, Indian Valley Cpgd, W of Downieville, Tahoe N. F., Sierra Co., SBBG)

**Synonyms:** [U. dasypoga](#) (Ach.) Shirley

**Note:** This species is not mentioned for S CA by Clerc 2008, although he says it is close to *U. scabrata* (p. 329), which is in S CA.

**Usnea flavocardia** Räsänen 📷 🌿

(Clerc 2004; Knudsen 2007b; Clerc 2008; Williams & Sillett 2007; Knudsen 2009; McCune & Geiser 2009; Rotter 2010; Tucker 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a; *P. Clerc s.n.*, Haypress Reservoir, Santa Catalina Isl., Los Angeles Co., ASU; *S. Tucker 6287b*, SE of Saratoga Gap, on Skyline Dr, ridge next to Castle Rock, Santa Cruz Co., SBBG)

**Synonyms:** [U. wirthii](#)

**Usnea fragilescens** Hav. ex Lyngé 📷 🌿

(Brodo et al. 2001 [pp. 718–719, with color photograph]; Jovan & McCune 2004; Clerc 2008; Rotter

2010; Benson et al. 2012 [as “cf.”]; Knudsen & Kocourková 2012a; *C. Bratt* 5856, Ridge Rd, Santa Cruz Isl., Santa Barbara Co., SBBG; *S. Tucker* 5356b, Mt. Tamalpais, Marin Co., SBBG)

**Usnea fragilescens** var. **mollis** (Vain.) P. Clerc 📷 🌿

(Egan 1989; Goward 1999 Ellyson & Sillett 2003; Williams & Sillett 2007)

**Synonyms:** [U. mollis](#)

**Usnea fragilescens** / **U. cornuta** Körb. group intermediates 📷 🌿

(Tavares 1997b; Baltzo 2002; Robertson 2002a)

**Usnea fulvoreaegens** (Räsänen) Räsänen 📷 🌿

(Jordan 1968; Lindsay 1973; Pinelli & Jordan 1978; TJ; Hale & Cole 1988; Tavares 1997b; Wright 2001b; Baltzo 2002; Tucker et al. 2004; Hinds & Hinds 2007 [color photograph, p. 497, only]; Clerc 2008; Knudsen & Kocourková 2012a; *T. Nash* 8117, Seal Point S of Monterey, Monterey Co., ASU; *C. Bratt* 1525a, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Synonyms:** *U. glabrescens* var. *fulvoreaegens* Räsänen

**Usnea glabrata** (Ach.) Vain. 📷 🌿

(Motyka 1936–1938; Thomson & Ketchledge 1958; TJ; Hale & Cole 1988; Doell & Wright 1996; Hill 1997; Tavares 1997b; Wright 1997; McGee 1998; Goward 1999; Brodo et al. 2001 [p. 719, with color photograph]; Wright 2001b; Baltzo 2002; Jovan & McCune 2004; Knudsen 2007b; Clerc 2008; Tucker 2010; Knudsen & Kocourková 2012a; *C. Bratt* 1765, Ridge Rd, Santa Cruz Isl., Santa Barbara Co., ASU; *K. Knudsen* 11590.2, Leo Carrillo S. P., Santa Monica Mts, Los Angeles Co., UCR)

**Synonyms:** [U. kujalae](#)

**Note:** I. Tavares (personal communication) regarded *U. kujalae* (characterized by tiny papillae) and *U. glabrata* as separate species.

**Usnea hirta** (L.) F. H. Wigg. subsp. **hirta** 📷 🌿

(Hasse 1898a, 1903d; Herre 1906, 1910; Hasse 1913b; Merrill 1923; TJ; Sweet 1983; Thomson 1984; Hill 1997; Tavares 1997b; Wright 1997; Goward 1999; Brodo et al. 2001 [pp. 720–721, with color photograph]; Wright 2001b; Robertson 2003a, 2003b; Jovan & McCune 2004; Benson 2005; Hinds & Hinds 2007 [color photograph, p. 499, only]; Williams & Sillett 2007; Clerc 2008; Benson & Hillyard 2012; Knudsen & Kocourková 2012a; *B. Ryan* 26671, NNE of Hollister, Merced Co., ASU; *C. Bratt* 8050, Ridge Rd, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Synonyms:** [U. barbata](#) var. *hirta*, [U. florida](#) f. *hirta*

**Note:** Western N. Amer. material identified as this species differs from that in eastern U. S. and Europe, and may be, at least in part, misidentified.

**Usnea lapponica** Vain. 📷 🌿

(von Reis 1991; Tavares 1997b; Goward 1999; Brodo et al. 2001 [p. 721, with color photograph]; Wright 2001b [included it under *U. glabrescens* s. l., but did not state that it is in CA]; Thomson 2003; Jovan & McCune 2004; Knudsen 2007b; Williams & Sillett 2007; Clerc 2008; Knudsen 2009; Rotter 2010; Tucker 2010; Benson et al. 2012 [as “cf.”]; Knudsen & Kocourková 2012a; *S. Tucker* 34111b, 3 mi. E of Kyburz on American River, El Dorado Co., SBBG, ! P. Clerc; *K. Knudsen* 4343, Leo Carrillo S. P., Santa Monica Mts, Los Angeles Co., UCR)

**Usnea longissima** Ach. 📷 🌿

(Herre 1906, 1907, 1910; Howe 1914–1915; Herre 1945, 1963; TJ; Sweet 1983; Hale & Cole 1988; Doell 1997; Tavares 1997b; Wright 1998; Goward 1999; Doell & Wright 2000; Brodo et al. 2001 [pp. 721–723, with color photograph]; Wright 2001b; Ellyson & Sillett 2003; Thomson 2003; Blauman 2004a; Doell 2007b [in Santa Cruz Co.]; Hinds & Hinds 2007 [color photograph, p. 500, only]; Williams & Sillett 2007; McCune & Geiser 2009; *R. Rosentreter* 10123, Redwood N. P. W of Crescent City, Del Norte Co., SRP; *A. Herre* 186, Purissima Creek, Santa Cruz Mts, Santa Cruz Co., MIN)

**Usnea mirabilis** Motyka 📷 🌿

(Motyka 1936–1938; TJ; in *U. rubicunda* group, *vide* Tavares 1997b)

**Note:** This species has rarely been reported in the U. S.; two collections from Florida and one from Louisiana at MICH were all det. A. Herre.

**Usnea monstrosa** Vain. 📷 🌿

(Motyka 1936–1938; TJ)

**Note:** There are no collections of this species known from N. Amer.

**Usnea mutabilis** Stirt. 📷 🌿

(Motyka 1936–1938; Lindsay 1973; TJ; Riefner, Bowler, & Ryan 1995; Hill 1996; Tavares 1997b; Brodo et al. 2001 [p. 723, with color photograph]; Wright 2001b; Thomson 2003; Hinds & Hinds 2007 [color photograph, p. 502, only]; Clerc 2008; Benson et al. 2012; Knudsen & Kocourková 2012a; *B. Ryan 30908A*, Santa Catalina Isl., Los Angeles Co., ASU, ! P. Clerc; *C. Bratt 6576a*, Elfin Forest, N of Baywood, southern end of Morro Bay, San Luis Obispo Co., SBBG, det. P. Clerc)

**Usnea pacificana** P. Halonen 📷 🌿

(Halonen 2000; Wright 2001b; Jovan & McCune 2004; Williams & Sillett 2007; McCune & Geiser 2009)

**Note:** Two collections (F) of this species were identified by D. Wright: one by *W. Follett s.n.*, Plumas Co., and the other *C. Brown 357*, probably Marin Co. Other collections have been reported from Oregon and Alaska.

**Usnea parvula** Motyka 📷 🌿

(Clerc 2008; *C. Bratt 1428A*, Orcutt Hill N of Los Alamos, Santa Barbara Co., ASU, SBBG, det. P. Clerc; *T. Nash 38711*, San Nicolas Isl., Ventura Co., SBBG, det. P. Clerc)

**Note:** This species has been collected extensively in Arizona, Texas, and Mexico.

**Usnea praetervisa** (Asah.) P. Clerc 📷 🌿

(Clerc 2004; Clerc 2008)

**Note:** The only U. S. collections reported of this species are from Maine and Vermont (NY).

**Usnea quasirigida** Lendemer & I. I. Tav. 📷 🌿

(Lendemer & Tavares 2003; *A. Herre s.n.*, Page Mill Rd, Black Mtn, Santa Clara Co., MIN; *S. Tucker 37791*, Sugarloaf Ridge S. P., Sonoma Co., SBBG)

**Synonyms:** [U. arizonica](#), [U. intermedia](#), [U. retifera](#), [U. rigida](#)

**Usnea rubicunda** Stirt. 📷 🌿

(Motyka 1936–1938; Jordan 1968; Lindsay 1973; TJ; Hale & Cole 1988; von Reis 1991; McGee 1995; Bowler et al. 1996; Hill 1996; Tavares 1997b; Goward 1999; Bourell 2000; Brodo et al. 2001 [pp. 723–724, with color photograph]; McGee 2001; Wright 2001b; Baltzo 2002; Robertson 2002a; Ellyson & Sillett 2003; Thomson 2003; Jovan & McCune 2004; Tucker et al. 2004; Robertson 2005b; Hinds & Hinds 2007 [color photograph, p. 503, only]; Williams & Sillett 2007; Clerc 2008; Knudsen 2009; Rotter 2010; Glacy et al. 2011; Benson et al. 2012; Benson & Hillyard 2012; Knudsen & Kocourková 2012a; *C. Bratt 4502*, Saucos Cyn, Santa Cruz Isl., Santa Barbara Co., ASU, SBBG; *T. Nash 40693*, Point Arena near Pacific Ocean, Mendocino Co., ASU)

**Misapplied names:** [U. hirta f. rubiginosa](#), [U. rubiginea](#)

**Usnea scabrata** Nyl. 📷 🌿

(Jordan 1968; Baltzo 1970; TJ; Doell & Wright 1996; Tavares 1997b; Wright 1997; Brodo et al. 2001 [p. 724, with color photograph]; Wright 2001b [as s. l.]; Baltzo 2002; Ellyson & Sillett 2003; Jovan & McCune 2004; Williams & Sillett 2007; Clerc 2008; McCune & Geiser 2009; Knudsen & Kocourková 2012a; *C. Bratt 5524*, Casmalia Rd, Vandenberg Air Force Base, near Lompoc, Santa Barbara Co., ASU, SBBG, det. P. Clerc; *T. Nash 32471*, Santa Cruz Isl., Santa Barbara Co., ASU, det. P. Clerc)

**Synonyms:** [U. dasypoga var. scabrata](#), [U. plicata](#), [U. scabiosa](#)

**Usnea silesiaca** Motyka 📷 🌿

(Tavares 1997b, 1998; Clerc 2008; McCune & Geiser 2009; *P. Clerc s.n.*, Santa Cruz Isl., Santa Barbara Co., ASU; *S. Tucker 31756C*, Armstrong Redwoods S. P., Sonoma Co., SBBG)

**Synonyms:** [U. madeirensis](#)

**Note:** I. Tavares regarded this and *U. madeirensis* as distinct species (personal communication, Oct 2004).

**Usnea subcornuta** Stirt. 📷 🌿

(Tavares 1997b [as *subcornuta* group]; Brodo et al. 2001 [p. 724]; *S. Tucker* 28937b, Point Reyes, Sonoma Co., SBBG)

**Usnea subfloridana** Stirt. 📖 🌿

(Lindsay 1973; Pinelli & Jordan 1978; TJ; Sweet 1983; Thomson 1984; Hale & Cole 1988; von Reis 1991; Tavares 1997b; Wright 1997; McGee 1998; Goward 1999; Baltzo 2002; Jovan & McCune 2004; Tucker et al. 2004; Hinds & Hinds 2007 [color photograph, p. 507, only]; Clerc 2008; Rotter 2010; Benson et al. 2012 [as “cf.”]; Knudsen & Kocourková 2012a; *P. Clerc s.n.*, Black Mtn, Santa Rosa Isl., Santa Barbara Co., ASU; *C. Bratt 10030a*, E of Potter Valley near Lake Pillsbury, Lake Co., SBBG)

**Synonyms:** [U. comosa](#), [U. comosa subsp. similis](#)

**Usnea subgracilis** Vain. 📖 🌿

(Tavares 1997b [as “*U. subgracilis* group”], 1998; Wright 1998; Lendemer 2006b)

**Synonyms:** [U. hesperina](#)

**Note:** Clerc (2008) included *U. subgracilis* under *U. schadenbergiana*, without mentioning presence in CA, but in Truong et al. (2013) Clerc and colleagues re-examined European material and determined that the two are distinct. Lendemer (2006b) considers *U. subgracilis* distinct from *U. schadenbergiana* on the basis of chemical differences.

**Usnea subscabrosa** Motyka 📖 🌿

(Clerc 2008; Glacy et al. 2011; Knudsen & Kocourková 2012a; *K. Knudsen 9861*, Point Reyes Nat. Seashore, Marin Co., UCR; *S. Tucker 35764d*, Santa Cruz Isl., Santa Barbara Co., ASU, SBBG)

**Note:** This species also occurs in southeastern U. S.

**Usnea substerilis** Motyka 📖 🌿

(Thomson & Ketchledge 1958; TJ; Thomson 1984; Doell & Wright 1996; Tavares 1997b; McGee 1998; Goward 1999; Baltzo 2002; Jovan & McCune 2004; Benson 2005; Clerc 2008; Tucker 2010; *P. Clerc s.n.*, Refugio Pass, Santa Ynez Mts, Santa Barbara Co., ASU; *S. Tucker 34111d*, 3 mi. E of Kyburz on American River, El Dorado Co., SBBG, ! Clerc)

**Synonyms:** *U. soreidifera* sensu Motyka

**Note:** According to I. Tavares (personal communication), this is the most common short sterile species in CA, especially inland and in the northern half of the state.

**Usnea wasmuthii** Räsänen 📖 🌿

(Tavares 1997b [as “near *U. wasmuthii*”]; Jovan & McCune 2004; Clerc 2008; McCune & Geiser 2009; *P. Clerc s.n.*, below Black Jack Mtn, Santa Catalina Isl., Los Angeles Co., ASU; *S. Tucker 31756b*, Armstrong Redwoods S. P. N of Guerneville, Sonoma Co., SBBG, ! P. Clerc)

**Note:** This species has also been collected in Wisconsin and Alaska.

**Usnea arizonica** Motyka 📖 🌿

(Motyka 1936–1938; Thomson & Ketchledge 1958; Jordan 1968; Baltzo 1970; Pinelli & Jordan 1978; TJ; Baltzo 1989; Doell & Wright 1996; Hill 1997; Tavares 1997b; McGee 1998; Tavares & Sanders 1998; Bourell 2000; Brodo et al. 2001 [p. 713, with color photograph]; Wright 2001b; Baltzo 2002; Robertson 2002a, 2003a, 2003b; Blauman 2004a; Jovan & McCune 2004; Tucker et al. 2004; Robertson 2005c; Clerc 2008)

=[U. quasirigida](#)

**Usnea articulata** (L.) Hoffm. 📖 🌿

(Hue 1899; Herre 1910; Howe 1912a, 1912b; Hasse 1913b; Howe 1914–1915; misidentifications)

**Usnea australis** Fr. 📖 🌿

(Motyka 1936–1938; doubtful record)

**Usnea barbata** (L.) F. H. Wigg. 📖 🌿

(TJ for references; misidentifications for N. Amer.; this name was used widely for many different taxa)

**Usnea barbata** var. *ceratina* (Ach.) Schaer. 📖 🌿

(Tuckerman 1866)

=[U. ceratina](#)

**Usnea barbata** var. *hirta* (L.) Fr. 📖 🌿

(Hasse 1895, 1896; McClatchie 1897; Hasse 1903a; Orcutt 1903, 1907)

=[\*U. hirta\* subsp. \*hirta\*](#)

*Usnea barbata* f. *rubiginea* (Michx.) Tuck. 📖 🌿

(Tuckerman 1866 [as *U. barbata* var. *hirta* f. *rubiginea*])

=[\*Usnea strigosa\* subsp. \*rubiginea\*](#) (probably misapplied to *U. rubicunda*)

*Usnea barbata* var. *rubiginea* (Michx.) Tuck. 📖 🌿

(Torrey 1856; Eckfeldt 1893; Orcutt 1903, 1907)

=[\*Usnea strigosa\* subsp. \*rubiginea\*](#) (probably misapplied to *U. rubicunda*)

*Usnea barbata* f. *rubiginosa* Michx. 📖 🌿

(Hasse 1903a, perhaps a spelling error for *rubiginea*)

=[\*U. rubicunda\*](#)

*Usnea brasiliensis* (Zahlbr.) Motyka 📖 🌿

(Knudsen & Kocourková 2012a)

=[\*U. cornuta\* subsp. \*brasiliensis\*](#)

*Usnea californica* Herre 📖 🌿

(Herre 1906, 1907, 1910; Howe 1910a, 1914–1915; Motyka 1936–1938; Malachowski 1975; TJ; McGee 1995; Riefner, Bowler, & Ryan 1995; Tavares 1997b; Wright 1997; McGee 1998; Brodo et al. 2001 [p 715]; Baltzo 2002; Robertson 2002a; Rotter 2010; Benson et al. 2012)

=[\*U. ceratina\*](#)

**Note:** I. Tavares considers *U. californica* distinct on the basis that *U. californica* specimens have a pinkish medulla and axis plus diffractaic acid.

*Usnea canariensis* DC. 🌿

**Synonyms:** [\*Alectoria canariensis\*](#) (misidentifications for North America)

*Usnea comosa* (Ach.) Ach. 📖 🌿

(Motyka 1936–1938; Thomson & Ketchledge 1958)

=[\*U. subfloridana\*](#)

*Usnea comosa* subsp. *similis* Motyka 📖 🌿

(Baltzo 1970)

=[\*U. subfloridana\*](#)

*Usnea condensata* Motyka 📖 🌿

(Malachowski 1975, but misidentification, *fide* Tavares 1997b; TJ; Robertson 2002a)

**Note:** *U. condensata* is probably a neotropical species, and unlikely to occur in CA. Tavares indicated that the Robertson collection was misidentified.

*Usnea dasypoga* (Ach.) Shirley 📖 🌿

(Hasse 1898a [as *U. dasycarpa*, in error]; Herre 1906, 1907, 1910; Hasse 1913b; Merrill 1923; Motyka 1936–1938; Herre 1945; Thomson & Ketchledge 1958; Thomson 1984)

=[\*U. filipendula\*](#) (synonymy *fide* Santesson 1984, without reference to CA)

*Usnea dasypoga* var. *scabrata* Nyl. 📖 🌿

(Hasse 1903c, 1906)

=[\*U. scabrata\*](#)

*Usnea deformis* Motyka 📖 🌿

(Motyka 1936–1938; TJ)

**Note:** CA specimens labeled *U. deformis* resemble the *U. fragilescens*-*U. cornuta* group, *fide* Tavares 1997b. No specimens were found. This species is not mentioned for CA (Clerc 2008) or for Oregon by McCune & Geiser (1997). A collection from Guatemala is in the Field Museum (F).

*Usnea diplotypus* Vain. 📖 🌿

(Jovan & McCune 2004)

**Note:** According to Clerc 2008, this species occurs in the high mountains of Arizona and Mexico, but not CA. The report by Jovan & McCune is for N CA. No collections were found.

*Usnea florida* (L.) F. H. Wigg. 📖 🌿

- (Hasse 1898a; Herre 1906, 1907, 1910; Howe 1914–1915; Herre 1950a; TJ; probably misidentifications of *U. quasirigida*)
- Usnea florida* f. *hirta* (L.) Ach. 📖 🌿  
(Howe 1914–1915)  
=[U. hirta subsp. hirta](#)
- Usnea glabrescens* (Nyl. ex Vain.) Vain. 📖 🌿  
(Wright 2001b [as s. l. including *U. fulvoreaegens*]; Thomson 2003; Jovan & McCune 2004)  
**Note:** Clerc 2008 lists *U. glabrescens* var. *fulvoreaegens* Räsänen as a synonym of *U. fulvoreaegens*.
- Usnea hesperina* Motyka 📖 🌿  
(Goward 1999; Brodo et al. 2001 [p. 720, with color photograph]; Wright 2001b; Tucker 2002; Lendemer 2006b)  
=[U. subgracilis](#)
- Usnea hirta* f. *rubiginosa* Michx. 📖 🌿  
(Hasse 1898a)  
=[Usnea strigosa subsp. rubiginea](#) (probably referred to *U. rubicunda*; “*rubiginosa*” may be a spelling error on Hasse's part)
- Usnea intermedia* (A. Massal.) Jatta 📖 🌿  
(McCune & Geiser 2009; Glacy et al. 2011; Miller 2011)  
=[U. quasirigida](#)
- Usnea jubata* Fr. 📖 🌿  
(Orcutt 1885, 1907)  
=misidentifications of *Bryoria* spp.
- Usnea kujalae* Räsänen 📖 🌿  
(Tavares 1997b; McGee 1998; Baltzo 2002)  
=[U. glabrata](#) (synonymy *fide* Esslinger 2011)
- Usnea madeirensis* Motyka 📖 🌿  
(Clerc 1991; Goward 1999; Ellyson & Sillett 2003; Lendemer 2006b)  
=[U. silesiaca](#)  
**Note:** I. Tavares (personal communication, Oct., 2004) regarded *U. madeirensis* and *U. silesiaca* as distinct species.
- Usnea mollis* Stirt. 📖 🌿  
(Lindsay 1973; TJ)  
=[U. fragilescens var. mollis](#)
- Usnea occidentalis* Motyka 📖 🌿  
(Malachowski 1975; TJ; Robertson 2002a)  
**Note:** According to I. Tavares, Malachowski material by this name seen by her is not correctly identified. The report by Robertson repeated the earlier report.
- Usnea ochroleuca* Hoffm. 📖 🌿  
(Orcutt 1885, 1903, 1907; Howe 1910a; Fink 1935)  
=[Alectoria ochroleuca](#), but misidentifications for CA
- Usnea pendulina* Motyka / *U. graciosa* group 📖 🌿  
(Tavares 1997b; Baltzo 2002; Clerc & Truong (2009) listed *U. pendulina* as a synonym of *U. scabrata*)
- Usnea pensylvanica* Motyka (misidentifications, *fide* I. Tavares [personal communication]; 🌿  
only in eastern U. S.)
- Usnea plicata* (L.) Weber 📖 🌿  
(Herre 1906, 1907; Howe 1910a; Fink 1935; misidentifications)  
=[U. scabrata](#), *fide* Clerc & Truong (2009)
- Usnea plicata* var. *megathamnia* Howe 📖 🌿  
(Howe 1914–1915)  
=[U. ceratina](#)

*Usnea retifera* Motyka 📖 🌿

(Motyka 1936–1938; TJ)

=[\*U. quasirigida\*](#)

**Note:** *Usnea retifera* is based on material collected by Gustav Eisen at Short Hair Creek, probably near the present-day Wishon Lake, Fresno Co.

*Usnea rigida* Motyka 📖 🌿

(Goward 1999; not in CA, *fide* I. Tavares; Miller 2011 for discussion of *U. rigida* group)

=[\*U. quasirigida\*](#) (synonymy *fide* Lendemer & Tavares 2003, but lacking inclusion of CA material)

**Note:** Goward (1999) gave the range of *U. rigida* as “S to CA” but did not cite any collections. Miller (2011) cited *U. rigida* in CA, under several different names, and resulting in considerable controversy over the name *U. rigida*.

*Usnea rubiginea* (Michx.) A. Massal. 📖 🌿

(Herre 1906, 1910; Hasse 1913b; Merrill 1923; Malachowski 1975)

=[\*Usnea strigosa\* subsp. \*rubiginea\*](#) (but Herre likely misapplied this name to *U. rubicunda*)

*Usnea scabiosa* Motyka 📖 🌿

(TJ; Hale & Cole 1988; Tavares 1997b; Wright 1997; Halonen et al. 1998; McGee 1998; Brodo et al. 2001 [p. 724]; Wright 2001b [as *U. scabrata* s. l.]; Baltzo 2002; Tucker 2002)

=[\*U. scabrata\*](#)

**Note:** According to I. Tavares (personal communication), *U. scabiosa* has several forms in CA.

*Usnea schadenbergiana* Göpp. & Stein 📖 🌿

(Clerc 2008; Hinds & Hinds 2007 [color photograph, p. 505, only]; Truong et al. 2013)

**Note:** Clerc's initial inclusion of *U. subgracilis* under the European *U. schadenbergiana* was changed in Truong et al. (2013), when the two species were determined as distinct. So there are no records of this species for CA.

*Usnea soreidifera* sensu Motyka non (Arnold) Lynge 📖 🌿

(Motyka 1936–1938)

=[\*U. lapponica\*](#), *fide* Esslinger (2011)

**Note:** *U. soreidifera* and *U. substerilis* are conspecific according to I. Tavares and Clerc & Truong (2009).

*Usnea strigosa* (Ach.) A. Eaton subsp. *rubiginea* (Michx.) I. I. Tav. 📖 🌿

=misidentifications (Tavares, personal communication)

**Synonyms:** [\*U. rubiginea\*](#), [\*U. barbata\* f. \*rubiginea\*](#), [\*U. barbata\* var. \*rubiginea\*](#), [\*U. barbata\* f. \*rubiginosa\*](#), [\*U. hirta\* f. \*rubiginosa\*](#)

*Usnea subfusca* Stirt. 📖 🌿

(Baltzo 1970, but misidentification, *fide* I. Tavares; Tavares & Sanders 1998)

**Note:** According to Clerc & Herrera-Campos (1997) this taxon occurs only in eastern U. S.

*Usnea trichodea* Ach. 📖 🌿

(Baltzo 1970)

**Note:** Hale (1979) reported that it is not in CA, and I. Tavares agreed [personal communication].

*Usnea vrieseana* Mont. & Bosch 📖 🌿

(Howe 1914–1915; current name not known)

*Usnea wirthii* P. Clerc 📖 🌿

(Clerc & Diederich 1991; McGee 1995; Doell & Wright 1996; Hill 1996; Clerc & Herrera-Campos 1997; Tavares 1997b; McGee 1998; Tavares et al. 1998; Goward 1999; Bourell 2000; Herrera-Campos et al. 2001; McGee 2001; Wright 2001b; Baltzo 2002; Jovan & McCune 2004; Tucker et al. 2004; Robertson 2005b)

=[\*U. flavocardia\*](#)

**VAHLIELLA** P. M. Jørg. (Jørgensen 2008)

**Vahliella californica** (Tuck.) P. M. Jørg. 📖 🌿

(Jørgensen 2008; Knudsen & Kocourková 2012a)

**Synonyms:** [Fuscopannaria californica](#), [Pannaria microphylla f. californica](#)

**Vahliella labrata** (P. M. Jørg.) P. M. Jørg. 📖 🌿

(Jørgensen 2008; Knudsen & Kocourková 2012a; CA endemic)

**Synonyms:** [Fuscopannaria labrata](#)

**Vahliella leucophaea** (Vahl) P. M. Jørg. 📖 🌿

(Jørgensen 2008; Knudsen & Kocourková 2012a; *B. Ryan 25119b*, edge of Marble Mtn Wilderness, Siskiyou Co., ASU; *C. Bratt 6210*, Nacimiento-Ferguson Rd, Santa Lucia Mts, Monterey Co., SBBG; *T. Nash 32235*, Santa Catalina Isl., Los Angeles Co., ASU)

**Synonyms:** [Fuscopannaria leucophaea](#), [Pannaria leucophaea](#), [P. microphylla](#), [Parmeliella microphylla](#), [Pannularia microphylla](#)

**Vahliella saubinetii** (Mont.) P. M. Jørg. 📖 🌿

(Jørgensen 2008)

**Synonyms:** [Pannaria saubinetii](#), [Parmeliella saubinetii](#)

**Note:** Jørgensen (2001a) gave its distribution as humid lowlands along the Pacific Coast north of British Columbia, with no mention of CA. He said that many collections labeled as *F. saubinetii* are referable to *F. pacifica*. According to Brodo et al. (2001, p. 324 with color photograph), *F. saubinetii* occurs in the Pacific Northwest. Tucker (2002) discussed old CA reports needing checking.

**VERMILACINIA** Spjut & Hale = [NIEBLA](#)

**Vermilacinia acicularis** Spjut 📖 🌿

(Spjut 1996; Bratt 1999)

= [Niebla ceruchoides](#)

**Vermilacinia cephalota** (Tuck.) Spjut & Hale 📖 🌿

(Spjut 1996; McGee 1998; Wright 1998; Bourell 2000; Baltzo 2002)

= [Niebla cephalota](#)

**Vermilacinia cerebra** Spjut 📖 🌿

(Spjut 1996; Bratt 1999)

= [Niebla ceruchis](#) (Bowler & Marsh 2004)

**Vermilacinia ceruchoides** (Rundel & Bowler) Spjut 📖 🌿

(Spjut 1996; Robertson & Robertson 2002)

= [Niebla ceruchoides](#)

**Vermilacinia combeoides** (Nyl.) Spjut & Hale 📖 🌿

(Spjut 1996; Bourell 2000; Baltzo 2002; Robertson & Robertson 2002)

= [Niebla combeoides](#)

**Vermilacinia corrugata** Spjut 📖 🌿

(Spjut 1996)

= [Niebla ceruchis](#) (Bowler & Marsh 2004)

**Vermilacinia howei** Spjut 📖 🌿

(Spjut 1996)

= [Niebla ceruchis](#) (Bowler & Marsh 2004)

**Vermilacinia laevigata** (Rundel & Bowler) Spjut 📖 🌿

(Spjut 1996; Robertson & Robertson 2002; Benson & Hillyard 2012; Benson 2012a; color photograph on front cover of CALS Bulletin 5(2), 1998)

= [Niebla laevigata](#)

**Vermilacinia leopardina** Spjut 📖 🌿

(Spjut 1996; Bratt 1997)

= [Niebla ceruchis](#) (Bowler & Marsh 2004)



- Vermilacinia nylanderi* Spjut 📖 🌿  
 (Spjut 1996; Bratt 1999)  
 =[Niebla ceruchis](#) (Bowler & Marsh 2004)
- Vermilacinia paleoderma* Spjut 📖 🌿  
 (Spjut 1996)  
 =[Niebla laevigata](#)
- Vermilacinia polymorpha* (Bowler, J. E. Marsh, T. H. Nash & Riefner) Spjut 📖 🌿  
 (Spjut 1996)  
 =[Niebla polymorpha](#) (Bowler & Marsh 2004)
- Vermilacinia procera* (Rundel & Bowler) Spjut 📖 🌿  
 (Spjut 1996; Robertson & Robertson 2002; color photograph on back cover of CALS Bulletin 8 [2], 2001)  
 =[Niebla procera](#)
- Vermilacinia pumila* Spjut 📖 🌿  
 (Spjut 1996; Bratt 1999)  
 =[Niebla ceruchooides](#)
- Vermilacinia robusta* (R. Howe) Spjut & Hale 📖 🌿  
 (Spjut 1996)  
 =[Niebla robusta](#)
- Vermilacinia tigrina* (Follmann) Spjut & Hale 📖 🌿  
 (Spjut 1996)  
 =[Niebla tigrina](#), but not in N. Amer., at least not the Sonoran region, *fide* Bowler & Marsh 2004
- Vermilacinia tuberculata* (Riefner, Bowler, J. E. Marsh & T. H. Nash) Spjut 📖 🌿  
 (Spjut 1996)  
 =[Niebla tuberculata](#)
- Vermilacinia zebrina* Spjut 📖 🌿  
 (Spjut 1996)  
 =[Niebla ceruchis](#) (Bowler & Marsh 2004)

## **VERRUCARIA** Schrad.

- Verrucaria acrotella** Ach. 📖 🌿  
 (TJ; Breuss 2008; *K. Knudsen 8231*, Montana de Oro S. P., San Luis Obispo Co., UCR)  
**Synonyms:** [V. margacea var. acrotella](#)
- Verrucaria adelminienii** Zschacke 📖 🌿  
 (Breuss 2008 [cited one collection, Santa Rosa Isl.]; Knudsen & Kocourková 2012a; *T. Nash 32796*, below Barton Point, Santa Rosa Isl., Santa Barbara Co., ASU)
- Verrucaria aethiobola** Wahlenb. 📖 🌿  
 (Hasse 1898a; Herre 1912b; Hasse 1913b; Fink 1935; Sigal 1975; TJ; Hawksworth 1989; Sigal 1989; Bourell 2000; Tucker et al. 2004 [as “cf.”]; Breuss 2008 [citing *K. Knudsen 2805*, Mt. Palomar S. P., San Diego Co., UCR])  
**Synonyms:** [V. aquilella](#) Nyl. (synonymy *fide* Purvis et al. p. 633)
- Verrucaria amylycea** Hepp 📖 🌿  
 (Breuss 2008; Knudsen & Kocourková 2010a, citing a Hasse collection, det. O. Breuss; Tucker 2010; *K. Knudsen 7450*, Santa Rosa Isl., Santa Barbara Co., UCR; *K. Knudsen 4923*, Montana de Oro S. P., San Luis Obispo Co., UCR)
- Verrucaria aspecta** Breuss 📖 🌿  
 (Breuss 2008; Knudsen & Kocourková 2012a; *Wetmore 73757*, Santa Rosa Isl., Santa Barbara Co., MIN; CA endemic)
- \*Verrucaria bernardinensis** Breuss 📖 🌿  
 (Knudsen 2006a; Breuss 2008; Knudsen & Werth 2008; Kocourková et al. 2012; *K. Knudsen 7983*,

Granite Mts, San Bernardino Co., UCR, parasite on *Staurothele drummondii*, *S. monicae*, *Acarospora strigata*, etc.; *K. Knudsen 13117*, Joshua Tree N. P., Mojave Desert, Riverside Co., UCR)

**Verrucaria calkinsiana** Servít 📖 🌿

(Knudsen 2007b; Breuss 2008; Knudsen 2009; Knudsen & Kocourková 2009c, 2010f; Tucker 2010; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *T. Nash 38915*, San Nicolas Isl., Ventura Co., ASU; *K. Knudsen 5611*, Santa Monica Mts, Ventura Co., ASU, UCR)

**\*Verrucaria cetera** Breuss 📖 🌿

(Knudsen 2007b; Breuss 2008; Knudsen 2009; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *T. Nash 41414*, southern side of Green Mtn, San Miguel Isl., Santa Barbara Co., ASU, juvenile parasite on *Staurothele areolata*; *K. Knudsen 13857*, Wildomar, Menifee Hills, Riverside Co., UCR)  
**Note:** This species is close to *V. bernardinensis* and *V. inficiens*. CA was not mentioned in the original description (Breuss 1998). Material previously identified as *Catapyrenium plumbeum* may include this species.

**\*Verrucaria compacta** (A. Massal.) Jatta 📖 🌿

(Knudsen & La Doux 2005; Breuss 2008; Knudsen & Werth 2008; Kocourková et al. 2012; *K. Knudsen 1135*, plateau below Santa Rosa Mtn, Riverside Co., UCR, det. O. Breuss)  
**Note:** This name may have been misapplied for *Heteroplacidium zamenhofiana*.

**Verrucaria dacryodes** Nyl. 📖 🌿

(Hasse 1903f, 1913b; TJ; Breuss 2008; Knudsen & Kocourková 2010a; *H. Hasse s.n.*, Santa Monica Mts, Los Angeles Co., UCR, MIN; CA endemic)

**Verrucaria dolosa** Hepp 📖 🌿

(Breuss 2008; Knudsen & Kocourková 2010a, citing Hasse 513 [as *V. integrella*, NYL-H; rather rare, S CA]; Glacy et al. 2011; *K. Knudsen 9917*, Golden Gate Nat. Recreation Area, W of Rock Spring, Marin Co., UCR; *K. Knudsen 9977*, Limekiln S. P., Santa Lucia Mts, Monterey Co., UCR)

**Verrucaria elaeina** Borrer 📖 🌿

(Knudsen 2007b; Breuss 2008; *K. Knudsen 3726*, Santa Monica Mts, Los Angeles Co., UCR)

**Verrucaria endocarpoides** Servít 📖 🌿

(Breuss 2008 for S CA; *K. Knudsen 5030*, Overview Park, Richmond, Contra Costa Co.; *K. Knudsen 3004*, Palomar Mtn S. P., San Diego Co., ASU, UCR)

**Verrucaria floerkeana** Dalla Torre & Sarnth. 📖 🌿

(Breuss 2008; Knudsen 2009; Knudsen & Kocourková 2010a [citing a Hasse collection], 2012a; *H. Hasse s.n.*, Santa Monica Mts, Los Angeles Co., ASU; *K. Knudsen 4941*, Coon Creek, Montana de Oro S. P., San Luis Obispo Co., UCR, ! O. Breuss)

**Verrucaria fraudulosa** Nyl. 📖 🌿

(Breuss 2008 for S CA)

**Verrucaria furfuracea** (B. de Lesd.) Breuss 📖 🌿

(Knudsen 2007b; Breuss 2008 for Santa Rosa Isl. and San Bernardino Mts; Knudsen 2009; Knudsen et al. 2009; Knudsen & Kocourková 2009c, 2012a *K. Knudsen 3469*, Cuyamaca S. P., San Diego Co., UCR)

**Verrucaria fusca** Pers. 📖 🌿

(Tucker et al. 2006; Knudsen 2007b; Knudsen & Kramer 2007; Breuss 2008 for S CA; Knudsen & Kocourková 2009c; Tucker 2010; Knudsen & Kocourková 2012a; *C. Bratt 12308*, Fiddymont Ranch, W of Roseville, Plumas Co., SBBG; *S. Tucker 38936*, Campbell Trail, Santa Barbara Botanic Garden, Santa Barbara Co., SBBG; *K. Knudsen 7949*, Santa Monica Mts, Los Angeles Co., UCR)

**Verrucaria fuscoatroides** Servít 📖 🌿

(Knudsen & La Doux 2005; Knudsen 2007b; Breuss 2008 from Orange, San Diego, San Bernardino, and Ventura counties; Knudsen & Werth 2008; Knudsen & Kocourková 2009c, 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *C. Bratt 12478*, Santa Cruz Isl., Santa Barbara Co., SBBG; *K. Knudsen 5235.2*, Eureka Peak, San Bernardino Mts, San Bernardino Co., ASU, UCR)

**Verrucaria fusconigrescens** Nyl. 📖 🌿

(Wright 1997 for N CA; species not mentioned from S CA by Breuss 2008; *S. Tucker 35508*, trailhead of Bloody Rock Trail, on Hull Mtn Rd, 15 mi. from Lake Pillsbury, Lake Co., SBBG)

**Verrucaria halizoa** Leight. 📖 🌿

(von Reis 1991; Tucker 1999; species not mentioned in S CA by Breuss 2008; *W. Weber L-42177*, Santa Catalina Isl., Los Angeles Co., ASU; *K. Knudsen 10139*, San Simeon S. P., San Luis Obispo Co., UCR)

**Verrucaria hydrela** Ach. 📖 🌿

(Breuss 2008; *C. Wetmore 73468*, Santa Catalina Isl., Los Angeles Co., ASU)

**Verrucaria inornata** Servít 📖 🌿

(Breuss 2008; Knudsen & Kocourková 2010a; *K. Knudsen 3521*, San Mateo Wilderness Area, N of Tenaja Cyn, Riverside Co., UCR)

**Verrucaria internigrescens** (Nyl.) Erichsen 🌿

(*B. Ryan 30944*, Parsons Landing near old quarry, Santa Catalina Isl., Los Angeles Co., ASU; species not mentioned by Breuss [2008] for S CA)

**Verrucaria macrostoma** Dufour *ex* DC. 📖 🌿

(Breuss 2008; Knudsen & Kocourková 2010a, citing Hasse collection from S CA det. O. Breuss [W]; Tucker 2010; *S. Tucker 38760*, Santa Barbara Botanic Garden, Mission Cyn, Santa Barbara Co., SBBG)

**Verrucaria margacea** (Wahlenb.) Wahlenb. 📖 🌿

(TJ; Sigal 1989; von Reis [1991] but latter based on a misidentification *vide* Tucker [1999]; Breuss 2008 from montane areas of S CA; *K. Knudsen 1271*, Santa Ana Mts, Riverside Co., UCR)

**Synonyms:** [\*V. margacea\* subsp. \*terrestris\*](#)

**Verrucaria memnonia** (Flot.) Arnold 📖 🌿

(Tucker et al. 2006; Breuss 2008 from S CA; Knudsen & Kocourková 2009a, 2009c; Tucker 2010; *K. Knudsen 5825*, Point Loma, Cabrillo Nat. Monument, San Diego Co., UCR)

**Note:** This species occurs in San Luis Obispo and Ventura counties and southward.

**Verrucaria mimicrans** Servít 📖 🌿

(Knudsen 2007b; Breuss 2008 citing specimens from Santa Barbara Co. and Ventura Co., in S CA, UCR; Knudsen 2009; Benson et al. 2012; Knudsen & Kocourková 2012a; *T. Nash 41131*, San Miguel Isl., Santa Barbara Co., ASU; *K. Knudsen 12071.2*, Red Rock Cyn, Santa Monica Mts, Los Angeles Co., UCR)

**Verrucaria muralis** Ach. 📖 🌿

(Hasse 1898a; Herre 1910; Sigal 1975; TJ; Sigal 1989; Breuss 2008 for S CA; Knudsen 2009; Knudsen & Kocourková 2009b, 2012a; *T. Nash 38680*, San Nicolas Isl., Ventura Co., ASU; *K. Knudsen 9553*, Topanga S. P., Santa Monica Mts, Los Angeles Co., UCR)

**Verrucaria nigrescens** Pers. 📖 🌿

(Hasse 1898a, 1913b; Orcutt 1903, 1907; Herre 1910, 1912b, 1942a, 1950a; Volk 1963; Sigal 1975; TJ; Sigal 1989; von Reis 1991; Tucker 1999; Tucker et al. 2004; Breuss 2008; Knudsen & Kocourková 2007 [for S CA]; Knudsen & Kocourková 2010a, citing a Hasse collection det. O. Breuss; Rotter 2010; Tucker 2010; Benson et al. 2012; *S. Tucker 36389*, Jasper Ridge Biological Preserve, near Palo Alto, San Mateo Co., SBBG; *W. Weber L-42732*, Santa Catalina Isl., Los Angeles Co., ASU)

**Note:** Many specimens have this name misapplied.

**Verrucaria nigrofusca** Servít 📖 🌿

(Breuss 2008 from Los Angeles Co.; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *K. Knudsen 7740*, Santa Rosa Isl., Santa Barbara Co., UCR)

**Verrucaria onegensis** Breuss 📖 🌿

(Breuss 2008; Knudsen & Kocourková 2009c; CA reports based on *K. Knudsen 6177.1*, Weir Cyn, Santa Ana Mts, Orange Co., ASU, UCR)

**Verrucaria othmarii** K. Knudsen & L. Arcadia 📖 🌿

(Knudsen & Kocourková 2012a)

**Synonyms:** [V. rupicola](#) (an illegitimate name)

**Verrucaria papillosa** Ach. 📖 🌿

(Hasse 1903a; Orcutt 1903, 1907; TJ; Breuss 2008; Knudsen 2009; Knudsen & Kocourková 2012a; *H. Hasse*, Ballona Bluffs, Los Angeles Co., June 1905, *Lichenes Exsiccati, Sullivant Moss Soc. 149*, MU; *K. Knudsen 8145*, San Simeon S. P., San Luis Obispo Co., UCR; *T. Nash 41204*, San Miguel Isl., Santa Barbara Co., ASU)

**Synonyms:** [V. margacea var. papillosa](#), [V. papillosa f. terrestris](#)

**Verrucaria prominula** Nyl. 📖 🌿

(Kocourková et al. 2009; *K. Knudsen 10013*, littoral zone, Point Loma, San Diego Co., UCR)

**Verrucaria prosoplectenchymatica** Servít 📖 🌿

(Breuss 2008; Knudsen & Kocourková 2010f; *K. Knudsen 4077*, Santa Monica Mts, Los Angeles Co., ASU, det. Breuss)

**Verrucaria rufofuscella** Servít 📖 🌿

(Knudsen 2007b; Breuss 2008; Knudsen & Kocourková 2012a; *K. Knudsen 3982*, Point Mugu S. P., Ventura Co., UCR; *K. Knudsen 8681*, Santa Rosa Isl., Santa Barbara Co., UCR)

**Verrucaria rupestris** Schrad. 📖 🌿

(Hasse 1898a; Herre 1910 [“doubtful” identification in Herre's opinion]; Hasse 1913b; Merrill 1923; Fink 1935; Thomson 1979; Doell 2002)

**Verrucaria sandstedei** B. de Lesd. 📖 🌿

(Knudsen & Kocourková 2010g, 2012a; *K. Knudsen 11373*, Santa Rosa Isl., Santa Barbara Co., UCR)

**Verrucaria sphaerospora** Anzi 📖 🌿

(Robertson & Robertson 2002; Knudsen & Kramer 2007; Breuss 2008; Knudsen et al. 2009; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan 12585*, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU, det. O. Breuss; *K. Knudsen 5699*, San Jacinto Mts, San Bernardino N. F., Riverside Co., UCR)

**Verrucaria subdivisa** Breuss 📖 🌿

(Knudsen 2007b; Breuss 2008; Knudsen 2009; Knudsen & Kocourková 2010f, 2012a) *C. Bratt 9277*, Diablo Cyn, San Luis Obispo Co., SBBG; *T. Nash 32096*, Santa Catalina Isl., Los Angeles Co., ASU; *K. Knudsen 6603*, Arroyo de los Chinos Grassland, San Luis Obispo Co., UCR; *W. Weber Exs. 677*, Santa Cruz Isl. (as *V. canella*), COLO

**Note:** Type is W. Weber & R. Santesson from San Clemente Isl., COLO.

**Verrucaria submuralis** Nyl. 📖 🌿

(Hasse 1897, 1898a; TJ)

**Synonyms:** [V. integrella](#)

**Note:** Breuss (2008) did not mention this species as occurring in S CA.

**Verrucaria turgida** Servít 📖 🌿

(Knudsen 2007b; Breuss 2008; Knudsen & Kocourková 2009c; *K. Knudsen 6076*, Weir Cyn, Santa Ana Mts, Orange Co., UCR)

**Verrucaria umbrinula** Nyl. 📖 🌿

(TJ; *S. Tucker 7967*, Rocky Nook City Park, Santa Barbara, Santa Barbara Co., SBBG, det. A. Aptroot)

**Note:** This species was not mentioned by Breuss 2008.

**Verrucaria viridula** (Schrad.) Ach. 📖 🌿

(Hasse 1895, 1898a; Orcutt 1903, 1907; Herre 1910; Hasse 1913b; Fink 1935; Sigal 1975; TJ; Sigal 1989; von Reis [1991] but based on a misidentification *fide* Tucker [1999]; Breuss 2008 [for CA Channel Is.]; Knudsen & Kocourková 2009c, 2010a; Tucker 2010; Knudsen & Kocourková 2012a; *K. Knudsen 9030*, Santa Ana Mts, Orange Co., UCR; also reported in Los Angeles Co.)

**Verrucaria aquilella** Nyl. 📖 🌿

(Hasse 1898a; Herre 1912b; Fink 1935; TJ)

= [V. aethiobola](#) (synonymy *fide* Purvis et al. 1992, p. 633)

**Verrucaria bacillosa** Nyl. 📖 🌿

- (Hasse 1898a)  
 =[Sarcopyrenia bacillosa](#)
- Verrucaria caerulea* DC. 📖 🌿  
 (TJ; Purvis et al. 1992 [p. 635]; Santesson 1993)  
**Synonyms:** [V. plumbea](#) Ach. (Hasse 1898a)  
**Note:** According to O. Breuss (personal communication) he has seen no collections of this species from N. Amer.
- Verrucaria calciseda* DC. 📖 🌿  
 (Hasse 1898a, 1913b; Fink 1935; TJ; Purvis et al. 1992 [p. 635]; Tucker 1999; Brodo et al. 2001 [p. 727, color photograph]; Breuss 2008 from Riverside Co.; Benson et al. 2012)  
 =[Bagliettoa calciseda](#)
- Verrucaria calciseda* subsp. *fuscospora* Herre 📖 🌿  
 (Herre 1910; Fink 1935; TJ)  
**Note:** The brown spores indicate it is not a *Verrucaria*.
- Verrucaria canella* Nyl. 📖 🌿  
 (TJ; Weber 1989a; W. Weber, Univ. Colo. Lich. Exs. 677, which has been re-identified as *V. subdivisa* by Breuss)  
**Synonyms:** [V. glaucina](#) subsp. [canella](#) (Fink 1935)  
**Note:** O. Breuss (personal communication) says that *V. canella* seems to be lacking from N. Amer.
- Verrucaria carpinea* Pers. var. *plumbaria* Stizenb. 📖 🌿  
 (Hasse 1898a)  
 =[Arthopyrenia plumbaria](#)
- Verrucaria cerasi* Schrad. 📖 🌿  
 (Hasse 1895; Orcutt 1903; Hasse 1906; Orcutt 1907)  
 =[Arthopyrenia cerasi](#)
- Verrucaria chlorotica* Ach. 📖 🌿  
 (Hasse 1898a, 1906)  
 =[Pseudosagedia chlorotica](#)
- Verrucaria chlorotica* f. *trachona* (Taylor) Hasse 📖 🌿  
 (Hasse 1906)  
 =[Pseudosagedia chlorotica](#)
- Verrucaria cinerea* Pers. 📖 🌿  
 (Hasse 1906)  
**Note:** According to R. Harris (personal communication), Hasse's material on *Rhus trilobata* was almost certainly *Arthopyrenia plumbaria*.
- Verrucaria circumspersella* Nyl. 📖 🌿  
 (Hasse 1906; TJ)  
 =[Thelidium circumspersellum](#) (but Hasse material was annotated by O. Breuss as *Porina linearis*, fide Nash 2002b, pp. 509–510)
- \**Verrucaria conturmatula* Nyl. 📖 🌿  
 (Hasse 1906; TJ)  
**Note:** This name was misapplied to *Polycoccum microsticticum*, a lichenicolous fungus fide Purvis et al. 1992, p. 686.
- Verrucaria discordans* Nyl. 📖 🌿  
 (Hasse 1903f)  
 =[Thrombium discordans](#)
- Verrucaria epidermidis* DC. 📖 🌿  
 (Hasse 1906)  
 =[Naetrocymbe punctiformis](#)
- Verrucaria epidermidis* var. *analepta* Ach. 📖 🌿

- (Hasse 1906)  
=[Arthopyrenia analepta](#)
- Verrucaria epidermidis* var. *cinereopruinosa* Garov. 📖 🌿  
(Hasse 1906)  
=[Arthopyrenia plumbaria](#) (but probably misidentifications)
- Verrucaria epigaea* (Pers.) Ach. 📖 🌿  
(Hasse 1898a)  
=[Thrombium epigaeum](#)
- Verrucaria fallax* Nyl. 📖 🌿  
(Hasse 1895, 1898a; Orcutt 1909)  
=[Arthopyrenia analepta](#)
- Verrucaria fuscella* (Turner) Winch 📖 🌿  
(TJ; Santesson 1984; Doell et al. 1999)  
=[Placopyrenium fuscillum](#)
- Verrucaria fuscocinerascens* Nyl. 📖 🌿  
(Hasse 1906; Herre 1912b; a species of boreal N. Amer. & Europe, so possibly a misapplied name)
- Verrucaria glaucina* Ach. subsp. *canella* (Nyl.) A. L. Sm. 📖 🌿  
(Fink 1935)  
=[V. canella](#), but that species is lacking in N. Amer.
- Verrucaria glaucovirens* Grunmann 📖 🌿  
(Tucker 1999 [as “cf.” for von Reis collection, San Luis Obispo Co., N of Sonoran region]; species not mentioned in S CA by Breuss (2008) who said that named herbarium material represents several other species)
- Verrucaria hochstetteri* Fr. 📖 🌿  
(Hasse 1898a; possibly a misapplied name, since this is a European species)
- Verrucaria inductula* Nyl. 📖 🌿  
(Hasse 1897)  
=[Thelenella inductula](#)
- Verrucaria integrella* Nyl. 📖 🌿  
(Hasse 1906, 1913b)  
=[V. submuralis](#) (synonymy *fide* Zahlbruckner 1922, p. 92)
- Verrucaria integrella* var. *terrestris* Nyl. 📖 🌿  
(Hasse 1898a; variety not in Zahlbruckner 1922)
- Verrucaria intercedens* Nyl. 📖 🌿  
(Hasse 1898a; Orcutt 1903, 1907)  
=[Polyblastia cupularis](#), but probably misidentifications
- Verrucaria intercedens* var. *aethioboloides* Nyl. 📖 🌿  
(Hasse 1895, 1898a; Orcutt 1903, 1907)  
=[Polyblastia cupularis](#)
- Verrucaria lecideoides* (A. Massal.) Trevis. 📖 🌿  
(Breuss 2008)  
=[Placopyrenium lecideoides](#)
- Verrucaria margacea* var. *acrotella* (Ach.) Le Jolis 📖 🌿  
(Hasse 1906)  
=[V. acrotella](#)
- Verrucaria margacea* var. *papillosa* (Ach.) Nyl. 📖 🌿  
(Hasse 1913b)  
=[V. papillosa](#)
- Verrucaria margacea* subsp. *terrestris* Nyl. 📖 🌿  
(Hasse 1898a, 1913b)

=[V. margacea](#)

*Verrucaria maura* Wahlenb. 📖 🌿

(Hasse 1898a [*H. Hasse*, Elsinore; *B. Trask*, Catalina Isl.]; Hasse 1903b, 1913b; Merrill 1923; Fink 1935; TJ; Bourell 2000; Doell 2002; Brodo et al. 2001 [p. 728, with color photograph]; not mentioned by Breuss [2008] for S CA)

=[Hydropunctaria maura](#)

**Note:** Hasse's material may be a *Collemopsidium* species.

*Verrucaria melas* Herre 📖 🌿

(Herre 1910; Fink 1935 [p. 33]; TJ; not mentioned by Breuss [2008] for S CA)

=name misapplied to [Wahlenbergiella striatula](#)

*Verrucaria microbola* Tuck. 📖 🌿

(Hasse 1906)

=[Thelidium microbolum](#) (but misidentified)

**Note:** The *H. Hasse* material, which is the only CA collection, was annotated by O. Breuss as *Verrucaria* sp. *fide* Nash (2002b, p. 510).

*Verrucaria mucosa* Wahlenb. 📖 🌿

(Riefner, Bowler, & Ryan 1995, based on *R. Riefner 93–12*, Morro Rock Reserve, San Luis Obispo Co., UCR; Magney 1999, citing same specimen; not mentioned by Breuss [2008] for S CA)

=[Wahlenbergiella mucosa](#)

**Note:** Magney (1999) cited the same Riefner collection that Riefner et al. cited.

*Verrucaria ochrostoma* Borrer 📖 🌿

(Hasse 1906; possibly a misapplied name, since this is a European species)

*Verrucaria papillosa* f. *terrestris* Arnold 📖 🌿

(Hasse 1903b; Orcutt 1903, 1907)

=[V. papillosa](#)

*Verrucaria peloclitia* Nyl. 📖 🌿

(Hasse 1903f; possibly a misidentification for CA, since this is a European species)

*Verrucaria plumbaria* Stizenb. 📖 🌿

(Hasse 1895, 1897; Orcutt 1903, 1907)

=[Arthopyrenia plumbaria](#)

*Verrucaria plumbea* Ach. 📖 🌿

(Hasse 1898a)

=[V. caerulea](#)

*Verrucaria punctiformis* (Schrank) Pers. 📖 🌿

(Hasse 1896, 1903b, 1905, 1906; Orcutt 1903, 1907)

=[Naetrocymbe punctiformis](#)

*Verrucaria rupicola* (B. de Lesd.) Breuss 📖 🌿

(Breuss 2008 for S CA; Knudsen & Kocourková 2009b, 2012a)

=[V. othmarii](#)

*Verrucaria salweyi* Leight. 📖 🌿

(Hasse 1898a [as “*salwei*”];

=*Acrocordia salweyi* (Leight.) A. L. Sm., but misidentifications for CA)

*Verrucaria squamella* Nyl. *ex* Hasse 📖 🌿

(Hasse 1897, 1898a)

=[Catapyrenium squamellum](#)

*Verrucaria stanfordii* Herre 📖 🌿

(Herre 1910, 1911a; TJ)

=[Placopyrenium stanfordii](#)

*Verrucaria subcorallina* Nyl. 📖 🌿

(Hasse 1898a)

=[\*Thelenella modesta\*](#)

*Verrucaria tavaresiae* R. L. Moe 📖 🌿

(Moe 1997; Tucker 1999; Magney 1999 [citing previous collections]; Peters & Moe 2001; Sanders et al. 2004)

=[\*Wahlenbergiella tavaresiae\*](#)

*Verrucaria terebrata* (Mudd) Leight. 📖 🌿

(Herre 1907; Fink 1935 [p. 33])

=[\*Staurothele rupifraga\*](#) (synonymy *fide* Smith 1926 and Esslinger 2011)

*Verrucaria thelemorpha* (Tuck.) Hasse 📖 🌿

(Hasse 1898a)

=[\*Pyrenula thelemorpha\*](#)

\**Verrucaria zamenhofiana* Clauz. & Cl. Roux 📖 🌿

(Knudsen 2006a; Breuss 2008)

=[\*Heteroplacidium zamenhofianum\*](#)

**VESTERGRENOPSIS** Gyeln.

*Vestergrenopsis isidiata* (Degel.) Å. E. Dahl 📖 🌿

**Synonyms:** [\*Pannaria isidiata\*](#) (Thomson & Ketchledge 1958 [report was based on a misidentification of *Koerberia sonomensis fide* Henssen 1963d])

**Note:** According to Tucker (2002), this is an arctic species, unlikely to occur in CA.

**VOUAUXIELLA** Petr. & Syd.

\***Vouauxiella lichenicola** (Linds.) Petr. & Syd. 📖 🌿

(Esslinger & Egan 1995 [under Appendix, New Records for N. Amer., based on *R. Santesson 17667*, Orange Co., Santa Ana Mts, Silverado Cyn, on *Lecanora* sp., UPS]; Diederich 2003; Robertson 2003b; Diederich 2004; Benson 2005; Knudsen & Kocourková 2009b; Tucker 2010; Knudsen & Kocourková 2012a; Kocourková et al. 2012; *S. Tucker 36393*, Jasper Ridge, San Mateo Co., on *Lecanora* sp., SBBG, det. P. Diederich; *S. Tucker 34361*, Santa Barbara Botanic Garden, Mission Cyn, Santa Barbara Co., SBBG, on *Lecanora* sp.)

**VULPICIDA** J.-E. Mattsson & M. J. Lai

**Vulpicida canadensis** (Räsänen) J.-E. Mattsson & M. J. Lai 📖 🌿

(Mattsson 1993; Goward et al. 1994; Hill 1997; Wright 1997; Brodo et al. 2001 [pp. 730–731, with color photograph]; Ryan 2002; Jovan & McCune 2004; McCune & Geiser 2009; *B. Ryan 32055*, North Fork Ranger Station, Sierra N. F., Sierra Nevada, Madera Co., ASU; *T. Nash 40694*, Point Arena near Pacific Ocean, Mendocino Co., ASU; *C. Bratt 7587b*, Bates Cyn, Sierra Madre Mts, Santa Barbara Co., SBBG)

**Synonyms:** [\*Cetraria canadensis\*](#), [\*Tuckermannopsis canadensis\*](#)

**Misapplied names:** [\*Cetraria viridis\*](#) (Hale 1969 [CA reports]), [\*Cetraria juniperina\*](#) (early CA reports but a European species)

**Note:** Knudsen et al. 2009 cited Sigal & Nash (1983) and suggested that this species may be extinct in the Cuyamaca Mts of San Diego Co.

*Vulpicida viridis* (Schwein.) J.-E. Mattsson & M. J. Lai 📖 🌿

(Hale 1969; Mattsson 1993)

=misidentification for CA

**Note:** Mattsson [1993] reported this species only in eastern U. S., W to Arkansas.

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

**WAHLENBERGIELLA** Gueidan & Thüs



**Wahlenbergiella mucosa** (Wahlenb.) Gueidan & Thüs 📖 🌿

(Benson et al. 2012)

**Synonyms:** [Verrucaria mucosa](#)

**Note:** This species has been reported from Washington and British Columbia.

**Wahlenbergiella striatula** (Wahlenb.) Gueidan & Thüs 📖 🌿

(Kocourková et al. 2009; Knudsen & Kocourková 2010f, 2012a; Knudsen 2012b; *K. Knudsen 10685*, intertidal zone, West Anacapa Isl., Ventura Co., UCR)

**Misapplied names:** [Verrucaria melas](#)

**Wahlenbergiella tavaresiae** (R. L. Moe) Gueidan 📖 🌿

(Gueidan et al. 2011; CA endemic)

**Synonyms:** [Verrucaria tavaresiae](#)

WAYNEA Moberg

**Waynea californica** Moberg 📖 🌿

(Moberg 1990; Goward et al. 1994; Roux et al. 1995; McGee 1998 [San Mateo Co.]; Baltzo 2002; Moberg 2002 [p. 508]; Tucker et al. 2004; Robertson 2005a [Sutter Co.]; Tucker et al. 2006 [San Benito Co.]; Carlberg et al. 2007 [Sutter Co.]; Knudsen 2007b [Los Angeles Co.]; Stone & Villella 2010 [Siskiyou Co.]; Knudsen & Kocourková 2012a; CA endemic)

**Misapplied names:** *W. stoechadiana* (in CA records)

*Waynea stoechadiana* (Abassi & Cl. Roux) Cl. Roux & P. Clerc 📖 🌿

(Wright 1997; Robertson 2003a)

=name misapplied to [Waynea californica](#), for CA reports; the species is not in N. Amer.

WEDDELLOMYCES D. Hawksw.

\***Weddellomyces xanthoparmeliae** Calat. & Nav.-Ros. 📖 🌿

(Kocourková & Knudsen 2008, on *Xanthoparmelia mexicana*, Los Angeles Co.; Kocourková et al. 2012)

**Note:** This species was first described by Calatayud & Navarro-Rosinés (1998).

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

**XANTHOMENDOZA** S. Y. Kondr. & Kärnefelt (Kondratyuk & Kärnefelt 1997)

**Xanthomendoza fallax** (Hepp) Søchting, Kärnefelt & S. Y. Kondr. 📖 🌿

(Lindblom 2004; Carlberg et al. 2007; Hinds & Hinds 2007 [color photograph, p. 514, only]; Knudsen et al. 2009; McCune & Geiser 2009; Knudsen & Kocourková 2010a, citing a Hasse collection [*Exs. 122*, FH]; Tucker 2010; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [Xanthoria fallax](#), [Xanthoria substellaris](#)

**Xanthomendoza fulva** (Hoffm.) Søchting, Kärnefelt & S. Y. Kondr. 📖 🌿

(Lindblom 2004; McCune & Geiser 2009; Tucker 2010; Knudsen & Kocourková 2012a)

**Synonyms:** [Xanthoria fulva](#)

**Xanthomendoza galericulata** L. Lindbl. 📖 🌿

(Lindblom 2004, as *Xanthomendoza* “*galericulata*”; Lindblom 2006; McCune & Geiser 2009)

**Note:** This species is in Oregon also, so not a CA endemic.

**Xanthomendoza hasseana** (Räsänen) Søchting, Kärnefelt & S. Y. Kondr. 📖 🌿

(Lindblom 2004; Tucker et al. 2006; Hinds & Hinds 2007 [color photograph, p. 515, only]; Knudsen & Kocourková 2009b; McCune & Geiser 2009; Tucker 2010; Villella 2010; Benson et al. 2012; *B. Ryan 24705*, ESE of Sonora, Tuolumne Co., ASU; *S. Tucker 35964B*, Coulson Cyn Rd, Santa Barbara Co., ASU, SBBG; *B. Ryan 25773*, Palomar Mtn, San Diego Co., ASU)

**Synonyms:** [Xanthoria hasseana](#)

**Xanthomendoza mendozae** (Räsänen) S. Y. Kondr. & Kärnefelt 📍🌿

(Kondratyuk & Kärnefelt 1997; Lindblom 2004; Carlberg et al. 2007; Knudsen & Kramer 2007; McCune & Geiser 2009; *T. Nash* 22841, along Manzanita Creek, 1 km W of Lassen Volcanic N. P., Shasta Co., ASU; *J. Blakeman* 627, Junction meadow, Sequoia N. P., Kern Cyn, Tulare Co., MIN; *B. Ryan* 26113, Angeles Crest Hwy, San Gabriel Mts, Los Angeles Co., ASU)

**Synonyms:** [\*Xanthoria mendozae\*](#)

**Xanthomendoza montana** (L. Lindbl.) Söchting, Kärnefelt & S. Y. Kondr. 📍🌿

(Knudsen & Kramer 2007; *R. Rosentreter* 14747, Madera Cyn, Coronado N. F., Santa Rita Mts, Santa Cruz Co., SRP; *K. Knudsen* 3384, Cactus Flats, San Bernardino Mts, San Bernardino Co., UCR)

**Synonyms:** [\*Xanthoria montana\*](#)

**Xanthomendoza oregana** (Gyeln.) Söchting, Kärnefelt & S. Y. Kondr. 📍🌿

(Lindblom 2004; Tucker et al. 2004; Knudsen 2009; Knudsen et al. 2009; McCune & Geiser 2009; Knudsen & Kocourková 2012a; *S. Tucker* 37757, 2 mi. W of Mendocino Pass, Mendocino N. F., Mendocino Co., SBBG; *B. Ryan* 25760, Cuyamaca S. P., San Diego Co., ASU)

**Synonyms:** [\*Xanthoria oregana\*](#)

**Xanthomendoza ulophyllodes** (Räsänen) Söchting, Kärnefelt & S. Y. Kondr. 📍🌿

(Lindblom 2004; *U. Arup* L-89307, Figueroa Mtn Rd, Santa Ynez Valley, Santa Barbara Co., ASU; *W. Weber* L-42870, San Clemente Isl., Los Angeles Co., ASU; *K. Knudsen* 7197, San Jacinto Mts, Riverside Co., UCR)

**Synonyms:** [\*Xanthoria ulophyllodes\*](#)

**XANTHOPARMELIA** (Vain.) Hale

**Xanthoparmelia ajoensis** (T. H. Nash) Egan 📍🌿

(Nash & Elix 2004; *T. Nash* 10329, NE of Three Rivers, Tulare Co., ASU, WIS)

**Note:** This species has also been collected in Mexico.

**Xanthoparmelia amableana** (Gyeln.) Hale 📍🌿

(Nash & Elix 2004 [shown on map in interior S CA]; Knudsen & Kocourková 2009c; *C. Bratt* 5045, Cottonwood Creek road crossing, Cuyama Valley, Santa Barbara Co., ASU, SBBG, det. T. Nash; *K. Knudsen* 9372, Fremont Cyn, Santa Ana Mts, Orange Co., UCR)

**Note:** This species also occurs in Arizona and Mexico.

**Xanthoparmelia angustiphylla** (Gyeln.) Hale 📍🌿

(Riefner, Bowler, & Ryan 1995 [San Luis Obispo Co.]; Magney 1999 [San Diego, San Luis Obispo, and Ventura counties]; Benson 2005; *W. Weber* L-42777, Santa Catalina Isl., Los Angeles Co., ASU)

**Misapplied names:** [\*X. hypopsila\*](#) (Hale & Cole 1988 [Siskiyou Co.])

**Note:** *Xanthoparmelia angustiphylla* is not cited for S CA by Nash & Elix (2004).

**Xanthoparmelia arida** Egan & Derstine 🌿

(*B. Ryan* 26740, 32 km NNE of Hollister, Merced Co., ASU)

**Note:** Other reports of this species are from Texas.

**Xanthoparmelia californica** Hale 📍🌿

(Hale 1984, 1990; Hale & Cole 1988; Riefner, Bowler, & Ryan 1995; Magney 1999; Nash & Elix 2004; Tucker 2010; Benson & Hillyard 2012; *R. Rosentreter* 7243, Pinnacles Nat. Monument, San Benito Co., SBBG)

**Note:** This species also occurs in Arizona and Mexico.

**Xanthoparmelia chlorochroa** (Tuck.) Hale 📍🌿

(Rosentreter et al. 2007 [with photograph])

**Note:** This species is common in Arizona and Oregon.

**Xanthoparmelia coloradoënsis** (Gyeln.) Hale 📍🌿

(Ryan & Nash 1991; Bratt 1997; Hill 1997 [as “?”]; Wright 1997; Bratt 1999; Tucker 1999 [as “aff. *coloradoënsis*”]; Bourell 2000; Knight et al. 2002; Robertson 2003b; Nash & Elix 2004; Benson 2005; Villeda 2010; *B. Ryan* 22224, N of Cloverdale, Mendocino Co., ASU; *B. Ryan* 13718, Eastern Brook

Lakes watershed, Sierra Nevada, Inyo Co., ASU; *K. Knudsen 556*, road to Thomas Mtn, San Jacinto Mts, Riverside Co., UCR)

**Note:** Western collections labeled *X. taractica* (a southern hemisphere species) and *Parmelia taractica* may be referable to *X. coloradoënsis*.

**Xanthoparmelia commonii** Elix & T. H. Nash 📄 🌿

(Nash & Elix 2004; Knudsen & Kocourková 2012a; *C. Bratt 11890*, Santa Catalina Isl.: above Rippers Cove, Los Angeles Co., ASU, SBBG, det. T. Nash)

**Note:** This species has also been collected in Utah and Mexico.

**Xanthoparmelia conspersa** (Ehrh. ex Ach.) Hale 📄 🌿

(Weber et al. 1987; Hale & Cole 1988, von Reis 1991; Bratt 1999; Brodo et al. 2001 [p. 735, with color photograph]; Nash & Elix 2004; Hinds & Hinds 2007 [color photograph, p. 519, only]; McCune & Geiser 2009; Tucker 2010; Glacy et al. 2011; *H. Hasse 65*, Santa Monica Mts, Los Angeles Co., SBBG)

**Synonyms:** [Parmelia conspersa](#)

**Note:** Herre's 1910 material (as *Parmelia conspersa*) is mixed with other species with a pale underside such as *X. mexicana* and *X. plittii*. [X. conspersa](#) is common in central and northern CA, although apparently scarce in southern CA, only in the Channel Is., *fide* Nash & Elix (2004);

**Xanthoparmelia cumberlandia** (Gyeln.) Hale 📄 🌿

(TJ; Hale & Cole 1988; Baltzo 1989; Sigal 1989; Ryan & Nash 1991; von Reis 1991; McGee 1995; Doell & Wright 1996; Tucker & Bratt 1996; Hill 1997; Bratt 1999; Doell et al. 1999; Bourell 2000; Brodo et al. 2001 [pp. 735–736, with color photograph]; Robertson 2001, 2002c; Doell 2002; Robertson 2003a; Nash & Elix 2004; Benson 2005; Robertson 2005a, 2005b; Carlberg et al. 2007; Hinds & Hinds 2007 [color photograph, p. 520, only]; Knudsen 2007b; Knudsen et al. 2009; Knudsen & Kocourková 2009a, 2009c; Glacy et al. 2011; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan 11111*, 27 km W of Redding, Shasta Co., ASU; *B. Ryan 11291*, Kaweah River, SW of Sequoia N. P., Tulare Co., ASU; *K. Knudsen 3729*, Leo Carrillo S. P., Santa Monica Mts, Los Angeles Co., UCR)

**Synonyms:** [Parmelia cumberlandia](#)

**Xanthoparmelia dierythra** (Hale) Hale 📄 🌿

(Nash & Zavada 1977; TJ; Nash & Elix 2004; *K. Knudsen 9696*, near Essen Rd, between US Hwy 40 and Mitchell Caverns, Mojave Desert, San Bernardino Co., UCR)

**Synonyms:** [Parmelia dierythra](#)

**Note:** This species has also been collected in western and midwestern U. S., Texas, and Mexico.

**Xanthoparmelia hypomelaena** (Hale) Hale 📄 🌿

(Nash & Elix 2004; *B. Ryan 26816*, 26 km S of Coarsegold, Madera Co., ASU)

**Note:** This species has been collected in Arizona, midwestern and southern U. S., and Mexico.

**Xanthoparmelia incerta** (Kurok. & Filson) Elix & J. Johnst. 📄 🌿

(Nash & Elix 2004 [shown on map in CA, N of Sonoran zone]; *B. Ryan 32046*, North Fork Ranger Station, Sierra N. F., Sierra Nevada, Madera Co., ASU)

**Note:** This species also occurs in interior western U. S.

**Xanthoparmelia lavicola** (Gyeln.) Hale 📄 🌿

(Hale 1990; McCune & Geiser 1997; Doell et al. 1999; Brodo et al. 2001 [pp. 737–738, with color photograph]; Nash & Elix 2004; McCune & Geiser 2009)

**Synonyms:** [X. kurokawae](#), [Parmelia kurokawae](#)

**Xanthoparmelia lineola** (E. C. Berry) Hale 📄 🌿

(TJ; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; Brodo et al. 2001 [p. 738, with color photograph]; Baltzo 2002; Nash & Elix 2004; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Thell et al. 2009; Tucker 2010; Knudsen & Kocourková 2012a; *B. Ryan 11158*, Mt. Diablo S. P., Contra Costa Co., ASU; *C. Bratt 9610*, San Clemente Isl., Santa Barbara Co., ASU, SBBG, det. T. Nash; *C. Wetmore 16939*, W of Anza-Borrego S. P., San Diego Co., ASU)

**Synonyms:** [Parmelia lineola](#)

**Xanthoparmelia loxodes** (Nyl.) O. Blanco, A. Crespo, Elix, D. Hawksw. & Lumbsch 📖 🌿  
(McCune & Geiser 2009; Villella 2010; *T. Nash* 25052, Townsend Gulch, Klamath N. F., Siskiyou Co., ASU; *B. Ryan* 24206, E of Dardanelle, Sierra Nevada, Tuolumne Co., ASU; *C. Wetmore* 14646B, Fuller Mill Creek Cpgd, San Bernardino N. F., Riverside Co., MIN)  
**Synonyms:** [Neofuscelia loxodes](#) (TJ; Baltzo 1989; Goward et al. 1994; Doell et al. 1999; Brodo et al. 2001 [p. 450, with color photograph]; Esslinger 2002; Rajakaruna et al. 2012, on serpentine, San Benito Co.), [Parmelia isidiotyla](#) (Anderson 1962; Baltzo 1970), [P. loxodes](#) (Esslinger 1973a, 1977a)  
**Note:** Combination in *Xanthoparmelia* was made in Blanco et al. 2004b. Collections of this species are known from Lake, San Benito, San Bernardino, Siskiyou, and Tuolumne counties (ASU, SBBG).

**Xanthoparmelia maricopensis** (E. C. Berry) Hale 📖 🌿  
(Nash & Elix 1986, 2004; *B. Ryan* 15713, Rd from US Hwy 395 to town of Little Lake, Inyo Co., ASU; *K. Knudsen* 12770, Mojave Desert, Joshua Tree N. P., Riverside Co., UCR)  
**Note:** This species also occurs in interior western U. S., Texas, and Mexico.

**Xanthoparmelia mexicana** (Gyeln.) Hale 📖 🌿  
(Pinelli & Jordan 1978; TJ; Bratt 1987; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; Bowler & Riefner 1990; Ryan & Nash 1991; von Reis 1991; McGee 1995; Bowler et al. 1996; Bratt 1997; Robertson et al. 1998; Doell et al. 1999; Bourell 2000; Brodo et al. 2001 [p. 738, with color photograph]; Robertson 2001; Knight et al. 2002; Robertson 2003a, 2003b; Nash & Elix 2004; Benson 2005; Knudsen & La Doux 2005; Robertson 2005b; Carlberg et al. 2007; Knudsen 2007b; Knudsen & Kramer 2007; Knudsen et al. 2009; Knudsen & Kocourková 2009a, 2009c, 2010f; Knudsen & Kocourková 2012a; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan* 25033, Gold Flat, Klamath N. F., Siskiyou Co., ASU; *C. Bratt* 725, gate above Jack Flat Cpgd, Sequoia N. F., Tulare Co., SBBG; *K. Knudsen* 8399, Point Loma, San Diego Co., UCR)  
**Synonyms:** [Parmelia mexicana](#)

**Xanthoparmelia mougeotii** (Schaer.) Hale 📖 🌿  
(Hale & Cole 1988; Riefner, Bowler, & Ryan 1995; Magney 1999; Robertson 2001; Hill 2002; Nash & Elix 2004; Tucker et al. 2004; Robertson 2005a, 2005c; McCune & Geiser 2009; *J. Robertson* 38440, UC Santa Cruz campus, Santa Cruz, Santa Cruz Co., UC, SBBG; *R. Riefner* 20–50, Santiago Peak, Cleveland N. F., Santa Ana Mts, Orange Co., ASU, det. J. Thomson)

**Xanthoparmelia neoconsersa** (Gyeln.) Hale 📖 🌿  
(Glacy et al. 2011; *T. Nash* 11524, seaside cliffs near Wilson's Creek, Del Norte Co., ASU; *B. Ryan* 11113, 17 mi. W of Redding, Shasta Co., ASU)  
**Note:** This species also occurs in interior western U. S. and Mexico.

**Xanthoparmelia neotaractica** Hale 📖 🌿  
(Nash & Elix 2004; Knudsen 2007b; Knudsen & Kocourková 2009c, 2012a; *T. Nash* 22862, along CA Hwy 44, 30 km E of Redding, Shasta Co., ASU; *K. Knudsen* 10600, Santa Rosa Isl., Santa Barbara Co., UCR)  
**Note:** This species also occurs in interior western U. S. and Mexico.

**Xanthoparmelia novomexicana** (Gyeln.) Hale 📖 🌿  
(Hale & Cole 1988; Baltzo 1989; Robertson et al. 1998; Brodo et al. 2001 [pp. 738–739, with color photograph]; Nash & Elix 2004; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Benson et al. 2012; *B. Ryan* 32051, North Fork Ranger Station, Sierra N. F., Madera Co., ASU; *T. Nash* 7078, Mt. San Jacinto, Riverside Co., ASU; *S. Tucker* 36267b, Mojave Natural Preserve, Granite Mts, San Bernardino Co., ASU, SBBG, det. T. Nash)

**Synonyms:** [Parmelia arseneana](#) Gyeln. (synonymy *fide* Nash & Elix 2004 [p. 590])

**Xanthoparmelia oleosa** (Elix & P. M. Armstr.) Elix & T. H. Nash 📖 🌿  
(Nash & Elix 2004; Knudsen et al. 2009; *C. Bratt* 5032, Sespe Gorge, Ventura Co., ASU, SBBG, det. T. Nash)  
**Note:** This species has also been collected in Arizona and Mexico. Southern CA material of “X.

*montanensis*” proved to be *X. oleosa*, *fide* Nash & Elix (2004, p. 584).

**Xanthoparmelia plittii** (Gyeln.) Hale 📖 🌿

(Hale & Cole 1988; Ryan & Nash 1991; von Reis 1991; Bratt 1999; Doell et al. 1999; Tucker 1999; Brodo et al. 2001 [pp. 739–740, with color photograph]; Knight et al. 2002; Nash & Elix 2004; Knudsen & Kramer 2007; Villella 2010; Glacy et al. 2011; *B. Ryan 13717*, 15 km S of Tom's Place, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU; *K. Knudsen 1788*, Tahquitz Peak, San Jacinto Mts Wilderness Area, San Jacinto Mts, Riverside Co., UCR)

**Xanthoparmelia psoromifera** (Kurok.) Hale 📖 🌿

(Nash & Elix 2004; *T. Nash 7043*, along Hwy I-8, Ocotillo Wells, San Diego Co., ASU)

**Note:** This species also occurs in interior western U. S., Texas, and Mexico.

**Xanthoparmelia schmidtii** Hale 📖 🌿

(Hale 1984; Hale & Cole 1988; Hale 1990; Doell & Wright 1996; Brodo et al. 2001 [p. 738]; *B. Ryan 11279*, Kaweah River, SW of Sequoia N. P., Tulare Co., ASU; CA endemic)

**Xanthoparmelia standaertii** (Gyeln.) Hale 📖 🌿

(Nash & Elix 2004; Knudsen & Kocourková 2012a; *C. Bratt 5327*, Point Sal Ridge, Santa Barbara Co., ASU, SBBG, det. T. Nash; *C. Bratt 9693*, San Clemente Isl., Los Angeles Co., ASU, SBBG, det. J. Elix; *K. Knudsen 2689*, Torrey Pines S. P., San Diego Co., UCR)

**Note:** This species also occurs in Mexico.

**Xanthoparmelia stenophylla** (Ach.) Ahti & D. Hawksw. 📖 🌿

(Imshaug 1957)

**Synonyms:** [\*Parmelia conspersa\* var. \*stenophylla\*](#) (McClatchie 1897; Hasse 1898a, 1913b), [\*P. stenophylla\*](#), [\*P. conspersa\* var. \*stenophylla\*](#), [\*X. somloënsis\*](#)

**Note:** Imshaug (1957) reported this species from Mono Pass, Mono Co., Piute Pass, Fresno Co., and Kearsarge Pass, Kings Canyon N. P.

**Xanthoparmelia subdecipiens** (Vain. ex Lynge) Hale 📖 🌿

(Riefner, Bowler, & Ryan 1995; Nash & Elix 2004; Tucker 2010; *S. Tucker 38635*, Riverside Park, Tuolumne River, Buchanan Mine Rd, Sierra Nevada, Tuolumne Co., SBBG; *B. Ryan 26527*, San Gabriel Wilderness, Los Angeles Co., ASU; *T. Nash 11296a*, Sequoia N. F., Tulare Co., ASU; *B. Ryan 25529b*, Marble Mtn Wilderness, Siskiyou Co., ASU)

**Xanthoparmelia subhosseana** (Essl.) A. Crespo, Elix, D. Hawksw. & Lumbsch 📖 🌿

(McCune & Geiser 2009; *B. Ryan 24957a*, Pacific Crest Trail at Etna Summit, Siskiyou Co., ASU; *C. Wetmore 16747*, Devil's Gate Pass, Sierra Nevada, Toiyabe N. F., Mono Co., MIN; *T. Nash 32550*, Santa Cruz Isl., Santa Barbara Co., ASU)

**Synonyms:** [\*Neofuscelia subhosseana\*](#), [\*Parmelia subhosseana\*](#)

**Note:** Combination in *Xanthoparmelia* was made in Blanco et al. 2004b. Collections are known from Kern, Lassen, Marin, Plumas, San Benito, San Luis Obispo, Santa Barbara, Siskiyou, Tuolumne counties (ASU, SBBG).

**Xanthoparmelia subplittii** Hale 📖 🌿

(Nash & Elix 2004; Knudsen et al. 2009; Knudsen & Kocourková 2009c; Rajakaruna et al. 2012, on serpentine, San Benito Co.; *B. Ryan 11047*, Eastern Brook Lakes watershed, Sierra Nevada, Inyo Co., ASU; *S. Tucker 36316A*, lava outcrops 13 mi. E of Baker on Kelbaker Rd, Mojave Desert, San Bernardino Co., ASU, SBBG, det. T. Nash; *T. Nash 32120*, Santa Catalina Isl., Los Angeles Co., ASU)

**Xanthoparmelia subramigera** (Gyeln.) Hale 📖 🌿

(Egan 1977; TJ; Hale & Cole 1988; Wright 1997; Nash & Elix 2004; McCune & Geiser 2009; Knudsen & Kocourková 2010f, 2012a; *B. Ryan 23920*, Ione-Sutter Creek Rd, W of town of Sutter Hill, Amador Co., ASU; *B. Ryan 25941b*, Magee Palomar Trail at Crossley Saddle, Agua Tibia Wilderness, San Diego Co., ASU)

**Synonyms:** [\*Parmelia subramigera\*](#)

**Xanthoparmelia tasmanica** (Hook. f. & Taylor) Hale 📖 🌿

(Nash & Elix 2004; McCune & Geiser 2009; *C. Wetmore 17010B*, back road between CA Hwy 94 and

Chula Vista near Otay Reservoir, San Diego Co., ASU)

**Note:** This species is widely distributed in the U. S. and Mexico.

**Xanthoparmelia tuckeriana** Elix & T. H. Nash 📄 🌿

(Nash & Elix 2004; *B. Ryan 32088*, near entrance to San Joaquin Experimental Forest on Hwy 41, Madera Co., ASU)

**Note:** This species also occurs in Arizona and Mexico.

**Xanthoparmelia tucsonensis** (T. H. Nash) Egan 📄 🌿

(Nash & Elix 2004; *B. Ryan 32093*, on Hwy 41, near entrance to San Joaquin Experimental Forest, Madera Co., ASU)

**Note:** This species also occurs in interior western U. S. and Mexico.

**Xanthoparmelia vagans** (Nyl.) Hale 🌿

(*S. Tucker 34710*, Cuesta Ridge, San Luis Obispo Co., ASU, SBBG, det. T. Nash)

**Note:** This species occurs in western U. S. and Mexico.

**Xanthoparmelia verruculifera** (Nyl.) A. Crespo, Elix, D. Hawksw. & Lumbsch 📄 🌿

(McCune & Geiser 2009)

**Synonyms:** [Neofuscelia verruculifera](#), [Parmelia verruculifera](#)

**Misapplied names:** [Parmelia olivacea var. prolixa](#) Ach. (Tuckerman 1882), [P. prolixa](#) (TJ for references)

**Note:** Collections are known from Kern, Lake, Los Angeles, Madera, Marin, Mendocino, Riverside, San Diego, San Luis Obispo, Santa Barbara, Siskiyou, Tulare, and Tuolumne counties (ASU, SBBG).

**Xanthoparmelia weberi** (Hale) Hale 🌿

**Synonyms:** [Parmelia weberi](#)

**Note:** This species occurs in western U. S., Texas, and Mexico.

**Xanthoparmelia wyomingica** (Gyeln.) Hale 📄 🌿

(Ryan & Nash 1991; Brodo et al. 2001 [pp. 741–742, with color photograph; CA not included on map]; Nash & Elix 2004; Knudsen & Kramer 2007; Rosentreter et al. 2007 [with photograph]; Knudsen et al. 2009; *S. Tucker 37464*, Mix Cyn Rd, summit of Blue Ridge, Vaca Mts, Solano Co., SBBG; *K. Knudsen 6847*, San Jacinto Mts Wilderness, Riverside Co., UCR)

*Xanthoparmelia hypopsila* (Müll. Arg.) Hale 📄 🌿

(Hale 1988; Hale & Cole 1988; von Reis [1991] based on misidentifications of *X. coloradoënsis*, *fide* Tucker [1999])

=name misapplied to [Xanthoparmelia angustiphylla](#)

**Note:** N. Amer. reports.

*Xanthoparmelia kurokawae* (Hale) Hale 📄 🌿

(Hale 1967; Nash 1974; TJ; Hale & Cole 1988; von Reis [1991] but based on misidentifications of *X. plittii* *fide* Tucker [1999])

=[X. lavicola](#)

*Xanthoparmelia montanensis* Hale 📄 🌿

(McCune & Geiser 2009) misidentifications for *Xanthoparmelia oleosa*, *fide* Nash & Elix (2004, p. 584)

*Xanthoparmelia somloënsis* (Gyeln.) Hale 📄 🌿

(Bowler et al. 1996)

=[Xanthoparmelia stenophylla](#) (synonymy *fide* Ahti & Hawksworth 2005)

*Xanthoparmelia taractica* (Kremp.) Hale 📄 🌿

(TJ; Thomson 1984; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; Hale 1990; von Reis 1991; Nash & Elix 2004)

**Synonyms:** [Parmelia taractica](#) (Baltzo 1970)

**Note:** According to Nash & Elix 2004, most western collections are misidentifications of *X. coloradoënsis*. *X. taractica* is only in S. Amer.

## **XANTHORIA** (Fr.) Th. Fr.

### **Xanthoria ascendens** S. Y. Kondr. 📷 🌿

(Lindblom 2004; Knudsen 2009; Knudsen & Kocourková 2010f, 2012a; *T. Nash 41091*, San Miguel Isl., Santa Barbara Co., ASU)

**Note:** This species has also been collected in Idaho and Mexico.

### **Xanthoria candelaria** (L.) Th. Fr. 📷 🌿

(Thomson & Ketchledge 1958; Jordan 1968; Baltzo 1970; Lindsay 1973; Pinelli & Jordan 1978; TJ; Thomson 1984; Hale & Cole 1988; Baltzo 1989; Bowler & Riefner 1990; von Reis 1991; McGee 1995; West & Doell 1995; Doell & Wright 1996 [as var. *candelaria*]; Tucker & Bratt 1996; Hill 1997; Lindblom 1997; McGee 1998; Robertson et al. 1998; Bratt 1999; Bourell 2000; Wright 2000; Brodo et al. 2001 [p. 743, with color photograph]; Baltzo 2002; Robertson 2002a, 2003a, 2003b; Jovan & McCune 2004; Lindblom 2004; Benson 2005; Robertson 2005b; Robertson & Beyer 2005; Carlberg et al. 2007; Williams & Sillett 2007; Knudsen 2009; Knudsen & Kocourková 2009a, 2009b; McCune & Geiser 2009; Knudsen & Kocourková 2010f; Tucker 2010; Glacy et al. 2011; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [\*Physcia lychnea\*](#), [\*Teloschistes candelarius\* var. \*lacinosus\*](#), [\*T. candelarius\* var. \*pygmaeus\*](#), [\*T. lychneus\*](#), [\*T. lychneus\* f. \*lacinosus\*](#), [\*T. lychneus\* var. \*pygmaeus\*](#), [\*X. lychnea\*](#)

### **Xanthoria elegans** (Link) Th. Fr. 📷 🌿

(TJ; Smith 1980; Thomson 1984; Hale & Cole 1988; Goward et al. 1994; Lindblom 1997; Wright 2000; Brodo et al. 2001 [p. 744, with color photograph]; Robertson 2003b; Lindblom 2004; Benson 2005; Knudsen & La Doux 2005; Robertson & Beyer 2005; Knudsen 2006a; Hinds & Hinds 2007 [color photograph, p. 523, only]; Knudsen 2007b; Knudsen & Kramer 2007; Tucker 2010; Villella 2010; Knudsen & Kocourková 2012a; Lendemmer 2012; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

**Synonyms:** [\*Caloplaca elegans\*](#), [\*Gasparrinia elegans\*](#), [\*Lecanora elegans\*](#), [\*Placodium elegans\*](#)

### **Xanthoria papillifera** (Vain.) Poelt 🌿

(*C. Wetmore 73768*, Santa Rosa Isl., Santa Barbara Co., MIN)

### **Xanthoria parietina** (L.) Th. Fr. 📷 🌿

(Herre 1910, 1945; Hale 1955; Baltzo 1970; TJ; Thomson 1984; Hale & Cole 1988; Baltzo 1989; von Reis 1991; Lindblom 1997; Robertson et al. 1998; Wright 2000; Brodo et al. 2001 [p. 746, with color photograph]; Baltzo 2002; Jovan & McCune 2004; Lindblom 2004; Tucker et al. 2004; Hinds & Hinds 2007 [color photograph, p. 524, only]; Knudsen & Kocourková 2009b; McCune & Geiser 2009; Rotter 2010; Benson et al. 2012; Knudsen & Kocourková 2012a; *S. Tucker 39106*, Seventeen-Mile-Drive, near Asilomar State Beach, Monterey, Monterey Co., SBBG; *B. Trask s.n.*, San Clemente Isl., Los Angeles Co., ASU)

**Synonyms:** [\*Physcia parietina\*](#), [\*Teloschistes parietinus\*](#)

### **Xanthoria pollinarioides** L. Lindbl. & D. M. Wright 📷 🌿

(Wright 2000; Lindblom 2004 [Marin Co. (type), Sonoma Co., Channel Is.]; Knudsen 2009; Glacy et al. 2011; Knudsen & Kocourková 2012a; *J. Robertson 3186*, Trailhead to Marshall Beach, Point Reyes Peninsula, Marin Co., SBBG; *K. Knudsen 6629*, Arroyo de la Cruz, San Luis Obispo Co., UCR; CA endemic)

**Note:** Lindblom (2004) first reported this species from Marin Co. (the type locality), Sonoma Co., and the Channel Is. A photograph of it had appeared four years previously (on back cover of CALS Bulletin 7 [1], 2000) before it was named, in connection with the article by Wright (2000).

### **Xanthoria polycarpa** (Hoffm.) Rieber 📷 🌿

(Hasse 1908b; Herre 1910; Merrill 1923; Herre 1950a; Rudolph 1955; Thomson & Ketchledge 1958; Jordan 1968; Baltzo 1970; Lindsay 1973; Pinelli & Jordan 1978; TJ; Smith 1980; Thomson 1984; Hale & Cole 1988; Baltzo 1989; Bowler & Riefner 1990; von Reis 1991; McGee 1995; Doell & Wright 1996; Tucker & Bratt 1996; Lindblom 1997; Wright 1997; McGee 1998; Bourell 2000; Wright 2000; Brodo et al. 2001 [pp. 746–747, with color photograph]; Baltzo 2002; Robertson 2002a, 2003a; Jovan

& McCune 2004; Lindblom 2004; Benson 2005; Robertson 2005a, 2005c; Carlberg et al. 2007; Hinds & Hinds 2007 [color photograph, p. 525, only]; Knudsen 2007b; Knudsen et al. 2009; Knudsen & Kocourková 2009c; McCune & Geiser 2009; Rotter 2010; Benson et al. 2012; Knudsen & Kocourková 2012a)

**Synonyms:** [\*Physcia parietina\* var. \*polycarpa\*](#), [\*Physcia parietina\* var. \*ramulosa\*](#), [\*Teloschistes parietinus\* var. \*polycarpus\*](#), [\*T. parietinus\* var. \*ramulosus\*](#), [\*T. polycarpus\*](#), [\*T. ramulosus\*](#), [\*X. ramulosa\*](#)

***Xanthoria sorediata*** (Vain.) Poelt 📖 🌿

(Hale & Cole 1988; Ryan & Nash 1991; Lindblom 1997; Wright 2000; Brodo et al. 2001 [pp. 747–748, with color photograph]; Robertson 2003b; Lindblom 2004; Hinds & Hinds 2007 [color photograph, p. 526, only]; *B. Ryan 12901*, Eastern Brook Lakes watershed, Inyo Co., ASU; *S. Tucker 37575*, Mt. Tamalpais, Marin Co., SBBG; *S. Tucker 36385*, Jasper Ridge, San Mateo Co., SBBG)

***Xanthoria tenax*** L. Lindbl. 📖 🌿

(Lindblom 1997; Robertson et al. 1998; Wright 2000; Brodo et al. 2001 [p. 747]; Jovan & McCune 2004; Lindblom 2004; Tucker et al. 2004, 2006; Carlberg et al. 2007; Knudsen 2007b; McCune & Geiser 2009; Knudsen & Kocourková 2010f; Tucker 2010; Knudsen & Kocourková 2012a; *C. Bratt 7960*, San Nicolas Isl., Ventura Co., ASU, SBBG; *B. Ryan 26024*, Arroyo Seco Cyn, Agua Tibia Wilderness, Riverside Co., ASU)

***Xanthoria tenuiloba*** L. Lindbl. 📖 🌿

(Lindblom 2004; Tucker et al. 2004; *S. Tucker 38268*, entrance, UC Santa Cruz campus, Santa Cruz, Santa Cruz Co., SBBG; *T. Nash 38784a*, San Nicolas Isl., near Tufts Rd, Ventura Co., ASU)

**Note:** This species has been collected most commonly in Mexico.

***Xanthoria fallax*** (Hepp) Arnold 📖 🌿

(Baltzo 1970; Tucker & Kowalski 1975; Pinelli & Jordan 1978; TJ; Smith 1980; Sigal & Nash 1983; Thomson 1984; Weber et al. 1987; Hale & Cole 1988; Baltzo 1989; von Reis 1991; Bowler et al. 1996; Doell & Wright 1996; Hill 1997; Lindblom 1997; McGee 1998; Wright 2000; Brodo et al. 2001 [pp. 744–745, with color photograph]; Robertson 2001; Baltzo 2002; Knight et al. 2002; Robertson 2002a, 2003a; Jovan & McCune 2004; Benson 2005)

=[\*Xanthomendoza fallax\*](#)

***Xanthoria fulva*** (Hoffm.) Poelt & Petut. 📖 🌿

(Lindblom 1997; McGee 1998 [as “cf.”]; Wright 2000; Brodo et al. 2001 [p. 745, with color photograph]; Baltzo 2002; Thomson 2003; Jovan & McCune 2004; Tucker et al. 2004; Robertson & Beyer 2005; Knudsen et al. 2009; Knudsen & Kocourková 2009b; Villella 2010; Benson et al. 2012; Rajakaruna et al. 2012, on serpentine, San Benito Co.)

=[\*Xanthomendoza fulva\*](#)

***Xanthoria hasseana*** Räsänen 📖 🌿

(Räsänen 1944; Ohlsson 1973; TJ; Doell & Wright 1996; Lindblom 1997; McGee 1998; Wright 2000; Brodo et al. 2001 [p. 746, with color photograph]; Baltzo 2002; Thomson 2003; Jovan & McCune 2004; Benson 2005)

=[\*Xanthomendoza hasseana\*](#)

***Xanthoria lobulata*** (Flörke) B. de Lesd. 📖 🌿

(Baltzo 1989)

=[\*Caloplaca lobulata\*](#)

***Xanthoria lychnea*** (Ach.) Th. Fr. 📖 🌿

(Hasse 1913b; Moxley 1921; Merrill 1923)

=[\*X. candelaria\*](#)

***Xanthoria mendozae*** Räsänen 📖 🌿

(Lindblom 1997; Doell et al. 1999; Bourell 2000; Wright 2000)

=[\*Xanthomendoza mendozae\*](#)

***Xanthoria montana*** L. Lindbl. 📖 🌿

(Robertson & Beyer 2005)



=[Xanthomendoza montana](#)

*Xanthoria oregana* Gyeln. 📖 🌿

(Lindblom 1997; Wright 2000; Brodo et al. 2001 [p. 743]; Doell 2002; Robertson 2002c; Jovan & McCune 2004; Benson 2005)

=[Xanthomendoza oregana](#)

*Xanthoria ramulosa* (Tuck.) Herre 📖 🌿

(Herre 1910; Keissler 1926; Rudolph 1955; Thomson & Ketchledge 1958; TJ; Hale & Cole 1988; Goward et al. 1994; Riefner, Bowler, & Ryan 1995; Tucker & Bratt 1996; Wright 1997)

=[X. polycarpa](#)

**Note:** According to Lindblom (1997), *X. ramulosa* has often been used for specimens with narrow lobes corresponding to *X. polycarpa*, in the sense of European authors.

*Xanthoria substellaris* (Ach.) Vain. 📖 🌿

(Rudolph 1955)

=[Xanthomendoza fallax](#) (synonymy *fide* Rudolph 1955, p. 184)

*Xanthoria ulophyllodes* Räsänen 📖 🌿

(Kondratyuk & Poelt 1997; Lindblom 1997; Wright 2000; Brodo et al. 2001 [p. 748, with color photograph]; Thomson 2003; Hinds & Hinds 2007 [color photograph, p. 516, only]; Knudsen & Kramer 2007; Tucker 2010)

=[Xanthomendoza ulophyllodes](#)

## **XYLOGRAPHA** (Fr.) Fr.

**Xylographa hians** Tuck. 📖 🌿

(Lindsay 1973; TJ; Ryan 2004 [p. 614]; *B. Ryan 32200*, Benedict Meadow, Sierra N. F., Madera Co., ASU)

**Note:** This species has also been collected in Oregon, Washington, and Arizona.

**Xylographa pruinodisca** B. D. Ryan & T. H. Nash 🌿

(*C. Wetmore 50973*, Muir Grove, Sequoia N. P., Tulare Co., MIN)

**Note:** This species has also been collected in Arizona.

**Xylographa parallela** (Ach.: Fr.) Behlen & Desberger 📖 🌿

(Orcutt 1885, 1903, 1907 [as "*Stylographa parallela* Nyl." in error]; Brodo et al. 2001 [p. 749, with color photograph]; Ryan 2004; Williams & Sillett 2007; Glacy et al. 2011; *T. Nash 11553*, 3 km N of Klamath, Del Norte Co., ASU; *B. Ryan 23750*, Meeks Creek Trail, Desolation Wilderness, El Dorado Co., ASU)

**Xylographa soralifera** Holien & Tønsberg 📖 🌿

(Lendemer et al. 2010; *J. Lendemer 19567*, Yosemite N. P., Mariposa Co., NY)

**Xylographa vitiligo** (Ach.) J. R. Laund. 📖 🌿

(Wetmore 1985 [based on *C. Wetmore 24446*, 13 mi. S of Crescent City, Del Norte Co., 16 Aug 1975, MIN]; Ryan 2004; Williams & Sillett 2007; *C. Wetmore 24446*, Crescent City, Del Norte Co., MIN; *B. Ryan 32027c*, Shinn Grove, Sierra N. F., Madera Co., ASU)

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

## **Z AHLBRUCKNERA** Herre =[Z AHLBRUCKNERELLA](#)

*Zahlbrucknera calcarea* Herre 📖 🌿

(Herre 1910)

=[Zahlbrucknerella calcarea](#)

**Note:** This species has only rarely been collected; one collection is known from N Canada.

## **Z AHLBRUCKNERELLA** Herre

**Zahlbrucknerella calcarea** (Herre) Herre 📖 🌿

(Herre 1912b; Fink 1935; Henssen 1963f, 1977; TJ; Thomson 1984; Goward 1999)

**Synonyms:** [Zahlbrucknera calcarea](#)

**Zahlbrucknerella californica** Henssen 📖 🌿

(Henssen 1977 [p. 43]; TJ; *A. Henssen 13627b* [type, on volcanic rock in dry stream bed, Pine Ridge Summit, Coast Range, Humboldt Co.]; CA endemic)

**ZWACKHIOMYCES** Grube & Hafellner

\***Zwackhiomyces coepulonus** (Norman) Grube & R. Sant. 📖 🌿

(Kocourková & Knudsen 2007; Kocourková et al. 2012; *K. Knudsen 11771*, Clark Mts, Mojave National Preserve, Mojave Desert, San Bernardino Co., on *Caloplaca biatorina*, UCR)

**Note:** *Z. coepulonus* occurs on *Caloplaca* and *Xanthoria* species.