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Botanic Garden

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GAP Analysis of California Channel Islands: Lichens



Lichen-rich rock on Santa Rosa Island ©Rikke Reese Næsborg

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Introduction

Lichens are composite organisms that consist of a fungus in a symbiotic association with green algae and/or cyanobacteria. Recent research has revealed that the relationship could be even more complex and include non-photosynthesizing bacteria, accessory fungi, and algae. These complex organisms have properties that are different from either of their components. Lichens are classified according to the major fungal partner, most of which belong in Ascomycota but Basidiomycota also has a few lichen representatives. Estimated global lichen richness is between 17,000 and 20,000 species, of which about 5,000 occur in North America (Esslinger 2019). California is lichen-rich with approximately 2,000 species within 340 genera (Tucker 2014).

Lichens are poikilohydric organisms (their water content changes with the surrounding environment), and they equilibrate quickly with their environmental conditions. Most are able to tolerate drought for extended periods, but all require water for the physiological activity that sustains life processes. Most lichens prefer moderate temperatures, abundant moisture, and bright light, and such habitats usually harbor diverse, species-rich lichen communities (Brodo et al. 2001). The coastal, foggy environment of the California Channel Islands offers these conditions, and it is therefore likely to support some of the richest lichen communities in Southern California.

Collection history

Although 1820 is the first record of any lichen collected on the California Channel Islands, lichen collection there didn't begin in earnest until the 1880s, with most collections from that time coming from Santa Catalina, along with a handful from Santa Rosa, Santa Cruz, San Miguel, and San Nicolas. Since then, the largest temporal gap in collections is 8 years (1942 to 1950), likely related to World War II activities. The most prolific collectors were William Weber (University of Colorado at Boulder, 1960s to 1990s), Charis Bratt (Santa Barbara Botanic Garden, 1980s to early 2000s), Clifford Wetmore (University of Minnesota, 1990s) and Thomas Nash III (Arizona State University, 1990s), but many other collectors have visited the islands. More than 12,000 lichen collections are housed in 41 herbaria distributed across North America and several in Europe. The largest collections are held at ASU (Arizona State University, 6,082 specimens), COLO (University of Colorado Museum, 786 specimens), MIN (University of Minnesota, 1,045 specimens), SBBG (Santa Barbara Botanic Garden, 1,592 specimens), and UC (University of California, 1,128 specimens). Lichens are notoriously difficult to identify, which is reflected in the relatively large number of unidentified collections (231) and collections that have been identified only to genus (1565).

A checklist of the lichens, lichenicolous and allied fungi of the Channel Islands National Park reported a total of 504 taxa including seven endemic species and at least 54 species that are only known in California from the Channel Islands National Park (Knudsen & Kocourková 2012).

Methods

Data collection and cleaning

Specimen records were obtained from the Consortium of North American Lichen Herbaria (<https://lichenportal.org/cnalh/>). This dataset was combed for synonyms and updated with current names. Also included were SBBG's 2019 collection efforts on San Nicolas Island. Approximately 31% of

the CNALH records were either not georeferenced or incorrectly georeferenced, yet they were still assigned to one of the California Channel Islands. These records were excluded from intra-island spatial analyses, but retained for the analyses requiring lesser resolution (e.g. island-level), such as per-island species accumulation curves. Incorrectly georeferenced collections were excluded if coordinates placed them outside the grid squares used in the spatial analysis.

Data analysis

Gaps in the spatial distribution were evaluated using maps. Islands were divided into 1 km² grid cells and collection efforts and species richness were recorded for each grid cell. Collection intensity and species richness per 1 km² grid cell were analyzed spatially using standard functions in the R *raster* package (Hijmans 2020; R Core Team 2021). Redundancy, a measure of sampling thoroughness, was calculated as 1 – (species richness/number of records) for each grid cell. Sampling completeness was assessed using species accumulation curves in which collections from each island were reshuffled 100 times and the mean species accumulation across increasing numbers of collections were plotted. All other analyses were performed using R scripts developed by Ben Carter and modified for use on lichen data.

Results and Discussion

A total of 12,748 lichen records encompassing 942 species were assigned to specimens collected from the California Channel Islands (**Table 1**). Since no previous publication include a checklist for all eight California Channel Islands, direct comparison is invalid. However, this report includes 561 species collected from Channel Islands National Park—a number that is slightly higher than the 504 species previously reported (Knudsen & Kocourková 2012).

Table 1. Total number of island records and species richness recorded from each of the eight California Channel Islands. Note that richness total is not the sum of richness on the individual islands since many species occur on more than one island. Values include all records that were assigned to an island.

	Island records	Island richness
Anacapa	507	137
Santa Cruz	3,305	519
Santa Rosa	2,712	432
San Miguel	878	209
Santa Catalina	2,539	487
San Clemente	808	222
San Nicolas	1,443	251
Santa Barbara	556	135
Total	12,748	942

The three largest islands (Santa Cruz, Santa Rosa, Santa Catalina) had the largest number of collections, but when viewed in terms of number of collections per total island area the collection efforts were low (**Figure 1**). The fourth largest island (San Clemente) had a relatively low number of collections and collection effort per total island area was the lowest among the eight islands (**Figure 1**). Navy ownership of San Clemente has likely been an impediment to collection efforts compared to the publicly accessible

islands. Of the four smaller islands (Anacapa, San Miguel, Santa Barbara, San Nicolas) San Nicolas had the highest number of collection records, which is primarily due to recent surveys performed by SBBG (**Figure 1**). However, collection efforts per total island area was considerably higher for Anacapa and Santa Barbara, mainly due to the relatively small land area of these islands.

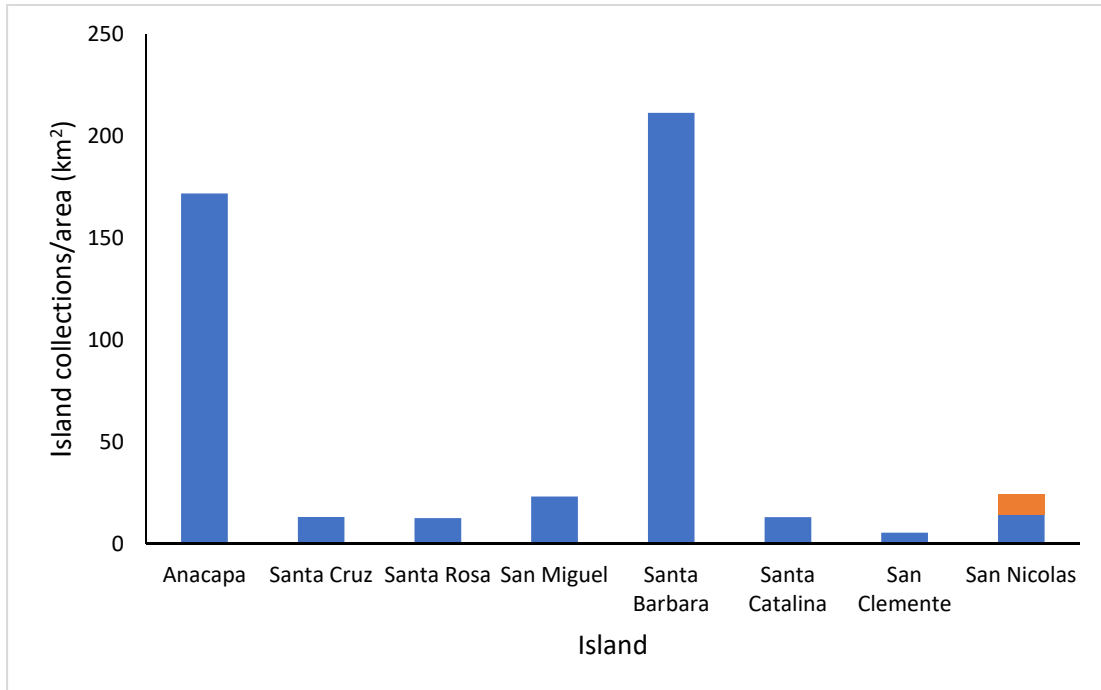


Figure 1. Total number of collections per island area. The orange part of the San Nicolas graph portrays SBBG collection efforts in 2019.

Species accumulation curves

Despite high variability in the number of collections among individual islands, species accumulation curves indicated that for each island, the documentation of species richness is far from complete (**Figure 2**), and additional sampling effort is recommended to better capture species richness. Considering the relatively high sampling effort on Anacapa and Santa Barbara combined with high mean redundancies (**Table 2**) for those two islands, it seems likely that greater collection effort could result in rapid saturation of the species accumulation curves. Likewise, San Miguel and San Nicolas may quickly reach saturation with more concentrated sampling efforts, especially on the western half of San Nicolas (**Figure 4**). Santa Cruz, Santa Rosa, and Santa Catalina have all experienced relatively robust collection efforts, and the shape of their respective species accumulation curves is very similar. The large land area of each of these islands in combination with low mean redundancy numbers (**Table 2**) indicate that further exploration on different parts of the islands is needed to better capture the species richness. Collection efforts on San Clemente has been very low compared to other islands. This is evident in the low number of collections, the very steep species accumulation curve, and the low mean redundancy (**Table 2**), as well as the distribution of collection efforts which are concentrated in the western, middle section of the island (**Figure 4**).

Spatial distribution within islands

Empty grid cells ranged from 42.9% (Anacapa) to 84.8% (San Clemente) indicating that large proportions of all the islands remain unsurveyed (**Table 2**). However, these numbers are somewhat inflated since grid cells along coastlines sometimes have very little terrestrial land area (e.g. Anacapa **Figure 3** and Santa Barbara **Figure 4**). Nevertheless, the high proportion of empty grid cells indicates that further lichen exploration, particularly on the larger islands, is warranted.

Collection biases were to some extent revealed by the spatial maps. It seems obvious that many collections were concentrated around easily accessible areas with high species richness (e.g. forests or rock outcrops). However, an empty cell does not necessarily indicate lack of visitation by collectors—it is possible that the habitats, such as the unstable sand dunes on the north-western part of San Nicolas, were unsuitable lichen habitat. The spatial distribution maps also provided no indication of whether a collector had concentrated on one group of lichens, such as macrolichens or epiphytes and thus overlooked additional species richness in other groups.

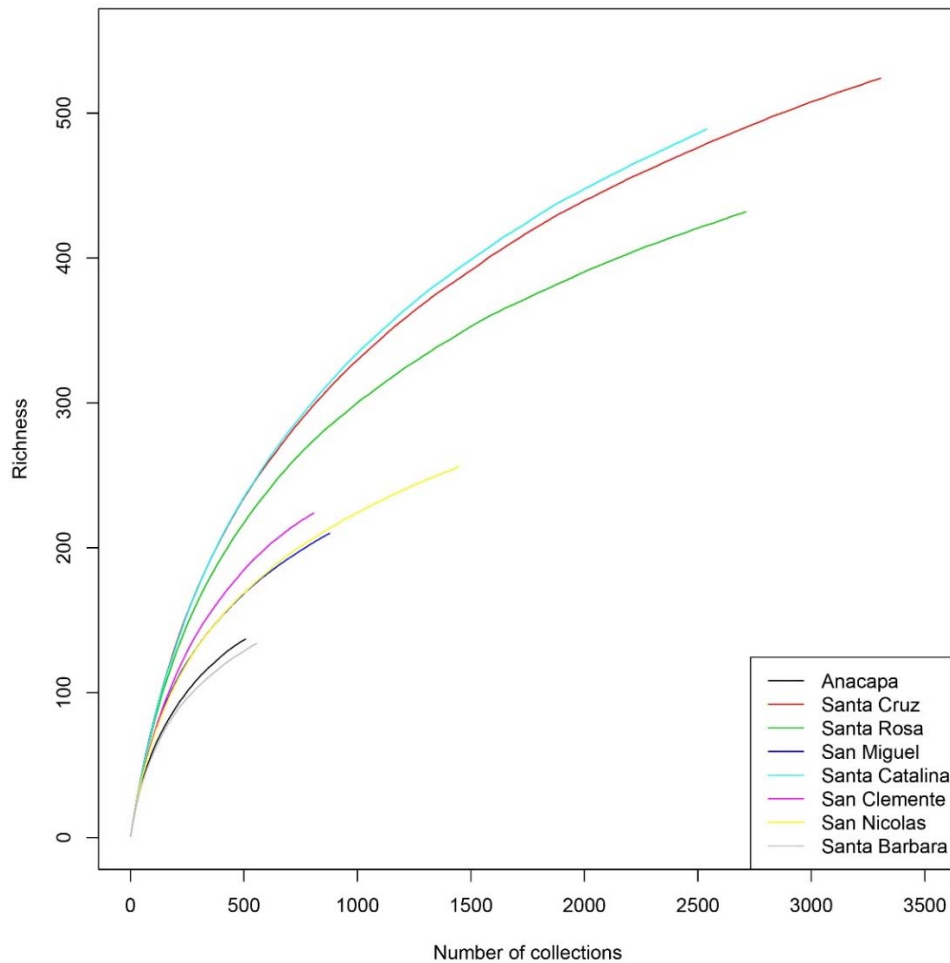


Figure 2. Species accumulation curves portraying sampling effort on each of the eight California Channel Islands.

Table 2. Spatial collecting effort based on 1 km grid cells overlaid onto each of the eight California Channel Islands. Calculations with an asterisk (*) included only cells for which there was at least one collection.

	Island collections	Island richness	1 km ² cells	Empty 1 km ² cells	% empty cells	Mean records/ cell*	Mean richness/ cell*	Mean redundancy*
Anacapa	377	121	14	6	42.9	47.1	23.8	0.35
Santa Cruz	2,049	431	313	217	69.3	21.3	13.1	0.19
Santa Rosa	2,240	408	263	178	67.7	26.4	14.7	0.18
San Miguel	668	188	67	32	47.8	19.1	13.4	0.15
Santa Catalina	1,449	356	250	170	68.0	18.1	11.9	0.15
San Clemente	395	163	198	168	84.8	13.2	8.4	0.17
San Nicolas	1,150	239	81	44	54.3	31.1	20.0	0.22
Santa Barbara	437	125	11	8	72.7	145.7	46.7	0.43

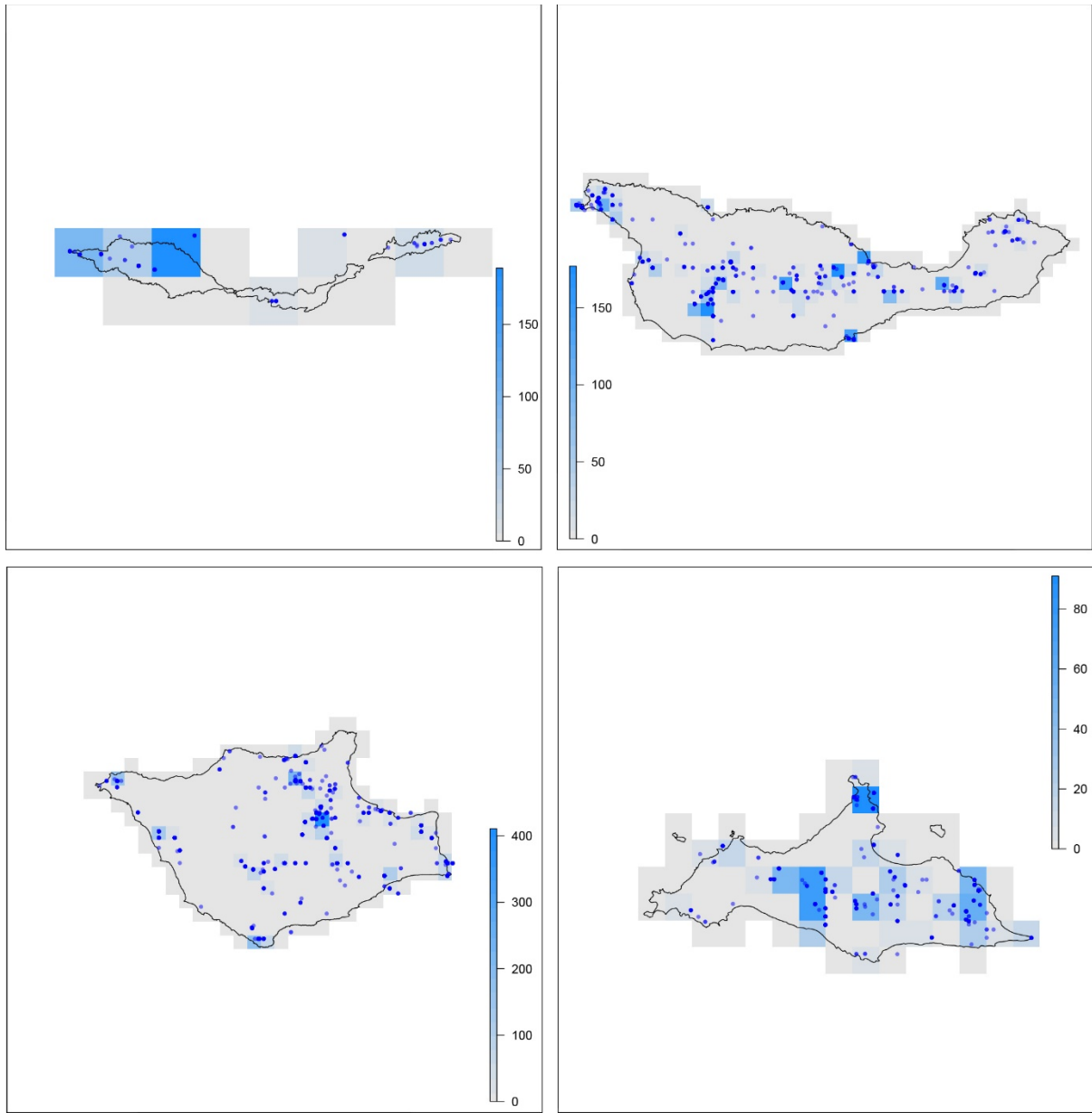


Figure 3. Spatial distribution of collection efforts on the northern California Channel Islands. Points show the collection locations. Blue grid squares are 1 km²; darker squares signify higher numbers of collections per kilometer. Note that the spatial scales and collection intensity ranges differ among islands.

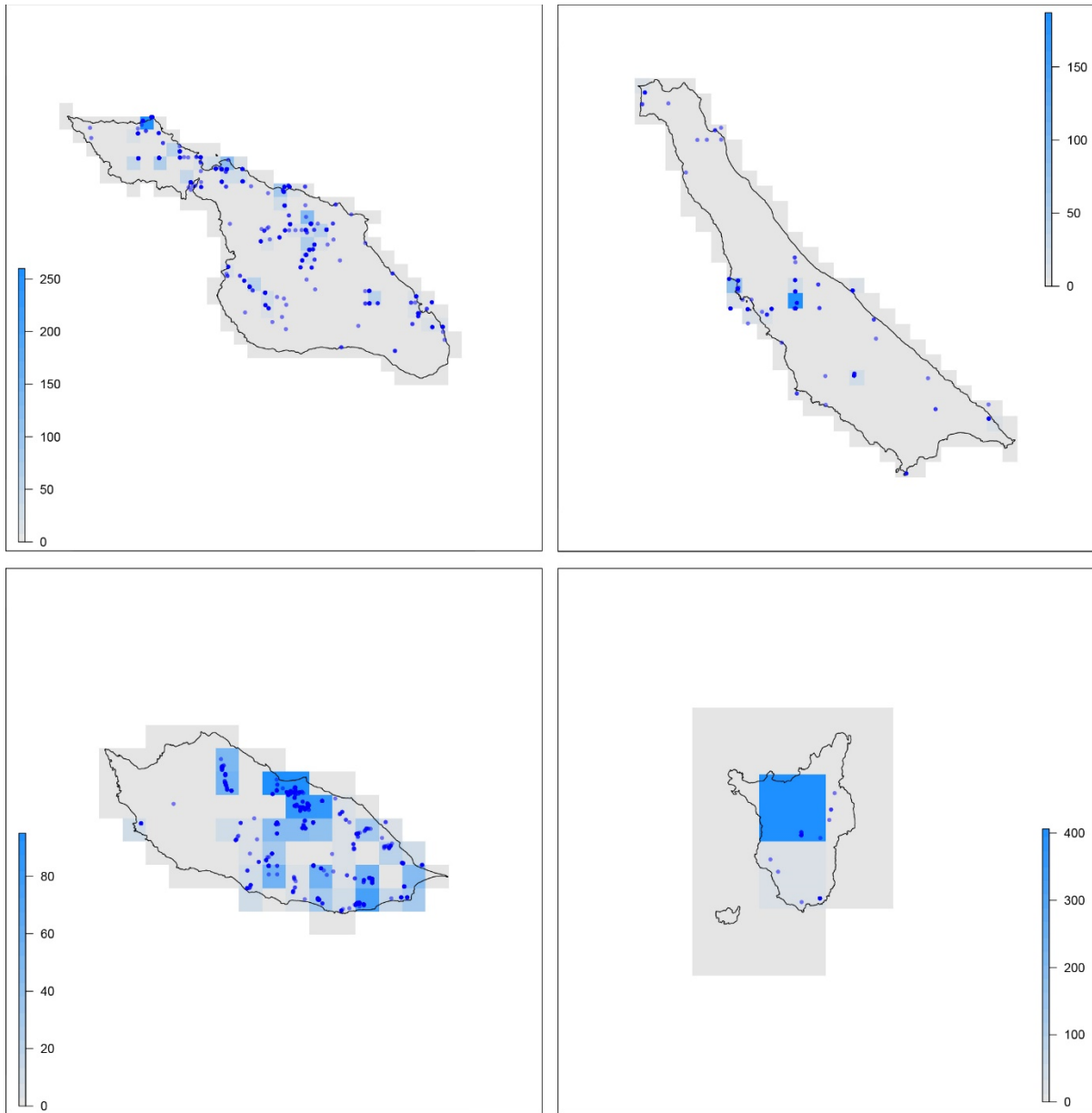


Figure 4. Spatial distribution of collection efforts on the southern California Channel Islands. Points show the collection locations. Blue grid squares are 1 km²; darker squares signify higher numbers of collections per kilometer. Note that the spatial scales and collection intensity ranges differ among islands.

Distribution across islands

Only 3.3% of lichen species are known from all eight islands, whereas almost 45% of all species are known from just one island (**Figure 5**). This pattern can be explained both in terms of species biology and collection effort. Biologically, suitable habitat for every species does not exist on all eight islands. For example, treeless Santa Barbara likely supports fewer epiphytic species. Additionally, the most remote islands (San Nicolas, San Miguel, Santa Barbara) may contain fewer species due to a lower probability of receiving dispersal propagules. Furthermore, sensitivity to salt spray varies greatly among

lichens (Nash & Lange 1988) so larger islands with interiors less affected by salt spray may harbor salt intolerant species that smaller islands cannot support.

Alternatively, the species distribution patterns could be explained by gaps in collection efforts, which can be further evaluated by comparing species records from islands with similar attributes such as latitude and island size (Tables 3, 4, 5). For example, on the four northern islands, several small crustose species that are currently unrecorded on Santa Cruz and Santa Rosa have probably just been overlooked whereas species missing from San Miguel and Anacapa are more likely to be absent due to a lack of suitable habitat (Table 3). The situation on the southernmost islands is slightly different since some of the species missing from both Santa Catalina and San Clemente are larger and unlikely overlooked. However, considering the low collection efforts on San Clemente, these species may occur in habitats not yet explored (Table 4). Many of the missing species from Santa Barbara are cryptic and could have easily been overlooked, especially since the geographic extent of collection efforts has been limited (Table 4, Figure 4). Those species missing from San Nicolas are a mixture of inconspicuous and larger species, suggesting that some may be altogether absent from the island considering the recent (2019) collection efforts there (Table 4). The picture that appears when the four largest islands (Santa Cruz, Santa Rosa, Santa Catalina, San Clemente) are compared is less clear (Table 5). The best supported insight is that San Clemente is vastly under collected, with 76 species missing that have been recorded on the other islands. Many, if not most, of these species are likely present. Species missing from Santa Cruz are mostly large conspicuous species that would be expected to have been recorded if present, whereas the missing species on Santa Rosa and Santa Catalina are a mixture of large and small species that may or may not be present.

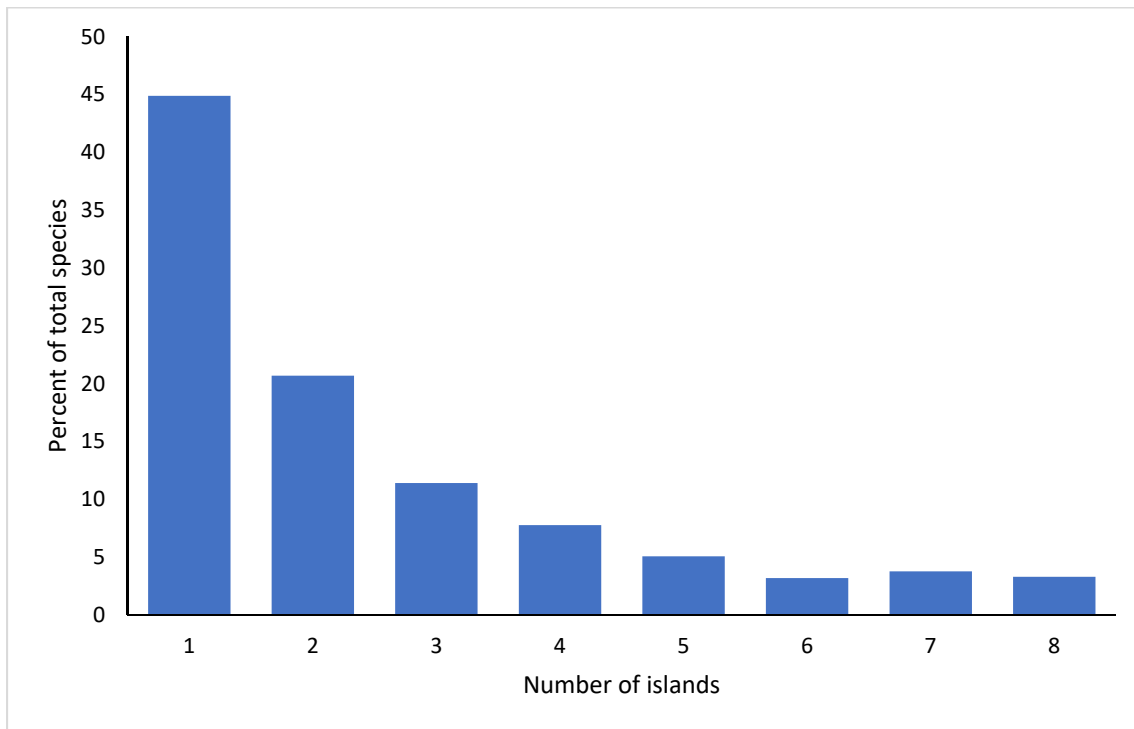


Figure 5. Distribution of lichens across the California Channel Islands. Each bar shows the percentage of all lichen species (N=851) known to occur on that number of islands.

Table 3. Species present on three of the four northern California Channel Islands (Anacapa, Santa Cruz, Santa Rosa, San Miguel) but absent or not yet recorded from the fourth.

Absent from Santa Cruz	Absent from Santa Rosa	Absent from San Miguel
<i>Lecania fuscella</i> <i>Pertusaria brattiae</i> <i>Polycauliona luteominia</i> var. <i>bolanderi</i>	<i>Acarospora schleicheri</i> <i>Placopyrenium canellum</i>	<i>Aspicilia pacifica</i> <i>Buellia badia</i> <i>Buellia stellulata</i> <i>Cladonia chlorophaea</i> <i>Cladonia scabriuscula</i> <i>Diploschistes actinostomus</i> <i>Diploschistes diacapsis</i> <i>Gyalecta herrei</i> <i>Hypogymnia mollis</i> <i>Lecania hassei</i> <i>Lecanora gangaleoides</i> <i>Pachnolepia pruinata</i> <i>Pertusaria lecanina</i> <i>Physcia phaea</i> <i>Physcia tenellula</i> <i>Physcia tribacia</i> <i>Physconia isidiigera</i> <i>Polycauliona impolita</i> <i>Ramalina lacera</i> <i>Sigridea californica</i> <i>Teloschistes flavicans</i> <i>Trapeliopsis glaucopholis</i> <i>Xanthoparmelia mexicana</i>
Absent from Anacapa		
<i>Amandinea punctata</i> <i>Arthonia subdispersa</i> <i>Bacidia coruscans</i> <i>Bacidia heterochroa</i> <i>Bacidina californica</i> <i>Buellia maritima</i> <i>Buellia sequax</i> <i>Buellia tesserata</i> <i>Candelariella vitellina</i> <i>Chrysothrix candelaris</i> <i>Evernia prunastri</i> <i>Flavoplaca citrina</i> <i>Gyalolechia stantonii</i> <i>Lecania cyrtella</i>	<i>Lecania dudleyi</i> <i>Lecania inundata</i> <i>Lecanora caesiorubella</i> subsp. <i>merrillii</i> <i>Lecanora californica</i> <i>Lecanora confusa</i> <i>Lecanora demosthenesii</i> <i>Lecanora pacifica</i> <i>Lecanora substrobilina</i> <i>Lecidea laboriosa</i> <i>Lecidella elaeochroma</i> <i>Niebla josecuervoii</i> <i>Niebla procera</i> <i>Opegrapha crassispora</i> <i>Phaeophyscia hirsuta</i>	<i>Physcia tenella</i> <i>Placopyrenium fuscillum</i> <i>Polycauliona ignea</i> <i>Tephromela nashii</i> <i>Toniniopsis aromatica</i> <i>Trapeliopsis flexuosa</i> <i>Usnea dasaea</i> <i>Usnea esperantiana</i> <i>Usnea rubicunda</i> <i>Verrucaria viridula</i> <i>Xanthomendoza fallax</i> <i>Xanthomendoza oregana</i>

Table 4. Species present on three of the four southern California Channel Islands (Santa Catalina, San Clemente, San Nicolas, Santa Barbara) but absent or not yet recorded from the fourth.

Absent from Santa Catalina	Absent from San Clemente	Absent from Santa Barbara
<i>Endocarpon pusillum</i> <i>Flavoplaca citrina</i> <i>Gyalolechia stipitata</i> <i>Polycauliona luteominia</i> var. <i>bolanderi</i> <i>Polycauliona tenax</i> <i>Ramalina lacera</i>	<i>Blennothallia crista</i> <i>Cladonia pyxidata</i> <i>Lecidella stigmataea</i> <i>Niebla cephalota</i> <i>Pachnolepia pruinata</i> <i>Polycauliona luteominia</i> <i>Ramalina subleptocarpha</i>	<i>Amandinea punctata</i> <i>Buellia badia</i> <i>Dimelaena californica</i> <i>Diploschistes diacapsis</i> <i>Diplotomma penichrum</i> <i>Flavopunctelia flaventior</i> <i>Lecanora caesiorubella</i> subsp. <i>merrillii</i> <i>Miriquadica verrucariicola</i> <i>Parmotrema perlatum</i> <i>Pertusaria flavicunda</i> <i>Physconia isidiigera</i> <i>Polycauliona brattiae</i> <i>Pyrhospora quernea</i> <i>Ramalina farinacea</i> <i>Ramalina leptocarpha</i> <i>Ramalina menziesii</i> <i>Rinodina luridata</i> <i>Sigridea californica</i> <i>Tephromela atra</i> <i>Toninia ruginosa</i> <i>Toninia ruginosa</i> subsp. <i>pacifica</i> <i>Usnea esperantiana</i> <i>Usnea rubicunda</i>
Absent from San Nicolas		
<i>Buellia christophii</i> <i>Caloplaca californica</i> <i>Caloplaca oregona</i> <i>Dimelaena weberi</i> <i>Dirina catalinariae</i> <i>Dirina catalinariae</i> f. <i>sorediata</i> <i>Flavoplaca marina</i> <i>Lecania brunonis</i> <i>Lecanographa hypothallina</i>	<i>Lepora amara</i> <i>Niebla ceruchoides</i> <i>Niebla combeoides</i> <i>Niebla robusta</i> <i>Physcia phaea</i> <i>Physcia tribacia</i> <i>Physconia enteroxantha</i> <i>Polycauliona impolita</i> <i>Polycauliona rosei</i>	<i>Roccella decipiens</i> <i>Roccella gracilis</i> <i>Schizopelte parishii</i> <i>Sparria cerebriformis</i> <i>Squamulea squamosa</i> <i>Vahliella leucophaea</i> <i>Verrucaria subdivisa</i> <i>Xanthoria parietina</i>

Table 5. Species present on three of the four largest California Channel Islands (Santa Cruz, Santa Rosa, Santa Catalina, San Clemente) but absent or not yet recorded from the fourth.

Absent from Santa Cruz	Absent from Santa Rosa	Absent from Santa Catalina
<i>Chrysothrix chlorina</i>	<i>Acarospora fuscata</i>	<i>Buellia dispersa</i>
<i>Cladonia kurokawae</i>	<i>Acarospora schleicheri</i>	<i>Diploschistes actinostomus</i>
<i>Roccella decipiens</i>	<i>Dermatocarpon leptophyllodes</i>	<i>Endocarpon pusillum</i>
<i>Roccella gracilis</i>	<i>Dimelaena thysanota</i>	<i>Flavoplaca citrina</i>
<i>Xanthoparmelia commonii</i>	<i>Dimelaena weberi</i>	<i>Punctelia borreri</i>
	<i>Enchylium tenax</i>	<i>Ramalina lacera</i>
	<i>Flavoplaca marina</i>	<i>Usnea ceratina</i>
	<i>Lecidea mannii</i>	<i>Xanthoparmelia standaertii</i>
	<i>Megalaria columbiana</i>	
	<i>Niebla isidiascens</i>	
	<i>Pseudothelomma occidentale</i>	
	<i>Rinodina conradii</i>	
	<i>Squamulea squamosa</i>	
	<i>Usnea brattiae</i>	
	<i>Vahliella leucophaea</i>	
	<i>Xanthoparmelia coloradoensis</i>	
	<i>Xanthoparmelia lineola</i>	
	<i>Xanthoparmelia verruculifera</i>	
Absent from San Clemente		
<i>Acarospora thamnina</i>	<i>Hypogymnia occidentalis</i>	<i>Placopyrenium fuscillum</i>
<i>Arthonia beccariana</i>	<i>Kaernefeltia merrillii</i>	<i>Polycauliona ludificans</i>
<i>Arthonia gyalectoides</i>	<i>Lecanactis californica</i>	<i>Polycauliona polycarpa</i>
<i>Arthonia subdispersa</i>	<i>Lecania inundata</i>	<i>Psora pacifica</i>
<i>Bacidia coruscans</i>	<i>Lecanora campestris</i>	<i>Punctelia perreticulata</i>
<i>Bacidina californica</i>	<i>Lecanora confusa</i>	<i>Ramalina labiosorediata</i>
<i>Blastenia ammiospila</i>	<i>Lecanora expallens</i>	<i>Ramalina subleptocarpa</i>
<i>Blastenia ferruginea</i>	<i>Lecanora pacifica</i>	<i>Rinodina herrei</i>
<i>Blennothallia crispa</i>	<i>Lecanora varia</i>	<i>Rinodina marysvillensis</i>
<i>Buellia maritima</i>	<i>Lecidella carpathica</i>	<i>Rinodina santae-monicae</i>
<i>Buellia pullata</i>	<i>Lecidella effugiens</i>	<i>Rusavskia elegans</i>
<i>Buellia stellulata</i>	<i>Lecidella elaeochroma</i>	<i>Sphinctrina leucopoda</i>
<i>Caloplaca atroflava</i>	<i>Lecidella latypiza</i>	<i>Teloschistes exilis</i>
<i>Candelaria pacifica</i>	<i>Mycocalicium subtile</i>	<i>Tephromela nashii</i>
<i>Candelariella vitellina</i>	<i>Niebla cephalota</i>	<i>Trapelia glebulosa</i>
<i>Chrysothrix candelaris</i>	<i>Niebla polymorpha</i>	<i>Usnea cornuta</i>
<i>Chrysothrix granulosa</i>	<i>Ochrolechia androgyna</i>	<i>Usnea flavocardia</i>
<i>Cladonia chlorophaea</i>	<i>Ochrolechia subpallascens</i>	<i>Usnea fragilesceus</i>
<i>Cladonia nashii</i>	<i>Opegrapha anomea</i>	<i>Usnea glabrata</i>
<i>Cladonia pyxidata</i>	<i>Opegrapha vulgata</i>	<i>Usnea mutabilis</i>
<i>Cliostomum griffithii</i>	<i>Pachnolepia pruinata</i>	<i>Usnea perplexans</i>
<i>Collema furfuraceum</i>	<i>Paraschismatomma ochroleucum</i>	<i>Verrucaria viridula</i>
<i>Flavopunctelia soledica</i>	<i>Pertusaria lecanina</i>	<i>Waynea californica</i>
<i>Gyalecta herrei</i>	<i>Physcia dimidiata</i>	<i>Xanthomendoza oregana</i>
<i>Hyperphyscia adglutinata</i>	<i>Physcia tenella</i>	
<i>Hypogymnia mollis</i>	<i>Placidium squamulosum</i>	

Taxonomic and collection biases

A wide range of lichenologists have collected from the California Channel Islands, so it is likely that taxonomic biases have influenced the specimen coverage reported in this gap analysis. Moreover, the general tendency for lichenologists to undercollect species that are cryptic or difficult to identify contributes additional bias. However, the islands have been visited by several lichen generalists who may have adequately captured the flora in the localities they have visited. A potential caveat with this gap analysis based on herbarium data is that only positive data were included (i.e. someone visited a locality and collected specimens). In other words, some localities may have been searched without resulting in collections, but no information about negative data is available.

One ecologically comparable mainland lichen checklist from Santa Monica Mountains recorded a total of 405 taxa (Knudsen & Kocourková 2010), which is less than half the species reported here. This discrepancy may be partially explained by a combination of habitat loss due to the heavy recreational use of the Santa Monica Mountains, the higher levels of air pollution harmful to lichens, and the more inland, drier conditions which usually harbor lower lichen richness.

Recommendations

Collection efforts for lichens on the California Channel Islands have generally been insufficient to fully capture the lichen richness, but a combination of general and more focused sampling across all islands would improve the situation. Below are more specific recommendations in order of importance.

- General collections are needed on the western and southwestern part of San Nicolas. This is planned by SBBG.
- San Clemente is vastly under collected and would benefit from general collections all over the island.
- Middle Anacapa has very few collections and may benefit from more targeted surveys.
- The majority of collections from Santa Barbara are concentrated in a few areas and some parts of the island do not appear to have been collected at all. Thus, more general collections are needed.
- General collections on Santa Cruz, Santa Rosa, San Miguel, and Santa Catalina are needed in order to capture portions of the islands that have not yet been visited as well as focused collections in areas of interesting habitats, such as oak and pine forests, rock outcrops, and intact soil crusts.
- Depending on the objective of future collecting efforts (e.g. total island species richness versus distribution of different species islandwide), it may be valuable to record travel paths and sampling efforts to document areas that lacked lichens.

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Appendix

List of lichen records from all eight California Channel Islands. Nomenclature follows Esslinger (2019), updates from recent primary literature were applied.

Taxon	Island
<i>Acarospora</i> A. Massal.	A, SCr, SR, SM, SCa, SN, SB
<i>Acarospora americana</i> H. Magn.	SR
<i>Acarospora badiofusca</i> (Nyl.) Th. Fr.	SCI
<i>Acarospora boulderensis</i> H. Magn.	SCa
<i>Acarospora citrina</i> (Taylor) Zahlbr.	SN
<i>Acarospora fuscata</i> (Schrader) Arnold	SCr, SCa, SCI
<i>Acarospora nodulosa</i> (Dufour) Hue	SN
<i>Acarospora obpallens</i> (Nyl. ex Hasse) Zahlbr.	SCr, SR, SCa, SCI
<i>Acarospora robiniae</i> K. Knudsen	SCr, SCa
<i>Acarospora schleicheri</i> (Ach.) A. Massal.	A, SCr, SM, SCa, SCI
<i>Acarospora socialis</i> H. Magn.	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Acarospora succedens</i> H. Magn.	SR
<i>Acarospora terrestris</i> (Nyl.) H. Magn.	SCr
<i>Acarospora thamnina</i> (Tuck.) Herre	SCr, SR, SCa
<i>Acarospora veronensis</i> A. Massal.	SCr
<i>Acrocordia conoidea</i> (Fr.) Körb.	SN
<i>Alyxoria varia</i> (Pers.) Ertz & Tehler	SCa, SN
<i>Amandinea dakotensis</i> (H. Magn.) P. May & Sheard	SN
<i>Amandinea punctata</i> (Hoffm.) Coppins & Scheid.	SCr, SR, SM, SCa, SCI, SN
<i>Anaptychia ciliaris</i> (L.) Körb.	SR
<i>Anisomeridium biforme</i> (Borrer) R.C. Harris	SCa
<i>Anisomeridium subprostans</i> (Nyl.) R.C. Harris	SCa
<i>Arthonia</i> Ach.	A, SCr, SR, SM, SCa, SB
<i>Arthonia albopulverea</i> Nyl.	SCa
<i>Arthonia atra</i> (Pers.) A. Schneid.	SCr, SM, SCa, SN
<i>Arthonia beccariana</i> (Bagl.) Stizenb.	SCr, SR, SCa, SN
<i>Arthonia calcarea</i> (Turner ex Sm.) Ertz & Diederich	SR, SCa
<i>Arthonia dispersa</i> (Schrader) Nyl.	SCa
<i>Arthonia galactites</i> (DC) Dufour	A
<i>Arthonia glebosa</i> Tuck.	SCr
<i>Arthonia gyalectoides</i> Müll. Arg.	SCr, SR, SCa
<i>Arthonia intexta</i> Almq.	SCr
<i>Arthonia lapidicola</i> (Taylor) Branth & Rostrup	SCa
<i>Arthonia lecanactidea</i> Zahlbr.	A, SCa, SN
<i>Arthonia madreana</i> Egea & Torrente	SN
<i>Arthonia molendoi</i> (Heufl. ex Frauenf.) R. Sant.	SN
<i>Arthonia polygramma</i> Nyl.	SCa
<i>Arthonia polymorpha</i> Ach.	SCa
<i>Arthonia pruinosula</i> Nyl.	SR

<i>Arthonia punctiformis</i> Ach.	SCa
<i>Arthonia radiata</i> (Pers.) Ach.	SCr, SCa
<i>Arthonia radiata f. angustata</i> Vain.	SCa
<i>Arthonia rhoidis</i> Zahlbr.	SCa
<i>Arthonia sanguinea</i> Willey	SCa
<i>Arthonia subdiffusa</i> Willey	SCa
<i>Arthonia subdispersa</i> Nyl. ex Willey	SCr, SR, SM, SCa, SN
<i>Arthonia tehleri</i> Sundin	SCa
<i>Arthonia tetramera</i> (Stizenb.) Hasse	SCa, SB
<i>Arthopyrenia analepta</i> (Ach.) A. Massal.	SCa
<i>Arthopyrenia cerasi</i> (Schrader) A. Massal.	SCa
<i>Arthopyrenia plumbaria</i> (Stizenb. ex Hasse) R.C. Harris	SCa
<i>Arthothelium</i> A. Massal.	SCr, SM, SCa, SN
<i>Arthothelium anastomosans</i> (Ach.) Arnold	SCa
<i>Arthothelium orbilliferum</i> (Almq.) Hasse	SCa
<i>Aspicilia</i> A. Massal.	A, SCr, SR, SM, SCa, SN
<i>Aspicilia aurantiaca</i> Owe-Larss. & A. Nordin	SCI, SN
<i>Aspicilia cinerea</i> (L.) Körb.	SCr, SCa
<i>Aspicilia pacifica</i> Owe-Larss. & A. Nordin	A, SCr, SR, SCa, SCI
<i>Aspicilia praecrenata</i> (Nyl. ex Hasse) Hue	SR, SCI
<i>Athallia holocarpa</i> (Hoffm.) Arup, Frödén & Søbcting	SCr, SM, SCa, SN
<i>Athallia pyracea</i> (Ach.) Arup, Frödén & Søbcting	SB
<i>Bacidia</i> De Not.	SCr, SCa
<i>Bacidia circumspecta</i> (Nyl. ex Vain.) Malme	SCr
<i>Bacidia coprodes</i> (Körb.) Lettau	SR
<i>Bacidia coruscans</i> S. Ekman	SCr, SR, SM, SCa, SN
<i>Bacidia heterochroa</i> (Müll.Arg.) Zahlbr.	SCr, SR, SM
<i>Bacidia insularis</i> Zahlbr.	SCa, SN
<i>Bacidia jacobi</i> (Tuck.) Hasse	SCa
<i>Bacidia laurocerasi</i> (Delise ex Duby) Zahlbr.	SCa
<i>Bacidina californica</i> S. Ekman	SCr, SR, SM, SCa, SN
<i>Bacidina ramea</i> S. Ekman	SCr, SM
<i>Bactrospora</i> A. Massal.	SCa
<i>Bactrospora acicularis</i> (C. W. Dodge) Egea & Torrente	SCr
<i>Bactrospora brevispora</i> R.C. Harris	SCr
<i>Bactrospora brodoi</i> Egea & Torrente	SR
<i>Bactrospora patellarioides</i> (Nyl.) Almq.	SCr, SR
<i>Bactrospora patellarioides var. convexa</i> (B. de Lesd.) Egea & Torrente	SCr, SR
<i>Biatora</i> Fr.	SCr, SM
<i>Blastenia ammiospila</i> (Wahlenb.) Arup, Søbcting & Frödén	SCr, SR, SCa
<i>Blastenia ferruginea</i> (Huds.) A. Massal.	SCr, SR, SCa, SN
<i>Blennothallia crispa</i> (Hudson) Otálora, P.M. Jørg. & Wedin	SCr, SR, SCa, SN, SB
<i>Bryoplaca jungermanniae</i> (Vahl) Søbcting, Frödén & Arup	SCr, SCa
<i>Buellia</i> De Not.	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Buellia abstracta</i> (Nyl.) H. Olivier	SM, SCa, SB

<i>Buellia badia</i> (Fr.) A. Massal.	A, SCr, SR, SCa, SCI, SN
<i>Buellia bolacina</i> Tuck.	SCa
<i>Buellia capitis-regum</i> W.A. Weber	A, SCr, SR, SM
<i>Buellia cerussata</i> Llimona & Werner	SCr, SCa
<i>Buellia christophii</i> Bungartz	A, SCr, SR, SM, SCa, SCI, SB
<i>Buellia concinna</i> Th. Fr.	SCa
<i>Buellia disciformis</i> (Fr.) Mudd	SCa
<i>Buellia dispersa</i> A. Massal.	SCr, SR, SCI, SN
<i>Buellia erubescens</i> Arnold	SCa
<i>Buellia griseovirens</i> (Turner & Borrer ex Sm.) Almb.	SCr
<i>Buellia halonia</i> (Ach.) Tuck.	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Buellia lepidastra</i> (Tuck.) Tuck.	SB
<i>Buellia mamillana</i> (Tuck.) W.A. Weber	SR
<i>Buellia maritima</i> (A. Massal.) Bagl.	SCr, SR, SM, SCa, SN
<i>Buellia muriformis</i> A. Nordin & Tønsberg	SCr
<i>Buellia nashii</i> Bungartz	SCI
<i>Buellia oidaliella</i> A. Nordin	SCr
<i>Buellia prospersa</i> (Nyl.) Riddle	SR, SM, SN
<i>Buellia pullata</i> Tuck.	A, SCr, SR, SM, SCa
<i>Buellia rinodinooides</i> Anzi	SCa, SN
<i>Buellia ryanii</i> Bungartz	SCr, SR
<i>Buellia sequax</i> (Nyl.) Zahlbr.	SCr, SR, SM, SCa, SCI, SN, SB
<i>Buellia spuria</i> (Schaer.) Anzi	SCa
<i>Buellia stellulata</i> (Taylor) Mudd	A, SCr, SR, SCa, SN
<i>Buellia subdispersa</i> Mig.	SN
<i>Buellia tergua</i> Bungartz	SN
<i>Buellia tesserata</i> Körb.	SCr, SR, SM, SCa, SCI, SN, SB
<i>Buellia triseptata</i> A. Nordin	SCa
<i>Buellia tyrolensis</i> Körb.	SCr
<i>Buelliella inops</i> (Triebel & Rambold) Hafellner	SCa, SB
<i>Buelliella physciicola</i> Poelt & Hafellner	SCr, SR
<i>Calicium</i> Pers.	SCr, SR, SCa
<i>Calicium abietinum</i> Pers.	SCr
<i>Calicium adpersum</i> Pers.	SCa
<i>Calicium glaucellum</i> Ach.	SCr
<i>Calogaya saxicola</i> (Hoffm.) Vondrák	SCa
<i>Caloplaca</i> Th. Fr.	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Caloplaca albovariegata</i> (B. de Lesd.) Wetmore	SR, SCa
<i>Caloplaca atroflava</i> (Turner) Mong.	SCr, SR, SCa
<i>Caloplaca californica</i> Zahlbr.	SCa, SCI, SB
<i>Caloplaca catalinae</i> H. Magn.	SCr, SCa, SB
<i>Caloplaca cerina</i> (Ehrh. ex Hedwig) Th. Fr.	SCr, SCa, SB
<i>Caloplaca cinnabarina</i> (Ach.) Zahlbr.	SN
<i>Caloplaca demissa</i> (Körb.) Arup & Grube	SCa, SCI
<i>Caloplaca durietzii</i> Zahlbr.	SCr

<i>Caloplaca fraudans</i> (Th. Fr.) H. Olivier	SM
<i>Caloplaca microphyllina</i> (Tuck.) Hasse	SCr, SCI
<i>Caloplaca obamae</i> K. Knudsen	SR
<i>Caloplaca oregona</i> H. Magn.	SCa, SCI, SB
<i>Caloplaca peliophylla</i> (Tuck.) Zahlbr.	SR, SCa
<i>Caloplaca rubelliana</i> (Ach.) Lojka	SN
<i>Caloplaca saxicola</i> (Hoffm.) Nordin	SCr, SR, SCa, SCI
<i>Caloplaca stanfordensis</i> H. Magn	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Candelaria concolor</i> (Dickson) Stein	SCr
<i>Candelaria pacifica</i> M. Westb. ined.	SCr, SR, SCa
<i>Candelariella</i> Müll. Arg.	SM
<i>Candelariella antennaria</i> Räsänen	SN
<i>Candelariella aurella</i> (Hoffm.) Zahlbr.	SR, SM, SN
<i>Candelariella citrina</i> B. de Lesd.	SCr, SR
<i>Candelariella rosulans</i> (Müll.Arg.) Zahlbr.	SR, SN
<i>Candelariella vitellina</i> (Hoffm.) Müll.Arg.	SCr, SR, SM, SCa
<i>Candelariella xanthostigma</i> (Ach.) Lettau	SR, SM, SN
<i>Catapyrenium</i> Flotow	SCr, SR, SCa
<i>Catillaria</i> A. Massal.	SCr, SR, SCa
<i>Catillaria chalybeia</i> (Borrer) A. Massal.	SCa, SN
<i>Catillaria lenticularis</i> (Ach.) Th. Fr.	SCa
<i>Catillaria subviridis</i> (Nyl.) Zahlbr.	SR, SCa
<i>Cetrelia cetrarioides</i> (Delise ex Duby) W.L. Culb. & C.F. Culb.	SCI
<i>Chaenotheca chrysocephala</i> (Turner ex Ach.) Th. Fr.	SCr
<i>Chaenotheca furfuracea</i> (L.) Tibell	SCr
<i>Chromatochlamys muscorum</i> (Fr.) H. Mayrhofer & Poelt	SCr
<i>Chrysothrix</i> Mont.	SCr, SCa
<i>Chrysothrix candelaris</i> (L.) J. R. Laundon	SCr, SR, SM, SCa
<i>Chrysothrix chlorina</i> (Ach.) J. R. Laundon	SR, SCa, SCI
<i>Chrysothrix granulosa</i> G. Thor	A, SCr, SR, SM, SCa, SN
<i>Chrysothrix xanthina</i> (Vain.) Kalb	SCa, SN
<i>Circinaria arida</i> Owe-Larsson, A. Nordin & Tibell	SR, SCa
<i>Circinaria caesiocinerea</i> (Nyl. ex Malbr.) A. Nordin, Savić & Tibell	SCr
<i>Circinaria contorta</i> (Hoffm.) A. Nordin, Savić & Tibell	SCr, SCI
<i>Cladonia</i> P. Browne	SCr, SR, SCa
<i>Cladonia asahinae</i> J.W. Thomson	SCa
<i>Cladonia carneola</i> (Fr.) Fr.	SCa
<i>Cladonia cervicornis</i> (Ach.) Flotow	A, SCa
<i>Cladonia cervicornis subsp. cervicornis</i> (Ach.) Flot.	SR
<i>Cladonia chlorophaea</i> (Flörke ex Sommerf.) Sprengel	A, SCr, SR, SCa
<i>Cladonia fimbriata</i> (L.) Fr.	SCa
<i>Cladonia fimbriata var. tubaeformis</i> (Hoffm.) Fr.	SCa
<i>Cladonia furcata</i> (Hudson) Schrader	A, SCr, SCa
<i>Cladonia kurokawae</i> Ahti & S. Stenroos	A, SR, SCa, SCI
<i>Cladonia macilenta</i> Hoffm.	SCr, SR

<i>Cladonia maritima</i> K. Knudsen & Lendemer	SR, SCa
<i>Cladonia nashii</i> Ahti	A, SCr, SR, SM, SCa
<i>Cladonia ochrochlora</i> Flörke	SCa
<i>Cladonia prolifica</i> Ahti & S. Hammer	SR
<i>Cladonia pulvinella</i> S. Hammer	A, SM, SCa
<i>Cladonia pyxidata</i> (L.) Hoffm.	A, SCr, SR, SM, SCa, SN, SB
<i>Cladonia scabriuscula</i> (Delise) Nyl.	A, SCr, SR, SCa, SCI
<i>Cladonia squamosa</i> (Scop.) Hoffm.	SCr, SCa, SN
<i>Cladonia subfimbriata</i> Ahti	SR, SCa
<i>Cladonia subulata</i> (L.) Weber ex F. H. Wigg.	SCr, SCa
<i>Cladonia umbricola</i> Tønsberg & Ahti	SCr
<i>Cladonia verruculosa</i> (Vain.) Ahti	SCr, SR
<i>Cladonia verticillata</i> (Hoffm.) Schaer.	SCr, SCa
<i>Clavascidium lacinulatum</i> (Ach.) M. Prieto	SCr, SR, SCa, SCI
<i>Cliostomum griffithii</i> (Sm.) Coppins	A, SCr, SR, SM, SCa, SN
<i>Coelocaulon steppae</i> (Savicz) Barreno & Vázquez	SR
<i>Coenogonium luteum</i> (Dicks.) Kalb & Lücking	SR
<i>Collema</i> F. H. Wigg.	SCr, SR, SM, SCa, SCI, SN, SB
<i>Collema furfuraceum</i> (Arnold) Du Rietz	SCr, SR, SCa, SB
<i>Collema nigrescens</i> (Hudson) DC.	SCr, SR, SB
<i>Collemopsidium elegans</i> (R. Sant.) Grube & B.D. Ryan	SCa
<i>Collemopsidium halodytes</i> (Nyl.) Grube & B.D. Ryan	SCa
<i>Collemopsidium sublitorale</i> (Leight.) Grube & B.D. Ryan	SCa
<i>Combea mollusca</i> (Ach.) Nyl.	SM
<i>Coniocarpon cinnabarinum</i> DC.	SCr, SCa, SB
<i>Constrictolumina lyrata</i> (R. C. Harris) Lücking, M. P. Nelsen & Aptroot	SCr, SN
<i>Cresponea chloroconia</i> (Tuck.) Egea & Torrente	SR, SN
<i>Cyphelium brachysporum</i> Nádv.	SR, SCa
<i>Dactylospora homoclinella</i> (Nyl.) Hafellner	SCa
<i>Dactylospora pleiosperma</i> Triebel	SR
<i>Dendrographa</i> Darb.	SCr, SR, SM, SCa, SN
<i>Dendrographa alectoroides</i> Sundin & Tehler	SCr, SCI, SN
<i>Dendrographa conformis</i> (Tehler) Ertz & Tehler	SR, SCa
<i>Dendrographa franciscana</i> (Zahlbr.) Ertz & Tehler	A, SR, SCa
<i>Dendrographa leucophaea</i> (Tuck.) Darbish.	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Dermatocarpon</i> Eschw.	SCr
<i>Dermatocarpon americanum</i> Vain.	SCr, SR, SCa, SCI
<i>Dermatocarpon leptophyllodes</i> (Nyl.) Vainio ex Hav.	SCr, SCa, SCI
<i>Dermatocarpon miniatum</i> (L.) W. Mann	SCr, SR, SCa, SCI
<i>Dermatocarpon tenue</i> (Müll. Arg.) Heiðmarsson	SCr, SCa
<i>Dimelaena</i> Norman	A, SCr, SR, SCa, SCI, SN
<i>Dimelaena californica</i> (H. Magn.) Sheard	A, SCr, SR, SM, SCa, SCI, SN
<i>Dimelaena oreina</i> (Ach.) Norman	SN
<i>Dimelaena radiata</i> (Tuck.) Müll.Arg.	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Dimelaena thysanota</i> (Tuck.) Hale & Culb.	SCr, SCa, SCI

<i>Dimelaena weberi</i> Sheard	SCr, SM, SCa, SCI, SB
<i>Diploicia</i> A. Massal.	SCr
<i>Diploicia canescens</i> (Dickson) A. Massal.	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Diploschistes</i> Norman	SCr, SR, SM, SCa, SN
<i>Diploschistes actinostomus</i> (Ach.) Zahlbr.	A, SCr, SR, SCI, SN
<i>Diploschistes aeneus</i> (Müll. Arg.) Lumbsch	SR
<i>Diplozomma alboatrum</i> (Hoffm.) Flotow	SR, SM, SCa, SN
<i>Diploschistes caesioplumbeus</i> (Nyl.) Vain.	SN
<i>Diploschistes diacapsis</i> (Ach.) Lumbsch	A, SCr, SR, SCa, SCI, SN
<i>Diploschistes muscorum</i> (Scop.) R. Sant.	SR, SCa
<i>Diploschistes scruposus</i> (Schreber) Norman	SCr, SR, SCa, SCI, SN, SB
<i>Diplozomma</i> Flotow	SCr
<i>Diplozomma alboatrum</i> (Hoffm.) Flotow	SR, SM, SCa, SN
<i>Diplozomma penichrum</i> (Tuck.) Szat.	A, SCr, SR, SM, SCa, SCI, SN
<i>Diplozomma venustum</i> (Körb.) Körb.	SR, SM, SN
<i>Dirina</i> Fr.	A, SM, SCa, SN
<i>Dirina catalinariae</i> Hasse	A, SCr, SR, SM, SCa, SCI, SB
<i>Dirina catalinariae f. sorediata</i> Tehler	A, SCr, SR, SM, SCa, SCI, SB
<i>Dirina immersa</i> Müll.Arg.	SM, SN
<i>Dirinaria neotropica</i> Kalb	SCr
<i>Distopyrenis americana</i> Aptroot	SN
<i>Enchylium coccophorum</i> (Tuck.) Otálora, P.M. Jørg. & Wedin	SN
<i>Enchylium polycarpon</i> (Hoffm.) Otálora, P.M. Jørg. & Wedin	SCr, SCa, SB
<i>Enchylium tenax</i> (Sw.) Gray	SCr, SCa, SCI, SN, SB
<i>Endocarpon</i> Hedwig	SCr
<i>Endocarpon lepidallum</i> Nyl.	SN
<i>Endocarpon loscosii</i> Müll.Arg.	SM, SN
<i>Endocarpon pallidum</i> Ach.	SB
<i>Endocarpon petrolepideum</i> (Nyl.) Hasse	SCr, SR
<i>Endocarpon pseudosubnitescens</i> Breuss	SCa, SB
<i>Endocarpon pusillum</i> Hedwig	A, SCr, SR, SM, SCI, SN, SB
<i>Endocarpon simplicatum</i> (Nyl.) Nyl.	SCr
<i>Endocarpon subnitescens</i> Nyl	SCr
<i>Endococcus matzeri</i> D. Hawksw. & Iturr.	SCI
<i>Endococcus thelommatis</i> Kocourk. & K. Knudsen	SR
<i>Evernia prunastri</i> (L.) Ach.	SCr, SR, SM, SCa, SCI
<i>Everniopsis trulla</i> (Ach.) Nyl.	SM
<i>Flavoparmelia</i> Hale	SCr, SR, SCa
<i>Flavoparmelia caperata</i> (L.) Hale	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Flavoplaca austrocitrina</i> (Vondrák, Říha, Arup & Söchting) Arup, Söchting & Frödén	SCa, SB
<i>Flavoplaca citrina</i> (Hoffm.) Arup, Frödén & Söchting	SCr, SR, SM, SCI, SN, SB
<i>Flavoplaca marina</i> (Wedd.) Arup, Frödén & Söchting	SCr, SM, SCa, SCI, SB
<i>Flavopunctelia</i> (Krog) Hale	SCr, SR
<i>Flavopunctelia flaventior</i> (Stirton) Hale	SCr, SR, SCa, SCI, SN
<i>Flavopunctelia soledica</i> (Nyl.) Hale	SCr, SR, SCa

<i>Fuscopannaria</i> P. M. Jørg.	SCa
<i>Fuscopannaria coralloidea</i> P.M. Jørg.	SCr, SCa
<i>Fuscopannaria leucostictoides</i> (Ohlsson) P.M. Jørg.	SCa, SCI
<i>Fuscopannaria praetermissa</i> (Nyl.) P.M. Jørg.	SCr, SR, SCa, SCI
<i>Geisleria sychnogonoides</i> Nitschke	SCI
<i>Graphis</i> Adanson	SCr, SR, SM, SN
<i>Gyalecta</i> Ach.	SCr, SR, SCa
<i>Gyalecta herrei</i> Vězda	A, SCr, SR, SCa
<i>Gyalecta jenensis</i> (Batsch) Zahlbr.	SR
<i>Gyalecta truncigena</i> (Ach.) Hepp	A
<i>Gyalolechia</i> A. Massal.	SN
<i>Gyalolechia bracteata</i> (Hoffm.) A. Massal.	SN
<i>Gyalolechia bracteata</i> (Hoffm.) A. Massal. subsp. <i>bracteata</i>	SN
<i>Gyalolechia desertorum</i> (Tomin) Søchting, Frödén & Arup	SN
<i>Gyalolechia flavorubescens</i> (Hudson) Søchting, Frödén & Arup	SR
<i>Gyalolechia flavovirescens</i> (Wulfen) Søchting, Frödén & Arup	SB
<i>Gyalolechia fulgens</i> (Sw.) Søchting, Frödén & Arup	SN
<i>Gyalolechia stantonii</i> (W. A. Weber ex Arup) Søchting, Frödén & Arup	SCr, SR, SM, SCa, SCI, SN, SB
<i>Gyalolechia stipitata</i> (Wetmore) Søchting, Frödén & Arup	SR, SM, SCI, SN, SB
<i>Gyalolechia subbracteata</i> (Nyl.) Søchting, Frödén & Arup	SN
<i>Haematomma</i> A. Massal.	SCr
<i>Heppia</i> Nägeli	SCr, SR
<i>Heppia lutosa</i> (Ach.) Nyl.	SCr, SCI
<i>Heterodermia</i> Trevisan	SCr, SR, SM, SCa
<i>Heterodermia erinacea</i> (Ach.) W.A. Weber	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Heterodermia namaquana</i> Breuss	A, SCr, SR, SM, SN, SB
<i>Hydropunctaria maura</i> (Wahlenb.) Keller, Gueidan & Thüs	SCa
<i>Hyperphyscia</i> Müll. Arg.	SCr, SR, SCI
<i>Hyperphyscia adglutinata</i> (Flörke) H. Mayrh. & Poelt	SCr, SR, SCa, SN
<i>Hyperphyscia confusa</i> Essl., C. A. Morse, & S. Leavitt	SCr
<i>Hypocenomyce</i> M. Choisy	SCr
<i>Hypocenomyce scalaris</i> (Ach. ex Lilj.) M. Choisy	SCr
<i>Hypogymnia</i> (Nyl.) Nyl.	SCr, SR
<i>Hypogymnia enteromorphoides</i> Elix	SCa
<i>Hypogymnia gracilis</i> McCune	SCr, SCa
<i>Hypogymnia heterophylla</i> L.H. Pike	SCr
<i>Hypogymnia imshaugii</i> Krog	SCr, SCa
<i>Hypogymnia minilobata</i> McCune & Schoch	SCr
<i>Hypogymnia mollis</i> L.H. Pike & Hale	A, SCr, SR, SCa
<i>Hypogymnia occidentalis</i> L.H. Pike	SCr, SR, SCa
<i>Hypogymnia physodes</i> (L.) Nyl.	SCa
<i>Hypogymnia schizidiata</i> McCune	SR
<i>Hypogymnia tubulosa</i> (Schaer.) Hav.	SCr
<i>Hypotrachyna</i> (Vainio) Hale	SCr
<i>Hypotrachyna revoluta</i> (Flörke) Hale	SCr, SR

<i>Hypotrachyna taylorensis</i> (M. E. Mitch.) Hale	SR
<i>Immersaria atrocarpa</i> (AK) Rambold & Pietchm.	SCa
<i>Julella vitrispora</i> (Cooke & Harkness) M. E. Barr	SCr, SCa
<i>Kaernefeltia californica</i> (Tuck.) Thell & Goward	SCa
<i>Kaernefeltia merrillii</i> (Du Rietz) Thell & Goward	SCr, SR, SCa
<i>Lacrima sonorae</i> (Wetmore) Søchting, Arup & Bungartz	SR
<i>Lambiella insularis</i> (Nyl.) T. Sprib.	SR, SCI
<i>Lathagrium cristatum</i> (L.) Otálora, P.M. Jørg. & Wedin	SR, SM
<i>Lathagrium undulatum</i> var. <i>granulosum</i> (Degel.) M. Schultz & McCune	SCa
<i>Lecanactis</i> Körber	SCr, SR, SM, SCa, SN
<i>Lecanactis akompsa</i> (Tuck.) ined.	SCa
<i>Lecanactis californica</i> Tuck.	A, SCr, SR, SM, SCa, SN
<i>Lecanactis dubia</i> G. Merr.	SCa
<i>Lecanactis salicina</i> Zahlbr.	SCa
<i>Lecania</i> A. Massal.	A, SCr, SR, SM, SCa, SN, SB
<i>Lecania brunonis</i> (Tuck.) Herre	A, SCr, SR, SM, SCa, SCI, SB
<i>Lecania caloplacicola</i> B.D. Ryan & van den Boom	SR
<i>Lecania chalcophila</i> B.D. Ryan & van den Boom	SN
<i>Lecania cyrtella</i> (Ach.) Th. Fr.	SCr, SR, SM, SN
<i>Lecania dudleyi</i> Herre	SCr, SR, SM, SCa, SCI, SN, SB
<i>Lecania erysibe</i> (Ach.) Mudd	SN
<i>Lecania franciscana</i> (Tuck.) K. Knudsen & Lendemer	SCr, SR, SCa, SCI, SN, SB
<i>Lecania fructigena</i> Zahlbr.	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Lecania fuscella</i> (Schaer.) Körb.	A, SR, SM, SN, SB
<i>Lecania fuscelloides</i> B.D. Ryan & van den Boom	SM, SN
<i>Lecania hassei</i> (Zahlbr.) W. Noble	A, SCr, SR, SB
<i>Lecania imbricata</i> van den Boom ined.	SR
<i>Lecania inundata</i> (Hepp ex Körb.) M. Mayrhofer	SCr, SR, SM, SCa, SN
<i>Lecania naegelii</i> (Hepp) Diederich & v. d. Boom	SCa, SN
<i>Lecania pacifica</i> Zahlbr. ex B.D. Ryan & van den Boom	SR, SM, SN
<i>Lecania rabenhorstii</i> (Hepp) Arnold	SN
<i>Lecania ryaniana</i> van den Boom	SR, SM, SB
<i>Lecania subtoninioides</i> van den Boom ined.	SCa
<i>Lecania subturicensis</i> van den Boom ined.	SN
<i>Lecania toninioides</i> Zahlbr.	SR, SM
<i>Lecania turicensis</i> (Hepp) Müll.Arg.	SM, SN, SB
<i>Lecanographa</i> Egea & Torrente	SCr, SM, SCa, SB
<i>Lecanographa aggregata</i> Egea & Torrente	SR
<i>Lecanographa brattiae</i> (Egea & Ertz) Ertz & Tehler	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Lecanographa dimelaenoides</i> (Egea & Torrente) Egea & Torrente	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Lecanographa hypothallina</i> (Zahlbr.) Egea & Torrente	A, SCr, SR, SM, SCa, SCI, SB
<i>Lecanographa insolita</i> Lendemer & K. Knudsen	SR, SCI
<i>Lecanographa lyncea</i> (Sm.) Egea & Torrente	SR, SN
<i>Lecanographa lynceoides</i> (Muell. Arg.) Egea & Torrente	SR, SN
<i>Lecanographa subdryophila</i> (Follmann & Vězda) Egea & Torrente	SR, SN

<i>Lecanographa tehleri</i> Egea, Sérus., Torrente & Wessel	SCr, SCI
<i>Lecanora</i> Ach.	A, SCr, SR, SM, SCa, SN, SB
<i>Lecanora albella</i> (Pers.) Ach.	SCa
<i>Lecanora albocaesiella</i> B.D. Ryan & T.H. Nash	SCa, SN
<i>Lecanora alboloba</i> B.D. Ryan ined.	SN
<i>Lecanora allophana</i> Nyl.	SCr, SCa
<i>Lecanora annularis</i> Lendemer & K. Knudsen	SCr
<i>Lecanora brattiae</i> B.D. Ryan & T.H. Nash	SCr
<i>Lecanora caesiella</i> Flörke	SN
<i>Lecanora caesiorubella</i> Ach.	SCr, SR, SCa, SCI
<i>Lecanora caesiorubella subsp. caesiorubella</i> Ach.	SCa
<i>Lecanora caesiorubella subsp. merrillii</i> Imshaug & Brodo	SCr, SR, SM, SCa, SCI, SN
<i>Lecanora californica</i> Brodo	SCr, SR, SM
<i>Lecanora campestris</i> (Schaer.) Hue	SCr, SR, SCa
<i>Lecanora carneolutescens</i> Nyl.	SM
<i>Lecanora cenisia</i> Ach.	SCr, SCa, SB
<i>Lecanora comonduensis</i> T.H. Nash & Herte	SCr
<i>Lecanora confusa</i> Almb.	SCr, SR, SM, SCa
<i>Lecanora demosthenesii</i> Lumbsch & Messuti	SCr, SR, SM
<i>Lecanora expallens</i> Ach.	SCr, SR, SCa, SN
<i>Lecanora gangaleoides</i> Nyl.	A, SCr, SR, SCa, SCI
<i>Lecanora horiza</i> (Ach.) Lindasy	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Lecanora impudens</i> Degel.	SCr
<i>Lecanora latens</i> Printzen	SCr
<i>Lecanora laxa</i> (Śliva & Wetm.) Printzen	SCr
<i>Lecanora mellea</i> W.A. Weber	SCr
<i>Lecanora orae-frigidae</i> R. Sant.	SM
<i>Lecanora pacifica</i> Tuck.	SCr, SR, SM, SCa, SN
<i>Lecanora plumosa</i> Müll.Arg.	SR
<i>Lecanora pseudistera</i> Nyl.	SCa
<i>Lecanora pulicaris</i> (Pers.) Ach.	SCa
<i>Lecanora rediunta</i> Stizenb.	SCa
<i>Lecanora rupicola</i> (L.) Zahlbr.	SCa
<i>Lecanora saligna</i> (Schrader) Zahlbr.	SCa
<i>Lecanora simeonensis</i> K. Knudsen & Lendemer	SN
<i>Lecanora strobilina</i> (Sprengel) Kieffer	SCr
<i>Lecanora subcarnea</i> (Lilj.) Ach.	SCr, SR, SCa, SCI
<i>Lecanora subrugosa</i> Nyl.	SCr
<i>Lecanora substrobilina</i> Printzen	SCr, SR, SM, SN
<i>Lecanora sulphurescens</i> Fée	SCr
<i>Lecanora utahensis</i> H. Magn.	SR, SM, SN
<i>Lecanora varia</i> (Hoffm.) Ach.	SCr, SR, SCa
<i>Lecanora xanthosora</i> B.D. Ryan & Poelt	SM, SCa, SCI
<i>Lecanora xylophila</i> Hue	SN
<i>Lecidea</i> Ach.	A, SCr, SR, SM, SCa, SCI, SN

<i>Lecidea cruciaria</i> Tuck.	SCr, SCa
<i>Lecidea diducens</i> Nyl.	SCr, SCa
<i>Lecidea erythrophaea</i> Flörke ex Sommerf.	SCr, SCa
<i>Lecidea fuscoatra</i> (L.) Ach.	SCa, SCI
<i>Lecidea laboriosa</i> Müll.Arg.	SCr, SR, SM, SCa, SCI
<i>Lecidea lapicida</i> (Ach.) Ach.	SCa
<i>Lecidea lithophila</i> (Ach.) Ach.	SCr
<i>Lecidea mannii</i> Tuck.	SCr, SCa, SCI
<i>Lecidea plana</i> (J. Lahm) Nyl.	SCr
<i>Lecidea tessellata</i> Flörke	SCa
<i>Lecidella</i> Körber	A, SCr, SR, SM, SCa, SN
<i>Lecidella asema</i> (Nyl.) Körb.	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Lecidella carpathica</i> Körb.	SCr, SR, SCa, SN
<i>Lecidella effugiens</i> (Nilson) Knoph & Hertel	SCr, SR, SCa
<i>Lecidella elaeochroma</i> (Ach.) M. Choisy	SCr, SR, SM, SCa
<i>Lecidella euphorea</i> (Flörke) Hertel	SN
<i>Lecidella granulosa</i> (Nyl.) Knoph & Leuckert	SR
<i>Lecidella latypiza</i> (Nyl.) Choisy	SCr, SR, SCa
<i>Lecidella meiococca</i> (Nyl.) Leuckert & Hertel	SCr, SR
<i>Lecidella scabra</i> (Taylor) Hertel & Leuckert	A, SR, SCa
<i>Lecidella stigmatea</i> (Ach.) Hertel & Leuckert	SCa, SN, SB
<i>Lecidella viridans</i> (Flotow) Körb.	SCr
<i>Lepra albescens</i> (Huds.) Hafellner	SB
<i>Lepra amara</i> (Ach.) Hafellner	SCr, SR, SCa, SCI, SB
<i>Lepra ophthalmiza</i> (Nyl.) Hafellner	SCr
<i>Lepraria</i> Ach.	SCr, SR, SM, SCa, SN
<i>Lepraria elobata</i> Tønsberg	SCr
<i>Lepraria finkii</i> (B. de Lesd.) R.C. Harris	SCr, SR
<i>Lepraria membranacea</i> (Dicks.) Vain.	SR
<i>Lepraria pacifica</i> Lendemer	SN
<i>Lepraria santamonicae</i> K. Knudsen & Elix	SR
<i>Lepraria subalbicans</i> (I. M. Lamb) Lendemer & Hodk.	SCr, SM
<i>Lepraria xerophila</i> Tønsberg	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Leprocaulon</i> Nyl. ex Lamy	SCr, SCa
<i>Leprocaulon americanum</i> Lendemer & Hodk.	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Leprocaulon knudsenii</i> Lendemer & Hodk.	SCr, SCa, SN
<i>Leprocaulon nanum</i> Nyl.	SCa
<i>Leprocaulon santamonicae</i> (K. Knudsen & Elix) Lendemer & Hodk.	SCr, SCa
<i>Leprocaulon terricola</i> (Lendemer) Lendemer & Hodk.	SCr, SR
<i>Leptoplaca</i> (Nyl.) Hue	A
<i>Leptochidium albociliatum</i> (Desmaz.) Choisy	SCr, SCI
<i>Leptogium</i> (Ach.) Gray	SCr, SR
<i>Leptogium pseudofurfuraceum</i> P.M. Jørg. & Wallace	SR
<i>Leucodermia leucomelos</i> (L.) Kalb	A, SCr, SR, SM, SCa, SCI
<i>Lichenodiplis lecanoricola</i> (M. S. Cole & Hawksw.) Diederich	SR, SB

<i>Lichenomphalia umbellifera</i> (L. : Fr.) Redhead, Lutzoni, Moncalvo & Vilgalys	SCr
<i>Lichenostigma</i> Hafellner	SR
<i>Lichenostigma cosmopolites</i> Hafellner & Calatayud	SR
<i>Lichenostigma rugosa</i> Thor	SCa
<i>Lichenostigma subradians</i> Hafellner, Calatayud & Nav.-Ros.	SR
<i>Lichenothelia scopularia</i> (Nyl.) D. Hawksw.	SCr, SCI
<i>Lichina</i> C. Agardh	SCr
<i>Lichinella</i> Nyl.	SCr, SCI
<i>Lichinella cribellifera</i> (Nyl.) Henssen	SCI
<i>Lichinella nigritella</i> (Lettau) P.P. Moreno & Egea	SCI
<i>Lichinella robustoides</i> Henssen, Büdel & T.H. Nash	SCr
<i>Lichinella stipatula</i> Nyl.	SCr, SN
<i>Lobaria anthraspis</i> (Ach.) T. Sprib. & McCune	SCr
<i>Maronea constans</i> (Nyl.) Hepp	SCr
<i>Maronea polyphaea</i> H. Magn.	SCr, SCa
<i>Massalongia microphylliza</i> (Nyl. ex Hasse) Henssen	SCa
<i>Megalaria columbiana</i> (G. Merr.) S. Ekman	SCr, SCa, SCI
<i>Megalaria laureri</i> (Th. Fr.) Hafellner	SCa
<i>Melanelia</i> Essl.	SCr, SCa
<i>Melanohalea elegantula</i> (Zahlbr.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch	SR
<i>Melanohalea exasperatula</i> (Nyl.) O. Blanco et al.	SN
<i>Melanohalea subolivacea</i> (Nyl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch	SCr
<i>Melanelixia glabratula</i> (Lamy) Sandler & Arup	SCI
<i>Melanelixia subaurifera</i> (Nyl.) O. Blanco et al.	SN
<i>Melaspilea</i> Nyl.	SN
<i>Melaspilea enteroleuca</i> (Ach.) Ertz & Diederich	SCa
<i>Micarea</i> Fr.	SCr, SM
<i>Micarea denigrata</i> (Fr.) Hedl.	SCr, SR
<i>Micarea nitschkeana</i> (J. Lahm ex Rabenh.) Harm.	SCr, SM
<i>Minksia</i> Müll.Arg.	SR
<i>Miriquidica</i> Hertel & Rambold	SR
<i>Miriquidica deusta</i> (Stenham.) Hertel & Rambold	SCa
<i>Miriquidica garovaglii</i> (Schaer.) Hertel & Rambold	SCI
<i>Miriquidica scotopholis</i> (Tuck.) B.D. Ryan & Timdal	SCr, SCa
<i>Miriquidica verrucariicola</i> (B.D. Ryan) K. Knudsen & Kocourk.	SCr, SR, SCa, SCI, SN
<i>Mobergia</i> H. Mayrhofer & Sheard	SR
<i>Mobergia angelica</i> (Stizenb.) H. Mayrh. & Sheard	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Muellerella lichenicola</i> (Sommerf. ex Fr.) D. Hawksw.	SR
<i>Mycocalicium albonigrum</i> (Nyl.) Fink	SCa
<i>Mycocalicium subtile</i> (Pers.) Szat.	SCr, SR, SCa
<i>Mycocalicium victoriae</i> (Kn. in Wilson) Nádv.	SCr
<i>Mycoporum antecellens</i> (Nyl.) R.C. Harris	SCa
<i>Mycoporum eschweileri</i> (Müll. Arg.) R.C. Harris	SCa
<i>Mycoporum lacteum</i> (Ach.) R.C. Harris	SCa
<i>Myriolecis andrewii</i> (B. de Lesd.) Śliwa, Zhao Xin & Lumbsch	SR

<i>Myriolecis crenulata</i> (Ach.) Śliwa, Zhao Xin & Lumbsch	SR, SN
<i>Myriolecis dispersa</i> (Pers.) Śliwa, Zhao Xin & Lumbsch	SR, SM, SN, SB
<i>Myriolecis hagenii</i> (Ach.) Śliwa, Zhao Xin & Lumbsch	SR, SM, SN
<i>Myriolecis zosteræ</i> (Ach.) Śliwa, Zhao Xin & Lumbsch	SM
<i>Myriospora hassei</i> (Herre) K. Knudsen & L. Arcadia	SCr, SCI
<i>Myriospora scabrida</i> (Hedl. ex H. Magn.) K. Knudsen & L. Arcadia	SCr
<i>Myriospora smaragdula</i> (Wahlenb. ex Ach.) Nägeli ex Uloth	SCr, SCI
<i>Naetrocymbe Körber</i>	SCa
<i>Naetrocymbe herrei</i> K. Knudsen & Lendemer	SN
<i>Naetrocymbe punctiformis</i> (Pers.) R.C. Harris	SCr, SCa
<i>Niebla</i> Rundel & Bowler	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Niebla cedrosensis</i> Marsh & T.H. Nash	SCa
<i>Niebla cephalota</i> (Tuck.) Rundel & Bowler	A, SCr, SR, SM, SCa, SN, SB
<i>Niebla ceruchis</i> (Ach.) Rundel & Bowler	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Niebla ceruchoides</i> Rundel & Bowler	A, SCr, SR, SM, SCa, SCI, SB
<i>Niebla combeoides</i> (Nyl.) Rundel & Bowler	A, SCr, SR, SM, SCa, SCI, SB
<i>Niebla homalea</i> (Ach.) Rundel & Bowler	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Niebla isidiascens</i> Bowler, Marsh, T.H. Nash & Riefner	A, SCr, SCa, SCI, SN, SB
<i>Niebla isidiosa</i> Spjut	SCa
<i>Niebla josecuervoi</i> Rundel & Bowler	SCr, SR, SM
<i>Niebla laevigata</i> Bowler & Rundel	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Niebla polymorpha</i> Bowler, Marsh, T.H. Nash & Riefner	SCr, SR, SCa
<i>Niebla procera</i> Rundel & Bowler	SCr, SR, SM, SCa, SCI, SN, SB
<i>Niebla ramosissima</i> Spjut	SN
<i>Niebla robusta</i> Rundel & Bowler	A, SCr, SR, SM, SCa, SCI, SB
<i>Normandina pulchella</i> (Borrer) Nyl.	SCr, SR
<i>Ochrolechia</i> A. Massal.	SCr, SR, SM, SCa, SN
<i>Ochrolechia africana</i> Vain.	SR, SCa
<i>Ochrolechia androgyna</i> (Hoffm.) Arnold	SCr, SR, SCa
<i>Ochrolechia arborea</i> (Kreyer) Almb.	SCr, SN
<i>Ochrolechia mexicana</i> Vain.	SR, SCI
<i>Ochrolechia parella</i> (L.) A. Massal.	SR
<i>Ochrolechia pseudopallescens</i> Brodo	SCa
<i>Ochrolechia subpallescens</i> Vers.	SCr, SR, SCa
<i>Ochrolechia tartarea</i> (L.) A. Massal.	SR
<i>Opegrapha</i> Ach.	A, SCr, SR, SM, SCa, SCI, SN
<i>Opegrapha anomea</i> Nyl.	SCr, SR, SCa
<i>Opegrapha crassispora</i> Egea & Torrente	SCr, SR, SM, SN
<i>Opegrapha herbarum</i> Mont.	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Opegrapha niveoatra</i> (Borrer) J. R. Laundon	SCr, SCa
<i>Opegrapha rupestris</i> Pers.	SCa, SCI
<i>Opegrapha subvulgata</i> Nyl.	SCa
<i>Opegrapha umbellulariae</i> Zahlbr.	SCa
<i>Opegrapha vulgata</i> (Ach.) Ach.	SCr, SR, SCa, SN
<i>Opegrapha xerica</i> Torrente & Egea	SN

<i>Pachnolepia pruinata</i> (Pers.) Frisch & G. Thor	A, SCr, SR, SCa, SN, SB
<i>Pannaria</i> Delise	SCr
<i>Paralecanographa grumulosa</i> (Dufour) Ertz & Tehler	SM
<i>Paraschismatomma</i> Ertz & Tehler	SCa
<i>Paraschismatomma ochroleucum</i> (Zahlbr.) K. Knudsen, Ertz & Tehler	SCr, SR, SCa
<i>Parmelia</i> Ach.	SCr, SR, SCa
<i>Parmelia californica</i> Gyeln.	SCa
<i>Parmelia saxatilis</i> (L.) Ach.	SCr
<i>Parmelia sulcata</i> Taylor	SCr, SR, SCa, SCI
<i>Parmeliella clavulifera</i> P.M. Jørg.	SCr
<i>Parmeliella triptophylla</i> (Ach.) Müll.Arg.	SCr
<i>Parmelina</i> Hale	SCa
<i>Parmeliopsis</i> Nyl.	SCr
<i>Parmeliopsis ambigua</i> (Wulfen) Nyl.	SCr
<i>Parmotrema</i> A. Massal.	SCr, SR, SM, SCa
<i>Parmotrema arnoldii</i> (Du Rietz) Hale	SCr, SR
<i>Parmotrema austrosinense</i> (Zahlbr.) Hale	SCr, SR, SN
<i>Parmotrema cristiferum</i> (Taylor) Hale	SCr
<i>Parmotrema hypoleucinum</i> (Steiner) Hale	A, SCr, SR, SM, SCa, SCI
<i>Parmotrema hypotropum</i> (Nyl.) Hale	SCa, SCI
<i>Parmotrema perlatum</i> (Hudson) M. Choisy	A, SCr, SR, SM, SCa, SCI, SN
<i>Parmotrema praesorediosum</i> (Nyl.) Hale	SCr, SCa
<i>Parmotrema reticulatum</i> (Taylor) M. Choisy	SCr, SR, SCa, SCI
<i>Parmotrema stuppeum</i> (Taylor) Hale	SCr, SR
<i>Peltigera</i> Willd.	SCr, SCI
<i>Peltigera collina</i> (Ach.) Schrader	SR
<i>Peltigera rufescens</i> (Weiss) Humb.	SCI
<i>Peltula</i> Nyl.	A, SCr, SR
<i>Peltula bolanderi</i> (Tuck.) Wetmore	SR, SB
<i>Peltula euploca</i> (Ach.) Poelt ex Pišút	SCr, SR, SCa, SCI
<i>Peltula farinosa</i> Büdel	SCr
<i>Peltula hassei</i> (Zahlbr.) Büdel, Kauff & Bachran	SR, SCI
<i>Peltula obscurans</i> (Nyl.) Gyelnik	SR, SCa
<i>Peltula obscurans</i> var. <i>deserticola</i> (Zahlbr.) Wetmore	SCr, SR
<i>Peltula omphaliza</i> (Nyl.) Wetmore	SCr, SR
<i>Peltula patellata</i> (Bagl.) Swinscow & Krog	SR, SCI
<i>Peltula sonorensis</i> Büdel & T.H. Nash	SR
<i>Pertusaria</i> DC.	A, SCr, SR, SM, SCa, SCI
<i>Pertusaria brattiae</i> Lumbsch & T.H. Nash	A, SR, SM, SB
<i>Pertusaria californica</i> Dibben	A
<i>Pertusaria flavicunda</i> Tuck.	A, SCr, SR, SM, SCa, SCI, SN
<i>Pertusaria hymenea</i> (Ach.) Schaer.	SCr
<i>Pertusaria islandica</i> Bratt, Lumbsch & Schmitt	SM
<i>Pertusaria lecanina</i> Tuck.	A, SCr, SR, SCa
<i>Pertusaria leioplaca</i> DC.	SR

<i>Pertusaria moreliensis</i> B. de Lesd.	SR, SCa
<i>Pertusaria occidentalis</i> Bratt, Lumbsch & Schmitt	SM, SN
<i>Pertusaria pustulata</i> (Ach.) Duby	SCr
<i>Pertusaria rubefacta</i> Erichsen	SCr, SR, SCa, SCl
<i>Pertusaria tejocotensis</i> B. de Lesd.	SCr
<i>Pertusaria wulfenoides</i> B. de Lesd.	SCr
<i>Pertusaria xanthodes</i> Müll.Arg.	SCr, SR
<i>Phaeophyscia</i> Moberg	SCr, SR, SCa
<i>Phaeophyscia hirsuta</i> (Mereschk.) Essl.	SCr, SR, SM, SCa, SCl
<i>Phaeophyscia kairamoi</i> (Vain.) Moberg	SR, SCa
<i>Phaeophyscia orbicularis</i> (Necker) Moberg	SCa
<i>Phloeopeccania pulvinulina</i> J. Steiner	SN
<i>Phlyctis</i> Wallr.	SR, SCa
<i>Phlyctis agelaea</i> (Ach.) Flotow	SR
<i>Phlyctis argena</i> (Sprengel) Flotow	SCa, SCl
<i>Phlyctis speirea</i> G. Merr.	SCr, SCa
<i>Physcia</i> (Schreber) Michaux	SCr, SR, SM, SCl, SB
<i>Physcia adscendens</i> (Fr.) H. Olivier	A, SCr, SR, SM, SCa, SCl, SN, SB
<i>Physcia aipolia</i> (Ehrh. ex Humb.) Furnr.	SCr, SR, SCa, SCl
<i>Physcia albinea</i> (Ach.) Nyl.	SR
<i>Physcia biziana</i> (A. Massal.) Zahlbr.	A, SCa, SB
<i>Physcia caesia</i> (Hoffm.) Furnr.	SCa
<i>Physcia clementei</i> (Sm.) Lynge	SCl, SN
<i>Physcia convexa</i> Nyl.	SCr
<i>Physcia crispa</i> Nyl.	SCa
<i>Physcia dimidiata</i> (Arnold) Nyl.	SCr, SR, SCa
<i>Physcia dubia</i> (Hoffm.) Lettau	A
<i>Physcia magnussonii</i> Frey	SCa
<i>Physcia millegrana</i> Degel.	SCr
<i>Physcia neglecta</i> Moberg	SR
<i>Physcia phaea</i> (Tuck.) J.W. Thomson	A, SCr, SR, SCa, SCl, SB
<i>Physcia poncinsii</i> Hue	SCa
<i>Physcia stellaris</i> (L.) Nyl.	SCa
<i>Physcia subtilis</i> Degel.	SR
<i>Physcia tenella</i> (Scop.) DC.	SCr, SR, SM, SCa, SB
<i>Physcia tenellula</i> Moberg	A, SCr, SR, SCa, SCl, SN, SB
<i>Physcia tribacia</i> (Ach.) Nyl.	A, SCr, SR, SCa, SCl, SB
<i>Physcia undulata</i> Moberg	SR
<i>Physciella chloantha</i> (Ach.) Essl.	SCr
<i>Physconia</i> Poelt	SCr, SR
<i>Physconia detersa</i> (Nyl.) Poelt	SCr, SR
<i>Physconia enteroxantha</i> (Nyl.) Poelt	A, SCr, SR, SM, SCa, SCl, SB
<i>Physconia isidiigera</i> (Zahlbr.) Essl.	A, SCr, SR, SCa, SCl, SN
<i>Physconia muscigena</i> (Ach.) Poelt	SN
<i>Physconia perisidiosa</i> (Erichsen) Moberg	SCr

<i>Physconia petraea</i> (Poelt) Vezda & Poelt	SCI
<i>Piccolia ochrophora</i> (Nyl.) Hafellner	SN
<i>Placidium</i> A. Massal.	SCr, SN
<i>Placidium acarosporoides</i> (Zahlbr.) Breuss	SCa, SN
<i>Placidium californicum</i> Breuss	SN
<i>Placidium chilense</i> (Räsänen) Breuss	SR
<i>Placidium lachneum</i> (Ach.) B. de Lesd.	SCr
<i>Placidium pilosellum</i> (Breuss) Breuss	SR, SN
<i>Placidium squamulosum</i> (Ach.) Breuss	SCr, SR, SCa, SN
<i>Placopyrenium canellum</i> (Nyl.) Gueidan & Cl. Roux	A, SCr, SM
<i>Placopyrenium fuscellum</i> (Turner) Gueidan & Cl. Roux	SCr, SR, SM, SCa
<i>Placynthiella icmalea</i> (Ach.) Coppins & P. James	SCr
<i>Placynthium</i> (Ach.) Gray	SM
<i>Placynthium nigrum</i> (Hudson) Gray	SCr, SN
<i>Placynthium tantaleum</i> (Hepp) Hue	SCr
<i>Pleopsidium</i> Körber	SCr
<i>Pleopsidium chlorophanum</i> (Wahlenb.) Zopf	SCr, SCa
<i>Pleopsidium flavum</i> (Bellardi) Körb.	SN, SB
<i>Polyblastidium japonicum</i> (M. Satô) Kalb	SCr, SR
<i>Polycauliona ascendens</i> (S. Y. Kondr.) Frödén, Arup, & Söchting	A, SM
<i>Polycauliona bolacina</i> (Tuck.) Arup, Frödén & Söchting	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Polycauliona brattiae</i> (W. A. Weber) Arup, Frödén & Söchting	A, SCr, SR, SM, SCa, SCI, SN
<i>Polycauliona candelaria</i> (L.) Frödén, Arup, & Söchting	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Polycauliona coralloides</i> (Tuck.) Hue	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Polycauliona ignea</i> (Arup) Arup, Frödén & Söchting	SCr, SR, SM, SCa, SCI
<i>Polycauliona impolita</i> (Arup) Arup, Frödén & Söchting	A, SCr, SR, SCa, SCI, SB
<i>Polycauliona ludificans</i> (Arup) Arup, Frödén & Söchting	A, SCr, SR, SM, SCa, SN
<i>Polycauliona luteominia</i> (Tuck.) Arup, Frödén & Söchting	SCr, SM, SCa, SN, SB
<i>Polycauliona luteominia</i> var. <i>bolanderi</i> (Tuck.) Arup, Frödén & Söchting	A, SR, SM, SCI, SN, SB
<i>Polycauliona luteominia</i> var. <i>luteominia</i> (Tuck.) Arup, Frödén & Söchting	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Polycauliona nashii</i> (Nav.-Ros., Gaya & Hladún) Arup, Frödén & Söchting	SR, SN
<i>Polycauliona pollinarioides</i> (L. Lindblom & D.M. Wright) Frödén, Arup, & Söchting	SM, SN
<i>Polycauliona polycarpa</i> (Hoffm.) Frödén, Arup, & Söchting	SCr, SR, SCa, SN
<i>Polycauliona rosei</i> (Hasse) Arup, Frödén & Söchting	A, SCr, SR, SM, SCa, SCI, SB
<i>Polycauliona stellata</i> (Wetmore & Kärnefelt) Arup, Frödén & Söchting	SR, SCI
<i>Polycauliona tenax</i> (L. Lindblom) Frödén, Arup, & Söchting	SCr, SCI, SN, SB
<i>Polycauliona tenuiloba</i> (L. Lindblom) Frödén, Arup, & Söchting	SN
<i>Polycauliona verruculifera</i> (Vain.) Arup, Frödén & Söchting	SB
<i>Polysporina simplex</i> (Taylor) Vězda	SCr, SCa
<i>Porina</i> Müll. Arg.	SR
<i>Porina hibernica</i> P. James & Swinscow	SR
<i>Porina peregrina</i> Tretiach & McCarthy	SR
<i>Protoparmelia</i> M. Choisy	SCr
<i>Protoparmelia badia</i> (Hoffm.) Hafellner	SR, SCa
<i>Protoparmelia ochrococca</i> P.M. Jørg., Rambold & Hertel	SCr

<i>Protoparmeliopsis muralis</i> (Schreb.) M. Choisy	SCr, SR, SCa, SCI
<i>Protoparmeliopsis pinguis</i> (Tuck.) S. Y. Kondr.	SCa
<i>Pseudosagedia aenea</i> (Wallr.) Hafellner & Kalb	SCr, SR
<i>Pseudosagedia cestrensis</i> (Michener) R.C. Harris	SCr, SR
<i>Pseudosagedia chlorotica</i> (Ach.) Hafellner & Kalb	SR, SN
<i>Pseudothelomma occidentale</i> (Herre) M. Prieto and Wedin	SCr, SCa, SCI
<i>Pseudothelomma ocellatum</i> (Körb.) M. Prieto and Wedin	SCr, SN
<i>Psora</i> Hoffm.	SCr, SM, SN, SB
<i>Psora brunneocarpa</i> Timdal	SR
<i>Psora californica</i> Timdal	SCr
<i>Psora decipiens</i> (Hedwig) Hoffm.	SCa, SCI
<i>Psora icterica</i> (Mont.) Müll.Arg.	SCr
<i>Psora luridella</i> (Tuck.) Fink	SCr, SCI
<i>Psora pacifica</i> Timdal	SCr, SR, SCa
<i>Psora peninsularis</i> Timdal	SCI
<i>Psora pruinosa</i> Timdal	SCa
<i>Psora tuckermanii</i> R. Anderson ex Timdal	SCI
<i>Psoroma cinnamomeum</i> Malme	SM
<i>Psorotichia</i> A. Massal.	SN
<i>Psorotichia schaeereri</i> (A. Massal.) Arnold	SR
<i>Punctelia</i> Krog	SCr
<i>Punctelia borrieri</i> (Sm.) Krog	SCr, SR, SCI
<i>Punctelia jeckeri</i> (Roum.) Kalb	SCr, SR
<i>Punctelia perreticulata</i> (Räsänen) G. Wilh. & Ladd	SCr, SR, SCa
<i>Punctelia punctilla</i> (Hale) Krog	SCr, SCI
<i>Punctelia stictica</i> (Duby) Krog	SCI
<i>Punctelia subrudecta</i> (Nyl.) Krog	SCr, SR, SCa, SCI
<i>Pyrenula</i> A. Massal.	SCr, SCa
<i>Pyrrhospora</i> Körber	SR, SM
<i>Pyrrhospora querneae</i> (Dickson) Körb.	A, SCr, SR, SM, SCa, SCI, SN
<i>Ramalina</i> Ach.	A, SCr, SR, SM, SCa, SN, SB
<i>Ramalina canariensis</i> J. Steiner	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Ramalina farinacea</i> (L.) Ach.	A, SCr, SR, SM, SCa, SCI, SN
<i>Ramalina fastigiata</i> (Pers.) Ach.	SCr
<i>Ramalina fraxinea</i> (L.) Ach.	SR
<i>Ramalina labiosorediata</i> Gasparyan, Sipman & Lücking	SCr, SR, SCa
<i>Ramalina lacera</i> (With.) J. R. Laundon	A, SCr, SR, SCI, SN, SB
<i>Ramalina leptocarpha</i> Tuck.	A, SCr, SR, SM, SCa, SCI, SN
<i>Ramalina menziesii</i> Taylor	A, SCr, SR, SM, SCa, SCI, SN
<i>Ramalina sarahae</i> K. Knudsen, Lendemer & Kocourk.	SM, SN
<i>Ramalina sonorensis</i> Kashiw. & T.H. Nash	SR
<i>Ramalina subleptocarpha</i> Rundel & Bowler	A, SCr, SR, SM, SCa, SN, SB
<i>Ramboldia gowardiana</i> (T. Sprib. & M. Hauck) Kalb, Lumbsch & Elix	SCr
<i>Rhizocarpon hochstetteri</i> (Körb.) Vain.	SCa
<i>Rhizoplaca</i> Zopf	SCr

<i>Rhizoplaca melanophthalma</i> (DC.) Leuckert & Poelt	SCa
<i>Rinodina</i> (Ach.) Gray	SCr, SR, SCa, SN, SB
<i>Rinodina archaea</i> (Ach.) Arnold	SCa
<i>Rinodina bolanderi</i> H. Magn.	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Rinodina californiensis</i> Sheard	SCr, SCa
<i>Rinodina capensis</i> Hampe	SCr, SR
<i>Rinodina confragosa</i> (Ach.) Körber	SN
<i>Rinodina conradii</i> Körb.	SCr, SCa, SCI
<i>Rinodina dilatata</i> Sheard ined.	SR, SCa
<i>Rinodina endospora</i> Sheard	SCr
<i>Rinodina gennarii</i> Bagl.	SCr, SR, SCa, SCI
<i>Rinodina griseosoralifera</i> Coppins	SM
<i>Rinodina hallii</i> Tuck.	SCr, SCI
<i>Rinodina herrei</i> H. Magn.	SCr, SR, SCa
<i>Rinodina innata</i> Sheard	SCr, SR
<i>Rinodina intermedia</i> Bagl.	SCr, SR, SCa, SCI
<i>Rinodina luridata</i> (Körb.) H. Mayrh., Schneid. & Sheard	SCa, SCI, SN
<i>Rinodina marysvillensis</i> H. Magn.	SCr, SR, SCa
<i>Rinodina oxydata</i> (A. Massal.) A. Massal.	SCr, SCa
<i>Rinodina pacifica</i> Sheard	SCa, SB
<i>Rinodina poeltiana</i> Giralt & Obermayer	SCr
<i>Rinodina pyrina</i> (Ach.) Arnold	SN
<i>Rinodina santae-monicae</i> H. Magn.	SCr, SR, SCa
<i>Rinodina sophodes</i> (Ach.) A. Massal.	SCr
<i>Rinodina turfacea</i> (Wahlenb.) Körb.	SCa
<i>Roccella</i> DC.	SM, SCa, SCI, SN, SB
<i>Roccella decipiens</i> Darb.	A, SR, SCa, SCI, SB
<i>Roccella fuciformis</i> (L.) DC.	SCa
<i>Roccella gracilis</i> Bory	A, SR, SCa, SCI, SB
<i>Roccella phycopsis</i> (Ach.) Ach.	SCI
<i>Rufoplaca arenaria</i> (Pers.) Arup, Søchting & Frödén	SCa
<i>Rusavskia elegans</i> (Link) S.Y. Kondr. & Kärnefelt	SCr, SR, SCa
<i>Rusavskia papillifera</i> (Vain.) S. Y. Kondr. & Kärnefelt	SR
<i>Sarcogyne arenosa</i> (Herre) Knudsen & Standley	SCr
<i>Sarcogyne clavus</i> (DC.) Krempelh.	SCr
<i>Sarcogyne hypophaea</i> (Nyl.) Arnold	SCr, SCa, SN
<i>Sarcogyne regularis</i> Körb.	SN
<i>Sarcogyne similis</i> H. Magn.	SCa, SN
<i>Sarea resinae</i> (Fr.) Kuntze	SR, SCa
<i>Schismatomma</i> Flotow & Körber ex A. Massal.	SR, SCa, SCI
<i>Schismatomma ochroleucum</i> Zahlbr. Ined.	SCa
<i>Schismatomma rediunta</i> (Hasse) Tehler	SCa
<i>Schizopelte</i> Th. Fr.	SCa
<i>Schizopelte</i> Th. Fr./ <i>Sparria</i> Ertz & Tehler	SCr
<i>Schizopelte californica</i> Th. Fr.	A, SCr, SR, SM, SCa, SCI, SN, SB

<i>Schizopelte crustosa</i> Ertz & Tehler	SCr, SR, SCa, SCI
<i>Schizopelte lumbricoides</i> (W.A. Weber) Ertz & Tehler	SCI
<i>Schizopelte parishii</i> (Hasse) Ertz & Tehler	A, SCr, SR, SM, SCa, SCI, SB
<i>Sclerophyton</i> Eschw.	SCr
<i>Sclerophyton elegans</i> Eschw.	SCa
<i>Scoliciosporum umbrinum</i> (Ach.) Arnold	SCr, SR
<i>Scytinium californicum</i> (Tuck.) Otálora, P.M. Jørg. & Wedin	SCr, SCI
<i>Scytinium lichenoides</i> (L.) Otálora, P.M. Jørg. & Wedin	SCI
<i>Scytinium palmatum</i> (Hudson) Gray	SCr
<i>Scytinium tenuissimum</i> (Dickson) Otálora, P.M. Jørg. & Wedin	SCI, SN
<i>Scytinium teretiusculum</i> (Wallr.) Otálora, P. M. Jørg. & Wedin	SCa
<i>Seirophora californica</i> (Sipman) Frödén	SR, SM, SN, SB
<i>Sigridea</i> Tehler	SCa
<i>Sigridea californica</i> (Tuck.) Tehler	A, SCr, SR, SCa, SCI, SN
<i>Siphula</i> Fr.	SCa
<i>Skyttea pertusariicola</i> Diederich & Etayo	SN
<i>Solenopsora</i> A. Massal.	SCr, SR, SM, SCa, SN
<i>Solenopsora candicans</i> (Dickson) J. Steiner	SCa
<i>Solenopsora cladonioides</i> B.D. Ryan & Timdal	SCr
<i>Solenopsora crenata</i> (Herre) Zahlbr.	SN, SB
<i>Sparria cerebriformis</i> (Egea & Torrente) Ertz & Tehler	SCr, SR, SCa, SCI, SB
<i>Sphaerellothecium breussii</i> K. Knudsen, Kocourk. & Etayo	SCa
<i>Sphinctrina leucopoda</i> Nyl.	SCr, SR, SCa
<i>Spilonema revertens</i> Nyl.	SCr
<i>Sporastatia</i> A. Massal.	SCa
<i>Squamulea squamosa</i> (B. de Lesd.) Arup, Sjøchting & Frödén	SCr, SCa, SCI, SB
<i>Staurothele areolata</i> (Ach.) Lettau	SR
<i>Staurothele drummondii</i> (Tuck.) Tuck.	SR
<i>Staurothele elenkinii</i> Oxner	SN
<i>Stereocaulon</i> Hoffm.	SCr
<i>Sticta</i> (Schreber) Ach.	SCa
<i>Sticta fuliginosa</i> (Hoffm.) Ach.	SR, SCI
<i>Stigmatidium</i> Trevisan	SCa
<i>Stigmatidium cerinae</i> Cl. Roux & Triebel	SN, SB
<i>Stigmatidium epistigmellum</i> (Nyl. ex Vouaux) Kocourk. & K. Knudsen	SR, SN, SB
<i>Stigmatidium epixanthum</i> Hafellner	SCa
<i>Stigmatidium rouxianum</i> Calat. & Triebel	SR
<i>Strigula stigmatella</i> (Ach.) R.C. Harris	SCr
<i>Synalissa</i> Fr.	SCr
<i>Syzygospora physciacearum</i> Diederich	A
<i>Teloschistes</i> Norman	SCr, SR, SM, SN
<i>Teloschistes chrysophthalmus</i> (L.) Th. Fr.	SCr, SR, SCa, SCI
<i>Teloschistes exilis</i> (Michaux) Vain.	SCr, SR, SCa
<i>Teloschistes flavicans</i> (Sw.) Norman	A, SCr, SR, SCa, SCI
<i>Tephromela</i> M. Choisy	SCr, SR, SM, SN

<i>Tephromela atra</i> (Hudson) Hafellner	A, SCr, SR, SM, SCa, SCI, SN
<i>Tephromela nashii</i> Kalb	SCr, SR, SM, SCa, SN
<i>Texosporium sancti-jacobi</i> (Tuck.) Nádv.	SCI
<i>Thalloidima sedifolium</i> (Scop.) Kistenich, Timdal, Bendiksby & S. Ekman	SM, SN
<i>Thamnotia papelillo</i> var. <i>papelillo</i> R. Sant	SCr
<i>Thelenella hassei</i> (Zahlbr.) H. Mayrh.	SCa
<i>Thelenella sychnogonoides</i> (Zahlbr.) R.C. Harris	SCa
<i>Thelenella weberi</i> H. Mayrh.	SN
<i>Thelomma</i> A. Massal.	SCr, SM, SCa, SN
<i>Thelomma brunneum</i> (W.A. Weber) M. Prieto and Wedin	SR, SCa
<i>Thelomma mammosum</i> (Hepp) A. Massal.	A, SCr, SR, SM, SCa, SCI
<i>Thelomma santessonii</i> Tibell	A, SCr, SR, SM, SCa, SCI
<i>Thelopsis isiacae</i> Stizenb.	SCr, SCa
<i>Thrombium epigaeum</i> (Pers.) Wallr.	SCa
<i>Tingiopsisidium sonomense</i> (Tuck.) Hafellner & T. Sprib.	SCr
<i>Toninia</i> A. Massal.	SCr, SR, SM
<i>Toninia massata</i> (Tuck.) Herre	SCr
<i>Toninia nashii</i> Timdal	SM
<i>Toninia pacifica</i> Timdal	SCr
<i>Toninia ruginosa</i> (Tuck.) Herre	SCr, SR, SCa, SCI, SN
<i>Toninia ruginosa</i> subsp. <i>pacifica</i> Timdal	SCr, SR, SCa, SCI, SN
<i>Toninia subdispersa</i> (Nyl. ex Hasse) K. Knudsen	SR, SM, SCa
<i>Toninia submexicana</i> B. de Lesd.	SCr
<i>Toninia tristis</i> (Th. Fr.) Th. Fr.	SCI
<i>Toniniopsis aromatica</i> (Sm.) Kistenich, Timdal, Bendiksby & S. Ekman	SCr, SR, SM, SN, SB
<i>Toniniopsis subincompta</i> (Nyl.) Kistenich, Timdal, Bendiksby & S. Ekman	SN
<i>Topelia</i> P. M. Jørg. & Vězda	SR
<i>Topelia californica</i> P.M. Jørg. & Vězda	SCr, SR
<i>Trapelia</i> M. Choisy	SCr
<i>Trapelia coarctata</i> (Sm.) Choisy	SCr, SR
<i>Trapelia glebulosa</i> (Sm.) J. R. Laundon	SCr, SR, SCa
<i>Trapelia placodioides</i> Coppins & P. James	A
<i>Trapeliopsis</i> Hertel & Gotth. Schneider	SCr, SM, SN
<i>Trapeliopsis bisorediata</i> McCune & Camacho	SCa, SN
<i>Trapeliopsis flexuosa</i> (Fr.) Coppins & P. James	SCr, SR, SM, SN
<i>Trapeliopsis glaucopholis</i> (Nyl. Ex Hasse) Printzen & McCune	A, SCr, SR, SCa, SCI
<i>Trapeliopsis granulosa</i> (Hoffm.) Lumbsch	SCa, SCI
<i>Trapeliopsis steppica</i> McCune & Camacho	SCr, SB
<i>Traponora varians</i> (Ach.) J. Kalb & Kalb	SCr, SCa
<i>Tremella dendrographae</i> Diederich & Tehler	SR
<i>Tremella nieblae</i> Diederich & van den Boom	SN
<i>Tremella parmiliarum</i> Diederich	A
<i>Trimmatothelopsis terricola</i> (H. Magn.) K. Knudsen & Lendemmer	SCr
<i>Tuckermannopsis Gyelnik</i>	SCr
<i>Tuckermannopsis chlorophylla</i> (Willd.) Hale	SCr, SR

<i>Tuckermannopsis ciliaris</i> (Ach.) Gyeln.	SCr
<i>Tuckermannopsis orbata</i> (Nyl.) M.J. Lai	SCr
<i>Tuckermannopsis platyphylla</i> (Tuck.) Gyeln.	SR
<i>Umbilicaria</i> Hoffm.	SCr, SCa
<i>Umbilicaria phaea</i> Tuck.	SCr, SR, SCa, SCI
Undetermined	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Usnea</i> Dill. ex Adanson	A, SCr, SR, SM, SCa
<i>Usnea barbata</i> (L.) F.H. Wigg.	SCr
<i>Usnea brasiliensis</i> (Zahlbr.) Motyka	SCr
<i>Usnea brattiae</i> P. Clerc	SCr, SCa, SCI
<i>Usnea californica</i> Herre	SCr
<i>Usnea cavernosa</i> Tuck.	SR
<i>Usnea ceratina</i> Ach.	SCr, SR, SCI, SN
<i>Usnea cornuta</i> Körb.	SCr, SR, SCa
<i>Usnea dasaea</i> Stirton	SCr, SR, SM, SCa, SCI
<i>Usnea esperantiana</i> Clerc	SCr, SR, SM, SCa, SCI, SN
<i>Usnea flavocardia</i> Räsänen	A, SCr, SR, SM, SCa
<i>Usnea fragilescens</i> Hav. ex Lynge	SCr, SR, SCa, SN
<i>Usnea fulvorea</i> (Räsänen) Räsänen	SCr, SCa
<i>Usnea glabrata</i> (Ach.) Vain.	SCr, SR, SCa
<i>Usnea hirta</i> (L.) Weber ex F.H. Wigg.	SCr
<i>Usnea mutabilis</i> Stirton	SCr, SR, SCa
<i>Usnea parvula</i> Motyka	SN
<i>Usnea perplexans</i> Stirt.	SCr, SR, SCa
<i>Usnea praetervisa</i> (Asah.) P. Clerc	SCr, SR
<i>Usnea rubicunda</i> Stirton	SCr, SR, SM, SCa, SCI, SN
<i>Usnea silesiaca</i> Motyka	SCr, SCa
<i>Usnea subcomosa</i> Vain.	SR, SCa
<i>Usnea subfloridana</i> Stirton	SCr, SR, SCa, SCI
<i>Usnea subgracilis</i> Vain.	SCr
<i>Usnea subscabrosa</i> Motyka	SCr
<i>Usnea wasmuthii</i> Räsänen	SCr, SR, SCa, SCI
<i>Vahliella californica</i> (Tuck.) P.M. Jørg.	SCr, SCa
<i>Vahliella labrata</i> (P.M. Jørg.) P.M. Jørg.	SCr
<i>Vahliella leucophaea</i> (Vahl) P.M. Jørg.	SCr, SCa, SCI, SB
<i>Varicellaria velata</i> (Turner) Schmitt & Lumbsch	SCr, SR
<i>Verrucaria</i> Schrader	A, SCr, SR, SM, SCa, SCI, SN, SB
<i>Verrucaria acrotella</i> Ach.	SCa
<i>Verrucaria adelminienii</i> Zschacke	SR
<i>Verrucaria alutacea</i> Wallr.	A
<i>Verrucaria aspecta</i> Breuss	SR
<i>Verrucaria asperula</i> Servft	SCa
<i>Verrucaria caerulea</i> DC.	A, SCr, SB
<i>Verrucaria calkinsiana</i> Servit	SR, SM, SN
<i>Verrucaria cetera</i> Breuss	SM

<i>Verrucaria dolosa</i> Hepp	SCa
<i>Verrucaria floerkeana</i> Dalla Torre & Sarnth.	SCr, SM, SCa
<i>Verrucaria furfuracea</i> (B. de Lesd.) Breuss	SR, SM, SCI
<i>Verrucaria fusca</i> Pers.	SR, SCa
<i>Verrucaria fuscoatroides</i> Servit	SN
<i>Verrucaria halizoa</i> Leighton	SCr, SCa
<i>Verrucaria hydrela</i> Ach.	SCa
<i>Verrucaria internigrescens</i> (Nyl.) Erichsen	SCa
<i>Verrucaria mimicrans</i> Servft	SM, SN
<i>Verrucaria muralis</i> Ach.	SR, SM, SCa, SN
<i>Verrucaria nigrescens</i> Pers.	SR, SCa
<i>Verrucaria polysticta</i> Borrer	SCr
<i>Verrucaria rupestris</i> Schrader	SCa
<i>Verrucaria subdivisa</i> Breuss	A, SCr, SR, SM, SCa, SCI, SB
<i>Verrucaria viridula</i> (Schrader) Ach.	SCr, SR, SM, SCa
<i>Wahlenbergiella mucosa</i> (Wahlenb.) Gueidan & Thüs	SCa
<i>Wahlenbergiella striatula</i> (Wahlenb.) Gueidan & Thüs	SCa
<i>Waynea californica</i> Moberg	SCr, SR, SCa
<i>Xanthocarpia crenulatella</i> (Nyl.) Frödén, Arup & Sjøchting	SR, SM, SN
<i>Xanthocarpia marmorata</i> (Bagl.) Frödén, Arup & Sjøchting	SR, SM, SN, SB
<i>Xanthomendoza fallax</i> (Hepp ex Arn.) Sjøchting, Kärnefelt & S.Y. Kondr.	SCr, SR, SM, SB
<i>Xanthomendoza fulva</i> (Hoffm.) Sjøchting, Kärnefelt & S.Y. Kondr.	SM
<i>Xanthomendoza mendozae</i> (Räsänen) S.Y. Kondr. & Kärnefelt	SCr, SB
<i>Xanthomendoza oregana</i> (Gyeln.) Sjøchting, Kärnefelt & S.Y. Kondr.	SCr, SR, SM, SCa, SN
<i>Xanthomendoza trachyphylla</i> (Tuck.) Frödén, Arup & Sjøchting	SCr, SCa
<i>Xanthomendoza ulophyllodes</i> (Räsänen) Sjøchting, Kärnefelt & S.Y. Kondr.	SCI
<i>Xanthoparmelia</i> (Vainio) Hale	SCr, SCI
<i>Xanthoparmelia angustiphylla</i> (Gyelnik) Hale	SCa
<i>Xanthoparmelia californica</i> Hale	SCr
<i>Xanthoparmelia coloradoensis</i> (Gyelnik) Hale	SCr, SCa, SCI
<i>Xanthoparmelia commonii</i> Elix & T.H. Nash	SR, SCa, SCI
<i>Xanthoparmelia conspersa</i> (Ehrh. ex Ach.) Hale	SCr, SCa
<i>Xanthoparmelia cumberlandia</i> (Gyelnik) Hale	SCr, SR, SCa, SCI
<i>Xanthoparmelia lineola</i> (E. C. Berry) Hale	SCr, SCa, SCI
<i>Xanthoparmelia loxodes</i> (Nyl.) O. Blanco, A. Crespo, Elix, D. Hawksw. & Lumbsch	SCa
<i>Xanthoparmelia mexicana</i> (Gyelnik) Hale	A, SCr, SR, SCa, SCI
<i>Xanthoparmelia novomexicana</i> (Gyelnik) Hale	SCr, SR
<i>Xanthoparmelia plittii</i> (Gyelnik) Hale	SCr, SCI
<i>Xanthoparmelia standaertii</i> (Gyeln.) Hale	SCr, SR, SCI
<i>Xanthoparmelia stenophylla</i> (Ach.) Ahti & D. Hawksw.	SCI
<i>Xanthoparmelia subamplexuloides</i> Hale	SCr
<i>Xanthoparmelia subhosseana</i> (Essl.) O. Blanco, A. Crespo, Elix, D. Hawksw. & Lumbsch	SCr
<i>Xanthoparmelia subplittii</i> Hale	SCa
<i>Xanthoparmelia subramigera</i> (Gyelnik) Hale	A, SCr
<i>Xanthoparmelia tinctina</i> (Maheu & A. Gillet) Hale	SCa

Xanthoparmelia verruculifera (Nyl.) O. Blanco, A. Crespo, Elix, D. Hawksw. & Lumbsch
Xanthoria (Fr.) Th. Fr.
Xanthoria parietina (L.) Th. Fr.

SCr, SCa, SCI
SCr, SR, SM, SCa, SN
SCa, SCI, SB