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University and Jepson Herbaria  
California Lichen Catalog

## REVISED CATALOG OF LICHENS, LICHENICOLES, AND ALLIED FUNGI IN CALIFORNIA

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### ABSTRACT

This revision of the California lichen catalog reports 1,575 taxa (of which 65 are recognized at the level of variety, subspecies or forma) for the state, an increase of about 580 taxa since the 1979 catalog. The number of genera is 297. The lichen flora of California includes about 36% of the 4,429 species 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 854 publications pertaining to California lichens.

Key words: California; Flora; Lichens.

The 25 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 has become markedly apparent, particularly because of an increased interest in lichen collecting in California. This revised catalog is intended to provide a current, comprehensive picture of the species known to occur in California. We 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 two authors, and was eventually combined. Publications (854) 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 report the species under its present name or some additional synonyms, or that represent reports for a scarce 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 California Channel Islands) include Bowler, Bratt, Eckfeldt, Hasse, Howe, Hue, 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 1,575, compared to 999 (1060 including infraspecific taxa) in the previous catalog (Tucker & Jordan 1979). The species number known has nearly doubled since 1945, when Herre (1945) reported 794 species and varieties known in California. The lichen flora of California includes about 36% of the 4,429 species reported for the continental United States and Canada by Esslinger (2004b). The number of genera represented in California has increased from 170 in 1979 to 297, about 61% of the genera found in the United States and Canada.

We follow approximately the format used by Esslinger & Egan (1995). 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 checklist (2004b). For full citations of older names, Tucker & Jordan (1979) should be consulted. Names have been checked against the Esslinger (2004b) online updated checklist for the continental United States and Canada (URL is given in References).

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, we selected records that show the broadest geographic range within the state, or that have not been published previously. In some cases, we 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). The identifications by specialists such as P. Diederich, D. Triebel, and M. Cole are responsible for 120 species in 54 genera reported in the current work, compared to seven species in five genera in 1979. Many more lichenicolous 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 90 years, since 1913; another 15 species have not been re-collected for over 65 years (since 1935); and another 27 have not been collected for over 50 years (since 1950). Encouraging evidence of renewed enthusiasm for collecting is demonstrated by the fact that that 42 species have recently been re-collected that had not been collected for at least 50 years.

About 102 species of lichens currently appear to be endemic to California and are so labeled in the text. 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 ten species of *Arthonia* are considered endemics, but their status may change when the genus undergoes a monographic study. Recently-named taxa may appear to be endemic due to a lack of recognition by collectors as distinct species; an example is in the eight California endemics in the genus *Lecania*, most described as new by van den Boom & Ryan (2004). Publications with descriptions of newly recognized species generally stimulate extension of the known range of such species.

#### ACKNOWLEDGMENTS.

Ten years of work have gone into preparation of this catalog. Starting in 1995 when ST moved back to California after her retirement, she and Bruce Ryan combined their 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.

I want to thank three colleagues especially for their contributions. 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 California, but his many publications are major contributions to the state flora. His comprehensive project on the Sonoran Desert lichen flora has funded visits to California and Arizona by numerous lichen specialists, and has resulted in publication of the results in the first two 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).

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 has been 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. The authors have benefited from the cooperation of many individuals in preparation of this catalog.

The author also is grateful to Richard L. Moe, editor of "Constancea", who has spent countless hours on the 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.

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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). Abbreviations 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. P., National Park; nr, near; pr. p., pro parte; Rd, Road; S. P., State Park; Univ., University; also months and directions of the compass are abbreviated.

#### NOTE 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 an entry in Index Fungorum (🔗).

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 caerulescens* Kotte 📁🔗  
(Diederich 2003, 2004)

**\**Abrothallus microspermus* Tul.**  

(Diederich 2003, 2004; S. Tucker 37640, LaVeaga Park, Santa Cruz, Santa Cruz Co., on *Flavoparmelia caperata*, SBBG, determination by P. Diederich)

**\**Abrothallus parmeliarum* (Sommerf.) Arnold**  

(TJ)

**Synonyms:** *Buellia parmeliarum* (Hasse 1915b), *Buellia parmeliarum* (Fink 1935), *Lecidea parmeliarum* (Hasse 1898a)

**\**Abrothallus prodiens* (Harm.) Diederich & Hafellner**  

(Triebel et al. 1991; Diederich 2003, 2004; S. Tucker 34655, 35088, pr. p., Los Osos, San Luis Obispo Co., SBBG, determinations by Diederich)

**\**Abrothallus suecicus* (Kirschst.) Nordin**  

(Diederich 2003, 2004; S. Tucker 34509, pr. p., Hastings Natural History Reserve, Monterey Co., on *Ramalina menziesii*, SBBG, determination by P. Diederich)

**\**Abrothallus usneae* Rabenh.**  

(Diederich 2003, 2004; S. Tucker 37794, Sugar Loaf Ridge S. P., Sonoma Co., on *Usnea arizonica*, SBBG, determination by P. Diederich)

**\**Abrothallus welwitschii* Mont. ex Tul.**  

(McGee 2003, determined by Diederich; Diederich 2004)

**ACAROSPORA A. Massal.****Acarospora americana** de Lesd.

 

(Magnusson 1929b; TJ; Knudsen 2004b)

**Acarospora badiofuscata** (Nyl.) Th. Fr.

 

(Knudsen 2004b; B. Ryan 13672, Eastern Brook Lakes Watershed, Sierra Nevada, 15 km S of Tom's Place, Inyo Co., ASU)

**Synonyms:** *A. californica* (synonymy *fide* K. Knudsen [personal communication])

**Acarospora bella** (Nyl.) Herre

 

(Herre 1910; Magnusson 1929b; Volk 1963; TJ; Clauzade et al. 1981; Knudsen 2004b)

**Acarospora bullata** Anzi

 

(Magnusson 1929a, 1956; TJ; Ryan & Nash 1991; Tucker & Bratt 1995)

**Acarospora cinereoalba** (Fink) H. Magn.

 

(Knudsen 2005c)

**Acarospora citrina** (Taylor) Zahlbr.

 

(Herre 1945; TJ)

**Acarospora complanata** H. Magn.

 

(B. Ryan 25044, Gold Flat, 9.7 km SW of Scott Bar, Klamath National Forest, Siskiyou Co., ASU)

**Synonyms:** *A. obscura* (synonymy *fide* Clauzade et al. [1981] and Esslinger [2004b], although Magnusson [1956] considered *A. obscura* distinct)

**Acarospora elevata** H. Magn.

 

(Magnusson 1929b, 1953; TJ)

**Misapplied names** (*fide* K. Knudsen): *A. nitida* [Hasse collections from San Gabriel Mts in herbaria]

**Acarospora epilutescens** Zahlbr.

 

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

**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 *Hasse* specimens) were accepted by Weber, who continued the confusion.

**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]; Knudsen 2004b)

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

**Acarospora glaucocarpa** (Wahlenb.) Körb.  

(Herre 1950a; TJ; Brodo et al. [2001, p. 147, with color photograph]; Robertson 2001; K. Knudsen has seen material of this species from the San Bernardino Mts [personal communication])

**Synonyms:** [\*A. cervina\* var. \*glaucocarpa\*](#) (Magnusson 1929a, 1929b), [\*Lecanora glaucocarpa\* var. \*depauperata\*](#) Cromb., and [\*L. glaucocarpa\* f. \*pruinifera\*](#) (Hasse 1903e, 1906)

**Acarospora heppii** (Nägeli ex Hepp) Nägeli ex Körb.  

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

**Synonyms:** [\*A. aeruginosa\*](#)

**Acarospora impressula** Th. Fr. 

(E. Weier collections, central Sierra Nevada, UC)

**Acarospora molybdina** (Wahlenb.) Trevis. 

(E. Weier collections, Sierra Nevada, UC)

**Acarospora obpallens** (Nyl.) Zahlbr.  

(Zahlbruckner 1902; Herre 1910; Hasse 1913b; Merrill 1923; Magnusson 1929b; Fink 1935; Magnusson 1956; TJ; Knudsen 2003c, 2004b, 2005c; B. Ryan 31465a, Cherry Cyn, Santa Rosa Isl., Santa Barbara Co., ASU)

**Synonyms:** [\*A. carnegiei\*](#), [\*Lecanora obpallens\*](#) (Hasse 1897; McClatchie 1897; Hasse 1898a; Nylander 1900; Hasse 1903a)

**Misapplied names** (*fide* K. Knudsen): [\*A. geogena\*](#) (Bratt 1987, 1997)

**Acarospora oligospora** (Nyl.) Arnold  

(Magnusson 1929b, 1953, 1956; TJ)

**Synonyms:** [\*A. glebosa\*](#) (Tuckerman 1872; Hasse 1909, 1913b; Fink 1935), [\*Lecanora fuscata\* var. \*oligocarpa\*](#) (Tuckerman 1882; Hasse 1896; McClatchie 1897; Hasse 1898a; Orcutt 1903, 1907), [\*L. oligospora\*](#) (Tuckerman 1872)

**Acarospora peliscypha** Th. Fr.  

(TJ)

**Synonyms:** [\*Lecanora peliscypha\*](#) (Tuckerman 1866; Willey 1873a; Hasse 1906)

**Acarospora radicata** H. Magn.  

(Wetmore 1985)

**Acarospora reagens** Zahlbr.  

(Zahlbruckner 1902 [Isotype is *H. E. Hasse* 201, Palm Springs, Riverside Co.], 1903–1907, p. 153; Hasse 1913b; Magnusson 1929b; Fink 1935; Magnusson 1956; TJ; Knudsen 2003c and 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)

**Synonyms:** [\*A. nodulosa\* var. \*reagens\*](#), [\*Lecanora reagens\*](#) (Hasse 1903e)

**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 and photograph on back cover of CALS Bulletin 11[1])

**Synonyms:** [Lecanora schleicheri](#) (TJ); [A. rhabarbarina](#)

**Note:** Several synonyms suggested by Weber (1968) are no longer accepted for *A. schleicheri* sensu stricto.

**Acarospora smaragdula** (Wahlenb.) A. Massal.  

(TJ; Bowler et al. 1996; Tucker & Bratt 1996; Knudsen 2005c)

**Acarospora smaragdula** var. **lesdainii** (Harm. ex A. L. Sm.) H. Magn.  

(Magnusson 1929a; Robertson 2003b; Knudsen 2004a, 2004b, 2005c)

**Synonyms:** [A. hassei](#) [synonymy *fide* TJ], [A. particularis](#) H. Magn. (Magnusson 1929b, 1956; TJ; Knudsen 2004a)

**Acarospora socialis** H. Magn.  

(Magnusson 1929a; Wheeler 1938; Weber 1968; TJ; Knudsen 2005c; *C. Bratt 3711*, Santa Barbara Isl., Santa Barbara Co., SBBG; *S. Tucker 35708*, Santa Cruz Isl., Santa Barbara Co., SBBG)

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

**Acarospora stenospora** (Stizenb.) Hue  

(Magnusson 1929b; TJ)

**Synonyms:** [Lecanora stenospora](#) Stizenb. *non* Zahlbr. (Hasse 1897, 1898a; TJ; Knudsen 2003c and color photograph on back cover of CALS Bulletin 10[2])

**Acarospora strigata** (Nyl.) Jatta  

(Magnusson 1929b; TJ; Brodo et al. [2001, p. 148, with color photograph]; Robertson 2003b)

**Synonyms:** [A. epilutescens](#) sensu H. Magn. and sensu Hasse *non* Zahlbr., [A. peltasticta](#), [A. strigata](#) var. [peltata](#), [Lecanora peltasticta](#) (Hasse 1903e)

**Acarospora terricola** H. Magn.  

(Magnusson 1929a, 1929b, 1956; TJ; Ryan & Nash 1991; *K. Knudsen 1108*, fertile specimens, Torrey Pines S. P., San Diego Co., ASU, NY, determined by K. Knudsen, compared with holotype; CA endemic)

**Acarospora thamnina** (Tuck.) Herre  

(Magnusson 1929b; Fink 1935; Herre 1945; Magnusson 1956; TJ; Robertson 2003b; *B. Ryan 26145*, Chilao Cpgd, San Gabriel Mts, Angeles Nat. Forest, Los Angeles Co., ASU)

**Synonyms:** [A. interposita](#) var. [nitidella](#), [A. thermophila](#), [Lecanora cervina](#) var. [thamnina](#) (Tuckerman 1872) (synonymy *fide* Magnusson)

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

(Magnusson 1929b; Fink 1935; Magnusson 1956; TJ; Riefner, Bowler, & Ryan 1995; Knudsen 2003a, 2003c, and color photographs on front and back covers of CALS Bulletin 10[1,2]; Riefner et al. 2003; Robertson 2003b; Riefner & Rosentreter 2004; CA endemic)

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

**Acarospora veronensis** A. Massal.  

(Magnusson 1929b, 1956; TJ; Knudsen 2004b, 2005c)

**Acarospora washingtonensis** H. Magn.  

(*K. Knudsen 1239*, Holcombe Valley, San Bernardino Mts, San Bernardino Co., ASU)

**Acarospora xanthophhana** (Nyl.) Jatta  

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

**Synonyms:** [Lecanora xanthophhana](#) (TJ for references)

**Note:** This is a punctiform species in yellow group, with a type from Chile; CA material of Hasse and others belong to the [A. bella](#) / *A. socialis* group *fide* K. Knudsen.

**Acarospora aeruginosa** Hasse  

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

=*A. heppii**Acarospora albomarginata* (Herre) G. Salisb.  

(Salisbury 1966; TJ)

=*Thelocarpon albomarginatum* Herre (Herre 1912b; Fink 1935)**Note:** *Acarospora albomarginata* (Herre) G. Salisb. is illegitimate because it is a later homonym of a Tunisian species, *Acarospora albomarginata* de Lesd. *fide* I. Tavares.*Acarospora arenosa* Herre  

(Herre 1910; Fink 1935; TJ; Knudsen 2004b; Knudsen 2005c; A. Sanders, comm. K. Knudsen 1365, Boden Cyn, San Diego Co., UCR, ASU, determination by K. Knudsen)

=*Sarcogyne arenosa**Acarospora californica* Zahlbr.  

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

=*A. badiofusca**Acarospora carnegiei* Zahlbr.  

(Magnusson 1929b, 1956; TJ; Bratt 1999)

=*A. obpallens* (synonymy *fide* K. Knudsen, personal communication)*Acarospora cervina* A. Massal.  

(TJ)

**Synonyms:** *Lecanora cervina*, but misidentifications for CA*Acarospora cervina* var. *glaucoarpa* (Wahlenb.) Körb. =*A. glaucoarpa* (TJ)*Acarospora chlorophana* (Wahlenb.) A. Massal.  

(Hasse 1908b, 1913b; Herre 1910; TJ; von Reis 1991; Knudsen 2004b)

=*Pleopsidium chlorophanum*, but most North American records (see TJ) are other species of*Acarospora* *fide* B. Ryan*Acarospora epilutescens* sensu H. Magn. and sensu Hasse non Zahlbr. (Magnusson 1929a, 1956; Weber 1968; this is probably an undescribed species *fide* B. Ryan, because Magnusson's descriptions of *A. epilutescens* [as having pruinose brown thalli, based on *H. E. Hasse* specimens] differ from the protologue describing a yellow species in Zahlbruckner [1902])=*A. strigata* (synonymy *fide* K. Knudsen)*Acarospora evoluta* H. Magn.  

(Magnusson 1929a, 1929b, 1956; Weber 1968; color photograph on back cover of CALS Bulletin 11[1])

=*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)**Synonyms:** *A. geophila* H. Magn. (1954), non H. Magn. (1944)**Note:** The Bratt specimen is K-, unlike *A. geogena*. It 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)

= *A. smaragdula* var. *lesdainii* (Magnusson 1929b; Clauzade & Roux [1985] regard these as distinct taxa)*Acarospora intercedens* H. Magn.  (Magnusson 1956; Weber [1968], who merged it with *A. schleicheri* s. l.)= *A. socialis*, 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 nitida* H. Magn.  (Ryan & Nash 1991; this name was incorrectly applied by Hasse to collections of *A. elevata* from San Gabriel Mts *fide* K. Knudsen)*Acarospora nodulosa* (Dufour) Hue var. *reagens* (Zahlbr.) Clauzade & Cl. Roux  

(Clauzade et al. [1981] named the variety but did not mention CA; St. Clair &amp; Warrick [1987] stated that this variety had been collected from a single site near Palm Springs)

= *A. reagens* *fide* K. Knudsen*Acarospora obscura* H. Magn.  

(Magnusson 1956; TJ)

= *A. complanata* in Esslinger 2004b, although Magnusson regarded them as distinct species*Acarospora oxytona* (Ach.) A. Massal.  

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

= *Pleopsidium flavum**Acarospora particularis* H. Magn.  

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

= *A. smaragdula* var. *lesdainii* (Knudsen 2004a)*Acarospora peltasticta* Zahlbr.  

(Zahlbruckner 1902, 1903–1907; Herre 1911a; Magnusson 1929b; Fink 1935; Magnusson 1956; TJ; von Reis 1991; Doell et al. 1999)

= *A. strigata* (synonymy *fide* K. Knudsen)*Acarospora pleiospora* (Nyl.) Hasse  

(Hasse 1897, 1913b; Lendemer 2004a)

= *A. thelococcoides**Acarospora pleistospora* (Nyl.) Hasse 

(Hasse 1897, 1913b; Lendemer 2004a)

= *A. thelococcoides**Acarospora rhabarbarina* Hue  

(Fink 1935)

= *A. schleicheri**Acarospora rufescens* (Ach.) Bausch  (Herre 1910; Hasse 1913b; Herre 1942a, 1950a; Thomson & Ketchledge 1958; TJ; Knudsen 2004b; name was applied incorrectly to collections of several other species *fide* K. Knudsen, personal communication)**Synonyms:** *Lecanora rufescens**Acarospora simplex* (Davies) Jatta f. *complicata* Cromb. 

(Hasse 1903e, 1906)

=*Biatorella simplex*

*Acarospora squamulosa* (Schrad.) Trevis.  

(Hasse 1913b; Fink 1935; Herre 1950a; name was misapplied to collections of several other species *fide* K. Knudsen, personal communication)

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

*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 thermophila* Herre  

(Magnusson 1929b; Herre 1945; TJ)

=*A. thamnina* (synonymy *fide* Magnusson)

**ACOLIUM** (Ach.) Gray

*Acolium bolanderi* Tuck.  

(TJ for references)

=*Thelomma mammosum*

*Acolium californicum* Tuck.  

(TJ for references)

=*Thelomma californicum*

*Acolium chloroconium* Tuck.  

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

=*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., SBBG, determination by A. Aptroot)

*Acrocordia cavata* (Ach.) R. C. Harris  

**Misapplied names:** *Arthopyrenia sphaeroides* (Tucker & Jordan 1979 *fide* Aptroot 2002)

**ACTINOGYRA** Schol. = **UMBILICARIA**

*Actinogyra polyrhiza* (L.) Schol.  

(Llano 1950; Baltzo 1970; TJ)

=*Umbilicaria polyrhiza*

**ADELOLECIA** Hertel & Hafellner**Adelolecia sonorae** Hertel (Hertel [2004] cited *T. Nash* 41422 from San Miguel Isl., Santa Barbara Co., ASU)**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](#) (Tucker 1973; Pinelli & Jordan 1978; Goward et al. 1994; Jovan & McCune 2004), [Tuckermannopsis pallidula](#)**Ahtiana sphaerosporella** (Müll. Arg.) Goward  

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

**Synonyms:** [Parmelia sphaerosporella](#) (Zahlbruckner 1902; Hasse 1903c; Fink 1935; Herre 1945, 1946; Tucker 1973)**ALECTORIA** Ach.**Alectoria imshaugii** Brodo & D. Hawksw.  

(Brodo &amp; Hawksworth 1977; TJ; McCune &amp; Geiser 1997; Goward 1999; Brodo et al. [2001, p. 152, with color photograph]; Jovan &amp; McCune 2004)

**Note:** "A. montana" is an herbarium name occasionally used for *A. imshaugii fide* I. Brodo (personal communication).**Alectoria lata** (Taylor) Linds.  

(Brodo &amp; Hawksworth 1977; TJ; Brodo et al. [2001, p. 152, with color photograph]; Carlberg 2003)

**Alectoria sarmentosa** (Ach.) Ach.  

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

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

(Wright 1997; Goward 1999; Bourell 2000; Brodo et al. 2001; Ryan [2002], who suggested that it is probably extinct in S CA; Robertson 2002a; Jovan &amp; McCune 2004)

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

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

**Alectoria bicolor** (Ehrh.) Nyl.  

(Hale [1969] map)

= *Bryoria bicolor* (Ehrh.) Brodo & D. Hawksw.**Note:** Hale's indication that this species is in CA is incorrect; it occurs on the West Coast from Vancouver Island 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* DC. (misidentifications for CA)**Alectoria chalybeiformis** (L.) Gray  

(Howe 1914–1915; Herre 1945)

= [Bryoria chalybeiformis](#) (misidentifications; an arctic/alpine species; no known collections 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; but 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; misidentifications; name has been applied to numerous species *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; misidentifications for CA)

*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 tortuosa](#)

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

*Allarthonia patellulata* (Nyl.) Zahlbr.  

(Hasse 1913b)

=[Arthonia patellulata](#)

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

(Hasse 1913b)

=[Arthonia patellulata](#) var. *caesiocarpa*

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

*Amandinea subduplicata* (Vain.) Marbach  

(Marbach 2000)

*Amandinea submontana* Marbach  

(Marbach 2000)

*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)

=*Buellia punctata*

*Amandinea turgescens* (Tuck.) Marbach  

(Bratt 1999; Marbach [2000] reported it only from eastern North America)

=*Buellia badia* (synonymy in Bungartz & Nash 2004)

## ANAPTYCHIA Körb.

*Anaptychia elbursiana* (Szatala) Poelt  

(*J. R. Shevock* 13362 [as *Physconia thomsonii*] Kern Co.; *J. R. Shevock* 13024, Tulare Co., determined by B. Ryan; synonymy but no CA report in Esslinger [2002, p. 96]; color photograph but no CA report in Brodo et al. [2001, p. 566, mislabeled as *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 ciliaris* (L.) Körb.  

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

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

(Herre 1910)

=*Heterodermia comosa* (but Herre collections should be verified; occurring 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)

**Note:** The type is *F. Drouet & J. P. MacBride* 4621, on desert soil, 1 mi. SW of Essex, San Bernardino Co., alt. 1,000 ft. According to C. Wetmore (personal communication), presumed isotypes of *Anema dodgei* are referable to *Heppia*.

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

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

(R. Harris 1975; TJ; von Reis 1991; Aptroot 2002; Baltzo 2002)

**Synonyms:** *Arthopyrenia biformis* (Herre 1910; Hasse 1912, 1913b; Merrill 1923; Fink 1935; Jordan 1968), *A. parvula* (Zahlbrückner 1902; Hasse 1903f, 1913b; Riddle 1918; Fink 1935; Herre 1944b), *Leiophloea parvula*

**Misapplied names:** *Arthopyrenia conformis* (Herre 1910; Fink 1935)

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

(Aptroot 2002; *S. Tucker* 34375, pr. p., Montecito, Santa Barbara Co., SBBG, determination by 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 thelomorphum* (Tuck.) Zahlbr.    
 (TJ)  
 =[Pyrenula thelomorpha](#)

## ARTHONIA Ach.

**Arthonia caesia** (Flot.) Körb.  

(Brodo et al. [2001, p. 164, with color photograph and map which showed it around Los Angeles];  
 Tucker 2002)

**Arthonia caudata** Willey  

(Hasse 1898a; TJ)

**Arthonia cinnabarinina** (DC.) Wallr.  

(TJ; Brodo et al. [2001, p. 164, with color photograph])

**Synonyms:** *A. gregaria* (Willey 1890; Hasse 1903f, 1906; Merrill 1923; Herre 1942c), [A. tumidula](#)

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

(Diederich [2003] as “s. str.”)

**Arthonia complanata** Fée  

(Herre 1944b; Lindsay 1973; TJ)

**Arthonia crozalsiana** de Lesd.  

(Sundin & Tehler 1998)

**Arthonia cytisi** A. Massal.  

(Fink 1935; TJ)

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

**Arthonia diffusa** Nyl.  

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

**Note:** The Hasse collection does not resemble collections of this species from Maine.

**Arthonia diffusella** Fink  

(Lindsay 1973; TJ)

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

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

**Arthonia epipastoides** Nyl.  

(Willey 1890; Hasse 1906, 1913b; Fink 1935; TJ)

**Arthonia excedens** Nyl.  

(Jordan 1968; TJ; Baltzo 2002)

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

(Diederich 2003; *S. Tucker* 36515, 36516, San Simeon S. P., San Luis Obispo Co., on soralia of *Ramalina*, SBBG, determination by P. Diederich)

**Arthonia galactitella** Nyl. 

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

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

(Hasse 1898a; TJ)

**Arthonia glebosa** Tuck. (Tuckerman 1872; Willey 1873a; Tuckerman 1888; Willey 1890; Zahlbruckner 1903–1907, p. 90; Orcutt 1903 [as “*A. globosa*”], 1907; Fink 1935; TJ; Egea & Torrente [1995b] suggest that this taxon does not belong in *Arthonia*)**Arthonia gyalectoides** Müll. Arg. (Hasse 1903f, 1913b; Merrill 1923; Fink 1935; TJ; Bourell 2000; *H. E. Hasse* [!S. Tucker] on *Heteromeles arbutifolia*, Catalina Isl., 1902, *Lichenes Exsiccati, Sullivant Moss Soc.* 2470, MIN; *T. Tønsberg TT14742*, Del Norte Co., BG, determination by R. Sundin; CA endemic)**Arthonia ilicina** Taylor 

(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)

**Arthonia infectans** Egea & Torrente 

(Egea &amp; Torrente 1995b; CA endemic)

**\*Arthonia intexta** Almq. 

(Hertel [1969, cited “California”, 1897, Hasse, herb. Nyl. 19986], 1971b; TJ; Triebel et al. 1991; Thomson 1997)

**Synonyms:** [\*Lecidea arthoniza\*](#)**Arthonia lecanactidea** Zahlbr. (Zahlbruckner 1902; Hasse 1903f, 1913b; Merrill 1923; Fink 1935; TJ; *H. E. Hasse*, on *Lycium californicum*, beach bluffs near San Pedro, 1897, *Lichenes Exsiccati, Sullivant Moss Soc.* 1316, MIN [!S. Tucker]; CA endemic)**Arthonia madreana** Egea & Torrente 

(Egea &amp; Torrente 1995b; CA endemic)

**Arthonia microspermella** Willey 

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

**\*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, determined by M. Cole)**Arthonia ochrolutea** Nyl. 

(Hasse 1898a; TJ; S. Tucker 37842, 25 mi. S of Half Moon Bay, San Mateo Co., SBBG)

**Arthonia patellulata** Nyl. 

(McClatchie 1897; Hasse 1898a; Fink 1935; TJ; Thomson 1997)

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

(CA endemic)

**Synonyms:** [\*Allarthonia patellulata\* var. \*caesiocarpa\*](#) (H. E. Hasse on *Chrysoma pinifolia* [= *Ericameria pinifolia*], near Playa del Rey, Los Angeles Co., 1900, *Lichenes Exsiccati, Sullivant Moss Soc.* 2071, MIN, !S. Tucker)**Arthonia polygramma** Nyl. (Hasse 1906; Herre 1912a [on oak, Alum Rock S. P., Inner Coast Range, Santa Clara Co., 450 ft. elev.]; Hasse 1913b; Moxley 1921; Merrill 1923; Fink 1935; TJ; *H. E. Hasse*, Santa Catalina Isl., Los Angeles Co., 1912, *Lichenes Exsiccati, Sullivant Moss Soc.* 1, MIN)**Arthonia polymorpha** Ach. 

(Hasse 1906; Fink 1935; TJ)

**Arthonia pruinata** (Pers.) A. L. Sm.  

**Synonyms:** [A. impolita](#) (Tuckerman 1872; Willey 1873a, 1890; Hasse 1903f, 1913b; Merrill 1923; Fink 1935; Herre 1942b; Lindsay 1973; TJ; Doell 2002)

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

**Arthonia pruinosaella** Nyl.  

(Hasse 1898a, 1898b, 1913b; Zahlbruckner 1902; Fink 1935; TJ; CA endemic)

**Arthonia punctiformis** Ach.  

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

**Arthonia pyrrhuliza** Nyl.  

(Hasse 1906; TJ)

**Arthonia quintaria** Nyl.  

(Hasse 1906; TJ)

**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)

**Synonyms:** [A. astroidea](#), [A. astroidea var. \*swartziana\*](#)

**Arthonia rhoidis** Zahlbr.  

(Zahlbruckner 1902; Hasse 1903b, 1903f, 1913b; Merrill 1923; Fink 1935; TJ; CA endemic)

**Arthonia spadicea** Leight.  

(*H. E. Hasse* 700, on *Tilia americana*, Soldiers' Home, Los Angeles Co., 1899, MIN; *S. Tucker* 33684, San Nicolas Isl., Ventura Co., SBBG)

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

**Arthonia stictella** Stizenb.  

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

**Arthonia subdiffusa** Willey  

(Hasse 1913b; Fink 1935; TJ)

**Arthonia subdispuncta** Nyl.  

(Hasse 1897, 1913b; Fink 1935; TJ; CA endemic)

**Arthonia tetramera** (Stizenb.) Hasse  

(Hasse 1913b; Merrill 1923; Fink 1935; TJ; Bourell 2000)

**Synonyms:** [A. dispersa var. \*tetramera\*](#)

**Arthonia adveniens** Nyl.  

(Hasse 1906)

=[Arthothelium adveniens](#)

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

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

=[Arthothelium anastomosans](#)

**Arthonia astroidea** Ach.  

(McClatchie 1897; Hasse 1898a, 1903b)

=[A. radiata](#)

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

(Hasse 1898a, 1903b)

=[A. radiata](#)

**Arthonia chiodectella** Nyl.  

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

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

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

=[A. cytisi](#)

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

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

=[A. tetramera](#)

*Arthonia epigina* Tuck.

(Orcutt 1885, 1903, 1907; TJ)

**Note:** This name is not in Zahlbruckner (1934) or Esslinger (2004b). The taxon to which it refers is uncertain.

*Arthonia gregaria* (Weigel) Körb. non Fée

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

=[A. cinnabarina](#)

*Arthonia impolita* (Hoffm.) Borrer

(Tuckerman 1872; Willey 1873a, 1890; Hasse 1913b; Merrill 1923; Fink 1935; Herre 1942c; TJ; Univ. Colo. Lich. Exs. 192, Santa Catalina Isl., Los Angeles Co.; 477, Marin Co.)

=[A. pruinata](#)

*Arthonia impolita* var. *chiodectonoides* Tuck.

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

=[A. pruinata](#)

*Arthonia impolita* var. *subfuscata* Nyl.

(Hasse 1903f)

=[A. pruinata](#)

*Arthonia interveniens* Nyl.

(Hasse 1906)

=[Arthothelium interveniens](#)

*Arthonia lurida* Ach. nom. rej.

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

=[A. spadicea](#)

*Arthonia orbillifera* Almq.

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

=[Arthothelium orbilliferum](#)

*Arthonia premnea* (Ach.) Tuck.

(Hasse 1896; Orcutt 1903, 1907; may be misidentifications of [Cresponea chloroconia](#))

*Arthonia pruinosa* (Nyl.) Ach.

(Hue 1891; McClatchie 1897)

=[A. pruinata](#)

*Arthonia pyrenuloides* Müll. Arg.

(Hasse 1903f)

=[Pyrenula pyrenuloides](#)

*Arthonia sanguinea* Willey

(Nylander 1885; Willey 1885, 1890; Hue 1891; Hasse 1903f; Orcutt 1903)

=[Arthothelium sanguineum](#)

*Arthonia spectabilis* Flot.

(Hasse 1898a)

=[Arthothelium spectabile](#)

*Arthonia taediosa* Nyl.  

(Hasse 1903f)

=[Arthothelium taediosum](#)

*Arthonia tumidula* (Ach.) Ach.  

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

=[A. cinnabrina](#) (synonymy *fide* Esslinger 2004b)

## ARTHOPYRENIA A. Massal.

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

(Herre 1910; Fink 1935; TJ; Aptroot [2002] reported only collections from CA Channel islands; most early reports for North America were misidentifications of [A. punctiformis](#) *fide* R. C. Harris [personal communication])

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

*Arthopyrenia lyrata* R. C. Harris  

(Aptroot 2002; Tucker 1997, 1999; *S. Tucker* 34374, Montecito, Santa Barbara Co., SBBG; *S. Tucker* 34625, Cerro Alto Cpgd, San Luis Obispo Co., SBBG; *S. Tucker* 35974, Santa Cruz, Santa Cruz Co., SBBG)

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

(R. Harris 1975; TJ; Aptroot 2002)

**Synonyms:** [A. cinereopruinosa](#) (Herre 1910; Fink 1935; R. Harris 1975; TJ; misapplied), [A. herrei](#) (R. Harris 1975; TJ), [Porina plumbaria](#) (Hasse 1913b; Merrill 1923; Fink 1935), [Pyrenula herrei](#) (Fink 1935; Herre 1942b), [Verrucaria carpinea var. plumbaria](#) (Hasse 1898a), [V. plumbaria](#) (Hasse 1895, 1897; Orcutt 1903, 1907)

**Misapplied names:** [V. cinerea](#) (Hasse 1906)

*Arthopyrenia punctiformis* (Schrank) A. Massal.  

(Hasse 1915b; Merrill 1923; Fink 1935; TJ; Aptroot 2002)

**Synonyms:** [A. epidermidis](#), [A. padi](#) (R. Harris 1975; TJ), [Pyrenula punctiformis](#), [Verrucaria epidermidis](#), [V. punctiformis](#)

*Arthopyrenia analeptella* (Nyl.) Arnold  

(Herre 1910; Fink 1935)

= misidentifications for CA

*Arthopyrenia antecellens* (Nyl.) Arnold  

(*S. Tucker* 34375, pr. p., Montecito, Santa Barbara Co., SBBG; *S. Tucker* 34498, 34574, Hastings Natural History Reserve, Monterey Co., SBBG, determination by A. Aptroot)

=[Mycoporum antecellens](#) (synonymy *fide* Harris 1995)

*Arthopyrenia biformis* (Borrer) A. Massal.  

(references in TJ)

=[Anisomeridium biforme](#) (R. Harris 1975; TJ) Some of the early reports may be based on misidentifications, probably of [Acrocordia cavata](#)

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

(Herre 1912b; Fink 1935; Noble et al. 1987; *R. Riefner* 93–20, [determination by J. W. Thomson] San Luis Obispo Co.: Montaña de Oro S. P., 3 Feb 1993; R. Harris [1975] said *A. cerasi* should be deleted from the North American flora)

**Synonyms:** [Pyrenula cerasi](#) (McClatchie 1897), [Verrucaria cerasi](#) (Hasse 1895, 1906; Orcutt 1907)

*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 biforme* for North America

*Arthopyrenia epidermidis* (DC.) A. Massal.

(TJ)

=*A. punctiformis*

*Arthopyrenia fallax* (Nyl.) Arnold

(Herre 1910; Hasse 1914, 1915b; Merrill 1923)

=*A. analepta*

*Arthopyrenia halodytes* (Nyl.) Arnold

(Herre 1907; Fink 1935)

=*Collemopsisidium halodytes*

*Arthopyrenia herrei* R. C. Harris ined.

(R. Harris 1975; TJ; von Reis 1991)

*Arthopyrenia litoralis* (Leight.) Arnold

(Herre 1942c; TJ)

= misidentifications, possibly of *Collemopsisidium sublitorale*

*Arthopyrenia padi* Rabenh.

(R. Harris 1975; TJ)

=*A. punctiformis*

*Arthopyrenia parvula* Zahlbr.

(Zahlbruckner 1902; Hasse 1903f, 1913b; Riddle 1918; Fink 1935; Herre 1944b)

=*Anisomeridium biforme*

*Arthopyrenia sphaeroides* (Wallr.) Zahlbr.

(references in TJ)

=*Acrocordia gemmata*, but misidentifications for CA

*Arthopyrenia sublitoralis* (Leight.) Arnold

(Thomson 1997)

=*Collemopsisidium sublitorale*

## ARTHOTHELIUM A. Massal.

*Arthothelium abnorme* (Ach.) Müll. Arg.

(Fink 1935; TJ)

**Synonyms:** *Opegrapha abnormis* (Herre 1912a)

*Arthothelium adveniens* Nyl.

(Fink 1935; TJ)

**Synonyms:** *Arthonia adveniens* (Hasse 1906)

*Arthothelium anastomosans* (Ach.) Arnold

(Herre 1912b; Hasse 1913b; Merrill 1923; Fink 1935; TJ; S. Tucker 37890, Univ. of California campus, Santa Barbara, Santa Barbara Co., SBBG)

**Synonyms:** *Arthonia anastomosans* (Ach.) Nyl. (Hasse 1895, 1896; McClatchie 1897; Hasse 1898a, 1903b; Orcutt 1907)

*Arthothelium interveniens* (Nyl.) Zahlbr.

(TJ)

**Synonyms:** *Arthonia interveniens* (Hasse 1906)

*Arthothelium orbilliferum* (Almq.) Hasse

(Hasse 1913b; Merrill 1923; Fink 1935; TJ; von Reis 1991; Bourell 2000; Baltzo 2002)

**Synonyms:** [Arthonia orbillifera](#) (Hasse 1903b)

**Arthothelium pruinascens** Zahlbr.  

(Zahlbruckner 1900; Hasse 1903f, 1913b; Fink 1935; TJ; *H. E. Hasse*, Santa Monica Range, Apr, 1903, *Lichenes Exsiccati, Sullivant Moss Soc.* 51, MU; *S. Tucker 35661B*, Santa Cruz Isl., Santa Barbara Co., SBBG; CA endemic)

**Arthothelium sanguineum** (Willey) Zahlbr.  

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

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

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

(Hasse 1915b; Merrill 1923; TJ)

**Synonyms:** [Arthonia spectabilis](#)

**Arthothelium subcyrtodes** (Willey) Hasse  

(Hasse 1915b; Merrill 1923; Fink 1935; TJ; *S. Tucker 34194B*, Santa Barbara, Santa Barbara Co., SBBG; CA endemic)

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

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

**Synonyms:** [Arthonia taediosa](#) (Hasse 1903f)

**ARTHROSPORUM** A. Massal.

**Arthrosporum populorum** A. Massal.  

**Synonyms:** [Bacidia acclinis](#) (Herre [1944b based on *C. L. Brown*, Marin Co., but this specimen = *Cresponia chloroconia* fide S. Tucker]), *B. populorum*, *Bilimbia acclinis*

**ASPICILIA** A. Massal.

**Aspicilia aquatica** Körb.  

(Ryan & Nash [1991, *B. Ryan 12615a*, Eastern Brook Lakes, Inyo 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)

**Aspicilia californica** Rosentr.  

(Rosentreter 1998; Sanders 1999b; Riefner & Rosentreter 2004)

**Synonyms:** *A. tuckerae* Ryan ined. on some herbarium specimens; *Aspicilia* sp. (Weber 1967a; Univ. Colo. Lich. Exs. 178, S of Ione, Amador Co.; CA endemic)

**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])

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

**Aspicilia contorta** (Hoffm.) Kremp.  

(Bowler et al. 1996; Brodo et al. [2001, p. 169, with color photograph])

**Synonyms:** [Lecanora contorta](#) (Herre 1942a, 1942c, 1950a; TJ; Robertson 2003b)

**Aspicilia desertorum** (Kremp.) Mereschk. 

(*C. Bratt 1689*, Aliso Cyn, behind Los Prietos Ranger Station, Santa Ynez Mts, Santa Barbara Co., SBBG; *C. Bratt 5083*, Ventura Co., SBBG)

**Aspicilia epiglypta** Hue 

(Weber [1989a], Univ. Colo. Lich. Exs. 689, San Joaquin Experimental Range, Madera Co., ASU, as "cf.")

**Aspicilia filiformis** Rosentr. 

(S. Tucker 34130, Big Rocks, San Luis Obispo Co., SBBG; determination by B. Ryan)

**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*

**Aspicilia glaucopsina** (Nyl. ex Hasse) Hue 

(K. Knudsen 906, western side of San Jacinto Mts, Riverside Co., ASU; CA endemic)

**Synonyms:** *Lecanora glaucopsina* (Hasse 1898a, 1913b; Zahlbruckner 1902; Fink 1935; TJ; synonymy *fide* K. Knudsen)

**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 26602, San Gabriel Wilderness, Los Angeles Co., ASU; B. Ryan 24188, Emigrant Wilderness, Tuolumne Co., ASU)

**Aspicilia simoënsis** Räsänen 

(Ryan & Nash 1991; B. Ryan 26602b, San Gabriel Wilderness, Los Angeles Co., ASU; B. Ryan 25382b, Marble Mountain Wilderness, Siskiyou Co., ASU)

**Aspicilia supertegens** Arnold 

(Thomson 1997)

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

**Aspicilia verrucigera** Hue 

(B. Ryan 25388, trail through Big Meadows, edge of Marble Mountain Wilderness, Siskiyou Co., ASU)

**Aspicilia alphoplaca** (Wahlenb.) Poelt & Leuckert 

=*Lobothallia alphoplaca*

**Aspicilia americana** de Lesd. 

(Weber et al. 1987 [as "cf."], Univ. Colo. Lich. Exs. 178 a, b, S of Ione, Amador Co., identified as *Aspicilia californica* Rosentreter by Rosentreter 1998, p. 166])

**Aspicilia calcarea** (L.) Mudd 

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

= probable misidentifications for CA (*fide* B. Ryan)

**Synonyms:** *Lecanora calcarea*

**Aspicilia melanaspis** (Ach.) Poelt & Leuckert 

=*Lobothallia melanaspis*

[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 records from Marin and Humboldt counties)

**Bacidia arceutina** (Ach.) Arnold  

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

**Bacidia biatorina** (Körb.) Vain.  

(Ekman [1996] cited collection from N CA)

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

(Ekman 1996, 2004; coastal S CA)

**Bacidia coruscans** S. Ekman 

(Ekman 2004; S. Tucker 33747, San Nicolas Isl., Ventura Co., SBBG; S. Tucker 33774, 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; S. Tucker 37767, 37768, pr. p., Sugar Loaf 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; CA endemic)**Synonyms:** [\*Biatoria jacobi\*](#)**Bacidia reagens** Malme  

(Ekman 1996, 2004; rare, Santa Ynez Mts, Santa Barbara Co.)

**Bacidia veneta** S. Ekman 

(Ekman 2004; known from low elevation cyns, Santa Monica Mts in S CA; CA endemic)

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

(Ekman [1996, collection from Tulare Co.]

**Bacidia acclinis** (Flot.) Zahlbr.  (Herre [1944b, based on *C. L. Brown*, Marin Co.])= misidentification of [\*Cresponea chloroconia\*](#) fide S. Tucker**Bacidia akompsa** (Tuck.) Herre  

(Herre 1910; TJ)

= *Lecanactis* sp. (Ekman 1996)**Bacidia albescens** (Kremp.) Zwackh  

(Thomson &amp; Ketchledge 1958; Weber 1967a; Univ. Colo. Lich. Exs. 182, Big Sur, Monterey Co.; TJ)

= *Bacidina phacodes*, a European species, but misidentification of [\*Bacidina californica\*](#) for CA reports**Bacidia atrogrisea** (Delise ex Hepp) Körb.  

(references in TJ)

= [\*B. laurocerasi\*](#), although misidentifications for CA**Bacidia beckhausii** Körb.  (Wetmore [1985, based on *C. Wetmore* 50703, Sequoia N. P., junction of Crystal Cave Rd and General's Highway, Tulare Co., 11 May 1984, MIN])**Bacidia clementis** Hasse  

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

= [\*Bactrospora patellariooides\*](#) var. [\*patellariooides\*](#) (Ekman 1996)**Bacidia dryina** (Ach.) Fink  

(TJ)

= [Bactrospora dryina](#)*Bacidia effusa* (Sm.) Trevis.  

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

**Synonyms:** [Lecidea effusa](#) (Hasse 1908a)

= misidentifications for CA

*Bacidia endoleuca* (Nyl.) J. Kickx f.  

(Hasse 1913a, 1913b; Merrill 1923)

= *B. laurocerasi*, but Hasse records are misidentifications of [Bacidia coruscans](#) *fide* Ekman (personal communication)*Bacidia fuscorubella* (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 ablephora](#)*Bacidia herrei* Zahlbr.  

(Zahlbruckner 1908; Herre 1910; Fink 1935; Herre 1945; TJ)

= [Ophioparma rubricosa](#)*Bacidia incompta* (Borrer ex Hook.) Anzi  

(Herre 1944b; TJ)

= misidentifications for North America *fide* Ekman (1996, p. 130)*Bacidia insularis* Zahlbr.  

(Ekman 1996)

= misidentifications for CA *fide* Ekman 2004*Bacidia inundata* (Fr.) Körb.  

(Herre 1944b; TJ)

= [Bacidina inundata](#), an accepted name, but misapplied to CA specimens*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.  **Synonyms:** [B. atrogrisea](#) Delise ex Hepp, [Biatora atrogrisea](#)**Misapplied names:** *B. endoleuca* auct. (TJ; Baltzo 2002)

= misidentifications for CA

*Bacidia milliaria* Fr.  

(Hasse 1908b; TJ)

= [Micarea lignaria](#)

*Bacidia millaria* 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 North America and North American 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)

=[\*Bilimbia sabuletorum\*](#)

*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; *S. Tucker* 37768, Sugar Loaf S. P., Sonoma Co., SBBG; CA endemic)

**Note:** According to Ekman (1996), reports of [\*Bacidia albescens\*](#) (e.g., Weber 1967a; Ekman [1996, p. 127]) and [\*B. phacodes\*](#) (Ekman [1996, p. 133]) in CA may refer to *Bacidina californica*.

*Bacidina egenula* (Nyl.) Vězda  

(Ekman 2004)

*Bacidina neosquamulosa* (Aptroot & van Herk) S. Ekman 

(Ekman [2004], based on a single collection from downtown San Diego; 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; *S. Tucker* 34471, Hastings Natural History Reserve, Monterey Co., SBBG; *S. Tucker* 34403, 34404, 34405, Lotusland, Santa Barbara, Santa Barbara Co., SBBG; *S. Tucker* 35778, Santa Cruz Isl., Santa Barbara Co., SBBG; *S. Tucker* 31850, Sierra Co., SBBG)

*Bacidina inundata* (Fr.) Vězda  

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

= misidentification for CA *fide* Ekman 1996

## BACTROSPORA A. Massal.

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

(Egea et al. 2004)

**Bactrospora brevispora** R. C. Harris  

(Egea et al. 2004; *T. Nash* 32436, Santa Cruz Isl., Santa Barbara Co. ASU)

**Bactrospora brodoi** Egea & Torrente  

(Egea et al. 2004; *T. Nash* 33095, 33097, 33110, Santa Rosa Isl., Santa Barbara Co., ASU; determinations by Egea & Torrente)

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

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

**Synonyms:** [Bacidia dryina](#) (Fink 1935; Lindsay 1973), [Biatora dryina](#)

**Bactrospora patellarioides** var. **convexa** (de Lesd.) Egea & Torrente  

(Egea et al. 2004; *S. Tucker* 35777, Santa Cruz Isl., Santa Barbara Co., SBBG; *C. Wetmore* 73784, Santa Rosa Isl., Santa Barbara Co., ASU)

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

(Egea et al. 2004)

**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; based on *W. A. Weber*, 1975a, Univ. Colo. Lich. Exs. 456, Cypress Point, Monterey Peninsula, Monterey Co.; *S. Tucker* 37745, W side of Mendocino Pass, Mendocino Co., SBBG; CA endemic)

## BAEOMYCES Pers.

**Baeomyces rufus** (Huds.) Rebent.  

(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])

*Baeomyces roseus* Pers.  

=[Dibaeis baeomyces](#) (Robertson 2002a)

## BELLEMERA Hafellner & Cl. Roux

**Bellemera alpina** (Sommerf.) Clauzade & Cl. Roux  

(Ryan & Nash 1991; Brodo et al. [2001, p. 175, with color photograph])

**Synonyms:** [Lecanora alpina](#) (Herre 1910; Fink 1935; Herre 1942a, 1950a; TJ)

**Bellemera cinereorufescens** (Ach.) Clauzade & Cl. Roux  

(Ryan & Nash [1991] cited collections in Inyo Co.; *B. Ryan* 24642, Carson-Iceberg Wilderness, Alpine Co., ASU; *B. Ryan* 23688, Desolation Wilderness, El Dorado Co., ASU; *B. Ryan* 25507, Marble Mountain Wilderness, Siskiyou Co., ASU)

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

## BIATORA Fr.

**Biatora efflorescens** (Hedl.) Räsänen  

(*T. Tønsberg* TT28922, Mendocino Co., BG)

**Biatora globulosa** (Flörke) Fr.  

**Synonyms:** [Biatora sylvana](#) (McClatchie 1897; Hasse 1903b, 1906), [Catillaria globulosa](#) (Herre 1910; Fink 1935; TJ), [Lecidea sylvana](#) (Hasse 1896; Orcutt 1907; Hasse 1915b; TJ)

**Note:** Printzen (2004) cited *Biatora globulosa* only from AZ, so early collections from CA should be checked.

**Biatora rufidula** (Graewe) S. Ekman & Printzen  

(Printzen & Tønsberg 1999)

**Biatora toensbergii** Holien & Printzen  

(*T. Tønsberg TT28922*, pr. p., Mendocino Co., BG)

*Biatora akompsa* Tuck.  

(Tuckerman 1888)

=*Lecanactis* sp. (Ekman 1996)

*Biatora anthracophila* (Nyl.) Hafellner  

(Printzen 1995)

=[Hypocenomyce anthracophila](#)

*Biatora atrogrisea* Delise ex Hepp  

(Hasse 1906)

=*B. 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](#)

*Biatora caulophylla* Tuck.  

(Tuckerman 1877, 1888)

=[Lecidea caulophylla](#)

*Biatora coarctata* (Turner ex Sm.) Nyl.  

(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* var. *conglomerata* Fr. (but 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.) Mann  

(Orcutt 1903)

=[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.  

(TJ)

=*Catillaria 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 alephora*

*Biatora holopolia* Tuck.  

(Hasse 1905)

=*Lecidea holopolia*

*Biatora jacobi* Tuck.  

(Tuckerman 1888)

=*Bacidia jacobi*

*Biatora laureri* (Hepp ex Th. Fr.) Tuck.  

(Tuckerman 1882)

=*Megalaria laureri* (Ekman & Tønsberg 1996)

*Biatora lurida* (Ach.) Fr.  

(McClatchie 1897)

=*Mycobilimbia lurida*

*Biatora luridella* Tuck.  

(Tuckerman 1888; McClatchie 1897)

=*Psora luridella*

*Biatora meiocarpa* (Nyl.) Arnold  

(An accepted species known from high elevations in Arizona [Printzen 2004], but the old reports from CA are unlikely)

**Synonyms:** *Lecidea meiocarpa* (Stizenberger 1895; Hasse 1915a)

*Biatora millaria* (Fr.) Tuck.  

(Tuckerman 1888)

=*Micarea lignaria*

*Biatora mixta* Fr.  

(Hasse 1896, 1903b; Orcutt 1903)

=*Cliostomum griffithii* fide Zahlbrückner (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* Fée

*Biatora naegelii* Hepp  

(references in TJ)

=*Lecania naegelii*

*Biatora nylanderi* Anzi  

(Hasse 1903e)

=*Lecidea nylanderi*

*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 rhabdogena* fide Printzen 1995, but probable misidentifications for CA

*Biatora quernea* (Dicks.) Fr.  

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

=*Pyrrhospora quernea*

*Biatora resinae* (Fr.) Tuck.  

(McClatchie 1897; Robertson 2002a)

=*Sarea resinae**Biatora russellii* Tuck. 

(Tuckerman 1888)

=*Psora russellii**Biatora schweinitzii* (Fr. ex E. Michener) 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* (Nash, Kainz et al. 2004)*Biatora subviridis* Nyl. 

(McClatchie 1897; Hasse 1906)

=*Catillaria subviridis**Biatora sylvana* Körb. 

(McClatchie 1897; Hasse 1903b, 1906)

=*Biatora globulosa* fide Printzen (1995, p. 227)*Biatora tornoënsis* (Nyl.) Th. Fr. 

(Tuckerman 1888)

=*Japewia tornoënsis**Biatora turgidula* (Fr.) Nyl. 

(Tuckerman 1888; Hasse 1896; McClatchie 1897; Orcutt 1903, 1907; TJ)

**Synonyms:** *Lecidea turgidula* (Tuckerman 1872; Willey 1873a; Hasse 1898a, 1913b; Lowe 1939; Anderson 1964; TJ)**Note:** Early reports for CA are probably based on misidentifications *fide* C. Printzen.*Biatora umbrina* (Ach.) Tuck. 

(Hasse 1903e; Fink 1935)

=*Scoliciosporum umbrinum**Biatora varians* Ach. 

(Hasse 1896; McClatchie 1897; Orcutt 1903, 1907)

=*Lecidea varians**Biatora vernalis* (L.) Fr. 

(Brodo et al. [2001, p. 176, on map in vicinity of Los Angeles, with color photograph])

**Synonyms:** *Lecidea vernalis* (Hasse 1913b; TJ)**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 xanthococcoidea* (Zahlbr.) Hasse 

(Hasse 1903e)

=*Lecidea xanthococcoidea* Zahlbr.**Note:** Hasse referred to “*xanthococci* A. Zahlbr.”, and cited Bull. Torr. Bot. Cl. XXVI, the place of publication of *Lecidea xanthococcoidea*.**BIATORELLA** De Not.*Biatorella cinerea* (Schaer.) Th. Fr. 

(Herre 1950a)

=[\*Sporastatia polyspora\*](#), an arctic/alpine species, unlikely for CA; 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; a European species, not otherwise reported for North America. This report should be checked)

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

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

=[\*Sarcogyne privigna\*](#), but Herre's material may have been misidentified, since stated spore size is not correct *fide* I. Tavares (personal communication)

*Biatorella microhaema* Norman  

(J. Blakeman 431, Lower Funston meadow, Kern Cyn, Sequoia N. P., Tulare Co., MIN)

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

*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  

(TJ for references)

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

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

(Herre 1910; Hasse 1913b; Merrill 1923)

=[\*Polysporina simplex\*](#) (but 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* (Willey) Hasse  

(Hasse 1911a)

=[\*Catillaria terrena\*](#) (Willey) Zahlbr., but misidentifications for CA

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

(Herre 1950a)

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

## BIATOROPSIS Räsänen

\**Biatoropsis usnearum* Räsänen  

(Diederich 2003; S. Tucker 31755D, on [\*Usnea pendulina\*](#), Armstrong Redwoods S. P., Sonoma Co., SBBG, determination of lichenicole by P. Diederich)

**BILIMBIA** De Not.***Bilimbia sabuletorum*** (Schreb.) Arnold  **Synonyms:** [\*Bacidia sabuletorum\*](#) (Brodo et al. [2001, pp. 172–173, with color photograph] showed it in NW CA), [\*Mycobilimbia sabuletorum\*](#), [\*Myxobilimbia sabuletorum\*](#) (synonymy *fide* Veldkamp 2004)***Bilimbia granosa*** (Tuck.) Fink  

(Fink 1935)

= [\*Bacidia granosa\*](#), but misidentifications for CA***Bilimbia gyalectiformis*** Zahlbr.  

(Zahlbruckner 1902; Fink 1935)

= [\*Ramonia ablephora\*](#)***Bilimbia lignaria*** (Ach.) A. Massal.  

(Fink 1935)

= [\*Micarea lignaria\*](#)***Bilimbia naegelii*** (Hepp) Kremp.  

(Fink 1935)

= [\*Lecania naegelii\*](#)**BISPORA** Fuckel**\**Bispora christiansenii*** D. Hawksw.  

(Alstrup &amp; Cole 1998)

= [\*Intralichen christiansenii\*](#)**BLASTENIA** A. Massal. = [CALOPLACA](#)***Blastenia catalinae*** (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 &amp; Ketchledge 1958)

= [\*Caloplaca luteominia\*](#) var. ***bolanderi******Blastenia ferruginea*** var. ***fraudans*** (Th. Fr.) Hazsl. 

(Hasse 1910a, 1913b)

= [\*Caloplaca fraudans\*](#), but probably misidentifications for North America***Blastenia ferruginea*** var. ***wrightii*** (Tuck.) Hasse 

(Hasse 1913b; Merrill 1923)

= [\*Caloplaca wrightii\*](#)***Blastenia festiva*** (Ach.) A. Massal.  

(Hasse 1913b)

= [\*Caloplaca crenularia\*](#), but misidentifications for North America *fide* Wetmore 1996***Blastenia fraudans*** (Th. Fr.) de Lesd.  

(Fink 1935; misdeterminations)

*Blastenia luteominia* Tuck.  

(Hasse 1913b; Fink 1935)

=[Caloplaca luteominia](#) var. [luteominia](#)

*Blastenia subpyraceella* (Nyl.) Hasse  

(Hasse 1913b)

=[Caloplaca subpyraceella](#)

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

*Botrydina botryoides* (L.) Redhead & Kuyper  

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

=[Lichenomphalia umbellifera](#) (Redhead et al. 2002)

**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)

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

(Brodo & Hawksworth 1977; Pinelli & Jordan 1978; TJ; Tucker & Bratt 1995; Wright 1997; Goward 1999; Brodo et al. [2001, p. 180, with color photograph]; Ryan 2002; Jovan & McCune 2004)

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

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

(Brodo & Hawksworth 1977; TJ; Hale & Cole 1988; Goward 1999; Jovan & McCune 2004; accepted by Esslinger [2004b], but considered a chemical race of [B. implexa](#) by Holien [1989])

**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)

**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 2004; Jovan & McCune 2004)

**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)

**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)

**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; considered a chemical race of [B. implexa](#) by Holien [1989])

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

**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)

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

(Brodo & Hawksworth 1977; TJ; Goward 1999)

**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)

**Synonyms:** [Alectoria tortuosa](#) (Lindsay 1973; Tucker 1973; Brodo & Hawksworth 1977)

**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)

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

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

=[Nodobryoria abbreviata](#)

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

(Goward 1999)

**Synonyms:** [Alectoria chalybeiformis](#) (Howe 1914–1915; Herre 1945; but unlikely to be found in CA; in Rocky Mts 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 us of this species from CA.

**Bryoria oregana** (Tuck. ex Willey) Brodo & D. Hawksw.  

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

=[Nodobryoria oregana](#), but many reports, especially from S CA, are [N. abbreviata](#)

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

(Goward 1999; Jovan & McCune 2004; *H. Thiers* 17708, San Francisco Watershed, San Mateo Co., SFSU, but specimen inadequate for identification *fide* B. Ryan)

**Note:** The record by Jovan & McCune is doubtful, because according to Brodo & Hawksworth (1977), the southern limit of the range is northern Oregon and southern Washington.

## BUELLIA De Not.

**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)

**Synonyms:** [B. ambigua](#), [Diplotomma alboatrum](#), [Lecidea alboatra](#)

**Buellia arborea** Coppins & Tønsberg  

(*S. Tucker* 34506, Hastings Natural History Reserve, Monterey Co., SBBG, determined by T. Tønsberg)

#**Buellia badia** (Fr.) A. Massal.  

(Tuckerman 1872; Willey 1873a; Tuckerman 1888; Hasse 1896; McClatchie 1897; Zahlbrückner 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 2004; Robertson 2004)

**Synonyms:** [Amandinea turgescens](#), [Buellia turgescens](#) (synonymy in Bungartz & Nash 2004)

**Buellia bolacina** Tuck.  

(Tuckerman 1888; Hasse 1896; McClatchie 1897; Orcutt 1903, 1907; Herre 1950a; Fink 1935; Imshaug 1951; TJ; Robertson 2003b; CA endemic)

**Synonyms:** [Lecidea bolacina](#) (Hasse 1898a)

**Buellia capitis-regum** W. A. Weber  

(Weber 1971; TJ; Weber 1989a; Robertson 2002b; Univ. Colo. Lich. Exs. 671, Fraser Point, Santa Cruz Isl., Santa Barbara Co.; CA endemic)

**Buellia christophii** Bungartz 

(Bungartz et al. 2004; *Hasse Exs.* 205, Los Angeles Co.; *S. Tucker 35170*, Hastings Natural History Reserve, Mendocino Co.)

**Buellia concinna** Th. Fr.  

(Bungartz et al. 2005)

**Synonyms:** [\*B. semitensis\*](#), [\*Lecidea semitensis\*](#) (Hasse 1898a)

**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)

**Synonyms:** [\*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  $\mu\text{m}$ ).

**Buellia dispersa** A. Massal.  

(Bungartz et al. 2002)

**Synonyms:** [\*B. 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]; synonymy in Bungartz et al. 2002, 2004)

**Buellia erubescens** Arnold  

(*B. Ryan 25455b*, Marble Mountain Wilderness, Siskiyou Co., ASU)

**Synonyms:** [\*B. zahlbruckneri\*](#) (Imshaug 1951; TJ; synonymy follows Esslinger 2004b)

**Buellia griseovirens** (Turner & Borrer ex Sm.) Almb.  

(TJ; reported for Europe in Nordin 1996)

**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)

**Synonyms:** [\*Lecidea halonia\*](#)

**Buellia lepidastroidea** Imshaug ex Bungartz 

(Imshaug 1951; TJ; Robertson 2003b; Bungartz 2004)

**Buellia microbola** (Tuck. ex Fink) Sheard  

(Sheard 1969; TJ; CA endemic)

**Synonyms:** [\*B. alboatra f. microbola\*](#) (Tuckerman 1888), [\*Rinodina microbola\*](#) (Hedrick 1934; Herre 1944b)

**Buellia muriformis** A. Nordin & Tønsberg  

(Nordin [1999, showing it as coastal from Santa Cruz Co. northwards])

**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.

**Buellia nashii** Bungartz 

(Bungartz 2004; *B. Ryan 1488*, Inyo Co.; *T. Nash 7052*, San Diego Co.)

**Buellia navajoensis** Bungartz 

(Bungartz 2004; *T. Nash 10350*, San Bernardino 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)

**Synonyms:** [Lecidea aliena](#) Nyl. (synonymy *fide* Hasse 1898a), [Lecidea 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."])

**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], but Kalb & Elix [1998] distinguished *B. parasema* from *B. disciformis*, as described under *B. disciformis*)

**Buellia penichra** (Tuck.) Hasse  

(Orcutt 1903; Hasse 1913b; Herre 1942c, 1945; Imshaug 1951; Lindsay 1973; Hale & Cole 1988; Nordin 1999; some records may be the newly described *B. muriformis* A. Nordin & Tønsberg; see notes under [B. muriformis](#))

**Synonyms:** [B. oidalea var. penichra](#), [Diplotomma penichrum](#), [Rhizocarpon penichrum](#)

**Buellia prospersa** (Nyl.) Riddle  

(Bungartz et al. 2004; *T. Nash 4312*, Santa Barbara Co.)

**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)

**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)

**Synonyms:** [Amandinea punctata](#) (synonymy *fide* F. Bungartz [personal communication]); [B. myriocarpa](#); [B. myriocarpa var. chloropolia](#); [B. myriocarpa var. ecrustacea](#); [B. myriocarpa var. punctiformis](#); [Catocarpon myriocarpum var. ecrustaceum](#); [C. myriocarpum var. punctiforme](#); [Lecidea myriocarpa](#)

**Buellia ryanii** Bungartz 

(Bungartz et al. 2004; *S. Tucker 34781A*, Santa Cruz Isl., Santa Barbara Co.)

**Buellia sequax** (Nyl.) Zahlbr.  

(C. Bratt 3592, along Bayside Trail, Point Loma, Cabrillo National Monument, San Diego Co., ASU, determinations by F. Bungartz; *S. Tucker 28815*, 1.6 km E of Pacheco Pass Summit on old State Hwy 152 near San Luis Reservoir, Merced Co., ASU)

**Synonyms:** [B. alboatra var. saxicola](#) (Fr.) Tuck. (Tuckerman 1888; Hasse 1903b; Herre 1910; Hasse 1913b; TJ), [Lecidea alboatra var. saxicola](#) (Hasse 1898a)

**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])

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

**Note:** This species should occur N of Sonoran part of CA *fide* F. Bungartz (personal communication).

**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 2005b)

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

**Buellia stillingiana** J. Steiner  

(B. Ryan 24998, Gold Flat, Klamath Nat. Forest, Siskiyou Co., ASU; eastern half of U. S. and Pacific coast from Washington northward *fide* Brodo et al. 2001)

**Buellia subalbula** (Nyl.) Müll. Arg.  

(Bungartz & Nash 2005a; S. Tucker 33692A, San Nicolas Isl.: NAVFAC Rd, Ventura Co., SBBG, determination by F. Bungartz)

**Buellia tesserata** Körb.  

(Rico et al. 2003, although CA is not mentioned; Bungartz 2004)

**Synonyms:** [B. cerussata](#), [B. fimbriata](#) (Sheard 1969; TJ; von Reis 1991), [B. pruinella](#) (Imshaug 1951), [Rinodina radiata](#) var. [fimbriata](#) Tuck. (Hasse 1908a)

**Buellia triseptata** A. Nordin  

(Nordin 1999; Baltzo 2002; Giralt & Nordin 2002)

**Misapplied names** (*fide* F. Bungartz [personal communication]): [B. triphragmioides](#) (Hasse 1903f; Imshaug 1951; Lindsay 1973; TJ) [B. vernicoma](#) (McGee 1998 [as "cf."])

**Buellia tyrolensis** Körb.

**Synonyms:** [B. novomexicana](#) (C. Bratt 5014, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Buellia venusta** (Körb.) Lettau  

(S. Tucker 33812, Theodolite Rd off Jackson Hwy, south coast, San Nicolas Isl., Ventura Co., SBBG)

**Synonyms:** [Diplotomma venustum](#) (Nordin 1996)

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

(TJ; Doell et al. 1999 [as "cf. aethalea"]); Bourell 2000)

**Synonyms:** [B. atroalbella](#), [B. verruculosa](#)

**Note:** Bungartz & Nash (2005b) report *B. aethalea* only at high elevations in the southwestern US outside of CA.

**Buellia alboatra** var. *ambigua* (Ach.) Th. Fr.  

(TJ)

=[Buellia alboatra](#) (Nordin 1999)

**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)

=[Buellia sequax](#)

**Buellia alpicola** (Wahlenb.) Anzi f. *microspora* Nyl. 

(Tuckerman [1888], based on a Lapham collection from 7,000 ft. in the Sierra Nevada)

=[Rhizocarpon alpicola](#)

**Buellia ambigua** (Ach.) Malme  

(Imshaug 1951)

=[Buellia alboatra](#) (Nordin 1999)

*Buellia atroalbella* Nyl.  

(Hasse 1903b, 1903f)

=[Buellia aethalea](#) = misidentifications for CA

*Buellia bolanderi* Tuck.  

(TJ for references)

=[Rhizocarpon bolanderi](#)

*Buellia callispora* (Knight) J. Steiner  

(Lindsay 1973; TJ)

=*Hafellia callispora*, but based on probable misidentifications, since this species is in the SE U. S.; *H. fosteri* Imshaug & Sheard, however, is known from Washington [Sheard 1992], and might be the lichen collected in north coastal CA by Lindsay.

*Buellia cerussata* Limona & Werner  

(Bratt 1993; Bowler et al. 1996)

=[B. tesserata](#)

*Buellia dialyta* (Nyl.) Tuck.  

(Tuckerman 1872, 1888; Fink 1935; Imshaug 1951; TJ; Thomson 2003)

=[Chrismofulvea dialyta](#) (Marbach 2000; a Bolander collection from CA is the type)

*Buellia disciformis* var. *triphragmia* (Nyl.) Oliv.  

(Merrill 1923)

=[B. triphragmia](#), but misidentification 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 geophila* (Sommerf.) Lyngé  

(Ryan & Nash [1991] on *Selaginella*)

=[Tetramelas geophila](#)

*Buellia hassei* Imshaug ined  

(Imshaug 1951, unpublished name, but listed in Esslinger 2004b)

=[B. griseovirens](#)

*Buellia inquilina* Tuck.  

(Willey 1873a; Hasse 1912, 1915b)

=[Dactylospora inquilina](#) (a non-lichenized fungus)

*Buellia lactea* Körb.  

(Tuckerman 1866; Bolander 1870; Tuckerman 1872; misidentifications for CA)

*Buellia lepidastrata* (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. *lepidastræ*"])

**Synonyms:** *Lecidea lepidastræ* (Hasse 1898a; TJ; This species is restricted to the NE US; CA reports represent an undescribed new species *fide* Bungartz & Nash [2005b])

*Buellia myriocarpa* (DC.) De Not.  

(TJ for references)

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

*Buellia myriocarpa* var. *chloropolia* (Fr.) Th. Fr.  

(Hasse 1913b; Moxley 1921; TJ [as var. *chlorophylla*])

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

*Buellia myriocarpa* var. *ecrustacea* Leight. 

(Hasse 1913b)

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

*Buellia myriocarpa* var. *punctiformis* (Hoffm.) Mudd  

(Hasse 1913b; Wheeler 1938)

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

*Buellia naegelii* (Hepp) McClatchie 

(McClatchie [1897], as *Buellia naegelii* Hepp, a name not in Zahlbruckner [1934])

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

*Buellia novomexicana* de Lesd.  

(C. Bratt 5014, Santa Cruz Isl., Santa Barbara Co., determination by W. Weber, SBBG)

=[\*B. tyrolensis\*](#) (synonymy *fide* Bungartz 2004)

*Buellia oidalea* Tuck. var. *penichra* Tuck. 

(Hasse 1903d)

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

*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\*](#)

**Note:** According to Hafellner (2004), a reinvestigation is needed to verify the collections by Bolander.

*Buellia parmeliarum* (Sommerf.) Tuck.  

(Hasse 1915b)

=[\*Abrothallus parmeliarum\*](#)

*Buellia petraea* (Wulfen) Branth. & Rostr.  

(Tuckerman 1872, 1888; Blankinship & Keeler 1892; Hasse 1896, 1903b, 1905; Orcutt 1903, 1907)

=[\*Rhizocarpon petraeum\*](#)

*Buellia petraea* var. *albinea* Tuck.  

(Hasse 1903f)

=[\*Rhizocarpon obscuratum\*](#)

*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)

=*Buellia tesserata*

*Buellia pulchella* (Schrad.) Tuck.  

(Hasse 1908b)

=*Catolechia wahlenbergii*

*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 in 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 stigmaea* Tuck.  

=*B. maculata* Bungartz (Bungartz & Nash 2005b, who cite no specimens from west of Illinois)

**Note:** Tucker (2002) reported B. Ryan collections from CA, but these records have now been removed from ASU database; this species does not reach CA *fide* F. Bungartz (personal communication).

*Buellia subdisciformis* (Leight.) Vain.  

(Hasse 1915b, but probably a misidentification; in Sinaloa, Mexico but not in Sonoran CA *fide* F. Bungartz [personal communication])

=*Buellia disciformis*, see under *B. disciformis* for differences noted by Kalb & Elix (1998)

*Buellia triphragmia* (Nyl.) Arnold  

(Hasse 1903b; Orcutt 1903)

**Synonyms:** *Lecidea disciformis* var. *triphragmia*, *Lecidea triphragmia* (misidentifications)

*Buellia triphragmioides* Anzi  

(Hasse 1903f; Imshaug 1951; Lindsay 1973; TJ)

**Note:** B. Ryan 27066 and other collections identified by A. Nordin as this species have now been re-determined by him as *B. triseptata*. *B. triphragmioides* occurs only in the Rocky Mts and adjacent high elevations.

*Buellia turgescens* Tuck.  

(Hasse 1915b; Imshaug 1951; Volk 1963; TJ; von Reis 1991; Bratt 1999; Thomson 2003)

=*Buellia badia* (synonymy in Bungartz & Nash 2004)

*Buellia verruculosa* (Sm.) Mudd  

(Sheard 1969; TJ)

=[\*Buellia aethalea\*](#) = misidentifications for CA (synonymy in Esslinger 2004b)

*Buellia vilis* Th. Fr.  

(Hasse 1915b; Sigal 1975; *L. Sigal* 235, Little Red Mtn, Mendocino Co.; TJ; Sigal 1989)

**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 wahlenbergii* (Ach.) Sheard  

(TJ)

=[\*Catolechia wahlenbergii\*](#)

*Buellia zahlbruckneri* J. Steiner  

(Imshaug 1951; TJ)

=[\*B. erubescens\*](#) Arnold *fide* Giralt et al. 2000, who said that Schauer (1965) incorrectly neotyped *B. zahlbruckneri*, selecting a specimen of *B. chloroleuca* as the type. Giralt's conclusions have been verified by Bungartz (personal communication)

## BUELLIELLA Fink

\**Buellia inops* (Triebel & Rambold) Hafellner  

(Diederich 2003; Hafellner 2004; on *Caloplaca* sp.)

\**Buellia physciicola* Poelt & Hafellner  

(Esslinger & Egan [1995, under Appendix, New Records for North America, based on *H. E. Hasse*, Topanga Cyn, Santa Monica Mts, Los Angeles Co., UPS]; Alstrup & Cole 1998; Diederich 2003; Hafellner 2004; *Rundel* 3214, Hastings Natural History Reserve, Monterey Co., UPS)

\**Buellia parmeliarum* (Sommerf.) Fink  

(Fink 1935; TJ)

=[\*Abrothallus parmeliarum\*](#)

## BYSSOLOMA Trevis.

*Byssoloma leucoblepharum* (Nyl.) Vain. 

(S. Tucker 35280, Pygmy Forest, Mitchell Creek Drive near Fort Bragg, Mendocino 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](#)

## CALICUM Pers.

*Calicium abietinum* Pers.  

(Fink 1935; Thomson & Ketchledge 1958; Lindsay 1973; Tibell 1975; TJ; Thomson 1997; Tucker 1997; Goward 1999; Thomson 2003; Tibell & Ryan [2004] for Channel Is.)

**Synonyms:** [\*C. curtum\*](#)

*Calicium adaequatum* Nyl.  

(Pinelli & Jordan 1978; TJ; Goward 1999; *B. Ryan* 24443, 5 km SW of Fraser Flat, Tuolumne Co., ASU)

*Calicium adspersum* Pers.  

(Gowdard 1999; Peterson & Rikkinen 1999; known from only one location in CA, in Del Norte Co. *fide* E. Peterson [personal communication])

*Calicium corynellum* (Ach.) Ach.  

(Wetmore 1985; Kolb & Spribble 2001)

**Note:** According to Tibell & Ryan (2004), this taxon occurs only in Arizona in the Sonoran region.

However, Wetmore's 1985 report, verified by Kolb & Spribille (2001), was from Sequoia Nat. Park, Tulare Co., north of the region in CA.

**Calicium glaucellum** Ach.  

(Pinelli & Jordan 1978; TJ; Tucker 1997; Wright 1998; Goward 1999; Bourell 2000; Tibell & Ryan [2004] for S CA)

**Calicium lenticulare** Ach.  

(Goward 1999; Robertson 2002a)

**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 viride** Pers.  

(Pinelli & Jordan 1978; TJ; Wetmore 1987; Goward 1999; Brodo et al. [2001, pp. 193–194, with color photograph])

**Synonyms:** [\*C. hyperellum\*](#) (Bolander 1870; Tuckerman 1872; Willey 1873a; Herre 1912a; Hasse 1913b; Fink 1935; Herre 1945; Tibell & Ryan 2004)

**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.  

(Herre 1912a)

=[\*C. viride\*](#)

**Calicium parietinum** Ach. ex Schaer.  

(Hasse 1905, 1913b; Merrill 1923)

=[\*Mycocalicium subtile\*](#)

**Calicium parietinum** var. **albonigrum** Nyl. 

(Tuckerman 1872)

=[\*Mycocalicium albonigrum\*](#)

†**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* (de Lesd.) Wetmore  

(Wetmore 1994; *T. Nash 32104*, Santa Catalina Isl., Los Angeles Co., ASU; *T. Nash 32829*, Santa Rosa Isl., Santa Barbara Co., ASU; *C. Wetmore 16974A*, Cpgd, NW of Descanso, N of Hwy 80, San Diego Co., MIN; *C. Wetmore 14631*, San Bernardino NF, S of Banning, Riverside 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; *L. Ross 83*, Refugio Rd, Santa Ynez Mts, Santa Barbara Co., ASU)

**Synonyms:** [\*Blastenia ferruginea\* var. \*ammiospila\*](#) (Hasse 1915b)

*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; *B. Ryan 24659a*, Carson-Iceberg Wilderness, Alpine Co., ASU; *B. Ryan 25048*, Gold Flat, Klamath Nat. Forest, Siskiyou Co., ASU)

**Note:** This species is included for North America in Esslinger (2004b). According to Weber, however, material from the U. S. under this name is referable to *C. lamprocheila*.

*Caloplaca atroalba* (Tuck.) Zahlbr.  

(Wetmore 1994; Thomson 2003; *H. E. Hasse 883*, near Elsinore, Riverside Co., 1898, MIN)

*Caloplaca atroflava* (Turner) Mong.  

(Riefner, Bowler, & Ryan 1995; Wetmore 1996)

*Caloplaca atrosanguinea* (G. Merr.) I. M. Lamb  

(Wetmore [1994, citing Siskiyou and Tulare Co. collections]; Baltzo 2002; *B. Ryan 25181, 25194a*, Marble Mountain Wilderness, Siskiyou Co., MIN, ASU)

*Caloplaca bolacina* (Tuck.) Herre  

(Herre 1910; Hasse 1913b; Merrill 1923; Fink 1935; Magnusson 1944; Thomson & Ketchledge 1958; Volk 1963; Baltzo 1970 [as "? 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])

**Synonyms:** [\*Placodium bolacinum\*](#), [\*Pyrenodesmia bolacina\*](#)

*Caloplaca brattiae* W. A. Weber  

(Weber 1989b; Riefner, Bowler, & Ryan 1995; Wetmore & Kärnefelt 1998; Bratt 1999; Doell 2002)

*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\*](#)

*Caloplaca catalinae* H. Magn.  

(Magnusson 1944; TJ; Wetmore [1994, who suggested that this may be a synonym of [\*C. atrosanguinea\*](#)]; Bowler et al. 1996; CA endemic)

**Synonyms:** [\*Blastenia catalinae\*](#) (Rudolph 1955)

*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)

**Synonyms:** [Lecanora cerina](#), [Placodium cerinum](#), [Pyrenodesmia cerina](#)

**Caloplaca chlorina** (Flot.) H. Olivier  

(Wetmore 1996, *C. 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)

**Caloplaca cladodes** (Tuck.) Zahlbr.  

(TJ; Ryan & Nash 1991; Wetmore & Kärnefelt 1998)

**Synonyms:** [Placodium cladodes](#) (Willey 1873a)

**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])

**Synonyms:** [Placodium coralloides](#) (TJ for references), [Polycauliona coralloides](#) (TJ for references)

**Caloplaca decipiens** (Arnold) Blomb. & Forss.  

(Anderson 1962; Baltzo 1970; Weber et al. 1987; TJ; Baltzo 1989; Wetmore & Kärnefelt 1998; Doell et al. 1999)

**Caloplaca demissa** (Körb.) Arup & Grube  

(Arup & Grube [1999, who 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])

**Synonyms:** [Lecanora demissa](#), [L. subolivascens](#) (Nylander 1900)

\***Caloplaca epithallina** Lyngé  

(Wetmore 1983, 1985; Ryan & Nash 1991; Riefner, Bowler, & Ryan 1995; Bratt 1999; Brodo et al. [2001, p. 199, with color photograph])

**Caloplaca feracissima** H. Magn.  

(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., 12 May 1984, 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)

**Synonyms:** [Blastenia ferruginea](#), [Placodium ferrugineum](#), [Pyrenodesmia ferruginea](#)

**Caloplaca flavogranulosa** Arup  

(Arup 1993b, 1995b; Brodo et al. [2001, p. 200, with color photograph]; *U. Arup* L89290, Trinidad State Beach, Humboldt Co., ASU; *U. Arup* L89288, Russian Gulch S. P., Mendocino Co., ASU)

**Caloplaca flavorubescens** (Huds.) J. R. Laundon  

(von Reis 1991; Bratt 1993; Brodo et al. [2001, pp. 200–201 with color photograph])

**Synonyms:** [C. aurantiaca](#) (Hasse 1908b, 1913b; Merrill 1923; Volk 1963; Jordan 1968; TJ),

[Lecanora aurantiaca](#) (Hasse 1898a), [Placodium aurantiacum](#) (Tuckerman 1866, 1882; Orcutt 1885; McClatchie 1895; Hasse 1896; McClatchie 1897; Hasse 1903a, 1903d), [Pyrenodesmia aurantiaca](#) (Rudolph 1955)

**Caloplaca flavovirescens** (Wulfen) Dalla Torre & Sarnth.  

(TJ; Wright 1997 [as “?”]; Bourell 2000; Baltzo 2002; Tucker [2002, pointing out its rarity])

**Synonyms:** [C. erythrella var. rubescens](#) (Hasse 1911a), [Pyrenodesmia flavovirescens](#) (Rudolph 1955)

**Note:** The map in Brodo et al. (2001) does not show this species on the west coast of North America.

**Caloplaca holocarpa** (Hoffm. ex Ach.) A. E. Wade  

(TJ; Tucker & Bratt 1996; Wright 1997; Bourell 2000; Baltzo 2002)

**Synonyms:** [C. pyracea](#) (Fink 1935; Wheeler 1938; Jordan 1968), [Placodium cerinum](#) var. [pyraceum](#) (McClatchie 1895, 1897), [Lecanora pyracea](#) (Hasse 1898a), [Pyrenodesmia pyracea](#)

**Caloplaca ignea** Arup  

(Arup 1995a, 1995b; Wetmore & Kärnefelt 1998; Bratt 1999; Brodo et al. [2001, p. 202, with color photograph])

**Caloplaca impolita** Arup  

(Arup 1995a, 1995b; Robertson et al. 1998 [as "cf."]; Wetmore & Kärnefelt 1998)

**Caloplaca inconspecta** Arup  

(Arup 1995a, 1995b; Brodo et al. [2001, pp. 202–203, with color photograph])

**Caloplaca jungermanniae** (Vahl) Th. Fr.  

(Wetmore 1985; *B. Ryan* 25284, Marble Mountain Wilderness, 1.6 km along Shackleford Creek, Siskiyou Co., ASU; *B. Ryan*, Emigrant Wilderness, Tuolumne Co., ASU)

**Caloplaca lactea** (A. Massal.) Zahlbr.  

(*B. Ryan* 32212, North Fork Ranger Station grounds, Sierra Nat. Forest, Madera Co., ASU)

**Caloplaca ludificans** Arup  

(Arup 1995a, 1995b; Doell 2002)

**Caloplaca luteominia** (Tuck.) Zahlbr. var. **bolanderi** (Tuck.) Arup  

(Arup 1993a; Bowler et al. 1996; Wright 1997; Tucker 1999; Brodo et al. [2001, p. 203, with color photograph]; CA endemic)

**Synonyms:** [C. bolanderi](#), [C. ferruginea](#) var. [bolanderi](#), [Blastenia ferruginea](#) var. [bolanderi](#)

**Caloplaca luteominia** var. **luteominia** Arup  

(TJ; Arup 1995a; Bratt 1997; Brodo et al. [2001, p. 203]; Doell 2002)

**Synonyms:** [Blastenia luteominia](#), [C. laeta](#), [Placodium luteominium](#), [Pyrenodesmia luteominia](#)

**Caloplaca marina** (Wedd.) Zahlbr. subsp. **americana** Arup  

(Arup 1992a, 1995b; Doell 2002)

**Caloplaca microphyllina** (Tuck.) Hasse  

(Hasse 1913b; Fink 1935; Herre 1942c; TJ; Brodo et al. [2001, p. 198]; Wetmore 2005)

**Synonyms:** [Placodium microphyllum](#) Tuck. (Hasse 1903c [as *P. microphillum*]), [Lecanora microphyllina](#)

**Caloplaca obscurella** (Körb.) Th. Fr.  

(Wetmore 2005)

**Caloplaca oregonia** H. Magn.  

(Lindsay 1973; TJ; von Reis 1991; Bowler et al. 1996; *T. Nash* 11359, along Hwy 253, 11 km E of Hwy 128, Mendocino Co., ASU)

**Caloplaca parviloba** Wetmore 

(Wetmore [2003, reporting a *B. Ryan* collection from Riverside Co.])

**Caloplaca peliophylla** (Tuck.) Zahlbr.  

(Fink 1935; Herre 1944b [*C. L. Brown*, Marin Co.]; TJ; Wetmore 1994; *T. Nash* 32731b, Hi Mtn, San Luis Obispo Co., ASU; CA endemic)

**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])

**Synonyms:** [Lecanora pellodella](#), [Pyrenodesmia pellodella](#)**Caloplaca persimilis** Wetmore (Wetmore 2005; *S. Tucker* 10995, On *Quercus lobata* on Hwy 41, Creston-Atascadero Rd, foothills of Santa Lucia range, 2.3 mi. W of Creston, San Luis Obispo Co., SBBG, determination by C. Wetmore)**Caloplaca rosei** Hasse  

(Arup 1992a; Bratt 1993; Bowler et al. 1996; Wetmore &amp; Kärnefelt 2000)

**Caloplaca saxicola** (Hoffm.) Nordin  

(Weber et al. 1987; Hale &amp; Cole 1988; Bowler &amp; Riefner 1990; Bratt 1993; Bowler et al. 1996; Thomson 1997; Robertson et al. 1998 [as "cf."]; Wetmore &amp; Kärnefelt 1998; Doell et al. 1999)

**Synonyms:** [C. murorum](#) (TJ), [Gasparrinia murorum](#), [Lecanora murorum](#) (Hasse 1898a), [Lecanora murorum](#) subsp. [tegularis](#) (Hasse 1898a), [Lecanora tegularis](#), [Placodium murorum](#), [P. murorum](#) var. [miniatum](#), [P. murorum](#) var. [gyalechiodes](#), [P. murorum](#) var. [obliterascens](#)**Caloplaca sideritis** (Tuck.) Zahlbr.  

(Bratt 1993; Wetmore 1996)

**Synonyms:** [Placodium cerinum](#) var. [sideritis](#) (Hasse 1903a), [Pyrenodesmia sideritis](#) (Rudolph 1955)**Caloplaca sonorae** Wetmore  (*S. Tucker* 35559, Big Rocks, 2.8 mi. N of Hwy 166, Los Padres Nat. Forest, San Luis Obispo Co., SBBG, determination by C. Wetmore; described in Wetmore [1996], but not from CA)**Caloplaca squamosa** (de Lesd.) Zahlbr.  

(Sigal 1975; TJ; Sigal 1989; Hill 1997; McGee 1998 [as "cf."]; Baltzo 2002; Wetmore 2003)

**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; Univ. Colo. Lich. Exs. 193, Howland Landing, Santa Catalina Isl., Los Angeles Co.; Univ. Colo. Lich. Exs. 695; *S. Tucker* 38304, campus of Univ. of California, 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; Univ. Colo. Lich. Exs. 672, Fraser Point, Santa Cruz Isl., Santa Barbara Co.)

**Caloplaca stellata** Wetmore & Kärnefelt  

(Wetmore &amp; Kärnefelt 1998)

**Caloplaca stipitata** Wetmore  (Wetmore 1999; *C. Wetmore* 73651, Santa Rosa Isl., Santa Barbara Co., isotype, MIN; *T. Nash* 41082, San Miguel Isl., Santa Barbara Isl., ASU; *C. Bratt* 4804, Santa Barbara Isl., Santa Barbara Co.)**Note:** This species occurs on bark in arid parts of S CA. It has been confused with [C. californica](#) (*fide* Wetmore [1999]), which is on wood and in more northern maritime situations.**Caloplaca subpyraceella** (Nyl.) Zahlbr.  (Zahlbrückner 1902; Fink 1935; TJ; von Reis 1991; Riefner, Bowler, & Ryan 1995; Magney 1999; Riefner & Rosentreter 2004; some CA collections are misidentifications of [C. luteominia](#) var. [luteominia](#) (*fide* K. Knudsen))**Synonyms:** [Blastenia subpyraceella](#), [Lecanora subpyraceella](#), [Placodium subpyracellum](#), [Pyrenodesmia subpyraceella](#)**Caloplaca subsoluta** (Nyl.) Zahlbr.  

(Wetmore 2003)

**Misapplied names:** [C. modesta](#), [C. sipeana](#)? , [C. lobulata](#) (some reports)**Caloplaca tiroliensis** Zahlbr.  

(Lindsay 1973; TJ; *B. Ryan* 25291, Marble Mountain Wilderness, Siskiyou Co., ASU)

**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)

**Synonyms:** [\*C. elegans\* var. \*trachyphylla\*](#) (Herre 1950a)

**Caloplaca variabilis** (Pers.) Müll. Arg.  

(Herre 1910; Hasse 1913b; Fink 1935; TJ; Bratt 1993; Robertson 2004)

**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 their map although they did not see collections from that region. Tucker (2002) raised questions about reports of this species in CA.

**Caloplaca vitellinula** (Nyl.) H. Olivier  

(Wetmore 1985)

**Caloplaca wrightii** (Willey) Fink  

(TJ)

**Synonyms:** [\*Blastenia ferruginea\* var. \*wrightii\*](#) (Hasse 1913a; Merrill 1923), [\*C. ferruginea\* var. \*wrightii\*](#), [\*Placodium ferrugineum\* var. \*wrightii\*](#) (Hasse 1903a)

**Caloplaca aurantia** (Pers.) Hellb.  

(Wetmore 1985; not included for North America 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 North America

**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)

**Note:** The disposition of these records is uncertain. According to Wetmore (2005), the species does not occur west of South Dakota.

**Caloplaca cinnabarina** (Ach.) Zahlbr.  

(Herre 1910, 1950a; Thomson & Ketchledge 1958; Volk 1963; TJ; von Reis 1991; Tucker & Bratt 1996)

= misidentifications for CA

**Note:** According to Wetmore (2003), the name *Caloplaca cinnabrina* has been applied widely to other species, including taxa in the *C. squamosa* group. Wetmore & Kärnefelt (2000) restrict *C. cinnabrina* 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 North America 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 sorediate lobes, lacking lower cortex, appressed to rock).

*Caloplaca constipans* (Nyl.) Zahlbr.  

(TJ)

=*Edrudia constipans*

*Caloplaca crenularia* (With.) J. R. Laundon  

**Synonyms:** *Blastenia festiva* (Hasse 1913b), *C. festiva*, *C. ferruginea* var. *festiva*, *Placodium ferrugineum* var. *festivum*, *P. festivum*, *Pyrenodesmia festiva*

**Note:** According to Wetmore (1996), North American reports are based on misidentifications.

*Caloplaca elegans* (Link) Th. Fr.  

(Herre 1910; Hasse 1913b; Merrill 1923; Herre 1945, 1950a)

=*Xanthoria elegans*

*Caloplaca elegans* var. *trachyphylla* Tuck.  

(Herre 1950a)

=*C. trachyphylla*

*Caloplaca erythrantha* (Tuck.) Zahlbr.  

**Synonyms:** *Lecanora erythrantha* (Fink 1935; not in Esslinger 2004b; omitted in first checklist of North American lichens [Hale & Culberson 1956];

= a possible misidentification for CA, since this species is otherwise reported only from the tropics)

*Caloplaca erythrella* (Ach.) Kieff. var. *rubescens* (Ach.) Hasse 

(Hasse 1911a)

=*Caloplaca flavovirescens*

*Caloplaca eugyra* (Tuck.) Zahlbr.  

(called a misidentification in TJ; Wetmore & Kärnefelt [1998] question CA record)

**Synonyms:** *Placodium eugyrum* Tuck. (Hasse 1908a)

*Caloplaca ferruginea* var. *bolanderi* (Tuck.) Herre 

(Thomson & Ketchledge 1958)

=*C. luteominia* var. *bolanderi*

*Caloplaca ferruginea* var. *festiva* (Ach.) Th. Fr.  

(Herre 1942a, 1950a)

=*Caloplaca crenularia*, but misidentifications for North America fide Wetmore (1996)

*Caloplaca ferruginea* var. *wrightii* Tuck.  

(Hasse 1913b; Merrill 1923)

=*C. wrightii*

*Caloplaca festiva* (Ach.) Zwackh  

(Fink 1935)

=*Caloplaca crenularia*, but misidentifications for North America 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* (Hasse 1910a, 1913b), *B. fraudans* (Fink 1935),

*Pyrenodesmia fraudans* (Rudolph 1955)

**Note:** Arup (1994) claimed that he had not seen material of this species from North America.

*Caloplaca fulgens* (Sw.) Körb.  

(Hasse 1906; TJ)

=*Fulglesia fulgens*

*Caloplaca laeta* H. Magn.  

(Magnusson 1944; Baltzo 1970; Sigal 1975; TJ; Baltzo 1989; Sigal 1989; von Reis 1991 [but report based on a misidentification *fide* Tucker 1999])

=*C. luteominia* var. *luteominia* *fide* Arup 1993b

*Caloplaca lobulata* (Flörke) de Lesd.  

(Baltzo 1970; TJ; Hale & Cole 1988; Robertson et al. 1998 [as "cf."]; Wetmore & Kärnefelt 1998)

=*C. subsoluta* for some CA records

*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 Mexico, Colorado, and eastern U. S., CA records are probably based on misidentifications.

*Caloplaca pyracea* (Ach.) Th. Fr.  

(Fink 1935; Wheeler 1938; Jordan 1968)

=*C. holocarpa*

*Caloplaca sipeana* H. Magn.  

(Riefner, Bowler, & Ryan 1995; Bowler et al. 1996)

=*C. subsoluta*? for some CA records

*Caloplaca stillicidiorum* (Vahl) Lyngé  

(Riefner, Bowler, & Ryan 1995)

=*C. cerina*

*Caloplaca teicholyta* (Ach.) J. Steiner  

(TJ, but misidentifications for North America *fide* Wetmore 1996 and Esslinger 2004b)

**Synonyms:** *Placodium teicholytum*, *Pyrenodesmia teicholyta*

*Caloplaca tominii* (Savicz) Ahlner  

(Wetmore [2001, description; CA not mentioned])

**Misapplied names:** *C. cirrochroa* (Herr 1912a; Hasse 1913b; Fink 1935; TJ)

**Note:** According to McCune (1985), these records should be verified, as the nearest collections are from western Nevada.

*Caloplaca ulmorum* (Fink) Fink  

(Wright 1997 = misidentification)

*Caloplaca viridirufa* (Ach.) Zahlbr.  

**Synonyms:** *Lecanora fuscoatra* Nyl. (Hasse 1898a)

= probable misidentification

## CALVITIMELA Hafellner

**Calvitimela aglaea** (Sommerf.) Hafellner 

**Synonyms:** [Tephromela aglaea](#) (J. & R. Robertson 6886, on serpentine outcrop, Bolinas Fairfax Rd .3 mi W of golf course, Mt. Tamalpais State Park, Marin Co.)

**Calvitimela armeniaca** (DC.) Hertel & Rambold  

**Synonyms:** [Lecidea armeniaca](#), [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 2004; Jovan & McCune 2004)

**Synonyms:** [Teloschistes concolor](#)

**Candelaria concolor** var. **effusa** (Tuck.) G. Merr. & Burnham  

(Pinelli & Jordan 1978; TJ; Hebert & Meyer 1984; Weber et al. 1987; Robertson 2002a)

**Candelaria pacifica** Westberg nom. inval. 

(Westberg & Nash 2002 [as *Candelaria "pacifica"*, in prep.]; 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 dispersa** (Räsänen) Hakul. 

(Thomson & Ketchledge 1958)

= error for [Candelariella dispersa](#)

**Candelaria vitellina** (Hoffm.) A. Massal.  

(Hasse 1908b)

=[Candelariella vitellina](#)

**CANDELARIELLA** Müll. Arg.**Candelariella antennaria** Räsänen  

(Westberg 2004)

**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)

**Synonyms:** [C. cerinella](#) (Hasse 1913b; Fink 1935), [Lecanora cerinella](#) (Stizenberger 1895), *L. vitellina* var. *aurella* (Hasse 1898a), [Placodium epixanthum](#) (Hasse 1903c), *P. vitellinum* var. *aurella* (Tuckerman 1882)

**Candelariella citrina** de Lesd.  

(Westberg 2004)

**Synonyms:** [C. terrigena](#)

**Candelariella corallizoides** Westberg

(C. Printzen, 25 Sept 1997, on rocks above La Cascada, Santa Cruz Isl., Santa Barbara Co., SBBG; C. Bratt 10298, Upper Chenett Cyn, San Clemente Isl., Los Angeles Co., SBBG, determination by S. Tucker)

**Candelariella dispersa** (Räsänen) Hakul.  

(Thomson & Ketchledge 1958 [as "*Candelaria dispersa*"]; TJ; Thomson 1997, 2003)

**Candelariella reflexa** (Nyl.) Lettau  

(Wetmore 1985; *C. Wetmore 50145*, on *Cercocarpus*, 2 mi. E of Lookout Ranger Station on Mineral King Rd, Sequoia N. P., Tulare Co., 3 May 1984, MIN)

**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]; Robertson 2003b; Westberg 2004)

**Candelariella vitellina** (Hoffm.) Müll. Arg.  

(Hasse 1908b; 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; Thomson 1997; Wright 1997; Bratt 1999; Bourell 2000; Brodo et al. [2001, pp. 208–209, with color photograph]; Riefner et al. 2003; Robertson 2003b; Westberg 2004)

**Synonyms:** [\*Candelaria vitellina\*](#), [\*Lecanora vitellina\*](#), [\*Placodium vitellinum\*](#)

**Candelariella vitellina** var. *asserticola* Degel.

(*T. Nash* 18947, E side of Pinnacles Nat. Monument, San Benito Co., ASU)

**Candelariella xanthostigma** (Ach.) Lettau  

(Lindsay 1973; TJ; Thomson 1997, 2003; Westberg 2004; *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)

**Candelariella cerinella** (Flörke) Zahlbr.  

(Hasse 1913b; Fink 1935; TJ)

=[\*C. aurella\*](#)

**Candelariella coralliza** (Nyl.) H. Magn.  

(Bratt 1999; Bourell [2000, citing *J. Doell* collection])

= misidentifications, as this is a European species

**Candelariella holophaea** (Mont.) Zahlbr.  

(TJ)

=[\*Solenopsora 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 spraguei** (Tuck.) Zahlbr.  

(TJ; Tucker [2002] indicated that the Hasse collections need to be verified; only in Colorado *fide* Brodo et al. [2001, p. 208])

**Synonyms:** [\*Lecanora spraguei\*](#) (Hasse 1898a)

**Candelariella terrigena** Räsänen  

(Ryan & Nash 1991; Brodo et al. [2001, pp. 208–209, with color photograph]; Robertson 2003b, 2004; Westberg 2004; *T. Nash* 7056, Ocotillo, San Diego Co., ASU; *B. Ryan* 31071, Santa Rosa Isl., Santa Barbara Co.; *J. R. Shevock* 17560, Kern Plateau, Tulare Co., ASU)

=[\*C. citrina\*](#) (Westberg [2004] for synonymy)

**CARBONEA** (Hertel) Hertel**\*Carbonea vitellinaria** (Nyl.) Hertel  

(Triebel et al. 1991; Diederich 2003; Robertson 2003b; Knoph et al. 2004; *B. Ryan* 12735, Eastern Brook Lakes Watershed, Inyo Co., ASU)

**Synonyms:** [\*Nesolechia vitellinaria\*](#)

**Carbonea vorticosa** (Flörke) Hertel  

(Knoph et al. 2004)

**Synonyms:** [\*Lecidea vorticosa\*](#) (Hasse 1913b)

**CATAPYRENIUM** Flot.**Catapyrenium cinereum** (Pers.) Körb.  (Thomson 1987; Sigal 1989; Ryan & Nash [1991] whose report was based on a misidentification of *C. daedaleum*; Goward et al. 1994)**Synonyms:** *Dermatocarpon cinereum*, *D. hepaticum* (Ach.) Th. Fr. s. str., non auct., *Endocarpon cinereum*, *Endocarpon cinereum* var. *cartilagineum* Nyl. (Tuckerman 1872; Willey 1873a; Thomson 1987), *E. hepaticum* Ach. (Hasse 1896, 1898a; Orcutt 1907), *E. tephroides***Note:** According to Breuss & Bratt (2001), this species 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 a montane area in Inyo Co.; an arctic/alpine species not in the Sonoran area of S CA *fide* Breuss [2002])**Catapyrenium psoromoides** (Borrer) R. Sant.  

(Breuss &amp; McCune 1994; Breuss &amp; Bratt 2001; Brodo et al. [2001, p. 571]; Robertson &amp; 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)

**Catapyrenium squamellum** (Nyl.) J. W. Thomson  

(Thomson 1987; Breuss &amp; Bratt 2001; Breuss 2002; Robertson 2003b; Knudsen 2004c)

**Synonyms:** *Dermatocarpon squamellum* (Herre 1910; Hasse 1915b; Fink [1935] who doubted the Hasse material from S CA; Sigal & Toren 1976; TJ), *Verrucaria squamella* (Hasse 1897)**Catapyrenium acarosporoides** (Zahlbr.) J. W. Thomson  = *Placidium acarosporoides* (Breuss 1996; Breuss & Bratt 2001)**Catapyrenium caeruleopulvinum** J. W. Thomson  

(Thomson 1987)

= *Placopyrenium caeruleopulvinum***Catapyrenium heppioides** (Zahlbr.) J. W. Thomson  

(Thomson 1987)

= *Placopyrenium heppioides***Catapyrenium lachneum** (Ach.) R. Sant.  

(Thomson 1987; Weber et al. 1987; Baltzo 1989; Doell &amp; 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 *Placidium lacinulatum*.**Catapyrenium lacinulatum** (Ach.) Breuss  = *Placidium lacinulatum* (Breuss 1996)**Catapyrenium pilosellum** Breuss  

(S. Tucker 33676, San Nicolas Isl., Ventura Co., SBBG; T. Nash 33013, Santa Rosa Isl., Santa Barbara Co., ASU)

= *Placidium pilosellum* (Breuss 1996)**Catapyrenium plumbeum** (de Lesd.) J. W. Thomson  (R. Rosentreter 7234, E 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. Thomson  

(Thomson 1987, 2003; Breuss & Bratt [2001, not known with certainty for CA])

=[Placidium arboreum](#)

*Catapyrenium umbrinum* Breuss 

=[Clavascidium umbrinum](#)

*Catapyrenium zahlbruckneri* (Hasse) J. W. Thomson  

(Thomson 1987)

=[Placopyrenium zahlbruckneri](#)

## CATILLARIA A. Massal.

*Catillaria chalybeia* (Borrer) A. Massal.  

(Hasse 1913b; Fink 1935; TJ)

*Catillaria franciscana* (Tuck.) Herre  

(Herre 1910; Hasse 1913b; Fink 1935; TJ; Knudsen 2005c; *L. Sigal*, Land's End, San Francisco, San Francisco Co., 23 Mar 1973, ASU; CA endemic)

**Synonyms:** [Biatora franciscana](#) (Tuckerman 1888; Hasse 1896; McClatchie 1897; Hasse 1903b; Orcutt 1903, 1907), [Lecidea franciscana](#)

*Catillaria glauconigrans* (Tuck.) Hasse  

(Hasse 1909, 1913b; Fink 1935; Herre 1942c; Thomson & Ketchledge 1958; TJ)

*Catillaria lenticularis* (Ach.) Th. Fr.  

(Hasse 1913b; Fink 1935; Sigal 1975; TJ; Sigal 1989; Tucker & Bratt 1996; Riefner et al. 2003)

**Synonyms:** [C. lenticularis var. acrustacea](#), [Lecidea lenticularis f. acrustacea](#)

*Catillaria nigroclavata* (Nyl.) Schuler  

(TJ; *B. Ryan 26661*, Hwy 152, 32 km NNE of Hollister, Merced Co., ASU)

**Synonyms:** [C. lenticularis var. vulgaris](#) (Bolander 1870; Hasse 1909, 1913b)

*Catillaria subviridis* (Nyl.) Zahlbr.  

(TJ)

**Synonyms:** [Biatora subviridis](#) (McClatchie 1897; Hasse 1906)

*Catillaria athallina* (Hepp) Hellb.  

(Thomson 1997, Catalina Isl. report)

=[Toninia athallina](#)

*Catillaria atropurpurea* (Schaer.) Th. Fr.  

(Hasse 1913b [*H. E. Hasse*, Santa Monica Range, Apr, 1914, *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; TJ)

=[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 based on a Mexican report by Tuckerman)

**Synonyms:** [Heterothecium endochromum](#) (Tuckerman [1888, p. 55], from Mexico)

*Catillaria globulosa* (Flörke) Th. Fr.  

(Herre 1910; Fink 1935; TJ)

=[\*Biatora globulosa\*](#) fide Printzen 2004

*Catillaria griffithii* (Sm.) Malme  

(Merrill 1923; Volk 1963; Jordan 1968; TJ; 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)

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

*Catillaria subnigrata* (Nyl.) Blomb. & Forss.  

(Herre 1910; Fink 1935; misidentifications;

=*Micarea subnigrata*, a European species, not in North America)

*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)

**Synonyms:** [\*Biatora atropurpurea\*](#), [\*Catillaria atropurpurea\*](#) (Hasse 1913b; Fink 1935; Herre 1942c;

Thomson & Ketchledge 1958; Lindsay 1973; TJ), [\*Lecidea atropurpurea\*](#)

## CATOCARPON Hellb.

*Catocarpone myriocarpum* Mudd var. *ecrustaceum* (Leight.) Hasse 

(Hasse 1908a, 1908b)

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

*Catocarpone myriocarpum* var. *punctiforme* (Mudd) Fr. 

(Hasse 1908a, 1908b)

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

## CATOLECHIA Flot.

*Catolechia wahlenbergii* (Ach.) Körb.  

**Synonyms:** [\*Buellia pulchella\*](#) (Hasse 1908b), [\*B. wahlenbergii\*](#) (TJ), [\*Lecidea aliena\* var. \*pulchella\*](#)

(Hasse 1898a)

## CAVERNULARIA Degel.

*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)

**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)

**Synonyms:** [Parmelia lophyrea](#) Ach. (Herre 1946; Fink 1935)

**CERCIDOSPORA** Körb.**Cercidospora lobothalliae** Nav.-Ros. & Calat.  

(Navarro-Rosinés et al. 2004)

**\*Cercidospora macrospora** (Uloth) Hafellner & Nav.-Ros.  

**Synonyms:** [C. ulothii](#) (Triebel et al. 1991)

**\*Cercidospora ulothii** Körb.  

(Triebel et al. [1991] based on *B. Ryan 12510*, Eastern Brook Lakes, Mono Co., on *Lecanora* [subg. *Placodium*] sp.)

=[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; Tucker 2002; *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 on the West Coast)

**Synonyms:** [Coelocaulon aculeatum](#), [Cornicularia aculeata](#) (Tucker & Kowalski 1975, based on *S. Tucker 11036*, 0.5 mi. from Dillon Beach, Marin Co., SBBG; TJ)

**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., and *J. & R. Robertson 2965*, Chanslor Guest Ranch, Sonoma Co.; Kärnefelt 1986)

**Synonyms:** [Coelocaulon muricatum](#) (McCune & Geiser 1997)

**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)

=[Kaernefeltia californica](#)

**Cetraria canadensis** (Räsänen) Räsänen  

(Esslinger 1973b; Tucker 1973; Pinelli & Jordan 1978; TJ)

=[Vulpicida canadensis](#)

**Cetraria chlorophylla** (Willd.) Vain.  

(TJ; Thomson 1984; Goward et al. 1994; Jovan & McCune 2004)

=[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*

*Cetraria merrillii* Du Rietz  

(TJ; Weber et al. 1987; Goward et al. 1994; Jovan & McCune 2004)

=*Kaernefeltia merrillii*

*Cetraria orbata* (Nyl.) Fink  

(TJ; Goward et al. 1994; Jovan & McCune 2004)

=*Tuckermannopsis orbata*

*Cetraria pallidula* Tuck. ex Riddle  

(TJ; Goward et al. 1994; Jovan & McCune 2004)

=*Ahtiana pallidula*

*Cetraria platiphylla* Tuck.  

(TJ; Goward et al. 1994; Jovan & McCune 2004)

=*Tuckermannopsis platiphylla*

*Cetraria saepincola* (Ehrh.) Ach.  

(McClatchie 1897; Hasse 1913b; Fink 1935; Thomson 1984)

=*Tuckermannopsis saepincola*

*Cetraria saepincola* var. *chlorophylla* (Willd.) Schaer.  

(Tuckerman 1882; Eckfeldt 1893; TJ)

=*Tuckermannopsis chlorophylla*

*Cetraria scutata* (Wulfen) Poetsch  

(Jordan 1968)

=*Tuckermannopsis saepincola* (Ehrh.) Hale, an apotheciate species

*Cetraria scutata* auct. non (Wulfen) Poetsch  

=*Tuckermannopsis chlorophylla*; CA reports such as Jordan [1968] may be based at least partly on this soraliate species

*Cetraria stenophylla* (Tuck.) G. Merr.  

(TJ)

=*Platismatia stenophylla*

*Cetraria tuckermanii* Herre non Oakes  

(Herre 1906, 1910; Fink 1935)

=*Platismatia herrei* Herre [1910] described his taxon as narrow-lobed which fits *P. herrei*, although it was called broad-lobed in his key

*Cetraria viridis* Schwein.  

(Hale 1969)

=*Vulpicida viridis* (Hale [1969] erroneously indicated presence in CA; Mattsson [1993] reported it only in E U. S. west to Arkansas)

## CETRELIA W. L. Culb. & C. F. Culb.

**Cetrelia cetrarioides** (Delise ex Duby) W. L. Culb. & C. F. Culb.  

(Jovan & McCune 2004; *C. cetrarioides* has been reported previously S to Oregon [Goward 1999] so the report by Jovan & McCune [2004] extends the range)

**Synonyms:** *Parmelia cetrarioides* (Berry 1941; Herre 1942c, 1945, 1946; Nash [2002b, p. 509])

**Note:** The CA collections listed by Herre (1946) should be verified, because Herre misapplied the name *Parmelia cetrarioides* to specimens of *Flavopunctelia praesignis* from Sonora, Mexico.

**Cetrelia olivetorum** (Nyl.) W. L. Culb. & C. F. Culb.  

(TJ; Ryan & Nash 2002, based on Hasse collections from S CA)

**Synonyms:** *Parmelia olivaria* (Herre 1912a; Merrill 1923; Herre 1946; Thomson & Ketchledge 1958; TJ), *P. olivetorum* (McClatchie 1897; Hasse 1898a, 1903a, 1913b; Fink 1935; TJ)

**Note:** This taxon is now probably extinct in CA.

## CHAENOTHECA Th. Fr.

**Chaenotheca brachypoda** (Ach.) Tibell  

(Goward 1999)

**Synonyms:** *C. sulphurea* (Wetmore 1985, based on *C. Wetmore 50733*, Sequoia N. P., junction of Crystal Cave Rd and General's Hwy, Tulare Co., MIN)

**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; *C. Wetmore 50721*, Sequoia N. P., Tulare Co., MIN)

**Note:** Tibell (1980) reported this taxon 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 chrysoccephala** (Turner ex Ach.) Th. Fr.  

(Herre 1950a [f. *melanocephala* (Nyl.) A. L. Sm.]; Jordan 1968; Lindsay 1973; TJ; Tibell 1980; Goward 1999; Baltzo [2002, repeating Jordan's report]; reports are all from central or N CA)

**Synonyms:** *Cyphelium chrysoccephalum*

**Chaenotheca furfuracea** (L.) Tibell  

(Baltzo [2002] repeated Jordan [1968] report; Goward 1999; Brodo et al. [2001, p. 222, with color photograph]; Tucker 2002; *B. Ryan 22229*, Redwood Experimental Forest, Mendocino Co., N of Cloverdale, Sonoma Co., ASU; reports are all from central or N CA)

**Synonyms:** *Coniocybe furfuracea* (Herre 1910; Fink 1935; Jordan 1968; Pinelli & Jordan 1978; Tibell 1975; TJ)

**Chaenotheca olivaceorufa** Vain.  

(Rikkinen [1998] for collections from Mendocino Co. and Humboldt Co.)

**Chaenotheca phaeocephala** (Turner) Th. Fr.  

(Herre 1912a [based on a *Herre* collection, from a redwood post, Oakland hills, 525 ft. elev.; *F. T. Bioletti*, Sonoma Co., UC]; Tibell 1980; Goward 1999; Tibell & Ryan 2004)

**Chaenotheca subroscida** (Eitner) Zahlbr.  

(Tibell 1980; Goward 1999; Tibell & Ryan 2004; *B. Ryan 32166b*, Rock Creek, Sierra Nat. Forest, Madera Co., ASU)

**Chaenotheca trichialis** (Ach.) Th. Fr.  

(Jordan 1968; TJ; Tibell 1980; Goward 1999; Baltzo [2002, repeating Jordan's report]; Tibell & Ryan 2004)

**Chaenotheca xyloxena** Nádv.  

(Tibell 1980; Goward 1999; Tibell & Ryan 2004)

**Chaenotheca carthusiae** (Harm.) Lettau  

=[C. chlorella](#) (Wetmore 1985)

**Chaenotheca pusilla** (Ach.) Vain.

=[Chaenothecopsis pusilla](#)

**Chaenotheca subpusilla** (Vain.) Tibell

=[Chaenothecopsis pusilla](#)

**Chaenotheca sulphurea** (Retz.) Middelb. & Mattsson  

(Wetmore 1985; *C. Wetmore 50733*, Sequoia N. P., junction of Crystal Cave Rd and General's Hwy, Tulare Co., MIN)

=[C. brachypoda](#)

## CHAENOTHECOPSIS Vain.

†**Chaenothecopsis debilis** (Turner & Borrer ex Sm.) Tibell  

(Goward 1999; Peterson & Rikkinen 1999; Robertson 2003b)

\***Chaenothecopsis epithallina** Tibell 

(E. Peterson collections from Trinity Co.)

†**Chaenothecopsis nana** Tibell  

(Tibell 1981; Goward 1999; Peterson & Rikkinen 1999; Tibell & Ryan 2004; *B. Ryan 22231*, near county airport, Mendocino Co., ASU)

#**Chaenothecopsis pusilla** (Ach.) A. F. W. Schmidt  

(Tibell 1980; Goward 1999; Thomson 2003; Tibell & Ryan 2004)

Synonyms: [Calicium pusillum](#) (Hasse 1908b; Fink 1935; TJ), [Chaenotheca pusilla](#), [C. subpusilla](#) (Pinelli & Jordan 1978; TJ)

\***Chaenothecopsis rubina** Tibell  

(Peterson & Rikkinen 1999)

†**Chaenothecopsis savonica** (Räsänen) Tibell  

(Goward 1999; Peterson & Rikkinen 1999)

†**Chaenothecopsis ussuriensis** Titov  

(Peterson & Rikkinen 1999)

\***Chaenothecopsis viridialba** (Kremp.) A. F. W. Schmidt  

(Goward 1999; Peterson & Rikkinen 1999)

#**Chaenothecopsis subpusilla** (Vain.) Tibell  

(Pinelli & Jordan 1978; TJ)

=[C. pusilla](#)

## CHIODECTON Ach.

**Chiodecton ochroleucum** Zahlbr.  

(Zahlbruckner 1900; Hasse 1903b, 1903f, 1913b; Merrill 1923; Hedrick 1933; Fink 1935; Herre 1945; TJ; Thor 1990; CA endemic)

**Chiodecton subochroleucum** Fink ex J. Hedrick  

(Hedrick 1933; Fink 1935; TJ; CA endemic)

**Note:** This species was not mentioned by Thor (1990).

*Chiodection californicum* Tuck.  

(Tuckerman [1888, p. 135]; Hasse 1913b)

=[\*Limonaea californica\*](#) (Sparrius 2004)

*Chiodection rubrocinctum* (Ehrenb.: Fr.) Nyl.  

(Hasse 1903b)

=*Cryptothecia rubrocincta*, but misidentification for CA

*Chiodection sanguineum* (Sw.) Vain.  

(Hasse 1903b)

=*Cryptothecia rubrocincta*, but misidentification for CA

## 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

*Chrismofulvea dialyta* (Nyl.) Marbach  

(Marbach 2000 [Type: *Bolander*, CA])

**Synonyms:** [\*Buellia dialyta\*](#) (Tuckerman 1872, 1888; Fink 1935; Imshaug 1951; TJ; Thomson 2003)

## CHROMATOCHLAMYS Trevis.

*Chromatochlamys muscorum* (Fr.) H. Mayrhofer & Poelt var. *muscorum*  

(Robertson & Robertson [2002, based on *J. & R. Robertson* 3676, Guenoc Winery, over mosses in chaparral, Lake Co., II. Brodo]; Mayrhofer 2002; *T. Nash* 32541, Santa Cruz Isl., Santa Barbara Co., ASU)

=[\*Thelenella muscorum\*](#)

## CHRYSOTHRIX Mont.

*Chrysotrichia candelaris* (L.) J. R. Laundon  

(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 2004; Tønsberg 2004)

**Synonyms:** [\*Lepraria candelaris\*](#)

*Chrysotrichia granulosa* G. Thor  

(Tønsberg 2004)

**Note:** Tønsberg (2004) reported this species as common from Mexico to British Columbia.

*Chrysotrichia chlorina* (Ach.) J. R. Laundon  

**Synonyms:** [\*Lepraria chlorina\*](#) (Hale & Cole [1988], but probably an error for [\*C. candelaris\*](#) or [\*C. granulosa\*](#); not mentioned for Sonoran region by Tønsberg [2004])

**CLADIDIUM** Hafellner**Cladidium bolanderi** (Tuck.) B. D. Ryan  

(Ryan 1989a; von Reis 1991; Brodo et al. [2001, pp. 385–386]; CA endemic)

**Synonyms:** [C. thamnitis](#), [Lecanora bolanderi](#) (Tuckerman 1864, 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1882; Herre 1906, 1907; Hue 1909a; Herre 1910; Fink 1935; Lamb 1939; Herre 1942c, 1945; Volk 1963; TJ), [Lecanora thamnitis](#) (Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1882; Zahlbruckner 1903–1907; Herre 1906; Fink 1935; Lamb 1939; Herre 1942c; TJ), [Polycauliona bolanderi](#) (Hue 1909a) [Polycauliona thamnitis](#) (Hue 1909a)**Cladidium thamnitis** (Tuck.) Hafellner  

(Hafellner 1984)

= [C. bolanderi](#)**CLADINA** Nyl.**Cladina arbuscula** (Wallr.) Hale & W. L. Culb. subsp. **beringiana** (Ahti) N. S. Golubk.  (based on *D. Wright 3079* [Wright 1992], coast near Dillon Beach, Marin Co., determined by T. Ahti; alternative identification as [C. ciliata](#), which see)**Cladina ciliata** (Stirt.) Trass  (Goward [1999] based on *D. Wright 3007* [Wright 1992], coast near Dillon Beach, Marin Co., determined by J. Thomson; T. Ahti identified a sample from the same population as [C. arbuscula](#) subsp. [beringiana](#))**Cladina portentosa** (Dufour) Follmann f. **pacifica** (Ahti) Ahti  

(Brodo &amp; Ahti 1996; Goward 1999; Brodo et al. [2001, pp. 225–226, with color photograph]; Robertson 2002a; Tucker 2002)

**Synonyms:** [Cladina alpestris](#) (Lindsay 1973)**Misapplied names:** [Cladina impexa](#), [C. mitis](#), [C. stellaris](#) [Cladonia impexa](#), [C. mitis](#), [C. stellaris](#)**Cladina alpestris** (L.) Nyl.  

(Lindsay 1973; TJ)

= [C. stellaris](#)**Cladina impexa** (Harm.) de Lesd.  (Lindsay 1973; TJ; name misapplied to CA collections of [C. portentosa](#) f. [pacifica](#); for synonymy see Ahti [1984])**Cladina mitis** (Sandst.) Hustich  (Herre 1945; Lindsay 1973; name misapplied to CA collections of [C. portentosa](#) f. [pacifica](#))**Cladina 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 *C. portentosa*)**Synonyms:** [C. alpestris](#) (Lindsay 1973), [Cladonia alpestris](#) (Thomson 1968a), [C. stellaris](#) (Thomson 1984)**CLADONIA** P. Browne**Cladonia albonigra** Brodo & Ahti  

(Brodo &amp; Ahti 1996; Goward 1999)

**Cladonia artuata** S. Hammer  

(Hammer 1993, 1995; Brodo &amp; Ahti 1996; S. Hammer 1007, vicinity of Hwy 408, Mendocino State Forest, Mendocino Co., ASU)

**Misapplied names:** [C. carassensis](#), for CA records, in part

**Cladonia asahinae** J. W. Thomson  

(Hammer 1994, 1995; Brodo & Ahti 1996; Doell & Wright 1996; Goward 1999; Brodo et al. [2001, pp. 238–239, with color photograph]; Ahti & Hammer 2002)

**Cladonia bacilliformis** (Nyl.) Glück  

(Goward 1999; not in S 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 2004)

**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]; Thomson 2003)

**Cladonia carneola** (Fr.) Fr.  

(Hammer 1989b, 1989c, 1995; Goward 1999; Brodo et al. [2001, p. 243, with color photograph]; Ahti & Hammer 2002)

**Cladonia cervicornis** (Ach.) Flot. subsp. **cervicornis**  

(Herre 1910; TJ; Hammer 1989c; Hammer & Ahti 1990 [CA implied but not definitely reported]; Goward 1999; Ahti & Hammer 2002)

**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)

**Synonyms:** [C. verticillata](#)

**Cladonia chlorophaea** (Flörke ex Sommerf.) Spreng.  

(Hasse 1898a; Nylander 1900; Herre 1906, 1945; Robbins 1931; Thomson & Ketchledge 1958; Jordan 1968; Baltzo 1970; Bowler 1972; Thomson 1984; Weber et al. 1987; TJ; 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 2004; Jovan & McCune 2004)

**Synonyms:** [C. pyxidata var. chlorophaea](#) (Hasse 1903a)

**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)

**Synonyms:** [C. fimbriata var. tubaeformis](#)

**Cladonia conista** (Nyl.) Robbins  

(Robbins 1931; TJ; Hammer 1995; Wright 1997; Tucker 2002)

**Note:** 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)

**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; 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.)

**Synonyms:** [C. japonica](#)

**Cladonia crispata** (Ach.) Flot. var. **cetrariiformis** (Delise) Vain.  

(Goward 1999)

**Cladonia cryptochlorophaea** Asahina  

(Ryan & Nash 1991; none seen from CA by S. Hammer [personal communication])

**Cladonia deformis** (L.) Hoffm.  

(Herre 1942c; TJ; Sweet 1983; Thomson 1984; Goward 1999; Brodo et al. [2001, p. 251, with color photograph]; Tucker 2002; *B. Ryan* 25151, Marble Mountain 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; Hasse 1895 [var. *tubaeformis*]; McClatchie 1895; Hasse 1896; McClatchie 1897; Hasse 1898a, 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, 1995; Ryan & Nash 1991; 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 2004; Jovan & McCune 2004; not in Hammer 1995)

**Synonyms:** [\*C. major\*](#) *fide* 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)

**Note:** This taxon is locally common but known in CA from only one (possibly two) areas.

**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 2004; Jovan & McCune 2004; Robertson 2004)

**Synonyms:** [\*C. furcata\*](#) var. [\*corymbosa\*](#) (Hasse 1903a), [\*C. herrei\*](#) (synonymy *fide* S. Hammer, personal communication)

**Cladonia grayi** G. Merr. ex Sandst.  

(Goward 1999; *H. Peters* 25, near Yountville, Napa Co., SFSU; is UV+; chemistry should be checked *fide* S. Hammer)

**Cladonia hammeri** Ahti  

(Ahti & Hammer 2002; Knudsen 2005c)

**Cladonia humilis** (With.) J. R. Laundon  

(Hale & Cole 1988; Hammer & Ahti 1990; Doell & Wright 1996; Goward 1999; Ahti & Hammer 2002)

**Synonyms:** [C. conistea](#) (Yoshimura 1968b)

**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 2004)

**Synonyms:** [C. balfourii](#) Cromb. non auct., [C. macilenta](#) var. [bacillaris](#) (Ahti & Hammer 2002; Baltzo 2002)

**Cladonia macrophyllodes** Nyl.  

(Thomson 1984; Hammer 1995; Goward 1999; Bourell 2000; Brodo et al. [2001, pp. 260–261, with color photograph])

**Cladonia merochlorophaea** Asahina var. **merochlorophaea**  

(Hammer 1995; Goward 1999)

**Cladonia multiformis** G. Merr.  

(TJ; Thomson 1984 [shown on map]; Goward 1999; *H. Thiers*, Lime Cave near Cedarville, Modoc Co., no number or date, SFSU, !S. Tucker)

**Synonyms:** [C. furcata](#) var. [racemosa](#) Flörke (Fink 1935; Herre 1942a; but these records may be based on misidentifications)

**Cladonia nashii** Ahti  

(Ahti & Hammer 2002; Robertson 2003b; *T. Nash* 34092, ridge above Blue Cavern Point, Santa Catalina Isl., Los Angeles Co., determination by T. Ahti; *McLeod P11912a*, Cuesta Ridge, San Luis Obispo Co., ASU; *B. Ryan* 27136b, Hastings Natural History Reserve, Monterey Co., ASU)

**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 2004; Jovan & McCune 2004)

**Synonyms:** [C. fimbriata](#) var. [ochrochlora](#)

**Cladonia peziziformis** (With.) J. R. Laundon  

(Hale 1979; in San Francisco Bay Area *fide* S. Hammer [personal communication])

**Synonyms:** [C. capitata](#)

**Cladonia pleurota** (Flörke) Schaer.  

(TJ; Thomson 1984, 2003, although S. Hammer [personal communication] doubted that it is in CA; color photograph but no CA report in Brodo et al. [2001, p. 265])

**Cladonia pocillum** (Ach.) Grognot  

(TJ; Bratt 1997; Goward 1999; Ahti & Hammer 2002; color photograph but no CA report in Brodo et al. [2001, p. 266]; *J. R. Shevock* 12890, Table Mtn Fish & Game Preserve, Millerton Lake, Fresno Co., CAS)

**Synonyms:** [C. pyxidata](#) var. [pocillum](#) (McClatchie 1897; Hasse 1898a; Herre 1910; Hasse 1913b; Moxley 1921; TJ)

**Note:** the specific status of *C. pocillum* is in doubt; it may be an ecotype of the *C. pyxidata* complex *fide* Ahti & Hammer (2002, p. 151).

**Cladonia poroscypha** S. Hammer  

(Hammer 1993, 1995; Brodo & Ahti 1996; *R. Y. Wing* 5109, Inverness, Marin Co., ASU; CA endemic)

**Misapplied names:** [\*C. carassensis\*](#), for CA records, in part

**Cladonia prolifica** Ahti & S. Hammer 

(Hammer & Ahti 1990; Hammer 1995; Brodo & Ahti 1996; Goward 1999)

**Cladonia pulvinella** S. Hammer 

(Hammer 1995; Ahti [2000, p. 147]; Ahti & Hammer 2002; Knudsen 2005c)

**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; Sigal 1989; Hammer 1989c; 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 2004)

**Synonyms:** [\*C. floccida\*](#)?

**Cladonia rei** Schaer. 

(Malachowski 1975; Pinelli & Jordan 1978; TJ; Weber et al. 1987; Robertson 2002a; Blauman 2004; color photograph but no CA report in Brodo et al. [2001, p. 269]; *D. Wright*, shore of Arcata Bay, Humboldt Co.)

**Synonyms:** [\*C. nemoxyina\*](#), [\*C. fimbriata\* var. \*nemoxyina\*](#)

**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)

**Cladonia squamosa** (Scop.) 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 2004)

**Synonyms:** [\*C. squamosa\* var. \*subsquamosa\*](#) (Nyl. ex Leight.) Vain. (Hammer 1989c, 1995; Robertson 2002a; Jovan & McCune 2004), [\*C. subsquamosa\*](#) (Nyl. ex Leight.) Cromb. (Herre 1910; Fink 1935; Thomson & Ketchledge 1958; Lindsay 1973; Malachowski 1975; TJ; Hale & Cole 1988; for synonymy, see Ahti & Hammer [2002, p. 153])

**Cladonia subfimbriata** Ahti 

(Ahti & Hammer 2002; *B. Ryan* 11272, Esperanza Cyn, Santa Monica Mts, Los Angeles Co., ASU)

**Cladonia subradiata** (Vain.) Sandst. 

(Tucker & Bratt 1996; Ahti & Hammer 2002; color photograph but out of range in Brodo et al. [2001, pp. 272–273]; *B. Ryan* 26365, 26382, San Gabriel Wilderness, Los Angeles Co., ASU; *B. Ryan* 32160, 32177, Sierra Nat. Forest, Madera Co., ASU; *B. Ryan* collections, Marble Mountain Wilderness, Siskiyou Co., ASU)

**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; *J. Linsdale* 447 as *C. fimbriata*, Hastings Natural History Reserve, Monterey Co., 1944, UC, determination by S. Tucker)

**Cladonia symphyarpia** (Flörke) Fr. 

(Brodo et al. [2001, pp. 274–275, with color photograph]; Tucker 2002; may be misidentifications of [\*C. peziziformis\*](#) fide S. Hammer [personal communication])

**Cladonia thiersii** S. Hammer  

(Hammer 1989a; Riefner, Bowler, & Ryan 1995; Magney 1999 [repeated earlier reports]; *S. Hammer* 3231, Kehoe Beach, Point Reyes, Marin Co., ASU; 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; Blauman 2004; Jovan & McCune 2004)

**Cladonia umbricola** Tønsberg & Ahti  

(Brodo & Ahti 1996; Goward 1999; Brodo et al. [2001, pp. 276–277, with color photograph]; *C. Bratt* 3766, Point Lobos State Reserve, Monterey Co., SBBG)

**Misapplied names** (*fide* T. Ahti): [\*C. polydactyla\*](#) (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; *B. Ryan* 26355, San Gabriel Wilderness, Los Angeles Co., determination by S. Hammer)

**Cladonia alpestris** (L.) Rabenh.  

(Thomson 1968a)

=[\*Cladina 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 distributed only in eastern U. S. *fide* Brodo et al. [2001, p. 242])

**Cladonia capitata** (Michx.) Spreng.  

(TJ)

=[\*C. peziziformis\*](#)

**Cladonia carassensis** Vain.  

(Herré 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), North American 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 interior North America *fide* Brodo et al. [2001, p. 245, with color photograph])

**Cladonia coccifera** (L.) Willd.  

(Ryan & Nash 1991; S. Hammer [personal communication] doubted presence in CA strongly; report needs to be verified)

**Cladonia conistea** (Delise) Asahina  

(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. 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; CA reports questionable *fide* S. Hammer [personal communication])

=*C. gracilis* var. *elongata*

*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. *tubaeformis* (Mudd) Vain.  

(Hasse 1903a; Orcutt 1903; Herre 1910)

=*C. coniocraea*

*Cladonia flabelliformis* (Flörke) Vain.  

(Herre 1910; Fink 1935; TJ)

=*C. polydactyla*, but misidentifications for CA

*Cladonia floccida* Nyl.  

(Hasse 1898a; TJ)

=*C. pyxidata*?

*Cladonia foliacea* (Huds.) Willd.  

(Fink 1935; TJ)

=*C. robbinsii*?, but misidentifications for CA

*Cladonia furcata* var. *corymbosa* (Ach.) Nyl. 

(Hasse 1903a)

=*C. furcata*

*Cladonia furcata* var. *racemosa* Flörke  

(Fink 1935; Herre 1942a)

=*C. multiformis*, but possibly 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* *fide* I. Brodo and S. Hammer

*Cladonia impexa* Harm.  

(Thomson 1968a; Tucker 1973; Malachowski 1975; misidentifications of [\*Cladina portentosa f. pacifica\*](#))

*Cladonia japonica* Vain.  

(McCune & Geiser 1997)

=*C. crispata* var. *crispata* (synonymy in Brodo & Ahti 1996)

*Cladonia krempelhuberi* Vain.  

(Robbins 1931; a misidentification, since this is an Asian species, and not known from North America)

*Cladonia macilenta* Hoffm. var. *bacillaris* (Genth.) Schaer.  

(Ahti & Hammer 2002 [for synonymy; CA is not specified]; Baltzo 2002)

=[\*C. macilenta\*](#)

*Cladonia major* (K. G. Hagen) Sandst.  

(Robbins 1931; Thomson 1968a; TJ; Thomson 1984; Hale & Cole 1988)

=[\*C. fimbriata\*](#) (synonymy *fide* Ahti [personal communication])

*Cladonia mitis* Sandst.  

(Herré 1945; misidentification of [\*Cladina portentosa f. pacifica\*](#))

*Cladonia nemoxyna* Ach.  

(Robbins 1931; Thomson 1968a; Malachowski 1975)

=[\*C. rei\*](#), but misidentifications for CA

*Cladonia phyllophora* Hoffm.  

(TJ; Hammer 1989c [Hammer later, personal communication, called it a misidentification, cited in Tucker 2002]; Goward 1999)

**Synonyms:** [\*C. degenerans\*](#)

*Cladonia pityrea* (Flörke) Fr.  

(Hasse 1913b; Herré 1942c; Baltzo 1970; Lindsay 1973; TJ)

=[\*C. ramulosa\*](#)

*Cladonia polydactyla* (Flörke) Spreng.  

(TJ; Hammer [1989c, as s. l.])

= misidentifications for North America. Most CA collections under this name are referable to [\*C. umbricola\*](#) *fide* T. Ahti.

*Cladonia pyxidata* var. *chlorophaea* (Flörke ex Sommerf.) 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; Herré 1910; Hasse 1913b; Moxley 1921)

=[\*C. pocillum\*](#)

*Cladonia ramulosa* (With.) J. R. Laundon  

(Baltzo 1989)

**Synonyms:** [\*C. anomaea\*](#), [\*C. pityrea\*](#) (Hasse 1913b; Herré 1942c; Baltzo 1970; Lindsay 1973; TJ; 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 only *fide* Brodo et al. [2001, pp. 269–270, with color photograph])

*Cladonia santensis* Tuck.  

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

*Cladonia sobolifera* (Harm.) Nyl.  

(Hasse 1906; Fink 1935)

=*C. strepsilis* (Ach.) Vain. but misidentifications

*Cladonia squamosa* var. *subsquamosa* (Nyl. ex Leight.) Vain.  

(Hammer 1989c, 1995; Robertson 2002a; Jovan & McCune 2004)

=[C. squamosa](#)

*Cladonia stellaris* (Opiz) Pouzar & Vězda  

(Thomson 1984)

=[Cladina stellaris](#), but not in CA

*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 North America *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](#) (for distinctions between this species and *C. subsquamosa* Kremp see Ahti & Hammer 2002, p. 153, 156)

*Cladonia tubaeformis* Hoffm. 

(Hasse 1913b; misidentifications)

*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)

=[C. cervicornis subsp. verticillata](#)

*Cladonia verticillata* f. *phyllophora* Sandst. 

(Thomson & Ketchledge 1958)

=[C. cervicornis subsp. verticillata](#)

## CLAUZADEA Hafellner & Bellemere

*Clauzadea monticola* (Ach. ex Schaer.) Hafellner & Bellemere  

**Synonyms:** [Lecidea fuscorubens](#) (Herre 1944b, but Herre misapplied this name to a collection [*C. L. Brown* 153, 4 mi. NW of Valley, Marin Co., F] [Porpidia thomsonii](#)), *Lecidea monticola*, *Protoblastenia monticola*

## CLAVASCIDIUM Breuss

*Clavascidium umbrinum* (Breuss) Breuss  

(Breuss & Bratt 2001; Breuss 2002)

**Synonyms:** [Catapyrenium umbrinum](#)

**CLIOSTOMUM** Fr.**Cliostomum flavidulum** Hafellner & Kalb  

(Tønsberg 1998)

**Cliostomum griffithii** (Sm.) Coppins  

(Gowan 1990; Bourell 2000; Brodo et al. [2001, p. 279, with color photograph]; Baltzo 2002; Tucker 2002; Ekman 2004)

**Synonyms:** [\*Biatora mixta\*](#) (Hasse 1896, 1903b; Orcutt 1903, 1907), [\*B. mixta\* var. \*pacifica\*](#), [\*Catillaria griffithii\*](#) (Merrill 1923; Volk 1963; Jordan 1968; TJ)**Misapplied names:** [\*C. tricolor\*](#) (Herre 1910; Hasse 1913b), [\*Lecidea tricolor\*](#) (Hasse 1898a)**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; dubious report, because range is coastal Pacific northwest *fide* Brodo et al. [2001, p. 281, and it is reported on bark rather than on rock]; discussed in Tucker 2002)**COELOCAULON** Link**Coelocaulon aculeatum** (Schreb.) Link  

(Goward 1999)

= [\*Cetraria aculeata\*](#)**Coelocaulon muricatum** (Ach.) J. R. Laundon  

(McCune &amp; Geiser 1997)

= [\*Cetraria muricata\*](#)**COENOGONIUM** Ehrenb.**Coenogonium luteum** (Dicks.) Kalb & Lücking  **Synonyms:** [\*Dimerella lutea\*](#) (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)[\*Microphiale lutea\*](#)**Coenogonium pineti** (Ach.) Lücking & Lumbsch  **Synonyms:** [\*Microphiale diluta\*](#) (Herre 1944b [*C. L. Brown*, Larkspur, Marin Co., 21 Mar 1943, F; !S. Tucker])**Coenogonium interpositum** Nyl.  

(Stizenberger 1895; TJ; dubious report for this species otherwise known from SE U. S.)

**COLLEMA** F. H. Wigg.**Collema bachmanianum** (Fink) Degel.  

(Schultz et al. 2004)

**Misapplied names** (*fide* Schultz et al. 2004): [\*C. pulposum\*](#) (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]; Schultz et al. 2004; *T. Nash* 8443, 3 km SW of Parker Dam on Colorado River, San Bernardino Co., MIN, ASU)**Synonyms:** [\*Synechoblastus coccophorus\*](#)**Collema conglomeratum** Hoffm.  (Nylander 1900; Wetmore 1985, based on *C. Wetmore* 50485, Sequoia N. P., Tulare Co., MIN;

“widely distributed” *fide* Brodo et al. 2001)

**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; Schultz et al. 2004)

**Synonyms:** [\*C. cheileum\*](#)

**Collema crispum** var. **metzleri** (Arnold) Degel.  

(Degelius 1974; TJ)

**Collema cristatum** (L.) F. H. Wigg.  

(Schultz et al. 2004; color photograph but no CA record in Brodo et al. [2001, pp. 284–285])

**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)

**Collema furfuraceum** var. **luzonense** (Räsänen) Degel.  

(Degelius 1974, p. 181; TJ)

**Collema fuscovirens** (With.) J. R. Laundon  

(Schultz et al. 2004; *C. Wetmore 16790*, 2 mi N of Coldbrook Station, Angeles Nat. Forest, Tulare Co., 18 June 1967, MIN; *B. Ryan 26378*, San Gabriel Wilderness, Los Angeles Co., ASU)

**Synonyms:** [\*C. tuniforme\*](#) (Tucker & Kowalski 1975; TJ)

**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)

**Synonyms:** [\*C. glaucescens\*](#)

**Collema nigrescens** (Huds.) DC.  

(Tuckerman 1866; Bolander 1870; Tuckerman 1872, 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; Weber et al. 1987; TJ; 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)

**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; in Arizona and Baja California but 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; *J. R. 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 subflaccidum** Degel.  

(TJ; Tucker 2002; Jovan & McCune 2004; Schultz et al. 2004; *B. Ryan 21930b*, N of Baywood Park, N side of Los Osos, San Luis Obispo Co., ASU)

**Synonyms:** *C. subfurvum* (Degelius [1954] was cited in TJ, but included no CA reference)

**Collema subnigrescens** Degel.  

(Degelius 1974; TJ)

**Collema subnigrescens** Degel. f. **caesium** (Clemente) Degel.  

(Schultz et al. 2004; *B. Ryan* 21930a, N of Baywood Park, San Luis Obispo Co., ASU, determination by 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]; Riefner et al. 2003; Robertson 2003b, 2004; Schultz et al. 2004)

**Synonyms:** [C. pulposum](#)

**Collema tenax** var. **corallinum** (A. Massal.) Degel.  

(TJ)

**Synonyms:** [C. cristatellum](#), [Leptogium cristatellum](#)

**Collema texanum** Tuck.  

(TJ; Weber et al. 1987)

**Synonyms:** [Synechoblastus laciniatus](#) (Fink 1935)

**Note:** California 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.

**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; on west Coast from British Columbia north *fide* Brodo et al. [2001, pp. 287–288, with color photograph])

**Collema aggregatum** (Ach.) Nyl.  

(McClatchie 1897; Hasse 1898a; Herre 1906; Orcutt 1909; Herre 1910; Hasse 1913b; 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** Ach. 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)

**Collema flaccidum** (Ach.) Ach.  

(Hasse 1895, 1898a; Orcutt 1903, 1907; TJ; Goward et al. 1994; probably misidentifications, as *C. flaccidum* is mostly from the eastern U. S.)

**Collema glaucescens** Hoffm.  

(Herre 1910)

=[C. limosum](#)

*Collema glaucophthalmum* Nyl.  

(Hasse 1913b)

=*C. leucocarpum* Hook. f. & Taylor, but misidentifications for North America

*Collema myriococcum* Ach.  

(Hasse 1898a; Orcutt 1909)

=*Lempholemma polyanthes*

*Collema nigrescens* var. *leucopeplum* Tuck.  

(Hasse 1903c, as "leucopipta")

=*C. pulchellum* var. *leucopeplum*

*Collema pulchellum* Ach. var. *leucopeplum* (Tuck.) Degel.  

(Degelia 1974; TJ; an accepted name but not reported in CA *fide* Brodo et al. [2001, p. 286]; discussed in Tucker 2002)

**Synonyms:** *C. nigrescens* var. *leucopeplum*

*Collema pulchellum* Ach. var. *subnigrescens* (Müll. Arg.) Degel.  

(Degelia 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 North America according to Degelia [1954])

*Collema vespertilio* (Lightf.) Vain.  

(Herre 1906, 1907, 1910)

=*C. nigrescens*

## COLLEMODIUM Nyl.

*Collemodium fragile* (Taylor) Nyl. ex Cromb.  

(Hasse 1906)

=*Leptogium fragile* Nyl., but misidentifications for CA

*Collemodium plicatile* (Ach.) Nyl.  

(Hasse 1898a; Orcutt 1909)

=*Leptogium plicatile*

*Collemodium schraderi* (Bernh.) Nyl.  

(Hasse 1903c)

=*Leptogium schraderi* (Bernh.) Nyl., but misidentification for CA

*Collemodium turgidum* Nyl.  

(Hasse 1898a; Orcutt 1909)

=*Leptogium plicatile*

## COLLEMOPSISIDIUM Nyl.

*Collemopsisidium elegans* (R. Sant.) Grube & B. D. Ryan  

(Grube & Ryan 2002)

**Synonyms:** [Pyrenocollema elegans](#)**Collemopsidium halodytes** (Nyl.) Grube & B. D. Ryan  

(Grube &amp; Ryan 2002)

**Synonyms:** [Arthopyrenia halodytes](#) (Herre 1907; Fink 1935; TJ), [Collemopsidium halodytes](#), [Pyrenocollema halodytes](#) (R. Harris 1975)**Collemopsidium sublitorale** (Leight.) Grube & B. D. Ryan  

(Grube &amp; Ryan 2002)

**Synonyms:** [Arthopyrenia sublitoralis](#) (Thomson 1997), [Pyrenocollema sublitorale](#)**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](#)**Collemopsis segregata** Nyl.  

(Hasse 1898a; Orcutt 1909)

= [Psorotichia segregata](#) but misidentifications for CA**Note:** According to Schultz (2004, p. 321), the name *Collemopsis segregata* Nyl. was misapplied by Hasse to specimens of [Lempholemma chalazanum](#) (Hasse Exs. No. 892).**COMBEA** De Not.**Combea californica** (Th. Fr.) Follmann & M. Geyer  

(von Reis 1991)

= [Schizophelte californica](#)**CONIOCYBE** Ach.**Coniocybe furfuracea** (L.) Ach.  

(Herre 1910; Fink 1935; Jordan 1968; Pinelli &amp; Jordan 1978; TJ)

= [Chaenotheca furfuracea](#)**CORNICULARIA** (Schreb.) Hoffm.**Cornicularia normoerica** (Gunnerus) 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 Nat. Forest, Del Norte Co.)**Cornicularia aculeata** (Schreb.) Ach.  

(Tucker &amp; Kowalski 1975; Thomson 1984)

= [Cetraria aculeata](#)**Cornicularia californica** (Tuck.) Du Rietz  

(Du Rietz 1926; Thomson &amp; Ketchledge 1958; Jordan 1968; Lindsay 1973; Malachowski 1975)

= [Kaernefeltia californica](#)**CRESPONEA** Egea & Torrente**Cresponea chloroconia** (Tuck.) Egea & Torrente  

(Egea &amp; Torrente 1993b; Baltzo 2002; Thomson 2003; Egea et al. 2004)

**Synonyms:** [Lecanactis chloroconia](#), [L. premnea var. chloroconia](#)

**Misapplied names:** [Bacidia acclinis](#) (Herre 1944b [*C. L. Brown* 2951, W of Larkspur, Marin Co.]),  
[Lecanactis premnea](#) (TJ for CA records)

*Cresponea premnea* (Ach.) Egea & Torrente   
(probably = [C. chloroconia](#) for CA)

**CROCYNIA** (Ach.) A. Massal.

#*Crocynia moxleyi* Plitt   
(Plitt 1923; TJ)  
= *Septobasidium* sp., a non-lichenized fungus

**CYPHELIOPSIS** Vain. = [THELOMMA](#)

*Cypheliopsis bolanderi* (Tuck.) Vain.   
(Zahlbruckner 1903–1907; Fink 1935; Herre 1957; Volk 1963; TJ)  
= [Thelomma mammosum](#)

**CYPHELIUM** Ach.

**Cyphelium brunneum** W. A. Weber   
(Weber 1967b; TJ; Riefner, Bowler, & Ryan 1995; Magney [1999] repeated earlier report; Tibell & Ryan 2004; *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; CA endemic)  
**Synonyms:** [Acolium chloroconium](#) (Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1888; TJ), [Trachylia chloroconium](#) (Hasse 1903c)

**Cyphelium inquinans** (Sm.) Trevis.   
(Herre 1910; Hasse 1913b; Fink 1935; Thomson & Ketchledge 1958; TJ; Brodo et al. [2001, p. 292, with color photograph]; Tibell & Ryan 2004)

**Synonyms:** [Acolium tympanellum](#), [Trachylia tympanella](#)

**Cyphelium karelicum** (Vain.) Räsänen   
(*B. Ryan* 25192, Marble Mountain 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; color photograph but no CA report in Brodo et al. [2001, pp. 292–293])

**Cyphelium notarisii** (Tul.) Blomb. & Forss.   
(Tibell & Ryan 2004)

**Synonyms:** [C. brachysporum](#) (synonymy *fide* Tibell & Ryan 2004)

**Cyphelium pinicola** Tibell   
(Tibell & Ryan 2004; *C. Bratt* 4911, Pine Mtn Ridge, Ventura Co., determined by L. Tibell; *B. Ryan* 26189, Mt. Mooney Rd, San Gabriel Mts, Los Angeles Co., ASU, determined by L. Tibell)

**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)

**Synonyms:** [Acolium tigillare](#)

**Cyphelium trachylloides** (Nyl. ex Branth. & Rostr.) Erichsen   
(Tibell 1978a; Brodo et al. [2001, p. 292]; Tibell & Ryan 2004)

*Cyphelium andersonii* Herre  

(Herre 1910; Fink 1935)

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

*Cyphelium bolanderi* (Tuck.) Vain.  

(Herre 1910; Hasse 1913b; Merrill 1923; Thomson & Ketchledge 1958)

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

*Cyphelium brachysporum* Nádv.  

(Nádvorník 1942; Weber 1967b; TJ; *B. Ryan 31340*, Santa Rosa Isl., Santa Barbara Co., ASU)

=[\*C. notarisii\*](#) (synonymy *fide* Tibell & Ryan 2004)

*Cyphelium caliciforme* (Flot.) Zahlbr.  

(Weber 1967b; TJ)

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

*Cyphelium californicum* (Tuck.) Zahlbr.  

(Zahlbrückner 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* (Turner ex Ach.) Chev.  

(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; Thomson & Ketchledge 1958; Volk 1963; Weber 1967b; TJ)

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

*Cyphelium sancti-jacobi* (Tuck.) Zahlbr.  

(Fink 1935; Weber 1967b)

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

## CYSTOBASIDIUM (Lagerh.) Neuhoff

\**Cystobasidium hypogymniicola* Diederich & Ahti  

(Diederich 2003, 2004; *S. Tucker 35479*, Soda Springs Ranger Station, near Lake Pillsbury, Lake Co., on *Hypogymnia imshaugii*; *S. Tucker 31841*, Indian Valley Cpgd 10.7 mi. W of Downieville, Tahoe Nat. Forest, Sierra Co. on *Hypogymnia imshaugii*, both SBBG, determinations by P. Diederich)

\**Cystobasidium usneicola* Diederich & Alstrup  

(Diederich 2003, 2004 [Mendocino Co. collection on *Usnea*]; *E. Palmer*, 1888, San Diego Co., on *Usnea*, SBBG, determination by P. Diederich)

[\*\*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\*\*](#)

## DACTYLINA Nyl.

*Dactylina madreporiformis* (Ach.) Tuck.  

(Tuckerman [1866, Rocky Mts]; erroneously reported for CA by Fink [1935])

**DACTYLOSPORA** Körb.

\***Dactylospora inquilina** (Tuck.) Hafellner  

Synonyms: [Buellia inquilina](#) (Willey 1873a; Hasse 1912, 1915b)

\***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 cf. parasitica*, see Egan 1989 for comment]; Baltzo [2002, listing *D. parasitica* as a synonym of [Opegrapha rupestris](#)])

Synonyms: [Buellia parasitica](#)

Misapplied names: [Leciographa parasitica](#) (records from bark)

Note: Hafellner (2004) called for a reinvestigation of the collections by Bolander and by Weber to verify that *D. parasitica* occurs in the Sonoran region. The expected hosts are *Pertusaria* and *Ochrolechia*.

\***Dactylospora pleiosperma** Triebel  

(Hafellner et al. 2002; Hafellner 2004; on [Lecanora caesiorubella](#); CA endemic)

**“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 amplissima](#). Therefore, *D. umhausense* is a taxonomic synonym of *Lobaria amplissima*. The disposition of other species assigned to *Dendriscocaulon* is uncertain.

*Dendriscocaulon* sp. 

(Tønsberg & Goward 2001; Jovan & McCune 2004)

*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])

**Note:** According to Tønsberg & Goward (2001) this name is misapplied to an undescribed western American species.

**DENDROGRAPHA** Darb.

**Dendrographa alectoroides** Sundin & Tehler  

(Brodo et al. [2001, p. 297]; Tehler 2002)

**Dendrographa alectoroides** Sundin & Tehler f. **alectoroides**  

(Sundin & Tehler 1996; Wright 1996; Lohtander et al. 1998; Tehler 2002; CA endemic)

**Dendrographa alectoroides** f. **parva** Sundin & Tehler  

(Bowler et al. 1996; Sundin & Tehler 1996; Wright 1996; Lohtander et al. 1998; Tehler 2002; CA endemic)

Misapplied names: [D. minor](#) (in some reports)

**Dendrographa leucophaea** (Tuck.) Darb.  

(Darbishire 1895, 1898; Hasse 1898a, 1903a, 1903d; Zahlbrückner 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)

Synonyms: [Roccella leucophaea](#)

**Dendrographa leucophaea** f. **leucophaea**  

(Sundin & Tehler 1996; 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)

**Synonyms:** [D. minor](#) Darb.

*Dendrographa minor* Darb.  

(TJ; West & Doell 1995; Wright 1996; Robertson & Robertson 2001)

=[D. leucophaea f. minor](#); many reports are based on [D. alectoroides f. parva](#); Herre's reports of fertile material are based on [D. leucophaea 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."]; Heiðmarsson 2000; Heiðmarsson & Breuss 2004; C. Wetmore 73929 [determination by S. Heiðmarsson 1998] Santa Rosa Isl.: Old Ranch Cyn, 5 Jan 1994; MIN; B. Ryan 21919, Muir Beach, Marin Co., ASU; B. Ryan 25497, trail through Big Meadows, edge of Marble Mountain Wilderness, Siskiyou Co., ASU; see also [D. miniatum](#))

**Synonyms:** [D. intestiniforme](#), [D. leptophyllum](#), [D. miniatum var. \*complicatum\*](#), [D. polyphyllum](#)

*Dermatocarpon leptophyllodes* (Nyl.) Zahlbr.  

(Heiðmarsson & Breuss 2004)

**Synonyms:** [D. lorenzianum](#) (Breuss & McCune 1994; synonymy in Heiðmarsson 2000)

*Dermatocarpon luridum* (With.) J. R. Laundon  

(Brodo et al. [2001, pp. 297–298, with color photograph]; Tucker 2002; Robertson 2004; B. Ryan 24666, end of Clark Fork Rd, edge of Carson-Iceberg Wilderness, Alpine Co., ASU)

**Synonyms:** [D. aquaticum](#) (Herre 1906; Fink 1935; Herre 1950a), [D. fluviatile](#) (Herre 1910; TJ), [D. weberi](#) (Hale & Cole 1988)

*Dermatocarpon meiophyllizum* Vain.  

(Glavich & Geiser 2004)

*Dermatocarpon moulinsii* (Mont.) Zahlbr.  

(B. Ryan 24141, Emigrant Wilderness, Tuolumne Co., ASU; T. Carlberg collection, Six Rivers Nat. Forest, Del Norte Co.; K. Knudsen 489, San Jacinto Mts, Riverside Co., UCR; not mentioned for S CA by Heiðmarsson & Breuss [2004])

*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]; Heiðmarsson & Breuss 2004)

*Dermatocarpon rivulorum* (Arnold) Dalla Torre & Sarnth.  

(Ryan & Nash 1991; B. Ryan 12611a, 12617a, Eastern Brook Lakes Watershed, Inyo Co., ASU; B. Ryan 32113, Brown's Creek, Sierra Nat. Forest, Madera Co., ASU; J. R. Shevock 17571, Kern Plateau, Tulare Co., ASU)

*Dermatocarpon taminium* Heiðmarsson  

(Heiðmarsson & Breuss 2004)

*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 quepinii* (Delise) Tuck.  

(Tuckerman 1866; Bolander 1870)

=[Peltula euploca](#)

*Dermatocarpon hepaticum* (Ach.) Th. Fr. 

(Herre 1910; Hasse 1913b; Thomson & Ketchledge 1958; Sigal 1975; TJ; Breuss 1990 for synonymy)

=[Catapyrenium cinereum](#)

*Dermatocarpon hepaticum* auct. non (Ach.) Th. Fr. 

(Breuss [1990] for synonymy)

=[Placidium squamulosum](#)

*Dermatocarpon heppioides* Zahlbr.  

(Zahlbrückner 1912b; Hasse 1915a; Fink 1935; Herre 1944b; TJ)

=[Placopyrenium heppioides](#)

*Dermatocarpon intestiniforme* (Körb.) Hasse  

(Hasse 1912, 1913b; TJ; Ryan & Nash 1991; Wright 1997; Robertson 2004; Blauman 2004)

=[D. americanum](#) (synonymy in Heiðmarsson 2000)

*Dermatocarpon lachneum* (Ach.) A. L. Sm.  

(Thomson 1984; Weber et al. 1987; Sigal 1989; misidentifications of *Placidium* spp., especially [Placidium lacinulatum](#))

*Dermatocarpon lecideoides* (A. Massal.) Hasse  

(Hasse 1915b; TJ)

=[Verrucaria lecideoides](#)

*Dermatocarpon leptophyllum* (Ach.) K. G. W. Lång  

(T. Nash 8099, along Hwy 108, 1.6 km W of Sonora Pass, Tuolumne Co., ASU)

=[D. americanum](#) (synonymy in Heiðmarsson 2000)

*Dermatocarpon lorenzianum* Anders  

(Breuss & McCune 1994)

=[D. leptophyllodes](#)

*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; Robertson 2003a, 2003b; Blauman 2004; most collections labeled *D. miniatum* from North America are [D. americanum](#) fide Heiðmarsson 2000, Heiðmarsson & Breuss 2004)

**Synonyms:** [Endocarpon miniatum](#)

*Dermatocarpon miniatum* var. *complicatum* (Sw.) Th. Fr.  

(Herre 1906, 1910; Hasse 1913b; Sigal 1975; TJ; Sigal 1989)

=[D. americanum](#) (fide Heiðmarsson [2000, fourth paper in thesis]; Heiðmarsson & Breuss 2004)

*Dermatocarpon polyphyllum* (Wulfen) Dalla Torre & Sarnth.  

(Fink 1935)

=[D. americanum](#)

*Dermatocarpon rufescens* (Ach.) Th. Fr. 

(Hasse 1908b, 1913b; Parish 1914; Fink 1935; TJ)

=[Placidium rufescens](#)

*Dermatocarpon squamellum* (Nyl.) 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 zahlbruckneri](#)

## 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; *B. Shervanick* 38, near Alpine Lake, Marin Co., CAS)

Synonyms: [Baeomyces roseus](#)

*DIEVERNIA* Bowler & Riefner = [RAMALINA](#)

*Dievernia 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)

Synonyms: [Rinodina californica](#)

*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)

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; color photograph on front cover of CALS Bulletin 6[1], 1999)

Synonyms: [Rinodina radiata](#) (TJ for references)

**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)

**Synonyms:** [Lecanora thysanota](#), [Rinodina thysanota](#)

**Dimelaena weberi** Sheard  

(Sheard & Mayrhofer 1984; Mayrhofer & Sheard 2004; *T. Nash* 32580, Santa Cruz Isl., Santa Barbara Co., ASU)

**DIMERELLA** Trevis. = **COENOGONIUM****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)

=[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; Univ. Colo. Lich. Exs. 184, Irvine Ranch, Morro Cyn, Orange Co.; also old collections labeled *Pyxine sorediata* from CA [Hasse 1903c, 1913b] may belong here; see Bratt 1984)

**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 from eastern U. S. only]; Lumbsch 2002; Tucker 2002; Blauman 2004)

**Synonyms:** [Urceolaria actinostoma](#) (Hasse 1898a)

**Diploschistes aeneus** (Müll. Arg.) Lumbsch  

(Lumbsch [1989, Marin Co. collection]; Brodo et al. 2001; Lumbsch 2002; *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; *T. Nash* 37108, West Anacapa Isl., Ventura Co.; this species grows on soil)

**Synonyms:** [Urceolaria albissima](#) (Fink 1935)

**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)

**Synonyms:** [D. bryophilus](#), *D. scruposus* subsp. *bryophilus*, [D. scruposus var. bryophilus](#), [D. scruposus var. parasiticus](#)

**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; Tucker & Bratt 1995; McGee 1995; Bowler et al. 1996; Tucker 1999; Doell et al. 1999; Bourell 2000; Brodo et al. [2001, pp. 304–305, with color photograph]; Robertson 2001; Lumbsch 2002; Riefner et al. 2003; Robertson 2003a;

Blauman 2004; this species grows on rock)

**Synonyms:** [Urceolaria scruposa](#) (TJ for references)

*Diploschistes bisporus* (Bagl.) J. Steiner 

(C. Bratt 7177, Anita Cyn, Hollister Ranch, Santa Barbara Co., SBBG)

=[Ingvariella bispora](#)

*Diploschistes bryophilus* (Ehrh. ex Ach.) Zahlbr.  

(TJ)

=[D. muscorum subsp. muscorum](#)

*Diploschistes gypsaceus* (Ach.) Zahlbr.  

(Hasse 1913b; Merrill 1923; TJ; Robertson 2001; the specimens reported by Hasse and Robertson were collected on soil, whereas *D. gypsaceus* is on rock *fide* Lumbsch 1988; 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)

**Synonyms:** [Urceolaria gypsacea](#) (Hasse 1895, 1896, 1898a, 1903b; Orcutt 1903, 1907), [U. scruposa var. gypsacea](#)

*Diploschistes scruposus* var. *bryophilus* (Ehrh. ex Ach.) Oksner  

(Hasse 1913b)

=[D. muscorum subsp. muscorum](#)

*Diploschistes scruposus* var. *parasiticus* (Sommerf.) Zahlbr.  

(Hasse 1913b)

=[D. muscorum subsp. muscorum](#)

## DIPLOTOMMA Flot. = [BUELLIA](#)

*Diplotomma alboatrum* (Hoffm.) Flot.  

(Sigal 1989; Bourell 2000; Baltzo 2002; Thomson 2003)

=[Buellia alboatra](#) (Nordin 1996)

*Diplotomma ambiguum* (Ach.) Flagey  

=[Buellia alboatra](#) (Nordin 1996)

*Diplotomma penichrum* (Tuck.) Szatala  

(Wright 1997)

=[Buellia penichra](#)

*Diplotomma venustum* (Körb.) Körb.  

=[Buellia venusta](#) (Nordin 1996)

## DIRINA Fr.

*Dirina catalinariae* Hasse  

(TJ; Brodo et al. [2001, p. 305, with color photograph]; Tehler 2002)

*Dirina catalinariae* f. *catalinariae* Hasse  

(Tehler 1983; Bowler et al. 1996)

*Dirina catalinariae* f. *sorediata* Tehler  

(Tehler 1983; Bratt 1993; Bowler et al. 1996; Bratt 1997; Sanders [1999b, photographs on back cover of CALS Bulletin 6(1)]; Brodo et al. [2001, p. 305])

*Dirina paradoxa* (Fée) Tehler 

(C. Bratt 11791, between Emerald Bay and Parsons Landing, N shore, W end of Santa Catalina Isl., Los Angeles Co., SBBG)

*Dirina californica* Tuck.  

(Tuckerman 1866 [p. 17, in Oakland, Alameda Co.]; Bolander 1870; Fink 1935; TJ)

=*Sigridia californica*

*Dirina franciscana* Zahlbr. ex Herre   
 (Herre 1907, 1910; Fink 1935; TJ)  
=*Roccellina franciscana*

*Dirina hassei* Zahlbr.   
 (Zahlbruckner 1900, 1901; Hasse 1902, 1903b, 1903e; Merrill 1923; Fink 1935; TJ)  
=*Sigridia 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., ASU, on rock)

*Dirinaria aegialita* (Afzel. ex Ach.) B. J. Moore   
 (C. Bratt 9151, West Anacapa Isl., W end of island, between Rat Rock and campground, Ventura Co., SBBG) = possible misdetermination

*Dirinaria picta* (Sw.) Schaer. ex Clem.   
 (Riefner, Bowler, & Ryan 1995; *R. Riefner* collections from Sonoma, Ventura, and San Luis Obispo Co.; these collections have been re-identified by S. Tucker as *Physcia poncinsii* [*R. Riefner* 88-7] and *Trapeliopsis steppica* [*R. Riefner* 92-190, 92-408])

**DISTOPYRENIS** Aptroot

**Distopyrenis americana** Aptroot

(Aptroot 2002; *S. Tucker* 33682B, San Nicolas Isl., Ventura Co., SBBG, determination by A. Aptroot)

**DUFOUREA** Ach.

**Dufourea madreporeiformis** Ach.

(Fink 1935)  
=*Dactylina madreporeiformis* (but Fink report for CA was in error, being based on a Tuckerman [1866] report of *Dactylina madreporeiformis* from the Rocky Mts; 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](#)

**ECHINOTHECIUM** Zopf

\***Echinothecium reticulatum** Zopf

(*S. Tucker* 35088 pr. p., Los Osos, San Luis Obispo Co., SBBG, on *Hypogymnia*, determined by P. Diederich)

**EDRUDIA** W. P. Jord.

**Edrudia constipans** (Nyl.) W. P. Jord.

(Jordan 1980; Hale & Cole 1988; Wright 2000; CA endemic)

**Synonyms:** *Caloplaca constipans*, *Lecanora constipans* (Hue 1891; Hulting 1896; Fink 1935), *Placodium constipans*, *Polycauliona constipans* (Hue 1909a, 1909b)

**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; S. Tucker 37910 [as "cf."], on *Quercus agrifolia* [unusual substrate], Jasper Ridge, W of Palo Alto, San Mateo Co., SBBG, determined by O. Breuss)

***Endocarpon pallidulum*** (Nyl.) Nyl.  

(Breuss 2002)

***Endocarpon pallidum*** Ach.  

(Hasse 1898a, 1906; Herre 1910; Hasse 1915b; Fink 1935; Breuss 2002)

**Note:** This name was considered synonymous with [\*E. adscendens\*](#) in TJ, but Breuss (personal communication) and Esslinger (2004b) consider the two species distinct.

***Endocarpon petrolepideum*** (Nyl.) Hasse  

(Hasse 1915b; Fink 1935; TJ; Breuss 2002)

***Endocarpon pseudosubnitescens*** Breuss  

(Knudsen 2005c)

***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.])

**Synonyms:** [\*E. tortuosum\*](#) (Herre 1945 [northeastern interior CA]; TJ)

***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; Robertson 2004)

**Synonyms:** [\*E. adnatum\*](#), [\*E. lepidallum\*](#), [\*E. subnitescens\*](#)

***Endocarpon simplicatum*** (Nyl.) Nyl.  

(Breuss 2002; *T. Nash* 32426, terraces NE of Fraser Point, Santa Cruz Isl., Santa Barbara Co., ASU)

***Endocarpon adnatum*** Nyl.  

(Hasse 1898a, 1906)

=[\*E. pusillum\*](#)

***Endocarpon adscendens*** (Anzi) Müll. Arg.  

(TJ; based on assumed synonymy with [\*E. pallidum\*](#))

***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*, but misidentification for North America

*Endocarpon miniatum* var. *complicatum* (Sw.) Schaer. 

(McClatchie 1897)

=*Dermatocarpon americanum*

*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; TJ)

=*E. pulvinatum* Th. Fr. (synonymy *fide* Breuss 2002)

*Endocarpon wilmsioides* Zahlbr.  

(Zahlbruckner 1902; Hasse 1903f, 1913b; Fink 1935; TJ; Thomson 1991)

=*Staurothele drummondii*

## ENDOCOCCUS Nyl.

\**Endococcus buelliae* (C. W. Dodge) Matzer  

(Kainz & Triebel 2004, on *Dimelaena radiata*)

\**Endococcus zahlbrucknerellae* (Henssen) D. Hawksw.  

(Henssen 1977; Hawksworth 1979)

Synonyms: *Tichothecium zahlbrucknerellae*

*Endococcus erraticus* Nyl.  

(Hasse 1906;

= nonlichenized fungus)

## EPHEBE Fr.

*Ephebe hispidula* (Ach.) Horw.  

(Goward 1999; *J. R. Shevock 14256*, Western Divide Hwy., Co. Rd M-107, Tulare Co., CAS, UC, determination by B. Ryan)

*Ephebe lanata* (L.) Vain.  

(Hale 1979; TJ; Goward 1999; Tucker [2002, reporting *J. R. Shevock 13883*, First Dinkey Lake, Fresno Co., UC, CAS, identified by B. Ryan]; color photograph but no CA report in Brodo et al.

[2001, p. 309])

*Ephebe pubescens* (Ach.) Th. Fr.  

(Herre 1906)

= *Spilonema revertens*, at least in part

*Ephebe solida* Bornet  

(Zahlbruckner 1912a; Herre 1910; Thomson & Ketchledge 1958)

= *Spilonema revertens*, at least in part, for *Herre* collections

## ERIODERMA Fée

*Erioderma sorediatum* D. J. Galloway & P. M. Jørg.  

(*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)

**Synonyms:** [\*Cetraria idahoensis\*](#)

**EUOPSIS** Nyl.

*Euopsis pulvinata* (Schaer.) Vain.  

**Synonyms:** [\*Pyrenopsis pulvinata\*](#) (Sigal [1975, *L. Sigal*, Little Red Mtn, Mendocino Co., 13 June 1973, SFSU, but misdetermination *fide* S. Tucker]; Sigal 1989)

**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; 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 2004; Jovan & McCune 2004)

*Evernia divaricata* (L.) Ach.  

(Howe 1911; Fink 1935; but misidentifications for CA)

*Evernia furfuracea* (L.) W. Mann  

(Hue 1895; Howe 1911; North American records are referable to *Pseudevernia consocians* Hale & W. L. Culb. or [\*P. intensa\*](#) but neither has been reported in CA; see [\*Pseudevernia intensa\*](#))

*Evernia vulpina* (L.) Ach.  

(TJ)

= [\*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  

**Synonyms:** [\*Catillaria bouteillei\*](#) (Santesson 1952, p. 434, based on *Felton*, 1885, on *Umbellularia* at

Big Tree Grove, Santa Cruz Co., K)

### **FISSURINA** Fée

**Fissurina columbina** (Tuck.) Staiger    
(Staiger & Kalb 2004; from Del Norte Co.)

**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., 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. & Fóriss) Hale    
(Nash & Elix 2002)

**Synonyms:** Parmelia baltimorensis, Pseudoparmelia baltimorensis

**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)

**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])

**Synonyms:** Parmelia subcapitata (McClatchie 1897; Hasse 1913b; Fink 1935; TJ)

**Note:** This taxon it had been presumed extinct in CA, but R. Riefner found it on chaparral in three locations in San Diego Co.

**Flavoparmelia rutidota** (Hook. f. & Taylor) Hale  

**Synonyms:** Parmelia conspersa var. subconspersa (Herre 1946; TJ; but misidentifications for CA)

Parmelia rutidota (Lindsay 1973), Xanthoparmelia subconspersa (but misidentifications for CA)

### **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)

**Synonyms:** *Parmelia andreana*, *P. californica*, *P. flaventior*, *P. kernstockii*

### **Flavopunctelia praesignis** (Nyl.) Hale

(Tucker 2002; Egan [2004] cited a central CA collection by W. A. Weber 3497, Mt. Hamilton, Santa Clara Co., ASU, determination by B. Ryan)

**Synonyms:** *Parmelia caperata* var. *incorrupta*, *P. praesignis*

### **Flavopunctelia soredica** (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)

**Synonyms:** *Parmelia soredica* (Herre 1906, 1907, 1910; Moxley 1921; Fink 1935; Berry 1941; Herre 1945, 1946; W. Culberson 1955; Thomson & Ketchledge 1958; TJ)

**Note:** Herre's material was described as commonly apotheciate, unlike this species, and may have been *F. flaventior*.

## **FULGENSIA** A. Massal. & De Not.

### **Fulgensia desertorum** (Tomlin) Poelt

(Doell et al. 1999; Brodo et al. [2001, pp. 319–320, with color photograph]; Kasalicky 2004; C. Bratt 7877, San Nicolas Isl.: below Twin Towers, bluff edge on S side, Ventura Co., SBBG, determination by W. A. Weber)

### **Fulgensia subbracteata** (Sw.) Elenkin

(Kasalicky 2004; C. Wetmore 14570, San Bernardino Nat. Forest, 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, MIN, determination by C. Wetmore)

### **Fulgensia fulgens** (Sw.) Elenkin

(Rudolph 1955 [based on *H. E. Hasse 1420*, collected near Palm Springs, Riverside Co., FH]; Thomson 1997; Tucker 2002; not mentioned for CA by Kasalicky 2004; probably misidentifications of *F. desertorum* or *F. subbracteata*)

**Synonyms:** *Caloplaca fulgens* (Hasse 1913b)

## **FUSCOPANNARIA** P. M. Jørg.

### **Fuscopannaria aurita** P. M. Jørg. & Tønsberg

(Jørgensen 2001a)

### **Fuscopannaria californica** (Tuck.) P. M. Jørg.

(Jørgensen 2001a, 2002)

**Synonyms:** *Pannaria microphylla* f. *californica*

### **Fuscopannaria coralloidea** P. M. Jørg.

(Jørgensen 2001a, 2002)

**Misapplied names:** *Parmeliella lepidiota* var. *coralliphora* (Tuck.) Vain. (Herre 1910 [as var. *coralliphora*]; Hasse 1913b [as *Parmeliella lepidiota* var. *coralliphora* auct., p. 80]; Fink 1935; Thomson & Ketchledge 1958; TJ)

### **Fuscopannaria crustacea** P. M. Jørg.

(Jørgensen 2001a)

### **Fuscopannaria cyanolepra** (Tuck.) P. M. Jørg.

(Jørgensen 2001a, 2002)

**Synonyms:** *Pannaria cyanolepra* (Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a),

*Pannaria lepidiota* var. *cyanolepra* (Tuckerman 1882; Hasse 1896; McClatchie 1897; Herre 1907;

Orcutt 1903, 1907), *Pannularia lepidiota* var. *cyanolepra* (Hasse 1898a), *Parmeliella cyanolepra* (Herre 1910; Sigal 1975; TJ; Sigal 1989; West & Doell 1995; Wright 1997; Robertson et al. 1998; McGee 1999; Robertson 2003a, 2004), *Parmeliella lepidiota* var. *cyanolepra* Tuck. (Hasse 1913b)

**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., holotype, det. by P. M. Jørgensen)

**Fuscopannaria laceratula** (Hue) P. M. Jørg.  

(Jørgensen 2001a)

**Synonyms:** *Pannaria lepidiota* var. *coralliphora* Tuck. (Herre 1907; synonymy *fide* Jørgensen [2001a, p. 683]; the spelling used by Tuckerman [1882, p. 123] is “*coralliphora*”)

**Fuscopannaria leucophaea** (Vahl) P. M. Jørg.  

(Bratt 1999; Brodo et al. [2001, pp. 321–322, with color photograph]; Jørgensen 2002; Tucker 2002)

**Synonyms:** *Pannaria leucophaea* (Sigal 1989), *P. microphylla* (Tuckerman 1866; Bolander 1870; Tuckerman 1872; Hasse 1896; Orcutt 1907; Sigal 1975), *Parmeliella microphylla* (Orcutt 1903; Herre 1910; Hasse 1913b), *Pannularia microphylla* (Hasse 1898a)

**Fuscopannaria leucostictoides** (Ohlsson) P. M. Jørg.  

(McGee 1998; Wright 1998; Brodo et al. [2001, pp. 322, with color photograph]; Jørgensen 2001a; Baltzo 2002; Jørgensen 2002; Robertson 2003a; Jovan & McCune 2004)

**Synonyms:** *Pannaria leucostictoides* (Hale & Cole 1988)

**Fuscopannaria mediterranea** (Tav.) P. M. Jørg.  

(Jovan & McCune 2004; T. Tønsberg TT2891, Humboldt Co., BG; S. Jovan collections in Colusa Co. and Trinity Co., cited in Anonymous 2002; S. Tucker 31765 [as “cf.”], Mix Cyn, Solano Co., determination by P. Jørgensen; B. Ryan 11230, James Lee Cpgd, Plumas Nat. Forest, Hwy 70, 13 km NE of Butte Co. border, Plumas Co., ASU)

**Fuscopannaria pacifica** P. M. Jørg.  

(Jørgensen 2001a; Jovan & McCune 2004)

**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; color photograph but no CA report in Brodo et al. [2001, pp. 323–324])

**Synonyms:** *Pannaria lepidiota* (Hasse 1896), *Pannularia lepidiota* (Hasse 1898a), *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; thought to be endemic [Jørgensen 2002], but reported from Oregon by Curtis 2003)

**Synonyms:** *Pannaria pulveracea*

**Fuscopannaria thiersii** P. M. Jørg.  

(Jørgensen 2001a)

**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*.

**Fuscopannaria saubinetii** (Mont.) P. M. Jørg.  

**Synonyms:** *Pannaria saubinetii* (Weber 1965b), *Parmeliella saubinetii* (Volk 1963; Lindsay 1973; Ohlsson 1973; TJ)

**Note:** Jørgensen (2001a), gave the 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 reports needing checking.

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### GASPARRINIA Tornab.

*Gasparrinia callopisma* (Ach.) Sydow  

(Rudolph 1955)

=[\*Caloplaca aurantia\*](#), but not in North America, so Rudolph report is presumably based on misidentifications

*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\*](#)

### 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], based on a collection from Del Norte Co.

= misidentification of [\*Fissurina humilis\*](#))

### GRAPHIS Adans.

*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 caesiella* Vain.  

(Lindsay 1973; TJ; identification should be verified)

*Graphis elegans* (Borrer ex Sm.) Ach.  

(Tucker & Kowalski 1975; TJ; from Mendocino Co. *fide* Staiger [personal communication to Ryan, 2003])

*Graphis saxorum* Egea & Torrente  

(Egea & Torrente 1997; Staiger & Kalb 2004)

*Graphis scripta* (L.) Ach.  

(Lindsay 1973; TJ; Brodo et al. [2001, pp. 327–328, with color photograph]; Robertson 2003a)

*Graphis eulectra* Tuck.  

Synonyms: [\*Phaeographis eulectra\*](#) (Herre 1944b; Tucker & Kowalski 1975; TJ; but misidentifications for CA reports)

*Graphis striatula* (Ach.) Spreng.  

(Lindsay 1973; Tucker & Kowalski 1975; TJ; Robertson 2002a; Mendocino Co. collections

= misidentifications of [\*G. elegans\*](#) fide Staiger, personal communication to Ryan, 2003)

## 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; CA endemic)

**Gyalecta jenensis** (Batsch) Zahlbr.  

(Doell 2002 [p. 12]; Ryan & Nimis 2004)

**Gyalecta truncigena** (Ach.) Hepp  

(Herre 1944c [Stanford Univ. campus, San Mateo Co.]; TJ; Ryan & Nimis [2004] for coastal central CA)

## GYALIDEA Lettau ex Vězda

**Gyalidea hyalinescens** (Nyl.) Vězda  

(K. Knudsen 1098, on soil, base of sandstone cliffs, Torrey Pines S. P., San Diego Co., ASU)

## GYALIDEOPSIS Vězda

**Gyalideopsis anastomosans** P. James & Vězda  

(Nash & Tønsberg [2004] reported one collection from Santa Ynez Mts, Santa Barbara Co.)

**Gyalideopsis athalloides** (Nyl.) Vězda  

(Vězda 1972, 1979, *H. E. Hasse* 246, Santa Monica Range, SBBG)

**Synonyms:** [\*Rhizocarpon athalloides\*](#) (Hasse 1913b; Fink 1935; TJ; Feuerer & Timdal [2004] say it is not a *Rhizocarpon*, and that its proper placement is uncertain)

## 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)

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

**Gyrophora diabolica** Zahlbr.  

(Herre 1906, 1907)

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

**Gyrophora erosa** (Weber) Ach.  

(Hasse 1903c; Herre 1911b; Fink 1935)

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

**Gyrophora grisea** Sw. ex Westr.  

(Herre 1911b; Fink 1935)

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

**Gyrophora hirsuta** Ach.  

(Hasse 1908b; Fink 1935; Herre 1942a, 1950a)

=[\*Umbilicaria hirsuta\*](#), but misidentifications for CA

**Gyrophora hirsuta** var. **grisea** (Sw. ex Westr.) Th. Fr. 

(Hasse 1898a, 1908b)

=[\*Umbilicaria hirsuta\*](#), but misidentifications for 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\*](#)

*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\*](#)

*Gyrophora reticulata* (Schaer.) Th. Fr. 

(Herre 1910, 1911b)

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

*Gyrophora rugifera* (Nyl.) Th. Fr. 

(Hasse 1898a, 1908b; Orcutt 1909; Herre 1911b; Du Rietz 1925; Fink 1935; Herre 1945, 1950a)

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

*Gyrophora semitensis* (Tuck.) Hasse 

(Hasse 1898a; Orcutt 1909; Herre 1911b)

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

*Gyrophora torrefacta* (Lightf.) Cromb. 

(Fink 1935; Herre 1945)

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

[\*\*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, pp. 332, with color photograph])

*Haematomma californicum* Sigal & D. R. Toren 

(Sigal & Toren 1975; TJ)

=[\*Ophioparma rubricosa\*](#)

*Haematomma lapponicum* Räsänen 

= probable misidentification of [\*Ophioparma ventosa\*](#) (May 1997)

*Haematomma pacificum* Hasse 

(Hale & Cole 1988)

=[\*Ophioparma rubricosa\*](#)

*Haematomma ventosum* (L.) A. Massal. 

(Fink 1935)

=[\*Ophioparma ventosa\*](#)

**Note:** According to Kalb et al. (2004) there are no confirmed records from the Sonoran region, although May (1997) reported it rarely from Oregon. H. E. 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)

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

**Note:** According to F. Bungartz (personal communication), [\*B. disciformis\*](#) is the conserved type of the generic name *Buellia*, so the species must be retained in *Buellia*.

### *HARPIDIUM* Körb.

*Harpodium nashii* Scheid.  

(Schultz et al. [2001] reported a collection from Santa Cruz Isl.; Scheidegger & Schultz 2004)

*Harpodium 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 conchiloba* Zahlbr.  

(Zahlbruckner 1902; Hasse 1903c [as “*conchilobata*”], 1913b; Fink 1935; Wetmore 1970; Henssen 1994; Brodo et al. [2001, pp. 333, with color photograph]; Büdel et al. 2002; Robertson & Robertson [2002, based on *J. & R. Robertson 5520*; sandstone outcrops on N side of Putah Creek below Monticello Dam, Solano Co.]; Tucker [2002] suggested likelihood that this species is in CA; *B. Ryan* collection, San Bernardino Co.; *T. Nash 8448*, 3 km SW of Parker Dam on Colorado River, San Bernardino Co., ASU; some reports of [\*H. lутosa\*](#) may belong here *fide* Henssen [1994]; Wetmore [1970] considered this a form of [\*H. lутosa\*](#) “of no taxonomic significance”)

*Heppia despreauxii* (Mont.) Tuck.  

(Orcutt 1885; McClatchie 1897; Hasse 1898a; Orcutt 1903, 1907, 1909; Hasse 1913b; not in S CA, but in Arizona *fide* Büdel et al. 2002)

*Heppia lутosa* (Ach.) Nyl.  

(Wetmore 1970; Sigal & Toren 1976; TJ; Bowler et al. 1996; Doell et al. 1999; Robertson & Robertson 2001; Büdel et al. 2002; partly misidentifications of [\*H. conchiloba\*](#))

*Heppia adglutinata* (Kremp.) A. Massal.  

**Note:** Henssen (1994) asserted that some reports of [\*H. lутosa\*](#), not specifically from CA, refer to either *H. adglutinata* or to [\*H. conchiloba\*](#), but apparently only the latter is known from CA. The situation is discussed in Tucker 2002.

*Heppia alumensis* 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. 

(Zahlbrückner 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 North America; reported for Algeria by Zahlbrückner [1925])

*Heppia terrena* Nyl. ex Hasse 

(Hasse 1897; McClatchie 1897; Hasse 1898a; Orcutt 1909; Hasse 1913b; Fink 1935)

=*Peltula patellata**Heppia zahlbrückneri* Hasse 

(Hasse 1911b, 1913b; Zahlbrückner 1925; Fink 1935)

=*Peltula zahlbrückneri***HERTELIDEA** Printzen & Kantvilas**Hertelidea botryosa** (Fr.) Printzen & Kantvilas 

(Printzen [2004] for synonymy, but author does not include S CA in its range)

**Synonyms:** *Biatora botryosa* (Thomson 1997), *Lecidea botryosa* (Lowe 1939)**HETEROCARPON** Müll. Arg.**\*Heterocarpon ochroleucum** (Tuck.) Müll. Arg. 

(Zahlbrückner 1903–1907; Hasse 1906, 1915b; Fink 1935; TJ; Harada 1991)

**Synonyms:** *Endocarpon ochroleucum* (Tuckerman 1872; Willey 1873a; Tuckerman 1888)**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* (Fée) Swinscow & Krog (Moberg & Nash [2002, p. 214]), *H. neoleucomelaena* (Lindsay 1973, collection not verified)**Heterodermia erinacea** (Ach.) W. A. Weber 

(Hale &amp; Cole 1988; Bratt 1993; Bowler et al. 1996; Moberg &amp; Nash 1999; Brodo et al. [2001, pp. 337, with color photograph]; Moberg &amp; Nash 2002)

**Synonyms:** *Anaptychia erinacea* (Herre 1910; Hasse 1913b; Fink 1935; Wheeler 1938; Herre 1945; Kurokawa 1973) *Physcia ciliaris* var. *erinacea* (Nylander 1858–1860; TJ), *Physcia erinacea*

(Tuckerman 1860, 1866; Bolander 1870; Willey 1873a; Tuckerman 1882; Orcutt 1885; Hue 1892; Hasse 1895; Hue 1895; McClatchie 1897; Hasse 1898a, 1903d; Herre 1906, 1907; Orcutt 1907; TJ)

**Heterodermia japonica** (M. Satô) Swinscow & Krog

(C. Bratt 11079, on *Quercus tomentella*, top of Black Mtn, 1290 ft. elev., Santa Rosa Isl., Santa Barbara Co., SBBG, determination by 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; Geiser et al. 2004; Jovan & McCune 2004)

**Synonyms:** [Anaptychia leucomela](#), [A. leucomelaena](#), *H. leucomelos*, *H. leucomela* f. *albociliata*, *H. leucomelos* subsp. *leucomelos*, [Parmelia ophioglossa](#), [Physcia leucomela](#), [P. leucomelaena](#)

### **Heterodermia namaquana** Brusse

(Esslinger & Bratt 1998; Tucker 1999; Brodo et al. [2001, p. 339]; Moberg & Nash 2002; Robertson & Robertson 2002 and color photograph on back cover of CALS Bulletin 8[2])

### **Heterodermia comosa** (Eschw.) Follmann & Redón

**Synonyms:** [Anaptychia comosa](#) (Herre [1910], but Herre collections should be verified; occurring in Mexico outside the Sonoran area *fide* Moberg & Nash [2002])

### **Heterodermia neoleucomelaena** (Kurok.) Follmann & Redón

(Lindsay [1973], Lindsay collection from Humboldt Co., HSC; not verified)  
= [Heterodermia boryi](#) (Fée) K. P. Singh & S. R. Singh

## *HETEROTHECIUM* Flot.

### *Heterothecium endochromum* (Fée) Flot.

(Tuckerman [1888, p. 55], report from Mexico)

### *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](#) (Räsänen 1949; TJ)

**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, according to Esslinger (2004b) 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; color photograph on back cover of CALS Bulletin 7[2], 2000)

**Synonyms:** [Reinkella parishii](#), [R. subcrustacea](#) (Räsänen 1949; TJ)

## *HUILIA* Zahlbr. = [PORPIDIA](#)

### *Huilia macrocarpa* (DC.) Hertel

(TJ)

=*Porpidia macrocarpa***HYDROTHYRIA** J. L. Russell = **PELTIGERA***Hydrothyria venosa* J. L. Russell  

(Tuckerman 1872, 1882; Willey 1887; Fink 1935; 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 Tuckerman and Willey reports; Univ. Colo. Lich. Exs. 293, Yosemite N. P., Mariposa Co.; B. Ryan 32035, Brown's Creek, Sierra Nat. Forest, Madera Co., ASU; Gross collections, Butte Co. and Plumas Co., cited in Anonymous 2002)

=*Peltigera hydrothyria***HYMENELIA** Kremp.*Hymenelia epulotica* (Ach.) Lutzoni  

**Synonyms:** *Ionaspis epulotica* (TJ), *Lecanora epulotica* var. *subepulotica* (McClatchie 1897; Hasse 1898a)

*Hymenelia ochrolemma* (Vain.) Gowan & Ahti  

(Gowan &amp; Ahti [1993] for synonymy)

=*Porpidia ochrolemma***HYPERPHYSCIA** Müll. Arg.*Hyperphyscia adglutinata* (Flörke) H. Mayrhofer & Poelt  

(Hale & Cole 1988; von Reis 1991; Doell & Wright 1996; Bourell 2000; Brodo et al. [2001, pp. 343, with color photograph]; Robertson 2001; Wright 2001a; Moberg 2002; Robertson 2003a; Thomson 2003)

**Synonyms:** *Physcia adglutinata* (Hasse 1895; McClatchie 1897; Hasse 1898a, 1906; Herre 1906; Orcutt 1907; Herre 1910; Hasse 1913b), *P. elaeina* (Thomson 1963), *Phyciopsis adglutinata* (TJ)

**HYPOCENOMYCE** M. Choisy*Hypocenomyce anthracophila* (Nyl.) P. James & Gotth. Schneid.  

(Brodo et al. [2001, p. 344, with color photograph]; B. Ryan 32204a, Benedict Meadow, Sierra Nat. Forest, Madera Co., ASU; not shown in S CA by Timdal [2002] but Madera Co. is north of Sonoran region)

**Synonyms:** *Biatora anthracophila* (Printzen 1995), *Lecidea anthracophila* (Hasse 1898a; TJ)

*Hypocenomyce castaneocinerea* (Räsänen) Timdal  

(combination made in Timdal 2002; B. Ryan 26183, 26188, Mooney Mountain Rd, San Gabriel Mts, Los Angeles Co., ASU, determination by E. Timdal; E. Timdal 7096, Yosemite N. P., Mariposa Co., ASU)

*Hypocenomyce scalaris* (Ach. ex Lilj.) M. Choisy  

(Baltzo 1989; Ryan & Nash 1991; Goward et al. 1994; Tucker & Bratt 1995; Hill 1997; Timdal 2002; color photograph but no CA report in Brodo et al. [2001, p. 345])

**Synonyms:** *Lecidea scalaris* (Baltzo 1970; Pinelli & Jordan 1978; TJ), *Psora scalaris*

*Hypocenomyce sierrae* Timdal  

(Timdal 2002; B. Ryan 26184, San Gabriel Mts, Los Angeles Co., ASU; B. Ryan 24615b, Emigrant Wilderness, Tuolumne Co., ASU, determination by E. Timdal)

*Hypocenomyce friesii* (Ach.) P. James & Gotth. Schneid.  

(Hasse 1913b; TJ; Goward et al. 1994; an accepted species in Esslinger [2004b], but CA reports are

probably misidentifications of other species *fide* E. Timdal)

**Synonyms:** [\*Biatora friesii\*](#) (Hasse 1906), [\*Lecidea friesii\*](#) (Hasse 1913b; Lowe 1939; TJ), [\*Psora friesii\*](#) (Fink 1935 ["doubtfully reported"])

*Hypocenomyce praestabilis* (Nyl.) Timdal 

(*B. Ryan* 12558, Eastern Brook Lakes Watershed, 15 km S of Tom's Place, Sierra Nevada, Inyo Co., ASU)

=[\*Pycnora praestabilis\*](#)

*Hypocenomyce xanthococca* (Sommerf.) P. James & Gotth. Schneid.  

(Ryan & Nash 1991)

=[\*Pycnora xanthococca\*](#)

**Note:** According to Timdal (2002, p. 226); North American records are based on misidentifications. Esslinger (2004b) retains the name in the North American 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; Jovan & McCune 2004; *T. Nash* 11411a, near county airport, Mendocino Co., ASU; *E. Peterson* collections, Humboldt Co. and Contra Costa Co.)

***Hypogymnia bitteri*** (Lynge) Ahti  

(on map in Hale 1979; Wright 2001a [citing Hale]; color photograph but no CA report in Brodo et al. [2001, p. 348]; *D. Wright* 1999, Horse Mtn, Humboldt Co.)

***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)

***Hypogymnia enteromorpha*** (Ach.) Nyl.  

(Ahti & Henssen 1965; Jordan 1968; Baltzo 1970; Lindsay 1973; Ohlsson 1973; Pinelli & Jordan 1978; TJ; 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; Robertson 2003a; Blauman 2004; Jovan & McCune 2004)

**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; *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, determined by B. McCune)

***Hypogymnia heterophylla*** L. H. Pike  

(Pike & Hale 1982; Hale & Cole 1988; von Reis 1991; Goward et al. 1994; Riefner, Bowler, & Ryan 1995; 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)

***Hypogymnia imshaugii*** Krog  

(Lindsay 1973; Ohlsson 1973; Pinelli & Jordan 1978; TJ; Weber et al. 1987; Hale & Cole 1988; 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; Robertson 2003a; Blauman 2004; Jovan & McCune 2004; color

photograph on front cover of CALS Bulletin 7[2], 2000)

**Hypogymnia inactiva** (Krog) Ohlsson  

(Ohlsson 1973; Malachowski 1975; Pinelli & Jordan 1978; TJ; Hale & Cole 1988; Goward et al. 1994; Bourell 2000; Brodo et al. [2001, p. 350, with color photograph]; Wright 2001a; Baltzo 2002; Robertson 2002a; Jovan & McCune 2004)

**Hypogymnia metaphysodes** (Asahina) Räsänen  

(Hale & Cole 1988; von Reis 1991; Riefner, Bowler, & Ryan 1995; McGee 1998; Brodo et al. [2001, p. 353, with color photograph]; Wright 2001a; Baltzo [2002, as "cf."]; Jovan & McCune 2004)

**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)

**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; S. Tucker 35341B, 8.6 mi. from Lake Pillsbury on Potter Valley Rd, Mendocino Nat. Forest, Lake Co., SBBG, determined by B. McCune; B. Ryan, Marble Mountain Wilderness, Siskiyou Co., ASU)

**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, 2003a; Jovan & McCune 2004; Robertson 2004)

**Synonyms:** [Parmelia physodes](#)

**Hypogymnia rugosa** (G. Merr.) L. H. Pike  

(B. Ryan 11138, Sequoia N. P., Tulare Co., SBBG; collection needs verification; shown with color photograph but no CA report, Oregon and north in Brodo et al. [2001, p. 354])

**Hypogymnia schizidiata** McCune  

(McCune 2002)

**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; 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)

**Hypogymnia vittata** (Ach.) Parrique  

(TJ)

**Synonyms:** [Parmelia vittata](#) (Merrill 1923)

= misidentification for CA fide B. Ryan

**HYPOTRACHYNA** (Vain.) Hale

**Hypotrachyna laevigata** (Sm.) Hale  

**Synonyms:** [Parmelia laevigata](#) (Hasse 1903a; Merrill 1923)

**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 et al. 2002; Robertson 2003a; Geiser et al. 2004)

**Synonyms:** *Parmelia revoluta***Hypotrachyna sinuosa** (Sm.) Hale  

(Hale &amp; Cole 1988 [Humboldt Co.]; Brodo et al. [2001, p. 360]; S. Tucker 38399, campus of Univ. of California, Santa Cruz, Santa Cruz 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](#)**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)**IMSHAUGIA** S. L. F. Meyer**Imshaugia aleurites** (Ach.) S. L. F. Meyer  (Robertson & Robertson [2001] based on *J. Robertson* 3955, ca. 5 mi. NW of Cazadero, W of King Ridge Rd, Sonoma Co.: 20 May 2000; Wright [2001a] and Tucker [2002] repeated Robertson report; color photograph but no CA report in Brodo et al. [2001, pp. 361–362])**INGVARIELLA** Guderley & Lumbsch**Ingvariella bispora** (Bagl.) Guderley & Lumbsch  

(Lumbsch [2004] reported a collection from Santa Rosa Isl.)

**Synonyms:** *Diploschistes bisporus***INTRALICHEN** D. Hawksw. & M. S. Cole**\*Intralichen christiansenii** (D. Hawksw.) D. Hawksw. & M. S. Cole  (Cole & Hawksworth 2001; Hawksworth & Cole 2002 [for nomenclature]; S. Tucker 14848b pr. p., Mt. Shasta, Siskiyou Co., SBBG, on *Letharia vulpina*, determination by D. Triebel; S. Tucker 28798, Bartlett Springs Rd, Lake Co., SBBG, determination by D. Triebel; C. Bratt 7223, Santa Cruz Isl., Santa Barbara Co., SBBG, on *Caloplaca brattiae*; C. Bratt 9584, San Clemente Isl., Los Angeles Co., SBBG, on *Caloplaca californica*; last two determinations by M. Cole)**Synonyms:** *Bispora christiansenii***IONASPIS** Th. Fr.***Ionaspis epulotica*** (Ach.) Blomb. & Forss.  

(TJ)

= *Hymenelia epulotica****Ionaspis lacustris*** (With.) Lutzoni  

(discussed by Tucker 2002)

**Synonyms:** *Lecanora lacustris* (Hasse 1915a)**Note:** Hasse reported this species from the Santa Monica Mts in S CA on rocks inundated only during the brief rainy season. The species is typically found at the edge of streams or lakes. According to Brodo et al. (2001, p. 363, with color photograph), the species on the Pacific Coast is found only as far south as Oregon.[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](#)

**JAPEWIA** Tønsberg**Japewia subaurifera** Muhr & Tønsberg 

(E. Peterson 1906, Trinity Co.)

**Japewia tornoënsis** (Nyl.) Tønsberg  

(described in Tønsberg [1990] 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.; color photograph but no CA report in Brodo et al. [2001, pp. 364–365]; *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* (Tuckerman 1888), *Lecidea tornoënsis* (Fink 1935; Lowe 1939), *Mycoblastus tornoënsis* (Anderson & Carmer 1974)

**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*)

**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 North America 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 Islands. The early collections were probably misidentified.

[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](#)

**KAERNEFELTIA** A. Thell & Goward**Kaernefelia 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)

**Synonyms:** *Alectoria californica*, *Cetraria californica*, *Cornicularia californica* (TJ)

**Kaernefelia 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)

**Synonyms:** *Cetraria californica* Merr. non Tuck., *Cetraria merrillii* (Du Rietz 1926; Esslinger 1973b; Pinelli & Jordan 1978; Jovan & McCune 2004), *Tuckermannopsis merrillii*

**KOERBERIA** A. Massal.**Koerberia biformis** A. Massal.  

(Sigal & Toren 1976; TJ; Baltzo 1989; Tucker & Bratt 1995; Robertson & Robertson 2001; Schoeninger 2002)

**Koerberia sonomensis** (Tuck.) Henssen  

(Henssen 1963c, 1977; Goward et al. 1994; Tucker & Bratt 1995; Schoeninger 2002)

**Synonyms:** *Pannaria sonomensis* (Tuckerman 1877; Hasse 1906; TJ), *Parmeliella sonomensis* (Hasse 1913b), *Placynthium sonomense*

[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](#)

**LASALLIA** Mérat**Lasallia pennsylvanica** (Hoffm.) Llano  

(Llano 1950; TJ; Brodo et al. [2001, pp. 367–368, with color photograph])

**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)**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 &amp; Tehler 2004; Univ. Colo. Lich. Exs. 194, between Cottonwood Cyn and Mills Landing, Santa Catalina Isl., Los Angeles Co.)

**Synonyms:** [\*L. zahlbruckneri\*](#) (Fink 1935; Esslinger & Egan (1995) treated [\*Sigridea californica\*](#) and [\*Lecanactis californica\*](#) as synonymous, but that error was corrected in Esslinger [2004b])**Lecanactis dubia** G. Merr.  

(Merrill 1923; TJ; Ryan &amp; Tehler [2004], known only on Santa Catalina Isl.; CA endemic)

**Lecanactis salicina** Zahlbr.  

(Hasse 1906; Zahlbruckner 1906; Hasse 1908a, 1913b; Merrill 1923; Fink 1935; Herre 1945; TJ; Ryan &amp; Tehler 2004)

**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 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\*](#), NOT [\*Sigridea californica\*](#)**LECANIA** A. Massal.**Lecania brattiae** B. D. Ryan & van den Boom (van den Boom & Ryan 2004; *J. Robertson 1451*, trail to Ragged Peak from Sauces Cyn along West Ridge, Santa Cruz Isl., Santa Barbara Co., SBBG, determination by B. Ryan)**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; van den Boom & Ryan 2004; Univ. Colo. Lich. Exs. 675 [Fraser Point, Santa Cruz Isl., Santa Barbara Co.] 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; CA endemic)

**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, determination by B. Ryan; CA endemic)

**Lecania cyrtella** (Ach.) Th. Fr.  

(Hasse 1913b; Fink 1935; TJ; Brodo et al. [2001, p. 371]; van den Boom & Ryan 2004; *S. Tucker 13399*, near Woodside, San Mateo Co., SBBG; *S. Tucker 28826A*, Morro Bay S. P., San Luis Obispo Co., SBBG; *S. Tucker 33788*, San Nicolas Isl., Ventura Co., SBBG)

**Synonyms:** [\*Biatora cyrtella\*](#) (Hasse 1896; Orcutt 1903, 1907), [\*Lecidea cyrtella\*](#) (Hasse 1898a)

**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; Univ. Colo. Lich. Exs. 675 labeled as *L. dudleyi* is representative of *L. brunonis*)

**Lecania fructigena** Zahlbr.  

(Hasse 1914; Merrill 1923; TJ; Bratt 1987, 1997; van den Boom & Ryan 2004)

**Lecania fuscella** (Schaer.) Körb.  

(van den Boom & Ryan 2004)

**Misapplied names** (for S CA): [\*L. syringea\*](#), [\*Lecanora athroocarpa\*](#), [\*Lecanora syringea\*](#)

**Lecania fuscelloides** B. D. Ryan & van den Boom 

(van den Boom & Ryan 2004; CA endemic)

**Lecania hassei** (Zahlbr. ex Hasse) W. J. Noble  

(Noble 1982; van den Boom & Ryan 2004; CA endemic)

**Synonyms:** [\*Placolecania hassei\*](#) (Hasse 1914), [\*Solenopsora hassei\*](#) (Zahlbruckner 1928)

**Lecania inundata** (Hepp ex Körb.) M. Mayrh.  

(van den Boom & Ryan 2004; *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)

**Synonyms:** [\*Bacidia naegelii\*](#) (Herre 1910; Hasse 1913b; Volk 1963; TJ), [\*Biatora naegelii\*](#) (Hasse 1896; Hasse 1903b; Orcutt 1903, 1907), [\*Bilimbia naegelii\*](#) (Fink 1935), [\*Buellia naegelii\*](#) (McClatchie 1897), [\*Lecidea naegelii\*](#) (Hasse 1898a; Nylander 1900)

**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.; CA endemic)

**Lecania rabenhorstii** (Hepp) Arnold  

(van den Boom & Ryan 2004)

**Lecania ryaniana** van den Boom 

(van den Boom & Ryan [2004] reports from two of the Channel Is.; CA endemic)

**Lecania subdispersa** (Nyl.) B. D. Ryan emend. B. D. Ryan  

(Hasse 1913b; Fink 1935; TJ; van den Boom & Ryan [2004], from Santa Monica Mts and Channel Is.; CA endemic)

**Synonyms:** *Lecanora subdispersa* (Hasse 1898a, but Hasse's material comprises several different taxa, none fitting Hasse's description *fide* van den Boom & Ryan, p. 168)

*Lecania toninioides* Zahlbr.  

(Zahlbruckner 1902; Hasse 1903e, 1913b; TJ; van den Boom & Ryan 2004; *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; *T. Nash* 41216, China Point, San Miguel Isl., Santa Barbara Co., ASU)

**Synonyms:** *L. albariella* (TJ), *L. californica*, *L. turicensis* var. *californica*, *Lecanora franciscana* (Tuckerman 1877)

*Lecania albariella* (Nyl.) Müll. Arg.  

(TJ)

=*L. turicensis* (synonymy in Esslinger 2004b)

*Lecania californica* (Zahlbr.) Fink  

(Fink 1935; TJ)

=*L. turicensis* (synonymy in van den Boom & Ryan 2004)

*Lecania cyathiformis* Szatala  

(Tavares 1997a; Tucker 1997; Magney [1999] repeated report by S. Tucker)

=*Solenopsora 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)

*Lecania dubitans* (Nyl.) A. L. Sm.  

(Wright 1997; not in CA, but in British Columbia and Utah *fide* Brodo et al. [2001, pp. 370–371, with color photograph]; not mentioned for S CA by van den Boom & Ryan 2004; however it has been reported several times in CA and these collections should be checked; Baltzo 2002; discussed in Tucker 2002)

**Synonyms:** *L. dimera* (Herre 1910; Hasse 1913b; Merrill 1923; Jordan 1968; Lindsay 1973; TJ), *L. syringaea* var. *dimera* (Fink 1935)

*Lecania erysibe* (Ach.) Mudd  

(Herre 1912a; Hasse 1913b; TJ)

= misidentifications for CA and other North American material *fide* B. Ryan

*Lecania shastensis* Herre  

(Herre 1912a; Fink 1935; the Herre collection probably does not belong in *Lecania*, because spores are described as four-celled)

*Lecania spodophaeiza* (Nyl.) A. L. Sm.  

(Bratt 1993)

= misidentifications for CA almost certainly

*Lecania syringaea* (Ach.) Th. Fr.  

(Hasse 1913a; Fink 1935; TJ; Bratt 1993)

=*L. fuscella* for S CA reports

*Lecania syringaea* var. *dimera* (Nyl.) H. Olivier 

(Fink 1935)

=*L. dubitans*

*Lecania syringaea* [var.] *metabolica* Nyl. 

(Hasse 1913b)

= misidentifications for CA (B. Ryan, unpublished data)

*Lecania turicensis* var. *californica* Zahlbr.    
 (Zahlbruckner 1902; Hasse 1903e, 1913b)  
 =[\*L. turicensis\*](#)

## LECANOGRAPHA Egea & Torrente

*Lecanographa aggregata* Egea & Torrente  

(Egea et al. 2004 [as "aff."]; *T. Nash* 33045, Santa Rosa Isl., 0.5 km N of pass adjacent to Black Mtn, Santa Barbara Co., ASU)

*Lecanographa dimelaenoides* (Egea & Torrente) Egea & Torrente  

(Egea et al. 2004; *T. Nash* 32388, Santa Cruz Isl., Santa Barbara Co., ASU; *T. Nash* 38754, San Nicolas Isl., Ventura Co., ASU; Weber [1989a: Univ. Colo. Lich. Exs. 662, Trailer Barranca, W end of Santa Cruz Isl., Santa Barbara Co.])

*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)

**Synonyms:** [\*Opegrapha hassei\*](#), [\*O. hypothallina\*](#) (Tehler 1993c), [\*Platygrapha hypothallina\*](#), [\*Schismatomma hypothallinum\*](#)

*Lecanographa lyncea* (Sm.) Egea & Torrente  

(Egea et al. 2004; *T. Nash* 32955, Santa Rosa Isl., Santa Barbara Co., ASU, determined by Egea & Torrente)

*Lecanographa lynceoides* (Müll. Arg.) Egea & Torrente  

(Egea et al. 2004; *T. Nash* 32738, Santa Barbara Co.: Santa Rosa Isl., ASU, determination by Egea & Torrente)

*Lecanographa subdryophila* (Follmann & Vězda) Egea & Torrente  

(Egea et al. 2004)

## 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)

**Misapplied names:** [\*L. pallida\*](#)

**Note:** This taxon is very similar to [\*L. caesiorubella\*](#), which, however, has larger apothecia and thicker pseudocortex.

*Lecanora albellula* Nyl.  

(Printzen 2001; Ryan, Lumbsch et al. 2004)

**Synonyms:** [\*L. piniperda\*](#) (*B. Ryan* 11273, Espanoza Cyn, Santa Monica Mts, Los Angeles Co., ASU; *B. Ryan* 12545, Eastern Brook Lakes Watershed, Sierra Nevada, Inyo Co., ASU)

*Lecanora albocaesiella* B. D. Ryan & T. H. Nash 

(Ryan, Lumbsch et al. 2004)

*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)

**Synonyms:** [\*L. subfusca\* var. \*allophana\*](#)

*Lecanora argentata* (Ach.) Malme  

(Brodo 1984)

**Synonyms:** [\*L. subfusca\* var. \*argentata\*](#)

*Lecanora argopholis* (Ach.) Ach.  

(Sigal 1989; Ryan & Nash 1991; Ryan, Lumbsch et al. 2004; *B. Ryan* 12645, Eastern Brook Lakes Watershed, Sierra Nevada, Inyo Co., ASU; *T. Nash* 8088, near Westgard Pass, White Mts, Inyo Co., ASU)

**Misapplied names:** [\*L. frustulosa\*](#) (Tuckerman 1882; Herre 1950a)

**Lecanora bicincta** Ramond 

(Ryan, Lumbsch et al. 2004; *B. Ryan* 24483, Herring Creek Rd, Stanislaus Nat. Forest, Tuolumne Co., ASU; *B. Ryan* 25369, edge of Marble Mountain Wilderness, Siskiyou Co., ASU, both determinations by H. T. Lumbsch)

**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.)

**Lecanora boligera** (Norman ex Th. Fr.) Hedl. 

(*S. Tucker* 37698, Plaskett Meadows, Glenn Co., SBBG, determined by C. Printzen)

**Lecanora brattiae** B. D. Ryan & T. H. Nash 

(Ryan, Lumbsch et al. 2004)

**Lecanora cadubriæ** (A. Massal.) Hedl. 

(TJ; Ryan, Lumbsch et al. [2004] for CA north of Sonoran region; *B. Ryan* 11314, Hwy 44, 1 km W of Lassen Volcanic N. P., Shasta Co., ASU; *B. Ryan* 24046, Huckleberry Trail through Kennedy Meadows, edge of Emigrant Wilderness, Tuolumne Co., ASU)

**Synonyms:** [\*Lecidea cadubriæ\*](#) (Hasse 1909; Fink 1935; but Hasse's collections were misidentified *fide* Lowe [1939]); [\*Lecidea ramulicola\*](#) (Magnusson 1952)

**Lecanora caesiorubella** Ach. 

(Hasse 1898a; TJ; Brodo et al. [2001, pp. 376–377, with color photograph]; Ryan, Lumbsch et al. 2004)

**Synonyms:** [\*L. albella\* var. \*cancriformis\*](#), [\*L. caesiorubella\* subsp. \*merrillii\*](#), [\*L. cancriformis\*](#), [\*L. pallida\* var. \*cancriformis\*](#), [\*L. subpallida\*](#)

**Lecanora californica** Brodo 

(Brodo 1984; Brodo et al. [2001, p. 377]; Ryan, Lumbsch et al. 2004)

**Lecanora campestris** (Schaer.) Hue 

(TJ; Brodo 1984; Ryan, Lumbsch et al. 2004)

**Synonyms:** [\*L. subfusca\* var. \*campestris\*](#) (Hasse 1896; McClatchie 1897; Hasse 1898a, 1903a; Orcutt 1907; Herre 1910; Hasse 1913b; Fink 1935; Volk 1963)

**Lecanora carneolutescens** Nyl. 

(Lumbsch et al. 2003; Ryan, Lumbsch et al. 2004)

**Lecanora carpinea** (L.) Vain. 

(Imshaug & Brodo 1966; TJ; Ryan, Lumbsch et al. 2004; Univ. Colo. Lich. Exs. 183, Silverado Cyn, S slope of Santa Ana Mts, Orange Co.)

**Lecanora cenisia** Ach. 

(Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1882, 1884; Orcutt 1885; Eckfeldt 1893; 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)

**Synonyms:** [\*L. atrynea\*](#) (Hasse 1903c), [\*L. atrynea\* var. \*cenisia\*](#) (Herre 1910)

**Lecanora chlarotera** Nyl. 

(Lindsay 1973; TJ; Brodo 1984; Ryan, Lumbsch et al. 2004)

**Synonyms:** *L. rugosella* (TJ; Brodo 1984; 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*])

**Lecanora circumborealis** Brodo & Vitik.  

(Brodo et al. [2001, p. 379, with color photograph]; Ryan, Lumbsch et al. 2004; *B. Ryan* 25757a, N part of Cuyamaca S. P., near Cpgd, San Diego Co., ASU; *B. Ryan* 26197, along Mt. Mooney Rd, San Gabriel Mts, Los Angeles Co., ASU; *B. Ryan* 32014a, China Meadow, Sierra Nat. Forest, Madera Co., ASU)

**Lecanora collatolica** J. W. Thomson & T. H. Nash  

(Thomson & Nash [1976] was not included by TJ; Ryan & Nash 1997; Ryan, Lumbsch et al. [2004] report it only from Kern Co.; intermediates are common between this and *L. mellea*; CA endemic)

**Lecanora comonduensis** T. H. Nash & Hertel  

(Ryan, Lumbsch et al. 2004; *T. Nash* 32170, Parsons Landing near old quarry, Santa Catalina Isl., Los Angeles Co., ASU)

**Lecanora confusa** Almb.  

(Tucker & Bratt 1996; Wright 1997; Printzen 2001; Ryan, Lumbsch et al. 2004; *S. Tucker* 6116B, McKerricher S. P., N of Fort Bragg, Mendocino Co.; *S. Tucker* 28963, Russian Gulch S. P., N of Mendocino, Mendocino Co., SBBG; *C. Bratt* 8561, Ridge Rd at Sauces Gate, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Synonyms:** *L. symmictera f. occidentalis* (synonymy *fide* Ryan, Lumbsch et al. 2004)

**Note:** Śliwa & Wetmore (2000) suggest that *L. confusa* is a non-sorediate 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)

**Lecanora crenulata** Hook.  

(Ryan, Lumbsch et al. 2004; *S. Tucker* 33800, San Nicolas Isl., Ventura Co., SBBG, !Ryan; *T. Nash* 18984, W side of Pinnacles Nat. Monument, San Benito Co., ASU)

**Lecanora demosthenesii** Lumbsch & Messuti 

(Lumbsch et al. 2003; Ryan, Lumbsch et al. 2004)

**Lecanora dispersa** (Pers.) Sommerf.  

(Bratt 1993; Brodo et al. [2001, p. 380, with color photograph]; Robertson 2002c; Ryan, Lumbsch et al. 2004; *B. Ryan* 14817, 16 km NNE of Big Bear Lake Village, San Bernardino Co.; *S. Tucker* 6175D, on sandstone, Blue Rock Springs Park SE of Vallejo, Solano Co., SBBG, determination by B. Ryan; *S. Tucker* 14978, on rock, Del Norte Beach, Del Norte Co., SBBG)

**Lecanora epibryon** (Ach.) Ach.  

(Brodo 1984)

**Lecanora expallens** Ach.  

(Tucker & Bratt 1996; Thomson 1997; Bourell 2000; Ryan, Lumbsch et al. 2004; *T. Nash* 32991, Santa Rosa Isl., Santa Barbara Co., ASU; *S. Tucker* 34019, 34112, near Kyburz, El Dorado Co., SBBG; *S. Tucker* 14957, Samoa Peninsula, Humboldt Co., SBBG; *S. Tucker* 35199, Jughandle State Reserve, Mendocino Co. SBBG; *S. Tucker* 34462, Hastings Natural History Reserve, Monterey Co., SBBG; *S. Tucker* 34242B, Diablo Cyn, San Luis Obispo Co., SBBG)

**Lecanora farinaria** Borrer  

(*T. Tønsberg* TT14688, Del Norte Co., BG; *T. Tønsberg* TT28919, Mendocino Co., BG; mentioned in Brodo [1984] but rare, not reported from CA)

**Lecanora flowersiana** H. Magn.  

(Ryan, Lumbsch et al. 2004)

**Lecanora fugiens** Nyl.  

(Ryan, Lumbsch et al. [2004, as "aff."] report material from Santa Rosa Isl.)

**Lecanora fuscescens** (Sommerf.) Nyl.  

(Sonoran distribution uncertain *fide* Ryan, Lumbsch et al. 2004; *B. Ryan* 25348, along Shackleford Creek, edge of Marble Mountain Wilderness, Siskiyou Co., ASU)

**Synonyms:** [Lecidea fuscescens](#) (Hasse 1909, 1913b; Fink 1935; Lowe 1939; Herre 1942c, 1950a; TJ)

**Lecanora gangaleoides** Nyl.  

(Weber et al. 1987; Brodo 1984; Bowler et al. 1996; Doell 2002; Robertson 2004; Ryan, Lumbsch et al. 2004)

**Lecanora garovaglii** (Körb.) Zahlbr.  

(Ryan & Nash 1993 ["s.l."], 1997; Doell et al. 1999; Brodo et al. [2001, p. 380, with color photograph]; Robertson 2003b; Ryan, Lumbsch et al. 2004 (as subsp. *garovaglii*); *B. Ryan* 26731, 20 mi. NNE of Hollister, Merced Co.; *Parish*, Inyo Co., FH; *E. Weier* 841, Alpine Co., UC; other *E. Weier* collections from Modoc Co., San Bernardino Co., and Siskiyou Co., UC)

**Lecanora garovaglii** (Körb.) Zahlbr. subsp. **cascadensis** (H. Magn.) B. D. Ryan & T. H. Nash 

(Ryan, Lumbsch et al. 2004)

**Synonyms:** [L. cascadensis](#), [L. nevadensis](#)

**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)

**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)

**Lecanora hybocarpa** (Tuck.) Brodo  

(Brodo 1984; Brodo et al. [2001, pp. 381–382, with color photograph]; Ryan, Lumbsch et al. 2004)

**Lecanora hypoptoides** (Nyl.) Nyl.  

(Ryan, Lumbsch et al. [2004, as aff.])

**Lecanora intricata** (Schrad.) Ach.  

(Herre 1950a; Ryan, Lumbsch et al. 2004; *B. Ryan* 32179b, Kerckhoff Lake, Sierra Nat. Forest, Madera Co., ASU)

**Lecanora jamesii** J. R. Laundon  

(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)

**Lecanora latens** Printzen  

(Printzen 2001; Ryan, Lumbsch et al. 2004; CA endemic)

**Lecanora laxa** (Śliwa & Wetmore) Printzen  

(Printzen 2001; Martínez & Aragón 2004; Ryan, Lumbsch et al. 2004)

**Synonyms:** [L. varia subsp. laxa](#) (Śliwa & Wetmore 2000)

**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 melaena** (Hedl.) Fink  

(Herre 1944b; TJ; Ryan, Lumbsch et al. 2004; *T. Nash* 18940, E side of Pinnacles Nat. Monument, San Benito Co., ASU)

**Lecanora mellea** W. A. Weber  

(Weber 1975a: Univ. Colo. Lich. Exs. 462 [type; SE of Sacramento between Sloughhouse and Bridge House, Sacramento Co.]; Weber et al. 1987; TJ; Hale & Cole 1988; Ryan & Nash 1997; Baltzo 1989; Brodo et al. [2001, p. 374]; Ryan, Lumbsch et al. 2004)

**Lecanora meridionalis** H. Magn.  

(Wetmore 1985; Bratt 1999; Ryan, Lumbsch et al. 2004; *B. Ryan* 26411, along Hwy 39 below Crystal Lake, San Gabriel Mts, Los Angeles Co., ASU)

**Lecanora muralis** (Schreb.) Rabenh.  

(Tuckerman 1866; Bolander 1870; Orcutt 1885; Hasse 1895, 1896, 1903a [including *L. muralis* var. *catalinae* Stizenb., a nomen nudum; 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]; Orcutt 1903; 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]; Robertson 2002c; Riefner et al. 2003; Robertson 2003a, 2003b; Ryan, Lumbsch et al. [2004, as s. l.])

**Synonyms:** [\*L. muralis\* var. \*diffracta\*](#), [\*L. saxicola\*](#), [\*L. versicolor\*](#), [\*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 Exper. Forest, Madera Co., ASU)

**Note:** This subspecies occasionally grows side by side with subsp. *muralis* and remains distinct; it occurs sporadically in CA.

**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)

**Note:** The report by Hebert & Meyer is almost certainly based on misidentifications *fide* T. Nash.

**Lecanora orizabana** Vain.  

(Lumbsch et al. 2003; Ryan, Lumbsch et al. 2004; *B. Ryan* 26206b, 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; Weber et al. 1987; TJ; Brodo 1984; 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)

**Note:** This taxon needs further study; many records needs to be verified.

**Lecanora peltastictoides** Hasse  

(Hasse 1914; TJ; Knudsen 2003c and color photograph on back cover of CALS Bulletin 10[2])

**Note:** This species probably belongs in *Aspicilia* *fide* Knudsen (2003c).

**Lecanora phaedrophthalma** Poelt var. **phaedrophthalma** 

(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; known only from type from Santa Catalina Isl.; CA endemic)

**Synonyms:** [\*Biatora phaeophora\*](#) (Hasse 1896; McClatchie 1897; Hasse 1903b; Orcutt 1909), [\*Lecidea phaeophora\*](#) (Hasse 1897, 1898a, 1913b; Merrill 1923; Fink 1935)

**Lecanora phryganitis** Tuck.  

(Tuckerman 1866, 1872; Bolander 1870; Tuckerman 1882; Hulting 1896; Herre 1906, 1907, 1910; Fink 1935; Lamb 1939; Herre 1945; TJ; Ryan 1989b; West & Doell 1995; Riefner, Bowler, & Ryan 1995; Magney 1999; Brodo et al. [2001, pp. 385–386, with color photograph]; Univ. Colo. Lich. Exs. 475, Point Reyes, Marin Co.; CA endemic)

**Synonyms:** [\*Polycauliona phryganitis\*](#) (Hue 1909a, 1909b)

**Lecanora pinguis** Tuck.  

(Tuckerman 1864, 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1882; Herre 1907; Hasse 1910a; Herre 1910; Hasse 1913b; Fink 1935; Herre 1945; Volk 1963; TJ; Ryan 1989b; von Reis 1991; McGee 1995; Brodo et al. [2001, p. 386, with color photograph]; Baltzo 2002; CA endemic)

**Note:** This taxon does not occur in Sonoran region of CA, so reports such as those by Hasse are open to question; they may be misidentifications of [\*L. xanthosora\*](#) fide Ryan, Lumbsch et al. 2004.

**Lecanora plumosa** Müll. Arg.  

(Ryan, Lumbsch et al. 2004)

**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)

**Synonyms:** [\*Lecanora varia\* var. \*illusoria\*](#), [\*L. varia\* var. \*polytropa\*](#)

**Lecanora pringlei** (Tuck.) I. M. Lamb  

(Lamb 1939; TJ; Ryan, Lumbsch et al. [2004, as subsp. *pringlei*])

**Synonyms:** [\*Lecidea pringlei\*](#) (Tuckerman 1883a, 1888)

**Lecanora pseudargentata** Lumbsch  

(Ryan, Lumbsch et al. 2004)

**Lecanora pseudistera** Nyl.  

(Ryan, Lumbsch et al. 2004; *B. Ryan* 26585, San Gabriel Wilderness, S-facing slope of Waterman Mtn, Los Angeles Co., ASU; *B. Ryan* 32109, Brown's Creek, Sierra Nat. Forest, Madera Co., ASU)

**Lecanora pseudomellea** B. D. Ryan  

(Ryan & Nash 1993; Ryan, Lumbsch et al. 2004; *B. Ryan* 23316, Bayview Cpgd, SW of Emerald Bay, El Dorado Co., ASU)

**Note:** [\*L. pseudomellea\*](#) is found mainly in north-central CA and northward. According to Ryan & Nash (1993), the name [\*L. cascadensis\*](#) has sometimes been misapplied to *L. pseudomellea* as well as to [\*L. sierrae\*](#).

**Lecanora pulicaris** (Pers.) Ach.  

(Brodo 1984; Sigal 1989; Ryan, Lumbsch et al. 2004; *T. Nash* 11317, Sequoia Nat. Forest, Tulare Co., ASU)

**Synonyms:** [\*L. chlarona\*](#), [\*L. coilocarpa\*](#), [\*L. subfusca\* var. \*chlaronae\*](#), [\*L. subfusca\* var. \*coilocarpa\*](#) Ach. (synonymy fide Esslinger & Egan 1995)

**Lecanora reagens** Norman  

(*C. Bratt* 6083, W of Summit at Sonora Pass, Tuolumne Co., SBBG, determination by E. Timdal)

**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; many collections need verification)

**Synonyms:** [\*L. rugosa\*](#) (synonymy fide Zahlbruckner 1928, p. 527), [\*L. sordida\*](#) (synonymy fide

Zahlbruckner 1928, p. 527)

**Lecanora saligna** (Schrad.) Zahlbr.  

(Wetmore 1985; Ryan & Nash 1991; Śliwa & Wetmore 2000; Printzen 2001; Ryan, Lumbsch et al. 2004; *T. Nash 11316*, Sequoia Nat. Forest, Tulare Co.; *B. Ryan 26475*, San Gabriel Wilderness, Los Angeles Co., ASU)

**Synonyms:** *L. effusa* (synonymy *fide* Esslinger & Egan 1995)

**Lecanora semitensis** (Tuck.) Zahlbr.  

(Tuckerman 1877 [*L. semitensis* Tuck. “subsp. nov.” with the species implied to be, but not explicitly stated to be, *L. saxicola*]; Zahlbruckner [1928, p. 661]; Fink 1935; Herre 1945 [Sierra Nevada]; TJ; Ryan, Lumbsch et al. 2004; *B. Ryan 24350*, SW of Fraser Flat, Tuolumne Co., ASU; *B. Ryan 25781*, Agua Tibia Wilderness, San Diego Co., ASU, SBBG; *C. Wetmore 51186*, Sequoia N. P., Tulare Co., MIN)

**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; *L. cascadensis* auct. non H. Magn. has been misapplied to *L. sierrae* [Ryan & Nash 1993])

**Lecanora stenotropa** Nyl.  

(Ryan, Lumbsch et al. 2004)

**Lecanora strobilina** (Spreng.) Kieff.  

(Giralt & Gómez-Bolea 1991; Śliwa & Wetmore 2000; Printzen 2001; Tucker 2002; Ryan, Lumbsch et al. 2004; *S. Tucker 34394*, on cultivated *Cedrus*, Lotusland estate, Montecito, Santa Barbara Co., SBBG, identification by C. Printzen, also on *Quercus agrifolia* and *Olea europaea* at same location)

**Misapplied names:** *L. strobilina* (*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; Bowler et al. 1996; Ryan, Lumbsch et al. 2004; *C. Bratt 6259*, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Lecanora subintricata** (Nyl.) Th. Fr.  

(Printzen 2001)

= possible misidentifications for CA reports *fide* Ryan, Lumbsch et al. 2004

**Lecanora subrugosa** Nyl.  

(Brodo 1984; Ryan, Lumbsch et al. 2004; *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 substrobilina** Printzen  

(Printzen 2001; Ryan, Lumbsch et al. 2004; *B. Ryan 31415*, 0.5 km below pass adjacent to Black Mtn, Santa Rosa Isl., Santa Barbara Co., SBBG, identified by 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; not reported from CA in Śliwa & Wetmore 2000 but shown for CA in Brodo et al. 2001)

**Synonyms:** *L. symmicta* var. *saepincola*, *L. symmicta* (as “*simmictica*”) (Hasse 1903a), *L. varia* var. *saepincola*, *L. varia* var. *symmicta*, *Lecidea symmicta*

**Lecanora utahensis** H. Magn.  

(Ryan, Lumbsch et al. 2004)

**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)

**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 North American collection that he had seen, and that it might possibly be mislabelled 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)

**Lecanora viriduloflava** de Lesd.  

(Ryan, Lumbsch et al. 2004)

**Lecanora xanthosora** B. D. Ryan & Poelt  

(Ryan 1989b; Bowler et al. 1996; Ryan, Lumbsch et al. 2004)

**Misapplied names:** *L. pinguis* (collections from south of San Luis Obispo Co. are misidentified and are probably *L. xanthosora*)

**Lecanora zosterae** (Ach.) Nyl.  

(Ryan, Lumbsch et al. 2004)

**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, as *L. aterrima* (Anzi) in *Squamaria* sect., in which Zahlbruckner (1928) placed taxa now in sect. *Placodium* as well as *Lobothallia*]; on rock, spores said to be 8:nae, simple, and colorless, but referent not known; no known connection with *L. aterrima* (Fée) Zahlbr., a Brazilian species on rock; 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.]; 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)

=[Rinodina atrocinerea](#), but misidentifications for CA

*Lecanora atrynaea* (Ach.) Röhl.  

(Hasse 1903c)

=[L. cenisia](#)

*Lecanora atrynaea* 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; 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* Ach. 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)

=[L. caesiorubella](#) (Lumbsch et al. [1997] regard most subspecies of *L. caesiorubella* as chemical variants only)

*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)

=[Aspicilia calcarea](#), but misidentifications for CA, since unlike European material

*Lecanora calcarea* var. *contorta* Nyl.  

(McClatchie 1897; Hasse 1898a, 1903e; Herre 1910)

=[Aspicilia contorta](#), but misidentifications for CA, since unlike European material

*Lecanora callopisma* (Ach.) Merat.  

(Hasse 1898a)

=[Caloplaca callopisma](#), but misidentification for North America

*Lecanora cancriformis* (Hoffm.) Vain.  

(Merrill 1923)

=[L. caesiorubella](#)

*Lecanora cascadiensis* H. Magn.  

(Weber 1975b; TJ)

=[L. garovaglii subsp. cascadiensis](#)

**Note:** The name *L. cascadiensis* has sometimes been misapplied to [\*L. sierrae\*](#) and [\*L. pseudomellea\*](#) (Ryan & Nash 1993).

*Lecanora catalinae* B. D. Ryan ined.

[sensu pre 1998]

=[\*L. muralis\*](#)

*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* Ach. var. *thamnina* Tuck. 

(Tuckerman 1872)

=[\*Acarospora thamnina\*](#)

*Lecanora chlarona* (Ach.) Nyl.  

(TJ)

=[\*L. pulicaris\*](#)

*Lecanora chlorophana* (Wahlenb.) Ach.  

(TJ for references)

=[\*Pleopsidium chlorophanum\*](#) (but CA records at least part are misidentifications)

*Lecanora chrysoleuca* (Sm.) Ach.  

(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\*](#)

*Lecanora cinereorufescens* (Ach.) Hepp  

(Herre 1942a, 1950a; TJ)

=[\*Bellemera 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; Univ. Colo. Lich. Exs. 180, Cameron Park, El Dorado Co., but name misapplied to *L. confusa* fide Weber [1981]; name not mentioned for S CA by Ryan, Lumbsch et al. 2004)

*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\*](#)

*Lecanora contorta* (Hoffm.) J. Steiner  

(Herre 1942a, 1942c, 1950a; TJ)

=[\*Aspicilia contorta\*](#)

*Lecanora demissa* (Körb.) Zahlbr.  

(Weber et al. 1987; Bowler et al. 1996; Tucker & Bratt 1996 [citing B. Ryan collection]; Arup & Grube 1999 [proposed transfer to *Caloplaca*]; Robertson 2004)

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

*Lecanora diffracta* Ach.  

(Fink 1935; TJ)

= part of *L. muralis* complex (but many CA records 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)

=[\*L. populicola\*](#) (Hasse 1898a; McClatchie 1897; Hasse 1913b [latter two as *L. subfusca* var. *distans*])

**Note:** Hasse's record may have been based on a misidentification, since the species was not mentioned in Ryan, Lumbsch et al. (2004). TJ listed *L. distans* under *L. subfusca* in error.

*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.) Mudd  

(Herre 1944b) misidentifications fide B. Ryan

*Lecanora erysibe* var. *sincerior* Nyl.  

(Hasse 1898a, 1903a; all CA and other North American collections appear to be misidentifications fide B. Ryan)

*Lecanora erythrantha* Tuck.  

(Fink 1935 [as "erythantha"])

=[\*Caloplaca erythrantha\*](#) (fide Zahlbruckner 1931; probable misidentification for CA, since this is a tropical species)

*Lecanora exigua* (Ach.) Röhl.  

(Hue 1895; 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 North American 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 1907)

=[Acarospora oligospora](#)

*Lecanora fuscata* var. *rufescens* (Ach.) Tuck. 

(Tuckerman 1882)

=[Acarospora smaragdula](#)

*Lecanora fuscoatra* Nyl.  

(Hasse 1898a)

=[Caloplaca viridirufa](#) (Ach.) Zahlbr., a European species, probably a misidentification for CA collections.

*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](#)

*Lecanora gibbosula* H. Magn.  

(Thomson & Ketchledge 1958 [as "cf."]; Baltzo 1970 ["sensu Herre"]; TJ)

=[Aspicilia gibbosa](#)

*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; Willey 1873a; Tuckerman 1882; Fink 1935),

=[Pertusaria glaucomela](#)

*Lecanora glaucophana* Nyl. ex Hasse  

(Hasse 1898a; TJ)

=[Rhizoplaca glaucophana](#)

*Lecanora glaucopsisina* Nyl. ex Hasse  

(Tuckerman 1872; Hasse 1898a; Zahlbruckner 1902; Hasse 1913b; Fink 1935)

=[Aspicilia glaucopsisina](#)

*Lecanora gyalectodes* Nyl.  

(Nylander 1900; Hasse 1903c)

=[Topelia gyalectodes](#)

*Lecanora hallii* (Tuck.) Hasse 

(Hasse 1898a)

=[Rinodina hallii](#)

*Lecanora holophaea* (Mont.) Nyl.  

(Hasse 1898a; Fink 1935)

=[Solenopsora 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](#), but misidentifications?

**Note:** According to Brodo et al. (2001, p. 363, with color photograph), the range of *I. lacustris* is along Pacific Coast S to Oregon; this discrepancy regarding range is discussed by Tucker (2002).

*Lecanora laevata* (Ach.) Nyl.  

(Hasse 1898a, 1903a, 1913b; Merrill 1923; Herre 1942c; Thomson & Ketchledge 1958; Volk 1963;

Baltzo 1970; TJ)

=[Aspicilia laevata](#)

*Lecanora lusca* Nyl. f. *lignicola* (Ach.) Zahlbr. 

(Hasse 1914)

=[Aspicilia gibbosa](#)

*Lecanora marginalis* Hasse  

(Hasse 1910b, 1913b; Fink 1935; TJ)

=[Rhizoplaca marginalis](#)

*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 microphyllina* (Tuck.) Hue  

(Hue 1895)

=[Caloplaca microphyllina](#)

*Lecanora mniaraea* Ach.  

(Hasse 1898a)

=[Rinodina mniaraea](#)

*Lecanora mniaroeiza* Nyl.  

(Hue 1891; TJ)

=[Rinodina mniaroeiza](#)

*Lecanora muralis* var. *diffracta* (Ach.) Rabenh.  

(TJ; CA reports are mostly [L. mellea](#))

*Lecanora muralis* var. *semitensis* (Tuck.) Tuck. 

(Tuckerman 1882)

=[L. semitensis](#)

*Lecanora murorum* Ach.  

(Hasse 1898a)

=[Caloplaca saxicola](#)

*Lecanora murorum* subsp. *tegularis* Ach. 

(Hasse 1898a)

=[Caloplaca saxicola](#)

*Lecanora mutabilis* (Ach.) Nyl. non Sommerf.  

(Herre 1942c)

=[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; B. Ryan 14863, 14866, Death Valley Nat. Monument, Inyo Co., ASU)

=[L. garovaglii](#) (synonymy in 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)

=[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; Hasse 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 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.*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. E. Hasse* Exs. 126 [as *Lecanora phaeobola* Tuck.], Mill Creek Cyn, San Bernardino Range, 1901 [*ex* Herb. Hasse, MIN])= *Protoparmelia ochrococca**Lecanora piniperda* Körb.  

(Brodo et al. 2001)

= *L. albella* *fide* Printzen [2001] and Ryan, Lumbsch et al. [2004]*Lecanora populicola* (DC.) Duby  **Synonyms:** *L. distans*, *L. subfusca* var. *distans***Note:** These reports are questionable; no material of *L. populicola* has been seen from CA *fide* Ryan, Lumbsch et al. (2004).*Lecanora praecrenata* Nyl.  

(Hasse 1898a, 1898b, 1913b; Fink 1935)

**Note:** the large (20 µm) globular spores occurring fewer than 8 per ascus suggest that this probably belongs in *Aspicilia*. The type material (in H-Nyl) needs to be examined.*Lecanora pringlei* subsp. *brandegeei* (Tuck.) B. D. Ryan (published reports by Hasse, McClatchie, and Orcutt from S CA are based on misidentifications *fide*

Ryan, Lumbsch et al. 2004)

**Synonyms:** [Lecidea brandegeei](#) (Hasse 1895; McClatchie 1897; Hasse 1898a; Orcutt 1903, 1907; Fink 1935)

*Lecanora privigna* (Ach.) Nyl. var. *clavus* (Th. Fr.) Tuck.  (Tuckerman 1882; McClatchie 1897)

=[Sarcogyne clavus](#)

*Lecanora privigna* (Ach.) Nyl. var. *pruinosa* Tuck.  (TJ for references)

=[Sarcogyne regularis](#) for CA reports

*Lecanora pyracea* (Ach.) Nyl.   (Hasse 1898a)

=[Caloplaca holocarpa](#)

*Lecanora reagens* (Zahlbr.) Hasse non Norman   (Hasse 1903e)

=[Acarospora reagens](#)

*Lecanora rediunta* Stizenb.  

(Stizenberger 1895; Hasse 1896, 1897; McClatchie 1897; Orcutt 1909)

=[Schismatomma rediunta](#)

*Lecanora roboris* Nyl.   (Hasse 1898a, 1903d)

=[Rinodina roboris](#), but misidentifications for CA

*Lecanora rubina* (Vill.) Ach.  

(Tuckerman 1882; Hasse 1905, 1913b; Herre 1942a, 1945, 1950a)

=[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. rupicola](#) (synonymy *fide* Zahlbruckner [1928, p. 527])

*Lecanora rugosella* Zahlbr.  

(TJ; Brodo 1984)

=[L. chlarotera](#) (synonymy *fide* Ryan, Lumbsch et al. 2004)

*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 [misidentifications])

*Lecanora saxicola* var. *semitensis* Tuck. 

(Tuckerman 1877; Hasse 1898a [as *L. saxicola semitensis*], 1913b; Herre 1910)

=[\*L. semitensis\*](#), but Herre's and most other CA records are probably misidentifications

*Lecanora schleicheri* (Ach.) Nyl.  

(TJ for references)

=[\*Acarospora schleicheri\*](#)

*Lecanora scotopholis* (Tuck.) Timdal  

(Sigal 1989; Tucker & Bratt 1996)

=[\*Miriquidica scotopholis\*](#) (synonymy in Nash, Kainz et al. 2004)

*Lecanora simplex* (Davies) Nyl.  

(Hasse 1898a)

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

*Lecanora simplex* f. *complicata* Cromb.  

(Hasse 1903e, 1906)

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

*Lecanora smaragdula* (Wahlenb.) Nyl.  

(Hasse 1898a)

=[\*Acarospora smaragdula\*](#)

*Lecanora sophodes* Ach.  

(Hasse 1898a)

=[\*Rinodina sophodes\*](#), but misidentifications for North America

*Lecanora sophodopsella* Nyl.  

(Hasse 1898a, but not in Hasse [1913b] or 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\*](#)

*Lecanora sordida* var. *bicincta* (Ramond) Th. Fr.  

(Hasse 1908b)

=[\*L. bicincta\*](#)

*Lecanora spodophaeiza* Nyl.  

(Hasse 1903a, 1903e; Fink 1935; TJ)

=[\*Lecania spodophaeiza\*](#) (but CA specimens almost certainly are misidentifications)

*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.  

(Hasse 1897, 1898a)

=[\*Acarospora stenospora\*](#) (Stizenb.) Hue

**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.  

(Hasse 1898a)

=[Lecania subdispersa](#) sensu B. D. Ryan, non Hasse (van den Boom & Ryan 2004)

*Lecanora subfusca* (L.) Ach.  

(TJ for references; Hale & Cole 1988)

=[L. allophana](#) and other species of *Lecanora*

*Lecanora subfusca* var. *allophana* Ach.  

(Orcutt 1903; Hasse 1905; Orcutt 1903, 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; Hasse 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 subolivascens* Nyl.  

(Nylander 1900; TJ)

=[Caloplaca demissa](#) (synonymy in Esslinger 2004b)

*Lecanora subpallida* G. Merr.  

(Evans 1927; TJ)

=*L. caesiorubella* subsp. *prolifera* (synonymy *fide* Esslinger 2004b, but no other reports of this subspecies have been made for CA)

*Lecanora subpyraceella* Nyl.  

(Hasse 1897, 1898a; Nylander 1900)

=[Caloplaca subpyraceella](#)

*Lecanora supertegens* (Arnold) Zahlbr.  

(Sigal & Toren 1976; TJ)

=[Aspicilia supertegens](#)

*Lecanora symmicta* var. *saepincola* (Ach.) Th. Fr.  

(TJ)

=[Lecanora symmicta](#)

*Lecanora symmicta* f. *occidentalis* Zahlbr.  

(Hasse 1903a)

=[L. confusa](#)

*Lecanora syringaea* 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; TJ)

=[\*Cladidium bolanderi\*](#)

*Lecanora thamnoplaca* Tuck.  

(Tuckerman 1884; Hasse 1911a, 1912; Fink 1935; Herre 1945; TJ)

=[\*Lobothallia alphoplaca\*](#)

*Lecanora thelococcoides* Nyl.  

(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. *saepincola* (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)

= misidentification of [\*Ophioparma rubricosa\*](#)

*Lecanora verrucosa* (Ach.) Lauer  

(Tuckerman 1872; Willey 1873a; Tuckerman 1882; Fink 1935; TJ)

=[\*Megaspora verrucosa\*](#)

*Lecanora versicolor* (Pers.) Ach.  

(TJ)

=[\*L. muralis\*](#)

*Lecanora vitellina* (Hoffm.) Ach.  

(Hasse 1898a)

=[\*Candelariella vitellina\*](#) (synonymy *fide* Zahlbruckner 1928, p. 804)

*Lecanora xanthophhana* Nyl.  

(TJ for references)

=[\*Acarospora xanthophhana\*](#)

**LECIDIA** Ach.**Lecidea aitema** Ach.  (Herre 1944b [*C. L. Brown*, Marin Co.]; TJ)**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 &amp; Ketchledge 1958; Volk 1963; Baltzo 1970; Sigal 1975; TJ; Hale &amp; Cole 1988; Baltzo 1989; Sigal 1989; von Reis 1991; Tucker &amp; 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]; Robertson 2003a, 2003b; Blauman 2004; Hertel &amp; Printzen 2004; many collections are misidentifications)

**Lecidea atrobrunnea** subsp. **atrobrunnea**  

(Hertel &amp; Printzen 2004)

**Lecidea atrobrunnea** subsp. **saxosa** Hertel & Leuckert 

(Hertel &amp; Printzen 2004)

Synonyms: [\*Lecidea syncarpa\*](#)**Lecidea atrobrunnea** subsp. **stictica** Hertel & LeuckertSynonyms: [\*L. protabacina\*](#) (*fide* Hertel & Printzen [2004])**Lecidea auriculata** Th. Fr.  

(Hasse 1898a, 1905; Herre 1907; Fink 1935; Lowe 1939; Thomson &amp; Ketchledge 1958; Volk 1963; TJ; Hale &amp; Cole 1988; von Reis 1991; Bratt 1997 [as "cf."]; Robertson 2003b)

Synonyms: [\*Lecidea sarcogyniza\*](#)Note: According to Hertel & Printzen (2004), *L. auriculata* is not reported for S CA; most reports are from central or N CA.**Lecidea berengeriana** (A. Massal.) Nyl.  (Thomson 1979; Hertel & Printzen 2004; *J. Robertson* 425b, Jasper Ridge Biological Preserve, on sandstone outcrop along Short Creek Trail, San Mateo Co.)Synonyms: [\*Mycobilimbia berengeriana\*](#) (synonymy in Hertel & Printzen 2004)**Lecidea brodoana** Hertel & Leuckert 

(Hertel &amp; Printzen 2004; CA endemic)

**Lecidea californica** Zahlbr.  

(Zahlbruckner 1925; Magnusson 1935b; TJ)

Synonyms: [\*L. bullata\*](#) (Hasse 1912)**Lecidea carnulenta** (Tuck.) Fink  (Herre 1942c [on *Acacia* bark, LaVeaga Park, Santa Cruz, Santa Cruz Co.]; TJ; Herre's report needs verification; Printzen [1995] questioned taxonomic placement for this species)**Lecidea cascadiensis** H. Magn.  (Hill 1997 [as "?"]; *T. E. Weier* 647, north bank Cosumnes River, Hsu Bridge SR49. E El Dorado Co., UC, SBBG; determined by W. A. Weber)**Lecidea caulophylla** (Tuck.) Zahlbr.  

(Zahlbruckner 1925; Herre 1942a, 1950a; TJ)

Synonyms: [\*Biatora caulophylla\*](#), [\*Psora caulophylla\*](#)Note: According to Esslinger (2004b) and G. Schneider (1980), this species belongs in *Lecanora*. According to B. Ryan (unpubl. study), the type collection is fragmentary, and the taxonomic status and position of the taxon is uncertain.**Lecidea chalybeiza** Nyl.  Synonyms: [\*L. cyrtidia\*](#) (Hasse 1903a; Herre 1944a)

**Lecidea cinerata** Zahlbr.  

(Zahlbruckner 1900; Hasse 1903e, 1913b; Fink 1935; Magnusson 1935b; C. Culberson & Hertel 1972; TJ; Hertel & Printzen 2004; CA endemic)

**Lecidea confluens** (Weber) Ach.  

(Thomson 1997)

**Lecidea cruciaria** Tuck.  

(Orcutt 1903; Herre 1910; Hertel & Printzen 2004)

**Lecidea diducens** Nyl.  

(Hasse 1913b; TJ; Robertson 2003b; Hertel & Printzen 2004; *B. Ryan* 26172a, along Mt. Mooney Rd, San Gabriel Mts, Los Angeles Co., ASU)

**Synonyms:** [\*L. auriculata\* var. \*diducens\*](#) (Hasse 1908b; Herre 1910, 1950a; Volk 1963)

**Lecidea dolodes** Nyl.  

(Hasse 1897; McClatchie 1897; Hasse 1903e; Fink 1935; TJ; *T. Nash* 7996, S of Pinecrest, Tuolumne Co., ASU; W. A. Weber, Univ. Colo. Lich. Exs. 478, Cpgd above Bullard Bar Dam, Yuba Co., ASU; CA endemic)

**Note:** This species was not reported for S CA by Hertel & Printzen (2004).

**Lecidea enalla** Nyl.  

**Synonyms:** [\*L. myriocarpella\*](#) (*B. Ryan* 27097, Hastings Natural History Reserve, Monterey Co., ASU; synonymy *fide* Printzen 1995)

**Lecidea erythrophaea** Flörke ex Sommerf.  

(Lowe 1939; TJ; Hertel & Printzen [2004] have seen no CA collections dated later than 1915)

**Lecidea fuscatoatra** Nyl.  

(Hasse 1898a, 1913b; Fink 1935; Magnusson 1935b; TJ; Baltzo 1989; von Reis 1991; name not in Zahlbruckner [1925])

**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)

**Synonyms:** [\*L. fumosa\*](#) (Herre 1910 [possible misidentification, see under [\*L. fumosa\*](#)]; Hasse 1913b; Merrill 1923), [\*L. grisella\*](#) (Herre 1910; Fink 1935; Weber et al. 1987), [\*Buellia fuscoatra\*](#) (L.) Fr.

(Hasse 1903f), [\*Lecanora fuscoatra\*](#) (Hasse 1898a; spores said to be one-celled)

**Lecidea fuscoatrina** Hertel & Leuckert 

(Hertel & Printzen 2004)

**Lecidea hassei** Zahlbr.  

(Zahlbruckner 1912b; Hasse 1913b; Fink 1935; Magnusson 1935b; TJ; Robertson 2003b; Hertel & Printzen 2004; *B. Ryan* 25797, along Magee Palomar Trail near Eagle Crag, Agua Tibia Wilderness, San Diego Co., ASU; CA endemic)

**Synonyms:** [\*L. antoniensis\*](#) (Magnusson 1935b)

**Lecidea holopolia** (Tuck.) Zahlbr.  

(Hasse 1915b; Fink 1935; TJ; Hertel & Printzen 2004; *B. Ryan* 26190, San Gabriel Mts, Los Angeles Co., ASU)

**Synonyms:** [\*Biatora holopolia\*](#) (Hasse 1905)

**Lecidea kingmanii** (Hasse) Hertel & S. Ekman 

(Hertel & Printzen 2004; known only from type in San Gabriel Mts; CA endemic)

**Synonyms:** [\*Bacidia kingmanii\*](#)

**Lecidea laboriosa** Müll. Arg.  

(Hertel 1997; Hertel & Printzen 2004)

**Synonyms:** *L. sanctae-monicae*, *L. violascens* (synonymy *fide* K. Knudsen)

**Lecidea lapicida** (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* Nyl., *L. lapicida* var. *declinans* Nyl., *L. lapicida* var. *declinascens* Nyl. (Hasse 1896; Orcutt 1903), *L. polycarpa* (Hasse 1908b)

**Note:** According to Hertel & Printzen (2004) this taxon is expected at highest elevations in Sonoran region. R. Anderson (1964) doubted the Herre report, but Rambold found the taxon common in western U. S. *fide* B. Ryan.

**Lecidea lapicida** var. **lapicida**  

(Robertson 2003b)

**Lecidea lapicida** var. **pantherina** Ach.  

**Synonyms:** *L. pantherina* (Hertel 1973, retained it as a variety but did not cite CA), *L. variegata* Fr. (Hasse 1898a, 1905)

**Lecidea leucothallina** Arnold  

(Ryan & Nash 1991; B. Ryan 11030, Eastern Brook Lakes Watershed, Sierra Nevada, Inyo Co., ASU)

**Lecidea lithophila** (Ach.) Ach.  

(Herre 1910; Hasse 1913b; Fink 1935; TJ)

**Synonyms:** *L. pruinosa* (Fink 1935)

**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)

**Synonyms:** *L. atrolutescens* Nyl. (Hasse 1898a)

**Lecidea mutabilis** Fée  

(Hasse 1915b; Fink 1935; TJ)

**Synonyms:** *Biatora mutabilis* (Hasse 1903e)

**Lecidea nylanderi** (Anzi) Th. Fr.  

(Lowe 1939; TJ)

**Synonyms:** *Biatora nylanderi* (Hasse 1903e, 1906)

**Lecidea pacifica** Herre  

(Herre 1910; Fink 1935; Magnusson 1935b; TJ)

**Lecidea paddensis** (Tuck.) Zahlbr.  

(Sigal & Toren 1976; TJ)

**Lecidea perlatolica** Hertel & Leuckert 

(Hertel & Printzen 2004)

**Misapplied names:** *L. protabacina* (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])

**Synonyms:** *L. latypea*, *Buellia parasema* var. *latypea*

**Lecidea plebeja** Nyl.  

(Jordan 1968; Lindsay 1973 [on *Cupressus*]; TJ; Baltzo [2002, repeating Jordan's report])

**Synonyms:** *L. myriocarpoides* (Hasse 1913b; synonymy in Weber & Wittman 1992)

**Lecidea pycnocarpa** (Körb.) Ohlert  

(Hasse 1906; TJ)

**Lecidea schizophelta** Hertel & Leuckert 

(Hertel & Printzen 2004)

**Lecidea silacea** Ach.  

(Herre 1912b; TJ)

**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]; Riefner et al. 2003; Robertson 2003a, 2003b; Hertel & Printzen 2004)

**Synonyms:** [L. pavementans](#), [L. spilota](#)

**Lecidea torquens** Müll. Arg.  

(B. Ryan 12542, Eastern Brook Lakes Watershed, Sierra Nevada, Inyo Co., ASU; belongs in *Lecanora* fide Printzen 1995)

**Lecidea truckeei** Herre  

(Herre 1945; TJ; also in Nevada [Herre 1911a])

**Lecidea varians** Ach.  

(Hasse 1898a, 1913b; Herre 1944b; TJ; Hertel & Printzen 2004)

**Synonyms:** [Biatora varians](#) (Hasse 1896; McClatchie 1897; Orcutt 1903, 1907), [Pyrrhospora varians](#) (Tucker 2002; Baltzo 2004)

**Lecidea xanthococcoidea** Zahlbr.  

(Zahlbruckner 1900; Hasse 1913b [as *xanthococcoides*]; Fink 1935 [as *xanthococcoides*]; TJ; CA endemic)

**Synonyms:** [Biatora xanthococcoidea](#) (Hasse 1903e [as *xanthococci*])

**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 aliena** Nyl.  

(Nylander 1858; Hue 1891; Hasse 1898a)

=[Buellia oidalea](#) fide Hasse (1898a, p. 15)

**Lecidea aliena** Nyl. var. *pulchella* Schrad. 

(Hasse 1898a)

=[Catolechia wahlenbergii](#)

**Lecidea alpestris** Sommerf.  

(Hasse 1898a; probably 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 CA collected by Hasse] by Hertel & Printzen [2004])

*Lecidea amylacea* Ach. (nom. illeg.)  

(Fink 1935; TJ)

= *Lecanora marginata*

**Note:** According to Hertel & Rambold (1985), Fink's report of *Lecidea amylacea* from CA was probably based on a misidentification.

*Lecidea aniptiza* Stirz.  

(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 apud Sm.  

(Tuckerman 1888; Hasse 1896; McClatchie 1897; Hasse 1898a, 1903b; Orcutt 1903, 1907)

= [\*Toninia aromatica\*](#)

*Lecidea arthoniza* Nyl. apud Hasse  

(Hasse 1898a)

= [\*Arthonia intexta\*](#) Almq.

*Lecidea assimilata* Nyl.  

(Hasse 1915b; Fink 1935; TJ)

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

*Lecidea atroalbula* Zahlbr.  

(Hasse 1898a)

= *Rhizocarpon simillimum*

**Note:** The identity of this taxon is uncertain. Ozenda & Clauzade (1970, p. 422) grouped it with *Rhizocarpon simillimum*, but that species was not recorded for CA by Feuerer & Timdal (2004, p. 465). In TJ, *L. atroalbula* was confused with *L. atroalbella* Nyl., which = [\*Buellia aethalea\*](#).

*Lecidea atrolutescens* Nyl.  

(Hasse 1898a; Fink 1935)

= [\*L. mannii\*](#)

*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.  

(Magnusson 1935b)

**Misapplied names:** *L. subplebeja* Nyl. ex Hasse non Vain. (Hasse 1897, 1903e)

= [\*Mycobilimbia austrocalifornica\*](#)

**Note:** *L. subplebeja* Nyl. ex Hasse, a Brazilian species, was erroneously listed by TJ as the correct name; the correct spelling of this latter is *L. subplebeia*.

*Lecidea bolacina* (Tuck.) Hasse 

(Hasse 1898a)

=*Buellia bolacina**Lecidea botryosa* (Fr.) Th. Fr.  

(Lowe 1939)

=*Hertelidea botryosa**Lecidea brandegeei* Tuck.  

(Hasse 1895; McClatchie 1897; Hasse 1898a; Orcutt 1903, 1907; Fink 1935)

=*Lecanora pringlei* subsp. *brandegeei* (published reports by Hasse, McClatchie, Orcutt, and Fink from S CA are based on misidentifications *fide* Ryan, Lumbsch et al. 2004)*Lecidea bullata* Hasse  

(Hasse 1912)

=*L. californica**Lecidea cadubriae* (A. Massal.) Nyl.  

(Hasse 1909; Fink 1935; Herre 1942c; TJ)

=*Lecanora cadubriae* (Hasse's collection was misidentified *fide* Lowe [1939], but others are correctly identified)*Lecidea caeruleonigricans* (Lightf.) Schaer.  (McClatchie 1897; Herre [1907], who omitted the authority here but later cited the same collection as *Toninia caeruleonigricans* (Lightf.) Th. Fr.)=*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 cinnabarina* Sommerf.  

(Riddle 1918; Fink 1935; Herre 1942c; TJ)

=*Pyrrhospora cinnabarina**Lecidea coarctata* (Turner ex Sm.) Nyl.  (Hasse 1898a; Herre [1910, including f. *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**Lecidea colludens* Nyl.  

(Hasse 1898a)

=*Rhizocarpon hochstetteri*, but probably misidentifications for CA*Lecidea contigua* Fr.  

(Orcutt 1909)

=*Porpidia macrocarpa**Lecidea crenata* (Taylor) Stizenb.  

(Hasse 1898a, 1913b)

=[Psora crenata](#)

*Lecidea cumulata* Sommerf.  

(Hasse 1895; Orcutt 1903, 1907)

=[Toninia cumulata](#), but excluded from *Toninia*; misidentifications for North America

*Lecidea cyrtella* Ach.  

(Hasse 1898a)

=[Lecania cyrtella](#)

*Lecidea cyrtidia* Tuck.  

(Hasse 1903e; Herre 1944b)

**Note:** R. Harris (1997) did not list *L. cyrtidia* from CA, although he did mention a CA collection of the very similar [Micarea erraticula](#); consequently the Herre and Hasse collections need to be re-examined.

*Lecidea decipiens* (Hedw.) Ach.  

(Herre 1910; Hasse 1913b; TJ)

=[Psora decipiens](#)

*Lecidea declinans* Nyl.  

(Hasse 1898a)

=[L. lapicida](#)

*Lecidea demissa* (Rutstr.) Ach.  

(Baltzo 1970; TJ)

=[Lecidoma demissum](#)

*Lecidea disciformis* (Fr.) Nyl.  

(Hasse 1898a)

=[Buellia disciformis](#)

*Lecidea effusa* (Sm.) Leight.  

(Hasse 1908a; but CA record is a misidentification)

*Lecidea elabens* Fr.  

(Hasse 1913b; Jordan 1968; TJ)

=[Pyrrhospora elabens](#)

*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* sp.

*Lecidea enteroleuca* Fr. var. *theioplaca* Tuck. 

(Tuckerman 1866, 1872, 1888; Hasse 1898a; Herre 1910; Hasse 1913b)

=*Lecidella* spp.

*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)

=[Catillaria franciscana](#)

*Lecidea frisiae* Ach.  

(Hasse 1913b; Lowe 1939; TJ)

=[Hypocenomyce frisiae](#)

*Lecidea fumosa* (Hoffm.) Ach.  

(Herre 1910; Hasse 1913b; Merrill 1923)

=[Lecidea fuscoatra](#) (but 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])

=[Clauzadea monticola](#), but misidentification of [Porpidia thomsonii](#) fide S. Tucker

*Lecidea geographica* (L.) Tuck.  

(Hasse 1898a)

=[Rhizocarpon geographicum](#)

*Lecidea glaucopholis* Nyl. ex Hasse  

(Hasse 1898a; Fink 1935; TJ; S. Tucker 34749, Bear Mtn, Kern Co., SBBG; S. Tucker 34188, Big Rocks, San Luis Obispo Co., SBBG; C. Wetmore 16810, NS of Topanga in Old Topanga Cyn, 4 km off Topanga Cyn Rd, Los Angeles Co., ASU)

=[Trapeliopsis glaucopholis](#) (Printzen & McCune 2004)

*Lecidea glebulosa* (Fr.) Clem.  

(Hasse 1898a; Herre 1912b; Hasse 1913b; Merrill 1923; Fink 1935; TJ)

=[Trapeliopsis wallrothii](#) (but 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](#) (but Herre [1910] report is probably a misidentification of another *Psora*)

*Lecidea glomerulosa* (DC.) Steud.  

(Baltzo 1970; Lindsay 1973; TJ)

=[Lecidella euphorea](#) in Esslinger (2004b), but this synonymy has been questioned by Thomson

(1997) and Santesson (1993)

*Lecidea goniophila* auct. non (Flörke) Schaer.  

(Herre 1910; Hasse 1913b; Merrill 1923; Fink 1935; Herre 1950a; Thomson & Ketchledge 1958)

=*Lecidella* sp.; most collections are [\*Lecidella anomalooides\*](#)

*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. 

(Zahlbrückner 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\*](#)

*Lecidea halonia* Ach.  

(Hasse 1898a)

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

*Lecidea humosa* (Hoffm.) Nyl.  

(Herre 1944b)

=[\*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)

=[\*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 (2004b), except for the Herre (1910) report, which = *Lecidella* sp.

*Lecidea latypiza* Nyl.  

(Hasse 1895; McClatchie 1897; Orcutt 1907; TJ)

=[\*Lecidella latypiza\*](#)

*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 [= misidentification of non-lichenized fungus *fide* S. Tucker]; TJ)

=[Psilolechia lucida](#)

*Lecidea lurida* (Ach.) DC.  

(Hasse 1898a; Baltzo 1970; TJ)

=[Mycobilimbia lurida](#) (Hafellner & Türk 2001)

*Lecidea luridella* Tuck.  

(Hasse 1898a, 1913b; Merrill 1923; Herre 1942a, 1942c, 1950a; 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; placement uncertain, but close to *Biatora albohyalina* *fide* Printzen [1995])

=[Biatora meiocarpa](#), but old reports are probably misidentifications.

*Lecidea melancheima* Tuck.  

(McClatchie 1897; Hasse 1903e; Herre 1910)

=[Pyrrhospora elabens](#)

*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.) Röhл.  

(Stizenberger 1895)

=[Buellia punctata](#)

*Lecidea myriocarpella* (G. Merr.) Zahlbr.  

(B. Ryan 27097, Hastings Natural History Reserve, Monterey Co., ASU)

=[L. enalla](#) Nyl. (synonymy *fide* Printzen 1995)

*Lecidea myriocarpoides* Nyl.  

(Hasse 1913b; Fink 1935; TJ)

=*L. plebeja*

*Lecidea naegelii* (Hepp) Hasse    
(Hasse 1898a; Nylander 1900)

=*Lecania naegelii*

*Lecidea novomexicana* (de Lesd.) W. A. Weber ex R. A. Anderson    
(Anderson 1962, 1964; Baltzo 1970; TJ)

=*Psora nipponica*

*Lecidea oidalea* Nyl.    
(Tuckerman 1860)

=*Buellia oidalea*

*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) Herre's description suggests material was a *Lecidella*

*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*, but 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 polycarpa* Flörke  

(Hasse 1906; Herre 1907; Hasse 1908b; Herre 1942a, 1942c, 1950a)

=[L. lapicida](#)

*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)

=[L. atrobrunnea subsp. stictica](#) (for Hasse records *fide* Hertel & Printzen 2004; records other than those of Hasse should be compared with [L. perlatalica](#))

*Lecidea pruinosa* Ach.  

(Fink 1935)

=[L. lithophila](#)

*Lecidea pullata* (Tuck.) Hasse  

(Hasse 1898a)

=[Buellia punctata](#)

*Lecidea punctella* (Willey) Zahlbr.  

(TJ)

=[Micarea rhabdogena](#) (Printzen 1995); probable misidentifications for CA

*Lecidea quadricolor* (Dicks.) Borrer  

(Anderson 1964)

=[Trapeliopsis granulosa](#)

*Lecidea quernea* (Dicks.) Ach.  

(Hasse 1898a; Herre 1910; Hasse 1913b; Fink 1935; Thomson & Ketchledge 1958; Volk 1963; Jordan 1968; TJ)

=[Pyrrhospora quernea](#)

*Lecidea ramulicola* H. Magn. 1953, nom. illeg., non H. Magn. 1952 

(Magnusson 1953 [as *Lecidea (Eulecidea) ramulicola*] based on an A. W. Herre collection [Herre 1942c] labeled [L. parasema](#), from Point San Pedro, San Mateo Co., 1942; TJ)

*Lecidea ramulicola* H. Magn. 

(Magnusson [1952] as *Lecidea [Biatora] ramulicola*)

=[Lecanora cadubriae](#) (Printzen 1995; not mentioned under that name by Ryan, Lumbsch et al. [2004])

†*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)

=[Pyrrhospora russula](#), but misidentification of [Pyrrhospora cinnabrina](#) for CA

*Lecidea sanguineoatra* sensu Nyl.  

(Hasse 1910b; TJ)

=[Mycobilimbia hypnorum](#)

*Lecidea sanguineoatra* (Wulffen) Ach. f. *corticola* Stizenb. 

(Stizenberger 1895)

=[Mycobilimbia hypnorum](#)

*Lecidea santae-monicae* H. Magn.  

(Magnusson 1935b [based on *H. E. Hasse* collection, Santa Monica Mts]; TJ)

=[L. laboriosa](#) (synonymy *fide* K. Knudsen)

*Lecidea sarcogyniza* Nyl.  

(Hasse 1906)

=[L. auriculata](#)

*Lecidea scalaris* (Ach. ex Lilj.) Ach.  

(Baltzo 1970; Pinelli & Jordan 1978; TJ)

=[Hypocenomyce scalaris](#)

*Lecidea scotopholis* (Tuck.) Herre  

(Hasse 1898a; Herre 1910; Hasse 1913b; Merrill 1923; Sigal 1975; TJ; Weber et al. 1987; Hebert & Meyer 1984; Weber et al. 1987)

=[Miriquidica scotopholis](#) (Nash, Kainz et al. 2004)

*Lecidea semitensis* (Tuck.) Hasse 

(Hasse 1898a; TJ)

=[Buellia concinna](#)

*Lecidea speirea* (Ach.) Ach.  

(Fink 1935; TJ)

=[Porpidia speirea](#), but probably misidentifications

*Lecidea spilota* Fr.  

(Tuckerman 1872)

=[L. tessellata](#)

*Lecidea spuria* Schaeer.  

(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 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; TJ)

=[Mycobilimbia austrocalifornica](#) (Knudsen 2005c)

**Note:** Esslinger (2004b) listed only *L. subplebeja* Vain., which is the accepted name for 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](#) Hertel & Leuckert (synonymy in Hertel & Printzen 2004)

*Lecidea tenebrosa* Flot.  

(TJ)

=[Schaereria fuscocinerea](#)

*Lecidea theioplaca* Fée  

(Thomson & Ketchledge 1958; misidentifications of *Lecidella* spp.)

*Lecidea tornoënsis* Nyl.  

(Fink 1935; Lowe 1939)

=[Japewia tornoënsis](#)

*Lecidea tricolor* Nyl.  

(Hasse 1898a, misapplication)

=[Cliostomum griffithii](#)

*Lecidea triphragmia* (Nyl.) Hasse  

(Hasse 1898a)

=[Buellia triphragmia](#)

*Lecidea triphragmoides* Nyl.  

(Hasse 1898b; see [Buellia triseptata](#))

*Lecidea turgidula* Fr.  

(Tuckerman 1872; Willey 1873a; Hasse 1898a, 1913b; Lowe 1939; Anderson 1964; TJ)

=[Biatora turgidula](#)

*Lecidea uliginosa* (Schrad.) Ach.  

(Herre 1912b; Hasse 1915b; Herre 1944b [as var. *fuliginea* Ach.]; Jordan 1968; TJ)

=[Placynthiella uliginosa](#)

*Lecidea variegata* Fr.  

(Hasse 1898a, 1905)

=[L. lapicida var. pantherina](#)

*Lecidea vernalis* (L.) Ach.  

(Hasse 1913b; TJ)

=[\*Biatora vernalis\*](#), but unlikely in southern California *fide* C. Printzen [personal communication]

*Lecidea vesicularis* Ach.  

(Hasse 1898a)

=[\*Toninia sedifolia\*](#)

*Lecidea violascens* H. Magn.  

(Magnusson 1935b; TJ)

=[\*L. laboriosa\*](#) (synonymy *fide* K. Knudsen)

*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 stigmatica\*](#)

*Lecidea wallrothii* Flörke ex Spreng.  

(Herre 1950a; TJ)

=[\*Trapeliopsis wallrothii\*](#) (but misidentifications for CA)

## LECIDELLA Körb.

**Lecidella anomalooides** (A. Massal.) Hertel & H. Kilias  

**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)

**Synonyms:** [\*Lecidea catalinaria\*](#), *Lecidella subincongrua* var. *subincongrua*

**Lecidella carpathica** Körb.  

(Sigal 1975; TJ; Weber et al. 1987; Sigal 1989; von Reis 1991; Knoph & Leuckert 1994, 2004)

**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)

**Synonyms:** [\*Lecidea elaeochroma\*](#), [\*L. enteroleuca\*](#) var. *achrista*, [\*L. enteroleuca\*](#) var. *ambigua*, [\*L. enteroleuca\*](#) var. *flavida*, [\*L. parasema\*](#) var. *tabescens*

**Lecidella elaeochroma** var. **soralifera** (Erichsen) Clauzade & Cl. Roux 

(B. Ryan 24876, Rd to Etna Summit, 2.5 mi. SW of town of Etna, Siskiyou Co., SBBG)

**Lecidella elaeochromoides** (Nyl.) Knoph & Hertel  

(Bratt 1987; distinct species *fide* Knoph 1990; Knoph & Leuckert 1994; Knoph et al. 1995, but =*L. asema* *fide* Esslinger 2004b)

**Lecidella euphorea** (Flörke) Hertel  

(Baltzo 1989; Tucker &amp; Bratt 1995; Baltzo 2002; Knoph &amp; Leuckert 2004)

**Synonyms:** [\*Lecidea euphorea\*](#) (Hasse 1898a, 1913b; Fink 1935; Jordan 1968), [\*Lecidea glomerulosa\*](#) (Baltzo 1970; TJ), [\*Lecidella glomerulosa\*](#)**Note:** Esslinger (2004b) includes [\*Lecidella glomerulosa\*](#) as a synonym, but Santesson (1993) and Thomson (1997) treat it separately.**Lecidella granulosula** (Nyl.) Knoph & Leuckert  

(Knoph &amp; Leuckert 1994)

**Synonyms:** [\*L. chodatii\*](#)**Lecidella latypiza** (Nyl.) M. Choisy  **Synonyms:** [\*Lecidea latypiza\*](#) (Hasse 1895; McClatchie 1897; Orcutt 1903, 1907; TJ; synonymy in Knoph & Mies [1995] but CA not mentioned)**Note:** According to Knoph & Leuckert (1994) this species occurs only in Texas in the U. S.**Lecidella meiococca** (Nyl.) Leuckert & Hertel  

(Knoph &amp; Leuckert 1994)

**Lecidella scabra** (Taylor) Hertel & Leuckert  (Knoph & Leuckert 2004; *B. Ryan 25813a*, Agua Tibia Wilderness, San Diego Co.; *T. Nash 37061*, West Anacapa Isl., Ventura Co.; *J. Marsh 6583*, Santa Catalina Isl., Los Angeles Co., all at ASU)**Lecidella stigmatea** (Ach.) Hertel & Leuckert  

(TJ; Sigal 1989; Bowler &amp; Riefner 1990; Ryan &amp; Nash 1991; Knoph &amp; Leuckert 1994; Brodo et al. [2001, pp. 394–395, with color photograph]; Knoph &amp; Leuckert 2004)

**Synonyms:** [\*Lecidea vulgata\*](#)**Lecidella viridans** (Flot.) Körb.  (Hertel 1970a; TJ; *T. Nash 32359*, Santa Cruz Isl., Santa Barbara Co., ASU; not mentioned for S CA in Knoph & Leuckert [2004])**Synonyms:** [\*Lecidea viridans\*](#) (Anderson 1962)**Lecidella chodatii** (Samp.) Knoph & Leuckert  (*B. Ryan 31420*, Santa Rosa Isl., Santa Barbara Co., ASU)=[\*L. granulosula\*](#) (synonymy in Knoph & Leuckert 2004)**Lecidella glomerulosa** (DC.) M. Choisy  =[\*L. euphorea\*](#) fide Esslinger (2004b), but synonymy has been questioned by Santesson (1993) and Thomson (1997)**Lecidella subincongrua** (Nyl.) Hertel & Leuckert var. *elaeochromoides* (Nyl.) Hertel & Leuckert  

(Hertel 1970a, 1971a; TJ; McGee 1995)

=[\*L. elaeochromoides\*](#)**LECIDOMA** Gotth. Schneid. & Hertel**Lecidoma demissum** (Rutstr.) Gotth. Schneid. & Hertel  

(Hale &amp; Cole 1988; Brodo et al. [2001, p. 395, with color photograph])

**Synonyms:** [\*Biatora atrorufa\*](#) (McClatchie 1897), [\*Lecidea demissa\*](#) (Baltzo 1970)**LECIOPHRAGMA** A. Massal.**Leciographa parasitica** (Flörke) A. Massal.  

(Fink 1935)

=*Opegrapha parasitica***Note:** The report by Weber et al. (1987, as *Leciographa cf. parasitica* A. Massal.) probably referred to [\*Dactylospora parasitica\*](#) (Flörke) Zopf fide Egan 1989. Hafellner (2004) said that a reinvestigation is

needed to verify the collections by Weber.

### *LEIOPHLOEA* S. Gray

*Leiophloea parvula* (Zahlbr.) Riedl  

(Riedl 1962b)

=[\*Anisomeridium biforme\*](#)

### *LEMPHOLEMMA* Körb.

*Lempholemma chalazanum* (Ach.) de Lesd.  

(TJ; Schultz 2004)

**Synonyms:** [\*Collema chalazanum\*](#) (Hasse 1898a; Orcutt 1909)

**Note:** According to Schultz (2004, p. 321), *Lempholemma chalazanum* was distributed by H. Hasse under the names [\*Psorotrichia segregata\*](#) (Nyl.) Hasse (*Hasse Exs. No. 245*) and [\*Collemopsis segregata\*](#) Nyl. (*Hasse Exs. No. 892*).

*Lempholemma polyanthes* (Bernh.) Malme  

(Goward 1999; Schultz 2004; *K. Knudsen 431*, above Cottonwood Falls, Laguna Mts, San Diego Co., UCR; *K. Knudsen 99*, San Mateo Cyn, San Mateo Wilderness Area, Santa Ana Mts, Riverside 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 caesioalba* (de Lesd.) J. R. Laundon  

(Tønsberg 2004, chemotypes I, II, III, IV; *C. Bratt 4723*, Sand Creek, Sierra Nat. Forest, Madera Co., SBBG)

*Lepraria crassissima* (Hue) Lettau  

(Ryan & Nash 1991)

*Lepraria diffusa* (J. R. Laundon) Kukwa var. *chrysodetoides* (J. R. Laundon) Kukwa  

(Tønsberg 2004)

*Lepraria eburnea* J. R. Laundon  

(Tønsberg 2004)

*Lepraria elobata* Tønsberg  

(Tønsberg 2004)

*Lepraria incana* (L.) Ach.  

(Ryan & Nash 1991; von Reis 1991; Tønsberg 2004; *B. Ryan 25938*, Agua Tibia Wilderness, San Diego Co., ASU)

*Lepraria lobificans* Nyl.  

(Brodo et al. [2001, pp. 396–397, with color photograph]; Baltzo 2002; Tucker [2002] indicated no CA reports; Tønsberg 2004; *B. Ryan 26399*, San Gabriel Wilderness, Los Angeles Co., ASU; *B. Ryan 11147*, Hastings Natural History Reserve, Monterey Co., ASU)

**Synonyms:** [\*L. finkii\*](#)

*Lepraria membranacea* (Dicks.) Vain.  

(Jordan 1968; Lindsay 1973; TJ)

**Synonyms:** [Leproloma membranaceum](#) (synonymy in Kukwa 2002a, 2002b)

**Lepraria neglecta** (Nyl.) Erichsen 

(Baltzo 1970; TJ; Baltzo 1989; Ryan & Nash 1991; Robertson 2003b; *B. Ryan* 32133, Minarets Rd, Sierra Nat. Forest, Madera Co., ASU)

**Lepraria xerophila** Tønsberg 

(Weber [1975a, as *Siphula* sp.]; Univ. Colo. Lich. Exs. 455, headland between Cottonwood Cyn and Mills Landing, Santa Catalina Isl., Los Angeles Co.]; Bratt [1997 as *Siphula* sp.]; Tønsberg 2004)

**Lepraria candelaris** (L.) Fr. 

(Jordan 1968; Lindsay 1973; TJ)

=[Chrysothrix candelaris](#)

**Lepraria chlorina** (Ach.) Ach. 

=[Chrysothrix chlorina](#)

**Lepraria finkii** (de Lesd.) R. C. Harris 

=[L. lobificans](#)

## LEPROCAULON Nyl. ex Lamy

**Leprocaulon albicans** (Th. Fr.) Nyl. ex Hue 

(von Reis 1991; Goward 1999; Ryan 2002)

**Synonyms:** [Stereocaulon albicans](#) (Riddle 1910; Fink 1935)

**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)

**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 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 N 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.

## LEPROLOMA Nyl. ex Cromb. = [LEPRARIA](#)

(synonymy in Ekman & Tønsberg 2002; Kukwa 2002b)

**Leproloma membranaceum** (Dicks.) Vain. 

(von Reis 1991; Tucker & Bratt 1995; Baltzo 2002; Robertson 2002a)

=[Lepraria membranacea](#) (synonymy in Kukwa 2002b; Ekman & Tønsberg 2002)

**Leproloma** sp. 

(Ryan [in herb.]; Bratt [1997, at least pr. p.])

=[Lepraria xerophila](#) Tønsberg

## LEPTOCHIDIUM M. Choisy

**Leptochidium albociliatum** (Desm.) M. Choisy 

(Pinelli & Jordan 1978; TJ; Thomson 1984; Baltzo 1989; Sigal 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 2004; Jovan & McCune 2004)

**Synonyms:** [Leptogium albociliatum](#), [Polychidium albociliatum](#)

**LEPTOGIUM** (Ach.) Gray**Leptogium arsenei** Sierk  

(Tucker & Bratt [1996, citing Ryan & Nash collections]; Jørgensen & Nash 2004; *T. Nash* 7254, Mt. San Jacinto, Banning to Idyllwild Rd, Riverside Co., ASU, !Jørgensen)

**Leptogium biatorinum** (Nyl.) Leight.  

(Jørgensen & Tønsberg 1999; Jørgensen & Nash 2004)

**Synonyms:** [\*L. nanum\*](#) (Herre 1956)

**Leptogium brebissonii** Mont.  

(Jovan & McCune 2004; *B. Ryan* 26655, Hwy 152, 32 km NNE of Hollister, Merced Co., ASU)

**Leptogium burnetiae** C. W. Dodge  

(Hale 1979 [map]; Smith 1980; *P. Bowler* 659, Hastings Natural History Reserve, Monterey Co., UCI)

**Leptogium burnetiae** var. **hirsutum** (Sierk) P. M. Jørg.  

(nomenclatural change in Jørgensen & Nash [2004], although this variety is not mentioned from Sonoran parts of CA; however it is reported from central CA under a synonym)

**Synonyms:** [\*L. hirsutum\*](#) (*B. Ryan* 32123, Minarets Rd, Sierra Nat. Forest, Madera Co., ASU; *S. Tucker* 36335, Jasper Ridge, San Mateo Co., SBBG)

**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)

**Leptogium cellulosum** P. M. Jørg. & Tønsberg  

(Anonymous 2002 [*S. Jovan* collection, Calaveras Co.]; Martin et al. 2002; Jovan & McCune 2004)

**Leptogium cyanescens** (Rabenh.) Körb.  

(Carlberg 2002, based on *T. Carlberg* collection, Six Rivers Nat. Forest, Del Norte Co.; color photograph on back cover of CALS Bulletin 9[2], 2002)

**Leptogium denticulatum** Nyl. sensu Sierk  

**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. Laundon  

(Goward et al. 1994; Hill 1997; Brodo et al. [2001, p. 405, with color photograph]; Tucker [2002] discussed known collections from Napa and Sonoma Co. in central CA; Jørgensen & Nash 2004; Jovan & McCune 2004)

**Synonyms:** [\*L. scotinum\*](#) (Tuckerman 1872; Willey 1873a; Herre 1906, 1910; Fink 1935), [\*L. sinuatum\*](#) (Sierk 1964; TJ; Thomson 1984)

**Leptogium laceroides** (de Lesd.) P. M. Jørg.  

(Jørgensen & Nash 2004)

**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 2004; Jørgensen & Nash 2004; Jovan & McCune 2004)

**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; *B. Ryan* 26910, Arroyo Seco Cpgd, Los Padres Nat. Forest, Monterey Co., ASU; *S. Tucker* 34116, New

Melones Reservoir, Tuolumne Co., SBBG)

**Misapplied names:** *L. chloromelum* var. *stellans* (Herre 1906, 1907, 1910)

**Leptogium minutissimum** auct. non (Flörke) Fr.  

(Baltzo 1989; Goward et al. 1994)

**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)

**Synonyms:** *L. corniculatum* (Sigal 1989; Brodo et al. [2001, p. 403, color photograph]; 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)

**Leptogium plicatile** (Ach.) Leight.  

(Herre 1910; Hasse 1913b; Sierk 1964; TJ; Jørgensen & Nash 2004)

**Synonyms:** *Colleodium plicatile*, *C. turgidum*, *Homodium microdium*, *L. microdium*

**Leptogium polycarpum** P. M. Jørg. & Goward  

(Brodo et al. [2001, p. 408, in north coastal CA; with color photograph]; Tucker 2002; Carlberg [2003, based on *T. Carlberg 612*, Little van Duzen River, Six Rivers Nat. Forest, Humboldt Co.]; Jovan & McCune 2004)

**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)

**Note:** Many if not all reports of *L. furfuraceum* from North America 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]; a semi-aquatic lichen)

**Synonyms:** *Polychidium rivale*

**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)

**Synonyms:** *L. myochroum*

**Leptogium subaridum** Jørg. & Goward  

(Carlberg [2003] based on *T. Carlberg 541*, Mule Ridge, Six Rivers Nat. Forest, Humboldt Co.; Aragon et al. 2004; *T. Nash 7065*, Banning to Idyllwild Rd, Mt. San Jacinto, 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)

**Synonyms:** *L. minutissimum* (Flörke) Fr. (Hasse 1903c, 1915b; Fink 1935; TJ)

**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; *J. R. Shevock 15168*, Kern Plateau, Tulare Co., CAS)

**Synonyms:** *L. rhyparodes* (TJ)

***Leptogium teretiusculum* (Wallr.) Arnold**  

(Jørgensen & Nash 2004; Jovan & McCune 2004; *H. Thiers* 33756, Hwy 49 between Auburn & Nevada City, Nevada Co., SFSU; *H. Thiers* 33592, Cachuma Reservoir, Fremont Cpgd, Santa Barbara Co., SFSU; *S. Jovan* collection, Calaveras Co., cited in Anonymous 2002; *T. Carlberg* 00650, Broken Rib Mtn, Del Norte Co.)

***Leptogium albociliatum* Desm.**  

(Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1882; McClatchie 1895, 1897; Hasse 1898a, 1905; Herre 1906, 1907; Orcutt 1909)

=[Lepthochidium albociliatum](#)

***Leptogium burgessii* (L.) Mont.**  

(Fink 1935 [misidentifications])

***Leptogium chloromelum* (Sw. ex Ach.) Nyl. var. *stellans* Tuck.**  

(Herre 1906, 1907, 1910)

=[L. milligranum](#) for Herre records

***Leptogium corniculatum* (Hoffm.) Minks**  

(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 2004; Jovan & McCune 2004)

=[L. palmatum](#) (synonymy *fide* Jørgensen & Nash 2004)

***Leptogium cristatellum* (Tuck.) Herre**  

(Herre 1912b)

=[Collema tenax var. corallinum](#)

***Leptogium fragile* (Taylor) Nyl.**  

(Fink [1935])

**Synonyms:** [Collemodium fragile](#) (Hasse 1906)

= misidentification for CA records

***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 North America, at least in part, of [L. pseudofurfuraceum](#) *fide* Jørgensen [1997])

***Leptogium hildenbrandii* (Garov.) Nyl.**  

(Hasse 1898a; Orcutt 1909; Herre 1910; Fink 1935;

= misidentifications for North America [at least north of Mexico] probably at least in part of [L. pseudofurfuraceum](#) [Jørgensen 1997])

***Leptogium hirsutum* Sierk**  

(B. Ryan 32123, Minarets Rd, Sierra Nat. Forest, Madera Co., ASU; S. Tucker 36335, Jasper Ridge, San Mateo Co., SBBG)

=[L. burnetiae var. hirsutum](#) (*fide* Jørgensen & Nash 2004)

***Leptogium lacerum* (Sw.) 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)

=[L. plicatile](#)

*Leptogium minutissimum* (Flörke) Fr.  

(Hasse 1903c, 1915b; Fink 1935; Sierk 1964; Jordan 1968; Baltzo 1970; TJ; Thomson 1984)

=[L. subtile](#)

*Leptogium muscicola* (Sw.) Fr.  

(Hasse 1903c)

=[Polychidium muscicola](#)

*Leptogium myochroum* Tuck.  

(Hasse 1895; McClatchie 1897; Orcutt 1903, 1907)

=[L. saturninum](#)

*Leptogium nanum* Herre  

(Herre 1956)

=[L. biatorinum](#)

*Leptogium papillosum* (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 rhyparodes* Nyl.  

(Tuckerman 1882; Zahlbrückner 1902; Hasse 1903c; Herre 1910; Hasse 1913b; Fink 1935)

=[L. tenuissimum](#)

*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)

=[L. gelatinosum](#)

*Leptogium sinuatum* (Huds.) A. Massal.  

(Sierk 1964; TJ; Thomson 1984)

=[L. gelatinosum](#)

## LEPTORAPHIS Körb.

*Leptoraphis atomaria* (Ach.) Szatala  

**Misapplied names:** [L. epidermidis](#) (Aptroot 1997)

#*Leptoraphis epidermidis* (Ach.) Th. Fr.  

(Aptroot 1997)

**Note:** Aptroot (1997) recorded this species from 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. Thomson  

(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)

**Synonyms:** [Chlorella californica](#), [Chlorella vulpina var. californica](#), [L. californica](#), [L. californica var.](#)

[fovatoretigera](#)**Letharia vulpina** (L.) Hue  

(Hasse 1908b; Herre 1910; Hasse 1913b; Herre 1942a, 1945, 1950a; Schade 1955; Jordan 1968; Lindsay 1973; Pinelli & Jordan 1978; TJ; 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 2004; Jovan & McCune 2004; Robertson 2004)

**Synonyms:** [Chlorea vulpina](#) (L.) Nyl.

**Letharia californica** (Lév.) Hue  

(Hue 1899)

=[L. columbiana](#)

**Letharia californica** var. **fovatoretigera** Räsänen  

(Räsänen 1944)

=[L. columbiana](#)

**LICHENOCONIUM** Petr. & H. Sydow**\*Lichenoconium cargillianum** (Linds.) D. Hawksw.  

(Cole & Hawksworth 2004, *C. Wetmore*, Tulare Co. on [Letharia vulpina](#))

**\*Lichenoconium lecanorae** (Jaap) D. Hawksw.  

(Diederich 2003; Hawksworth [2003] cited it for UK only but included a color photograph, p. 196; Diederich 2004)

**\*Lichenoconium usneae** (Anzi) D. Hawksw.  

(Diederich 2003, 2004)

**LICHENODIPLIS** Dyko & D. Hawksw.**\*Lichenodiplis dendrographae** Diederich & van den Boom 

(Diederich 2003, 2004; CA endemic)

**\*Lichenodiplis lecanorae** (Vouaux) Dyko & D. Hawksw.  

(Diederich 2003; *S. Tucker* 34307, pr. p., Montecito, Santa Barbara Co., SBBG, on *Pertusaria*, determined by D. Hawksworth)

**\*Lichenodiplis lecanoricola** (M. S. Cole & D. Hawksw.) Diederich 

(Diederich 2003, 2004)

**LICHENOMPHALIA** Redhead, Lutzoni, Moncalvo & Vilgalys**Lichenomphalia umbellifera** (L.: Fr.) Redhead, Lutzoni, Moncalvo & Vilgalys  

(Redhead et al. 2002)

**Synonyms:** [Botrydina botryoides](#) (*H. Thiers* collections, Humboldt Co., Mendocino Co., SFSU), [Omphalina ericetorum](#), [O. umbellifera](#) (Brodo et al. [2001, p. 470, with color photograph]; Redhead et al. 2002; *H. Saylor* 2453, Jackson State Forest, Amador Co., SFSU; *H. Saylor* 2770, Calaveras Big Tree S. P., Tuolumne Co., SFSU; *D. Desjardin* 1294, Lanphere Dunes, Humboldt Co., SFSU; *S. Hammer* 987, Van Damme S. P., Mendocino Co., all determined by B. Ryan)

**LICHENOSTIGMA** Hafellner**\*Lichenostigma cosmopolites** Hafellner & Calat.  

(Diederich 2003; Calatayud et al. 2004; on *Xanthoparmelia* spp.)

**\*Lichenostigma elongata** Nav.-Ros. & Hafellner  

(Hafellner et al. 2002; Diederich 2003; Calatayud et al. 2004; on species of *Aspicilia* and *Lobothallia*)

**\*Lichenostigma maureri** Hafellner  

(Essligner & Egan [1995, under Appendix, New Records for North America, based on *Eisen* 1876, foothills above Tollhouse in Fresno, Fresno Co., UPS, on *Letharia columbiana*, determination by R. Santesson]; Calatayud et al. [2004] report it on *Usnea* in Sonoran region)

## LICHENOTHELIA D. Hawksw.

#**Lichenothelia calcarea** Henssen  

(Henssen 1987)

#**Lichenothelia convexa** Henssen  

(Henssen 1987)

#**Lichenothelia intermixta** Henssen  

(Henssen 1987)

#**Lichenothelia scopularia** (Nyl.) D. Hawksw. 

(*H. Thiers* 364, Pacific Summit, near Mosquito Lake, Alpine Co., University of Idaho Herbarium [ID]; *E. Weier* 569, Burnside Lake, Alpine Co.)

**Synonyms:** [\*Microthelia aterrima\*](#), [\*Rinodina aterrima\*](#)

#**Lichenothelia tenuissima** Henssen  

(Bowler et al. 1996; nonlichenized fungus *fide* Henssen [1987])

## LICHINELLA Nyl.

**Lichinella cribellifera** (Nyl.) P. P. Moreno & Egea 

(*C. Bratt* 8315, Big Rocks on Branch Creek Rd, N of Cuyama River, San Luis Obispo Co., SBBG, determination by M. Schultz)

**Lichinella flexa** Henssen, Büdel & T. H. Nash 

(*S. Tucker* 34156, Big Rocks, Los Padres Nat. Forest, San Luis Obispo Co., SBBG, determination by M. Schultz)

**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 2004; Robertson 2004)

**Synonyms:** [\*Gonohymenia nigritella\*](#), [\*Thyrea nigritella\*](#) (Tucker & Kowalski 1975; TJ)

**Lichinella robustoides** Henssen 

(*J. R. Shevock* 14643, below Paradise Ridge, Tulare Co., ASU; *C. Bratt* 6263B, Santa Cruz Isl., Santa Barbara Co., SBBG, determination by B. Büdel, SBBG)

**Lichinella stipatula** Nyl.  

(Henssen 1963f; TJ; Baltzo 1989; Bratt 1999; Goward 1999; Robertson 2001)

## LLIMONAEA Egea & Torrente

**Limonaea californica** (Tuck.) Sparrius 

(Sparrius 2004 [citing Weber & Bratt, Univ. Colo. Lich. Exsiccati 661, Christie Ranch, W end of Santa Cruz Isl., Santa Barbara Co.]; CA endemic)

**Synonyms:** [\*Chiodection californicum\*](#) Tuck. (Tuckerman [1888, p. 135]; Hasse 1913b), [\*Phaeotrema californicum\*](#) (Zahlbruckner 1924; Fink 1935; TJ), [\*Sclerophyton californicum\*](#) (Tuck.) Hasse (Hasse 1909, 1913b; Merrill 1923; TJ; Weber 1989a; Egea & Torrente 1995a; Bratt 1999; Egea & Torrente 2002), [\*Thelotrema californicum\*](#) Tuck. (Tuckerman [1877, based on E. Palmer collection on bark, San Diego, herb. Willey]; Willey 1887; Tucker 1997)

**Limonaea cerebriformis** (Egea & Torrente) Sparrius 

(Sparrius 2004)

**Synonyms:** [\*Sclerophyton cerebriforme\*](#)

*Llimonaea occulta* Egea & Torrente ined.  

(von Reis [1991] based on misidentifications of *Lecanographa hypothallina* fide Tucker [1999]; not in North America)

**LOBARIA** (Schreb.) Hoffm.

**Lobaria amplissima** (Scop.) Forss.  

(Tønsberg & Goward 2001)

**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; *H. Thiers* 44189, Jackson State Forest 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]; Jovan & McCune 2004)

**Synonyms:** *Sticta oregana* (C. Harris 1903; Fink 1935)

**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, 2003a; Thomson 2003; Blauman 2004; Jovan & McCune 2004)

**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)

**Synonyms:** *Sticta scrobiculata*, *Sticta verrucosa*

**LOBOTHALLIA** (Clauzade & Cl. Roux) Hafellner

**Lobothallia melanaspis** (Ach.) Hafellner  

**Synonyms:** *Aspicilia melanaspis* (T. Nash 8094, Hwy. 108 over Sonora Pass, Tuolumne Co., ASU), *Lecanora melanaspis* (Tuckerman 1872, 1882, 1884; Hasse 1896; McClatchie 1897; Orcutt 1907; Fink 1935; TJ)

**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 even *Lecanora garovagli* s. l.).

**Lobothallia praeradiosa** (Nyl.) Hafellner  

(Doell et al. 1999; Brodo et al. [2001, p. 423, with color photograph]; Tucker 2002; Ryan 2004)

**Note:** Reports of *Lecanora melanaspis* var. *alphoplaca* (Hasse [1912, 1913b]) and *Lecanora alphoplaca* are probably based on *Lobothallia praeradiosa*.

**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)

**Synonyms:** *Aspicilia alphoplaca*, *Lecanora alphoplaca*, *L. melanaspis* var. *alphoplaca* (Hasse [1912, 1913b]) reports are probably based on *Lobothallia praeradiosa* which is very common in the Great Basin and adjacent areas), *Lecanora thamnoplaca* (Tuckerman 1884; Hasse 1911a; Fink 1935; Herre 1945)

**Note:** J. Poelt (personal communication to B. Ryan) indicated that many western U. S. collections of *L. praeradiosa* are misidentified as *L. alphoplaca*.

**LOPADIUM** Körb.**Lopadium disciforme** (Flot.) Kullh. 

(T. Nash 11380, hill above Hendy Woods State Park, Mendocino Co., ASU)

**Lopodium dodgei** Herre  (Herre 1950b [type on *Quercus agrifolia*, Pacific Grove, Monterey Co.]; TJ; CA endemic)**LOXOSPOROPSIS** Henssen**Loxosporopsis corallifera** Brodo, Henssen & Imshaug  

(Brodo &amp; Henssen 1995; Goward 1999; Brodo et al. [2001, pp. 426–427, with color photograph]; Robertson 2002a)

[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](#)**MARONEA** A. Massal.**Maronea constans** (Nyl.) Hepp  

(Robertson &amp; Robertson [2002, based on J. &amp; R. Robertson 6100, on chaparral, Daley Ranch, San Diego Co.]; S. Tucker 35679, Santa Cruz Isl., Santa Barbara Co., SBBG; L. Ross 9, Tuna Cyn, Santa Monica Mts, Los Angeles Co., ASU; Fink [1935] reported it only from E U. S.)

**Maronea constans** var. **sublecidinea** Zahlbr. 

(Hasse 1913a; Fink 1935; TJ; CA endemic)

**MASSALONGIA** Körb.**Massalongia carnosa** (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])

**Massalongia microphylliza** (Nyl. ex Hasse) Henssen  

(Henssen 1963b; TJ; Goward et al. 1994; Nash 2002a; H. E. 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](#) (Hasse 1913b), [Placynthium dubium](#)(Herre 1910; Fink 1935; Thomson & Ketchledge 1958), [P. microphyllizum](#) (Hasse 1913b)**MEGALARIA** Hafellner**Megalaria columbiana** (G. Merr.) S. Ekman  

(combination made in Ekman &amp; Tønsberg [1996])

**Synonyms:** [Catillaria columbiana](#) (Noble 1980, 1982)**Megalaria laureri** (Hepp) 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 NE United States 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** (Clauzade & Cl. Roux) Hafellner & V. Wirth**Megaspora verrucosa** (Ach.) Hafellner & V. Wirth  

(Tucker &amp; Bratt 1995; Brodo et al. [2001, pp. 429–430, with color photograph]; Thomson 2003)

**Synonyms:** [Lecanora mutabilis](#) (Ach.) Nyl. non Sommerf. (Herre 1942c; TJ), [L. verrucosa](#)

(Tuckerman 1872; Willey 1873a; Tuckerman 1882; Fink 1935; TJ), *Pachyospora verrucosa* (Hale & Cole 1988)

## MELANELIA Essl.

### **Melanelia disjuncta** (Erichsen) Essl.

(TJ; Tucker & Bratt 1996; Brodo et al. [2001, p. 433, with color photograph]; Esslinger 2002; Thomson 2003)

**Synonyms:** *Parmelia disjuncta* (Thomson & Ketchledge 1958; Esslinger 1977a; Goward et al. 1994; synonymy *fide* Esslinger 2004b)

### **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)

**Synonyms:** *M. incolorata*, *Parmelia elegantula*

### **Melanelia exasperatula** (Nyl.) Essl.

(TJ; Tucker & Bratt 1995; Brodo et al. [2001, p. 434, with color photograph]; Thomson 2003; Jovan & McCune 2004)

**Synonyms:** *Parmelia exasperatula* (Esslinger 1977a; Hale 1979; TJ)

### **Melanelia fuliginosa** (Fr. ex Duby) Essl.

(Baltzo 1989; Goward et al. 1994; Jovan & McCune 2004)

**Synonyms:** *M. glabratula* (TJ; Bratt 1999; Brodo et al. [2001, p. 434]; Esslinger 2002), *Parmelia fuliginosa* (Herre 1910, 1946), *P. glabratula* (Baltzo 1970; Esslinger 1977a)

### **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)

**Synonyms:** *Parmelia glabra* (TJ), *P. olivacea* var. *glabra* (Berry 1941; Herre 1942b)

### **Melanelia glabroides** (Essl.) Essl.

(TJ; Baltzo 1989; Esslinger 2002)

**Synonyms:** *Parmelia glabroides* (Esslinger 1977a)

### **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 infumata** (Nyl.) Essl.

(TJ)

**Synonyms:** *Parmelia infumata* (Imshaug 1957)

### **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)

**Synonyms:** *Parmelia multispora*, *Parmelia olivacea* var. *multispora*, *P. olivacea* var. *polyspora* Herre

### **Melanelia panniformis** (Nyl.) Essl.

(Tucker 2002; Robertson 2004; color photograph but no CA report in Brodo et al. [2001, p. 437]; S. Tucker 35502, on rock, Bloody Rock trailhead near Lake Pillsbury, Lake Co., SBBG, determination by T. Esslinger)

**Synonyms:** *Parmelia prolixa* var. *panniformis* (Hasse 1906; this early report may be a misidentification)

### **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)

**Synonyms:** *Parmelia conspurcata* (Herre 1906, 1907, 1910; Fink 1935; Berry 1941; Herre 1946), *P. subargentifera* (Jordan 1968; Baltzo 1970; Esslinger 1977a)

**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)

**Synonyms:** *Parmelia subaurifera*

**Melanelia subelegantula** (Essl.) Essl.  

(TJ; Hale & Cole 1988; Baltzo 1989; Goward et al. 1994; Tucker & Bratt 1995; Jovan & McCune 2004)

**Synonyms:** *Parmelia 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)

**Synonyms:** *Parmelia subolivacea* (Pinelli & Jordan 1978)

**Melanelia tominii** (Oksner) Essl.  

(Doell et al. 1999; Brodo et al. [2001, p. 441, with color photograph]; Esslinger 2002; Tucker 2002; Robertson 2003b; Thomson 2003; *T. Nash 11247*, Onyx Summit, San Bernardino Mts, San Bernardino Co., ASU)

**Synonyms:** *M. substygia* (Thomson 1984; Ryan & Nash 1991)

**Melanelia exasperata** (De Not.) Essl.  

(misidentifications for CA *fide* TJ and B. Ryan)

**Synonyms:** *Parmelia olivacea* var. *aspidata*, *P. aspidota*, *P. exasperata*

**Melanelia glabratula** (Lamy) Essl.  

(TJ)

=*M. fuliginosa*

**Melanelia incolorata** (Parrique) Essl.  

(Baltzo 1989; Ryan & Nash 1991)

=*M. elegantula*

**Melanelia olivacea** (L.) Essl.  

(TJ as misidentifications; discussed in Tucker [2002]; mostly Alaska, Canada, in Brodo et al. [2001, p. 437, with color photograph])

**Synonyms:** *Parmelia olivacea*

**Melanelia sorediata** (Ach.) Goward & Ahti  

(accepted species but not in CA *fide* Brodo et al. [2001, p. 438, color photograph]; Tucker 2002)

**Synonyms:** *Parmelia sorediata* (Herre 1906; Fink 1935; Herre 1946 [Herre reports may be misidentifications])

**Melanelia stygia** (L.) Essl.  

(TJ, as misidentifications; Ryan & Nash 1991; discussed in Tucker 2002)

**Synonyms:** *Parmelia stygia* (Hasse 1903c; Herre 1946)

**Melanelia substygia** (Räsänen) Essl.  

(Thomson 1984; Ryan & Nash 1991)

=*M. tominii*

## MELASPILEA Nyl.

**Melaspilea constrictella** (Stirt.) A. L. Sm.  

(Fink 1935; TJ; Ryan & Nimis [2004, as “aff. *constrictella*”], all based on the reports of *Opegrapha constrictella* by McClatchie [1897] and Hasse [1906]; the species is poorly known; “the identity of North American material needs clarification and specimens should only very tentatively be given this name” *fide* Ryan & Nimis [2004])

**Synonyms:** *Opegrapha constrictella* (McClatchie 1897; Hasse 1906)

## MENEGAZZIA A. Massal.

**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)

## METAMELANEA Henssen

**Metamelaena melambola** (Tuck.) Henssen  

(Henssen 1989)

**Synonyms:** *Pyrenopsis melambola* (Hasse 1906)

## MICAREA Fr.

**Micarea assimilata** (Nyl.) Coppins  

**Synonyms:** *Lecidea assimilata* (Hasse 1915b; Fink 1935)

**Micarea denigrata** (Fr.) Hedl.  

(Wetmore 1985 [based on *C. Wetmore 50360* and *J. Blakeman 102*, both Tulare Co., MIN]; A. W. Herre 1280, Los Gatos, Santa Clara Co. [determined by C. Printzen; Herre called it *Catillaria globulosa*])

**Synonyms:** *Lecidea aniptiza* (Herre 1944b [*C. L. Brown 257*, Marin Co.], but a misidentification of *Micarea prasina* *fide* S. Tucker), *L. parissima* (Hasse 1903e)

**Micarea erratica** (Körb.) Hertel  

(R. Harris [1997] mentioned he had seen one CA collection, and that CA collections labeled as the very similar *Lecidea cyrtidia* [Hasse 1903e; Herre 1944b] should be re-examined; see under *Lecidea chalybeiza*)

**Micarea lignaria** (Ach.) Hedl.  

**Synonyms:** *Bacidia milliaria* (Hasse 1908b), *B. milliaria f. lignaria* (Hasse 1913b), *Biatora milliaria* (Tuckerman 1888), *Bilimbia lignaria* (Fink 1935)

**Micarea misella** (Nyl.) Hedl.  

(TJ)

**Synonyms:** *Lecidea misella* (Fink 1935)

**Micarea nitschkeana** (J. Lahm ex Rabenh.) Harm.  

(*S. Tucker 34445*, Hastings Natural History Reserve, Monterey Co., SBBG; *S. Tucker 35777B*, Santa Cruz Isl., Santa Barbara Co., SBBG; *S. Tucker 35068, 35643A*, Los Osos, San Luis Obispo Co., SBBG; “near San Francisco” in B. Ryan unpublished Sonoran key)

**Micarea peliocarpa** (Anzi) Coppins & R. Sant.  

(*T. Tønsberg 14700*, Del Norte Co., BG)

**Micarea prasina** Fr.  

(TJ; *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; *S. Tucker 36325*, Jasper Ridge, San Mateo Co., SBBG; *S. Tucker 35892, 35893*, Figueroa Mtn, Santa Barbara Co., SBBG)

**Synonyms:** *Biatora prasina* (McClatchie 1897; Hasse 1906), *Catillaria prasina* (Herre 1942c),

*Lecidea prasina* (Hasse 1898a)

**Micarea xanthonica** Coppins & Tønsberg    
(Coppins & Tønsberg 2001)

*Micarea rhabdogena* (Norman) Hedl.  

**Synonyms:** *Biatora punctella* (Hasse 1906), *Lecidea punctella*; probable misidentifications for CA

*Micarea viridescens* (Schrad.) Brodo    
(TJ)  
= [\*Trapeliopsis viridescens\*](#)

## MICROCALICIUM Vain.

†**Microcalicium ahlneri** Tibell  

(Goward 1999; Peterson & Rikkinen 1999; Tibell & Ryan 2004)

\***Microcalicium conversum** Tibell    
(Tibell & Ryan 2004)

\***Microcalicium disseminatum** (Ach.) Vain.  

(Tucker 1997; Wright 1997; Goward 1999; Tibell & Ryan 2004)

**Synonyms:** [\*Mycocalicium disseminatum\*](#) (Fink 1935)

#**Microcalicium arenarium** (Hampe ex A. Massal.) Tibell  

(Goward 1999; *T. Nash 8020*, 15 mi. E of Cambria, San Luis Obispo Co., SBBG)

**Note:** ASU records identify *T. Nash 8020* as *Thelomma occidentale*, possibly accompanying the *M. arenarium*. E. Peterson (personal communication) strongly doubted that *M. arenarium* occurs in S CA, and had not seen any from northern CA either.

## MICROGLAENA Körb. nom. illeg. = [\*\*THELENELLA\*\*](#)

*Microglaena hassei* Zahlbr.  

(TJ; Hasse [1903f] said that his collections of *Microglaena hassei* were distributed as [\*Pyrenula thelomorpha\*](#))

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

*Microglaena subcorallina* Hasse  

(Hasse 1913b; Herre 1944b; TJ)

= [\*Thelenella modesta\*](#)

*Microglaena sychnogonioides* Zahlbr.  

(Zahlbruckner 1902; Hasse 1903f, 1913b; Fink 1935; TJ)

= [\*Thelenella sychnogonioides\*](#)

## MICROPHIALE (Stizenb.) Zahlbr. = [\*\*COENOGONIUM\*\*](#)

*Microphiale diluta* (Pers.) Zahlbr.  

(Herre 1944b [*C. L. Brown*, Larkspur, Marin Co., 21 Mar 1943, F])

= [\*Coenogonium pineti\* !S. Tucker](#)

*Microphiale lutea* (Dicks.) Zahlbr.  

(Herre 1944b)

= [\*Coenogonium luteum\*](#)

## MICROTHELIA Körb.

#*Microthelia aterrima* (Kremp. ex Anzi) Zahlbr.  

(Herre 1942a, 1950a; Weber et al. 1987; TJ)

= [\*Lichenothelia scopularia\*](#)

#*Microthelia micula* (Flot.) Körb.  

(Herre 1944b; TJ)

=[\*Peridiothelia fuliguncta\*](#)

## MINUTOEXCIPULA V. Atienza & D. Hawksw.

\**Minutoexcipula mariana* V. Atienza  

(Diederich 2003, 2004; S. Tucker 34307, Hope Ranch, Santa Barbara, Santa Barbara Co., on

[\*Pertusaria xanthodes\*](#), SBBG, determination by P. Diederich)

\**Minutoexcipula tuckerae* V. Atienza & D. Hawksw.  

(Diederich 2003, 2004; S. Tucker 34417, Lotusland estate, Montecito, Santa Barbara, Santa Barbara Co., on [\*Pertusaria xanthodes\*](#), SBBG, determination by P. Diederich)

## MIRIQUIDICA Hertel & Rambold

*Miriiquidica deusta* (Stenh.) Hertel & Rambold  

(Nash, Kainz et al. 2004)

*Miriiquidica garovaglii* (Schaer.) Hertel & Rambold 

(C. Bratt 9741, E of Snapper Tower, near Box Cyn, San Clemente Isl., determination by A. Fryday)

*Miriiquidica griseoatra* (Flot.) Hertel & Rambold  

Synonyms: [\*Lecidea griseoatra\*](#) (Hoffm.) Flot. (Hasse 1915b; Fink 1935)

*Miriiquidica leucophaea* (Flörke ex Rabenh.) Hertel & Rambold  

Synonyms: [\*Lecidea leucophaea\*](#) (Hasse 1898a, 1912; TJ)

*Miriiquidica mexicana* Rambold 

(K. Knudsen 2113, on granite, Pacific Crest trail, Garner Valley, San Jacinto Mts, Riverside Co., UCR)

*Miriiquidica scotopholis* (Tuck.) B. D. Ryan & Timdal 

(Nash, Kainz et al. 2004)

Synonyms: [\*Biatora scotopholis\*](#) (Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1888; McClatchie 1897; Hasse 1903b), [\*Lecanora scotopholis\*](#) (Sigal 1989; Tucker & Bratt 1996), [\*Lecidea scotopholis\*](#) (Hasse 1898a; Herre 1910; Hasse 1913b; Merrill 1923; Sigal 1975; Hebert & Meyer 1984), [\*Psora scotopholis\*](#), [\*Psorula scotopholis\*](#)

Note: This species is known from the central coast of CA (Bolander, Oakland), but most if not all records from southern CA (e.g., Hasse, Merrill) appear to be based on misidentifications of species of *Lecidea*.

## MOBERGIA H. Mayrhofer & Sheard

*Mobergia angelica* (Stizenb.) H. Mayrhofer & Sheard  

(Mayrhofer et al. 1992; Bowler et al. 1996; Bratt 1997; Mayrhofer & Sheard 2004)

Synonyms: [\*Lecanora angelica\*](#), [\*Rinodina angelica\*](#) (Hasse 1895, 1896; McClatchie 1897; Hasse 1903b; Orcutt 1907; Hasse 1913b; Merrill 1923; Fink 1935; Anderson 1962), [\*R. bolodes\*](#) (Orcutt 1885, 1907; Hedrick 1934; Fink 1935; Herre 1944b; Magnusson 1947), [\*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 calculiformis\*](#), [\*R. platyloba\*](#) (Fink 1935)

## MOELLEROPSIS Gyeln.

*Moelleropsis nebulosa* (Hoffm.) Gyeln. subsp. *nebulosa*  

(Jørgensen 2001a, 2002)

### *MOSIGIA* Fr. ex A. Massal. = **RIMULARIA**

*Mosigia gibbosa* (Ach.) Fr. ex A. Massal.  

(Egan [1991] but based on a misidentification)

=*Rimularia gibbosa*

### **MUELLELLA** Hepp ex Müll. Arg.

\***Muellerella lecanactidis** Diederich & van den Boom 

(Diederich 2003; Triebel & Kainz 2004; CA endemic)

\***Muellerella lichenicola** (Sommerf. ex Fr.) D. Hawksw. 

(Hafellner et al. 2002; Diederich 2003; Triebel & Kainz 2004)

\***Muellerella pygmaea** (Körb.) D. Hawksw. var. **athallina** (Müll. Arg.) Triebel  

(Triebel et al. 1991; Riefner, Bowler, & Ryan 1995; Triebel & Kainz 2004; B. Ryan 26596, San Gabriel Wilderness, Los Angeles Co.; Orange Co., ASU)

### **MYCOBILIMBIA** Rehm

**Mycobilimbia austrocalifornica** (Zahlbr.) Knudsen 

(Knudsen 2005c)

**Synonyms:** *Lecidea austrocalifornica* (the name *Lecidea subplebeia* has been misapplied to this taxon in CA *fide* K. Knudsen)

**Mycobilimbia hypnorum** (Lib.) Kalb & Hafellner  

**Synonyms:** *Lecidea sanguineoatra* (Hasse 1910b), *L. sanguineoatra f. corticola* Stizenb.

(Stizenberger 1895)

**Mycobilimbia lurida** (Ach.) Hafellner & Türk  

(Hafellner & Türk 2001)

**Synonyms:** *Biatora lurida* (McClatchie 1897), *Lecidea lurida* (Hasse 1898a; Baltzo 1970; TJ), *Psora lurida* (Fink 1935)

**Mycobilimbia berengeriana** (A. Massal.) Hafellner & V. Wirth  

(Thomson 2003)

=*Lecidea berengeriana* (synonymy in Hertel & Printzen 2004)

**Mycobilimbia sabuletorum** (Schreb.) Hafellner 

=*Bilimbia sabuletorum*

### **MYCOBLASTUS** Norman

**Mycoblastus affinis** (Schaer.) T. Schauer  

(Lindsay 1973; TJ; Robertson 2002a; S. Tucker 35209, 35244, pygmy forest near Fort Bragg, Mendocino Co., SBBG)

**Misapplied names:** *M. alpinus* (sterile CA collections)

**Mycoblastus caesius** (Coppins & P. James) Tønsberg 

(T. Tønsberg TT14735, Del Norte Co., BG)

**Mycoblastus sanguinarius** (L.) Norman  

(Lindsay 1973; TJ; Brodo et al. [2001, pp. 446–447, with color photograph]; Robertson 2002a)

**Synonyms:** *Heterothecium sanguinarium* (Tuckerman 1872, 1888)

**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; E. Peterson [personal communication] questioned the identification and would like to see collections)

**Synonyms:** [\*Calicium albonigrum\*](#) (Jordan 1968), [\*C. parietinum\* var. \*albonigrum\*](#) (Tuckerman 1872)

†*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; CA endemic)

†*Mycocalicium subtile* (Pers.) Szatala  

(Pinelli & Jordan 1978; TJ; Weber et al. 1987; Tucker 1997; Baltzo 2002; Thomson 2003)

**Synonyms:** [\*M. parietinum\*](#), [\*Calicium parietinum\*](#) (Hasse 1905, 1913b; Merrill 1923), [\*C. subtile\*](#) (Tuckerman 1866; Bolander 1870; Herre 1950a; Jordan 1968)

*Mycocalicium victoriae* (Knight ex F. Wilson) Tibell  

(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 Keissl.

†*Mycomicrothelia dothideaaspora* (Cooke & Harkn.) D. Hawksw.  

(Hawksworth 1985)

†*Mycomicrothelia inaequalis* (Fabre) D. Hawksw.  

(Hawksworth 1985)

*MYCOPERELLUM* Müll. Arg. = [\*TOMASELLIA\*](#)

*Mycoporellum californicum* Zahlbr.  

(Zahlbrückner 1912b; Hasse 1915a; Fink 1935)

=[\*Tomasellia californica\*](#) (Aptroot 2002)

#*Mycoporellum epistigmellum* Hasse  

(Hasse 1913b; *H. E. Hasse*, Santa Monica Mts, Los Angeles Co., *Lichenes Exsiccati, Sullivant Moss Soc.* 202, MIN) = lichenicolous fungus; the accepted name needs to be determined

*Mycoporellum hassei* Zahlbr.  

(Hasse 1912, 1913b; Merrill 1923; Fink 1935; Riedl 1962a [collection from Santa Catalina Isl.])

=[\*Tomasellia eschweileri\*](#) (*fide* Aptroot 1997)

*Mycoporellum lacteum* (Ach.) R. C. Harris  

(*H. E. Hasse*, May, 1911, Catalina Isl., Los Angeles Co., *Lichenes Exsiccati, Sullivant Moss Soc.* 113,

MU)

=[\*Tomasellia eschweileri\*](#) (Aptroot 2002)

*Mycoporellum sparsellum* (Nyl.) Müll. Arg.  

(Fink 1935; Riedl 1962a [Farlow collection, San Diego Co.]; based on misidentifications)

=[\*Tomasellia sparsella\*](#)

**MYCOPOROPSIS** Riedl = [\*\*TOMASELLIA\*\*](#)

*Mycoporopsis californica* (Zahlbr.) Riedl  

(Riedl 1963)

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

**MYCOPORUM** Flot. ex Nyl.

*Mycoporum antecellens* (Nyl.) R. C. Harris  

**Synonyms:** [\*Arthopyrenia antecellens\*](#) (synonymy *fide* R. Harris 1995)

*Mycoporum californicum* (Zahlbr.) R. C. Harris  

(R. Harris 1975; R. Harris 1995; Aptroot 2002)

=[\*Tomasellia californica\*](#) (Aptroot 2002)

*Mycoporum compositum* (A. Massal.) R. C. Harris  

(error for CA, based on Fink [1935])

**Synonyms:** [\*M. ohiense\*](#), [\*M. pyrenocarpum\*](#), *M. pycnocarpum*, *Dermatina "pyrenocarpa"* of Fink

*Mycoporum eschweileri* (Müll. Arg.) R. C. Harris  

(R. Harris 1995; Tucker 1997; Aptroot 2002)

=[\*Tomasellia eschweileri\*](#) (Aptroot 2002)

*Mycoporum lacteum* (Ach.) R. C. Harris  

=[\*Tomasellia eschweileri\*](#)

*Mycoporum ohiense* Nyl. ex Fink  

(Fink 1935; TJ)

=[\*M. compositum\*](#); error for CA, based on Fink (1935)

*Mycoporum pyrenocarpum* (Nyl.) Zahlbr.  

(Fink 1935)

=[\*M. compositum\*](#), error for CA, based on Fink report

**MYXOBILIMBIA** Hafellner

*Myxobilimbia sabuletorum* (Schreb.) Hafellner  

(combination in Hafellner & Türk [2001], but CA not cited; CA not cited in Ekman [2004])

=[\*Bilimbia sabuletorum\*](#)

[\*\*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\*\*](#)

**NEOFUSCELIA** Essl.

*Neofuscelia loxodes* (Nyl.) Essl.  

(TJ; Baltzo 1989; Goward et al. 1994; Doell et al. 1999; Brodo et al. [2001, pp. 450, with color photograph]; Esslinger 2002)

**Synonyms:** [\*Parmelia isidiotyla\*](#) (Anderson 1962; Baltzo 1970), [\*P. loxodes\*](#) (Esslinger 1973a, 1977a)

*Neofuscelia subhosseana* (Essl.) Essl.  

(Weber et al. 1987; Hale & Cole 1988; Goward et al. 1994; Brodo et al. [2001, pp. 451, with color photograph]; Esslinger 2002; *B. Ryan* 15573, Kern Co., ASU; *T. Nash* 32550, Santa Cruz Isl., Santa

Barbara Co., ASU)

**Synonyms:** *Parmelia subhosseana* (Esslinger 1977a)

**Note:** Esslinger (2002) said that it occurs in central and N CA but has not been found yet in the Sonoran area of CA.

**Neofuscelia verruculifera** (Nyl.) Essl.  

(TJ; Hale & Cole 1988; von Reis 1991; Goward et al. 1994; Bowler et al. 1996; Esslinger 2002; Robertson 2002c, 2003a)

**Synonyms:** *Parmelia verruculifera* (Esslinger 1973a, 1977a)

**Misapplied names:** *Neofuscelia pulla*, for CA reports

**Neofuscelia pulla** (Ach.) Essl.  

**Synonyms:** *Parmelia olivacea* var. *prolixa* Ach. (Tuckerman 1882), *P. prolixa* (TJ for references)

**Note:** All North American reports of this species or its synonyms are misidentifications *fide* Esslinger (1977a, p. 138).

**NEPHROMA** Ach.

**Nephroma bellum** (Spreng.) Tuck.  

(TJ; Hale 1979, p. 135; Brodo et al. [2001, pp. 452–3, with color photograph] did not show it in CA, but in adjacent southern Oregon; collections discussed in Tucker [2002]; Jovan & McCune 2004; S. Tucker 13408, Skyline Drive, San Mateo Co., SBBG: H. Thiers collection, San Francisco Watershed, San Mateo Co., 3 Nov 1979, CAS, !S. Tucker)

**Synonyms:** *N. laevigatum* auct. non Ach. (*fide* Wetmore 1960)

**Nephroma helveticum** Ach.  

(Tuckerman 1882; Hasse 1903c; Herre 1910; Pinelli & Jordan 1978; TJ; Tucker & Bratt 1995, 1996; Robertson 2002a, 2003a; Jovan & McCune 2004; color photograph but no CA report in Brodo et al. [2001, p. 453])

**Synonyms:** *Nephromium helveticum* (Herre 1906, 1907)

**Nephroma helveticum** subsp. *sipeanum* (Gyeln.) Goward & Ahti  

(Brodo et al. [2001, p. 454])

**Synonyms:** *N. helveticum* var. *sipeanum* (Wetmore 1960; TJ)

**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, pp. 455, with color photograph]; McGee 2001; Baltzo 2002; Robertson 2002a, 2003a)

**Synonyms:** *N. lusitanicum* (Thomson & Ketchledge 1958), *Nephromium lusitanicum* (Herre 1906, 1907)

**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])

**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, pp. 457, with color photograph]; Baltzo 2002; Robertson 2002a; Blauman 2004; Jovan & McCune 2004)

**Synonyms:** *Nephroma rameum*, *Nephromium tomentosum* var. *rameum* (Herre 1906, 1907)

**Nephroma helveticum** var. *sipeanum* (Gyeln.) Wetmore  

(Wetmore 1960; TJ)

=*N. helveticum* subsp. *sipeanum*

*Nephroma lusitanicum* Schaeer.  

(Tuckerman 1882; Herre 1910; Gyelnik 1931; Fink 1935; Thomson & Ketchledge 1958)  
= [\*N. laevigatum\*](#) Ach. non auct.

*Nephroma occultum* Wetmore  

(An incorrect reference by Zavarzin & Timdal [2004] 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\*](#)

### **NEPHROMIUM Nyl. = [\*\*NEPHROMA\*\*](#)**

*Nephromium helveticum* Ach.  

(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. = [\*\*TUCKERMANNOPSIS\*\*](#)**

*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\*](#)

### **NIEBLA Rundel & Bowler**

*Niebla cedrosensis* J. E. Marsh & T. H. Nash  

(Bowler & Marsh 2004)

*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)

**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)

**Synonyms:** [\*Desmazieria ceruchis\*](#), [\*Ramalina ceruchis\*](#), [\*Vermilacinia cerebra\*](#), [\*V. ceruchis\*](#), [\*V. corrugata\*](#), [\*V. howei\*](#), [\*V. leopardina\*](#), [\*V. nylanderii\*](#), [\*V. zebra\*](#)

**Note:** According to Spjut (1996), *V. ceruchis* sensu stricto is restricted to South America.

**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; Univ. Colo. Lich. Exs. 658, below summit of Mt. Diablo, Santa Cruz Isl., Santa Barbara Co.; *T. Nash*, Lich. Exs. 173)

**Synonyms:** [Vermilacinia acicularis](#), [V. ceruchoides](#), [V. pumila](#) (Spjut 1996)

**Niebla combeoides** (Nyl.) Rundel & Bowler 

(TJ; Hale & Cole 1988; von Reis 1991; Bratt 1993; Bowler & Riefner 1995; McGee 1995; Brodo et al. [2001, pp. 458, with color photograph]; Doell 2002; Tucker 2002; Bowler & Marsh 2004)

**Synonyms:** [Ramalina ceruchis](#) subsp. [combeoides](#), [R. combeoides](#), [Roccella combeoides](#), [Vermilacinia combeoides](#) (Spjut 1996)

**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, pp. 458, 460, with color photograph]; Robertson & Robertson 2001; Baltzo 2002; Doell 2002; Bowler & Marsh 2004; Vězda, 1981, Lich. Sel. 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. testudinaria* var. *intermedia*, [N. undulata](#), [Ramalina homalea](#), [R. homalea](#) var. [disrupta](#) (Nylander 1870; Hue 1890; Howe 1913), [R. testudinaria](#), [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)

**Niebla laevigata** Bowler & Rundel 

(Bowler et al. 1994; Bowler & Riefner 1995; Bowler et al. 1996; Brodo et al. [2001, pp. 460, with color photograph]; Doell 2002; Tucker 2002; Bowler & Marsh 2004)

**Synonyms:** [Vermilacinia laevigata](#) (color photograph on front cover of CALS Bulletin 5(2), 1998), [V. paleoderma](#)

**Niebla polymorpha** Bowler, J. E. Marsh, T. H. Nash & Riefner 

(Bowler et al. 1994; Bowler & Riefner 1995; Bowler & Marsh 2004)

**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)

**Synonyms:** [Vermilacinia procera](#) (Spjut 1996; color photograph on back cover of CALS Bulletin 8[2], 2001)

**Niebla robusta** (R. Howe) Rundel & Bowler 

(Rundel & Bowler 1978; Bowler & Riefner 1995; Bowler et al. 1996; Bowler & Marsh 2004)

**Synonyms:** [Ramalina combeoides](#) var. [robusta](#), [Vermilacinia robusta](#) (Spjut 1996)

**Niebla tuberculata** Riefner, Bowler, J. E. Marsh & T. H. Nash 

(Bowler & Riefner 1995; Riefner, Bowler, Marsh, & Nash 1995; Riefner, Bowler, & Ryan 1995; Bowler & Marsh 2004; CA endemic)

**Synonyms:** [Vermilacinia tuberculata](#) (Spjut 1996)

**Niebla caespitosa** Spjut 

(Spjut 1996)

=[N. homalea](#), divaricatic acid race (Bowler & Marsh 2004)

**Niebla cornea** Spjut 

(Spjut 1996)

=[N. homalea](#), sekikaic acid race (Bowler & Marsh 2004)

*Niebla dactylifera* Spjut  

(Spjut 1996)

=[N. homalea](#), sekikaic acid race (Bowler & Marsh 2004)

*Niebla disrupta* (Nyl.) Spjut  

(Spjut 1996)

=[N. homalea](#), sekikaic acid race (Bowler & Marsh 2004)

*Niebla dissecta* Spjut  

(Spjut 1996; Bratt 1999)

=[N. homalea](#), sekikaic acid race (Bowler & Marsh 2004)

*Niebla eburnea* Spjut  

(Spjut 1996)

=[N. homalea](#), divaricatic acid race (Bowler & Marsh 2004)

*Niebla fimbriata* Spjut  

(Spjut 1996)

=[N. homalea](#), sekikaic acid race (Bowler & Marsh 2004)

*Niebla flaccescens* (Nyl.) Rundel & Bowler  

(TJ; misidentifications *fide* Spjut 1996; only in Peru and Chile)

**Synonyms:** [Ramalina flaccescens](#) (Howe 1913; Fink 1935; Herre 1945)

*Niebla flagelliforma* Spjut  

(Spjut 1996)

=[N. homalea](#), divaricatic acid race (Bowler & Marsh 2004)

*Niebla halei* Spjut  

(Spjut 1996)

=[N. homalea](#), divaricatic acid race (Bowler & Marsh 2004)

*Niebla infundibula* Spjut  

(Spjut 1996)

=[N. homalea](#), divaricatic acid race (Bowler & Marsh 2004)

*Niebla laminaria* Spjut  

(Spjut 1996; Bratt 1997, 1999)

=[N. homalea](#), divaricatic acid race (Bowler & Marsh 2004)

*Niebla palmeri* Spjut  

(Spjut 1996)

=[N. homalea](#), sekikaic acid race (Bowler & Marsh 2004)

*Niebla ramosissima* Spjut  

(Spjut 1996)

=[N. homalea](#), divaricatic acid race (Bowler & Marsh 2004)

*Niebla siphonoloba* Spjut  

(Spjut 1996)

=[N. homalea](#), sekikaic acid race (Bowler & Marsh 2004)

*Niebla sorediata* Spjut  

(Spjut 1996; Bratt 1999)

=[N. homalea](#), divaricatic acid race (Bowler & Marsh 2004)

*Niebla sorocarpia* Spjut  

(Spjut 1996; Bratt 1999)

=[N. homalea](#), divaricatic acid race (Bowler & Marsh 2004)

*Niebla testudinaria* (Nyl.) Spjut  

(Spjut 1996; Bratt 1997, 1999)

=[\*N. homalea\*](#), divaricatic acid race (Bowler & Marsh 2004)

*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 (Bowler & Marsh 2004)

## NIGROPUNCTA D. Hawksw.

\**Nigropuncta rugulosa* D. Hawksw.  

(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)

**Synonyms:** [\*Bryoria abbreviata\*](#) (Brodo & Hawksworth 1977; Pinelli & Jordan 1978; TJ)

*Nodobryoria oregana* (Tuck.) Common & Brodo  

(Common & Brodo 1995; Goward 1999; Brodo et al. [2001, pp. 461, with color photograph]; Jovan & McCune 2004; doubtful in S CA *fide* Ryan 2002)

**Synonyms:** [\*Alectoria oregana\*](#), [\*Bryoria oregana\*](#) (TJ)

*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)

**Synonyms:** [\*N. jungermanniae\*](#)

*Normandina jungermanniae* (Delise) 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](#)

## OCELLULARIA G. Meyer

*Ocellularia subtilis* (Tuck.) Riddle  

(Lindsay 1973)

=[\*Thelotrema subtile\*](#), but misidentifications

**Note:** According to Fink (1935) the range for this species is the east coast of U. S. to Florida and west 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)

**Ochrolechia androgyna** (Hoffm.) Arnold  

(Brodo 1991; Ryan & Nash 1991; Brodo et al. [2001, pp. 465, with color photograph]; Roemer et al. 2004; *T. Nash* 32291, Santa Cruz Isl., Santa Barbara Co., ASU; *T. Nash* 33054, Santa Rosa Isl., Santa Barbara Co., ASU)

**Ochrolechia arborea** (Kreyer) Almb.  

(Roemer et al. 2004; *T. Tønsberg* TT18408, TT18411, Hollister Ranch, Santa Barbara Co., BG; range not given in Brodo 1991)

**Ochrolechia farinacea** G. E. Howard  

(Brodo 1991; Wright 1997)

**Ochrolechia juvenalis** Brodo  

(Brodo 1991; Wright 1997; Brodo et al. [2001, pp. 466, with color photograph]; Blauman 2004; *T. Nash* 11405, 8 km E of Navarro on Hwy. 138, Mendocino Co., ASU; *S. Tucker* 35445B, Lake Pillsbury, Lake Co., SBBG, determined by B. Ryan; *S. Tucker* 37598, Mt. Tamalpais, Marin Co., SBBG)

**Ochrolechia laevigata** (Räsänen) Versegely ex Brodo  

(Brodo 1991; Brodo et al. [2001, pp. 466–467, with color photograph]; Roemer et al. 2004; *S. Tucker* 15027B, Gasquet, Del Norte Co., SBBG; *T. Nash* 11456, 39 km N of Fort Bragg on Hwy 1, Mendocino Co., ASU)

**Ochrolechia mexicana** Vain.  

(Tucker & Bratt 1995; Wright [1997] but based on misidentifications; shown in CA on map in Roemer et al. 2004)

**Ochrolechia oregonensis** H. Magn.  

(Magnusson 1939; Jordan 1968; Howard 1970; TJ; Brodo 1991; Tucker & Bratt 1996; Hill 1997; Brodo et al. [2001, pp. 467, with color photograph]; Baltzo 2002; Blauman 2004)

**Synonyms:** *O. californica*

**Ochrolechia parella** (L.) A. Massal.  

(TJ; Roemer et al. [2004] say that this may represent a new species; early reports of *O. aff. parella* were based on misidentifications for North American collections *fide* Brodo 1991)

**Ochrolechia pseudopallescens** Brodo  

(Roemer et al. 2004; *T. Nash* 34083, Santa Catalina Isl., Los Angeles Co., ASU)

**Ochrolechia subathallina** H. Magn.  

(*S. Tucker* 35357C, Lake Pillsbury, Lake Co., SBBG; *S. Tucker* 6372, Samuel Taylor S. P., Marin Co., SBBG; *S. Tucker* 35230B, Pygmy Forest near airport on Albion-Little River Rd, 2.5 mi. E of Mendocino, Mendocino Co., SBBG; Jovan & McCune 2004; *B. Ryan* 25342, edge of Marble Mountain Wilderness, Siskiyou Co., ASU)

**Ochrolechia subpallescens** Versegely  

(Versegely 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 2004; Roemer et al. 2004)

**Ochrolechia szatalaënsis** Versegely  

(Brodo 1991)

**Misapplied names:** *O. upsalensis* (Herre [1910])

**Ochrolechia tartarea** (L.) A. Massal.  

(Herre 1910, 1945; Verseghy 1962; Volk 1963; Howard 1970; TJ; von Reis 1991; B. Ryan 31259, Lobos Cyn, Santa Rosa Isl., Santa Barbara Co., ASU)

**Ochrolechia upsaliensis** (L.) A. Massal.  

(Herre 1910; Volk 1963; Howard 1970; TJ; Baltzo 1989; Brodo et al. [2001, pp. 468, with color photograph]; Tucker 2002; Blauman 2004; D. Toren 792, Lake Co.; T. Nash 11484, Spyrock Rd, Ukiah, Mendocino Co., ASU; T. Nash 18941, E side of Pinnacles, San Benito Co., ASU; D. T. Kowalski, Paynes Creek, Tehama Co., SBBG, CHSC; L. Sigal, 1975, Potato Patch Cpgd on Hwy 32, Lassen Nat. Forest, Tehama Co., ASU)

**Misapplied names:** *O. farinacea*, *O. szatalaënsis* *fide* (Brodo [1991, for some Herre collections]), *O. oregonensis* *fide* S. Tucker (for some Herre collections)

**Ochrolechia californica** Verseghy  

(Verseghy 1962; Howard 1970; Lindsay 1973; TJ)

=*O. oregonensis*

**Ochrolechia frigida** (Sw.) Lynge f. *thelephoroides* (Ach.) Lynge  

(Howard 1970; TJ)

= misidentifications for North America *fide* Brodo 1991

**Ochrolechia pallescens** (L.) A. Massal.  

(TJ; Weber et al. 1987; Hale & Cole 1988; Baltzo [2002, quoting Jordan's report])

= misidentifications for North America *fide* Brodo 1991

**Ochrolechia pallescens** var. *rosella* (Tuck.) Zahlbr. 

(Howard 1970; TJ, but = misidentifications)

**Ochrolechia parella** (L.) A. Massal.  

(Herre 1942c, 1945; Howard 1970; TJ)

**Note:** According to Brodo (1991), North American reports are based on misidentifications. Roemer et al. (2004) report a taxon in CA which they call "*Ochrolechia* aff. *parella*".

**Ochrolechia rosella** (Müll. Arg.) Verseghy  

(Lindsay 1973; TJ; but an Asian taxon; the name has been misapplied to CA material;

=*O. trochophora* *fide* Esslinger 2004b)

**Ochrolechia trochophora** (Vain.) Oshio  

= 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.) M. 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; H. Saylor 2453, Jackson State Forest, Amador Co., SFSU; H. Saylor 2770, Calaveras Big Tree S. P., Calaveras Co., SFSU; D. Desjardin 1294, Lanphere Dunes, Humboldt Co., SFSU; S. Hammer 987, Van Damme S. P., Mendocino Co., all determined by B. Ryan; H. Thiers collections, identified as *Botrydina botryoides*, Humboldt Co., Mendocino Co., SFSU)

=*Lichenomphalia umbellifera*

***OMPHALODISCUS* Schol. = [UMBILICARIA](#)***Omphalodiscus decussatus* (Vill.) Schol.  

(TJ; Thomson 1984)

= [\*Umbilicaria decussata\*](#)*Omphalodiscus krascheninnikovii* (Savicz) Schol.  

(TJ; Thomson 1984)

= [\*Umbilicaria krascheninnikovii\*](#)*Omphalodiscus virginis* (Schaer.) Schol.  

(TJ; Thomson 1984)

= [\*Umbilicaria virginis\*](#)***OPEGRAPHA* Ach.****\**Opegrapha anomea*** Nyl.  (Ertz et al. 2004; lichenicole on [\*Pertusaria amara\*](#))Synonyms: [\*O. pertusariae\*](#)***Opegrapha atra*** Pers.  

(Hasse 1898a; Herre 1912a; Volk 1963; Lindsay 1973; TJ)

***Opegrapha calcarea*** Turner ex Sm. & Sowerby  (Fink 1935; TJ; ecotype of *O. saxatilis*, in Purvis et al. 1992, but *O. saxatilis* is not reported from North America *fide* Esslinger 2004b)Synonyms: [\*O. chevallieri\*](#)**\**Opegrapha glaucomaria*** (Nyl.) Källsten  

(Baltzo 2002)

***Opegrapha herbarum*** Mont.  (Lindsay 1973; TJ; Bourell 2000; *S. Tucker* 14974, Crescent City, Del Norte Co., SBBG; *S. Tucker* 36502, San Simeon S.P., San Luis Obispo Co., SBBG; *S. Tucker* 37840, Pigeon Point Lighthouse, San Mateo Co., SBBG)Synonyms: [\*O. atrorimalis\*](#)Misapplied names: *O. betulina*Note: Pentecost & James (1992) include [\*O. protuberans\*](#) as a questionable synonym of *O. herbarum*.***Opegrapha niveoatra*** (Borrer) J. R. Laundon  (Egea & Torrente unpubl. manuscript; *T. Nash* 11202, W of University near beach bluffs, Goleta, Santa Barbara Co., ASU)***Opegrapha protuberans*** Zahlbr.  (Lindsay 1973; TJ; Baltzo 2002; possibly distinct from [\*O. herbarum\*](#) *fide* B. Ryan; questionably synonymous with [\*O. herbarum\*](#) in Pentecost & James [1992])Synonyms: [\*O. prosiliens\*](#)**\**Opegrapha pulvinata*** Rehm  

(Diederich 2003)

***Opegrapha sorediifera*** P. James  (*T. Tønsberg* TT14737, Del Norte Co., BG; *T. Tønsberg* TT28910, Humboldt Co., BG)**\**Opegrapha sphaerophoricola*** Isbrand & Alstrup  (Alstrup & Cole 1998; on "Sphaerophorus tuckermanii", i.e., [\*Sphaerophorus globosus\*](#) var. *gracilis* from Mendocino Co.)***Opegrapha umbellulariae*** Zahlbr.  (Zahlbruckner 1902; Hasse 1903f, 1913b; Fink 1935; TJ; von Reis 1991; *H. E. Hasse*, Santa Monica

Mts, CA, 1898, !S. Tucker; MIN; *S. Tucker* 38276, campus of Univ. of California, Santa Cruz, Santa Cruz Co., SBBG; CA endemic)

**Opegrapha varia** Pers.  

(Bolander 1870; McClatchie 1897; von Reis 1991; only in Oregon and Washington on West Coast *fide* Brodo et al. [2001, pp. 472, with color photograph])

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

**Opegrapha vulgata** Ach.  

(Tuckerman 1866; Bolander 1870; McClatchie 1897; Zahlbruckner 1902; Hasse 1903b, 1903f, 1903b, 1903f; Orcutt 1903, 1907; Hasse 1913b; Merrill 1923; TJ; *H. E. Hasse* collection, Santa Monica Mts, CA, 1900, misidentified as *Opegrapha lyncea*, a European species, MIN; A. W. Herre 2253, 8 Sept 1949, Pacific Grove, Monterey Co., CAS)

**Opegrapha abnormis** Ach.  

(Herre 1912a)

=[\*Arthothelium abnorme\*](#)

**Opegrapha astraea** Tuck.  

(McClatchie 1897; Hasse 1898a [as *O. astraca*]; TJ; may be based on misdeterminations)

**Opegrapha atra** f. *chlorina* Jatta 

(Hasse [1913b, as *O. atra* var. *lichenoides* f. *chlorina*])

=[\*O. varia\*](#)

**Opegrapha atrorimalis** Nyl.  

(TJ for references)

=[\*O. herbarum\*](#)

**Opegrapha betulina** Sm. non Pers.  

(Hasse 1903b; Merrill 1923; Fink 1935; Herre 1942c) name misapplied to [\*O. herbarum\*](#)

**Opegrapha candida** Müll. Arg.  

(Volk 1963; TJ, but unlikely for CA; found in SE U. S.)

**Opegrapha chevallieri** Leight.  

(Hasse 1913b; Merrill 1923)

=[\*O. calcarea\*](#)

**Opegrapha constrictella** Stirn.  

(McClatchie 1897; Hasse 1906)

=[\*Melaspilea constrictella\*](#)

**Opegrapha diaphora** (Ach.) Ach.  

(TJ for references)

=[\*O. varia\*](#)

**Opegrapha hassei** Zahlbr.  

(TJ for references)

=[\*Lecanographa hypothallina\*](#)

**Opegrapha hypothallina** (Zahlbr.) Tehler  

(Tehler 1993c)

=[\*Lecanographa hypothallina\*](#)

**Opegrapha lichenoides** Pers.  

(TJ)

=[\*O. varia\*](#)

**Opegrapha pertusariae** (Vouaux) Hafellner 

(Hafellner et al. 2002)

=[\*O. anomea\*](#)

\**Opegrapha physciaria* (Nyl.) D. Hawksw. & Coppins  

(Cole & Hawksworth 2001; C. Bratt 5141, on [\*Caloplaca rosei\*](#), Santa Barbara Isl., Santa Barbara Co., SBBG, determined by M. Cole; this specimen was examined by D. Ertz, who found no *Opegrapha* but only [\*Stigmidium cerinae\*](#) and another undeterminable lichenicole unrelated to *Opegrapha*)

*Opegrapha prosiliens* Stirt. non Mont. & Bosch  

(TJ for references)

=[\*O. protuberans\*](#) in Esslinger 2004b

*Opegrapha pulicaris* (Hoffm.) Schrad.  

(Hasse 1913b; Merrill 1923; Lindsay 1973; TJ)

=[\*O. varia\*](#)

*Opegrapha rimalis* Pers. ex Ach.  

(TJ for references)

=[\*O. varia\*](#)

\**Opegrapha rupestris* Pers.  

(Brodo et al. [2001, p. 472], but this report may have been based on the Herre and Fink reports)

**Synonyms:** [\*O. saxicola\*](#) (Herre 1907, 1910 [a saxicolous form of [\*O. herbarum\*](#) fide D. Ertz]; Fink 1935; TJ; on rock; Baltzo [2002] mistakenly listed [\*O. rupestris\*](#) rather than [\*Dactylospora parasitica\*](#))

\**Opegrapha saxicola* Ach.  

(Herre 1907, 1910; Fink 1935; TJ; Univ. Colo. Lich. Exs. 198, San Clemente Isl., Los Angeles Co.)

=*Opegrapha brattiae* for CA records

=[\*O. rupestris\*](#)

**Note:** Herre's specimens (1907, 1910) represent a saxicolous form of [\*O. herbarum\*](#), fide D. Ertz (personal communication).

*Opegrapha varia* f. *chlorina* Jatta 

(Zahlbruckner [1900, as *O. varia* var. *lichenoides* f. *chlorina*] Hasse [1903f, as *O. varia* var. *lichenoides* f. *chlorina*])

=[\*O. varia\*](#)

## OPHIOPARMA Norman

*Ophioparma rubricosa* (Müll. Arg.) S. Ekman  

(Wright 1997; Brodo et al. [2001, pp. 473, with color photograph]; Tucker 2002; Kalb et al. 2004; Robertson 2004)

**Synonyms:** [\*Bacidia herrei\*](#) (Zahlbruckner 1908; Herre 1910; Fink 1935; Herre 1945), [\*Haematomma californicum\*](#) (Sigal & Toren 1975), [\*H. pacificum\*](#) (Hasse 1910a), [\*O. herrei\*](#) (Kalb & Staiger 1995)

**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:** According to May (1997), who showed *O. lapponica* only for the Arctic, the Fink record is based on misidentifications. According to Kalb et al. (2004), there are no confirmed records from the Sonoran region.

*Ophioparma ventosa* (L.) Norman  

**Synonyms:** [\*Haematomma ventosum\*](#) (Fink 1935), [\*Lecanora ventosa\*](#) (McClatchie 1897; Hasse 1898a)

**Note:** Published records are based on material referable to *Ophioparma rubricosa*. According to Kalb et al. (2004), there are no confirmed records from the Sonoran region.

[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)

=[\*Megaspora 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] indicated that it occurs at high elevations; S. Tucker 35446, Soda Springs Station, Lake Co., SBBG, determination by P. M. Jørgensen)

**Synonyms:** [\*P. lanuginosa\*](#), [\*P. pityrea\*](#) auct. (synonymy *fide* Esslinger 2004b), [\*P. rubiginosa\* var. \*conoplea\*](#), [\*P. rubiginosa\* var. \*lanuginosa\*](#)

*Pannaria malmei* C. W. Dodge

(Jørgensen 2001a)

*Pannaria rubiginella* P. M. Jørg.

(Jørgensen & Sipman [2004], citing a collection from San Mateo Co. by L. Tibell; S. Tucker 34735B, Cone Peak, Monterey Co., SBBG, determination by P. M. Jørgensen in Oct 2004 [previously identified as *P. subcrustacea*])

*Pannaria tavaresii* P. M. Jørg.

(S. Tucker 34625B, road to Cerro Alto Cpgd off Hwy 41, near Morro Bay, San Luis Obispo Co., determination by Jørgensen; Jørgensen [2001a] did not mention CA for this species)

*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)

=[\*Peltula euploca\*](#)

*Pannaria hookeri* (Borrer ex Sm.) Nyl.

(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.  

(TJ for references)

=*Fuscopannaria praetermissa*

*Pannaria lepidiota* var. *coralliphora* Tuck. 

(Herre 1907)

=*Fuscopannaria laceratula* (synonymy *fide* Jørgensen [2001a, p. 683])

*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)

=*Fuscopannaria leucophaea*

*Pannaria leucosticta* (Tuck.) Tuck. ex Nyl.  

(Herre 1912b; Lindsay 1973)

=*Fuscopannaria leucosticta*, but Jørgensen [2001a] did not report this species in CA, and said that it is replaced in the 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.  

(TJ for references)

=*Fuscopannaria leucophaea*

*Pannaria microphylla* f. *californica* Tuck. 

(Tuckerman 1882; Hasse 1895; McClatchie 1897; Orcutt 1907)

=*Fuscopannaria 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 ["?"]; not mentioned for CA by Jørgensen [2001a]; discussed by Tucker 2002; color photograph but no CA report in Brodo et al. [2001, pp. 477–478])

=*Protopannaria pezizoides* (a northern species extending southward to Washington on West Coast *fide* Jørgensen 2001a)

*Pannaria pityrea* auct.  

(Lindsay 1973; Tucker & Kowalski 1975; Pinelli & Jordan 1978; TJ)

=*Pannaria conoplea* (synonymy *fide* Esslinger 2004b)

*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, pp. 478, with color photograph]; McGee 2001; Baltzo 2002; 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* Fr.  

(Hasse 1898a)

=[\*Pannaria conoplea\*](#)

*Pannaria rubiginosa* var. *lanuginosa* (Hoffm.) Zahlbr.  

(Fink 1935)

=[\*Pannaria conoplea\*](#)

*Pannaria saubinetii* (Mont.) Nyl.  

(Weber 1965b; Goward et al. 1994)

=[\*Fuscopannaria saubinetii\*](#); 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\*](#)

## 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)

=[\*Fuscopannaria leucophaea\*](#)

*Pannularia microphylliza* Nyl. ex Hasse  

(Hasse 1898a)

=[\*Massalongia microphylliza\*](#)

*Pannularia nigra* (Huds.) Nyl.  

(Hasse 1898a)

=[\*Placynthium nigrum\*](#)

*Pannularia triseptata* Nyl.  

(Hasse 1898a)

=[\*Placynthium nigrum\*](#)

## PARMELIA Ach.

*Parmelia hygrophila* Goward & Ahti  

(Goward & Ahti 1983; Hill 1997; Brodo et al. [2001, pp. 481–482, with color photograph]; Wright 2001a; Nash & Elix 2002; Blauman 2004; Jovan & McCune 2004; *B. Ryan* 25823, Agua Tibia Wilderness, San Diego Co., ASU; *B. Ryan*, Desolation Wilderness, El Dorado Co.; Tuolumne Co., ASU; *T. Nash* 22802, Plumas Cpgd on Hwy 70, Plumas Co., ASU)

*Parmelia pseudosulcata* Gyeln.  

(Goward et al. 1994; Carlberg [2003] based on Isaacs & Bergman 042, intersection of Rds. 30 and FR 23, Mad River Ranger District, Six Rivers Nat. Forest, Trinity Co.; Jovan & McCune 2004)

**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 2004; Jovan & McCune 2004)

**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; Thomson 2003)

**Parmelia sulcata** Taylor 

(Berry 1941; Herre 1946; Thomson & Ketchledge 1958; Jordan 1968; Baltzo 1970; Lindsay 1973; Pinelli & Jordan 1978; TJ; 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 2004; Jovan & McCune 2004)

**Parmelia acanthifolia** Pers. 

(Hue 1895, cited in TJ, but an error, as report was from Baja California)

=[Rimelia cetrata](#)

**Parmelia andreana** Müll. 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](#)

**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 baltimorensis** Gyeln. & Fóriss 

=[Flavoparmelia baltimorensis](#)

**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. *incorrupta* (J. P. Moore) E. C. Berry  

(Herre 1942b)

=[Flavopunctelia praesignis](#)

*Parmelia cetrariooides* (Delise ex Duby) Nyl.  

(Berry 1941; Herre 1942c, 1945, 1946)

=[Cetrelia cetrariooides](#)

**Note:** Herre determinations should be checked, because Herre misapplied the name to [Flavopunctelia praesignis](#) fide Nash (2002b).

*Parmelia cetrata* Ach.  

(Herre 1946; TJ)

=[Rimelia cetrata](#), but CA collections are probably misidentifications of [R. reticulata](#)

*Parmelia cirrhata* Fr.  

(Herre 1945, 1946)

=*Everniastrum* sp., but misidentifications for CA

*Parmelia concreta* Stizenb.  

(TJ for references)

=[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 1903, 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 somloënsis](#)

*Parmelia conspersa* var. *subconspersa* (Nyl.) Gyeln.  

(Herre 1946)

=[Flavoparmelia rutidota](#), but misidentifications for CA

*Parmelia conspurcata* (Schaer.) Vain.  

(Herre 1906, 1907, 1910; Fink 1935; Berry 1941; Herre 1946)

=[Melanelia subargentifera](#) (synonymy in Esslinger [2004b]; Berry [1941] may have been mistaken in saying his material was C-, since *M. subargentifera* is C+ red)

*Parmelia corrugis* Müll. Arg.  

(Hue 1895, cited in TJ; but in error, as report was from Baja California)

*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* (Wulff) Schaer.  

(Thomson & Ketchledge 1958;

=[Punctelia subrudecta](#) fide Esslinger [2004b], but name was misapplied because *P. subrudecta* is not in CA)

*Parmelia elegantula* (Zahlbr.) Szatala  

(Ahti 1969; Baltzo 1970; Esslinger 1977a; Thomson 1984)

=[Melanelia elegantula](#)

*Parmelia enteromorpha* Ach.  

(TJ for references)

=[Hypogymnia enteromorpha](#)

*Parmelia exasperata* De Not.  

(TJ for references)

=[Melanelia exasperata](#), but misidentifications for CA

*Parmelia exasperatula* Nyl.  

(Hale 1969; Esslinger 1977a; TJ; Thomson 1984)

=[Melanelia 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)

=[Melanelia fuliginosa](#)

*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; Anderson 1962;

Ahti 1966; Thomson & Ketchledge 1958; Baltzo 1970; Esslinger 1977a; Pinelli & Jordan 1978)

=*Melanelia glabra**Parmelia glabratula* (Lamy) Nyl.  

(Baltzo 1970; Esslinger 1977a; Thomson 1984)

=*Melanelia fuliginosa**Parmelia glabroides* Essl.  

(Essliger 1977a)

=*Melanelia glabroides**Parmelia herreana* Zahlbr.  

(TJ for references)

=*Flavoparmelia caperata*

**Note:** According to D. Wright (personal communication), Herre (1946) described the medulla of *P. herreana* as C+ red, so the material could not have been *Flavoparmelia caperata* (C-). If the specimen was a *Flavopunctelia*, no mention was made of pseudocyphellae, so *F. sorediaca*, which lacks them, is most likely. The original specimens need to me examined.

*Parmelia herrei* Zahlbr.  

(Herre 1906, 1907, 1910; Fink 1935; Berry 1941; Herre 1946)

**Note:** Collections from CA are probably misidentifications of *Parmotrema chinense* (rather than *R. cetrata*, as suggested by Hale & Fletcher 1990) because *R. cetrata* is primarily eastern North America, extending west only to SE Arizona and Chihuahua, Mexico. Darrell Wright (personal communication) favors *P. chinense* as the proper identity of Herre's material because Herre (1906) indicated that the thallus is K+ yellow, non-reticulate, and very narrowly lobed. The Herre specimens need to be examined.

*Parmelia hypoleucina* J. Steiner  

(W. Culberson 1973)

=*Parmotrema hypoleucinum**Parmelia hypotropa* Nyl. s. l.;  

(Hale 1965; W. Culberson 1973; W. Culberson &amp; C. Culberson 1973)

=*Parmotrema hypotropum* s. l.*Parmelia infumata* Nyl.  

(Imshaug 1957)

=*Melanelia infumata**Parmelia ioannis-simae* Gyeln.  

(Baltzo 1970)

=*Xanthoparmelia taractica*, but CA records are likely to be *Xanthoparmelia coloradoënsis* fide Esslinger & Egan (1995)

*Parmelia isidiotyla* Nyl.  

(Anderson 1962; Baltzo 1970)

=*Neofuscelia loxodes**Parmelia kamtschadalis* var. *americana* Nyl.  

(Hue 1895, but possibly from Baja California, and misidentifications)

*Parmelia kerguelensis* F. Wilson  

(Hale &amp; Cole 1988)

= chemotype of *P. saxatilis**Parmelia kernstockii* Lyngé & Zahlbr.  

(Du Rietz 1925; Herre 1946)

=*Flavopunctelia flaventior*

*Parmelia kurokawai* Hale  

(Hale 1967; Nash 1974)

=[Xanthoparmelia lavicola](#)

*Parmelia laevigata* (Sm.) Ach.  

(Hue [1895] reported a *Diguet* collection, Laguna Mts, but probably from the Sierra de la Laguna in southern Baja California rather than San Diego Co., CA; Hasse 1903a; Merrill 1923)

=[Hypotrachyna laevigata](#)

*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)

=[Cavernularia lophyrea](#)

*Parmelia loxodes* Nyl.  

(Esslinger 1973a, 1977a)

=[Neofuscelia 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)

=[Melanelia multispora](#)

*Parmelia olivacea* (L.) Ach.  

(TJ for references)

=[Melanelia olivacea](#), but misidentifications, possibly, of [M. subolivacea](#)

*Parmelia olivacea* var. *aspidata* Ach. 

(TJ for references)

=[Melanelia exasperata](#), but misidentifications

*Parmelia olivacea* var. *glabra* (Schaer.) Linds. 

(Berry 1941; Herre 1942c)

=[Melanelia glabra](#)

*Parmelia olivacea* var. *multispora* A. Schneid. 

(Herre 1946)

=[Melanelia multispora](#)

*Parmelia olivacea* var. *polyspora* Herre  

(Herre 1910, 1946)

**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 in *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)

[=Neofuscelia pulla](#)

**Note:** According to Esslinger (1977a, p. 138), the Tuckerman report is based on misidentifications of [N. verruculifera](#).

*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)

=[Cetrelia olivetorum](#)

*Parmelia olivetorum* Nyl.  

(McClatchie 1897; Hasse 1898a, 1903a, 1913b; Fink 1935)

=[Cetrelia olivetorum](#)

*Parmelia omphalodes* (L.) Ach.  

(Herre 1946 [high elevations in Santa Cruz Co., but name refers to a boreal species, misapplied to CA material]; Brodo et al. [2001, color photograph and map on p. 482] showed it in Washington but not in CA; discussed in Tucker 2002)

**Synonyms:** [P. saxatilis](#) var. [omphalodes](#) (Herre 1910)

*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 misidentifications for CA

*Parmelia perlata* (Huds.) Ach.  

(TJ for references)

=[Parmotrema chinense](#)

*Parmelia perlata* subsp. *ciliata* Nyl. 

(Hasse 1898a)

=[Parmotrema chinense](#)

*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 described also by McCune (2002). Herre's description, however, may apply in part to other species of *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)

=[Pseudephebe pubescens](#)

*Parmelia quercina* (Willd.) Vain.  

(Berry 1941; Herre 1942a, 1946, 1950a; Smith 1980)

=[Parmelina quercina](#)

*Parmelia reticulata* Taylor  

(Thomson & Ketchledge 1958; TJ)

=[Rimelia reticulata](#)

*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 SE U. S.

*Parmelia saxatilis* var. *omphalodes* (L.) Herre  

(Herre 1910)

=[P. omphalodes](#)

*Parmelia soreciata* (Ach.) Th. Fr.  

(Herre 1906; Fink 1935; Herre 1946)

=[Melanelia soreciata](#)

*Parmelia soredica* Nyl.  

(Herre 1906, 1907, 1910; Moxley 1921; Fink 1935; Berry 1941; Herre 1945, 1946; W. Culberson 1955; Thomson & Ketchledge 1958)

=[Flavopunctelia soredica](#)?

**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. soredica](#), since Egan (2004) says that apothecia are rare in both species of *Flavopunctelia*. Herre's specimens should be examined to determine the identity of his material.

*Parmelia sphaerospora* Müll. Arg.  

(Zahlbrückner 1902; Hasse 1903c; Fink 1935; Herre 1945, 1946; Tucker 1973; TJ)

=[Ahtiana sphaerospora](#)

*Parmelia stenophylla* (Ach.) Du Rietz  

(Imshaug [1957, from Mono Pass, Mono Co., Piute Pass, Fresno Co., and Kearsarge Pass, King's Canyon N. P.])

=[Xanthoparmelia somloënsis](#)

*Parmelia stuprea* 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)

=*Melanelia subargentifera*

*Parmelia subaurifera* Nyl.  

(Hale 1969; Baltzo 1970; Lindsay 1973; Esslinger 1977a)

=*Melanelia 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)

=*Melanelia subelegantula*

*Parmelia subhosseana* Essl.  

(TJ)

=*Neofuscelia subhosseana*

*Parmelia sublaevigata* Nyl.  

(Berry 1941; Herre 1946)

**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 from Chihuahua and Sinaloa, Mexico.

*Parmelia subolivacea* Nyl.  

(Pinelli & Jordan 1978)

=*Melanelia subolivacea*

*Parmelia subramigera* Gyeln.  

(Nash 1974)

=*Xanthoparmelia subramigera*

*Parmelia subrudecta* Nyl.  

(Jordan 1968)

=*Punctelia subrudecta*, but CA material is *P. perreticulata*

*Parmelia taractica* Kremp.  

(Baltzo 1970; Hale 1979)

=*Xanthoparmelia taractica*, but not in North America

**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)

=*Parmelina quercina*

*Parmelia verruculifera* Nyl.  

(Esslinger 1973a, 1977a)

=*Neofuscelia verruculifera*

*Parmelia vittata* (Ach.) Nyl.  

(Merrill 1923)

=*Hypogymnia vittata*, but misidentifications for CA

*Parmelia weberi* Hale 

(*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. 

(*T. Tønsberg* TT14689, pr. p., Del Norte Co., BG)

*Parmeliella triptophylla* (Ach.) Müll. Arg.  

(Jovan & McCune 2004; color photograph but no CA report in Brodo et al. [2001, p. 485])

*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)

=[Fuscopannaria cyanolepra](#)

*Parmeliella lepidiota* (Sommerf.) Vain.  

(Herre 1910; Hasse 1913b; Fink 1935)

=[Fuscopannaria praetermissa](#)

*Parmeliella lepidiota* var. *coralliphora* (Tuck.) Herre 

(Herre 1910; Hasse 1913b; Fink 1935; Thomson & Ketchledge 1958)

=[Fuscopannaria laceratula](#) (*fide* Jørgensen [2001a, p. 683]; 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.  

(Hasse 1913b; Herre 1910; an invalid name *fide* Jørgensen 2001a)

=[Fuscopannaria 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)

=[Fuscopannaria 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 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)

**Synonyms:** [Parmelia quercina](#), [P. tiliacea](#)

**PARMELIOPSIS** Nyl.**Parmeliopsis ambigua** (Wulfen) Nyl.  

(Tucker 1973; Sigal &amp; Toren 1976; Pinelli &amp; Jordan 1978; TJ; Thomson 1984; Hale &amp; Cole 1988; Ryan &amp; Nash 1991; Brodo et al. [2001, p. 489, with color photograph]; Jovan &amp; McCune 2004)

**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; *B. Ryan* 25156, edge of Marble Mountain Wilderness, about 1 mi. along trail from Lovers Camp, Siskiyou Co., SBBG)**PARMOTREMA** A. Massal.**Parmotrema arnoldii** (Du Rietz) Hale  

(TJ; Hale &amp; Cole 1988; Baltzo 1989; Brodo et al. [2001, p. 492, with color photograph]; Wright 2001a; Baltzo 2002; Nash &amp; Elix 2002; Robertson 2002a; Thomson 2003; Jovan &amp; McCune 2004)

**Synonyms:** [Parmelia arnoldii](#)**Parmotrema austrosinense** (Zahlbr.) Hale  

(Hale &amp; Cole 1988; von Reis 1991; Riefner, Bowler, &amp; Ryan 1995; Brodo et al. [2001, pp. 492–493, with color photograph]; Wright 2001a; Nash &amp; Elix 2002; Jovan &amp; McCune 2004)

**Parmotrema chinense** (Osbeck) Hale & Ahti  

(Hale &amp; Cole 1988; Baltzo 1989; McGee 1995; West &amp; Doell 1995; Bowler et al. 1996; Doell &amp; 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 &amp; Elix 2002; Robertson 2003a; Jovan &amp; McCune 2004)

**Synonyms:** [Parmelia perlata](#), [P. perlata](#) subsp. [ciliata](#) (Hasse 1898a)**Parmotrema crinitum** (Ach.) M. Choisy  

(Hale &amp; Cole 1988; West &amp; Doell 1995; Wright 2001a; Brodo et al. [2001, p. 494, with color photograph]; Robertson 2002a)

**Synonyms:** [Parmelia crinita](#) (Lindsay 1973)**Parmotrema cristiferum** (Taylor) Hale  

(TJ; Nash &amp; Elix 2002)

**Synonyms:** [Parmelia cristifera](#) (Fink 1935; Berry 1941; Herre 1946; color photograph but no CA report in Brodo et al. [2001, p. 495])**Parmotrema hypoleucinum** (J. Steiner) Hale  

(TJ; Bratt 1987, 1997; Hale &amp; Cole 1988; Riefner, Bowler, &amp; Ryan 1995; Bowler et al. 1996; Tucker 1999; Bourell 2000; Brodo et al. [2001, p. 496]; Wright 2001a; Nash &amp; Elix 2002)

**Synonyms:** [Parmelia hypoleuca](#)**Parmotrema hypotropum** (Nyl.) Hale  (Wright 2001a; Nash & Elix 2002; *T. Nash* 6920, Torrey Pines State Park, San Diego Co., ASU; Brodo et al. [2001, p. 497, color photograph but no CA report]; *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 the extreme southern part of CA *fide* Nash & Elix 2002.**Parmotrema stuppeum** (Taylor) Hale  

(TJ; Baltzo 1989; von Reis 1991; Doell &amp; Wright 1996; Bratt 1999; Brodo et al. [2001, pp. 500–501, with color photograph]; Wright 2001a; Baltzo 2002; Nash &amp; Elix 2002; Robertson 2003a; Thomson 2003)

**Synonyms:** *Parmelia stupaea*

*Parmotrema perforatum* (Jacq.) A. Massal.  

**Synonyms:** *Parmelia perforata* (Tuckerman 1866; Bolander 1870; Herre 1906, 1907, 1910; Berry 1941; Herre 1945, 1946; color photograph but no CA report in Brodo et al. [2001, p. 498])

**Note:** Herre's comments (1946) on his material suggest that the specimens were misidentified; the 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 SE 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)

**PELTIDEA** Ach.

*Peltidea canina* (L.) Hoffm.  

(Hansen 1895)

=[\*Peltigera canina\*](#)

**PELTIGERA** Willd.

*Peltigera aphthosa* (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)

**Note:** Collections should be compared to [\*P. leucophlebia\*](#) and [\*P. britannica\*](#); distinctions are clear in Goward et al. (1994).

*Peltigera britannica* (Gyeln.) Holt.-Hartw. & Tønsberg  

(McCune & Geiser 1997; Brodo et al. [2001, pp. 505–506, with color photograph])

*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; 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 2004; Jovan & McCune 2004; Vitikainen 2004)

**Synonyms:** [\*P. scutata\*](#)

*Peltigera degenii* Gyeln.  

(Tucker & Bratt 1996; B. Ryan 27126a, Monterey Co., ASU; S. Tucker 37924, Jasper Ridge Biological Preserve W of Stanford Univ., San Mateo Co., SBBG, determined by B. McCune)

*Peltigera didactyla* (With.) J. R. Laundon  

(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)

**Synonyms:** *P. canina* var. *soredifera*, *P. canina* var. *spuria*, *P. sorediata*, *P. spuria*

**Peltigera elisabethae** Gyeln.  

(color photograph but no CA report in Brodo et al. [2001, p. 497]; *S. Tucker* 34731, Cone Peak, Monterey Co., SBBG; only in Washington and Canada in west *fide* Brodo et al. 2001)

**Peltigera fibrilloides** (Gyeln.) Vitik.  

(Vitikainen [2004] from Riverside, S CA)

**Peltigera horizontalis** (Huds.) Baumg.  

(central CA on map in Vitikainen 2004)

**Peltigera hydrothyria** (J. L. Russell) Miadl. & Lutzoni  

(Miadlikowska & Lutzoni 2000; CA not mentioned)

**Synonyms:** *Hydrothyria venosa* (Tuckerman 1872, 1882; Willey 1887; Fink 1935; Pinelli & Jordan 1978; TJ; Hale & Cole 1988; Brodo et al. [2001, pp. 342–343, with color photograph]; *Bolander*, Mariposa Co. [the basis for the E. Tuckerman and H. Willey reports]; *B. Ryan* 32035, Brown's Creek, Sierra Nat. Forest, Madera Co., ASU; Gross collections, Butte Co. and Plumas Co., cited in Anonymous 2002)

**Note:** Miadlikowska & Lutzoni (2000) were obligated to propose a new name when transferring *H. venosa* into *Peltigera* because of the existence of *P. venosa* (L.) Hoffm.

**Peltigera kristinssonii** Vitik.  

(color photograph but no CA report in Brodo et al. [2001, pp. 510–511]; *C. Bratt* 3341, Manzana Creek above Nira, Figueroa Mt., Santa Barbara Co., SBBG; determined by B. McCune)

**Peltigera leptoderma** Nyl.  

(Herré 1944b)

**Peltigera leucophlebia** (Nyl.) Gyeln.  

(Hale & Cole 1988; Goward et al. 1994; Brodo et al. [2001, pp. 512–513 with color photograph]; *C. Bratt* et al. 7550, Pacific Crest trail, Plumas Co., SBBG; *Darrow* 5103, Willow Creek Cyn, Humboldt Co., ASU)

**Synonyms:** *P. aphthosa* var. *leucophlebia*, *P. aphthosa* var. *variolosa*

**Peltigera malacea** (Ach.) Funck  

(Hale [1979, map on p. 52]; omitted inadvertently in TJ; discussed in Tucker [2002]; color photograph but no CA report in Brodo et al. [2001, p. 513]; *B. Ryan* 25642-d, Siskiyou 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)

**Peltigera monticola** Vitik.  

(Vitikainen 2004)

**Peltigera neckeri** Hepp ex Müll. Arg.  

(Carlberg [2003], based on *Isaacs/Bergman* 51, Six Rivers Nat. Forest, Trinity Co.; color photograph but no CA report in Brodo et al. [2001, p. 514]; *S. Tucker* 6263B, Skyline Blvd., Santa Cruz Co., SBBG, determined by B. Ryan)

**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 Nat. Forest, Del Norte Co.; *P. dolichorrhiza* may have been misapplied to this taxon

[Thomson 1950])

**Peltigera pacifica** Vitik.  

(color photograph but no CA report in Brodo et al. [2001, p. 517]; *S. Tucker 31804*, Oregon Creek near Downieville, Yuba Co., SBBG)

**Peltigera polydactylon** (Neck.) Hoffm.  

(Thomson 1984; Hale & Cole 1988; Baltzo 2002; discussed by Tucker 2002; Vitikainen [2004] for S coast of CA; color photograph but no CA report in Brodo et al. [2001, p. 518]; many collections are probably misidentifications *fide* B. Ryan)

**Synonyms:** [\*P. polydactyla\*](#)

**Peltigera ponokensis** 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 Nat. Forest, Trinity Co.; Robertson 2003b; Vitikainen [2004] for central CA; *J. R. 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)

**Synonyms:** [\*P. canina\* f. \*innovans\*](#), [\*P. canina\* f. \*sorediata\*](#)

**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)

**Peltigera scabrosa** Th. Fr.  

(TJ; Brodo et al. [2001, p. 521, color photograph but no CA report])

**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. Thomson  

(Thomson 1950; TJ)

=[\*P. leucophlebia\*](#)

**Peltigera canina** f. *innovans* (Körb.) J. W. Thomson  

(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* Schaeer.  

(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.  

(probably a misidentification for CA)

**Synonyms:** [\*P. polydactyla\* var. \*dolichorrhiza\*](#) Nyl. (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\*](#).

*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. Thomson 

(Thomson 1950)

=[\*P. polydactylon\*](#)

*Peltigera pulverulenta* (Taylor) Kremp.  

(Herre 1942a, 1950a)

=[\*P. scabrosa\*](#) Th. Fr. for North American 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\*](#)

*Peltigera spuria* (Ach.) DC.  

(Hasse 1913b; Herre 1942c; TJ)

=[\*P. didactyla\*](#)

## PELTOSPHAERIA Berl.

*Peltosphaeria californica* Petr.  

(Petrak 1952; Riedl 1962b; Barr 1985)

**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)

**Synonyms:** [\*Endocarpiscum bolanderi\*](#), [\*Heppia bolanderi\*](#), [\*Pannaria bolanderi\*](#)

*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, !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; Blauman 2004)

**Synonyms:** *Dermatocarpon guepinii*, *Endocarpiscum guepinii* (Tuckerman 1882; Hasse 1895, 1896; McClatchie 1897; Herre 1906; Orcutt 1903, 1907), *Heppia guepinii* (Hasse 1898a; Orcutt 1909; Herre 1910; Hasse 1913b; Merrill 1923; Fink 1935), *Pannaria guepinii*

**Peltula farinosa** Büdel 

(Büdel & Nash 2002; *T. Nash* 32451, Santa Cruz Isl., Santa Barbara Co., ASU)

**Peltula michoacanensis** (de Lesd.) Wetmore 

(Wetmore 1970; TJ; Büdel & Nash 2002)

**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)

**Misapplied names:** *Heppia hassei* (in part)

**Peltula obscurans** var. **deserticola** (Zahlbr.) Wetmore 

(Wetmore 1970; TJ; Büdel & Nash 2002)

**Peltula obscurans** var. **hassei** (Zahlbr.) Wetmore 

(Wetmore 1970; TJ; Brodo et al. [2001, p. 523, with color photograph]; Büdel & Nash 2002; Robertson 2004)

**Synonyms:** *Heppia hassei* (Zahlbrückner 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)

**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)

**Synonyms:** *P. polyspora*, *Heppia leptopholis*, *H. polyspora*, *H. terrena*

**Peltula placodizans** (Zahlbr.) Wetmore 

(Büdel & Nash 2002)

**Peltula richardsii** (Herre) Wetmore 

(Wetmore 1970; TJ; Brodo et al. [2001, p. 525, with color photograph]; Büdel & Nash 2002)

**Peltula tortuosa** (Nees) Wetmore 

(Büdel & Nash 2002)

**Peltula zahlbrückneri** (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]; color photograph on back cover of CALS Bulletin 7[2], 2000)

**Synonyms:** *Heppia zahlbrückneri*

**Peltula polyspora** (Tuck.) Wetmore 

(Wetmore 1970; TJ; Hale & Cole 1988; Bowler & Riefner 1990)

=*P. patellata*

†**PERIDIOTHELIA** D. Hawksw.

**†*Peridiothelia fuliguncta* (Norman) D. Hawksw.**  

**Synonyms:** [\*Microthelia micula\*](#) (Flot.) Körb. (Herre 1944b; may be based on misidentifications)

**Note:** Aptroot (1997) should be consulted.

**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; A. W. 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. W. Herre 639, labeled as *Pertusaria globulifera*, between Kelseyville and Middletown, Lake Co., 23 Apr 1939, CAS, verified and name updated by S. Tucker)

**Synonyms:** [\*P. globulifera\*](#) (Zahlbruckner 1902; Herre 1910; Fink 1935)

**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 2004)

**Pertusaria borealis** Erichsen 

(*T. Tønsberg TT14706*, Del Norte Co., BG)

**Pertusaria brattiae** Lumbsch & T. H. Nash  

(Lumbsch et al. 1999; Lumbsch & Nash 2002; *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; Univ. Colo. Lich. Exs. 473, ocean headlands S of Stinson Beach, Marin Co.; *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)

**Synonyms:** [\*P. nolens\*](#) (Hasse 1909, 1913b; Fink 1935; Herre 1944b; Volk 1963; Baltzo 1970)

**Pertusaria coccodes** (Ach.) Nyl. 

(*T. Tønsberg TT14730*, Del Norte Co., BG)

**Pertusaria consocians** Dibben  

(Lumbsch & Nash 2002)

**Pertusaria excludens** Nyl. 

(*B. Ryan 23548*, on rock, W end of Heather Lake, Desolation Wilderness, El Dorado Co., ASU, determination by A. Fryday)

**Pertusaria flavicunda** Tuck.  

(Tuckerman 1877, 1882; Orcutt 1885; Eckfeldt 1893; Hasse 1896; McClatchie 1897; Hasse 1898a; Zahlbruckner 1911; Hasse 1903b, 1903d; Orcutt 1903, 1909; Hasse 1913b; Merrill 1923; TJ; Dibben 1980; Bratt 1987, 1997; Hale & Cole 1988; McGee 1995; Bowler et al. 1996; Lumbsch et al. 1999; Brodo et al. [2001, pp. 528–529, with color photograph]; Lumbsch & Nash 2002)

**Pertusaria glaucomela** (Tuck.) Nyl.  

(Hue 1891; TJ; Dibben 1980)

**Synonyms:** [\*Lecanora glaucomela\*](#) *L. oculata* subsp. *glaucomela*, [\*Pertusaria subpupillaris\*](#)

**Pertusaria hymenea** (Ach.) Schaeer.  

(TJ; Dibben 1980; Wright 1997; Lumbsch et al. 1999; Baltzo 2002; A. W. 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 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)

**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)

**Synonyms:** *P. leucostoma* (Dibben 1980)

**Pertusaria moreliensis** de Lesd.  

(Lumbsch & Nash 2002; *T. Nash* 32031, Santa Catalina Isl., Los Angeles Co., ASU, determination by H. Lumbsch)

**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; *B. Ryan* 11277, Espanoza Cyn, Santa Monica Mts, Los Angeles Co., ASU; *B. Ryan* 11250, Pozo Station, Los Padres Nat. Forest, San Luis Obispo Co., ASU)

**Pertusaria pseudocorallina** (Lilj.) Arnold  

(Riefner 1990, based on *R. Riefner* 88–163, Coon Creek Cyn, Montaña de Oro S. P., San Luis Obispo Co., WIS, SBBG, UCI; reported from Mexico, not S CA, by Lumbsch & Nash 2002)

**Pertusaria pupillaris** (Nyl.) Th. Fr. 

(*T. Tønsberg* TT14694, 14694, Del Norte Co., BG)

**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)

**Pertusaria rubefacta** Erichsen  

(Dibben 1980; McGee 1998 [as "cf."]; Lumbsch et al. 1999; Lumbsch & Nash 2002)

**Pertusaria subambigens** Dibben  

(Dibben 1980; Baltzo 2002; Brodo et al. [2001, p. 532, with color photograph]; Tucker 2002)

**Misapplied names:** *P. ambigens*, for North American records

**Pertusaria tejocotensis** de Lesd.  

(Lumbsch & Nash 2002; *T. Nash* 32452, Santa Cruz Isl., Santa Barbara Co., ASU)

**Pertusaria velata** (Turner) Nyl.  

(Bolander 1870; Herre 1910; Fink 1935; TJ; Baltzo 2002; Lumbsch & Nash 2002; Tucker 2002; color photograph but no CA report in Brodo et al. [2001, p. 534]; *B. Ryan* 21997, San Bruno Mtn, San Mateo Co., ASU; A. W. Herre collection, Devil's Cyn, Peter's 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 xanthodes** Müll. Arg.  

(Dibben 1980; Lumbsch & Nash 2002; color photograph but no CA report in Brodo et al. [2001, p. 535]; *L. Ross* 287, Wood Cyn, NW of Camp Pendleton, San Diego Co., ASU; *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 North American records

*Pertusaria communis* Lam. & DC.  

(Tuckerman 1882)

=[\*P. pertusa\*](#), but misidentifications for North America

*Pertusaria globulifera* (Turner) Nyl.  

(Zahlbrückner 1902; Hasse 1903e, 1903f [as *P. globifera*]; Herre 1910; Fink 1935; TJ)

=[\*P. albescens\*](#)

*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 North American 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 North America)

*Pertusaria pertusa* (Weigel) Tuck.  

(TJ [as *P. pertusa* (L.) Tuck.]; Herre [1910] referred to a saxicolous form *rupestris* auct.)

= misidentifications for North American records.

*Pertusaria raesaenensis* Erichsen  

(Lindsay 1973; TJ)

= misidentifications for North America

*Pertusaria rupestris* (DC.) Schaer.  

(Thomson & Ketchledge 1958)

= misidentifications for North American records *fide* Dibben [1980]

*Pertusaria santamoniciae* Dibben  

(Dibben 1980; Bratt 1987; Hill 1996; Bratt 1997)

=[\*P. velata\*](#) (synonymy *fide* Archer & Messuti [1997], although the range of *P. velata* is restricted to 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; Herre 1907; Hasse 1908b; Orcutt 1909; Herre 1910; Hasse 1913b; Merrill 1923; Volk 1963; Jordan 1968)

=[\*P. hymenea\*](#)

## PHACOPSIS Tul.

\**Phacopsis oxyspora* (Tul.) Triebel & Rambold  

(Diederich 2003)

\**Phacopsis oxyspora* var. *oxyspora*  

(*S. Tucker* 31759, Austin Creek, Armstrong Woods S. P., Sonoma Co., SBBG, on *Platismatia herrei*, determination by D. Triebel; *C. Bratt* 7184B, Anita Cyn, Hollister Ranch, on *Hypotrachyna*, SBBG, determination by P. Diederich; *S. Tucker* 37157, pr. p., Pollard Flat SW of Dunsmuir, Shasta Co., on *Parmelia sulcata*, SBBG, determination by P. Diederich)

\***Phacopsis oxyspora** var. **defecta** Triebel & Rambold 

(*S. Tucker* 28798, pr. p., Bartlett Springs Rd, Lake Co., SBBG, on *Flavopunctelia flaventior*, determination by D. Triebel)

\***Phacopsis vulpina** Tul.  

(Willey 1873b; Diederich 2003; Persoh & Kainz 2004; *S. Tucker* 14848B, Mt. Shasta, Siskiyou Co., SBBG, on *Letharia vulpina*, determination by D. Triebel; *S. Tucker* 14898B, Mt. Shasta, Siskiyou Co., SBBG, on *Letharia columbiana*, determination by D. Triebel; *S. Tucker* 34113A pr. p., American River Cyn near Kyburz, El Dorado Co., SBBG, on *Letharia vulpina*, determination by P. Diederich)

## PHAEOCALICIUM A. F. W. Schmidt

†**Phaeocalicium curtisii** (Tuck.) Tibell  

(TJ; Tibell & Ryan 2004)

**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; Thomson 2003)

**Synonyms:** *Calicium populneum* (Herre 1910)

†**Phaeocalicium tremulicola** (Norrl. ex Nyl.) Tibell  

**Synonyms:** *Stenocybe tremulicola* Norrl. ex Nyl. (Zahlbruckner 1900; Hasse 1903c, 1913b; Fink 1935; TJ)

**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 Botanical Garden, Montecito, Santa Barbara, Santa Barbara Co., SBBG; *S. Tucker* 28928, Point Reyes, Marin Co., SBBG; *D. T. Kowalski* collection, Mendocino Co., 1972, CHSC)

**Phaeographis smithii** (Leight.) de Lesd.  

(Staiger & Kalb [2004] for central CA coast; *T. Tønsberg* TT14729, Del Norte Co., BG; *S. Tucker* 14969A, S of Crescent City, Del Norte Co., SBBG; *S. Tucker* 5409A, S of Olema, Marin Co., SBBG)

**Phaeographis erumpens** (Nyl.) Müll. Arg.  

(Robertson 2001, based on *L. Braun* collection)

**Note:** Other collections under this name from Marin Co. and Mendocino Co., are referable to *Graphis britannica*, determined by Staiger & Kalb, personal communication to Ryan in 2003.

**Phaeographis eulectra** (Tuck.) Zahlbr.  

(Herre 1944b; Tucker & Kowalski 1975; TJ)

=*Graphis eulectra* (= misidentifications for CA reports, although known from E 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)

**Synonyms:** *Physcia ciliata* (TJ; Weber et al. 1987), *P. ciliata f. ciliata* (Thomson 1963)

**Misapplied names:** *Physcia obscura* (some early CA collections)

**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 2004a; C. Wetmore 50421, as *P. endococcina* (Körb.) Essl., Giant Forest, Sequoia N. P., Tulare Co., 6 May 1984, MIN; B. Ryan 32155, along Rock Creek, NW of Rock Creek Cpgd, Sierra Nat. Forest, Tulare Co., ASU; T. Nash 11292, Lower Peppermint Cpgd, Sequoia Nat. Forest, Tulare Co., ASU)

**Note:** Esslinger (2004a, 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) distinct from *P. decolor* *fide* Esslinger [2004a, p. 407] although Moberg [1977] regarded *P. decolor* as a synonym of *P. endococcina* for European material. Esslinger (1978) stated that he had not seen *P. endococcina* from North America.

**Phaeophyscia erythrocardia** (Tuck.) Essl. 

(T. Nash 7253, Mt. San Jacinto, Riverside Co., ASU)

**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 2004a; Jovan & McCune 2004)

**Synonyms:** *P. cernohorskyi* (synonymy in Esslinger 2004b), *Physcia ciliata f. fibrillosa* (Thomson 1963)

**Phaeophyscia hirtella** Essl. 

(Robertson [2001, p. 34]; Thomson 2003)

**Note:** According to Brodo et al. (2001), the distribution is eastern temperate in U. S., but Thomson (2003) cited the species from CA and New Mexico as well.

**Phaeophyscia hispidula** (Ach.) Essl. 

(Brodo et al. [2001, p. 542, with color photograph]; 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; B. Ryan 26888, Arroyo Seco Cpgd, Los Padres Nat. Forest, Monterey Co., ASU)

**Note:** According to Esslinger (2004a), this taxon is known for the Sonoran region from one locality in Arizona.

**Phaeophyscia nigricans** (Flörke) Moberg 

(Wetmore 1985; T. Nash 8103, 1.6 mi W of Sonora Pass on Hwy 108, Tuolumne Co., ASU; not reported for S CA by Esslinger [2004a])

**Phaeophyscia opuntiella** (Poelt & Buschardt) Hafellner 

(L. Sigal coll. from Lake Co., determination by Breuss)

**Phaeophyscia orbicularis** (Neck.) Moberg 

(Hale & Cole 1988; Baltzo 1989; Ryan & Nash 1991; von Reis 1991 [but report based on a misidentification *fide* Tucker 1999]; Goward et al. 1994; Doell & Wright 1996; Brodo et al. [2001, pp. 542–543, with color photograph]; Baltzo 2002; Esslinger 2004a; Jovan & McCune 2004)

**Synonyms:** *Physcia obscura* [in some early publications for CA, *P. obscura* may have alternatively

referred to *Phaeophyscia ciliata*], *Physcia orbicularis* (Thomson & Ketchledge 1958; Baltzo 1970; Esslinger 1977b; TJ)

**Phaeophyscia sciastra** (Ach.) Moberg  

(Riefner, Bowler, & Ryan 1995; Magney 1999; Brodo et al. [2001, p. 544, with color photograph]; Esslinger [2004a] showed it in central CA on map; C. Wetmore 14791, on granitic rock, Los Padres Nat. Forest near Frazier Park, Kern Co., 22 June 1966, MIN)

**Phaeophyscia cernohorskyi** (Nádv.) Essl.  

(Esslinger 1978; Hale & Cole 1988; Weber 1989a; Bowler et al. 1996; Tucker & Bratt 1996; Bourell 2000; Brodo et al. [2001, pp. 539–540, with color photograph]; Robertson 2001, 2003a; Thomson 2003; Univ. Colo. Lich. Exs. 668)

=*P. hirsuta* (synonymy in Esslinger 2004a)

**PHAEOPYXIS** Rambold & Triebel

\***Phaeopyxis punctum** (A. Massal.) Rambold, Triebel & Coppins 

(T. Tønsberg TT 14891, Humboldt Co., BG, on *Cladonia* sp.)

**PHAEORRHIZA** H. Mayrhofer & Poelt

**Phaeorrhiza sareptana** (Tomin) H. Mayrhofer & Poelt  

(Ryan & Nash 1991)

**PHAEOSPOROBOLUS** D. Hawksw. & Hafellner

\***Phaeosporobolus usneae** D. Hawksw. & Hafellner  

(Diederich 2003, 2004; S. Tucker 34113B, American River Cyn near Kyburz, El Dorado Co., SBBG, on *Letharia vulpina*, determined by P. Diederich; S. Tucker 6267D, Skyline Blvd., on *Usnea fulvoreagens*, Santa Cruz Co., SBBG, determination by P. Diederich; S. Tucker 14848B pr. p., Mt. Shasta, Siskiyou Co., SBBG, on *Letharia vulpina*; C. Bratt 5697, Santa Cruz Isl., Santa Barbara Co., SBBG, on *Ramalina subleptocarpha*)

**PHAEOTREMA** Müll. Arg.

**Phaeotrema californicum** (Tuck.) Zahlbr.  

(Zahlbruckner 1924; Fink 1935; TJ)

=*Limonaea californica* (Sparrius 2004)

**PHLYCTIS** Wallr.

**Phlyctis argena** (Spreng.) Flot.  

(Hasse 1898a; Orcutt 1909; Hasse 1913b; Fink 1935; Jordan 1968; Lindsay 1973; TJ; Hale & Cole 1988; Baltzo 1989; Bratt 1999; Brodo et al. [2001, pp. 545–546, with color photograph]; Baltzo 2002; Thomson 2003; Tønsberg [2004] showed it along coastal S CA)

**Phlyctis speirea** G. Merr.  

(Tønsberg [2004] reported that it occurs in Channel Is. and coastal S CA)

**Phlyctis agelaea** (Ach.) Flot.  

(Hasse 1903e, 1913b; Fink 1935; Herre 1944b; TJ; Hale & Cole 1988; H. E. Hasse, Santa Monica Mts, Los Angeles Co., 1 July 1902; S CA specimens are apparently misidentifications, probably of *P. speirea* fide Tønsberg 2004; “eastern boreal” fide Brodo et al. 2001, p. 546)

**PHOMA** Sacc.

\***Phoma cytospora** (Vouaux) D. Hawksw.  

(Diederich 2003, 2004)

**\*Phoma physciicola** Keissl. 

(Diederich 2003, 2004; *S. Tucker 35931*, Figueroa Mtn, Santa Barbara Co., SBBG, on *Physcia*, determination by P. Diederich)

**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.]; Baltzo [2002, based on *H. Thiers 15283*, San Francisco Watershed, San Mateo Co., SFSU]; Thomson 2003)

**Phylliscum tenue** Henssen 

(Henssen 1963a, 1977; TJ; CA endemic)

**PHYSCIA** (Schreb.) Michx.

**Physcia 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)

**Physcia aipolia** (Ehrh. ex Humb.) Fürnr. 

(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)

**Synonyms:** [\*P. stellaris\* var. \*aipolia\*](#)

**Physcia 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; *T. Nash 11250*, Onyx Summit, San Bernardino Mts, San Bernardino Co., ASU, determination by R. Moberg, 1996; collections from Sierra Nevada and Siskiyou Co. also are at ASU; all S CA material is misidentified *fide* Nash [2002b, p. 509])

**Physcia 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)

**Physcia caesia** (Hoffm.) Fürnr. 

(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)

**Physcia clementei** (Sm.) Lyngé 

(Thomson 1963; TJ; Hale & Cole 1988; Bowler et al. 1996; Doell & Wright 1996; Brodo et al. [2001,

p. 551]; Wright 2001a; Moberg 2002)

**Synonyms:** *P. astroidea* Nyl.

**Phycia dimidiata** (Arnold) Nyl.  

(Wetmore 1985; Moberg 1997; Wright 2001a; Moberg 2002; Jovan & McCune 2004; *B. Ryan* 26360, San Gabriel Wilderness, Los Angeles Co., ASU; *T. Nash* 8101, W of Sonora Pass, Tuolumne Co., ASU; collections from Marble Mountain Wilderness, Siskiyou Co., ASU; also collections from San Diego Co., Madera Co., and Monterey Co., ASU)

**Phycia 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)

**Synonyms:** *P. intermedia*, *P. teretiuscula*

**Phycia duplicorticata** W. A. Weber & J. W. Thomson  

(Weber & Thomson 1975; TJ; *B. Ryan* 26200, San Gabriel Mts, Los Angeles Co., ASU; type collection: W. A. Weber, Inverness, Point Reyes, Marin Co., 12 March 1975; Weber [1976]: Univ. Colo. Lich. Exs. 476, E of junction Nicasio-Point Reyes Rd, Marin Co.; CA endemic)

**Phycia erumpens** Moberg  

(Robertson & Robertson [2001, *J. Robertson* 4392, Mt. Tamalpais, Marin Co., verified by T. Esslinger]; Wright [2001a, referring to Robertson collection]; Hill 2002; *S. Tucker* 38375, campus of Univ. of California, Santa Cruz, Santa Cruz Co., SBBG)

**Phycia halei** J. W. Thomson  

(Wetmore 1985; Riefner, Bowler, & Ryan [1995], based on Tulare Co. record [later re-identified as *P. tribacia* by S. Tucker on the basis of soredia present; *P. halei* is esorediate]; Magney 1999 [as *Phaeophyscia halei*, same collection as Riefner]; Wright [2001a, cited same *R. Riefner* collection]; color photograph but no CA report in Brodo et al. [2001, p. 555]; *T. Carlberg* 497, Six Rivers Nat. Forest, Mad River Rock, Del Norte Co.; Moberg [2002] reported it from Baja California including a collection on the U. S. border)

**Phycia leptalea** (Ach.) DC.  

(Thomson 1963; Baltzo 1970; TJ; Wright 2001a)

=*P. semipinnata*

**Note:** The Thomson record, which is based on a S CA specimen, is probably misidentified because S CA coastal material is likely to be referable to *P. villosula*. The Baltzo and Wright reports are from central CA.

**Phycia magnussonii** Frey  

(Magney [1999] and Wright [2001a] cite *S. Tucker* 35403, "The Slides", 8.6 mi. from Lake Pillsbury, Lake Co., SBBG, !T. Esslinger)

**Phycia 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; *T. Nash* 32860, Santa Rosa Isl., Santa Barbara Co., ASU)

**Phycia neglecta** Moberg  

(in Sonoran part of Mexico but not reported from CA fide Moberg 2002; *T. Nash* 32601b, Santa Rosa Isl., pass on main road SE of Black Mtn, Santa Barbara Co., ASU)

**Phycia phaea** (Tuck.) J. W. Thomson  

(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)

**Synonyms:** *P. melops*, *P. cascadensis* H. Magn. (synonymy in Nash [2002b, p. 509], after Moberg 1997)

**Misapplied names:** *P. callosa* Nyl. for CA material

### **Physcia poncinsii** Hue

(Moberg 2002; S. Tucker 7966, Santa Barbara, Santa Barbara Co., SBBG, determination by T. Esslinger; R. Riefner 88–78, coastal bluff on Hwy 1 near Fort Ross, Sonoma Co., determination by S. Tucker; 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)

**Note:** Some early CA collections should be re-examined, because it is often difficult to distinguish this from *P. biziana*.

### **Physcia tenella** (Scop.) DC.

(Herre 1910; Merrill 1923; Thomson 1963; Baltzo 1970; Pinelli & Jordan 1978; TJ; 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)

**Synonyms:** *P. hispida*, *P. stellaris* var. *hispida*, *P. stellaris* subsp. *tenella*

### **Physcia tenella** subsp. **tenella**

(Bratt 1997; Wright 2001a)

### **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], including a Santa Barbara collection in Thomson [1963])

**Synonyms:** *P. subobscura* (B. Ryan 26415a, near Crystal Lake, San Gabriel Wilderness, Los Angeles Co., ASU)

### **Physcia tenellula** Moberg

(Moberg 1997; Wright [2001a, distinction from *P. tenella* explained]; Moberg 2002)

**Misapplied names** (*fide* R. Moberg): *P. tenella* (records from Sonoran parts of S CA)

**Note:** *P. tenellula* has lobes 0.5–1.0 mm 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; von Reis [1991, collection misidentified as *P. millegrana* *fide* Tucker 1999]; Wright 2001a; Baltzo 2002; Moberg 2002; Robertson 2003b)

**Misapplied names:** *P. callosa* sensu Thomson (North American material)

### **Physcia villosula** Moberg

(in Baja California but not reported from CA *fide* Moberg 2002; S. Tucker 35681, ridge on Islay Canyon Rd, Santa Cruz Isl., Santa Barbara Co., SBBG, determined by R. Moberg)

### **Physcia adglutinata** (Flörke) Nyl.

(TJ for references)

=*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 South America. He suggested that the name *P. alba* may have been misapplied to *P. aipolia*.*Physcia alba* var. *obsessa* (Mont.) J. W. Thomson  

(Thomson 1963)

=*P. integrata* var. *obsessa* (Mont.) Nyl., but misidentifications for North America*Physcia albicans* (Pers.) J. W. Thomson  

(Thomson 1963; TJ)

=*Heterodermia albicans* (see Moberg & Nash [2002, p. 209]; the name was misapplied by Thomson to a *Physcia* [cf. *P. dimidiata*] having a prosoplectenchymatous lower cortex and marginal soralia.)*Physcia americana* G. Merr.  

(Hale 1979; Riefner, Bowler, &amp; Ryan [1995, based on San Luis Obispo Co. collection which needs verification]; same cited by Wright [2001a]; Thomson 2003; Jovan &amp; McCune 2004)

**Misapplied names:** *P. tribacoides* for North American materia**Note:** According to Brodo et al. (2001, p. 551, color photograph), this species occurs only in the eastern U. S.*Physcia aquila* (Ach.) Nyl.  

(McClatchie 1897; Hasse 1898a)

=*Anaptychia runcinata* (With.) J. R. Laund. (misidentifications for CA)*Physcia astroidea* (Clem.) 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; color photograph in Brodo et al. [2001, p. 554, mislabeled *P. callosa*])**Note:** Most reports represent misidentifications of *P. tribacia*, a soraliaceous 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* (soraliaceous).*Physcia cascadensis* H. Magn.  (Thomson 1963; TJ; Baltzo 1989; Wright 2001a; CA material by this name is *P. phaea* *fide* Moberg 1997 and Nash [2002b, p. 509])*Physcia chrysophthalma* var. *pubera* Nyl. 

(Tuckerman 1860)

= *Teloschistes flavicans*; 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 North America

*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. Thomson  

(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, 1895; 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 North American 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 hypoleuca* Nyl.  

(Hue 1895)

= misidentification of *Heterodermia* sp.

*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 leucomelaena* (L.) Hue  

(Hue 1895)

=*Heterodermia leucomela*

*Physcia lychnea* (Ach.) Nyl.  

(Hulting 1896; Hasse 1898a)

=*Xanthoria candelaria*

*Physcia melops* Nyl.  

(Imshaug 1957)

=*P. phaea*

*Physcia mexicana* de Lesd.  

(Baltzo 1970; Hebert & Meyer 1984; TJ; Baltzo 1989; Wright 2001a, who cited Baltzo collection from Contra Costa Co.; CA collections are probably misidentifications of *P. biziana* fide Nash 2002b)

*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 S CA described an esorediate species with densely black rhizinate lower surface, which probably referred to *Phaeophyscia ciliata*. Although *Physcia 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 name is not clear, since it is not in Zahlbruckner; TJ said it was a synonym of *Melanelia olivacea* (which is not reported for CA) but no support has been found for this interpretation.

*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\*](#), but North American reports are misidentifications. Most are presumably [\*Physconia americana\*](#), or other species of *Physconia* if soredia or isidia are present.

*Physcia pulverulenta* f. *deminuta* Cromb.  

(Hasse 1908b)

= [\*Physcia venusta\*](#), but misidentifications for North America

*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* f. *panniformis* Cromb.  

(Hasse 1908b)

= [\*Physcia venusta\*](#), but misidentifications for North America

*Physcia pulverulenta* subsp. *pityrea* Nyl. 

(Hasse 1908b, 1913b)

= *Physconia* sp.

*Physcia pulverulenta* var. *subvenusta* Nyl.  

(Hasse 1908b)

= [\*Physcia venusta\*](#), but misidentifications for North America

*Physcia pulverulenta* f. *venusta* (Ach.) Sandst.  

(Thomson 1963; Baltzo 1970)

= [\*Physconia venusta\*](#), but misidentifications for North America.

*Physcia semipinnata* (J. F. Gmel.) Moberg  

(Baltzo [1989] based on collections from Mt. Diablo, Contra Costa Co.)

= [\*P. leptalea\*](#)

*Physcia setosa* (Ach.) Nyl.  

(Thomson 1963; TJ)

= [\*Phaeophyscia hispidula\*](#)

*Physcia speciosa* Wulfen  

(Bolander 1870)

= *Heterodermia speciosa* (Wulfen) Trevis. (misidentifications for CA)

*Physcia stellaris* var. *aipolia* (Ehrh. ex Humb.) Nyl.  

(Tuckerman 1882; Hasse 1895, 1896; McClatchie 1897; Orcutt 1903, 1907)

= [\*P. aipolia\*](#)

*Physcia stellaris* var. *hispida* 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 subtilis* Degel.  

(Wetmore 1985; Riefner, Bowler, & Ryan 1995; Wright 2001a; most CA records are probably misidentifications of *P. halei* fide Nash 2002b.)

*Physcia teretiuscula* (Ach.) Lyngé  

(Imshaug 1957; Thomson 1963)

=*P. dubia*

*Physcia tribacoides* Nyl.  

(Thomson & Ketchledge 1958; Thomson 1963; TJ)

= misapplication for North American material

*Physcia venusta* (Ach.) Nyl.  

(Fink 1935;

=*Physconia venusta*, but misidentifications for North America)

*Physcia villosa* (Ach.) Duby  

(Howe 1910b, 1910c; misapplied to taxon later described as *Teloschistes californicus* for North America [see Sipman 1993], now *Seirophora californica*)

## PHYSCIELLA Essl.

**Physciella chloantha** (Ach.) Essl.  

(Esslinger 2004a; Jovan & McCune 2004; B. Ryan 26216, Mt. Mooney Rd, Los Angeles Nat. Forest, Los Angeles Co., ASU; S. Tucker 35865, Santa Cruz Isl., intersection of Ridge Rd and Valley Rd, 0.25 mi. W of Univ. of California Biological Station, Santa Barbara Co., SBBG; S. Tucker 38317, campus of Univ. of California, Santa Cruz, Santa Cruz Co., SBBG)

**Physciella melanchra** (Hue) Essl.  

(Riefner, Bowler, & Ryan [1995, based on R. Riefner 89–226, Morro Bay, San Luis Obispo Co. !S. Tucker]; Wright 2001a; Jovan & McCune 2004)

**Note:** According to Esslinger (2004a), this species is rare in Arizona, and not in S CA. The Riefner report is from N CA.

## 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)

**Misapplied names:** *P. distorta* (North American records), *P. venusta* (North American records)

**Physconia californica** Essl.  

(Esslinger 2000, 2002)

**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)

**Physconia fallax** Essl.  

(Esslinger 2000, 2002; Jovan 2003; Jovan & McCune 2004; 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 Nat. Forest, Madera Co., ASU)

**Physconia isidiigera** (Zahlbr.) Essl.  

(Essliger 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 2004; Jovan & McCune 2004)

**Synonyms:** *Physcia isidiigera*, *Physcia pulverulenta* subsp. *isidiigera*, *Physconia grisea* f. *isidiigera* (Thomson 1963)

**Physconia isidiomuscigena** Essl.  

(Essliger 2000, 2002; Jovan 2003; Robertson 2003b)

**Physconia kurokawae** Kashiw.  

**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. He saw only one S CA collection, *H. Hasse 161*, Santa Monica Mts, specimen in NY.

**Physconia leucoleiptes** (Tuck.) Essl.  

(Essliger 1994, 2000, 2002; Jovan 2003; Jovan & McCune 2004; *B. Ryan* 25889, Agua Tibia Wilderness, San Diego Co., ASU)

**Synonyms:** *Physcia pulverulenta* var. *leucoleiptes* Tuck. (Tuckerman 1882; Hasse 1896; McClatchie 1897; Orcutt 1907; Hasse 1913b)

**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)  
**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)

**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; color photograph in Brodo et al. [2001, p. 563]; name misapplied to other soraliate species of *Physconia* in CA)

**Physconia distorta** (With.) J. R. Laundon  

(Hale & Cole 1988; Baltzo 1989; Sigal 1989; von Reis 1991)

=*P. americana* for North American material

**Physconia grisea** (Lam.) Poelt  

(TJ; Baltzo 1989, 2002; name misapplied to other soraliate North American *Physconia* spp.)

**Physconia grisea** f. *isidiigera* (Zahlbr.) J. W. Thomson 

(Sigal 1989)

=*P. isidiigera*

**Physconia pulverulenta** (Schreb.) Poelt  

(Sigal 1975; Pinelli & Jordan 1978; TJ; Baltzo 2002)

=*P. distorta*, but misidentifications of *P. americana* for North American records

**Physconia thomsonii** Essl.  

(synonymy but no CA report in Esslinger [2002, p. 96]; *J. R. Shevock* 13362, Kern Co.; *J. R. Shevock* 13024, Tulare Co., determined by B. Ryan)

=*Anaptychia elbursiana*

**Physconia venusta** (Ach.) Poelt  

von Reis 1991 (but report based on a misidentification *fide* Tucker [1999])

### *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]; Robertson & Robertson 2002)

**Synonyms:** [\*Pilophoron aciculare\*](#) (Tuckerman 1872; Krog 1968; Hale 1969; Tucker 1973; TJ; Doell 1994)

### *PLACIDIOPSIS* Beltr.

*Placiopsis cinerascens* (Nyl.) Breuss  

(Breuss & McCune 1994; Breuss 2002)

*Placiopsis cervinula* (Nyl.) Vain.  

(Thomson 1987; misidentifications for North America *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 [reported collections from Inyo Co. and Riverside Co.]; Breuss 2002)

**Synonyms:** [\*Catapyrenium acarosporoides\*](#), [\*Dermatocarpon acarosporoides\*](#) (Zahlbruckner 1902; Hasse 1903f, 1913b; Fink 1935; TJ), [\*D. contumescens\*](#) (Hasse 1906)

*Placidium andicola* (Breuss) Breuss  

(Doell et al. 1999, based on *J. Robertson* 1944, Cove Springs, Granite Mountains, San Bernardino Co.)

*Placidium arboreum* (Schwein. ex E. Michener) Lendemer

**Synonyms:** [\*Catapyrenium tuckermanii\*](#), [\*P. tuckermanii\*](#) (synonymy follows Lendemer & Yahr 2004)

*Placidium californicum* Breuss  

(Breuss & Bratt 2001; Breuss 2002)

*Placidium chilense* (Räsänen) Breuss  

(Bratt 1999; Breuss & Bratt 2001)

*Placidium fingens* (Breuss) Breuss  

(Breuss & Bratt 2001; Breuss 2002)

*Placidium lachneum* (Ach.) de Lesd.  

(Breuss & Bratt 2001; Breuss 2002)

**Synonyms:** [\*Catapyrenium lachneum\*](#) (Ryan & Nash 1991), [\*Dermatocarpon lachneum\*](#)

*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)

**Synonyms:** [\*Catapyrenium lacinulatum\*](#)

*Placidium lacinulatum* var. *erythrostratum* Breuss  

(Breuss 2000, 2002)

*Placidium michelii* (A. Massal.) Breuss  

(Breuss 2002)

**Placidium pilosellum** (Breuss) Breuss  

(Breuss 1996; Breuss & Bratt 2001; Breuss 2002)

**Synonyms:** [Catapyrenium pilosellum](#) Breuss (*S. Tucker* 33676, San Nicolas Isl., Ventura Co., SBBG; *T. Nash* 33013, Santa Rosa Isl., Santa Barbara Co., ASU)

**Placidium squamulosum** (Ach.) Breuss  

(Doell et al. 1999; Breuss & Bratt 2001; Robertson 2001; Breuss 2002; Tucker 2002; Riefner et al. 2003; Robertson 2003b)

**Synonyms:** [Catapyrenium squamulosum](#)

**Misapplied names:** [Dermatocarpon hepaticum](#) for CA records

*Placidium rufescens* (Ach.) A. Massal.  

(not mentioned for CA by Breuss [2002] or Breuss & Bratt [2001] so early CA reports are in doubt)

**Synonyms:** [Dermatocarpon rufescens](#) (Hasse 1908b, 1913b; Parish 1914), [Endocarpon rufescens](#)

**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]; *T. Nash* 19052, Hastings Natural History Reserve, Monterey Co., ASU)

=[P. arboreum](#)

**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.) Merat.  

(Tuckerman 1866; Bolander 1870)

=[Caloplaca callopisma](#)

*Placodium candicans* Schaer.  

(Hasse 1903c)

=misidentifications for North American 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 holocarpa](#)

*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*?

*Placodium eugyrum* Tuck.

(Hasse 1908a)

=*Caloplaca eugyra*, but misidentification for CA

**Note:** Wetmore & Kärnefelt (1998) question the CA record and according to Zahlbrückner (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 of *C. bolanderi* (*C. luteominia* var. *bolanderi*) fide Magnusson 1944

*Placodium fulgens* (Sw.) Körb.

(Hasse 1913b; Fink 1935)

=*Fulglesia 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. *gyalechoides* Müll. Arg. (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 North America *fide* Wetmore 1996 and Esslinger 2004b

*Placodium vitellinum* (Hoffm.) Hepp

(TJ for references)

=*Candelariella vitellina***PLACOLECANIA** (J. Steiner) Zahlbr.

*Placolecania candicans* (Dicks.) Zahlbr.

(Hasse 1910a, 1913b; Merrill 1923)

= misidentifications for North American 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])

**Synonyms:** *Lecanora gelida* (Fink 1935)

*Placopsis lambii* Hertel & V. Wirth

(Brodo et al. [2001, p. 572, with color photograph]; Tucker [2002, with reference to report of Brodo et al.])

**PLACOPYRENIUM** Breuss

*Placopyrenium caeruleopulvinum* (J. W. Thomson) Breuss

(Breuss 2002; Knudsen 2003a; *T. Nash* 8449, 3 km SW of Parker Dam on Colorado River, San Bernardino Co., ASU)

**Synonyms:** [Catapyrenium caeruleopulvinum](#) (Thomson 1987)

**Placopyrenium heppioides** (Zahlbr.) Breuss  

(Breuss 2002)

**Synonyms:** [Catapyrenium heppioides](#) (Thomson 1987), [Dermatocarpon heppioides](#) (Zahlbruckner 1912b; Hasse 1915a; Fink 1935; Herre 1944b; TJ; Knudsen 2003a)

\***Placopyrenium noxium** Breuss  

(*K. Knudsen*, San Bernardino Mts, Riverside Co., parasite on [Staurothele areolata](#), UCR; reported from Baja California by Breuss 2002)

**Placopyrenium zahlbruckneri** (Hasse) Breuss  

(Breuss 2002)

**Synonyms:** [Catapyrenium zahlbruckneri](#) (Thomson 1987), [Dermatocarpon zahlbruckneri](#) (Hasse 1913a; Fink 1935; TJ)

## PLACYNTHIELLA Elenkin

**Placynthiella icmalea** (Ach.) Coppins & P. James  

(Wetmore 1985, based on *J. Blakeman* 69, Grant Grove, King's Canyon N. P., Tulare Co., 19 July 1985, MIN; Knudsen 2005c)

**Placynthiella knudsenii** Lendemer 

(Lendemer 2004b; Ryan, Hertel et al. [2004]; Knudsen 2005c; CA endemic)

**Placynthiella oligotropha** (J. R. Laundon) Coppins & P. James  

(color photograph but no CA report in Brodo et al. [2001, p. 572]; *B. Ryan* 23782a, edge of Desolation Wilderness on burnt log, Meeks Creek Trail, ca. 3 mi. SW of Meeks Bay, El Dorado Co., 2000–2500 m, ASU; *T. Nash* 11395, hills above Hendy Woods S. P., Mendocino Co.; *K. Knudsen* 389, Menifee Hills, Wildomar, Riverside Co., UCR)

**Placynthiella uliginosa** (Schrad.) Coppins & P. James  

(Baltzo 2002; Ryan, Hertel et al. 2004; *B. Ryan* 22278, Boonville, Mendocino Co., ASU; *S. Tucker* 35294, Pygmy Forest, Mitchell Creek Dr., Mendocino Co., SBBG, determined by B. Ryan)

**Synonyms:** [Lecidea humosa](#) (Herre 1944b, based on *C. L. Brown*, Marin Co.), [L. uliginosa](#) (Herre 1912b; Hasse 1915b; Herre 1944b; Jordan 1968)

## PLACYNTHIUM (Ach.) Gray

**Placynthium flabellosum** (Tuck.) Zahlbr.  

(Henssen 1963a; TJ)

**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)

**Synonyms:** [Pannaria nigra](#) (Huds.) Nyl. (Hasse 1896; McClatchie 1897; Orcutt 1907)

**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 &amp; C. Culberson 1968; Lindsay 1973; Malachowski 1975; Pinelli &amp; Jordan 1978; TJ; Smith 1980; Sweet 1983; Thomson 1984; Hale &amp; Cole 1988; Goward et al. 1994; Tucker &amp; 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; Blauman 2004; Jovan &amp; McCune 2004)

**Synonyms:** [Cetraria glauca](#)**Platismatia herrei** (Imshaug) W. L. Culb. & C. F. Culb.  

(W. Culberson &amp; C. Culberson 1968; Lindsay 1973; Malachowski 1975; TJ; Smith 1980; Sweet 1983; Hale &amp; 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; Blauman 2004; Jovan &amp; McCune 2004)

**Synonyms:** [Cetraria herrei](#), [C. tuckermanii](#) Herre non Oakes in Tuckerman**Platismatia lacunosa** (Ach.) W. L. Culb. & C. F. Culb.  

(W. Culberson &amp; C. Culberson 1968; TJ; Hale &amp; Cole 1988; Goward et al. 1994; Wright 2001a; Brodo et al. [2001, p. 576, with color photograph])

**Synonyms:** [Cetraria lacunosa](#) (Tuckerman 1866; Bolander 1870; Hasse 1913b)**Platismatia norvegica** (Lynge) W. L. Culb. & C. F. Culb.  

(Goward et al. 1994; McCune &amp; Geiser 1997; Wright [2001a, repeated McCune &amp; Geiser's report]; no first-hand CA records are known to S. Tucker and B. Ryan; color photograph but no CA report in Brodo et al. [2001, p. 576])

**Platismatia stenophylla** (Tuck.) W. L. Culb. & C. F. Culb.  

(W. Culberson &amp; C. Culberson 1968; Lindsay 1973; Hale 1979; TJ; Sweet 1983; Hale &amp; Cole 1988; Tucker &amp; Bratt 1995 [as "cf."]; Riefner, Bowler, &amp; Ryan 1995; Brodo et al. [2001, pp. 576–577, with color photograph]; Wright 2001a; Blauman 2004; Jovan &amp; McCune 2004)

**Synonyms:** [Cetraria stenophylla](#), [Cetraria lacunosa var. stenophylla](#)**PLATYGRAPHA** Nyl. = **SCHISMATOMMA****Platygrapha californica** (Tuck.) Nyl.  

(Tuckerman 1872 [p. 195], 1888 [p. 116]; Hue 1891)

= [Sigridia californica](#)**Platygrapha hypothallina** Zahlbr.  

(Zahlbrückner 1900, 1907; Hasse 1903b, 1903f)

= [Lecanographa hypothallina](#)**Platygrapha plurilocularis** Zahlbr.  

(Zahlbrückner 1902; Hasse 1903b, 1903f)

= [Schismatomma pluriloculare](#)**PLATYSMA** Hoffm.**Platysma orbatum** Nyl.  

(Hue 1890)

= [Tuckermannopsis orbata](#)**Platysma saepincola** (Ehrh.) Hoffm.  

(Hasse 1898a; Orcutt 1909)

= [Tuckermannopsis saepincola](#)**PLECTOCARPON** Fée

**\*Plectocarpon nashii** Hafellner  (Hafellner et al. [2002, on *Niebla robusta*])**PLEOPSIDIUM** Körb.**Pleopsidium chlorophanum** (Wahlenb.) Zopf  

(Robertson et al. 1998, [as "cf."]; Bratt 1999; Doell et al. 1999; Bourell 2000; Robertson 2003b; Knudsen 2004b)

**Synonyms:** *Acarospora chlorophana* (Hasse 1908b; Herre 1910; Hasse 1913b; TJ), *Lecanora chlorophana* (Tuckerman 1872, 1882; Hasse 1895; McClatchie 1897; Hasse 1905; Orcutt 1903, 1907)**Note:** According to Hafellner (1993), many records, including all from lowland areas, are almost certainly misidentifications, because this species is arctic/alpine in Europe.**Pleopsidium flavum** (Bellardi) Körb.  (Brodo et al. [2001, pp. 578–579, with color photograph, although identity of latter is *Acarospora novomexicana fide* W. Weber]; Robertson 2003b; Knudsen 2004b)**Synonyms:** *Acarospora flava* (Fink 1935; Herre 1942a, 1945, 1950a; TJ), *A. oxytona* (Magnusson 1929b)**POLYBLASTIA** A. Massal.**Polyblastia cupularis** A. Massal.  **Synonyms:** *P. intercedens* (Herre 1912a [on sandstone, Alum Rock S. P., Inner Coast Range, Santa Clara Co., 450 ft. elev.]; Hasse 1913b), *Verrucaria intercedens* (Hasse 1898a), *Verrucaria intercedens var. aethioboloides* Nyl. (Hasse 1895, 1898a; Orcutt 1907)*Polyblastia intercedens* (Nyl.) Lönnr.  

(Herre 1912a; Hasse 1913b; Fink 1935; TJ)

= *P. cupularis**Polyblastia intercedens* var. *aethioboloides* Nyl. 

(Hasse 1895, 1898a; Orcutt 1907)

= *P. cupularis***POLYBLASTIOPSIS** Zahlbr. = **JULELLA***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 probable misidentifications**POLYCAULIONA** Hue = **CALOPLACA***Polycauliona bolanderi* (Tuck.) Hue  

(Hue 1909a)

= *Cladidium bolanderi**Polycauliona constipans* (Nyl.) Hue  

(Hue 1909a)

= *Edrudia constipans**Polycauliona coralloides* (Tuck.) Hue  

(Hue 1909a; Rudolph 1955; Bowler et al. 1996)

= *Caloplaca coralloides*

*Polycauliona phryganitis* (Tuck.) Hue  

(Hue 1909a)

=[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)

**Synonyms:** [Leptogium muscicola](#) (Sw.) Fr.

*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 *fide* Brodo et al. 2001, p. 579)

*Polychidium rivale* (Tuck.) Fink  

(Fink 1935)

=[Leptogium rivale](#)

## POLYCOCCUM Sauter ex Körb.

\***Polycoccum microsticticum** (Leight. ex Mudd) Arnold  

(Santesson, *Fungi Lichenicoli Exs.* 67, Orange Co.)

**Note:** This taxon was not reported for the Sonoran region or S CA in particular by Calatayud (2004) although five other species were reported. 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*.

## POLYSPORINA Vězda

**Polysporina lapponica** (Ach. ex Schaer.) Degel.  

(Knudsen 2005b, 2005c; K. Knudsen 1318, Torrey Pines, San Diego Co.)

**Synonyms:** [Sarcogyne bicolor](#) (synonymy *fide* K. Knudsen)

**Polysporina simplex** (Davies) Vězda  

(Bratt 1987, 1997; Doell et al. 1999; Robertson 2001, 2003b)

**Synonyms:** [Acarospora simplex](#) f. [complicata](#), [Biatorella simplex](#), [B. revertens](#), [Lecanora privigna](#) var. [revertens](#), [L. simplex](#), [L. simplex](#) f. [complicata](#), [Sarcogyne simplex](#)

**Polysporina urceolata** (Anzi) Brodo  

(S. Tucker 28026, on dolomite, Patriarch Grove, White Mts, Mono Co., SBBG; K. Knudsen, near Cactus Flats, San Bernardino Mts, San Bernardino Co., UCR)

## PORINA Müll. Arg.

**Porina aenea** (Wallr.) Zahlbr.  

(Aptroot 2002; T. Nash 33058, Santa Rosa Isl., Santa Barbara Co., ASU)

**Synonyms:** [P. carpinea](#) (Herre 1910; Fink 1935; TJ), [Trichothelium aeneum](#)

**Porina cestrensis** (Tuck. ex E. Michener) Müll. Arg.  

(Aptroot 2002; *S. Tucker* 35830, Santa Cruz Isl., Santa Barbara Co., SBBG, determination by A. Aptroot)

**Misapplied names:** *P. hibernica*

**Porina chlorotica** (Ach.) Müll. Arg.  

(TJ; von Reis 1991; Tucker 1999; Aptroot 2002; *von Reis SS-L45D*, San Luis Obispo Co., OBI, determination by S. Tucker)

**Synonyms:** *Trichothelium chloroticum* (T. Nash 33020, Santa Rosa Isl., Santa Barbara Co., ASU), *Verrucaria chlorotica* (Hasse 1898a, 1906), *V. chlorotica f. trachona* (Taylor) Hasse (Hasse 1906)

**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, based on a single collection from Santa Rosa Isl.; photographs included]; CA endemic)

**Porina carpinea** (Pers. ex Ach.) Zahlbr.  

(Herré 1910; Fink 1935; TJ)

=*P. aenea*, but some A. W. Herré collections were misidentified; some have been re-determined as *Anisomeridium biforme* by S. Tucker

**Porina cinerea** (Pers.) Zahlbr. (nom. illeg.)  

(Hasse 1906; Fink 1935)

=*Strigula stigmatella* (Aptroot 2002)

**Porina hibernica** P. James & Swinscow  

**Note:** According to R. Harris (1995) this taxon does not occur in North America. 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)

## PORPIDIA Körb.

**Porpidia crustulata** (Ach.) Hertel & Knoph  

(Wetmore 1985; Gowan 1989; Brodo et al. [2001, p. 584, with color photograph])

**Porpidia grisea** Gowan  

(Knoph & Rambold [2004]; on coastal rocks north of the Sonoran zone in CA)

**Porpidia ochrolemma** (Vain.) Brodo & R. Sant.  

(B. Ryan 23331, SW of Fallen Leaf Lake, El Dorado Co., ASU)

**Synonyms:** *Hymenelia ochrolemma* (Gowan & Ahti [1993] for synonymy)

**Porpidia thomsonii** Gowan  

(Gowan 1989; *S. Tucker* 14866, near Oroville, Butte Co., SBBG)

**Misapplied names** (*fide* S. Tucker): *Lecidea fuscorubens* (Herré 1944b)

**Porpidia macrocarpa** (DC.) Hertel & A. J. Schwab  

(Wetmore 1985)

**Synonyms:** *Lecidea contigua* (Orcutt 1909; synonymy *fide* Esslinger [2004b]), *L. macrocarpa* (Thomson & Ketchledge 1958), *L. platycarpa* (Hasse 1896; Orcutt 1907; Herre 1910; Hasse 1913b; Fink 1935), *Hulia macrocarpa*

**Note:** Reports from CA are probably misidentifications, since nearly all CA reports are from S CA, and Knoph & Rambold (2004) do not mention any reports for S CA, although the taxon is 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], but probably based on misidentifications since it is boreal, with Washington as the southernmost occurrence on the West Coast *fide* Gowan [1989])

## PROTOBLASTENIA (Zahlbruckner) J. Steiner

*Protoblastenia rupestris* (Scop.) J. Steiner  

(*R. Robertson* 8729, upper quarry, Univ. of CA, Santa Cruz, Santa Cruz Co.)

*Protoblastenia quernea* (Dicks.) Clauzade  

(Lindsay 1973; TJ)

=*Pyrrhospora quernea*

## PROTOPANNARIA (Gyeln.) P. M. Jørg. & S. Ekman

*Protopannaria pezizoides* (Weber) P. M. Jørg. & S. Ekman  

(not mentioned for CA by Jørgensen [2001a])

**Synonyms:** *Pannaria brunnea* (Hasse 1903c), *P. pezizoides* (Hasse 1913b; Fink 1935; Goward et al. 1994; Wright 1997; discussed by Tucker 2002)

## 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.]; discussed by Tucker 2002; Ryan, Nash et al. 2004; *T. Nash* 11284b, near Pyle's Boys Camp, 11 km N of Lower Peppermint Cpgd, Sequoia Nat. Forest, Tulare Co., ASU; *T. Nash* 33030, South Point, Santa Rosa Isl., Santa Barbara Co., ASU)

**Synonyms:** *Lecanora badia* (Hasse 1896; Orcutt 1903, 1907; Herre 1912b; TJ)

*Protoparmelia nephaea* (Sommerf.) R. Sant. ex Poelt & Obermayer  

(Ryan, Nash et al. [2004] based on Herre report for N CA, and expected to occur in S CA)

**Synonyms:** *Lecanora nephaea* (Herre 1944b)

*Protoparmelia ochrooccca* (Nyl.) P. M. Jørg., Rambold & Hertel  

(Ryan, Nash et al. 2004)

**Synonyms:** *Lecanora phaeobola* (Tuckerman 1872; Willey 1873a; Tuckerman 1882; Hasse 1895; Orcutt 1909; Hasse 1913a, 1913b; Hertel 1988)

## 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; *J. & R. Robertson 1775*, Hull Mtn Rd 5 mi. S of summit, elev. 6800 ft., Lake Co., 4 July 1998)

**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)

**Synonyms:** *Alectoria pubescens*, [\*Parmelia lanata\*](#) (Tuckerman 1882; Hasse 1903c; Fink 1935; Herre 1945, 1946), [\*P. pubescens\*](#) (Berry 1941; Herre 1942a, 1946, 1950a; TJ)

**PSEUDEVERNIA** Zopf**Pseudevernia intensa** (Nyl.) Hale & W. L. Culb.  

**Misapplied names:** [\*Parmelia furfuracea\*](#) (Berry 1941; Herre 1946), [\*Evernia furfuracea\*](#), probable misidentifications for CA

**PSEUDOCYPHELLARIA** Vain.**Pseudocypsellaria 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; Robertson 2002a, 2003a; Blauman 2004; Jovan & McCune 2004)

**Pseudocypsellaria 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, 2003a; Blauman 2004; Jovan & McCune 2004)

**Synonyms:** [\*Sticta anthraspis\*](#) (C. Harris 1903; Thomson & Ketchledge 1958), [\*Stictina anthraspis\*](#)

**Pseudocypsellaria 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; Jovan & McCune 2004)

**PSEUDOPARMELIA** Lynge**Pseudoparmelia caperata** (L.) Hale  

(Hale 1976a; TJ; Bratt 1987; Weber et al. 1987)

=[\*Flavoparmelia caperata\*](#)

**PSEUDOPYRENULA** Müll. Arg.**Pseudopyrenula subnudata** Müll. Arg.  

(Aptroot 2002)

**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\*](#) (Herre 1944b, but Herre report based on misidentification of a

nonlichenized fungus *fide* S. Tucker)

**PSORA** Hoffm.

**Psora brunneocarpa** Timdal  

(Timdal 2002)

**Psora californica** Timdal  

(Timdal 1986; Baltzo 1989; Brodo et al. [2001, p. 601]; Timdal 2002; Riefner et al. 2003)

**Psora cerebriformis** W. A. Weber  

(Timdal 1986; Goward et al. 1994; Brodo et al. [2001, p. 598, with color photograph])

**Psora crenata** (Taylor) Reinke  

(Timdal 1986; Brodo et al. [2001, p. 599, with color photograph]; Timdal 2002)

**Synonyms:** *Biatora crenata* (McClatchie 1897), *Lecidea crenata* (Hasse 1898a, 1913b; TJ)

**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)

**Synonyms:** *Biatora decipiens* (Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1888; McClatchie 1897; Hasse 1903b, 1903e; Orcutt 1903, 1907), *Lecidea decipiens* (Herre 1910; Hasse 1913b; TJ)

**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]; Timdal 2002; Robertson 2003b)

**Synonyms:** *Biatora globifera* (Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a; Tuckerman 1888; Hasse 1896; Orcutt 1907), *Lecidea globifera* (Hasse 1898a; Herre 1910; Hasse 1913b; Baltzo 1970; Sigal 1975; TJ)

**Psora hyporubescens** Timdal  

(Timdal 2002; CA endemic)

**Psora luridella** (Tuck.) Fink  

(Fink 1935; Hale & Cole 1988; Timdal 2002)

**Synonyms:** *Biatora luridella* (Tuckerman 1888; McClatchie 1897), *Lecidea luridella* (Hasse 1898a, 1913b; Merrill 1923; Herre 1942a, 1942c, 1950a; Anderson 1964; TJ)

**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 2004)

**Synonyms:** *Lecidea nipponica*, *L. novomexicana* (Anderson 1962, 1964; Baltzo 1970), *Psora novomexicana*

**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)

**Psora peninsularis** Timdal  

(Timdal 2002)

**Psora pruinosa** Timdal  

(Timdal 2002; Robertson 2003b)

**Psora russellii** (Tuck.) A. Schneid.  

(Timdal 1986; Hale & Cole 1988; Doell et al. 1999; Brodo et al. [2001, p. 603]; Timdal 2002)

**Synonyms:** *Biatora russellii* (Tuckerman 1888), *Lecidea russellii* (TJ)

**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]; Timdal 2002)

*Psora caulophylla* (Tuck.) Fink  

(Fink 1935)

=[Lecidea caulophylla](#)

*Psora friesii* (Ach.) Hellb.  

(Fink 1935 ["doubtfully reported"])

=[Hypocenomyce friesii](#)

*Psora lurida* (Ach.) DC.  

(Fink 1935)

=[Mycobilimbia lurida](#)

*Psora novomexicana* 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](#) (Nash, Kainz et al. 2004)

## PSORINIA Gotth. Schneid.

*Psorinia conglomerata* (Ach.) Gotth. Schneid.  

**Synonyms:** [Biatora conglomerata](#) (Fr.) Hasse (Hasse 1906)

**Note:** The Hasse report was not mentioned by Timdal (2002), who reported the species from Arizona but not CA.

## PSOROMA Michx.

*Psoroma cinnamomeum* Malme  

(Jørgensen 2001a, 2002)

*Psoroma hypnorum* (Vahl) Gray  

(Hale 1979, shown on map in extreme northern CA; discussed by Tucker [2002]; Carlberg [2003] based on *T. Carlberg 651*, Broken Rib Mountain Botanical Area, Six Rivers Nat. Forest, Del Norte Co.; 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 S Oregon)

**Synonyms:** [Pannaria hypnorum](#)

## PSOROTICHIA A. Massal.

*Psorotichia hassei* Fink ex J. Hedrick  

(Hedrick 1933; Fink 1935; TJ; *T. Nash 38775b*, San Nicolas Isl., downslope from Theodolite Rd, Ventura Co., ASU; CA endemic)

**Misapplied names:** [P. arnoldiana](#) (Hasse 1913b), [Collemopsis arnoldiana](#) (Hasse 1906)

*Psorotichia schaeferi* (A. Massal.) Arnold  

(Hasse 1913b; Fink 1935; TJ; Thomson 2003)

**Synonyms:** [Collemopsis schaeferi](#) (Hasse 1898a; Orcutt 1909)

*Psorotichia squamulosa* Zahlbr.  

(Zahlbruckner 1902; Hasse 1903f, 1913b; Fink 1935; Herre 1944b; TJ; CA endemic)

*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; CA endemic)

**Synonyms:** [\*Collemopsis segregata\*](#) (Hasse 1898a; Orcutt 1909)

**Note:** According to Schultz (2004, p. 321), the name *Psorotichia segregata* Nyl. was misapplied by Hasse to specimens of [\*Lempholemma chalazanum\*](#) (Hasse Exs. No. 892).

## PSORULA Gotth. Schneid.

*Psorula rufonigra* (Tuck.) Gotth. Schneid.  

(Hale & Cole 1988; Sigal 1989; von Reis 1991 [but report based on a misidentification *fide* Tucker 1999]; *T. Nash 18963*, E side of Pinnacles Nat. Monument, San Benito Co. (central CA), ASU; not in S CA *fide* Timdal 2002, p. 435)

**Synonyms:** [\*Lecidea rufonigra\*](#) (Hasse 1913b; Herre 1950a; Sigal 1975; TJ), *Psora rufonigra*

*Psorula scotopholis* (Tuck.) Gotth. Schneid.  

(Weber [1989a; Univ. Colo. Lich. Exs. 690, San Joaquin Experimental Range, 28 mi. N of Fresno, Madera Co.]; Bowler et al. 1996)

=[\*Miriquidica scotopholis\*](#) (Nash, Kainz et al. 2004)

## 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; *Shevock 12137*, W of Hatchet Mtn, along Hwy 299, Shasta Co., UC, determined by B. Ryan)

**Synonyms:** [\*Parmelia borreri\*](#) (Herre 1907, 1910; Berry 1941; Herre 1946; W. Culberson 1962; Jordan 1968)

**Note:** Many of the early CA reports are misidentifications of [\*Punctelia perreticulata\*](#).

*Punctelia perreticulata* (Räsänen) G. Wilh. & Ladd  

(Adler & Ahti 1996; Wright 2001a; Tucker 2002; Aptroot 2003; Thomson 2003; Egan & Aptroot 2004; photograph in Brodo et al. [2001, p. 609, mislabeled as *P. subrudecta*])

**Synonyms:** *Parmelia perreticulata* (Räsänen) Hale

**Misapplied names:** [\*Parmelia dubia\*](#), [\*P. borreri\*](#) (Herre 1946), [\*P. subrudecta\*](#)

*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 *R. Riefner* collections; Egan & Aptroot 2004)

*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)

*Punctelia ulophylla* (Ach.) van Herk & Aptroot  

(*C. Bratt 4603*, Cuesta Ridge, San Luis Obispo Co., SBBG, determination by P. van den Boom; not confirmed for North America by Aptroot [2003])

*Punctelia bolliana* (Müll. Arg.) Krog  

(Tucker 2002 [negative report for CA]; Thomson 2003; in midwest and eastern U. S., not in CA *fide* Brodo et al. [2001, p. 606])

**Synonyms:** [\*Parmelia bolliana\*](#) (W. Culberson & C. Culberson 1956; W. Culberson 1962)

*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; not confirmed for North America by Aptroot [2003])

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

**Note:** Many of the early CA reports are misidentifications of [\*Punctelia perreticulata\*](#).

**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)

**Synonyms:** [\*Hypocenomyce praestabilis\*](#)

*Pycnora xanthococca* (Sommerf.) Hafellner  

**Synonyms:** [\*Hypocenomyce xanthococca\*](#) (Ryan & Nash 1991)

**Note:** According to Timdal (2002, p. 226) this report is based on misidentifications. Esslinger (2004b) lists the species for North America.

**PYRENOCOLLEMA** Reinke*Pyrenocollema prospersellum* (Nyl.) R. C. Harris  

(S. Tucker 6210A, on rock, near Ione, Amador Co., SBBG, determination [as "cf."] by R. C. Harris)

*Pyrenocollema elegans* R. Sant.  

(R. Santesson, 1992, from Santa Catalina Isl., Los Angeles Co.)

=[\*Collemopsidium elegans\*](#)

*Pyrenocollema halodytes* (Nyl.) R. C. Harris  

(R. Harris 1975; TJ; von Reis 1991)

=[\*Collemopsidium halodytes\*](#)

*Pyrenocollema imshaugii* R. C. Harris ined. 

(R. Harris 1975; TJ)

=*Collemopsidium* sp. (R. Harris, personal communication)

*Pyrenocollema sublitorale* (Leight.) R. C. Harris ex A. Fletcher  

=[\*Collemopsidium sublitorale\*](#)

**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 North America *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 holocarpa](#)

*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 North America *fide* Wetmore [1996] and Esslinger [2004b])

*Pyrenodesmia variabilis* (Pers.) E. Rud. ined.  

(Rudolph 1955)

=[Caloplaca variabilis](#)

**PYRENOPSIS** (Nyl.) Nyl.*Pyrenopsis furfurea* (Nyl.) Th. Fr.  

(Egan 1991)

Synonyms: [P. homoeopsis](#) (Hasse 1903c)*Pyrenopsis phaeococcia* Tuck.  

(Hasse 1903c, 1906; Herre 1910; Fink 1935; Sigal 1975; TJ; Sigal 1989; Tucker 1999; Thomson 2003)

Synonyms: [Psorotrichia phaeococcia](#), [Synalissa phaeococcia](#)*Pyrenopsis polycocca* (Nyl.) Tuck.  (H. Thiers, Trinity Co., reported in Tucker [2002], but should be checked; range is north central and northeast U. S. and Utah *fide* Brodo et al. [2001, p. 611])*Pyrenopsis homoeopsis* Nyl.  

(Hasse 1903c; TJ)

= [P. furfurea](#)*Pyrenopsis melambola* (Tuck.) Tuck.  

(Hasse 1906; Fink 1935; TJ)

= *Metamelanea melambola*, but Hasse specimens belong to different crustose taxa of Lichenaceae *fide* 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)

*Pyrenula occidentalis* (R. C. Harris) R. C. Harris  

(Aptroot 2002; D. T. Kowalski collection, Mendocino Co., CHSC, determination by R. C. Harris)

Synonyms: [P. neglecta subsp. occidentalis](#) (R. Harris 1973; Tucker & Kowalski 1975)*Pyrenula pyrenuloides* (Mont.) R. C. Harris  

(R. Harris 1989; Aptroot 2002)

Synonyms: [Anthracothecium pyrenuloides](#) (TJ)*Pyrenula thelomorpha* Tuck.  

(Aptroot 2002)

Synonyms: [Anthracothecium thelomorphum](#) (TJ), [Verrucaria thelomorpha](#) (Hasse 1898a)Note: Hasse (1903f) said that his collections of [Microglaena hassei](#) (= *Thelenella hassei*) were distributed as *Pyrenula thelomorpha*.*Pyrenula cerasi* (Schrad.) Trevis.  

(McClatchie 1897)

= [Arthopyrenia cerasi](#)*Pyrenula fallax* Nyl. 

(McClatchie 1897)

= *Arthopyrenia lapponica*; misidentifications for CA*Pyrenula herrei* Fink ex J. Hedrick  

(Hedrick 1933; Fink 1935; Herre 1942c)

= [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)

=[\*Arthopyrenia punctiformis\*](#)

## PYRRHOSPORA Körb.

**Pyrrhospora cinnabrina** (Sommerf.) M. Choisy  

(Brodo et al. [2001, pp. 614–615, with color photograph]; Tucker 2002; Spribille & Hauck 2003)

**Synonyms:** [\*Lecidea cinnabrina\*](#) (Riddle 1918; Fink 1935; Herre 1942a; TJ)

**Pyrrhospora elabens** (Fr.) Hafellner  

(Baltzo 2002; Ryan, Tønsberg et al. 2004)

**Synonyms:** [\*Lecidea elabens\*](#) (Hasse 1913b; Jordan 1968; TJ), [\*L. melancheima\*](#) (McClatchie 1897; Hasse 1903e; Herre 1910)

**Pyrrhospora gowardiana** Spribille & Hauck 

(Spribille & Hauck 2003)

**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)

**Synonyms:** [\*Biatora quernea\*](#), [\*Lecidea quernea\*](#), [\*Protoblastenia quernea\*](#)

**Pyrrhospora subcinnabrina** (Tønsberg) Hafellner  

(*T. Tønsberg TT14709*, Del Norte Co., BG)

**Pyrrhospora russula** (Ach.) Hafellner  

(Hasse and Herre reports, last from 1942; Wright 1997; Magney 1999; but out of range; could be misidentifications of [\*P. cinnabrina\*](#) fide Tucker [2002])

**Synonyms:** [\*Lecidea russula\*](#)

**Pyrrhospora varians** (Ach.) R. C. Harris  

(Tucker 2002; Baltzo 2004)

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

## PYXINE Fr.

**Pyxine subcinerea** Stirz. 

(*J. Saprison* collection, San Diego Co., determination by T. Esslinger)

**Pyxine cocoes** (Sw.) Nyl.  

(Hue [1895] --- a doubtful record, probably from Baja California, since the collection was by Diguet, who collected near the Cape)

**Pyxine sorediata** (Ach.) Mont.  

(Hasse 1903c, 1913b;

= misidentifications of [\*Diploicia canescens\*](#), based on examination of a *H. E. Hasse* collection from 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 baltica** Lettau  

(Riefner &amp; Bowler 1994a; Bowler &amp; Riefner 1995)

**Ramalina canariensis** J. Steiner  

(Riefner &amp; Bowler 1994b; Bowler &amp; Riefner 1995; Bowler et al. 1996; Bourell 2000; Brodo et al. [2001, p. 627]; Kashiwadani &amp; Nash 2004)

**Synonyms:** [\*R. evernioides\*](#)**Ramalina crinita** Tuck.  

(Tuckerman 1883b; Orcutt 1885; Eckfeldt 1893; Orcutt 1903, 1907; Hasse 1913b; Howe 1914; Herre 1945; CA not mentioned in Kashiwadani &amp; Nash [2004] who overlooked historical records)

**Synonyms:** [\*Trichoramalina crinita\*](#) (Rundel & Bowler 1974; TJ; Bowler & Riefner 1995; Bratt 2003; color photograph on front cover of CALS Bulletin 10[1], 2003)**Ramalina dilacerata** (Hoffm.) Hoffm.  (Hale & Cole 1988; Bowler & Riefner 1995; Goward 1999; Baltzo 2002; Tucker 2002; Jovan & McCune 2004; color photograph but no CA report in Brodo et al. [2001, p. 623]; *I. Tavares 1465*, Willits, Mendocino Co., 1965, UC, !S. Tucker; *M. A. Howe*, Olema, Marin Co. 1894, UC, !S. Tucker; most reports are from N half of CA)**Synonyms:** [\*R. minuscula\*](#) (Jordan 1968), [\*Fistulariella minuscula\*](#) (Bowler & Rundel 1977)**Ramalina farinacea** (L.) Ach.  

(Herre 1906, 1907, 1910; Hasse 1913b; Howe 1913; Merrill 1923; Wheeler 1938; Thomson &amp; Ketchledge 1958; Jordan 1968; Baltzo 1970; Lindsay 1973; Malachowski 1975; Pinelli &amp; Jordan 1978; TJ; Baltzo 1989; von Reis 1991; Bowler &amp; Riefner 1995; Tucker &amp; Bratt 1995; Bowler et al. 1996; Doell &amp; Wright 1996; Tucker &amp; 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, 2003a; Jovan &amp; McCune 2004; Kashiwadani &amp; Nash 2004)

**Synonyms:** [\*R. calicaris\* var. \*farinacea\*](#), [\*R. hypoprotocetrarica\*](#), [\*R. reagens\*](#)**Ramalina fraxinea** (L.) Ach.  

(Hulting 1896; Hasse 1910a; Herre 1910; Howe 1914; Fink 1935; TJ; Bowler &amp; Riefner 1995; Riefner, Bowler, &amp; Ryan [1995, who said that this species is coastal and rare, and that the name is commonly misapplied]; Bourell 2000; Doell 2002; not mentioned for CA by Kashiwadani &amp; Nash 2004)

**Synonyms:** [\*R. calicaris\* var. \*fraxinea\*](#), [\*Roccella calicaris\* var. \*fraxinea\*](#)**Ramalina intermedia** (Delise ex Nyl.) Nyl.  

(Hasse 1896, 1898a, 1903a; Orcutt 1903, 1907; Merrill 1923; Goward 1999; Kashiwadani &amp; Nash 2004; color photograph but no CA report in Brodo et al. [2001, p. 625])

**Synonyms:** [\*Roccella intermedia\*](#)**Ramalina lacera** (With.) J. R. Laundon  

(Bowler &amp; Riefner 1995; Bowler et al. 1996; Brodo et al. [2001, p. 628]; no S CA material seen by Kashiwadani &amp; Nash [2004] although they report it from Baja California)

**Synonyms:** [\*Dievernia lacera\*](#) (Bowler & Riefner 1995), [\*R. duriae\*](#) (Howe 1913; Fink 1935; Wheeler 1938; TJ), [\*R. evernioides\*](#) (Hasse 1910b, 1913b)**Ramalina leptocarpha** Tuck.  

(Tuckerman 1858, 1866; Zahlbruckner 1910; Keissler 1926; Wheeler 1938; Herre 1945; Baltzo 1970; Weber 1970; Rundel &amp; Bowler 1976; TJ; Hale &amp; Cole 1988; Baltzo 1989; von Reis 1991; Bowler &amp; Riefner 1995; Bowler et al. 1996; Doell &amp; Wright 1996; Tucker &amp; 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; *H. E. 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, 1882; Willey 1873a; Orcutt 1885; Hue 1890; Orcutt 1903; Hasse 1903d; 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)

**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)

**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; 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; Jovan & McCune 2004)

**Synonyms:** [\*Fistulariella roesleri\*](#) (Bowler & Rundel 1977)

**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; color photograph but no CA report in Brodo et al. [2001, p. 630]; not mentioned for S CA by Kashiwadani & Nash [2004]; but central and N CA reports are likely)

**Ramalina sonorensis** Kashiw. & T. H. Nash  

(Kashiwadani & Nash 2004, shown in CA on map)

**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)

**Synonyms:** *R. leptocarpha* f. *sorediata* (Baltzo 1970), *R. menziesii* f. *sorediata* (Eckfeldt 1893; Hasse 1915b)

**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; *T. Carlberg* collection, Six Rivers Nat. Forest, Del Norte Co.)

**Note:** The Sanders, Wright, Goward, and Magney citations are based on *W. Sanders*, Sonoma Co.,

UC. Brodo et al. (2001, p. 632) provide a color photograph but no CA report. Kashiwadani & Nash (2004) do not mention the taxon from the Sonoran region.

**Ramalina zwackhiana** (Kremp.) Körb. 

(Sheard 1982, 2004)

*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* Taylor  

(Taylor 1847; Howe 1914; not mentioned for CA by Kashiwadani & Nash 2004)

*Ramalina canaliculata* (Fr.) Dietr. non Taylor  

(Herre 1910; Hasse 1913b; Howe 1914; Moxley 1921)

=*R. calicaris*; misidentifications for CA

*Ramalina celastri* (Spreng.) Krog & Swinscow  

(very rare in Sonoran zone in Mexico, not in S CA *fide* Kashiwadani & Nash [2004])

**Synonyms:** *R. laevigata* (McClatchie 1895, 1897; Hasse 1898a), *R. yemensis* (Hasse 1913b; Howe 1914; Fink 1935; Herre 1945)

= misidentifications for early CA reports

*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* (Bowler & Marsh [2004, p. 372])

*Ramalina ceruchis* f. *cephalota* Tuck.  

(Tuckerman 1882; Stizenberger 1895; Hasse 1896, 1903a, 1903d; Herre 1906, 1907; Orcutt 1907; Herre 1910; Hasse 1913b; Wheeler 1938; Thomson & Ketchledge 1958)

=*Niebla cephalota* (TJ; Bowler & Marsh 2004)

*Ramalina ceruchis* [subsp.] *combeoides* (Nyl.) Tuck. 

(Merrill 1923)

=*Niebla combeoides* (Bowler & Marsh 2004)

*Ramalina ceruchis* var. *tumidula* (Taylor) Nyl. 

(Hasse 1914; Wheeler 1938; Spjut [1996, p. 202] said this combination was unclear and doubtful; 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 North America)

*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; Fink 1935; Wheeler 1938; Herre 1945; Thomson & Ketchledge 1958)

=[Niebla combeoides](#) (Bowler & Marsh 2004)

*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 was redetermined as [Ramalina leptocarpha](#) Tuck. by S. Tucker, CAS. This species was not mentioned for S CA by Kashiwadani & Nash (2004).

*Ramalina duriæi* (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](#), but misidentifications for North America, known only from Peru and Chile *fide* 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 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; Zahlbrückner 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](#) (Bowler & Marsh 2004)

*Ramalina homalea* f. *isidiosa* Willey ined. 

(Howe 1914)

=[Niebla isidiosa](#) Spjut

**Note:** Spjut (1996, p. 104) based the name *Niebla isidiosa* on a specimen bearing the unpublished name [Ramalina homalea](#) f. *isidiosa* Willey. Spjut did not refer to any CA records.

*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)

= probable misidentifications, since Zahlbruckner [1930] reported it from South America

*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. E. Hasse* 1179, as *Ramalina linearis* [Sw.] Ach., Santa Monica Mts, CA, 1900, MIN, identified as *R. leptocarpha* Tuck. by S. Tucker)

= misidentifications

*Ramalina menziesii* Tuck. non Taylor 

(TJ for references)

=*R. leptocarpha*

*Ramalina minuscula* (Nyl.) Nyl.  

(Jordan 1968)

=*R. dilacerata*

*Ramalina obtusata* (Arnold) Bitter  

(Goward 1999; not mentioned for CA by Kashiwadani & Nash 2004; *R. Riefner* 87–227, Santa Barbara Co. SBBG, and *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; color photograph but no CA report in Brodo et al. [2001, p. 629]; not mentioned for CA by Kashiwadani & Nash 2004)

*Ramalina pollinaria* f. *humilis* Anders  

(Hasse 1908a)

=*R. pollinaria*

*Ramalina reagens* (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 North America are based on misidentifications *fide* Bowler & Rundel (1973).

*Ramalina testudinaria* Nyl.  

(Nylander 1870; Willey 1873a; Hue 1890; Howe 1913; Fink 1935; TJ)

=[\*Niebla homalea\*](#) (Bowler & Marsh 2004)

*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)

## RAMONIA Stizenb.

**Ramonia ablephora** (Nyl. ex Hasse) R. C. Harris  

(R. Harris 1993; Ryan & Nimis 2004; CA endemic)

**Synonyms:** [\*Bacidia gyalectiformis\*](#) (Hasse 1913b; R. Harris 1988), [\*Biatora gyalectiformis\*](#) (Hasse 1903e), [\*Bilimbia gyalectiformis\*](#) (Zahlbruckner 1902; Fink 1935), [\*Lecidea ablephora\*](#) (Hasse 1898a), [\*Ramonia gyalectiformis\*](#)

*Ramonia gyalectiformis* (Zahlbr.) Vězda  

(TJ; Sigal 1989; R. Harris 1988)

=[\*R. ablephora\*](#)

**REINKELLA** Darb. = [\*\*HUBBSIA\*\*](#)

*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; Univ. Colo. Lich. Exs. 176)

=[\*Hubbsia parishii\*](#) (Follmann 1979; Tehler 2002; Tehler et al. 1997; Brodo et al. 2001)

*Reinkella subcrustacea* Räsänen  

(Räsänen 1949; TJ; Follmann 1979; Tehler 2002)

=[\*Hubbsia parishii\*](#)

## RHIZOCARPON Ramond ex DC.

**Rhizocarpon alpicola** (Wahlenb.) Rabenh.  

**Synonyms:** [\*Buellia alpicola\* f. \*microspora\*](#) (Tuckerman [1888], based on *Lapham* collection from 7,000 ft. in Sierra Nevada)

**Rhizocarpon badioatrum** (Flörke ex Spreng.) Th. Fr.  

(B. Ryan 25089, Marble Mountain Wilderness, Siskiyou Co., ASU; B. Ryan 32182, pr. p., Powerhouse Rd, Sierra Nevada, Madera Co., ASU, determination by Feuerer)

**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)

**Synonyms:** [Buellia bolanderi](#) (TJ for references)

**Rhizocarpon bolanderi** var. **sulphurosum** (Tuck.) Zahlbr. 

(Feuerer & Timdal [2004] for N CA; *B. Ryan* collections from Siskiyou Co., ASU; Feuerer [1991] lists this as a synonym of *R. bolanderi*)

**Rhizocarpon cinereovirens** (Müll. Arg.) Vain. 

(*B. Ryan* 25067, 8 km SW of town of Scott's Bar, Klamath Nat. Forest, Siskiyou Co., ASU)

**Rhizocarpon cookeanum** H. Magn. 

(*B. Ryan* 23923, Ione-Sutter Creek Rd, Amador Co., ASU)

\***Rhizocarpon dimelaenae** Timdal 

(Feuerer & Timdal [2004], lichenicolous 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]; Feuerer & Timdal 2004)

**Synonyms:** [Buellia petraea](#) var. [montagnei](#) (Tuckerman 1888; Hasse 1896; McClatchie 1897; Orcutt 1903, 1907)

**Rhizocarpon distinctum** Th. Fr.  

(Herre 1910; Hasse 1913b; TJ; not mentioned for CA by Feuerer & Timdal 2004, but may occur in N CA)

**Synonyms:** [R. ambiguum](#) (Fink 1935)

\***Rhizocarpon effiguratum** (Anzi) Th. Fr.  

(Anderson 1965; Thomson 1968b; TJ; lichenicolous on [Pleopsidium flavum](#) fide Feuerer & Timdal [2004], but they do not cite *R. effiguratum* from CA)

**Rhizocarpon eupetraeum** (Nyl.) Arnold  

(Feuerer & Timdal 2004)

**Synonyms:** [R. intermedium](#) (Ryan & Nash 1991)

**Rhizocarpon ferax** H. Magn.  

(Baltzo 1989; TJ)

**Rhizocarpon geminatum** Körb.  

(Herre 1910; Hasse 1913b; TJ; Ryan & Nash 1991; Feuerer & Timdal 2004)

**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)

**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)

**Synonyms:** [Buellia petraea](#) var. [albinea](#), [B. petraea](#) var. [grandis](#), [B. petraea](#) var. [vulgaris](#), [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]; *B. Ryan* 32183b, near Kerckhoff Lake, Sierra Nat. Forest, Madera Co., ASU; *T. Nash* 11306, Sequoia Nat. Forest, Tulare

Co., ASU)

**Synonyms:** *R. geographicum* f. *lecanorinum* Körb., *Buellia geographica* var. *lecanorina*

**Rhizocarpon macrosporum** Räsänen  

(Thomson 1968b; TJ; Brodo et al. [2001, p. 637, with color photograph]; Feuerer & Timdal 2004; *B. Ryan* 26133, Chilao Cpgd, Angeles Nat. Forest, San Gabriel Mts, Los Angeles Co., ASU; *B. Ryan* 32184b, Sierra Nat. Forest, Madera Co., ASU; *T. Nash* 11483, Spyrock Rd, 81 km N of Ukiah, Mendocino Co., ASU)

**Rhizocarpon oederi** (Weber) Körb.  

(Fink 1935; Thomson 1968b; TJ)

**Rhizocarpon petraeum** (Wulfen) A. Massal.  

(Herre 1910; Hasse 1913b; Herre 1942a, 1950a; TJ; not mentioned for S CA by Feuerer & Timdal [2004], but Herre reports are from northern CA)

**Synonyms:** *Buellia petraea* (Tuckerman 1872, 1888; Blankinship & Keeler 1892; Hasse 1896, 1903b, 1905; Orcutt 1907), *Lecidea petraea* (Hasse 1898a)

**Note:** Feuerer (1991) asserted that *R. petraeum* is a synonym of *R. concentricum*.

\***Rhizocarpon pusillum** Runemark  

(Thomson 1979, 1997; lichenicolous on *Sporastatia testudinea* in Arizona *fide* Feuerer & Timdal [2004], but they do not cite *R. pusillum* from S CA)

\***Rhizocarpon renneri** Poelt  

(*C. Bratt & E. Timdal* 6098, W of Sonora Pass Summit at Haigh Overlook on Hwy 108, Tuolumne Co., SBBG)

**Rhizocarpon riparium** Räsänen  

(Ryan & Nash 1991; Robertson 2003b; Feuerer & Timdal 2004)

**Rhizocarpon saanaëns**e Räsänen  

**Synonyms:** *R. sublucidum* (Runemark 1956)

**Rhizocarpon superficiale** (Schaer.) Vain.  

(Ryan & Nash 1991; Feuerer & Timdal 2004; *B. Ryan* 26591, San Gabriel Wilderness, Los Angeles Co., 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], lichenicolous on *Acarospora* and *Aspicilia* species)

**Rhizocarpon albineum** (Tuck.) Fink  

(*D. T. Kowalski* collection, Butte Co., CHSC)

=*R. obscuratum*, but probably a misidentification

**Rhizocarpon ambiguum** (Schaer.) Zahlbr.  

(Fink 1935)

=*R. distinctum*

**Rhizocarpon athalloides** (Nyl.) Hasse  

(Hasse 1913b; Fink 1935; TJ; *H. E. Hasse*, Lich. Exs. 246, Santa Monica Range, Los Angeles Co., March, 1915; Feuerer & Timdal [2004] say on soil in S CA but not a true *Rhizocarpon*)

=*Gyalideopsis athalloides* (Vězda 1972, 1979)

**Rhizocarpon concentricum** (Davies) Beltr., non auct.  

(Riefner, Bowler, & Ryan 1995, based on *R. Riefner* collection from San Luis Obispo Co.; Thomson 1997; Magney 1999, based on *C. Bratt* collection from San Bernardino Co., but no records in SBBG database, so determination may have been changed; not mentioned for S CA by Feuerer & Timdal

2004)

=[\*R. petraeum\*](#)

*Rhizocarpon confervoides* DC.  

(Merrill 1923)

= misidentifications

*Rhizocarpon geographicum* f. *lecanorinum* Körb. 

(Hasse 1913b)

=[\*R. lecanorinum\*](#)

*Rhizocarpon hochstetteri* (Körb.) Vain.  

(TJ; not mentioned for CA by Feuerer & Timdal 2004; in N Canada, NE U. S., so unlikely for CA)

**Synonyms:** [\*Lecidea colludens\*](#) (Hasse 1898a, probably a misidentification)

*Rhizocarpon intermedium* Degel.  

(Ryan & Nash 1991)

=[\*R. eupetraeum\*](#)

*Rhizocarpon obscuratum* (Ach.) A. Massal.  

(Riefner, Bowler, & Ryan 1995, based on *R. Riefner* 89–252, San Luis Obispo Co., !S. Tucker; discussed by Tucker 2002; not mentioned for S CA by Feuerer & Timdal 2004; not in CA, only in NE U. S. and Colorado *fide* Brodo et al. [2001, p. 637, with color photograph])

**Synonyms:** [\*R. albineum\*](#) (D. T. Kowalski collection, Butte Co., probably a misidentification)

*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. saanaëns\*](#) Räsänen

*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)

**Synonyms:** [\*Lecanora chrysoleuca\*](#) (Hasse 1898a; Sigal 1975), [\*L. rubina\*](#) (TJ for references)

*Rhizoplaca glaucophana* (Nyl. ex Hasse) W. A. Weber  

(Hebert & Meyer 1984; McCune 1987; Ryan 2002)

**Synonyms:** [\*Harpidium glaucophanum\*](#) (Hasse 1913b), [\*Lecanora glaucophana\*](#) (Hasse 1898a)

*Rhizoplaca marginalis* (Hasse) W. A. Weber  

(Hebert & Meyer 1984; McCune 1987; Brodo et al. 2001, p. 638; Ryan 2002; Univ. Colo. Lich. Exs. 192, 477; CA endemic)

**Synonyms:** [\*Lecanora marginalis\*](#) (Hasse 1910b, 1913b; Fink 1935; TJ)

*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]; Ryan 2002; Robertson 2003b)

**Synonyms:** *Lecanora melanophthalma* (Hasse 1898a; Fink 1935; Herre 1942a, 1950a; Sigal 1975)

**Rhizoplaca peltata** (Ramond) Leuckert & Poelt  

(Brodo et al. [2001, pp. 640–641, with color photograph]; Ryan 2002)

**Synonyms:** *Lecanora peltata* (Herre 1945)

**Rhizoplaca subdiscrepans** (Nyl.) R. Sant.  

(Ryan 2002; *B. Ryan* 14802, 16 km NNE of Big Bear Lake Village, San Bernardino Co., ASU)

## RHYMBOCARPUS Zopf

\***Rhymbocarpus boomii** Etayo & Diederich  

(Diederich & Etayo 2004)

\***Rhymbocarpus cruciatus** (Sherwood, D. Hawksw. & Coppins) Etayo & Diederich  

(Diederich 2003; Diederich & Etayo 2004)

## RIMELIA Hale & A. Fletcher

**Rimelia reticulata** (Taylor) Hale & A. Fletcher  

(Hale & Cole 1988; Bowler et al. 1996; Bourell 2000; Wright 2001a; Brodo et al. [2001, pp. 642–643, with color photograph]; Nash & Elix 2002)

**Synonyms:** *Parmelia reticulata* (Thomson & Ketchledge 1958; TJ); *Parmelia herrei* (Herre 1946) may belong here.

*Rimelia cetrata* (Ach.) Hale & A. Fletcher  

(Tucker [2002] said that reports are probably misidentifications of *R. reticulata*; in eastern U. S. only *fide* Brodo et al. [2001, p. 642, with color photograph])

**Synonyms:** *Parmelia acanthifolia*, *P. cetrata*

## 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], lichenicole on *Lecanora rupicola* group; color photograph on back cover of CALS Bulletin 8[2], 2001)

**Synonyms:** *Lecidea insularis* (Tuckerman 1866, 1872; Bolander 1870; Willey 1873a; Anderson 1964; Hertel 1973; TJ), *L. intumescens* (Herre 1910; Fink 1935; Herre 1950a; TJ)

*Rimularia gibbosa* (Ach.) Coppins, Hertel & Rambold  

**Synonyms:** *Lecanora bockii* (Hasse 1906), *Mosigia gibbosa* (Egan 1991)

**Note:** The only CA record, by Hasse, is based on a probable misidentification; 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; *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)

**Rinodina badiexcipula** Sheard  

(Sheard & Mayrhofer 2002; Sheard 2004; *S. Tucker* 31676, Clear Lake, and *S. Tucker* 35461, Lake Pillsbury, Lake Co., SBBG; *S. Tucker* 34599, corral by entrance road to Hastings Natural History

Reserve, Monterey Co., SBBG)

**Misapplied names:** *R. succedens* (Nyl.) Arnold (Hasse, 1913b)

**Rinodina bischoffii** (Hepp) A. Massal. 

(Fink 1935; TJ; Hale & Cole 1988; Sheard 2004)

**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; *T. Nash* 32108, Empire Landing, Santa Catalina Isl., Los Angeles Co., ASU)

**Rinodina californiensis** Sheard 

(Sheard & Mayrhofer 2002; Sheard 2004)

**Rinodina capensis** Hampe 

(Sheard 2004; *S. Tucker* 35460a, Soda Springs Ranger Station, Lake Co., ASU; *B. Ryan* 26209, Mt. Mooney Rd, San Gabriel Mts, Los Angeles Co., ASU; *T. Nash* 18981c, W side of Pinnacles Nat. Monument, San Benito Co., ASU; *S. Tucker* 6396B, Bonny Doon, Cruz Co., SBBG)

**Synonyms:** *R. corticola*

**Rinodina colobina** (Ach.) Th. Fr. 

(Wetmore 1985; *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)

**Synonyms:** *Lecanora confragosa*

**Rinodina constrictula** H. Magn. 

(Sheard [2004] from San Bernardino Co.)

**Rinodina degeliana** Coppins 

(*T. Tønsberg* TT 14713b, Del Norte Co., BG)

**Rinodina disjuncta** Sheard & Tønsberg 

(Giralt et al. 1995 ["high rainfall areas" of western North America, from CA to Alaska"]; Sheard 1995)

**Rinodina endospora** Sheard 

(Sheard & Mayrhofer 2002; Sheard 2004; CA endemic)

**Rinodina exigua** (Ach.) Gray 

(Hasse 1903b, 1908b; Herre 1910; Hasse 1913b; Jordan 1968; TJ; von Reis 1991; Wright 1997; McGee 1998; Baltzo 2002; *S. Tucker* 34586D, Hastings Nat. History Reserve, Monterey Co., SBBG, determination by J. Sheard)

**Synonyms:** *Lecanora exigua*

**Note:** According to J. Sheard (personal communication), some early CA reports were based on misidentifications.

**Rinodina gennarii** Bagl. 

(Sheard 2004; *T. Nash* 11424, N of Ft. Bragg, Mendocino Co., ASU; *S. Tucker* 28822, Pacheco Pass, Merced Co., SBBG; *S. Tucker* 34221A, Diablo Canyon Power Plant, San Luis Obispo Co., SBBG; *S. Tucker* 34426, Montecito, Santa Barbara Co., SBBG; all determined by J. Sheard)

**Rinodina glauca** Ropin 

(*S. Tucker* 34060, El Dorado Co., SBBG [J. Sheard determination]; *S. Tucker* 28852C, Bates Cyn, Cuyama valley, Santa Barbara Co., SBBG)

**Note:** This taxon is not reported from S CA by Sheard (2004), but occurs in northern CA. It is

synonymized with [\*R. septentrionalis\*](#) Malme by Giralt & Mayrhofer (1995), but not by Sheard (personal communication).

**Rinodina griseosoralifera** Coppins  

(Sheard 2004; *T. Tønsberg TT 28951*, Mendocino Co., BG; *S. Tucker 37795*, Sugar Loaf Ridge S. P. near Santa Rosa, Sonoma Co., SBBG, determined by T. Tønsberg)

**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)

**Synonyms:** [\*Lecanora hallii\*](#)

**Note:** Sheard (2004) said that he has seen no recent mainland records from S CA.

**Rinodina herrei** H. Magn.  

(Magnusson 1953; TJ; Sheard 2004; *H. E. Hasse 518* [as *R. sophodes* var. *exigua*], Santa Monica Range, CA 1899, ex Herb. Hasse, MIN, [determination by J. Sheard]; *C. Wetmore 73273*, 0.8 km NW of Catalina airfield, junction of road to Avalon and secondary road to coast, Santa Catalina Isl., Los Angeles Co., 28 Dec 1993, MIN; *S. Tucker 10967*, Cold Springs Cyn, Santa Ynez Mts, Santa Barbara Co., SBBG)

**Rinodina innata** Sheard  

(Sheard & Mayrhofer 2002; Sheard 2004)

**Rinodina intermedia** Bagl.  

(Magnusson 1947; TJ; Mayrhofer et al. 2001; Sheard 2004; *L. Sigal*, 11 Apr 1975, San Bruno Mtn, SE of San Francisco, San Mateo Co., ASU; *S. Tucker 35678*, Santa Cruz Isl., Santa Barbara Co., SBBG)

**Synonyms:** [\*R. sabulosa\*](#) (Tuckerman 1866, 1872; Bolander 1870; Willey 1873a; TJ)

**Rinodina juniperina** Sheard  

(Sheard & Mayrhofer 2002; Sheard 2004)

**Rinodina laevigata** (Ach.) Malme  

(Sheard 2004; Meyer collection, Madera Co., FSC, determination by J. Sheard; *S. Tucker 28852B* pr. p., Santa Barbara Co., SBBG; *B. Ryan 25693*, road to Walker Gulch, 4.8 km NE of town of Seiad Valley, Siskiyou Co., ASU)

**Rinodina lignaria** H. Magn.  

(*S. Tucker 34110C*, American River Cyn by Hwy 50, 3 mi. E of Kyburz, El Dorado Co., SBBG)

**Rinodina luridata** (Körb.) H. Mayrhofer, Scheid. & Sheard  

(Bowler et al. 1996; Bourell 2000; Sheard 2004)

**Synonyms:** [\*R. euryspora\*](#) (Hasse 1915a; Fink 1935; TJ)

**Rinodina macrospora** Sheard  

(Sheard & Mayrhofer 2002)

**Rinodina marysvillensis** H. Magn.  

(Tucker 1973; TJ; Hale & Cole 1988; Sheard 2004; *W. A. Weber*, Univ. Colo. Lich. Exs. 474, Sutter Creek, Amador Co.)

**Rinodina metaboliza** Vain.  

(*B. Ryan 25692a*, road to Walker Gulch, 4.8 km NE of town of Seiad Valley, Siskiyou Co., ASU)

**Rinodina milvina** (Wahlenb.) Th. Fr.  

(Sheard [2004] reports a single S CA collection from San Bernardino Co.; *B. Ryan 24639*, edge of Carson-Iceberg Wilderness, Alpine Co., ASU; *S. Tucker 34044*, Silver Fork Rd near China Flat, El Dorado Co., SBBG, determination by J. Sheard)

**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)

**Synonyms:** *Lecanora mniaraea*

**Note:** According to Sheard (2004), this species occurs on moss in alpine areas.

**Rinodina mniaroeiza** (Nyl.) Arnold  

**Synonyms:** *Lecanora mniaroeiza* (Hue 1891), *R. mniaraea var. mniaroeiza* (Nyl.) H. Magn.

**Rinodina obnascens** (Nyl.) H. Olivier  

(*S. Tucker 6349A*, Jasper Ridge, San Mateo Co. on serpentine, SBBG; *L. Sigal*, Cuesta Ridge, San Luis Obispo Co. on serpentine, SFSU, both determinations by Sheard; not in S CA *fide* Sheard [2004], but in central CA)

**Rinodina olivaceobrunnea** C. W. Dodge & G. E. Baker  

(*B. Ryan 23575*, trail to Lost Lake through Sugar Pine S. P., 6.4 km WSW of Meeks Bay, El Dorado Co., ASU; *C. Bratt 4739*, Sand Creek, Sierra Nat. Forest, Madera Co., SBBG)

**Rinodina orculata** Poelt & M. Steiner  

(*S. Tucker 35366*, Lake Pillsbury, Lake Co., SBBG; *S. Tucker 35375C* pr. p., *35507B*, trailhead of Bloody Rock Trail, N end of Lake Pillsbury on Hill Mtn Rd, Lake Co., SBBG, determinations by J. Sheard)

**Rinodina oregana** H. Magn.  

(Hale & Cole 1988; Sheard 2004; *D. T. Kowalski* collection, Butte Co., CHSC, determination by J. Sheard; *R. Meyer 93740B-a*, Madera Co., FSC, determination by J. Sheard; *B. McCune 18870*, Shasta River Cyn, Siskiyou Co., ASU)

**Rinodina oxydata** (A. Massal.) A. Massal.  

(Sheard 2004; *H. E. Hasse 249*, Santa Monica Range, Los Angeles Co., SBBG; *S. Tucker 35321B*, Sage Hill Cpgd, E. of Lake Cachuma, S. Barbara Co., SBBG, determination by J. Sheard)

**Rinodina pacifica** Sheard  

(Sheard & Mayrhofer 2002)

**Note:** According to Sheard (2004), this species has an oceanic distribution in W North America, S to Los Angeles Co.

**Rinodina parasitica** H. Mayrhofer & Poelt  

(Sheard 2004; *B. Ryan 24648b*, end of Clark Fork Rd, edge of Carson-Iceberg Wilderness, Alpine Co., ASU; *B. Ryan 24493*, Herring Creek Rd, 6 km from Hwy 108, Stanislaus Nat. Forest, Tuolumne Co., ASU)

**Rinodina poeltiana** Giralt & W. Oberm.  

(Sheard 2004; *J. Sheard 5131*, Santa Cruz Isl., 7 km SSE of Prisoner's Harbor, Santa Barbara Co., ASU)

**Rinodina polypora** Th. Fr.  

(Brodo et al. [2001, p. 647]; Tucker 2002; *S. Tucker 28807*, pr. p. with *R. septentrionalis*, Clear Lake, Lake Co., SBBG, determinations by J. Sheard)

**Rinodina pyrina** (Ach.) Arnold  

(Sheard [2004] said it is rare in S CA, in Santa Barbara and San Bernardino counties; *S. Tucker 28852A* pr. p., Bates Cyn, Cuyama valley, Santa Barbara Co., SBBG; *T. Nash 22848a*, 30 km E of Redding, Shasta Co., ASU)

**Rinodina rinodinoides** (Anzi) H. Mayrhofer & Scheid.  

(Sheard [2004], San Nicolas Isl. and Santa Barbara Co. in S CA; *T. Nash 11332*, Land's End, San Francisco, San Francisco Co., ASU)

**Synonyms:** *Buellia rinodinoides* (Hasse 1913b; Fink 1935; Wheeler 1938; Herre 1944b)

**Note:** According to J. Sheard (personal communication), early reports of *Buellia rinodinoides* were based on misidentifications.

**Rinodina riparia** Sheard  

(Sheard 1998 [*H. Hasse*, Yosemite Valley, Mariposa Co.])

**Rinodina santae-monicae** H. Magn.  

(Magnusson 1947; TJ; Wright 1997; Bourell 2000; Sheard & Mayrhofer 2002; Sheard 2004)

**Rinodina septentrionalis** Malme  

(*B. Ryan* 32163a, along Rock Creek, NW of Rock Creek Cpgd, Sierra Nat. Forest, Madera Co., ASU; *S. Tucker* 28807, pr. p. with [\*R. polyspora\*](#), Clear Lake, Lake Co., SBBG, determination by J. Sheard)

**Note:** [\*R. glauca\*](#) is included as a synonym by Giralt & Mayrhofer (1995), but not by Sheard (personal communication).

**Rinodina angelica** Stizenb.  

(Hasse 1895, 1896; McClatchie 1897; Hasse 1903b; Orcutt 1903, 1907; Hasse 1913b; Merrill 1923; Fink 1935; Magnusson 1947; 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\*](#)

**Rinodina atrocinerea** (Dicks.) Körb.  

(TJ; Esslinger 2004b)

= misidentifications for North America *fide* J. Sheard (personal communication)

**Rinodina bolodes** Tuck. ex Fink  

(Orcutt 1885, 1903, 1907; Hedrick 1934; Fink 1935; Herre 1944b; Magnusson 1947; TJ)

=[\*Mobergia angelica\*](#)

**Rinodina calculiformis** W. A. Weber 

=[\*Mobergia calculiformis\*](#)

**Rinodina californica** H. Magn.  

(Magnusson 1927; Fink 1935; TJ)

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

**Rinodina chrysomelaena** Tuck.  

(Herre 1944b; TJ)

= misidentifications for CA *fide* J. Sheard (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)

**Note:** According to J. Sheard (personal communication, Oct. 2004), he has seen no CA specimens of *R. conradii*, and the S CA reports are almost certainly referable to *R. intermedia*.

**Rinodina corticola** Arnold  

(Volk 1963; TJ)

=[\*R. capensis\*](#) (synonymy *fide* Sheard [2004, p. 479])

**Rinodina dirinoides** Zahlbr.  

(Hasse 1915a; Fink 1935; TJ)

=*Mobergia angelica*

*Rinodina euryspora* Zahlbr.  

(Hasse 1915a; Fink 1935; TJ)

=*R. luridata*

*Rinodina lignicola* Sheard  

(Sheard & Mayrhofer [2002, p. 473]; Sheard 2004)

=*R. archaea* (see Sheard 2004)

*Rinodina microbola* Tuck. ex Fink  

(Hedrick 1934; Fink 1935; Herre 1944b)

=*Buellia microbola*

*Rinodina mniaraea* var. *mniaroeiza* (Nyl.) H. Magn.  

=*R. mniaroeiza*

*Rinodina orbata* (Ach.) Vain.  

(Fink 1935)

=*R. turfacea*

*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 roboris* (Dufour ex Nyl.) Arnold  

(Herre 1910; Hasse 1913b; Fink 1935; Magnusson 1947; Thomson & Ketchledge 1958; TJ)

= misidentifications for North America *fide* J. Sheard; *H. E. 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 sophodes* (Ach.) A. Massal.  

(TJ for references;

= misidentifications for North America *fide* Esslinger 2004b)

*Rinodina sophodes* var. *atrocinerea* (Dicks.) Tuck. 

(McClatchie [1897, based on *H. E. Hasse* collections]; *H. E. Hasse*, Santa Monica Mts, CA, 1902, MIN 2042)

=*R. atrocinerea*, but misidentifications for North America *fide* Esslinger 2004b

*Rinodina succedens* Nyl.  

(Hasse 1896, 1903e; Orcutt 1907; Hasse 1908b, 1913b; Fink 1935)

=*R. sophodes*, but North American records are misidentifications of *R. badiexcipula* and *R. oregana*

*Rinodina tephraaspis* (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)

*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 Mts 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; *J. Rebman* collection, San Clemente Isl., Los Angeles Co., 1996, ASU)

**Synonyms:** [\*R. fimbriata\*](#), [\*R. babingtonii\*](#) Mont. (*fide* Tehler [2002, p. 453])

*Roccella peruensis* Kremp.  

(Darbishire 1898; TJ; Tehler 2002; Knudsen 2003a)

**Synonyms:** [\*R. difficilis\*](#)

*Roccella babingtonii* Mont.  

(Hale 1969; Egan 1977; TJ; Hale & Cole 1988; von Reis [1991] but based on misidentifications of [\*Dendrographa leucophaea\* f. \*minor\*](#) *fide* Tucker [1999]; 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 to the sterile sorediate [\*R. peruensis\*](#).

*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 intended for *Ramalina combeoides* *fide* Spjut [1996, p. 202])

=[\*Niebla combeoides\*](#)

*Roccella difficilis* Darb.  

(Darbishire 1898; TJ; Tehler [2002])

=[\*R. peruensis\*](#)

*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; Darbshire (1898) reported it only from Europe and Africa.

*Roccella fucoides* (Dicks.) Vain.  

(Hasse 1913b)

=*R. phycopsis* Ach. (synonymy in Zahlbruckner [1924], but 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])

=*Niebla homalea*

*Roccella intermedia* Delise 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* f. *minor* (but see note under that name)

*Roccella montagnei* Bél.  

(Hasse 1915b; Fink 1935; TJ; probable misidentifications, since Darbshire [1898] did not report it from North America)

*Roccella phycopsis* (Ach.) Ach.  

(Tuckerman 1882; Eckfeldt 1893; Fink 1935; TJ) = probable misidentifications, as Darbshire (1898) reported it only from Europe, Africa, and Australia.

**Synonyms:** *R. fucoides* (synonymy in Zahlbruckner 1924)

*Roccella reticulata* (Nöhden) Kremp. 

(Hasse 1903a) lapsus for *Ramalina reticulata*

=*Ramalina menziesii* Taylor non Tuck.

*Roccella tinctoria* DC.  

(TJ for references) = probably misidentifications *fide* B. Ryan, since 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; *H. E. Hasse* collection, SBBG)

*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)

**Synonyms:** *Dirina franciscana* (Herre 1907, 1910; Fink 1935; TJ), *Schismatomma cupressum* (Herre 1952; Weber 1967a; Univ. Colo. Lich. Exs. 195, Cypress Point, Monterey Peninsula, Monterey Co.)

**SARCOGYNE** Flot.**Sarcogyne arenosa** (Herre) Knudsen & Standley 

(Knudsen 2005c)

**Synonyms:** [Acarospora arenosa](#) (Fink 1935)**Sarcogyne clavus** (DC.) Kremp.  

(Magnusson 1935a, 1936; TJ; K. Knudsen 1166, San Mateo Cyn above Tenaja Falls, Riverside Co., UCR)

**Synonyms:** [Biatorella clavus](#) (Hasse 1908a; Herre [1910, in part misidentifications of *S. similis*]; Hasse 1913b; Fink 1935), [Lecanora privigna var. clavus](#) (Tuckerman 1882; McClatchie 1897), [S. privigna var. clavus](#) (Tuckerman 1882; McClatchie 1897)**Sarcogyne novomexicana** H. Magn. 

(K. Knudsen 1251, on granite, San Jacinto Mts, Riverside Co., ASU; K. Knudsen 1609, on dolomite, Bear Mtn, San Bernardino Mts, San Bernardino Co., UCR)

**Sarcogyne privigna** (Ach.) A. Massal.  

(TJ; von Reis 1991; Wright 1997; Robertson 2003b)

**Synonyms:** [Biatorella hypophaea](#) (Hasse 1913b; Herre 1944b; Hasse's material may have been misidentified, since spore size differs *fide* I. Tavares), [B. plicata](#), [Sarcogyne plicata](#) (synonymy *fide* K. Knudsen), [S. plicata f. pulvinata](#)**Sarcogyne regularis** Körb.  

(TJ; Brodo et al. [2001, pp. 650–651, with color photograph]; Robertson 2003b)

**Misapplied names** (*fide* I. Tavares): [Biatorella pruinosa](#) (Hasse 1913b), [Lecanora privigna var. pruinosa](#) (Hasse 1895; Orcutt 1907)**Sarcogyne similis** H. Magn.  

(Magnusson 1935a; TJ; Brodo et al. [2001, pp. 650–651]; Robertson 2003b; Knudsen 2005c; B. Ryan 32047, North Fork Ranger Station, Sierra Nat. Forest, Madera Co., ASU; T. Nash 38899, San Nicolas Isl., Ventura Co., ASU)

**Synonyms:** [S. californica](#) (synonymy *fide* K. Knudsen [personal communication])**Note:** [Biatorella clavus](#) was applied in part to this taxon by Herre (1910); [Lecanora simplex](#) was applied in part to this taxon by Hasse (1898a).**Sarcogyne bicolor** H. Magn.  

(Magnusson 1935a; TJ)

= [Polysporina lapponica](#) (synonymy *fide* K. Knudsen)**Sarcogyne californica** H. Magn.  

(Magnusson 1935a; Thomson &amp; Ketchledge 1958; TJ)

= [S. similis](#) (synonymy *fide* K. Knudsen [personal communication])**Note:** The name *Biatorella 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 plicata** H. Magn.  

(Magnusson 1935a; TJ)

= [Sarcogyne privigna](#) (synonymy *fide* K. Knudsen [personal communication])**Sarcogyne plicata f. pulvinata** H. Magn.  

(Magnusson 1935a)

= [Sarcogyne privigna](#)**Sarcogyne privigna 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. & Hladun  

(Navarro-Rosinés & Hladun 2004; CA endemic)

**Synonyms:** [\*Hassea bacillosa\*](#) (Zahlbruckner 1902; Hasse 1913b), [\*Verrucaria bacillosa\*](#) (Hasse 1898a, p. 20)

## SAREA Fr.

†***Sarea resinae*** (Fr.) Kuntze  

**Synonyms:** [\*Biatora resinae\*](#) (McClatchie 1897; Robertson 2002a), [\*Biatorella resinae\*](#) (Hasse 1908b), [\*Lecidea resinae\*](#) (Hasse 1898a)

**Note:** Lamb (1963) listed this taxon as *Tromera resinae* Körb., a nonlichenized fungus.

## SCHAERERIA Körb.

***Schaereria corticola*** Muhr & Tønsberg  

(Tønsberg 1993)

***Schaereria fuscocinerea*** (Nyl.) Clauzade & Cl. Roux  

(Hertel [2004] cited report from central CA but not S CA)

**Misapplied names:** [\*Lecidea griseoatra\*](#) (Hasse 1915b; Fink 1935), [\*L. tenebrosa\*](#), *S. tenebrosa* (*T. E. Weier* 1407.476, 3.2 km S of Ione on Hwy 88, just west of junction with Hwy 124, Amador Co., ASU)

## SCHISMATOMMA Flot. & Körb. ex A. Massal.

***Schismatomma pluriloculare*** (Zahlbr.) Zahlbr.  

(Hasse 1913b; Merrill 1923; Zahlbruckner 1924; Herre 1945; TJ; *T. Nash* 32119, Santa Catalina Isl., Los Angeles Co., ASU; *T. Nash* 32429, Santa Cruz Isl., Santa Barbara Co., ASU; Tehler [2002] said that there are doubts that this species belongs in this genus)

**Synonyms:** [\*Platygrapha plurilocularis\*](#) (Zahlbruckner 1902; Hasse 1903b, 1903f)

***Schismatomma rediunta*** (Stizenb.) Tehler  

(Tehler 1985, 1993b, 2002; *S. Tucker* 38297, campus of Univ. of California, Santa Cruz, Santa Cruz Co., SBBG; CA endemic)

**Synonyms:** [\*Dirina rediunta\*](#) (Zahlbruckner 1901; Hasse 1902, 1903b, 1903e, 1913b; Merrill 1923; Fink 1935; Wheeler 1938; TJ), [\*Lecanora rediunta\*](#) (Stizenberger 1895 [as “*redimita* Stiz.”]; Hasse 1896, 1897; McClatchie 1897; Orcutt 1909), [\*Lecidea sublugens\*](#) (Hasse 1898a; synonymy *fide* Zahlbruckner 1924, p. 508)

***Schismatomma abietinum*** (Humb.) A. Massal.  

(Fink 1935; misidentifications for CA)

***Schismatomma californicum*** (Tuck.) Zahlbr.  

(Zahlbruckner 1911; Hasse 1913b; Merrill 1923; Herre 1945; Bratt 1987; von Reis 1991; Tehler 1985, 1993b)

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

***Schismatomma cupressum*** Herre  

(Herre 1952; Weber 1967a; Jordan 1968; Lindsay 1973; TJ; Univ. Colo. Lich. Exs. 195)

=*Roccellina franciscana**Schismatomma hypothallinum* (Zahlbr.) Hasse  

(Hasse 1913b; Merrill 1923; Fink 1935; Herre 1945; TJ)

=*Lecanographa hypothallina***SCHIZOPELTE** Th. Fr.**Schizopelte californica** Th. Fr.  

(Fries 1875; Tuckerman 1882; Willey 1887; Hue 1892; Eckfeldt 1893; Darbshire 1898; Hasse 1903a, 1903d; Orcutt 1903, 1907; Zahlbruckner 1907; Hasse 1912, 1913b; Merrill 1923; Fink 1935; Herre 1945; C. Culberson 1972; Weber 1967a; TJ; Hale &amp; Cole 1988; Riefner, Bowler, &amp; Ryan 1995; Bowler et al. 1996; Hill 1996; Brodo et al. 2001; Robertson 2002b; Tehler 2002; Univ. Colo. Lich. Exs. 175, San Clemente Isl., Los Angeles Co.)

**Synonyms:** *Combea californica***SCLEROPHORA** Chevall.**Sclerophora nivea** (Hoffm.) Tibell  (W. B. Cooke 26633 (determination by A. W. Herre as *Coniocybe pallida*), Lassen Volcanic N. P., CA, MU)**SCLEROPHYTON** Eschw.**Sclerophyton murex** Egea & Torrente ex Sparrius 

(Sparrius 2004)

*Sclerophyton californicum* (Tuck.) Hasse  

(Hasse 1909, 1913b; Merrill 1923; Weber 1989a; TJ; Egea &amp; Torrente 1995a; Bratt 1999; Egea &amp; Torrente 2002)

=*Limonaea californica* (Sparrius 2004)**Sclerophyton cerebriforme** Egea & Torrente  (Egea & Torrente 1995a; Bowler et al. 1996; Robertson & Robertson [2002, based on *J. & R. Robertson* 5436, rocky headlands along Hwy 1 ca. 3 km S of Stinson Beach, Mt. Tamalpais S. P., Marin Co.]; Egea & Torrente 2002)=*Limonaea cerebriformis***Sclerophyton occidentale** Herre  (Herre 1940, 1942c; TJ) does not belong in *Sclerophyton* fide Egea & Torrente 1995a;=*Pertusaria ophthalmiza* parasitized by *Dactylospora parasitica* based on isotype (fide L. Sparrius, e-mail to T. Nash)**SCOLICIOSPORUM** A. Massal.**Scoliciosporum sarothonamni** (Vain.) Vězda  

(Baltzo 2004; Ekman &amp; Tønsberg 2004)

**Scoliciosporum umbrinum** (Ach.) Arnold  (Ekman & Tønsberg 2004; *S. Tucker* 14982, Del Norte Beach, Del Norte Co., SBBG; *S. Tucker* 6349B, near Woodside, San Mateo Co., SBBG)**Synonyms:** *Bacidia umbrina* (Hasse 1913b), *Biatora umbrina* (Hasse 1903e; Fink 1935)**SEIROPHORA** J. Poelt**Seirophora californica** (Sipman) Frödén 

(Frödén &amp; Lassen 2004)

**Synonyms:** [Teloschistes californicus](#)  
**Misapplied names:** [T. villosus](#), [Physcia villosa](#)

## SIGRIDEA Tehler

### **Sigridia californica** (Tuck.) Tehler

(Tehler 1993d; Bowler et al. 1996; Bratt 1997; Bourell 2000; Brodo et al. [2001, p. 132]; Tehler 2002)  
**Synonyms:** [Dirina californica](#), (Tuckerman 1866 [p. 17, in Oakland, Alameda Co.]; Bolander 1870; Fink 1935; TJ), [D. hassei](#) (Zahlbruckner 1900, 1901; Hasse 1902, 1903e; Merrill 1923; Fink 1935; TJ), [Platygrapha californica](#) (Tuckerman 1872 [p. 195], 1888 [p. 116]; Hue 1891), [Schismatomma californicum](#) (Zahlbruckner 1911; Hasse 1913b; Merrill 1923; Herre 1945; Tehler 1985; Bratt 1987; von Reis 1991)

## SIPHULA Fr.

### **Siphula simplex** (Taylor) Nyl.

(Fink 1935, based on *Palmer* collections on wood from Mexico; no CA collections known; cannot have been misapplied to what is now known as *Lepraria xerophila*, a soil lichen, because of the different substrate)

=*Siphula ceratites*

### **Siphula sp.**

of Weber (1975a, Univ. Colo. Lich. Exs. 455, headland between Cottonwood Cyn and Mills Landing, Santa Catalina Isl., Los Angeles Co.; Weber remarked that this is the most abundant earth lichen in coastal S CA)

=[Lepraria xerophila](#) (Tønsberg 2004)

## SKYTTEA Sherwood, D. Hawksw. & Coppins

### \***Skyttea pertusariicola** Diederich & Etayo

(Diederich & Etayo 2004; on sterile *Pertusaria*)

### \***Skyttea tavaresiae** R. Sant., Etayo & Diederich

(Diederich & Etayo 2000; Diederich 2003; Diederich & Etayo 2004; *I. Tavares 1419*, Cambria, San Luis Obispo Co., on *Pyrrhospora* cf. *quernea* on *Pinus radiata*; CA endemic)

## SKYTELLO D. Hawksw. & R. Sant.

### \***Skytella mulleri** (Willey) D. Hawksw. & R. Sant.

(Hawksworth & Santesson 1988; Alstrup & Cole 1998, on *Peltigera* spp.; Diederich 2003)

## SOLENOPSORA A. Massal.

### **Solenopsora cladonioides** B. D. Ryan & Timdal

(Ryan & Timdal 2002; Robertson 2002b)

### **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 Co., determinations by B. Ryan]; Ryan & Timdal 2002; *C. Bratt 7930*, San Nicolas Isl., Ventura Co., SBBG; color photograph on back cover of CALS Bulletin 8[2], 2001; CA endemic)

**Synonyms:** [Placolecania crenata](#) (Herre 1910)

### **Solenopsora cyathiformis** (Szatala) van den Boom

(van den Boom & Ryan 2004, pp. 170–171; CA endemic)

**Synonyms:** [Lecania cyathiformis](#) (Tavares 1997a; Tucker [1997, based on *S. Tucker 35064*, on

chaparral N of Baywood Middle School, Los Osos, San Luis Obispo Co.]; Magney [1999] repeated earlier report by S. Tucker)

*Solenopsora candidans* (Dicks.) J. Steiner  

(Fink 1935; TJ; Brodo et al. [2001, p. 370]; misidentifications for North American records)

*Solenopsora hassei* (Zahlbr.) Zahlbr.  

(Zahlbruckner 1928; Fink 1935; TJ)

=[Lecania hassei](#)

*Solenopsora holophaea* (Mont.) Samp.  

**Synonyms:** [Candelariella holophaea](#), [Lecanora holophaea](#) (Hasse 1898a; Fink 1935; 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)

## SOLORINA Ach.

*Solorina crocea* (L.) Ach.  

(Hale 1979; McCune & Goward 1995; McCune & Geiser 1997, p. 268; discussed by Tucker [2002]; range is Oregon along coast to Alaska, Rocky Mountains, not CA *fide* Brodo et al. [2001, p. 655])

*Solorina spongiosa* (Ach.) Anzi  

(Tucker 2002; *J. R. Shevock 12531*, South Lake Rd, 0.7 mi. below South Lake, Inyo Co., UC, CAS, determinations by B. Ryan; color photograph, CALS Bulletin 11[1], 2004)

## SPHAERELLOTHECIUM Zopf

\**Sphaerellothecium abditum* Triebel  

(Triebel et al. 1991; Cáceres & Triebel 2004, on species of *Lecidea* including [Lecidea atrobrunnea](#); B. Ryan 12445, Eastern Brook Lakes Watershed, Inyo Co., ASU)

\**Sphaerellothecium parmeliae* Diederich & Etayo  

(Diederich 2003; Cáceres & Triebel 2004, on [Parmelia saxatilis](#) and [P. sulcata](#))

\**Sphaerellothecium propinquellum* (Nyl.) Cl. Roux & Triebel  

(Diederich 2003)

## SPHAEROPHORUS Pers.

*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 2004; Jovan & McCune 2004; color photograph on front cover of CALS Bulletin 9[1], 2002)

**Synonyms:** [S. globiferus](#)

**Note:** According to B. Ryan many if not all CA specimens labeled *S. globosus* are actually *S. globosus* var. *gracilis*.

*Sphaerophorus globosus* var. *gracilis* (Müll. Arg.) Zahlbr.  

(Tibell & Ryan [2004] cite its presence in coastal CA north of the Sonoran area; see note under [S. globosus](#))

**Synonyms:** [S. tuckermanii](#)

*Sphaerophorus compressus* Ach.  

(Tuckerman 1872; this citation, repeated in TJ, referred to a Canadian collection)

=*S. melanocarpus*

*Sphaerophorus fragilis* (L.) Pers.  

(Herre 1942c)

= misidentifications

*Sphaerophorus globiferus* (L.) DC.   
(Tuckerman 1866; Bolander 1870)  
= [\*S. globosus\*](#)

*Sphaerophorus tuckermanii* Räsänen   
(Goward 1999)  
= [\*S. globosus\* var. \*gracilis\*](#) (synonymy in Tibell & Ryan 2004)

## SPHINCTRINA Fr.

\**Sphinctrina anglica* Nyl.   
(Tibell 2004)

**Synonyms:** [\*Mycocalicium microcephalum\*](#), [\*S. microcephala\*](#) (Sm.) Körb., non Nyl.

\**Sphinctrina leucopoda* Nyl.   
(Bratt 1986; von Reis 1991; Diederich 2003; Tibell 2004; C. Wetmore 73792, East Point, Santa Rosa Isl., Santa Barbara Co., determination by L. Tibell, MIN; T. Nash 32054, Santa Catalina Isl., Los Angeles Co., ASU; T. Nash 6910b, Torrey Pines S. P., San Diego Co., ASU)

\**Sphinctrina tubiformis* A. Massal.   
(Herre 1910; Robertson & Robertson 2002; Tibell 2004)

**Synonyms:** [\*S. microcephala\*](#) Nyl. non (Sm.) Körb. (Hasse 1903c, 1913b [on *Pertusaria* sp.]; Merrill 1923; Fink 1935)

\**Sphinctrina turbinata* (Pers.: Fr.) De Not.   
(Hasse 1913b; TJ; Thomson 2003; Tibell 2004)

**Synonyms:** [\*Calicium turbinatum\*](#) (Orcutt 1903, 1907), [\*S. gelasinata\*](#) (Fink 1935; TJ)

*Sphinctrina gelasinata* (With.) Zahlbr.   
(Fink 1935)  
= [\*S. turbinata\*](#)

\**Sphinctrina microcephala* Nyl. non (Sm.) Körb.   
(Hasse 1903c, 1913b; Merrill 1923)  
= [\*S. tubiformis\*](#)

\**Sphinctrina microcephala* (Sm.) Körb.   
(Fink 1935)  
= [\*S. anglica\*](#)

## SPILONEMA 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)

**Misapplied names:** [\*Ephebe pubescens\*](#) sensu Herre pr. p.; [\*Ephebe solida\*](#) sensu Herre pr. p.

## SPORASTATIA A. Massal.

*Sporastatia polyspora* (Nyl.) Grummann   
(TJ; Thomson 1997; Tucker [2002] based on Herre report)

**Synonyms:** [\*Biatorella cinerea\*](#) (Schaer.) Th. Fr. (Herre 1950a; TJ)

*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; color photograph on front cover of CALS Bulletin 8[2], 2001)

**Synonyms:** *Biatorella testudinea* (Herre 1950a), *Lecidea morio* (Hasse 1896)

### **SQUAMARINA** Poelt

*Squamaria lentigera* (Weber) Poelt  

(Hale [1969, map on p. 204]; TJ; Ryan [2002, p. 468] doubted Hale report for CA)

### **STAUROTHELE** Norman

*Staurothele areolata* (Ach.) Lettau  

(Thomson 1991; Ryan & Nash 1991; Thomson 2002; Robertson 2004)

*Staurothele clopimoides* (Bagl. & Carestia) J. Steiner  

(Thomson 1991 [collection cited from Siskiyou Co.])

*Staurothele diffractella* (Nyl.) Tuck.  

(Wright 1997 [as "cf."]; Tucker 2002; *S. Tucker* 35322, Paradise Rd, Santa Ynez Mts, Santa Barbara Co., SBBG)

**Note:** According to Brodo et al. (2001, p. 661–662, with color photograph), this species is found only in eastern United States.

*Staurothele drummondii* (Tuck.) Tuck.  

(Brodo et al. [2001, p. 662, with color photograph]; Thomson 2002; Robertson 2003b; Weber 1975a: Univ. Colo. Lich. Exs. 427, Siskiyou Co., as *S. clopima*)

**Synonyms:** *S. fuscocuprea*, *Endocarpon wilmsioides* (Zahlbruckner 1902; Hasse 1903f, 1913b; Fink 1935; *H. E. Hasse*, Exsiccati 237, Santa Monica Range, June, 1906, MU)

*Staurothele elenkinii* Oksner  

(*B. Ryan* 24368, Winter Sports Area N of Hwy 108, 5 km W of Fraser Flat Cpgd, Tuolumne Co., ASU)

**Note:** According to Thomson (2002) this species is found in Arizona and Sonora, Mexico, but not CA.

*Staurothele fissa* (Taylor) Zwackh  

(Ryan & Nash 1991; Thomson 1991; Brodo et al. [2001, pp. 662–663, with color photograph])

*Staurothele monicae* (Zahlbr.) Wetmore  

(Thomson 1991, 2002)

**Synonyms:** *Endocarpon monicae* (Zahlbruckner 1902; Hasse 1903f, 1913b)

*Staurothele polygonia* de Lesd.  

(Thomson [1991] reported an Alpine Co. collection; Thomson 2002)

*Staurothele clopima* (Wahlenb.) Th. Fr. 

(W. Weber, Univ. Colo. Lich. Exs. 427, Siskiyou Co.)

=*S. drummondii*

*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; Tibell & Ryan 2004)

**Synonyms:** *S. byssacea* (Hasse 1913b)*Stenocybe byssacea* (Fr.) Körb. 

(Hasse 1913b)

= *S. pullatula*†*Stenocybe tremulicola* Norrl. ex Nyl. 

(Zahlbruckner 1900; Hasse 1903c, 1913b; TJ)

= *Phaeocalicium tremulicola***STEREOCAULON** Hoffm.**Stereocaulon glareosum** (Savicz) H. Magn. 

(Goward 1999)

**Stereocaulon intermedium** (Savicz) H. Magn. (Tucker 1973 [based on *S. Tucker 6453*, *Darlingtonia* bog along Hwy 199 & Ranger Lewis Rd, 2 mi. E of Gasquet, Del Norte Co., SBBG]; TJ; Hale & Cole 1988; West & Doell 1995; Goward 1999; Robertson 2004)**Stereocaulon myriocarpum** Th. Fr. (Lamb [1977, reference overlooked by TJ]; Hale & Cole 1988; *S. Tucker 5425C* pr. p., redwood forest ca. 10 mi. E of Stewart's Point, Sonoma Co., SBBG)**Stereocaulon paschale** (L.) Hoffm. 

(Tuckerman 1866; Bolander 1870; Thomson 1984; Brodo et al. [2001, p. 666, color photograph but no CA report])

**Stereocaulon rivulorum** H. Magn. (Ryan & Nash 1991; Goward 1999; Brodo et al. [2001, p. 667, color photograph but no CA report]; *B. Ryan 12587*, Eastern Brook Lakes Watershed, Sierra Nevada, Inyo Co., ASU)**Stereocaulon sasakii** Zahlbr. var. **tomentosoides** I. M. Lamb (Lamb 1977; overlooked by TJ; Brodo et al. [2001, p. 667, as *S. sasakii*, with color photograph]; discussed by Tucker [2002])**Stereocaulon sterile** (Savicz) I. M. Lamb ex Krog 

(Tucker 1973; Lamb 1977; TJ; Hale &amp; Cole 1988)

**Stereocaulon tomentosum** Fr. (Tucker 1973 [based on *S. Tucker 5425C* pr. p., redwood forest ca. 10 mi. E of Stewart's Point, Sonoma Co., SBBG, determination by I. M. Lamb]; TJ; Lamb 1977 [based on *Sipe* collection, Clear Lake, Modoc Co.]; Hale & Cole 1988; Goward 1999; discussed by Tucker [2002]; color photograph but no CA report in Brodo et al. [2001, p. 670])**Stereocaulon vesuvianum** Pers. var. **denudatum** (Flörke) I. M. Lamb (TJ; Tucker 2002; both based on report by Riddle [1910, as *S. denudatum*]; Goward 1999; color photograph but no CA report in Brodo et al. [2001, p. 670])**Synonyms:** *S. denudatum* (Riddle 1910; Fink 1935)**Stereocaulon albicans** Th. Fr. 

(Riddle 1910; Orcutt 1903; Fink 1935)

= *Leprocaulon albicans* (Th. Fr.) Nyl. ex Hue**Stereocaulon denudatum** Flörke 

(Riddle 1910; Fink 1935)

= *S. vesuvianum* var. *denudatum***STICTA** (Schreb.) Ach.**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 2004; Galloway & Thomas 2004; Jovan & McCune 2004)

**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 central CA [San Francisco Watershed] and perhaps extending S to Sonoran area; Jovan & McCune 2004; color photograph on front cover of CALS Bulletin 7[1], 2000)

**Sticta sylvatica** (Huds.) Ach.  

(Hale 1979; Robertson 2002a; Galloway & Thomas [2004] for S CA)

**Sticta anthraspis** Ach.  

(TJ for references)

=[Pseudocyphellaria anthraspis](#)

**Sticta laciniata** Ach.  

(Lindsay 1973; TJ; misidentifications for North America)

**Sticta oregana** Tuck.  

(C. Harris 1903; Fink 1935)

=[Lobaria oregana](#)

**Sticta pulmonaria** (L.) Biroli  

(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; based on misidentifications of several other *Sticta* species)

**STICTINA** Nyl.

**Stictina anthraspis** (Ach.) Nyl.  

(Hue 1890; Orcutt 1909)

=[Pseudocyphellaria anthraspis](#)

**Stictina quercizans** Ach. non Michx.  

(Hue 1895)

=[Lobaria quercizans](#), but not in CA

**STIGMIDIUM** Trevis.

\***Stigmidium cerinae** Cl. Roux & Triebel  

(Cole & Hawksworth 2001; Triebel & Cáceres 2004; C. Bratt 5121, on [Caloplaca bolacina](#), Santa Barbara Isl., Santa Barbara Co.; C. Bratt 8139, on [Caloplaca luteominia](#) var. [bolanderi](#), San Nicolas

Isl., Ventura Co., both determined by M. Cole)

\***Stigmadium epixanthum** Hafellner  

(Hafellner et al., 2002; Diederich 2003; Triebel & Cáceres [2004] on *Acarospora* and *Pleopsidium*; S. Tucker 36312, on *Pleopsidium*, lava beds near Baker, San Bernardino Co., SBBG, determination by P. Diederich)

\***Stigmadium fuscatae** (Arnold) R. Sant.  

(Etayo & Breuss 1998; Diederich 2003)

## STRANGOSPORA Körb.

**Strangospora microhaema** (Norman) R. A. Anderson  

(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.)

**Synonyms:** [\*Biatorella microhaema\*](#)

**Strangospora moriformis** (Ach.) Stein  

**Synonyms:** [\*Biatora moriformis\*](#) (Hasse 1906), [\*Biatorella moriformis\*](#) (Hasse 1913b; Magnusson 1935a)

**Strangospora ochrophora** (Nyl.) R. A. Anderson  

(Thomson 2003)

## STRIGULA Fr.

**Strigula stigmatella** (Ach.) R. C. Harris  

(R. Harris 1975; Aptroot 2002, p. 475)

**Synonyms:** [\*Porina cinerea\*](#) (Pers.) Zahlbr. (Fink 1935), [\*Verrucaria cinerea\*](#) Pers. (Hasse 1906)

## STROMATELLA Henssen

**Stromatella bermudana** (Riddle) Henssen  

(Schultz 2002; Knudsen 2004c)

## 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])

**Sulcaria isidiifera** Brodo  

(Brodo 1986; von Reis 1991; Riefner, Bowler, & Ryan 1995; Hill 1996; Magney 1999; Brodo et al. [2001, p. 674]; CA endemic)

## SYNALISSA Fr.

**Synalissa symphorea** (Ach.) Nyl.  

(TJ; Goward 1999; not mentioned as present in S CA *fide* Schultz 2002)

**Synonyms:** [\*Omphalaria symphorea\*](#) (Hasse [1906, as *Omphalaria symphorea*, Palm Springs]), [\*S. symphorea\*](#) var. [\*sphaerospora\*](#) (Herre 1944b [but based on a misidentification from Marin Co. in N CA])

**Synalissa symphorea** var. [\*sphaerospora\*](#) Nyl. 

(Herre 1944b [based on *C. L. Brown* 229, Marin Co., but a misidentification *fide* S. Tucker])  
= [\*S. symphorea\*](#)

## SYNECHOBLASTUS Trevis. = [\*\*COLLEMA\*\*](#)

*Synechoblastus aggregatus* (Ach.) Th. Fr.  

(Fink 1935;

=*Collema fasciculare* (Ach.) Röhl., but misidentifications for CA)

*Synechoblastus coccophorus* (Tuck.) Fink  

(Fink 1935)

=*Collema coccophorum*

*Synechoblastus fascicularis* (L.) A. L. Sm.  

(Fink 1935)

=*Collema fasciculare* (but misidentifications for CA)

*Synechoblastus laciiniatus* (Nyl.) Fink  

(Fink 1935)

=*Collema texanum* (synonymy in Esslinger & Egan 1995)

*Synechoblastus leucocarpus* (Hook. f. & Taylor) Müll. Arg.  

(Fink 1935; misidentifications for North America)

## SYZYGOSPORA G. W. Martin

\***Syzygospora physciacearum** Diederich  

(Diederich 1996; Tucker & Bratt 1996; Wright 1997; Bratt 1999; Diederich 2003, 2004; S. Tucker 35462, 35516, Lake Pillsbury, Lake Co., SBBG, on *Physconia* spp.; S. Tucker 6269, near Castle Rock, Santa Cruz Co., SBBG, on *Heterodermia erinacea*; S. Tucker 10988, 34366, Santa Barbara, Santa Barbara Co., SBBG, on *Physcia tenella*; S. Tucker 37163, Pollard Flat SW of Dunsmuir, Shasta Co., SBBG, determination by P. Diederich; *Lecidea granulosa* var. *phyllizans*)

[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](#)

## TAENIOLELLA S. Hughes

\***Taeniolella phaeophysciae** D. Hawksw.  

(Diederich 2003, 2004 [in San Luis Obispo Co.]; S. Tucker 31712, Clear Lake, Lake Co., SBBG, on *Phaeophyscia orbicularis*, determination by D. Hawksworth)

## 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)

**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)

= 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*; *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)

**Synonyms:** [\*T. chrysophthalmus\*](#) var. [\*flavicans\*](#)

**Misapplied names:** [\*T. exilis\*](#) (for S CA records)

*Teloschistes flavicans* var. *puberus* Wallr.  

(Tuckerman 1866; TJ)

**Synonyms:** [\*Physcia chrysophthalma\*](#) var. [\*pubera\*](#) (Tuckerman 1860)

*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)

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

**Note:** The names [\*T. villosus\*](#) and [\*Physcia villosa\*](#) were misapplied to North American collections.

*Teloschistes candelarius* (L.) Fink var. *laciniosus* (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.  

(Herré 1906)

=[\*Candelaria concolor\*](#)

*Teloschistes lychneus* (Ach.) Tuck.  

(Tuckerman 1882; Hasse 1903a, 1908a)

=[\*Xanthoria candelaria\*](#)

*Teloschistes lychneus* f. *laciniosus* Schaeer. 

(Hasse 1895; Herré 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. *polycarpus* (Hoffm.) Tuck.  

(Tuckerman 1866; Orcutt 1903, 1907)

=[\*Xanthoria polycarpa\*](#)

*Teloschistes parietinus* var. *ramulosus* (Tuck.) Tuck. 

(Tuckerman 1866, 1872)

=[\*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.  

(TJ for references;

=[\*Xanthoria ramulosa\* fide](#) Esslinger [2004b], but

=[\*Xanthoria polycarpa\* fide](#) Lindblom [1997, 2004])

*Teloschistes villosus* auct.  

(Hasse 1910a; Howe 1910b, 1910c; Hasse 1913b; Howe 1915; Hillman 1930; Fink 1935; Rudolph 1955; TJ; Hale & Cole 1988)

=*Seirophora californica* for North American records

**Note:** [\*Teloschistes californicus\*](#) was based on North American records of *T. villosus* and *Physcia villosa* (Sipman 1993). Frödén & Lassen (2004) transferred [\*T. californicus\*](#) to *Seirophora*.

## 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 et al. 2004; Robertson 2004)

**Synonyms:** [\*Lecanora atra\*](#) (TJ for references)

**Tephromela nashii** Kalb  

Weber 1989a; (Bratt 1999; Nash, Kalb et al. 2004; Univ. Colo. Lich. Exs. 669, Fraser Point, Santa Cruz Isl., Santa Barbara Co.)

**Note:** Some collections from coastal S CA have been misidentified as [\*T. atra\*](#) or [\*Lecanora atra\*](#).

**Tephromela aglaea** Sommerf.  

(J. & R. Robertson 6886, on serpentine outcrop, Bolinas Fairfax Rd .3 mi W of golf course, Mt. Tamalpais State Park, Marin Co.)

=[\*Calvitimela aglaea\*](#)

**Tephromela armeniaca** (DC.) Hertel & Rambold  

(Ryan & Nash 1991; not in CA *fide* Brodo et al. [2001, p. 676, with color photograph] and Hafellner et al. 2004)

=[\*Calvitimela armeniaca\*](#)

## TETRAMELAS Norman

**Tetramelas geophila** (Sommerf.) Norman  

**Synonyms:** [\*Buellia geophila\*](#) (synonymy *fide* Marbach 2000)

## TEXOSPORIUM Nádv. ex Tibell & Hofsten

**Texosporium sancti-jacobi** (Tuck.) Nádv.  

(Nádvorník 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; color photograph on back cover of CALS Bulletin 9[2], 2002)

**Synonyms:** [\*Acolium sancti-jacobi\*](#) (Tuckerman 1883a; Orcutt 1903, 1907), [\*Cyphelium sancti-jacobi\*](#) (Weber 1967b), [\*Trachylia sancti-jacobi\*](#) (Hue 1892)

## THAMNOLIA Ach. ex Schaer.

**Thamnolia vermicularis** (Sw.) Ach. ex Schaer.  

(Wright 1992; Goward 1999; Tucker [2002] repeated Wright record)

## THELENELLA Nyl.

### **Thelenella hassei** (Zahlbr.) H. Mayrhofer

(Mayrhofer 1987; R. Harris 1995; Mayrhofer 2002; *H. E. Hasse* collection, on *Juglans californica*, etc., canyons of Santa Monica Mts, IX. 1913; *Lichenes Exsiccati, Sullivant Moss Soc. 146*, MIN; CA endemic)

**Synonyms:** [Microglaena hassei](#) (Zahlbruckner 1902; Hasse 1903f, 1913b; Fink 1935; Hasse [1903f] said that his collections of [Microglaena hassei](#) [=*Thelenella hassei*] were distributed as [Pyrenula thelomorpha](#))

### **Thelenella inductula** (Nyl.) H. Mayrhofer

(Mayrhofer 1987; R. Harris 1995; Mayrhofer 2002)

**Synonyms:** [Polyblastiopsis inductula](#) (Fink 1935; TJ), [Verrucaria inductula](#) (Hasse 1897)

### **Thelenella modesta** (Nyl.) Nyl.

(Mayrhofer 1987; R. Harris 1995, p. 163; Mayrhofer 2002)

**Synonyms:** [Microglaena subcorallina](#) (Hasse 1913b; Fink 1935; Herre 1944b; TJ), [Verrucaria subcorallina](#) (Hasse 1898a)

### **Thelenella muscorum** (Fr.) Vain.

**Synonyms:** [Chromatochlamys muscorum](#) var. [muscorum](#) (Robertson & Robertson 2002 [based on *J. & R. Robertson* 3676, Guenoc Winery, over mosses in chaparral, Lake Co., !I. Brodo]; Mayrhofer 2002; *T. Nash* 32541, Santa Cruz Isl., Santa Barbara Co., ASU; synonymy in Fryday & Coppins 2004)

### **Thelenella sychnogonioides** (Zahlbr.) R. C. Harris

(R. Harris 1995; Mayrhofer 2002)

**Synonyms:** [Microglaena sychnogonioides](#) (Zahlbruckner 1902; Hasse 1903f, 1913b), [Thelenella harrisii](#)

**Note:** R. Harris (1995) and Mayrhofer (2002) both included [Thelenella harrisii](#) as a synonym of *T. sychnogonioides*. Mayrhofer (1987) merged *T. sychnogonioides* with [T. hassei](#), but later (Mayrhofer, 2002) revised his opinion.

### **Thelenella weberi** H. Mayrhofer

(Mayrhofer 1987; R. Harris 1995, p. 164; Mayrhofer 2002)

### **Thelenella harrisii** H. Mayrhofer

(Mayrhofer 1987)

=[Thelenella sychnogonioides](#)

## THELIDIUM A. Massal.

### **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)

**Synonyms:** [Verrucaria microbola](#) (Hasse 1906)

**Note:** The Hasse material, which is the only CA collection, was annotated by O. Breuss as *Verrucaria* sp. *fide* Nash (2002b, p. 510).

## THELOCARPON Nyl. ex Hue

**Thelocarpon albomarginatum** Herre  

(Herre 1912b; Fink 1935; CA endemic)

= [\*Acarospora albomarginata\*](#) (Herre) G. Salisb., but this name is illegitimate, so the taxon is retained here**Thelocarpon hassei** de Lesd.  

(de Lesdain 1930; TJ; CA endemic)

**THELOMMA** A. Massal.**Thelomma californicum** (Tuck.) Tibell  

(Tibell 1976, 1978b, 1979 [Calic. Exs. 50]; von Reis 1991; Riefner, Bowler, &amp; Ryan 1995; Brodo et al. [2001, pp. 679–680, with color photograph]; Baltzo 2002; Doell 2002; Tibell &amp; Ryan 2004)

**Synonyms:** [\*Acolium californicum\*](#) (Tuckerman 1866; Bolander 1870; Tuckerman 1872; Willey 1873a), [\*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; Tibell *Calic. Exs. 178*)**Synonyms:** [\*Acolium bolanderi\*](#) (Tuckerman 1866; Bolander 1870; Tuckerman 1872; Orcutt 1885; Tuckerman 1888; Hasse 1895, 1896; Orcutt 1903, 1907; Hasse 1913b), [\*Cyphelium bolanderi\*](#) (Herre 1910; Hasse 1913b; Merrill 1923; Thomson & Ketchledge 1958), [\*Cypheliopsis bolanderi\*](#) (Zahlbrückner 1903–1907; Fink 1935; Herre 1957; Volk 1963)**Thelomma occidentale** (Herre) Tibell  

(Weber et al. 1987; Tucker &amp; Bratt 1996; Hill 1997 [as “cf.”]; McGee 1998; Robertson et al. 1998; Brodo et al. [2001, p. 679]; Baltzo 2002; Blauman 2004; Tibell &amp; Ryan 2004)

**Synonyms:** [\*Cyphelium occidentale\*](#) (Herre 1910, 1942c; Thomson & Ketchledge 1958; Volk 1963; Weber 1967b)**Thelomma ocellatum** (Körb.) Tibell  (Tibell 1978a [*Calic. Exs. 25*], 1978b [comments on the exsiccatae]; McCune & Rosentreter 1995; Tibell & Ryan 2004; *B. Ryan 32201*, Benedict Meadow, Sierra Nat. Forest, 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; Tibell [*Calic. Exs. 19*])**Thelomma carolinianum** (Tuck.) Tibell  **Synonyms:** [\*Cyphelium carolinianum\*](#) (Hasse 1908b; Lindsay 1973; but based on misidentifications *fide* Tibell & Ryan 2004)**THELOPSIS** Nyl.**Thelopsis isiaca** Stizenb.  

(Vězda 1968; TJ; R. Harris 1975, 1979; Tretiach et al. 2002)

**Synonyms:** [\*T. subporinella\*](#)**Thelopsis subporinella** Nyl.  

(Hasse 1898b; Zahlbrückner 1903–1907; Hasse 1903f, 1913b; TJ)

= [\*T. isiaca\*](#)**THELOTREMA** Ach.**Thelotrema lepadinum** (Ach.) Ach.  

(Tuckerman 1882; Lindsay 1973; TJ; Hale &amp; Cole 1988; Brodo et al. [2001, p. 681, with color

photograph]; Robertson 2002a [as *T. lapidum*])

*Thelotrema californicum* Tuck.  

(Tuckerman [1877, based on *E. Palmer* collection on bark, San Diego, herb. Willey]; Willey 1887; Tucker 1997)

=[Limonaea californica](#) (Sparrius 2004)

*Thelotrema subtile* Tuck.  

(not reported in CA; occurs in NE and E U. S., W to Texas)

**Synonyms:** [Ocellularia subtilis](#) (Lindsay 1973, based on a misidentification)

## TERMUTIS Fr.

*Thermutis velutina* (Ach.) Flot.  

(Goward 1999; *H. Thiers* 558, Stanislaus Co., SFSU, was re-identified as [Spilonema revertens](#) by S. Tucker)

## THOLURNA Norman

*Tholurna dissimilis* (Norman) Norman  

(Goward 1999; Anonymous [2002, cited *S. Jovan* collection, Fresno Co.]; Jovan & McCune 2004)

## THROMBIUM Wallr.

*Thrombium aoristum* (Nyl.) Arnold  

(Breuss 2002, reported from Santa Monica Mts, Los Angeles Co.)

*Thrombium discordans* (Nyl.) Zahlbr.  

(Fink 1935; TJ; Breuss [2002, p. 484, noting that *T. discordans* does not belong in the genus]; CA endemic)

**Synonyms:** [Verrucaria discordans](#) (Hasse 1903f)

*Thrombium epigaeum* (Pers.) Wallr.  

(Hasse 1913b [*Lichenes Exsiccati, Sullivant Moss Soc.* 225, Santa Monica Mts., 1 Nov 1904, ASU]; Fink 1935; TJ; not reported for S CA by Breuss 2002; *L. Janeway* 5374, on soil, Butte Co., CSU, det. S. Tucker)

**Synonyms:** [Verrucaria epigaea](#) (Hasse 1898a)

## THYREA A. Massal.

*Thyrea confusa* Henssen 

(*D. Toren* 899, as *T. pulvinata* [an unpublished name], on basalt rock, Hell's Peak, Lake Co., SFSU, but a misidentification *fide* B. Ryan, based on the fact that the thallus is completely epruinose in the *Toren* collection)

*Thyrea nigritella* Lettau  

(Tucker & Kowalski 1975; TJ)

=[Lichenella nigritella](#)

## TICHOPOECIUM Flot.

\**Ticlopoecium 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  

(Aptroot 2002; S. Tucker 34313, Santa Barbara, Santa Barbara Co., SBBG, determined by A. Aptroot)

**Tomasellia californica** (Zahlbr.) R. C. Harris  

(R. Harris 1975; TJ; R. Harris 1995; Aptroot 2002)

**Synonyms:** [Mycoporellum californicum](#) (Zahlbruckner 1912b; Hasse 1915a; Fink 1935),

[Mycoporopsis californica](#) (Riedl 1962a), [Mycoporum californicum](#) (R. Harris 1975; R. Harris 1995;

Aptroot 2002)

**Tomasellia eschweileri** (Müll. Arg.) R. C. Harris  

(R. Harris 1995; Tucker 1997; Aptroot 2002; S. Tucker 34358, 34761, Santa Barbara, Santa Barbara Co., SBBG, determined by Aptroot)

**Synonyms:** [Mycoporum eschweileri](#) (R. Harris 1995; Aptroot 2002), [Mycoporellum hassei](#) (Hasse 1912, 1913b; Merrill 1923; Fink 1935; Riedl 1962a), [T. lactea](#)

**Tomasellia sparsella** (Nyl.) R. C. Harris  

**Synonyms:** [Mycoporellum sparsellum](#) (Nyl.) Müll. Arg. (Fink 1935; Riedl 1962a)

*Tomasellia lactea* (Ach.) R. C. Harris  

(R. Harris 1975)

=[T. eschweileri](#)

## TONINIA A. Massal.

**Toninia aromatica** (Turner apud Sm.) A. Massal.  

(Herre 1910; Hasse 1913b; Merrill 1923; Fink 1935; Sigal 1975; TJ; Sigal 1989; Timdal 1992; Bratt & Wright 1995; Timdal 2002)

**Synonyms:** [Lecidea aromatica](#) (Tuckerman 1888; Hasse 1896; McClatchie 1897; Hasse 1898a, 1903b; Orcutt 1903, 1907)

**Toninia massata** (Tuck.) Herre  

(Herre 1910; Hasse 1913b; Fink 1935; TJ; Timdal 1992; Bratt & Wright 1995; Timdal 2002; Riefner et al. 2003)

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

**Toninia nashii** Timdal  

(Timdal 2002; 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; W. Weber [1989a, Univ. Colo. Lich. Exs. 663, as *Toninia pacifica*, nom. nud.])

**Toninia ruginosa** subsp. **ruginosa**  

(Lamb [1954, referred to CA type]; Timdal 1992; Bratt & Wright 1995; Timdal 2002)

**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]; Timdal 2002; Robertson 2004)

**Synonyms:** [T. caeruleonigricans](#), [Lecidea vesicularis](#)

**Toninia squalida** (Ach.) A. Massal.  

(Herre 1910; Sigal 1975; TJ; Sigal 1989; Timdal 1992; Bratt & Wright 1995)

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

**Toninia submexicana** de Lesd.  

(Timdal 1992; Bratt &amp; Wright 1995; Magney [1999] cited latter; Timdal 2002)

**\*Toninia subtalparum** van den Boom (van den Boom 2004, on [Lecania dudleyi](#))**\*Toninia talparum** Timdal  

(Timdal 1992; Bratt &amp; Wright 1995; Timdal 2002)

**\*Toninia verrucariooides** (Nyl.) Timdal  

(Timdal 1992; Bratt &amp; Wright 1995; Magney 1999 cited latter; not in Timdal [2002] for S CA)

**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, and because there is only one Santa Catalina Island in the Channel Islands of California. Timdal (2002) does not report it from the Sonoran area of California.**Toninia caeruleonigrans** (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 conglomerata** (Ach.) Boistel  = [Psorinia conglomerata](#)**Toninia cumulata** (Sommerf.) Th. Fr.  (Hasse 1913b; Fink 1935; TJ; excluded from *Toninia*, misidentifications for North America; not mentioned for Sonoran area or CA by Timdal [2002])**Synonyms:** [Lecidea cumulata](#) (Hasse 1895; Orcutt 1903, 1907)**Toninia ruginosa** f. *nigricans* I. M. Lamb  

(Lamb 1954)

= [Toninia 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*)= [Toninia squalida](#)**Toninia squalida** var. *persimilans* Nyl. 

(Lamb 1954)

= [Toninia 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 tristis** (Th. Fr.) Th. Fr.  

(Sigal &amp; Toren 1976; TJ; Bowler et al. 1996)

= misidentifications; not listed by Timdal 1992 for CA

**TOPELIA** P. M. Jørg. & Vězda**Topelia californica** P. M. Jørg. & Vězda  

(Jørgensen & Vězda 1984; Baltzo [2002, determination by R. C. Harris]; Nash & Nimis 2002; S. Tucker 38266, campus of Univ. of California, Santa Cruz, Santa Cruz Co., SBBG; CA endemic)

### **Topelia gyalectodes** (Nyl.) B. D. Ryan, Lumbsch et al. (nom. inval.)

**Synonyms:** [Lecanora gyalectodes](#) Nyl. (Nylander 1900; Hasse 1903c; TJ; CA endemic)

**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.

## **TORNABEA** Østh.

### **Tornabea scutellifera** (With.) J. R. Laundon

(Nimis & Tretiach 1997, 2002; T. Nash 32757, Santa Rosa Isl., Santa Barbara Co., ASU)

## **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)

**Synonyms:** [Biatora coarctata](#) (Tuckerman 1866; Bolander 1870; Tuckerman 1872, 1888; Hasse 1896; McClatchie 1897; Hasse 1903b; Orcutt 1903, 1907), [Lecidea coarctata](#) (Hasse 1898a; Herre 1910; Hasse 1913b; Merrill 1923; some Herre collections [1910] thought to be misidentifications of [L. involuta](#), judging from his descriptions)

### **Trapelia corticola** Coppins & P. James

(*T. Tønsberg TT14894*, Humboldt Co., BG)

### **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)

**Synonyms:** *Lecidea coarctata* var. *ornata*

**Misapplied names** (for many CA records): [Biatora coarctata](#), [Lecidea coarctata](#)

### **Trapelia obtegens** (Th. Fr.) Hertel

(TJ; not listed for CA by Lumbsch & Kainz [2004])

**Synonyms:** [Lecidea coarctata f. obtegens](#) (Hasse 1913b)

## **TRAPELIOPSIS** Hertel & Gotth. Schneid.

### **Trapeliopsis bisorediata** McCune & Camacho

(description in McCune et al. [2002] but CA not cited; *K. Knudsen 760*, Menifee Hills, Wildomar, Riverside Co., ASU, determined by C. Printzen)

### **Trapeliopsis flexuosa** (Fr.) Coppins & P. James

(Weber et al. 1987; Brodo et al. [2001, p. 686, with color photograph]; Doell 2002; Blauman 2004; Printzen & McCune 2004; Robertson 2004)

**Synonyms:** *Biatora flexuosa* (McClatchie 1897), *Lecidea flexuosa* (Hasse 1898a, 1908b, 1913b; Thomson & Ketchledge 1958; TJ)

**Trapeliopsis glaucopholis** (Nyl. ex Hasse) Printzen & McCune 

(Printzen & McCune 2004; S. Tucker 34749, Bear Mtn, Kern Co., SBBG; S. Tucker 34188, Big Rocks, San Luis Obispo Co., SBBG; C. Wetmore 16810, NS of Topanga in Old Topanga Cyn, 4 km off Topanga Cyn Rd, Los Angeles Co., ASU)

**Synonyms:** *Biatora granulosa* var. *phyllizans* (Hasse 1903b), *Lecidea admiscens*, *L. glaucopholis* (Hasse 1898a; Fink 1935; TJ), *Lecidea granulosa* var. *phyllizans*, *T. californica* (McCune et al. 2002)

**Misapplied names:** *T. wallrothii* (in part)

**Trapeliopsis granulosa** (Hoffm.) Lumbsch 

(Weber et al. 1987; Brodo et al. [2001, p. 687, with color photograph]; Blauman 2004; Printzen & McCune 2004; Robertson 2004; this species is usually only at high elevation, at least south of the San Francisco Bay Area)

**Synonyms:** *Biatora granulosa* var. *corallina* (Hasse 1903b), *Lecidea granulosa* (Hasse 1908b, 1915b), *L. quadricolor* (Anderson 1964)

**Trapeliopsis steppica** McCune & Camacho 

(McCune et al. 2002; Printzen & McCune 2004; Robertson 2004; R. Riefner 92–190 [originally as *Dirinaria picta*], Ventura Co., UCI; CA endemic)

**Misapplied names:** *T. wallrothii* (in part)

**Trapeliopsis californica** McCune & Camacho 

(McCune et al. 2002; Robertson 2004)

=*T. glaucopholis*

**Trapeliopsis viridescens** (Schrad.) Coppins & P. James 

(not mentioned for Sonoran part of CA by Printzen & McCune [2004], and all older reports are from S CA)

**Synonyms:** *Biatora viridescens* (McClatchie 1897; Hasse 1906), *Lecidea viridescens* (Hasse 1908a, 1913b), *Micarea viridescens*

**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 2004)

**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)

\***Tremella lethariae** Diederich 

(Diederich 2003, 2004 [Tulare Co.])

\***Tremella parmeliarum** Diederich 

(Diederich 2003, 2004; S. Tucker 34441, Montecito, Santa Barbara Co., SBBG, on *Parmotrema hypoleucinum*, determination by P. Diederich)

\***Tremella phaeophysciae** Diederich & M. S. Christ. 

(Diederich 2003, 2004; S. Tucker 31712, pr. p., Clear Lake, Lake Co., on *Phaeophyscia orbicularis*, SBBG, determination by P. Diederich)

\***Tremella ramalinae** Diederich 

(Diederich 2003, 2004; S. Tucker 34509A,B, Hastings Natural History Reserve, Monterey Co., on *Ramalina farinacea* and *R. menziesii*, SBBG, determination by P. Diederich; S. Tucker 35762B, Santa

Cruz Isl., Santa Barbara Co., on *Ramalina pollinaria*, SBBG, determination by P. Diederich)

## TREMOLECIA M. Choisy

**Tremolecia atrata** (Ach.) Hertel  

(Robertson & Robertson 2001 [*J. & R. Robertson* 1780, Hull Mtn Rd near summit, 6800 ft., Lake Co., and *J. & R. Robertson* 4581, near West Peak, Mt. Tamalpais S. P., Marin Co.]; Robertson & Robertson 2002 [*J. & R. Robertson* 6985, on granite, Black Butte, Glenn Co., *J. & R. Robertson* 3020, Palisades Trail, Robert Louis Stevenson S. P., 700 m. elev., Napa Co.]; color photograph on back cover of CALS Bulletin 7[2], 2000)

## TRICHORAMALINA Rundel & Bowler = **RAMALINA**

*Trichoramalina crinita* (Tuck.) Rundel & Bowler  

(Rundel & Bowler 1974; TJ; Bowler & Riefner 1995; Bratt 2003)

=*Ramalina crinita* (Tuckerman 1883b; Orcutt 1885; Eckfeldt 1893; Orcutt 1907; Hasse 1913b; Howe 1914; Herre 1945; Kashiwadani & Nash 2004)

*Trichoramalina melanothrix* (Laurer) Rundel & Bowler  

(cited in Rundel & Bowler [1974], but unclear reference to CA, from Baja California only [*fide* R. Riefner, personal communication]; this taxon is not mentioned in R. Howe papers or in Kashiwadani & Nash [2004])

## TRICHOHELMIUM Müll. Arg. = **PORINA**

*Trichothelium aeneum* (Wallr.) R. C. Harris  

=*Porina aenea* (Aptroot 2002)

*Trichothelium chloroticum* (Ach.) R. C. Harris  

(Tucker 1999; *T. Nash* 33020, Santa Rosa Isl., Santa Barbara Co., ASU)

=*Porina chlorotica* (Aptroot 2002)

*Trichothelium lineare* (Leight.) R. C. Harris  

**Note:** Hasse (1906) misapplied the name *Verrucaria circumspersellum* to this taxon *fide* Nash (2002b, pp. 509–510). Breuss identified the Hasse material as *Porina linearis*.

## 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; TJ; CA endemic)

**Note:** According to Nash (2002a) this species is unlikely to occur in S CA.

## TUCKERMANNOPSIS Gyeln.

**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 2004; Esslinger 2004a)

**Synonyms:** *Cetraria chlorophylla* (TJ; Thomson 1984; Jovan & McCune 2004), *C. scutata* auct. non (Wulfen) Poetsch

**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 2004; Esslinger 2004a; Printzen & McCune 2004)

**Synonyms:** *Cetraria orbata* (TJ; Jovan & McCune 2004), *Nephromopsis californica* (Gyelnik 1931; Herre 1950a, 1956), *Platysma orbatum*

**Tuckermannopsis platiphylla** (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)

**Synonyms:** *Cetraria platiphylla* (Tuckerman 1882; Hasse 1903c; Herre 1906; Fink 1935; Esslinger 1973b; Pinelli & Jordan 1978; TJ; Jovan & McCune 2004) *Nephromopsis platiphylla* (Herre 1910; Zahlbrückner 1910; Herre 1912a, 1940, 1942b, 1950a)

**Note:** This species occurs in N CA, but reports from S CA (i.e., Hasse) are probably based on misidentifications.

**Tuckermannopsis saepincola** (Ehrh.) Hale  

(Brodo et al. [2001, p. 696, showed it in N CA, with color photograph]; records discussed in Tucker [2002]; E. B. Copeland collection, Jonesville, Butte Co., October 1942, CAS,!S. Tucker)

**Synonyms:** *Cetraria saepincola* (McClatchie 1897; Hasse 1913b; Fink 1935; TJ), *Platysma saepincola* (Hasse 1898a; Orcutt 1909)

**Note:** According to Goward et al. (1994) the range is from BC to Washington. N CA records appear correct but S CA records are based on misidentifications. Kärnefelt & Thell (2001) have the opinion that this taxon does not belong in *Tuckermannopsis*.

**Tuckermannopsis canadensis** (Räsänen) Hale  

(von Reis 1991)

= *Vulpicida canadensis*

**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], but probably a misidentification of *T. orbata*)

**Tuckermannopsis juniperina** (L.) Hale  

= misidentifications; probably of *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.

***Umbilicaria americana*** Poelt & T. H. Nash  

(Poelt & Nash 1993; Brodo et al. [2001, p. 696, with color photograph]; Hestmark 2004)

**Misapplied names:** *U. vellea* (some low-elevation collections)

***Umbilicaria 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)

**Synonyms:** *Gyrophora angulata* (Herre 1911b), *G. semitensis* (Hasse 1898a; Orcutt 1909), *U. semitensis* (Tuckerman 1872; Willey 1873a; Tuckerman 1882; Eckfeldt 1893; Hasse 1895; McClatchie 1897; Orcutt 1903, 1907; Hasse 1908a; Herre 1911b; Hasse 1913b; Fink 1935)

**Umbilicaria arctica** (Ach.) Nyl.  

(TJ)

**Synonyms:** *Gyrophora arctica* (Herre 1911b, 1942a, 1945, 1950a; Llano 1950)

**Umbilicaria cinereorufescens** (Schaer.) Frey  

(Wetmore 1985; *B. Ryan* 32134, Minarets Rd, Sierra Nat. Forest, Madera Co., ASU, annotated by Poelt as being in the *U. trabeculata* group; not in S CA *fide* Hestmark [2004])

**Umbilicaria decussata** (Vill.) Zahlbr.  

(Imshaug 1957; Hale 1969; Brodo et al. [2001, pp. 701–702, with color photograph])

**Synonyms:** *Gyrophora decussata* (Fink 1935; Herre 1942a, 1945, 1950a; TJ), *Omphalodiscus decussatus* (Llano 1950)

**Umbilicaria deusta** (L.) Baumg.  

(Sigal & Toren 1976; TJ; Wetmore 1983; Hale & Cole 1988; Tucker 2002; Brodo et al. [2001, p. 702, with color photograph] did not show it in CA but in northern Oregon and northward)

**Umbilicaria hirsuta** (Sw. ex Westr.) Hoffm.  

(Bolander 1870; Llano 1950; TJ; Thomson 1984; Hale & Cole 1988; Hestmark 2004)

**Synonyms:** *Gyrophora grisea* (Herre 1911b; Fink 1935), *G. hirsuta* (Hasse 1908b; Fink 1935; Herre 1942a, 1950a), *G. hirsuta* var. *grisea* (Hasse 1898a), *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)

**Synonyms:** *Gyrophora hyperborea* (Herre 1911b)

**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)

**Synonyms:** *Gyrophora reticulata* (Herre 1910, 1911b; Hasse 1913b; TJ), *Omphalodiscus krascheninnikovii* (Llano 1950; Sigal & Toren 1974; Sigal 1975; TJ)

**Umbilicaria lambii** Imshaug  

(Peterson 1997; *E. Peterson* 2485 and 2539, near Sanger Peak, Del Norte Co.)

**Umbilicaria nylanderiana** (Zahlbr.) H. Magn.  

(Goward et al. 1994; *B. Ryan* 24139, Burst Rock, edge of Emigrant Wilderness, Tuolumne Co., ASU; high-elevation species)

**Umbilicaria phaea** Tuck.  

(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 2004; Hestmark 2004; color photograph on front cover of CALS Bulletin 9[2], 2002)

**Synonyms:** *Gyrophora phaea* (Herre 1911b)

**Umbilicaria phaea** var. **coccinea** Llano  

(Llano 1950; TJ; McCune & Geiser 1997; Brodo et al. [2001, p. 706]; *B. Ryan* 25620, Siskiyou Co.;

*E. Peterson collection, Siskiyou Co.)*

**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)

**Synonyms:** [\*Gyrophora polyphylla\*](#) (Herre 1906, 1907; Hasse 1908b; Herre 1910, 1911b; Hasse 1913b; Fink 1935)

**Umbilicaria polyrhiza** (L.) Fr.  

(Hale 1969; Sigal & Toren 1976; Hale & Cole 1988; Baltzo 1989; Goward et al. 1994)

**Synonyms:** [\*Actinogyra polyrhiza\*](#) (Llano 1950; Baltzo 1970; TJ), [\*Gyrophora diabolica\*](#) (Herre 1906, 1907), [\*G. polyrhiza\*](#) (Herre 1910, 1911b; Fink 1935)

**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; *B. Ryan 22180*, E of town of Mammoth Lakes, Mono Co., ASU)

**Umbilicaria rigida** (Du Rietz) Frey  

(Peterson 1997; Brodo et al. [2001, pp. 707–708, with color photograph]; Tucker 2002; *E. Peterson 2494* and *2540*, trail to Sanger Peak, Del Norte Co.)

**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)

**Synonyms:** [\*Gyrophora erosa\*](#) (Hasse 1903c; Herre 1911b; Hasse 1913b; Fink 1935; Herre 1945), [\*G. torrefacta\*](#) (Herre 1911b, 1945; Fink 1935)

**Umbilicaria vellea** (L.) Hoffm.  

(TJ; Smith 1980; Thomson 1984; Poelt & Nash 1993; Tucker 2002; arctic/alpine *fide* Hestmark [2004, p. 555]; 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; *B. Ryan 24140*, Burst Rock, edge of Emigrant Wilderness, Tuolumne Co., ASU)

**Synonyms:** [\*Gyrophora rugifera\*](#) (Hasse 1898a, 1908b; Orcutt 1909; Herre 1911b; Du Rietz 1925; Fink 1935; Herre 1945, 1950a), [\*Omphalodiscus virginis\*](#) (Llano 1950; TJ)

**Umbilicaria hirsuta** var. *grisea* (Sw. ex Westr.) Th. Fr. 

(Tuckerman 1882; McClatchie 1897)

=[\*U. hirsuta\*](#), but misidentifications for CA

**Umbilicaria murina** DC.  

(Tuckerman 1872; Willey 1873a; misidentifications of [\*U. americana\*](#))

**Umbilicaria rugifera** Nyl.  

(Tuckerman 1872; Willey 1873a; Tuckerman 1882; McClatchie 1897)

=[\*U. virginis\*](#)

**Umbilicaria semitensis** Tuck.  

(Tuckerman 1872; Willey 1873a; Tuckerman 1882; Eckfeldt 1893; Hasse 1895; McClatchie 1897; Orcutt 1903, 1907; Hasse 1908b; Herre 1911b; Hasse 1913b; Fink 1935)

=[\*U. angulata\*](#)

**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.  

(TJ for references)

=[\*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 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 2004; Jovan & McCune 2004)

**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)

**Note:** Clerc considered *U. californica* to be a synonym of [\*U. ceratina\*](#), but I. Tavares considers them distinct.

**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)

**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, 2003b; Blauman 2004; Jovan & McCune 2004)

**Synonyms:** [\*U. barbata\* var. \*ceratina\*](#) (Tuckerman 1866), [\*U. plicata\* var. \*megathamnia\*](#), (Howe 1914–1915), [\*U. californica\*](#) (*fide* Clerc)

**Note:** I. Tavares indicated that CA specimens having pinkish medulla and axis plus diffractaic acid are distinct, [\*U. californica\*](#).

**Usnea cornuta** Körb.  

(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; Jovan & McCune 2004)

**Usnea dasaea** Stirt.  

(Clerc & Herrera-Campos 1997; Tavares 1997b)

**Usnea deformis** Motyka  

(Motyka 1936–1938; TJ)

**Note:** CA specimens labeled *U. deformis* resemble the *U. fragilescens*-*U. cornuta* group *fide* Tavares (1997b).

**Usnea diplotypus** Vain.  

(Jovan & McCune 2004)

**Usnea esperantiana** P. Clerc  

(Halonen et al. 1998; Bratt 1999; Goward 1999; Herrera-Campos et al. 2001; Jovan & McCune 2004)

**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; Thomson 2003; Blauman 2004; Jovan & McCune 2004)

**Synonyms:** *U. dasypoga*

**Usnea flavocardia** Räsänen  

(Clerc 2004)

**Synonyms:** *Usnea wirthii*

**Note:** Tavares (personal communication) regards *U. flavocardia* and *U. wirthii* as separate species and thinks that the dense medulla and galbinic acid of the former suggest a closer relationship to *U. dasaea*.

**Usnea fragilescens** Hav. ex Lyngé  

(Brodo et al. [2001, pp. 718–719, with color photograph]; Jovan & McCune 2004)

**Usnea fragilescens** Hav. ex Lyngé / **U. cornuta** Körb. group intermediates  

(Tavares 1997b; Baltzo 2002; Robertson 2002a)

**Usnea fulvoreagens** (Räsänen) Räsänen  

(Jordan 1968; Lindsay 1973; Pinelli & Jordan 1978; TJ; Hale & Cole 1988; Tavares 1997b; Wright 2001b; Baltzo 2002)

**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)

**Synonyms:** *Usnea kujalae*

**Note:** Tavares (personal communication) regards *U. kujalae* (characterised by tiny papillae) and *U. glabrata* as separate species.

**Usnea glabrescens** (Nyl. ex Vain.) Vain.  

(Wright 2001b [as “s. l.” including *U. fulvoreagens*]; Thomson 2003; Jovan & McCune 2004)

**Usnea hesperina** Motyka  

(Goward 1999; Brodo et al. [2001, p. 720, with color photograph]; Wright 2001b; Tucker 2002; accepted by Clerc [1997], although California was not mentioned)

**Synonyms:** *U. subgracilis*

**Usnea hirta** (L.) F. H. Wigg.  

(Hasse 1898a, 1903d; Herre 1906, 1910; Hasse 1913b; Merrill 1923; TJ; Sweet 1983; Thomson 1984; Tavares 1997b; Hill 1997; Wright 1997, 2001b; Goward 1999; Brodo et al. [2001, pp. 720–721, with color photograph]; Robertson 2003a, b; Jovan & McCune 2004)

**Synonyms:** *U. barbata* var. *hirta*, *U. florida* f. *hirta*

**Note:** Western North American material identified as this species differs from that in eastern U. S. and Europe, and may be, at least 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)

**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; Thomson 2003; Blauman 2004)

**Usnea madeirensis** Motyka  

(Clerc 1991; Goward 1999)

**Synonyms:** [\*U. silesiaca\*](#) *fide* Clerc (1997)

**Note:** I. Tavares (personal communication, Oct, 2004) regards *U. madeirensis* and *U. silesiaca* as distinct species.

**Usnea mirabilis** Motyka  

(Motyka 1936–1938; TJ; in [\*U. rubicunda\*](#) group *fide* Tavares 1997b)

**Usnea monstruosa** Vain.  

(Motyka 1936–1938; TJ)

**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)

**Usnea occidentalis** Motyka  

(Malachowski 1975; TJ; Robertson 2002a)

**Note:** According to I. Tavares (personal communication), Malachowski material seen by her is not correctly identified, but *U. occidentalis* does occur in CA.

**Usnea pacificana** Halonen  

(Halonen 2000; Wright 2001b; Jovan & McCune 2004)

**Usnea pendulina** Motyka / ***U. graciosa*** group  

(Tavares 1997b; Baltzo 2002)

**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; Thomson 2003; Jovan & McCune 2004)

**Misapplied names:** *U. barbata* var. *rubiginosa*, *U. hirta* var. *rubiginosa*, [\*U. rubiginea\*](#)

**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 [under *U. scabrata* s. l.]; Baltzo 2002; Tucker 2002)

**Note:** According to I. Tavares (personal communication), [\*U. scabiosa\*](#) has several forms in CA.

**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; Jovan & McCune 2004)

**Synonyms:** [\*U. dasypoga\*](#) var. *scabrata*

**Usnea silesiaca** Motyka  

(Tavares 1997b, 1998)

**Note:** I. Tavares regards *U. silesiaca* and [\*U. madeirensis\*](#) as distinct (personal communication, Oct 2004).

**Usnea subcornuta** Stirt.  

(Tavares 1997b [as *subcornuta* group]; Brodo et al. [2001, p. 724])

**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)

**Synonyms:** [\*U. comosa\*](#), [\*U. comosa\* subsp. \*similis\*](#), [\*U. similis\*](#)

**Usnea substerilis** Motyka 

(Thomson & Ketchledge 1958; TJ; Thomson 1984; Doell & Wright 1996; Tavares 1997b; McGee 1998; Goward 1999; Baltzo 2002; Jovan & McCune 2004)

**Synonyms:** *U. soredifera* sensu Motyka

**Note:** According to I. Tavares (personal communication) this is the most common short sterile species in California, especially inland.

**Usnea wasmuthii** Räsänen 

(Tavares 1997b [as “near *U. wasmuthii*”]; Jovan & McCune 2004)

**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 North America; 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\*](#)

**Usnea barbata** f. *rubiginea* (Michx.) Tuck. 

(Tuckerman 1866)

=[\*U. strigosa\* subsp. \*rubiginea\*](#) (probably misapplied to [\*U. rubicunda\*](#))

**Usnea barbata** var. *rubiginea* (Michx.) Tuck. 

(Torrey 1856; Eckfeldt 1893; Orcutt 1903, 1907)

=[\*U. strigosa\* subsp. \*rubiginea\*](#) (probably misapplied to [\*U. rubicunda\*](#))

**Usnea barbata** f. *rubiginosa* Michx. 

(Hasse 1903a, perhaps a spelling error for *rubiginea*)

=[\*U. rubicunda\*](#)

**Usnea barbata** var. *xanthopoga* (Nyl.) Müll. Arg. 

(Hue [1895] report was based on material from Baja California)

=[\*U. xanthopoga\*](#), but misidentifications for CA

**Usnea chaetophora** Stirt. 

(Wright 2001b; Jovan & McCune 2004; not in CA *fide* I. Tavares [personal communication])

**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, misidentification *fide* Tavares 1997b]; TJ; Robertson 2002a)*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* (*fide* Santesson [1984, for synonymy, without reference to CA])*Usnea dasypoga* var. *scabrata* Nyl. 

(Hasse 1903c, 1906)

= *U. scabrata**Usnea florida* (L.) F. H. Wigg.  (Hasse 1898a; Herre 1906, 1907, 1910; Howe 1914–1915; Herre 1950a; TJ; probably misidentifications of *U. arizonica*)**Synonyms:** *U. barbata* var. *florida**Usnea florida* f. *hirta* (L.) Ach. 

(Howe [1914–1915])

= *U. hirta**Usnea fragilescens* var. *mollis* (Vain.) P. Clerc  

(Egan 1989; Goward 1999; misidentifications for CA)

*Usnea hirta* f. *rubiginosa* Michx. 

(Hasse 1898a)

= *U. strigosa* subsp. *rubiginea* (probably referred to *U. rubicunda*; “*rubiginosa*” may be a spelling error on Hasse's part)*Usnea jubata* Fr.  

(Orcutt 1885, 1907)

= misidentifications of *Bryoria* spp.*Usnea kujalae* Räsänen  

(Tavares 1997b; McGee 1998; Baltzo 2002)

= *U. glabrata* (synonymy in Esslinger 2004b)**Note:** I. Tavares (personal communication) disagrees with this synonymy. For her reasons, see under *U. glabrata*.*Usnea laricina* Vain.  **Note:** According to Tavares (1997b, p. 21), this taxon might be present in N CA.*Usnea mollis* Stirt.  

(Lindsay 1973; TJ)

= *U. fragilescens**Usnea ochroleuca* Hoffm.  

(Orcutt 1885, 1903, 1907; Howe 1910a; Fink 1935;

= *Alectoria ochroleuca*, but misidentifications for CA)*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)

*Usnea plicata* var. *megathamnia* R. Howe 

(Howe 1914–1915)

= *U. ceratina*

*Usnea retifera* Motyka 

(Motyka 1936–1938; TJ)

**Note:** *Usnea retifera* is based on material collected by Gustav Eisen at Short Hair Creek, probably near the present-day Wishon Lake, Fresno Co. The current name is not known.*Usnea rigida* (Ach.) Motyka (Goward 1999; not in CA *fide* I. Tavares)= *U. quasirigida* (synonymy *fide* Lendemer & Tavares 2003)*Usnea rubiginea* (Michx.) A. Massal. 

(Herre 1906, 1910; Hasse 1913b; Merrill 1923; Malachowski 1975)

= *U. strigosa* subsp. *rubiginea*, but Herre likely misapplied this name to *U. rubicunda**Usnea similis* (Motyka) Räsänen 

(TJ)

= *U. subfloridana**Usnea sorediifera* sensu Motyka non (Arnold) Lyngé 

(Motyka 1936–1938)

= *U. substerilis* *fide* I. Tavares, but= *U. lapponica* *fide* Esslinger [2004b]*Usnea strigosa* (Ach.) A. Eaton subsp. *rubiginea* (Michx.) I. I. Tav. **Synonyms:** *U. rubiginea* (Michx.) A. Massal., *U. barbata* var. *hirta* f. *rubiginea*, *U. barbata* var. *rubiginea*, *U. barbata* f. *rubiginosa*, *U. hirta* f. *rubiginosa*

= misidentifications (Tavares, personal communication)

*Usnea subfuscata* Stirt. (Baltzo [1970, = misidentification *fide* I. Tavares]; Tavares & Sanders 1998)**Note:** According to Clerc & Herrera-Campos (1997) this taxon occurs only in eastern U. S.*Usnea subgracilis* Vain. (Tavares 1997b [as “*U. subgracilis* group”], 1998; Wright 1998)= *Usnea hesperina**Usnea trichodea* Ach. 

(Baltzo 1970)

**Note:** Hale (1979) reported that it is not in CA and I. Tavares (personal communication) agreed.*Usnea vrieseana* Mont. & Bosch 

(Howe 1914–1915; current name not known)

*Usnea wirthii* P. Clerc 

(Clerc &amp; Diederich 1991; McGee 1995; Doell &amp; Wright 1996; Hill 1996; Clerc &amp; 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 &amp; McCune 2004)

= *Usnea flavocardia***Note:** I. Tavares disagrees with this synonymy; her reasons are explained under *U. flavocardia*.*Usnea xanthopoga* Nyl. 

(TJ)

**Synonyms:** *U. barbata* var. *xanthopoga* (Hue [1895, based on material from Baja California])

[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](#)

**VERMILACINIA** Spjut & Hale = **NIEBLA***Vermilacinia acicularis* Spjut 

(Spjut 1996; Bratt 1999)

=[Niebla ceruchoides](#) (Bowler & Marsh 2004)

*Vermilacinia cephalota* (Tuck.) Spjut & Hale  

(Spjut 1996; McGee 1998; Wright 1998; Bourell 2000; Baltzo 2002)

=[Niebla cephalota](#) (Bowler & Marsh 2004)

*Vermilacinia cerebra* Spjut  

(Spjut 1996; Bratt 1999)

=[Niebla ceruchis](#) (Bowler & Marsh 2004)

*Vermilacinia ceruchis* (Ach.) De Not.  

=[Niebla ceruchis](#) (Bowler & Marsh 2004)

*Vermilacinia ceruchoides* (Rundel & Bowler) Spjut  

(Spjut 1996; Robertson & Robertson 2002)

=[Niebla ceruchoides](#) (Bowler & Marsh 2004)

*Vermilacinia combeoides* (Nyl.) Spjut & Hale  

(Spjut 1996; Bourell 2000; Baltzo 2002; Robertson & Robertson 2002)

=[Niebla combeoides](#) (Doell 2002; Bowler & Marsh 2004)

*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)

=[Niebla laevigata](#) (Doell 2002; Bowler & Marsh 2004)

*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](#) (Bowler & Marsh 2004)

*Vermilacinia polymorpha* (Bowler, J. E. Marsh, T. H. Nash & Riefner) Spjut  

(Spjut 1996)

=[Niebla polymorpha](#) (Bowler & Marsh 2004)

*Vermilacinia procera* (Bowler & Rundel) Spjut  

(Spjut 1996; Robertson & Robertson 2002)

=[Niebla procera](#) (Bowler & Marsh 2004)

*Vermilacinia pumila* Spjut  

(Spjut 1996; Bratt 1999)

=[Niebla ceruchoides](#) (Bowler & Marsh 2004)

*Vermilacinia robusta* (R. Howe) Spjut & Hale  

(Spjut 1996)

=[Niebla robusta](#) (Bowler & Marsh 2004)

**Vermilacinia tigrina** (Follmann) Spjut & Hale  

(Spjut 1996)

=[\*Niebla tigrina\*](#) (but not in North America, 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\*](#) (Bowler & Marsh 2004)

**Vermilacinia zebra** Spjut  

(Spjut 1996)

=[\*Niebla ceruchis\*](#) (Bowler & Marsh 2004)

## VERRUCARIA Schrad.

**Verrucaria acrotella** Ach.  

(TJ; *B. Ryan* 26376, San Gabriel Wilderness, Los Angeles Co., ASU)

**Synonyms:** [\*V. margacea\* var. \*acrotella\*](#) (Hasse 1906)

**Verrucaria aethiobola** Wahlenb.  

(Hasse 1898a; Herre 1912b; Hasse 1913b; Fink 1935; Sigal 1975; TJ; Hawksworth 1989; Sigal 1989; Bourell 2000)

**Synonyms:** [\*V. aquilella\*](#) Nyl. (Hasse 1898a; Herre 1912b; Fink 1935; TJ; synonymy *fide* Purvis et al. 1992, p. 633)

**Verrucaria caerulea** DC.  

(TJ; Purvis et al. 1992, p. 635; Santesson 1993)

**Synonyms:** [\*V. plumbea\*](#) Ach. (Hasse 1898a)

**Verrucaria calciseda** DC.  

(Hasse 1898a, 1913b; Fink 1935; TJ; Purvis et al. 1992, p. 635; Tucker 1999; color photograph in Brodo et al. [2001, p. 727])

**Verrucaria canella** Nyl.  

(TJ; Weber 1989a; Univ. Colo. Lich. Exs. 677; *T. Nash* 10309, South Laguna Cyn near ocean, Orange Co., ASU; *T. Nash* 37016, West Anacapa Isl., Ventura Co., ASU)

**Synonyms:** [\*V. glaucina\* subsp. \*canella\*](#) (Fink 1935)

**Verrucaria cetera** Breuss  

(*T. Nash* 41414, S side of Green Mtn, San Miguel Isl., Santa Barbara Co., ASU)

**Note:** California was not mentioned in the original description (Breuss, 1998). Material previously identified as [\*Catapyrenium plumbeum\*](#) may include this species.

**Verrucaria compacta** (A. Massal.) Jatta  

(*K. Knudsen* 1135, plateau below Santa Rosa Mtn, Riverside Co., UCR, determined by O. Breuss)

**Verrucaria dacryodes** Nyl.  

(Hasse 1903f, 1913b; TJ; CA endemic)

**Verrucaria fuscella** (Turner) Winch  

(TJ; Santesson 1984; Doell et al. 1999; *T. Nash* 32758, Santa Rosa Isl., Santa Barbara Co., ASU)

**Verrucaria fusconigrescens** Nyl.  

(Wright 1997)

**Verrucaria glaucovirens** Grummann  

(Tucker 1999 [as "cf."])

**Verrucaria halizoa** Leight.  

(von Reis 1991; Tucker 1999)

**Verrucaria inficiens** Breuss 

**Note:** According to Breuss (1998), *V. inficiens* is not known from CA. Material previously identified as *Catapyrenium plumbeum* may be referable in part to this species.

**Verrucaria internigrescens** (Nyl.) Erichsen 

(*B. Ryan* 30944, Parsons Landing near old quarry, Santa Catalina Isl., Los Angeles Co., ASU)

**Verrucaria lecideoides** (A. Massal.) Trevis. 

**Synonyms:** *Dermatocarpon lecideoides* (Hasse 1915b)

**Verrucaria margacea** (Wahlenb.) Wahlenb. 

(TJ; Sigal 1989; von Reis 1991 [but report based on a misidentification *fide* Tucker 1999])

**Synonyms:** *V. margacea* subsp. *terrestris* (Hasse 1898a, 1913b)

**Verrucaria maura** Wahlenb. 

(Hasse 1898a, 1903b, 1913b; Merrill 1923; Fink 1935; TJ; Bourell 2000; Doell 2002; Brodo et al. [2001, p. 728, with color photograph])

**Verrucaria melas** Herre 

(Herre 1910; TJ; CA endemic)

**Verrucaria mucosa** Wahlenb. 

(Riefner, Bowler, & Ryan 1995, based on *R. Riefner* collection, San Luis Obispo Co.)

**Note:** Magney (1999) cited a collection from Morro Rock Reserve, which was probably the same Riefner collection that Riefner et al. cited.

**Verrucaria muralis** Ach. 

(Hasse 1898a; Herre 1910; Sigal 1975; TJ; Sigal 1989)

**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)

**Verrucaria papillosa** Ach. 

(Hasse 1903a; Orcutt 1903, 1907; TJ)

**Synonyms:** *V. margacea* var. *papillosa* (Hasse 1913b; *H. E. Hasse*, Ballona Bluffs, Los Angeles Co., June 1905, *Lichenes Exsiccati, Sullivant Moss Soc.* 149, MU; *V. papillosa* f. *terrestris*)

**Note:** O. Breuss (personal communication to T. Nash) regards *V. papillosa* as a distinct species rather than as a synonym of *V. viridula*, as it is treated by Orange (2004).

**Verrucaria rupestris** Schrad. 

(Hasse 1898a; Herre 1910 ["doubtful" identification in Herre's opinion]; Hasse 1913b; Merrill 1923; Fink 1935; Thomson 1979; Doell 2002)

**Verrucaria sphaerospora** Anzi 

(Robertson & Robertson 2002; *B. Ryan* 12585, Eastern Brook Lakes Watershed, Sierra Nevada, Inyo Co., ASU, determination by O. Breuss)

**Verrucaria stanfordii** Herre 

(Herre 1910, 1911a; TJ; also in Nevada [Herre 1911a])

**Verrucaria submuralis** Nyl. 

(Hasse 1897, 1898a; TJ)

**Synonyms:** *V. integrella* (Hasse 1906, 1913b; synonymy *fide* Zahlbruckner 1922, p. 92)

**Verrucaria tavaresiae** R. L. Moe 

(Moe 1997; Tucker 1999; Magney [1999, citing previous collections]; Peters & Moe 2001; Sanders et al. 2004) (CA endemic)

**Verrucaria terebrata** (Mudd) Leight. 

(Herre 1907)

**Verrucaria umbrinula** Nyl. 

(TJ; S. Tucker 7967, Santa Barbara, Santa Barbara Co., SBBG, determination by Aptroot)

**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 report based on a misidentification *fide* Tucker 1999])**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](#) (Nyl.) Nav.-Ros. & Hladun (Navarro-Rosinés & Hladun 2004)**Verrucaria calciseda** subsp. *fuscospora* Herre (Herre 1910; Fink 1935; TJ; brown spores indicate it is not a *Verrucaria*)**Verrucaria carpinea** Pers. var. *plumbaria* Stizenb.= [Arthopyrenia plumbaria](#)**Verrucaria cerasi** Schrad. 

(Hasse 1895; Orcutt 1903; Hasse 1906; Orcutt 1907)

= [Arthopyrenia cerasi](#)**Verrucaria chlorotica** Ach. 

(Hasse 1898a, 1906)

= [Porina chlorotica](#)**Verrucaria chlorotica** f. *trachona* (Taylor) Hasse 

(Hasse 1906)

= [Porina chlorotica](#)**Verrucaria cinerea** Pers. 

(Hasse 1906)

**Note:** According to R. C. Harris (personal communication), Hasse's material on *Rhus trilobata* almost certainly is [Arthopyrenia plumbaria](#).**Verrucaria circumspersella** Nyl. 

(Hasse 1906; TJ)

= [Thelidium circumspersellum](#), but Hasse material was annotated by O. Breuss as [Porina linearis](#)

(Nash 2002b, pp. 509–510)

\***Verrucaria conturmatula** Nyl. (Hasse 1906; TJ; possibly 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)

= [Arthopyrenia punctiformis](#)**Verrucaria epidermidis** DC. var. *analepta* Ach. 

(Hasse 1906)

= [Arthopyrenia analepta](#)**Verrucaria epidermidis** var. *cinereopruinosa* Gar. 

(Hasse 1906)

= [Arthopyrenia plumbaria](#), but probably misidentifications

*Verrucaria epigaea* (Pers.) Ach.  

(Hasse 1898a)

=[Thrombium epigaeum](#)

*Verrucaria fallax* Nyl.  

(Hasse 1895, 1898a; Orcutt 1909)

=[Arthopyrenia analpta](#)

*Verrucaria fuscocinerascens* Nyl.  

(Hasse 1906; Herre 1912b; a species of boreal North America and Europe, so possibly a misapplied name)

*Verrucaria glaucina* Ach. subsp. *canella* (Nyl.) A. L. Sm.  

(Fink 1935)

=[V. canella](#)

*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 in 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](#)

*Verrucaria intercedens* var. *aethioboloides* Nyl. 

(Hasse 1895, 1898a; Orcutt 1903, 1907)

=[Polyblastia cupularis](#)

*Verrucaria margacea* var. *acrotella* (Ach.) Le Jolis 

(Hasse 1906)

=[V. acrotella](#)

*Verrucaria margacea* var. *papillosa* (Ach.) Nyl. 

(Hasse 1913b; H. E. Hasse, Ballona Bluffs, Los Angeles Co., June 1905, *Lichenes Exsiccati, Sullivant Moss Soc.* 149, MU)

=[V. viridula](#)

*Verrucaria margacea* subsp. *terrestris* Nyl. 

(Hasse 1898a, 1913b)

=[V. margacea](#)

*Verrucaria microbola* Tuck.  

(Hasse 1906)

=[Thelidium microbolum](#), but misidentified

**Note:** The Hasse material, which is the only CA collection, was annotated by O. Breuss as *Verrucaria* sp. *fide* Nash (2002b, p. 510).

*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. viridula**Verrucaria peloclita* 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* (Schrink) Pers.  

(Hasse 1896, 1903b, 1905, 1906; Orcutt 1903, 1907)

=*Arthopyrenia punctiformis**Verrucaria salweyi* Leight.  

(Hasse 1898a (as "salweii");

= *Acrocordia salweyi* (Leight.) A. L. Sm., but misidentifications for CA)*Verrucaria squamella* Nyl.  

(Hasse 1897, 1898a)

=*Catapyrenium squamellum**Verrucaria subcorallina* Nyl.  

(Hasse 1898a)

=*Thelenella modesta**Verrucaria thelomorpha* (Tuck.) Hasse 

(Hasse 1898a)

=*Pyrenula thelomorpha****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 and unlikely to occur in CA.***VOUAUXIELLA* Petr. & Sydow****\**Vouauxiella lichenicola*** (Linds.) Petr. & Sydow  (Essliger & Egan [1995, under Appendix, New Records for North America, based on *R. Santesson* 17667, Orange Co., S slope of Santa Ana Mts, Silverado Cyn, on *Lecanora* sp., UPS]; Diederich 2003; Robertson 2003b; Diederich 2004; S. Tucker 36393, Jasper Ridge, San Mateo Co., on *Lecanora* sp., SBBG, determination by P. Diederich; S. Tucker 34361, Santa Barbara, 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 &amp; McCune 2004)

**Synonyms:** *Cetraria canadensis* Räsänen (Essliger 1973b; Tucker 1973; Pinelli & Jordan 1978; TJ), *Tuckermannopsis canadensis* (von Reis 1991)**Misapplied names:** *Cetraria viridis* (Hale 1969, CA reports) *Cetraria juniperina* (early CA reports)***Vulpicida viridis*** (Schwein.) J.-E. Mattsson & M. J. Lai  

**Synonyms:** *Cetraria viridis* = misidentification for CA (Hale 1969; Mattsson [1993] reported it only in E U. S. west 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](#)

## WAYNEA Moberg

### Waynea californica Moberg

(Moberg 1990; Goward et al. 1994; Roux et al. 1995; McGee 1998; Baltzo 2002; Moberg 2002; CA endemic)

**Misapplied names:** *W. stoechadiana* (CA records)

### Waynea stoechadiana (Abassi & Cl. Roux) Cl. Roux & P. Clerc

(Wright 1997; Robertson 2003a; not in North America, but this name was misapplied to CA reports of *W. californica*)

[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

### Xanthomendoza fallax (Hepp) Søchting, Kärnefelt & S. Y. Kondr.

(Lindblom 2004)

**Synonyms:** *Xanthoria fallax* (Baltzo 1970; Tucker & Kowalski 1975; Pinelli & Jordan 1978; TJ; Smith 1980; Thomson 1984; Weber et al. 1987; Hale & Cole 1988; 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; Robertson 2002a, 2003a; Jovan & McCune 2004), *X. substellaris* (Rudolph 1955)

### Xanthomendoza fulva (Hoffm.) Søchting, Kärnefelt & S. Y. Kondr.

(Lindblom 2004)

**Synonyms:** *Xanthoria fulva* (Lindblom 1997; McGee 1998 [as “cf.”]; Wright 2000; Brodo et al. [2001, p. 745, with color photograph]; Baltzo 2002; Thomson 2003; Jovan & McCune 2004)

### Xanthomendoza galericulata L. Lindbl. nom. inval.

(Lindblom 2004 [as *Xanthomendoza “galericulata”* in prep.]; CA endemic)

### Xanthomendoza hasseana (Räsänen) Søchting, Kärnefelt & S. Y. Kondr.

(Lindblom 2004)

**Synonyms:** *Xanthoria hasseana* (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; *B. Ryan* 25773, Palomar Mtn, San Diego Co., ASU; *B. Ryan* 24705, ESE of Sonora, Tuolumne Co., ASU; *S. Tucker* 35964, Coulson Canyon Rd, Santa Barbara Co., SBBG)

### Xanthomendoza mendozae (Räsänen) S. Y. Kondr. & Kärnefelt

(Kondratyuk & Kärnefelt 1997; Lindblom 2004)

**Synonyms:** *Xanthoria mendozae* (Lindblom 1997; Doell et al. 1999; Bourell 2000; Wright 2000)

### Xanthomendoza oregana (Gyeln.) Søchting, Kärnefelt & S. Y. Kondr.

(Lindblom 2004)

**Synonyms:** *Xanthoria oregana* (Lindblom 1997; Wright 2000; Brodo et al. [2001, p. 743]; Doell 2002; Robertson 2002c; Jovan & McCune 2004)

### Xanthomendoza ulophyllodes (Räsänen) Søchting, Kärnefelt & S. Y. Kondr.

(Lindblom 2004)

**Synonyms:** *Xanthoria ulophyllodes* (Lindblom 1997; Kondratyuk & Poelt 1997; Wright 2000; Brodo

et al. [2001, p. 748, with color photograph]; Thomson 2003)

### XANTHOPARMELIA (Vain.) Hale

**Xanthoparmelia ajoensis** (T. H. Nash) Egan  

(Nash & Elix [2004], shown on map in central CA)

**Xanthoparmelia amableana** (Gyeln.) Hale  

(Nash & Elix [2004], shown on map in interior S CA; C. Bratt 5045, Cuyama valley, Santa Barbara Co., SBBG, det. T. Nash)

**Xanthoparmelia angustiphylla** (Gyeln.) Hale  

(Riefner, Bowler & Ryan [1995, San Luis Obispo Co.]; Magney [1999, San Diego Co., San Luis Obispo Co., and Ventura Co.])

**Misapplied names:** [X. hypopsila](#) (Hale & Cole [1988, Siskiyou Co.])

**Note:** [X. 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; this is north of the Sonoran area in CA)

**Xanthoparmelia californica** Hale  

(Hale 1984, 1990; Hale & Cole 1988; Riefner, Bowler, & Ryan 1995; Magney 1999; Nash & Elix 2004)

**Xanthoparmelia coloradoënsis** (Gyeln.) Hale  

(Ryan & Nash 1991; Bratt 1997; Hill 1997 [as "?"]; Wright 1997; Bratt 1999; Tucker 1999 [as "aff. *coloradoënsis*"]]; Bourell 2000; Robertson 2003b; Nash & Elix 2004)

**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; C. Bratt 11890, Santa Catalina Isl.: above Rippers Cove, Los Angeles Co., SBBG, determination by T. Nash)

**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; [X. conspersa](#) is common in central and northern CA, although apparently scarce in S CA, only in the Channel Is. *fide* Nash & Elix [2004])

**Synonyms:** [Parmelia conspersa](#) (Tuckerman 1882; Orcutt 1885; Eckfeldt 1893; Hasse 1895; McClatchie 1895; Hasse 1896; Hulting 1896; McClatchie 1897; Hasse 1898a, 1903a; Herre 1906; Orcutt 1907; Herre 1910; Hasse 1913b; Moxley 1921; Merrill 1923; Berry 1941; Herre 1946; Thomson & Ketchledge 1958; Hale 1964)

**Note:** Herre's 1910 material is mixed with other species with a pale underside such as [X. mexicana](#) and [X. plittii](#).

**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)

**Synonyms:** [Parmelia cumberlandia](#)

**Xanthoparmelia dierythra** (Hale) Hale  

(Nash & Zavada 1977; TJ; Nash & Elix 2004)

**Xanthoparmelia hypomelaena** (Hale) Hale  

(Nash & Elix [2004], shown on map in CA, N of Sonoran zone)

**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 Nat. Forest, Madera Co., ASU)

**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)

**Synonyms:** [X. kurokawai](#), [Parmelia kurokawai](#) (Hale 1967; Nash 1974)

**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)

**Synonyms:** [Parmelia lineola](#) (Herre 1942b, 1945, 1946; Baltzo 1970)

**Xanthoparmelia maricopensis** T. H. Nash & Elix  

(Nash & Elix 1986, 2004; *B. Ryan* 15713, Rd from Hwy 395 to town of Little Lake, Inyo Co., ASU; Inyo Co. is north of the Sonoran zone in CA)

**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, 2003a, 2003b; Nash & Elix 2004)

**Synonyms:** [Parmelia mexicana](#)

**Xanthoparmelia mougeotii** (Schaer.) Hale  

(Hale & Cole 1988; Riefner, Bowler, & Ryan 1995; Magney 1999; Robertson 2001; Hill 2002; Nash & Elix 2004)

**Xanthoparmelia neoconspersa** (Gyeln.) Hale  

(*T. Nash* 11524, seaside cliffs near Wilson's Creek, Del Norte Co., ASU)

**Xanthoparmelia neotaractica** Hale  

(Nash & Elix 2004; *T. Nash* 22862, along Hwy 44, 30 km E of Redding, Shasta Co., ASU)

**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; *T. Nash* 7078, Mt. San Jacinto, Riverside Co., ASU; *B. Ryan* 32051, North Fork Ranger Station, Sierra Nat. Forest, Madera Co., ASU)

**Synonyms:** [Parmelia arseneana](#) Gyeln. (synonymy *fide* Nash & Elix 2004, p. 590)

**Xanthoparmelia oleosa** (Elix & P. M. Armstr.) Elix & T. H. Nash  

(Nash & Elix 2004; *C. Bratt* 5032, Sespe Gorge, Ventura Co., SBBG, determination by T. Nash)

**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]; Nash & Elix 2004)

**Xanthoparmelia psoromifera** (Kurok.) Hale  

(Nash & Elix 2004; *T. Nash* 7043, along Hwy I-8, Ocotillo, San Diego Co., ASU)

**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 somloënsis** (Gyeln.) Hale  

(Bowler et al. 1996; not in S CA, but in higher elevations in Arizona *fide* Nash & Elix [2004] so possible from N of Sonoran area based on Imshaug reports; distributed only west to CO *fide* Brodo et al. [2001, p. 740, with color photograph])

**Synonyms** (*fide* Nash & Elix 2004, p. 595):: [Parmelia conspersa var. stenophylla](#) (McClatchie 1897;

Hasse 1898a, 1913b), *P. stenophylla* (Imshaug [1957, reports from Mono Pass, Mono Co., Piute Pass, Fresno Co., and Kearsarge Pass, King's Canyon N. P.]), *X. stenophylla*

**Xanthoparmelia standaertii** (Gyeln.) Hale  

(Nash & Elix 2004; *C. Bratt* 5327, Point Sal Ridge, Santa Barbara Co., SBBG, determination by T. Nash)

**Xanthoparmelia subdecipiens** (Vain. ex Lyngé) Hale  

(Riefner, Bowler, & Ryan 1995; Nash & Elix 2004; *R. Riefner*, talus slope on Modjeska property, elev. ca. 1500 ft., Cleveland Nat. Forest, Orange Co.; *B. Ryan* 26527, San Gabriel Wilderness, Los Angeles Co., ASU; *T. Nash* 11296a, Sequoia National Forest, Tulare Co., ASU)

**Xanthoparmelia subplittii** Hale  

(Nash & Elix 2004; *S. Tucker* 36316A, lava outcrops 13 mi. E of Baker on Kelbaker Rd, San Bernardino Co., SBBG; *C. Bratt* 10427, 5 mi. E of Santa Paula, Ventura Co., SBBG; both determinations by T. Nash)

**Xanthoparmelia subramigera** (Gyeln.) Hale  

(Egan 1977; TJ; Hale & Cole 1988; Wright 1997; Nash & Elix 2004)

**Synonyms:** *Parmelia subramigera*

**Xanthoparmelia tasmanica** (Hook. f. & Taylor) Hale  

(Nash & Elix 2004; *C. Wetmore* 17010B, back road between Hwy 94 and Chula Vista near Otay Reservoir, San Diego Co., ASU)

**Xanthoparmelia tuckeriana** Elix & T. H. Nash 

(Nash & Elix 2004)

**Xanthoparmelia tucsonensis** (T. H. Nash) Egan  

(Nash & Elix [2004, central interior CA on map])

**Xanthoparmelia vagans** (Nyl.) Hale  

(*S. Tucker* 34710, Cuesta Ridge, San Luis Obispo Co., SBBG, determined by T. Nash)

**Note:** The Tucker collection was made north of the Sonoran area in CA. This species occurs otherwise only as far north as Chihuahua, Mexico *fide* Nash & Elix (2004).

**Xanthoparmelia weberi** (Hale) Hale  

**Synonyms:** *Parmelia weberi* (Nash & Elix 2004; *C. Wetmore* 16894, Palm Cyn, Riverside Co., MIN; *C. Wetmore* 14609, San Jacinto Mts, Riverside Co., MIN)

**Xanthoparmelia wyomingica** (Gyeln.) Hale  

(Ryan & Nash 1991; Brodo et al. [2001, pp. 741–742, with color photograph]; Nash & Elix 2004)

**Xanthoparmelia hypopsila** (Müll. Arg.) Hale  

(Hale 1988; Hale & Cole 1988; von Reis [1991] based on misidentifications of *X. coloradoënsis* *fide* Tucker [1999]) North American reports

=*X. angustiphylla*

**Xanthoparmelia kurokawai** (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 stenophylla** (Ach.) Du Rietz 

(Imshaug 1957)

=*X. somloënsis*

**Xanthoparmelia subconspersa** (Nyl.) Hale  

(TJ)

=*Flavoparmelia rutidota*, but misidentifications for CA

**Xanthoparmelia taractica** (Kremp.) Hale  

(TJ; Thomson 1984; Weber et al. 1987; Hale & Cole 1988; Hale 1990; von Reis 1991; most western collections are misidentifications of [X. coloradoënsis](#); [X. taractica](#) is only in South America *fide* 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 South America.

**XANTHORIA** (Fr.) Th. Fr.**Xanthoria adscendens** S. Y. Kondr.  

(Lindblom 2004)

**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)

**Synonyms:** [Physcia lychnea](#), [Teloschistes candelarius](#) var. *laciniosus*, [T. lychneus](#) f. *laciniosus* (Hasse 1895; Herre 1906; Orcutt 1903; Herre 1907; Orcutt 1907), [T. lychneus](#) var. *pygmaeus* (Tuckerman 1882; Hasse 1903a, 1908a), [X. lychnea](#) (Hasse 1913b; Moxley 1921; Merrill 1923)

**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)

**Synonyms:** [Caloplaca elegans](#), [Placodium elegans](#)

**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)

**Synonyms:** [Physcia parietina](#), [Teloschistes parietinus](#)

**Xanthoria pollinarioides** L. Lindblom & D. M. Wright 

(Wright 2000; Lindblom [2004, Marin Co. (type), Sonoma Co., Channel Is.]; color photograph on back cover of CALS Bulletin 7[1], 2000; CA endemic)

**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)

**Synonyms:** [Physcia parietina](#) var. *polycarpa*, [Physcia parietina](#) var. *ramulosa*, (Tuckerman 1860), [Teloschistes parietinus](#) var. *polycarpus* (Tuckerman 1866), [T. parietinus](#) var. *ramulosus* (Tuckerman 1866, 1872), [T. polycarpus](#), [T. ramulosus](#) (Tuckerman 1882; Eckfeldt 1893; Hasse 1906; Herre 1906; Hasse 1908a; Fink 1935), [X. ramulosa](#) (Herre 1910; Keissler 1926; Rudolph 1955; Thomson & Ketchledge 1958)

**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; *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; *C. Bratt 3311*, Figueroa Mtn, Santa Barbara Co., SBBG

**Xanthoria tenax** L. Lindblom  

(Lindblom 1997; Robertson et al. 1998; Wright 2000; Brodo et al. [2001, p. 747]; Jovan & McCune 2004; Lindblom 2004)

**Xanthoria tenuiloba** L. Lindblom  

(Lindblom 2004; *T. Nash 38784a*, San Nicolas Isl., near Tufts Rd, Ventura Co., ASU)

**Xanthoria fallax** (Hepp) Arnold  

(Baltzo 1970; Tucker & Kowalski 1975; Pinelli & Jordan 1978; TJ; Smith 1980; 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; Robertson 2002a, 2003a; Jovan & McCune 2004)

=[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)

=[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; *B. Ryan 25773*, Palomar Mtn, San Diego Co., ASU; *B. Ryan 24705*, ESE of Sonora, Tuolumne Co., ASU; *S. Tucker 35964*, Coulson Canyon Rd, Santa Barbara Co., SBBG)

=[Xanthomendoza hasseana](#)

**Xanthoria lobulata** (Flörke) 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 oregana** Gyeln.  

(Lindblom 1997; Wright 2000; Brodo et al. [2001, p. 743]; Doell 2002; Robertson 2002c; Jovan & McCune 2004)

=[Xanthomendoza oregana](#)

**Xanthoria ramulosa** (Tuck.) Herre  

(TJ; Hale & Cole 1988; Goward et al. 1994; Riefner, Bowler, & Ryan 1995; Tucker & Bratt 1996; Wright 1997)

=[X. polycarpa](#)

**Note:** According to Lindblom (1997) the name *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)

=[X. fallax](#) (synonymy in 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)  
 =[Xanthomendoza ulophyllodes](#)

**XYLOGRAPHA** (Fr.) Fr.**Xylographa hians** Tuck. 

(Lindsay 1973; TJ; Ryan [2004, p. 614: S to Madera Co.]; *B. Ryan* 32200, Benedict Meadow, Sierra Nat. Forest, Madera Co., ASU)

**Xylographa opegraphella** Nyl. ex Rothr. 

(C. Wetmore 50973, Muir Grove, Sequoia N. P., Tulare Co., 17 May 1984, MIN)

**Xylographa parallela** (Ach.: Fr.) Behlen & Desberger 

(Orcutt 1885, 1903, 1907 [as "Stylographa" in error]; Brodo et al. [2001, p. 749, with color photograph]; Ryan 2004)

**Synonyms:** [X. abietina](#)

**Xylographa vitiligo** (Ach.) J. R. Laundon 

(Wetmore [1985, based on *C. Wetmore* 24446, 13 mi. S of Crescent City, Del Norte Co., 16 Aug 1975, MIN]; Ryan 2004; *T. Nash* 32303, Santa Cruz Isl., Ridge Rd at Sauces Gate, Santa Barbara Co., ASU)

**Xylographa abietina** (Pers.) Zahlbr. 

(TJ)

=[X. parallela](#)

[\*\*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\*\*](#)

**ZAHLBRUCKNERA** Herre = [\*\*ZAHLBRUCKNERELLA\*\*](#)**Zahlbrucknera calcarea** Herre 

(Herre 1910)

=[Zahlbrucknerella calcarea](#)

**ZAHLBRUCKNERELLA** Herre**Zahlbrucknerella calcarea** (Herre) Herre 

(Herre 1912b; Fink 1935; Henssen 1963f, 1977; TJ; Thomson 1984; Goward 1999)

**Synonyms:** [Zahlbrucknera calcarea](#) (Herre 1910)

**Zahlbrucknerella californica** Henssen 

(Henssen [1977, p. 43, *A. Henssen* 13627b, type, on volcanic rock in dry stream bed, Pine Ridge Summit, Coast Range, Humboldt Co.]; TJ; CA endemic)

**ZWACKHIOMYCES** Grube & Hafellner**\*Zwackhiomyces** sp.

(*S. Tucker* 7964A, Romero Cyn, Santa Barbara Co., SBBG, determination by A. Aptroot, on [Caloplaca flavorubescens](#))