

BEIHEFTE ZUR
NOVA HEDWIGIA

HEFT 17

CATALOGUE
OF THE
LICHENS FROM INDIA
NEPAL, PAKISTAN, AND CEYLON

BY

DHARANI DHAR AWASTHI
(LUCKNOW)



WEINHEIM
VERLAG VON J. CRAMER
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When this catalogue was in the page-proof stage in the press, a work entitled "Lichens of India" by Ajay Singh was published as a bulletin by the National Botanic Gardens, Lucknow. This bulletin apparently appears to have been based largely on an unpublished part of my Ph. D. thesis lodged at the Lucknow University Library, and to have been consulted during my stay in the U.S.A. (1960-63) without my knowledge. I congratulate this author, and the authorities of the National Botanic Gardens, Lucknow, for their endeavour to perpetuate the errors and shortcomings in the manuscript of my said thesis and also considerably add their own to make the work really COMPREHENSIVE. The lichenologists all over the world will find plenty of material to browse and enjoy!

D. D. AWASTHI

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Introduction

This catalogue comprises the taxa of the lichens reported from the political boundaries of India (continental and insular), Nepal, Pakistan and Ceylon. The consideration together of these territories falling within a single phytogeographical unit, has been taken up with a view to give the research workers in any of these countries an opportunity to assess their floristic component with reference to the neighbouring country. The catalogue is an out-come of compilation for a number of years in India (major part of this, comprising 702 species excluding lichens from Ceylon was included as an appendix in the Ph.D. thesis submitted by the author at the University of Lucknow in 1960), and subsequently completed in its present form during the author's stay (1960-63) at the University of Colorado, U.S.A. This long period for the compilation was necessitated on account of the much dispersed literature on Indian lichens in the publications of the 19th and early 20th century several of which were not available in India. Under the schematic representation followed, the taxa comprising the catalogue number 1310 species belonging to 158 genera and 50 families. The thus consolidation of the taxa, it is hoped, will form a firm foundation on which future taxonomic investigations on the lichens of this region can be satisfactorily carried out.

The taxa that have been described on the material collected from this subcontinent have been marginally marked by an asterisk (*) in the catalogue. A large number of these taxa are known from their original collections only. The type specimens are located in the various European herbaria and thus not within an easy reach to an Indian worker. Even the duplicates of the earlier collections are either altogether absent or insignificantly represented in the Indian herbaria. This has made the comparison of fresh collections a formidable task. Tropical lichens in general are in great need of revision on world-wide basis and there is possibility that many taxa have been described more than once not only from other parts of the world but even from India. Such tangles can be resolved only after a thorough examination of the type specimens preserved in numerous herbaria.

The genera, the species within the genus, are arranged alphabetically for easy reference. The name of the family has been noted within parenthesis against the name of the genus according to the system of ZAHLBRUCKNER (1926) excepting those for which a subsequent authority has been quoted. Catalogus Lichenum Universalis by ZAHLBRUCKNER (1922-40), abbreviated to CATAL. for brevity in the catalogue, has been followed closely for nomenclatural purposes except in few cases. The latter mostly pertain to either revisions or the monographs published subsequently. Each taxon described on the material from the subcontinent has been provided with complete citations of the references of the original author (and the author of a transfer), the name of the collector, the area of collection, and the location of the type specimen (s). For all other taxa, reference is made to the CATAL. to conserve space. The type specimens that have been seen by the author have been marked by the sign “!” following the abbreviation for the name of the herbarium. Under whichever name (the correct name, the basionym or the synonym) a taxon has been reported by an author has been cited as such along with the locality. Monographic works, such as by MOTYKA (1936-38), SANTESSON (1952), RUNEMARK (1956), and KUROKAWA (1962) have been followed in toto. Few cross references have been given to avoid confusion. Few desirable new combinations have also been effected. Personal opinion has been kept at a minimum unless they are warranted for clarification. Every attempt has been made to make the catalogue as comprehensive as possible within its limited scope. However, errors of omission or commission that may have crept in will be welcomed by the author, if brought to his notice.

Acknowledgements

I am especially grateful to Dr. S. N. DAS GUPTA for the encouragement provided at the early stages of my work on lichens. My sincere thanks are due to Dr. HUGO G. RODECK, and Prof. WILLIAM A. WEBER of the University of Colorado for the facilities, help, and numerous courtesies extended to me during my stay there. To Prof. O. A. HØEG, Oslo, I am indebted for readily making available the photostat copies of the rare literature. I also take this opportunity to express my thanks to the National Science Foundation for the grant which provided for my stay at the University of Colorado during 1962-63, and also enabled me to procure rare and costly literature on lichenology.

Historical Review

There is mention of *Lichen fuciformis* L. from India in Species Plantarum by LINNAEUS (1753, p. 1147); but the true *Lichen fuciformis* [= *Roccella fuciformis* (L.) DC.] does not occur in India and hence

the Indian specimen cited by Linnaeus should be *Roccella montagnei* BÉL. ERIC ACHARIUS, the father of lichenology, described four species, namely *Alectoria arabum* ACH., *Collema rottneli* ACH., *Isidium bassiae* ACH., and *Porina subcutanea* ACH. from India in his classical works *Lichenographia Universalis* (1810) and *Synopsis Methodica Lichenum* (1814). About a decade later, E. FRIES (1825) described five new species: *Parmelia cirrhata* FR., *P. confluens* FR., *Trypethelium pruinosum* FR., *T. superbum* FR. and *Usnea dichotoma* FR. from "India Orientalis." Collections of lichens made from Pondicherry and Coromandel coast were described by BÉLANGER (1838), and comprised 40 taxa. The six new species described were: *Gyalecta tropica* BÉL., *Parmelia coccodes* BÉL., *Ramalina berterii* BÉL., *Opegrapha stroblocarpa* BÉL., *Roccella montagnei* BÉL., and *Thelotrema crateriforme* BÉL. At almost the same period PERROTTET's collections of lichens from Nilgiri mountains (often mis-spelt Neelgherries or Nilgherries by European authors) were described by MONTAGNE (1842) which comprised 37 species, two of which were new to science.

Some of the conspicuous foliose and fruticose lichens collected by N. WALLICH from eastern India and Nepal were described by TAYLOR (1847), and numbered 12 new species. In the same publication, TAYLOR also included another five new species from Madras and Ceylon the specimens of which were collected by WIGHT. Out of the 17 taxa described, *Alectoria virens* TAYL., *Parmelia cristifera* TAYL., *P. cylindrophora* TAYL., *P. diademata* TAYL., *P. nepalensis* TAYL., *Sticta wallichiana* TAYL., and *Usnea pectinata* TAYL. are noteworthy and now known to be widely distributed. The lichen collections of R. STRACHEY and J.E. WINTERBOTTOM from Kumaon, N.W. Himalayas during the years 1847-48 were described by BABINGTON (1852). Out of the 44 taxa reported five species were new to science. The lichens collected by J.D. HOOKER and T. THOMSON from eastern Himalayas and Nepal during 1846-48, were examined, described and incorporated in *Synopsis Methodica Lichenum* by W. NYLANDER (1860, and 1863). Majority of the species reported were foliose and fruticose in nature. Out of a total of 80 taxa reported, almost half belonging to the genera *Alectoria*, *Cetraria*, *Leptogium*, *Parmelia*, *Stereocaulon*, *Umbilicaria* and *Usnea* were new. This was an important contribution to considerably enhance the knowledge of the lichens from the Himalayan region. A few years later, outstanding collections from the tropical parts of the subcontinent were made by KURZ from the Botanic Garden, Calcutta; from Bengal and 24 paragannas; and from the Andamans. All of these were described by NYLANDER (1867, 1869, and 1873 respectively), and comprised 53 species (19 new) for Calcutta, 22 species (11 new) for

Bengal, and 63 species (46 new) for the Andamans. These collections had a large number of new species and a conspicuously high percentage of the crustose Pyrenocarpeae and Graphidineae. The genera *Arthonia*, *Graphis*, *Lecanora*, *Lecidea*, *Opegrapha*, *Platygrapha*, *Thelotrema*, *Trypethelium* and *Verrucaria* were richly represented. A monotypic genus, *Pyrgidium* (*P. bengaliense* KREMPPELH.), of the family Caliciaceae was also created. My attempts to re-collect it in the type locality (Botanic Garden, Calcutta) and on the same habitat (bark of *Ravenela madagascariensis*) have been unsuccessful, and it is very likely that due to the changed environmental conditions of the garden within the last one hundred years, the species is lost.

At almost a simultaneous period, G. H. K. THWAITES, Director of the Royal Botanic Garden, Peradeniya, Ceylon made extensive collections of the lichens from that island. These were described by LEIGHTON (1869), comprised 196 species of which 44 were new, and there was a new genus *Asteristion* LEIGHT. Almost three decades later, NYLANDER (1900) described 159 species of lichens from Ceylon that were collected by ALMQUIST in 1879 in the Vega Expedition. There were 48 new species in NYLANDER's publication. In both the contributions on lichens from Ceylon, the crustose forms predominated. The members of the Pyrenocarpeae and Graphidineae constitute about one third of the total lichen flora of the island.

Through his various publications, the Scottish lichenologist J. STIRTON (1876, 1879, 1881, 1882, 1898a, and 1898b) added 98 new taxa to the lichen flora of India. Specimens of these were mostly collected by G. WATT, A. WATT, KING and THOMSON from the different parts of India (Assam, Darjeeling, Kumaon, and Nilgiri) and Ceylon. Contributions of major interest pertained to the genus *Usnea* and to Pyrenocarpeae and Graphidineae. Another major contribution to the lichen flora of the subcontinent was through the revisions or new descriptions of about 60 species by JEAN MÜLLER Argoviensis (=MÜLL. ARG.) (1874–91) in Lichenologische Beiträge. In addition, MÜLL. ARG. (1892) also described the lichens from Manipur collected by G. WATT during the boundary demarcation period. This collection comprised 101 taxa of which 29 were new species and one new genus *Enterodictyon* MÜLL. ARG. A small collection by STEVENS from Sikkim was enumerated again by MÜLL. ARG. (1895) and comprised 12 species. Majority of the new species in the contributions by MÜLL. ARG. belonged to the genera *Arthothelium*, *Graphis*, *Graphina*, *Lecanora*, *Lecidea*, *Pertusaria*, *Phaeographina* and *Trypethelium*.

The exotic (from European view-point) lichens determined by NYLANDER and preserved in the herbarium of Paris Museum were

enumerated by A. HUE (1892), where mention of 273 taxa from India and Ceylon is made. In the more elaborate work on the Extra-European lichen, HUE (1898, 1899, 1900, 1901) recorded 84 taxa from India giving full descriptions along modern lines. Three new species of *Parmelia* from Nilgiri were also described. In another publication, HUE (1900b) enumerated 37 species of lichens collected by GRAY from Coonoor in Nilgiri Hills. Lichens from the different parts of the country and belonging to the herbarium of E. LEVIER were enumerated by JATTA (1902, and 1905) and comprised 142 taxa. A few years later, JATTA (1911) enumerated 46 taxa of lichens collected by LUTHI from Malabar, and by LONG and GOLLAN from the Himalayas. The same year, 5 species were recorded from Ceylon by ZAHLBRUCKNER (1911). 31 taxa of lichens collected by SOMERVELLE from the high altitudes in the region of the Everest during the Everest Expedition in 1924 were reported by PAULSON (1925). An important contribution by A. L. SMITH (1926) recorded the creation of a new family *Cryptotheciaceae* – a family of primitive lichens, comprising the genera *Cryptothecia* STIRT. and *Stirtonia* A. L. SMITH. Interestingly enough majority of the species belonging to these two genera are based on the material collected from India. In the late twenties, lichens from the Himalayan region were collected by KASHYUP, CHAUDHURI and CHOPRA. Their collections were determined by A. L. SMITH (1931) and comprised 76 taxa. Based on a part of the same collection, ZAHLBRUCKNER (1931) established a new genus *Chaudhuria* with a single species *C. indica* ZAHLBR. Apparently based on these determinations, CHOPRA (1934) published a treatment on the lichens from the Himalayas, which comprised 75 species.

Studies on the Indian lichens were resumed in the late forties of the present century through the collections of AWASTHI. Some of his collections resulted into 43 new taxa that were described by RÄSÄNEN (1950, and 1952). A collection by FOREAU from Palni hills was enumerated with short notes by MOREAU (1952) and comprised 62 taxa. The lichens from Nepal Himalayas were collected by NAKAO in 1952–53 and described by ASAHIKA (1955). In his first two publications, AWASTHI (1957a, 1957b) described 7 new species from the Himalayan region and one from Kodaikanal. A third note of the same year (1957c) recorded certain species of *Usnea* for the first time from India. Subsequently, monographic treatment of the Indian species of *Physcia* and *Anaptychia* was undertaken by AWASTHI (1960a, 1960b). Further advance was achieved by the enumeration of a large number of lichen taxa chiefly from the Himalayan region by AWASTHI (1960c, 1961, and 1963). Another recent important contribution to the lichen flora

of the subcontinent was made by POELT (1961) by enumerating 73 taxa of lichens from the region of N.W. Karakorum. This is the first comprehensive record of the lichens occurring in the dry temperate regions of the Himalayas. In addition, to the above mentioned references several others list minor additions to the lichen flora of the sub-continent, and the following which I have been able to examine are by LINDSAY (1866), BITTER (1901), BOULY DE LESDAIN (1910), DU RIETZ (1926), QURAISHI (1928), MAGNUSSON (1934), ABBAYES (1939, 1958a, 1958b), SANTESSON (1941), RÄSÄNEN (1949, 1952b), BISWAS (1956), BHATIA (1957), AHTI (1961a, 1961b), and CULBERSON (1962).

Though a large number of Indian lichens have been chemically investigated by Seshadri and his numerous students at Delhi University, the names of only those taxa that are of taxonomic interest have been incorporated in the catalogue.

Monographic treatments of only a few genera on world-wide basis have so far been published. In the monograph on the genus *Cladonia* by VAINIO (1887, 1894, and 1897), 19 species are reported from the temperate regions of India. MAGNUSSON (1929) reported a single species of the genus *Acarospora* from India. In the monographic treatment of the genus *Usnea*, MOTYKA (1936–38) reported 48 species, of which *Usnea ceratina* Ach., *U. dichotoma* Fr., *U. flexilis* STIRT., *U. hookeri* Mot., *U. pectinata* TAYL., *U. rubicunda* STIRT., *U. stirtoniana* ZAHLBR., *U. sordida* Mot., *U. subsordida* STIRT., and *U. thomsonii* STIRT. are widely distributed in the Himalayas and the Nilgiris. In the monumental work on the foliicolous lichens by SANTESSON (1952), 22 species of wide distribution in the other tropical parts of the world are reported from India and Ceylon. In the most recent monograph on the genus *Anaptychia*, KUROKAWA (1962) has reported 24 species from India.

Location of the Specimens

It is very difficult to almost impossible to pin-point the location of all the specimens of lichens so far collected and distributed. However, the location of the specimens of the principal collectors of which information is available has been noted below. BABINGTON's herbarium is reported to have been transferred to British Museum from Cambridge. RÄSÄNEN's herbarium is now incorporated in the University Botanical Museum, Helsinki. Original herbarium of STIRTON is preserved at the Natural History Museum, Glasgow, while duplicates of the majority of the specimens are also present in the British Museum, London. KURZ's collections seem to be widely distributed and I have

seen better samples in other herbaria than the original collection of NYLANDER at Helsinki. The collection of HOOKER and THOMSON is also widely distributed. The abbreviations used for the herbaria below are in accordance to the Index Herbariorum by LANJOUW and STAFLEU (1959). The private herbarium of the author has been abbreviated to "Aw."

Table

Collector(s)	Described by	Location of the types or isotypes
PERROTET	MONTAGNE (1842)	PC
WALLICH	TAYLOR (1847)	FH, BM, K
STRACHEY and WINTERBOTTOM	BABINGTON (1852)	BM, DD
HOOKER and THOMSON	NYLANDER (1860)	H, K, PC, BM
KURZ	NYLANDER (1867, 1869, and 1873)	H, BM, PC, M, CAL
THWAITES	LEIGHTON (1869)	BM
G. WATT, A. WATT, and THOMSON	STIRTON (1876, 1879, 1881)	GLAM, BM
G. WATT	MÜLL. ARG. (1892)	K, G
ALMQUIST	NYLANDER (1900)	S, H
GRAY	HUE (1900b)	PC
LEVIER	JATTA (1902, 1905)	NAP
LUTHI and GOLLAN	JATTA (1911)	NAP
KASHYUP, CHAUDHURI, and CHOPRA	A. L. SMITH (1931)	BM, W
AWASTHI	RÄSÄNEN (1950, 1952)	H, Aw
LOBBICHLER and SCHNEIDER	POELT (1961)	M
AWASTHI	AWASTHI (1957, 1960)	Aw

Phytogeography, Distribution and Affinities

The climate of India is essentially monsoon tropical; the four seasons recognized by the Indian Meteorological department are (1) the cold weather season from December to March, (2) the hot weather season from April to May, (3) the rainy season from June to September, and (4) the season of the retreating south-west monsoon from October to November. Each of the seasons is characteristic in possessing an easily recognisable seasonal rhythm of its own, which has a more or less definite duration. The major part of the rain, an essential factor for vegetation, falls throughout India (except the eastern coastal region of Peninsular India) during the rainy season due to south-west monsoon. The coastal districts of Orissa, Andhra Pradesh and Madras get their maximum rain during October and November due to retreating monsoon. As a result of the south-west monsoon the maximum

amount of rainfall occurs in the Himalayan region. The eastern Himalayas receive the greatest amount, and its intensity gradually decreases westwards. The western Ghats are in the next category of lower rainfall, the intensity of which diminishes southwards. This is followed by the eastern Ghats where too, the decrease is southwards. The peninsular plateau is comparatively drier from the adjoining similar latitudes, the dryness of which increases southwards. The Indo-Gangetic Plain though fairly wet in the eastern India, gets drier westwards, ultimately resulting into the desert regions of Rajasthan.

As a consequence of the high percentage of humidity coupled with high average mean temperature, the eastern parts of India and the lower elevations of the Ghats support broad-leaf evergreen and deciduous forests. The lower elevations in the Himalayan region (under 4,000 ft.) have broad-leaf deciduous forests of a subtropical nature. Elevations of over 5,000 ft. in the Himalayas invariably have broad-leaf deciduous and needle-leaf evergreen forests, which are gradually replaced above 11,000 ft. by an alpine vegetation of small evergreen needle-leaf shrubs, deciduous shrubs and/or perennial or annual herbs. The elevations of over 5,000 ft. in the western Ghats have either broad-leaf evergreen forests or rarely local coniferous forests. In the mid-eastern parts of India (Bihar and Orissa) the forests are chiefly of broad-leaf deciduous trees or evergreen shrubs. Part of the Gangetic plain and the peninsular plateau support broad-leaf deciduous forests or subtropical deciduous forests. In western India, where rainfall is very meagre and the xerophytic conditions prevail, the vegetation is sparse consisting of scattered broad-leaf deciduous shrubs or small trees. A study of the lichen flora from all these areas reveals that there exists a direct correlation of the above mentioned vegetational types with the floristic lichen types. In the broad-leaf evergreen forests, only places exposed to sunlight and wind, such as the fringes of the forests or borders of the artificial or natural openings in the forests form suitable habitats for the growth of lichens. The lichen types that predominate in such areas are the corticolous Pyrenocarpeae and Graphidineae. In the shady places within the forests, the shade loving Collemaceae and Peltigeraceae occur in modest number. Folicolous lichens are likely to occur in profusion in such localities, but in view of their limited collections from the subcontinent it is premature to express a definite opinion.

Optimum conditions for a profuse growth of lichens exist in the temperate and alpine regions of the Himalayas, and in the higher elevations of the Western Ghats. Most of the foliose and fruticose lichens reported have been collected from these areas. In the alpine

region of the Himalayas, the lichens often form as felt-like growth on the ground in shade or in open, and in addition are conspicuously present on the rocks and boulders. In the southern part of the peninsular region, the forests instead of being in continuous stretches, are restricted to small communities located in the depressions or sheltered areas of the landscape. These groups of forests, locally called *Shola* are favourable habitats for a good lichen vegetation. Foliose and fruticose lichens are found to grow luxuriantly in these small areas, where almost all the trees are equally and sufficiently exposed to rain, sunlight and wind currents. Moderate number of corticolous crustose lichens and few foliose forms occur in the broad-leaf deciduous forests of mid-eastern India, the peninsular plateau, and other subtropical regions where rainfall is not a limiting factor. A considerable area of the Indo-Gangetic Plain is devoid of lichen flora due to severe inhibitory factors of insufficient rainfall, high temperature, long dry seasons, and over and above them a dense human population and continued cultivation for ages past.

An interesting phytogeographic area exists in the insular Ceylon and the Andamans. A large number of species of lichens belonging to Pyrenocarpeae and Graphidineae, which are corticolous in nature are dominant part of the lichen flora. They are in addition endemic in nature, which however is a well known feature of the insular areas.

Until the lichen flora of the subcontinent is fully explored, it is premature to discuss at length the distributional patterns within the country and the affinities outside. However, even at this stage of our knowledge, the distribution and the affinities of the lichen flora in context with the rest of the world can be broadly surmised. Taking the Himalayan region first, we notice a high degree of correlation between the affinities of the lichen flora and the higher plants. In short, the lichens from the eastern Himalayas show close affinity with the Sino-Japanese and South-East-Asian element of the flora. This is exhibited by the occurrence of species namely *Alectoria asiatica* DU RIETZ, *Cetraria asahinae* SATO, *C. everniella* (NYL.) KREMPELH., *C. straminea* VAIN., *C. wallichiana* (TAYL.) MÜLL. ARG., *Parmelia homogenes* NYL., *P. marmoriza* NYL., *P. ruderata* VAIN., *P. platyphyllina* NYL., *P. subcrinita* NYL., *P. zollingeri* HEPP, *Nephromopsis stracheyi* (BAB.) MÜLL. ARG., *Ramalina sinensis* JATTA, *Sticta henryana* MÜLL. ARG., *S. platyphylloides* NYL., *Umbilicaria yunnana* (NYL.) HUE, and *Usnea asahinae* MOT. The lichens from the western Himalayas show a closer affinity with the European element. This is indicated by the species: *Cetraria pinastri* (SCOP.) RÖHL., *Dermatocarpon moulinii* (MONT.) ZAHLBR., *Lobaria discolor* (BORY) HUE, *Nephroma expallidum*

NYL., *N. helveticum* ACH., *Physcia caesica* (HOFFM.) HAMPE, *P. muscigena* (ACH.) NYL., *P. pulverulenta* (SCHREB.) HAMPE, *P. stellaris* (L.) NYL., *Parmelia stenophylla* (ACH.) DU RIETZ, *P. olivacea* (L.) NYL., *Solorina crocea* (L.) ACH., *Toninia coeruleonigricans* (LIGHTF.) TH. FR., *Usnea ceratina* ACH., and *Xanthoria parietina* (L.) BELTRAM. In addition a smaller Himalayan element which is endemic in nature is exemplified by *Gymnoderma coccocarpum* NYL., *Cetraria ambigua* BAB., *C. leucostigma* LÉV., *C. thomsonii* (STIRT.) MÜLL. ARG., *Physcia melanotricha* AWASTHI, *Ramalina subcomplanata* NYL., *Stereocaulon botryophorum* MÜLL. ARG., *S. foliolosum* NYL., *S. macrocephalum* MÜLL. ARG., *S. piluliferum* TH. FR., *Usnea hookeri* MOT., *U. cladonioides* (NYL.) DU RIETZ, *U. pectinata* TAYL., *U. stirtoniana* ZAHLBR., and *U. thomsonii* STIRT. A fourth type includes species which are almost cosmopolitan, circum-polar, or pantropical. Examples of these are: *Alectoria jubata* (L.) ACH., *Cetraria islandica* (L.) ACH., *C. nivalis* (L.) ACH., *Cladonia rangiferina* (L.) WEB., *Lecanora rubina* (VILL.) ACH., *Rinodina mniarea* (ACH.) KÖRB., *Siphula ceratites* (WAHLENB.) FR., and *Thamnolia vermicularis* (L.) SCHÄER. as the circum-polar element; and *Baecomyces roseus* PERS., *Caloplaca elegans* (LINK.) TH. FR., *Cladonia pyxidata* (L.) FR., *Dermatocarpon miniatum* (L.) MANN., *Lobaria pulmonaria* (L.) ACH., *Parmelia cirrhata* FR., *P. conspersa* ACH., *P. tinctorum* DESPR., *Peltigera canina* ACH., *P. horizontalis* (HUDS.) BAUMG., and *Physcia setosa* (ACH.) NYL., representing an element cosmopolitan in distribution.

An interesting feature is exhibited by the lichen flora of the remote sheltered parts in Western Himalayas where rainfall is meagre and altitudes high so that temperate xerophytic conditions prevail. Though insufficiently known so far, the lichens of the area show an affinity with the lichens occurring in the arid regions of Central China, drier parts of western Asia, arid regions of Rocky mountains in North America, and Peru in South America. The species which reflect this disjunct distribution are *Acarospora strigata* (NYL.) JATTA, *A. bullata* ANZI, *Glypholecia scabra* (PERS.) MÜLL. ARG., *Lecanora maculata* H. MAGN., *L. peltata* (RAM.) STEUD., *Thyrea pulvinata* (SCHAER.) MASS., and *Peccania hoegii* AWASTHI (this Indian taxon is closely allied to *P. coralloides* MASS. occurring in the other areas).

The lichens occurring in the foot-hills of the Himalayas, and in the subtropical parts of India, usually belong to the cosmopolitan element and thus exhibit affinities with the lichens of tropical America and South-East Asia. Examples to support this are: *Anaptychia diademata* (TAYL.) KUROKAWA, *Coccocarpia pellita* (ACH.) MÜLL. ARG., *Nephroma tropicum* (MÜLL. ARG.) ZAHLBR., *Parmelia reticulata* TAYL., *P. sub-*

laevigata NYL., *Phyllopsora parvifolia* (PERS.) MÜLL. ARG., *Physcia aegialita* (Ach.) NYL., *P. picta* (Sw.) NYL., *Pyxine berteriana* (FÉE) IMSHAUG, *P. cocoës* (Sw.) NYL., *P. sorediata* (Ach.) MONT., *Pseudocyphellaria aurata* (Ach.) VAIN., *P. argyracea* (BORY) VAIN., *Roccella montagnei* BÉL., *Sticta fuliginosa* (DICKS.) Ach., and *Teloschistes flavicans* (Sw.) NORM.

Most of the examples given above are amongst the foliose and fruticose forms on account of their exhaustive studies in all the areas. The crustose element of the flora is either cosmopolitan in distribution or apparently endemic due to insufficient explorations of them. SANTESSON's monograph on the foliicolous lichens goes to prove this fact. The insular areas are well known to possess a high degree of endemity in all their biological populations, and lichens do not seem to form an exception. On account of their peculiar biological nature, lichens are more plastic than any other group of plants. With the increase of our knowledge about their responses under diverse ecological and climatic conditions, it is very likely that a large number of the lichen taxa may prove to be minor modifications of the more widely occurring species and thereby get merged with them. It thus necessitates to view the taxonomy of lichens in perspective of the whole world rather than small geographic areas.

Catalogue

ACAROSPORA Mass. (Acarosporaceae)

Acarospora bullata Anzi – CATAL. 5: 55. 1928 – Magnusson (1929, p. 359); Awasthi (1963, p. 32) N.W. Himalaya.

Acarospora chlorophana (Wahlenb.) Mass.; Magnusson (1929, p. 103); Paulson (1925, p. 192) Mt. Everest – nomencl. syn. of *Acarospora flava* (Bell.) Trevis. in CATAL. 5: 104. 1928.

* *Acarospora indica* (Müll. Arg.) Hue, Nouv. Arch. Mus. V, 1: 162. 1909 (not seen) – CATAL. 5: 76. 1928; Magnusson (1929, p. 373) Manipur, a doubtful species of *Acarospora*; – *Placodium indicum* Müll. Arg. Journ. Linn. Soc. Bot. 29: 219. 1892. Manipur, leg. G. Watt. Type in K.

Acarospora schleicheri (Ach.) Mass. – CATAL. 5: 87. 1928; Magnusson (1929, p. 77) – Poelt (1961, p. 88) N.W. Karakorum.

Acarospora smaragdula (Wahlenb.) Mass. – CATAL. 5: 91. 1928; Magnusson (1929, p. 139) – Paulson (1925, p. 192) Mt. Everest.

Acarospora strigata (Nyl.) Jatta – CATAL. 5: 96. 1928; Magnusson (1929, p. 207) – Awasthi (1963, p. 32) N.W. Himalaya.

- Acarospora superans* H. Magn. – Poelt (1961, p. 88) N. W. Karakorum.
- Acarospora tominiana* H. Magn. – CATAL. 8: 517. 1932 – Poelt (1961, p. 88) N. W. Karakorum.
- Acarospora veronensis* Mass. – CATAL. 5: 100. 1928; Magnusson (1929, p. 191) – Paulson (1925, p. 192) Mt. Everest.

ACROSCYPHUS Lév. (Sphaerophoraceae)

- Acroschyphus sphaerophoroides* Lév. – CATAL. 1: 681. 1922 – Nylander (1860, p. 173) Himalaya; Hue (1892, p. 34) Himalaya.

ALECTORIA Ach. (Usneaceae)

- Alectoria* cfr. *acanthodes* Hue – Asahina (1955, p. 63) Nepal.
- Alectoria asiatica* DuRietz, Arkiv for Bot. 20 A (11): 18. 1926. Himalaya – CATAL. 6: 376. 1930.
- Alectoria bicolor* (Ehrh.) Nyl. – CATAL. 6: 376. 1930 – Nylander (1860, p. 279) Himalayas.
- Alectoria jubata* (L.) Ach. – CATAL. 6: 389. 1930 – Nylander (1860, p. 280) Himalayas; Hue (1892, p. 69) Himalaya.
- Alectoria jubata* var. *prolixa* Ach. – CATAL. 6: 394. 1930 – Hue (1892, p. 86) Himalayas.
- Alectoria ochroleuca* (Hoffm.) Mass. – CATAL. 6: 400. 1930 – Nylander (1860, p. 281) Himalayas; Hue (1892, p. 69) Himalayas; DuRietz (1926, p. 23) Himalayas.
- **Alectoria spinosa* Tayl. Hook. London Journ. Bot. 6: 188. 1847. Nepal, leg. Wallich. Type in FH! – nomencl. syn. of *Alectoria sulcata* (Lév.) Nyl. in CATAL. 6: 397. 1930.
- **Alectoria sulcata* (Lév.) Nyl. Mem. Soc. Imp. Sci. Nat. Cherbourg 5: 98. 1857 (not seen); Nylander (1860, p. 281) Nepal, Himalayas; Hue (1892, p. 67) Himalayas; Hue (1899, p. 91) India; DuRietz (1926, p. 19) Himalayas – CATAL. 6: 397. 1930 – Awasthi (1960, p. 176) Nepal; Awasthi (1961, p. 38) NEFA; – *Cornicularia sulcata* Lév. in Jacq. Voyage l'Inde, Bot. 1841 – 44, p. 179 (not seen).
- **Alectoria virens* Tayl. Hook. London Journ. Bot. 6: 188. 1847. Sheopore, leg. Wallich. Type in FH!; Nylander (1860, p. 283) Himalaya; Müll. Arg. (1891, p. 373) Himalaya; Hue (1892, p. 70) Himalaya; Hue (1899, p. 96) Nepal, Himalaya; DuRietz (1926, p. 19) Himalaya – CATAL. 6: 398. 1930 – Asahina (1955, p. 62) Nepal; Awasthi (1961, p. 37) NEFA.

ANAPTYCHIA Körb. (Physciaceae)

- Anaptychia aquila* (Ach.) Mass. – nomencl. syn. of *Anaptychia fusca* (Huds.) Vain. in CATAL. 7: 720. 1931 and in Kurokawa (1962, p. 16); – *Physcia aquila* (Ach.), Hue (1892, p. 112) Himalaya.
- * *Anaptychia albidiflava* Kurokawa, Beihefte "Nova Hedwigia," Hefte 6: 42. 1962. Darjeeling, E. Himalaya, leg. Awasthi. Type in Aw! *Anaptychia angustiloba* (Müll. Arg.) Kurokawa (1962, p. 39) Nepal; – *Physcia speciosa* v. *angustiloba* Müll. Arg., Jatta (1905, p. 177) N.W. Himalaya; – *Anaptychia speciosa* v. *angustiloba* (Müll. Arg.) Zahlbr. – CATAL. 7: 741. 1931.
- * *Anaptychia awasthii* Kurokawa, Beihefte zur "Nova Hedwigia," Hefte 6: 88. 1962. Tiger hill, Darjeeling, Himalayas, leg. Awasthi. Type in Aw!.
- * *Anaptychia barbifera* (Nyl.) Trevis. var. *setigera* (Stirt.) Zahlbr. Cat. Lich. Univ. 7: 730. 1931; – *Physcia barbifera* v. *setigera* Stirt. Proc. Phil. Soc. Glasgow 10: 157. 1876. Kumaon, Himalaya, leg.? Type in GLAM – not cited in Kurokawa (1962).
- Anaptychia ciliaris* (L.) Körb. – CATAL. 7: 707. 1931 – Awasthi (1960b, p. 433) Kashmir; – *Physcia ciliaris* (L.) DC., Jatta (1905, p. 176) N.W. Himalaya – taxon not recorded from Himalaya in Kurokawa (1962).
- Anaptychia comosa* (Eschw.) Mass. – CATAL. 7: 717. 1931 – Jatta (1911, p. 311) Sikkim; Awasthi (1960b, p. 434) Himalayas; Kurokawa (1962, p. 103) Himalaya; – *Physcia comosa* (Eschw.), Nylander (1900, p. 9) Ceylon.
- Anaptychia corallophora* (Tayl.) Vain. – CATAL. 7: 718. 1931 – Smith (1931, p. 132) Himalaya; Chopra (1934, p. 80) Himalaya; Awasthi (1960b, p. 417) Himalayas and S. India; Kurokawa (1962, p. 62) – taxon not reported from Indian subcontinent. The specimens cited by Awasthi (l.c.) annotated to *Anaptychia isidiophora* (Nyl.) Vain. by Kurokawa.
- * *Anaptychia coronata* Kurokawa, Beihefte zur "Nova Hedwigia," Hefte 6: 68. 1962. Darjeeling, E. Himalaya, leg. Awasthi. Type in Aw.
- Anaptychia dendritica* (Pers.) Vain. – CATAL. 7: 719. 1931 – Chopra (1934, p. 80) Himalayas; – *Anaptychia dendritica* var. *dendritica*, Kurokawa (1962, p. 54) Himalayas.
- Anaptychia detonsa* (Fr.) Jatta – nomencl. syn. of *Anaptychia palmulata* (Michx) Vain. in CATAL. 7: 735. 1931; Kurokawa (1962, p. 17) not recorded from Himalaya; – *Physcia detonsa* (Fr.), Jatta (1905, p. 178) N.W. Himalaya.

**Anaptychia diademata* (Tayl.) Kurokawa, Beihefte zur "Nova Hedwigia," Hefte 6: 28. 1962. Himalayas, and Ceylon; – *Parmelia diademata* Tayl. Hook. London Journ. Bot. 6: 165. 1847. Nepal, leg. Wallich. Type in FH!; – *Anaptychia hypoleuca* v. *diademata* (Tayl.) Zahlbr. – CATAL. 7: 726. 1931 – Hue (1899, p. 113) India; Awasthi (1960b, p. 428) Himalayas.

**Anaptychia diademata* f. *brachyloba* (Müll. Arg.) Kurokawa, Beihefte zur "Nova Hedwigia," Hefte 6: 29. 1962. Himalayas; – *Physcia speciosa* var. *cinerascens* f. *brachyloba* Müll. Arg. Flora 73: 340. 1890. Khasi hills, leg. Griffith. Type in G; – *Anaptychia esorediata* f. *brachyloba* (Müll. Arg.) Awasthi (1960b, p. 422) Himalaya.

Anaptychia dissecta Kurokawa var. *dissecta*, Kurokawa (1962, p. 38) Himalayas.

Anaptychia dissecta var. *koyana* Kurokawa (1962, p. 39) N.W. Himalaya.

Anaptychia esorediata (Vain.) DuRietz et Lynge – CATAL. 7. 742. 1931 – Awasthi (1960b, p. 421) Himalayas, Nepal, and South India – nomencl. syn. of *Anaptychia diademata* (Tayl.) Kurokawa by Kurokawa (1962, p. 28). Specimens cited by Awasthi (l.c.) annotated to *Anaptychia diademata* by Kurokawa.

**Anaptychia firmula* (Nyl.) Dodge et Awasthi in Awasthi, Journ. Indian Bot. Soc. 39: 423. 1960. Himalayas; Kurokawa (1962, p. 40) Himalayas; – *Physcia firmula* Nyl. Synop. Lich. 1: 418. 1860. Himalaya, leg. Hooker and Thomson. Type in H – Stirton (1876, p. 157) Kumaon; Hue (1892, p. 110) Himalayas – CATAL. 7: 618. 1931.

Anaptychia flabellata (Fée) Mass., Kurokawa (1962, p. 52) N.W. Himalaya, South India and Ceylon – nomencl. syn. of *Anaptychia hypoleuca* (Mühlenb.) Mass. in CATAL. 7: 725. 1931.

Anaptychia galactophylla (Tuck.) Trevis. – CATAL. 7: 724. 1931 – Hue (1900b, p. 236) South India, Nilgiri. Taxon not reported from India by Kurokawa (1962).

**Anaptychia himalayensis* Awasthi, Proc. Indian Acad. Sci. 45 B: 134. 1957. Askote, N.W. Himalaya, leg. Awasthi. Type in Aw – Awasthi (1960b, p. 435) Himalayas; Kurokawa (1962, p. 87) Himalayas.

Anaptychia hypocaesia Yasuda, Kurokawa (1962, p. 57) Himalayas, and South India.

Anaptychia hypoleuca (Mühlenb.) Mass. – CATAL. 7: 725. 1931 – Nylander (1900, p. 9) Ceylon; Smith (1931, p. 132) Himalaya; Moreau (1952, p. 143) South India, Palni hills; Awasthi (1960b,

p. 427) South India. Taxon not reported from India by Kurokawa (1962). Specimens cited in Awasthi (l.c.) annotated to *Anaptychia dendritica* by Kurokawa; – *Physcia hypoleuca*, Jatta (1905, p. 177) N.W. Himalaya; – *Pseudophyscia hypoleuca*, Hue (1900b, p. 256) South India; Jatta (1911, p. 311) Himalaya.

Anaptychia hypoleuca var. *fulvescens* Vain. – CATAL. 7: 727. 1931 – nomencl. syn. of *Anaptychia flabellata* (Fée) Mass. in Kurokawa (1962, p. 52) – Awasthi (1960b, p. 429) Himalayas. Specimens cited by Awasthi (l.c.) annotated to *Anaptychia dendritica* (Pers.) Vain. by Kurokawa.

* *Anaptychia incana* (Stirt.) Zahlbr. Cat. Lich. Univ. 7: 727. 1931; Awasthi (1960b, p. 438) Himalayas; Kurokawa (1962, p. 92) Himalayas, Nepal, and S. India; – *Physcia incana* Stirt. Proc. Phil. Soc. Glasgow 11: 322. 1879. Darjeeling, leg. Thomson. Type in BM, GLAM.

* *Anaptychia indica* H. Magn. in Awasthi, Journ. Indian Bot. Soc. 39: 439. 1960. Darjeeling, leg. Awasthi. Type in Aw – Kurokawa (1962, p. 102) Darjeeling.

Anaptychia isidiophora (Nyl.) Vain., Kurokawa (1962, p. 33) Himalayas, and South India; – *Anaptychia speciosa* f. *isidiophora* (Nyl.) Zahlbr. – CATAL. 7: 740. 1931 – Moreau (1952, p. 143) South India; Awasthi (1960b, p. 419) Himalayas.

Anaptychia kaspica Gyel. – CATAL. 10: 657. 1940 – Kurokawa (1962, p. 15) Kashmir.

Anaptychia leucomelaena (L.) Mass. f. *albociliata* (Nyl.) Hue – CATAL. 7: 732. 1931 – Kurokawa (1962, p. 76) South India.

Anaptychia leucomelaena var. *angustifolia* (Mey. et Flot.) Müll. Arg. – CATAL. 7: 732. 1931 – Awasthi (1960b, p. 430–32) Himalayas; – *Physcia leucomela* v. *angustifolia*, Nylander (1860, p. 415) Himalayas; – *Physcia angustifolia*, Hue (1892, p. 194) Himalayas – taxon nomencl. syn. of *Anaptychia leucomelaena* (L.) Mass. in Kurokawa (1962, p. 74) – specimens cited by Awasthi (l.c.) annotated to *Anaptychia neoleucomelaena* Kurokawa, by Kurokawa.

Anaptychia leucomelaena (L.) Mass. f. *leucomelaena*, Kurokawa (1962, p. 74–75) India; – *Anaptychia leucomelaena* (L.) Mass., Hue (1900b, p. 256) South India; Jatta (1911, p. 311) South India; Smith (1931, p. 132) Himalayas; CATAL. 7: 730. 1931; Awasthi (1960b, p. 429) South India; – *Parmelia leucomela* Ach., Montagne (1842, p. 19) South India; – *Physcia leucomela*, Nylander (1900, p. 9) Ceylon.

Anaptychia leucomelaena var. *multifida* (Mey. et Flot.) Vain. – CATAL. 7: 733. 1931 – Müll. Arg. (1895, p. 194) Himalaya; Moreau (1952, p. 143) Palni hills – taxon nomencl. syn. of *Anaptychia leucomelaena* (L.) Mass. in Kurokawa (1962, p. 74).

* *Anaptychia leucomelaena* var. *soredobullata* Awasthi, Journ. Indian Bot. Soc. 39: 432. 1960. Darjeeling, Himalaya, leg. Awasthi. Type in Aw – taxon nomencl. syn. of *Anaptychia neoleucomelaena* Kurokawa by Kurokawa (1962, p. 77).

* *Anaptychia neoleucomelaena* Kurokawa, Journ. Jap. Bot. 36: 51. 1961. Jamnotri, leg. Awasthi. Type in Aw; – *Anaptychia neoleucomelaena* f. *neoleucomelaena* Kurokawa (1962, p. 77–78) Himalayas, and South India.

Anaptychia neoleucomelaena f. *sorediosa* (Jatta) Kurokawa (1961, p. 53; and 1962, p. 79) Himalaya; – *Anaptychia leucomelaena* v. *sorediosa* (Jatta) Zahlbr. – CATAL. 7: 733. 1931 – Awasthi (1960b, p. 432) Himalaya.

Anaptychia neoleucomelaena f. *squarrosa* (Vain.) Kurokawa (1962, p. 78) India.

Anaptychia obscurata (Nyl.) Vain. – CATAL. 7: 734. 1931 – Kurokawa (1962, p. 49) Himalayas.

* *Anaptychia pellucida* Awasthi, Proc. Indian Acad. Sci. 45 B: 136. 1957. Darjeeling, leg. Awasthi. Type in Aw – Awasthi (1960b, p. 434) Himalayas; Kurokawa (1962, p. 93) Himalayas.

Anaptychia podocarpa (Bél.) Mass. – CATAL. 7: 736. 1931; Kurokawa (1962, p. 86) – Müll. Arg. (1895, p. 194) Himalaya; Hue (1899, p. 109) India; Smith (1931, p. 132) Sikkim; Chopra (1934, p. 77) Himalaya; Awasthi (1960b, p. 435–38) Himalayas and Nepal; – *Parmelia podocarpa* Bél., Montagne (1842, p. 19) South India; – *Physcia podocarpa*, Jatta (1905, p. 176) Himalayas – taxon not reported from India by Kurokawa (1962). Specimens cited by Awasthi (l.c.) annotated to pr. p. *Anaptychia awasthii* and pr. p. *A. incana* by Kurokawa.

Anaptychia pseudospeciosa Kurokawa (1962, p. 25–26) Himalayas.

Anaptychia pseudospeciosa var. *tremulans* (Müll. Arg.) Kurokawa (1962, p. 26–27) South India; – *Pseudophyscia speciosa* v. *tremulans* Müll. Arg. (1895, p. 195) Himalayas.

* *Anaptychia punctifera* Kurokawa, Beihefte zur “Nova Hedwigia,” Hefte 6: 45. 1962. Nepal, and Himalayas, leg. Awasthi. Type in Aw.

**Anaptychia rubescens* (Räs.) Kurokawa, Beihefte zur "Nova Hedwigia," Hefte 6: 31. 1962. Himalaya; – *Anaptychia hypoleuca* f. *rubescens* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 27. 1950. Darjeeling, leg. Awasthi. Type in H, isotype in Aw; – *Anaptychia esorediata* f. *rubescens* (Räs.) Awasthi (1960b, p. 423) Himalayas.

Anaptychia sorediifera (Müll. Arg.) Du Rietz et Lyngé, Awasthi (1960b, p. 424) Himalaya, Nepal and South India; – *Anaptychia speciosa* v. *hypoleuca* f. *sorediifera* Müll. Arg. (1892, p. 218) Manipur; – *Pseudophyscia speciosa* v. *hypoleuca* f. *sorediifera*, Müll. Arg. (1895, p. 195) Himalaya; – *Anaptychia hypoleuca* f. *sorediifera* (Müll. Arg.) Vain. – CATAL. 7: 727. 1931 – Smith (1931, p. 132) Himalaya; Moreau (1952, p. 143) South India – taxon nomencl. syn. of *Anaptychia obscurata* (Nyl.) Vain. in Kurokawa (1962, p. 49). Specimens cited by Awasthi (l. c.) annotated pr. p. *Anaptychia hypocaesia* and pr. p. *Anaptychia dissecta*, by Kurokawa.

Anaptychia sorediifera var. *colorata* (Zahlbr.) H. Magn., Awasthi (1960b, p. 426) Himalaya – taxon nomencl. syn. of *Anaptychia obscurata* (Nyl.) Vain. in Kurokawa (1962, p. 49).

Anaptychia speciosa (Wulf) Mass. – CATAL. 7: 737. 1931 – Smith (1931, p. 132) Himalayas; Chopra (1934, p. 78) Himalaya; Moreau (1952, p. 143) Palni hills; Awasthi (1960b, p. 418–19) Himalayas and South India; – *Parmelia speciosa* (Wulf), Babington (1852, p. 248) Kumaon; Montagne (1842, p. 19) South India; – *Physcia speciosa*, Nylander (1860, p. 416) India; Nylander (1900, p. 8) Ceylon; Hue (1892, p. 109) India; Jatta (1905, p. 176) Himalaya; – *Pseudophyscia speciosa* (Wulf), Hue (1900b, p. 256) South India – taxon not reported from India by Kurokawa (1962).

Anaptychia speciosa var. *cinerascens* (Nyl.) Müll. Arg. – CATAL. 7: 741. 1931 – Müll. Arg. (1891, p. 182) Naga and Khasi Hills – nomencl. syn. of *Anaptychia diademata* (Tayl.) in Kurokawa (1962, p. 28); – *Physcia speciosa* v. *cinerascens*, Nylander (1860, p. 417) Himalaya; – *Pseudophyscia speciosa* v. *cinerascens*, Müll. Arg. (1895, p. 195) Himalaya.

Anaptychia speciosa v. *cinerascens* f. *coralligera* (Müll. Arg.) Zahlbr. – CATAL. 7: 741. 1931 – nomencl. syn. of *Anaptychia isidiophora* (Nyl.) Vain. in Kurokawa (1962, p. 33); – *Pseudophyscia speciosa* v. *cinerascens* f. *coralligera*, Hue (1900b, p. 256) S. India.

Anaptychia speciosa f. *compactior* (Mey. et Flot.) Müll. Arg. – CATAL. 7: 140. 1931 – nomencl. syn. of *Anaptychia diademata* (Tayl.) in Kurokawa (1962, p. 28) – Asahina (1955, p. 63) Nepal.

**Anaptychia speciosa* var. *imbricata* (Jatta) Zahlbr. Cat. Lich. Univ. 7: 742. 1931; – *Physcia speciosa* v. *imbricata* Jatta, Malpighia 19: 177. 1905. Mussoorie, N.W. Himalaya, leg. Amar Singh. Type in NAP. Taxon not recorded in Kurokawa (1962).

Anaptychia speciosa f. *pulvinigera* Müll. Arg. – CATAL. 7: 742. 1931; – *Physcia speciosa* v. *cinerascens* f. *pulvinigera* Müll. Arg. (1890, p. 340) Naga hills – nomencl. syn. of *Anaptychia pseudospeciosa* var. *tremulans* (Müll. Arg.) Kurokawa (1962, p. 26–27).

Anaptychia speciosa f. *sorediosa* (Müll. Arg.) Zahlbr. – CATAL. 7: 741. 1931; – *Pseudophyscia speciosa* f. *sorediosa* Müll. Arg., Hue (1900b, p. 256) Nilgiri hills – nomencl. syn. of *Anaptychia pseudospeciosa* v. *tremulans* (Müll. Arg.) in Kurokawa (1962, p. 26).

**Anaptychia togashii* Kurokawa, Beihefte zur "Nova Hedwigia," Hefte 6: 68. 1962. Sikkim, leg. Togashi. Type in TI, US.

ANTHRACO THECIUM Hampe (Pyrenulaceae)

Anthracothecium americanum (Ach.) Müll. Arg. – CATAL. 1: 458. 1922; – *Verrucaria anallepta* v. *americana* Ach., Bélanger (1838, p. 143) Peninsular India.

**Anthracothecium andamanicum* (Nyl.) Müll. Arg. Linnaea 63: 44. 1880 (not seen) – CATAL. 1: 458. 1922; – *Verrucaria andamanica* Nyl. Bull. Soc. Linn. Normand. II, 7: 178. 1873. Andaman, leg. Kurz. Type in H!. Hue (1892, p. 287) Andaman.

**Anthracothecium* (?) *anoistum* (Stirt.) Zahlbr. Cat. Lich. Univ. 1: 458. 1922; – *Verrucaria anoista* Stirt. Proc. Phil. Soc. Glasgow 13: 191. 1881. Assam, leg. A. Watt. Type in BM!, GLAM.

(*Anthracothecium*) *aspistea* (Fée); – *Verrucaria aspistea* (Fée), Leighton (1869, p. 184) Ceylon; Nylander (1873, p. 183) Andaman – nomencl. syn. of *Anthracothecium libricolum* (Fée) Müll. Arg. in CATAL. 1: 463. 1922.

Anthracothecium borbonicum (Nyl.) Müll. Arg. – CATAL. 1: 458. 1922; – *Verrucaria borbonica* Nyl., Leighton (1869, p. 183) Ceylon.

Anthracothecium denudatum (Nyl.) Müll. Arg. – CATAL. 1: 466. 1922; – *Verrucaria denudata* Nyl., Nylander (1873, p. 180) Andaman; Hue (1892, p. 292) Andaman, Ceylon; Nylander (1900, p. 25) Ceylon – nomencl. syn. of *Anthracothecium parvinucleum* (Mey. et Flot.) in CATAL. 1: 466. 1922.

Anthracothecium duplicans (Nyl.) Müll. Arg. – CATAL. 1: 460. 1922; – *Verrucaria duplicans* Nyl., Leighton (1869, p. 184) Ceylon.

- * *Anthracothecium emergens* (Leight.) Zahlbr. Cat. Lich. Univ. 1: 461. 1922; – *Verrucaria emergens* Leight. Trans. Linn. Soc. London 27: 184. 1869. Ceylon, leg. Thwaites. Type in (?) – not seen at BM.
- Anthracothecium epapillatum* (Nyl.) Müll. Arg. – CATAL. 1: 461. 1922; – *Verrucaria epapillata* Nyl., Nylander (1900, p. 24) Ceylon.
- * *ANTHRAACOTHECIUM HIMALAYENSE* (Räs.) Comb. nov.; – *Bottaria* (*Anthracothecium*) *himalayensis* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 31. 1950. Darjeeling, leg. Awasthi. Type in H; isotype in Aw.
- * *Anthracothecium interponens* (Nyl.) Müll. Arg. Bull. Soc. Bot. Belgique 30: 96. 1891 (not seen) – CATAL. 1: 462. 1922; – *Verrucaria interponens* Nyl. Bull. Soc. Linn. Normand. II, 7: 179. 1873. Andaman, leg. S. Kurz. Type in H!. Hue (1892, p. 288) Andaman.
- Anthracothecium libricolum* (Fée) Müll. Arg. – CATAL. 1: 463. 1922; – *Verrucaria libricola* (Fée), Nylander (1867, p. 8) Calcutta; Stirton (1876, p. 159) Calcutta; Hue (1892, p. 288) Ceylon.
- * *Anthracothecium luteonitens* (Nyl.) Zahlbr. Cat. Lich. Univ. 1: 464. 1922; – *Verrucaria luteonitens* Nyl. Acta Soc. Sci. Fenn. 26 (10): 24. 1900. Ceylon, leg. Almquist. Type in S, H.
- * *Anthracothecium manipurens* Müll. Arg. Journ. Linn. Soc. Bot. 29: 231. 1892. Manipur, leg. G. Watt. Type in K, G – CATAL. 1: 464. 1922.
- Anthracothecium paramerum* (Nyl.) Müll. Arg. – CATAL. 1: 466. 1922; – *Verrucaria paramera* Nyl., Nylander (1900, p. 24) Ceylon.
- * *Anthracothecium thwaitesii* (Leight.) Müll. Arg. Linnaea 63: 44. 1880 (not seen) – CATAL. 1: 469. 1922; – *Verrucaria thwaitesii* Leight. Trans. Linn. Soc. London 27: 184. 1869. Ceylon, leg. Thwaites. Type in BM!.
- Anthracothecium variolosum* (Pers.) Müll. Arg. – CATAL. 1: 469. 1922 – Müll. Arg. (1892, p. 231) Manipur; Smith (1931, p. 128) Darjeeling; Chopra (1934, p. 15) Himalaya; – *Verrucaria variolosa* (Pers.), Leighton (1869, p. 183) Ceylon.

ANZIA Stiz. (Parmeliaceae)

- * *Anzia physoidea* A. L. Smith, Trans. Brit. Mycol. Soc. 16: 131. 1931. Himalaya, Darjeeling, leg. Chopra. Type in BM. Chopra (1934, p. 61) Darjeeling; Awasthi (1961, p. 34) NEFA.

ARTHONIA (Ach.) Zahlbr. (Arthoniaceae)

- Arthonia antillarum* (Fée) Nyl. – CATAL. 2: 9. 1923 – Nylander (1867, p. 7) Calcutta; Hue (1892, p. 261) Calcutta.
- * *Arthonia arctata* Stirt. Proc. Phil. Soc. Glasgow 13: 188. 1881. Assam, leg. A. Watt. Type in GLAM – CATAL. 2: 10. 1923.
- * *Arthonia catenatula* Nyl. Bull. Soc. Linn. Normand. II, 7: 173. 1873. Andamans, leg. S. Kurz. Type in H!; Hue (1892, p. 260) Andamans – CATAL. 2: 18. 1923.
- Arthonia cinnabarina* (DC.) Wallr. – CATAL. 2: 21. 1923 – Nylander (1867, p. 7) Calcutta; Leighton (1869, p. 180) Ceylon; Hue (1892, p. 259) Calcutta; Nylander (1900, p. 19) Ceylon.
- * *Arthonia cinnabarina* f. *comitata* Stirt. Proc. Phil. Soc. Glasgow 11: 318. 1879. India, leg. G. Watt. Type in BM! – CATAL. 2: 23. 1923.
- Arthonia cinnabarina* var. *opegraphina* (Ach.) Leight. – CATAL. 2: 27. 1923; – *Arthonia opegraphina* (Ach.), Nylander (1900, p. 19) Ceylon.
- Arthonia cinnabarina* var. *violacea* (Chev.) Nyl. – CATAL. 2: 31. 1923 – Stirton (1876, p. 157) Calcutta.
- * *Arthonia circumalbicans* Nyl. Flora 50: 7. 1867. Calcutta, leg. Kurz. Type in H! – CATAL. 2: 32. 1923.
- * *Arthonia collectiva* Stirt. Proc. Phil. Soc. Glasgow 13: 188. 1881. Assam, leg. A. Watt. Type in GLAM – CATAL. 2: 32. 1923.
- Arthonia dispersula* Nyl. – CATAL. 2: 42. 1923 – Nylander (1900, p. 19) Ceylon.
- * *Arthonia impolitella* Nyl. Flora 50: 7. 1867. Calcutta, leg. Kurz. Type in H! – CATAL. 2: 57. 1923.
- * *Arthonia inconspicua* Stirt. Proc. Phil. Soc. Glasgow 11: 319. 1879. Nilgiri, leg. G. Watt. Type in BM!, GLAM – CATAL. 2: 58. 1923.
- Arthonia leprariella* Nyl. – CATAL. 2: 59. 1923 – Hue (1892, p. 264) India.
- * *Arthonia limitata* Nyl. in Hue, Nouv. Arch. Mus. III, 3: 180. 1891. Ceylon, leg. Gardener. Type in H!; Hue (1892, p. 262) Ceylon – CATAL. 2: 61. 1923.
- Arthonia medusula* (Pers.) Nyl. – CATAL. 2: 66. 1923; – *Opegrapha medusula* Pers., Bélanger (1838, p. 136) Peninsular India.
- Arthonia obscura* Ach., Bélanger (1838, p. 132) Peninsular India – taxon nomencl. syn. of *Arthonia reniformis* (Pers.) Röhl. in CATAL. 2: 94. 1923.

- **Arthonia pellea* Leight. Trans. Linn. Soc. London 27: 180. 1869. Ceylon, leg. Thwaites. Type in BM!; Willey (1890, p. 48) Ceylon; Nylander (1900, p. 20) Ceylon – CATAL. 2: 73. 1923.
- Arthonia polymorpha* Ach. – CATAL. 2: 76. 1923 – Müll. Arg. (1892, p. 228) Manipur.
- Arthonia propinqua* Nyl. – CATAL. 2: 78. 1923 – Hue (1892, p. 266) Ceylon.
- Arthonia radiata* (Pers.) Ach. var. *swartziana* (Ach.) Almq. – CATAL. 2: 84. 1923; – *Arthonia astroidea* v. *swartziana* (Ach.), Nylander (1867, p. 8) Calcutta; Hue (1892, p. 267) Calcutta.
- **Arthonia ravidia* Stirt. Proc. Phil. Soc. Glasgow 11: 318. 1879. Chinsurah, Assam, leg. G. Watt. Type in BM!, GLAM – CATAL. 2: 94. 1923.
- **Arthonia recedens* Stirt. Proc. Phil. Soc. Glasgow 11: 319. 1879. Chinsurah, Assam, leg. G. Watt. Type BM!, GLAM – CATAL. 2: 94. 1923.
- **Arthonia rubiginella* Nyl. Acta Soc. Sci. Fenn. 26 (10): 19. 1900. Ceylon, leg. Almquist. Type in S, H – CATAL. 2: 97. 1923.
- **Arthonia simplicascens* Nyl. Acta Soc. Sci. Fenn. 26 (10): 20. 1900. Ceylon, leg. Almquist. Type in S, H – CATAL. 2: 97. 1923.
- **Arthonia simplicata* Nyl. Acta Soc. Sci. Fenn. 26 (10): 19. 1900. Ceylon, leg. Almquist. Type in S, H – CATAL. 2: 98. 1923.
- **Arthonia subgyroza* Nyl. Flora 52: 72. 1869. Bengal, leg. Kurz. Type in H!; Hue (1892, p. 267) Bengal – CATAL. 2: 101. 1923.
- **Arthonia subvelata* Nyl. Flora 52: 71. 1869. Bengal, leg. Kurz. Type in H!; Hue (1892, p. 267) Bengal – CATAL. 2: 103. 1923.
- **Arthonia translucens* Stirt. Proc. Phil. Soc. Glasgow 13: 188. 1881. Assam, leg. A. Watt. Type in BM!, GLAM – CATAL. 2: 103. 1923.
- Arthonia varia* (Ach.) Nyl. var. *stenographella* (Nyl.) Vain. – CATAL. 2: 105. 1923; – *Arthonia stenographella* Nyl., Nylander (1900, p. 19) Ceylon.

ARTHONIOPSIS Müll. Arg. (Arthoniaceae)

- **Arthoniopsis phyllospiliza* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 141. 1923; – *Arthonia phyllospiliza* Nyl. Acta Soc. Sci. Fenn. 26 (10): 20. 1900. Ceylon, leg. Almquist. Type in S, UPS, H – Santesson (1952, p. 84–85) – “to be rejected as nomen dubium.”

ARTHOPYRENTIA (Mass.) Müll. Arg. (Pyrenulaceae)

- **Arthopyrenia alboatra* (Krempelh.) Müll. Arg. Flora 66: 306. 1883.
Calcutta – CATAL. 1: 318. 1922; – *Verrucaria alboatra* Krempelh.
in Nyl. Flora 50: 8. 1867. Calcutta, leg. Kurz. Type in H!; Hue
(1892, p. 295) Calcutta.
- Arthopyrenia analepta* (Ach.) Mass. – CATAL. 1: 269. 1922; – *Verru-*
caria analepta (Ach.), Bélanger (1838, p. 143) Peninsular India.
- **Arthopyrenia ceylonensis* (Mass.) Müll. Arg. Flora 66: 289. 1883.
Ceylon – CATAL. 1: 302. 1922; – *Dactyloblastus ceylonensis* Mass.
Atti I. R. Istit. Veneto III, 5: 327. 1860. Ceylon, leg. ?. Type (?) –
(not seen); – *Verrucaria ceylonensis* (Mass.), Leighton (1869, p. 182)
Ceylon; Hue (1892, p. 297) Ceylon; Nylander (1900, p. 24) Ceylon.
- **Arthopyrenia cinefaciens* (Nyl.) Zahlbr. Cat. Lich. Univ. 1: 320. 1922;
– *Verrucaria cinefaciens* Nyl. Bull. Soc. Linn. Normand. II, 7: 180.
1873. Andamans, leg. Kurz. Type in H!; Hue (1892, p. 295)
Andamans.
- Arthopyrenia majuscula* (Nyl.) Zahlbr. – CATAL. 1: 332. 1922; –
Verrucaria majuscula Nyl., Nylander (1867, p. 8) Calcutta.
- **Arthopyrenia nidulans* Müll. Arg. Flora 68: 326. 1885. Ceylon, leg.
Nieter. Type in G – CATAL. 1: 313. 1922.
- **Arthopyrenia nieteriana* Müll. Arg. Flora 66: 288. 1883. Ceylon, leg.
Nieter. Type in G – CATAL. 1: 309. 1922.
- **Arthopyrenia planorbella* (Nyl.) Zahlbr. Cat. Lich. Univ. 1: 310.
1922; – *Verrucaria planorbella* Nyl. Bull. Soc. Linn. Normand. II,
7: 181. 1873. Andamans, leg. Kurz. Type in H!; Hue (1892, p. 297)
Andamans.
- **Arthopyrenia subnexa* (Nyl.) Müll. Arg. Hedwigia 30: 188. 1891 –
CATAL. 1: 311. 1922; – *Verrucaria subnexa* Nyl. Bull. Soc. Linn.
Normand. II, 7: 181. 1873. Andaman, leg. Kurz. Type in H!; Hue
(1892, p. 295) Andaman.
- **Arthopyrenia terminata* (Nyl.) Müll. Arg. Flora 73: 345. 1890 –
CATAL. 1: 299. 1922; – *Verrucaria terminata* Nyl. Bull. Soc. Linn.
Normand. II, 7: 180–181. 1873. Andamans, leg. Kurz. Type in H!;
Hue (1892, p. 295) Andamans.

ARTHOTHELIUM Mass. (Arthoniaceae)

- Arthothelium abnorme* (Ach.) Müll. Arg. – CATAL. 2: 118. 1923; –
Arthonia abnormis (Ach.), Nylander (1867, p. 7) Calcutta; Hue
(1892, p. 265) Calcutta.

- * *Arthothelium abnorme* var. *insitum* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 118. 1923; – *Arthonia abnormis* * *insita* Stirt. Proc. Phil. Soc. Glasgow 11: 319. 1879. India, leg. G. Watt. Type in BM!, GLAM.
- Arthothelium anastomosans* (Ach.) Arn.; – *Arthonia anastomosana* (Ach.), Nylander (1900, p. 20) Ceylon – nomencl. syn. of *Arthothelium dispersum* (DC.) Mudd. in CATAL. 2: 124. 1923.
- * *Arthothelium bessale* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 122. 1923; – *Arthonia bessalis* Nyl. Bull. Soc. Linn. Normand. II, 7: 174. 1873. Andamans, leg. Kurz. Type in H!; Hue (1892, p. 268) Andaman.
- * *Arthothelium chiodectoides* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 122. 1923; – *Arthonia chiodectoides* Nyl. Flora 52: 72. 1869. Bengal, leg. Kurz. Type in H!; Hue (1892, p. 264) Bengal.
- * *Arthothelium erumpens* Müll. Arg. Journ. Linn. Soc. Bot. 29: 228. 1892. Manipur, leg. G. Watt. Type in K, G – taxon not recorded in CATAL.
- * *Arthothelium nemorale* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 129. 1923; – *Arthonia nemoralis* Stirt. Proc. Phil. Soc. Glasgow 13: 189. 1881. Assam, leg. A. Watt. Type in BM!, GLAM.
- * *Arthothelium pycnocarpoides* Müll. Arg. Journ. Linn. Soc. Bot. 29: 228. 1892. Manipur, leg. G. Watt. Type in K, G – CATAL. 2: 131. 1923.
- Arthothelium spectabile* (Flot.) Mass. – CATAL. 2: 134. 1923 – Moreau (1952, p. 136) Palni hills; – *Arthonia spectabilis* (Flot.), Nylander (1900, p. 20) Ceylon.
- * *Arthothelium subilicinum* (Leight.) Zahlbr. Cat. Lich. Univ. 2: 136. 1923; – *Arthonia subilicina* Leight. Trans. Linn. Soc. London 27: 181. 1869. Ceylon, leg. Thwaites. Type in BM!.
- * *Arthothelium subvenosum* (Leight.) Zahlbr. Cat. Lich. Univ. 2: 136. 1923; – *Arthonia subvenosa* Leight. Trans. Linn. Soc. London 27: 180. 1869. Ceylon, leg. Thwaites. Type in BM!.

* *ASTERISTION* Leight. (Byssolomaceae)

- * *Asteristion erumpens* Leight. Trans. Linn. Soc. London 27: 163. 1869. Ceylon, leg. Thwaites. Type in BM!; Nylander (1900, p. 18) Ceylon – CATAL. 2: 571. 1923.

ASTROTHELIUM Eschw. (Astrotheliaceae)

- * *Astrothelium fallax* Müll. Arg. Bot. Jahrbuch 6: 383. 1885. Ceylon (not seen) – CATAL. 1: 515. 1922; – *Trypethelium pallescens* Leight. Trans. Linn. Soc. London 27: 185. 1869. Ceylon, leg. Thwaites – (non Fée).

AULAXINA Fée (Graphidaceae)

**Aulaxina uniseptata* R. Sant. Symbol. Bot. Upsal. 12: 298. 1952.
Assam, leg. Kanjilal. Type in UPS.

BACIDIA Zahlbr. (Lecideaceae)

Bacidia alpina (Schaer.) Vain. – CATAL. 4: 173. 1927 – Poelt (1961,
p. 87) N.W. Karakorum.

**BACIDIA AMERICANA* var. *LIVIDONIGRICANS* (Müll.
Arg.) Comb. nov.; – *Patellaria americana* var. *lividonigricans* Müll.
Arg. Journ. Linn. Soc. Bot. 29: 222. 1892. Manipur, leg. G. Watt.
Type in K – taxon not recorded in CATAL.

**Bacidia chinsurensis* (Stirt.) Zahlbr. Cat. Lich. Univ. 4: 185. 1927; –
Lecidea chinsurensis Stirt. Proc. Phil. Soc. Glasgow 11: 313. 1879.
Chinsurah, Assam, leg. G. Watt. Type in GLAM, BM.

**Bacidia convexula* (Müll. Arg.) Zahlbr. Cat. Lich. Univ. 4: 188. 1927;
– *Patellaria convexula* Müll. Arg. Journ. Linn. Soc. Bot. 29: 222.
1892. Manipur, leg. G. Watt. Type in K, G.

Bacidia fuscorubella (Hoffm.) Bausch – CATAL. 4: 200. 1927; –
Lecidea luteola * *fuscorubella* (Hoffm.), Nylander (1869, p. 170)
Bengal; Hue (1892, p. 201) India.

Bacidia hunana Zahlbr., A. L. Smith (1931, p. 129) Darjeeling; Chopra
(1934, p. 35) Darjeeling – CATAL. 8: 403. 1932.

**Bacidia hunana* var. *rugosa* A. L. Smith, Trans. Brit. Mycol. Soc. 16:
129. 1931. Darjeeling, leg. Chopra. Type in ?; Chopra (1934, p. 35)
Darjeeling – CATAL. 10: 362. 1940.

**Bacidia incongruens* (Stirt.) Zahlbr. Cat. Lich. Univ. 4: 208. 1927; –
Lecidea incongruens Stirt. Proc. Phil. Soc. Glasgow 11: 314. 1879.
Assam, leg. G. Watt. Type in BM!, GLAM.

Bacidia laurocerasi (Del.) Vain. – CATAL. 4: 213. 1927; – *Lecidea*
endoleuca v. *laurocerasi* Del., Nylander (1900, p. 15) Ceylon.

Bacidia luteola (Schrad.) Mudd. – CATAL. 4: 221. 1927; – *Patellaria*
luteola (Schrad.), Müll. Arg. (1892, p. 223) Manipur; A. L. Smith
(1931, p. 129) Darjeeling; Chopra (1934, p. 36) Darjeeling.

Bacidia medialis (Tuck.) Zahlbr. – CATAL. 4: 221. 1927; – *Lecidea*
medialis Tuck., Nylander (1867, p. 5) Calcutta; Hue (1892, p. 203)
Calcutta.

Bacidia naegelii (Hepp) Zahlbr. – CATAL. 4: 231. 1927; – *Lecidea*
naegelii Hepp, Nylander (1900, p. 32) Ceylon.

Bacidia pallidocarnea (Müll. Arg.) Zahlbr. – CATAL. 4: 231. 1927 – Santesson (1952, p. 444) Ceylon.

Bacidia pelidniza (Nyl.) Oliv.; – *Lecidea pelidniza* Nyl., Nylander (1900, p. 15) Ceylon – taxon nomencl. syn. of *Bacidia umbrina* v. *turgida* (Körb.) Th. Fr. in CATAL. 4: 259. 1927.

Bacidia personata Malme – CATAL. 10: 365. 1940 – Awasthi (1963, p. 30) Kodaikanal.

* *Bacidia phaeolomoides* (Müll. Arg.) Zahlbr. Cat. Lich. Univ. 4: 232. 1927; – *Patellaria phaeolomoides* Müll. Arg. Flora 67: 467. 1884. Ceylon, leg. Thwaites. Type in G.

* *Bacidia propinquella* (Nyl.) Zahlbr. Cat. Lich. Univ. 4: 234. 1927; – *Lecidea propinquella* Nyl. Flora 50: 5. 1867. Calcutta, leg. Kurz. Type in H!; Hue (1892, p. 203) Calcutta.

Bacidia rosella (Pers.) DeNot. – CATAL. 4: 235. 1927 – Awasthi (1963, p. 30) N.W. Himalaya.

* *Bacidia rufescens* (Müll. Arg.) Zahlbr. Cat. Lich. Univ. 4: 239. 1927; – *Patellaria rufescens* Müll. Arg. Journ. Linn. Soc. Bot. 29: 223. 1892. Manipur, leg. G. Watt. Type in K, G.

Bacidia scitula (Tuck.) Zahlbr. – CATAL. 4: 145. 1927; – *Lecidea scitula* Tuck., Nylander (1900, p. 14) Ceylon.

Bacidia spadicea (Ach.) Zahlbr. – CATAL. 4: 240. 1927; – *Lecidea spadicea* Ach., Nylander (1867, p. 5) Calcutta; Hue (1892, p. 201) Calcutta; Nylander (1900, p. 15) Ceylon.

* *Bacidia subannexa* (Nyl.) Zahlbr. Cat. Lich. Univ. 4: 242. 1927; – *Lecidea subannexa* Nyl. Acta Soc. Sci. Fenn. 26 (10): 15. 1900. Ceylon, leg. Almquist. Type in S, H.

* *Bacidia submedialis* (Nyl.) Zahlbr. Cat. Lich. Univ. 4: 243. 1927; – *Lecidea submedialis* Nyl. Acta Soc. Sci. Fenn. 26 (10): 14. 1900. Ceylon, leg. Almquist. Type in S, H.

BAEOMYCES Pers. (Cladoniaceae)

Baeomyces erythrellus (Mont.) Nyl. – CATAL. 4: 410–11. 1927. Erronously reported from “India Orientalis” in CATAL. The original references cited refer it to tropical America.

Baeomyces fungoides Ach. – CATAL. 4: 411. 1927 – Müll. Arg. (1895, p. 194) Darjeeling; Hue (1892, p. 237) India.

Baeomyces icmadophilus Nyl.; – see *Icmadophila ericetorum* (L.) Zahlbr.

- * *Baeomyces pachypus* Nyl. Synop. Lich. 1: 182. 1860. Himalaya, leg. Hooker and Thomson. Type in H, K; Hue (1892, p. 35) India; Hue (1898, p. 237) India – CATAL. 4: 413. 1927.
- Baeomyces roseus* Pers. – CATAL. 4: 415. 1927 – A. L. Smith (1931, p. 129) Darjeeling; Chopra (1934, p. 39) Darjeeling, Himalaya.
- Baeomyces rufus* (Huds.) Rabenh. – CATAL. 4: 419. 1927 – Leighton (1869, p. 163) Ceylon.
- * *Baeomyces sorediifer* Nyl. Acta Soc. Sci. Fenn. 26 (10): 5. 1900. Ceylon, leg. Almquist. Type in S, H – CATAL. 4: 426. 1927.

BIATORELLA Th. Fr. (Acarosporaceae)

- Biatorella conspersa* (Fée) Vain. – CATAL. 5: 36. 1928; – *Lecidea conspersa* Fée, Müll. Arg. (1892, p. 221) Manipur.
- Biatorella testudinea* (Ach.) Mass. – CATAL. 5: 29. 1928; – *Sporastatia testudinea* (Ach.) Mass., Poelt (1961, p. 88) N.W. Karakorum.

BLASTENIA Mass. (Caloplacaceae)

- * *Blastenia brebissonii* (Fée) Müll. Arg. var. *subdecadens* (Nyl.) Zahlbr. Cat. Lich. Univ. 7: 46. 1931; – *Lecanora brebissonii* v. *subdecadens* Nyl. Acta Soc. Sci. Fenn. 26 (10): 10. 1900. Ceylon, leg. Almquist. Type in S, H.
- * *Blastenia nigrocinctella* (Nyl.) Zahlbr. Cat. Lich. Univ. 7: 37. 1931; – *Lecanora nigrocinctella* Nyl. Acta Soc. Sci. Fenn. 26 (10): 10. 1900. Ceylon, leg. Almquist. Type in S, H.
- * *BLASTENIA ORISSENSIS* (Räs.) Comb. nov.; – *Callopisma* (*Blastenia*) *orissense* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 27. 1950. Orissa, leg. Awasthi. Type in H, isotype in Aw.
- * *Blastenia poliotera* (Nyl.) Müll. Arg. Linnaea 63: 36. 1880 (not seen) – CATAL. 7: 39. 1931; – *Lecanora poliotera* Nyl. Flora 52: 70. 1869. Bengal, leg. Kurz. Type in H!; Hue (1892, p. 133) Bengal.

BOMBYLIOS PORA DeNot. (Caloplacaceae)

- * *Bombyliospora coccodes* (Bél.) Mass. Atti I. R. Istit. Veneto III, 5: 262. 1860 (not seen) – CATAL. 7: 50. 1931; – *Parmelia coccodes* Bél. Voyage Ind. Orient. 2: 125. 1838. Peninsular India, leg. Bélangier. Type in ?; Hue (1892, p. 198) India.
- Bombyliospora domingensis* (Pers.) Zahlbr. – CATAL. 7: 51. 1931; – *Lecanora domingensis* Ach., Nylander (1869, p. 70) Bengal; Hue (1892, p. 135) Bengal; – *Lecidea domingensis* (Pers.), Leighton (1869, p. 173) Ceylon.

* *Bombyliospora leprolyta* (Nyl.) Zahlbr. Cat. Lich. Univ. 7: 54. 1931; – *Lecanora leprolyta* Nyl. Flora 52: 70. 1869. Bengal, leg. Kurz. Type in H!; Hue (1892, p. 135) Bengal; – *Patellaria leprolyta* (Nyl.), Müll. Arg. (1892, p. 222) Manipur.

Bombyliospora tuberculosa (Fée) Mass. – CATAL. 7: 56. 1931 – Jatta (1911, p. 312) Malabar; Moreau (1952, p. 141) Palni hills.

BUELLIA DeNot. (Buellaceae)

Buellia aethalea (Ach.) Th. Fr. – CATAL. 7: 331. 1931 – Awasthi (1963, p. 35) N.W. Himalaya.

* *Buellia aggregiens* (Stirt.) Zahlbr. Cat. Lich. Univ. 7: 333. 1931; – *Lecidea aggregiens* Stirt. Proc. Phil. Soc. Glasgow 11: 313. 1879. Nilgiri, leg. G. Watt. Type in BM!, GLAM.

* *Buellia alboatrion* (Nyl.) Zahlbr. Cat. Lich. Univ. 7: 441. 1931; – *Lecidea alboatrion* Nyl. Flora 52: 71. 1869. Bengal, leg. Kurz. Type in H!; Hue (1892, p. 227) Bengal; – *Diplotomma alboatrion* (Nyl.), Jatta (1902, p. 12) Bilaspur.

Buellia canescens (Dicks.) DeNot. – CATAL. 7: 460. 1931 – Hue (1892, p. 221) India.

* *Buellia ceylanensis* Zahlbr. Denks. math. naturv. class Kais. Akad. Wiss. Wien 88: 31. 1911. Ceylon, leg. Rechinger. Type in W – CATAL. 7: 342. 1931.

* *Buellia diorista* (Nyl.) Zahlbr. Cat. Lich. Univ. 7: 349. 1931; – *Lecidea diorista* Nyl. Flora 52: 71. 1869. Bengal, leg. Kurz. Type in H!; Hue (1892, p. 222) Bengal.

Buellia disciformis (Fr.) Mudd. – CATAL. 7: 349. 1931 – Moreau (1952, p. 142) Palni hills; – *Lecidea disciformis* Fr., Leighton (1869, p. 173) Ceylon; Nylander (1900, p. 16) Ceylon; – *Buellia parasema* v. *disciformis* (Fr.), Müll. Arg. (1892, p. 223) Manipur.

Buellia epipolia (Ach.) Mong. – CATAL. 7: 444. 1931; – *Rhizocarpon alboatrum* v. *epipolia*, A.L. Smith, Paulson (1925, p. 193) Mt. Everest.

* *Buellia flavella* Müll. Arg. Hedwigia 32: 130. 1893. Bombay, leg. ?. Type in K – CATAL. 7: 362. 1931.

Buellia geophila (Floerke) Lyngé, Awasthi (1963, p. 35) Nepal – taxon nomencl. syn. of *Buellia insignis* v. *geophila* (Floerke) Th. Fr. in CATAL. 7: 371. 1931.

* *Buellia inornata* (Stirt.) Zahlbr. Cat. Lich. Univ. 7: 369. 1931; – *Lecidea inornata* Stirt. Proc. Phil. Soc. Glasgow 13: 185. 1885. Assam, leg. A. Watt. Type in BM!, GLAM.

- Buellia insignis* (Naeg.) Th. Fr. – CATAL. 7: 370. 1931; – *Buellia disciformis* v. *insignis* Naeg. Moreau (1952, p. 140) Palni hills.
- Buellia leptocline* (Flot.) Körb. – CATAL. 7: 375. 1931; – *Lecidea leptoclinis* Flot., Hue (1892, p. 226) Bengal.
- * *Buellia lycopodina* (Mont.) Zahlbr. Cat. Lich. Univ. 7: 379. 1931 (“species dubium”); – *Lecidea lycopodina* Mont. Ann. Sci. Nat. II, 17: 20. 1842. Nilgiri, leg. Perrottet. Type in ?.
- * *Buellia montana* H. Magn. Bot. Notiser 2: 199. 1954. Nainital, leg. Mehra. Type in Herb. Magnusson.
- Buellia myriocarpa* (DC.) DeNot.; – *Lecidea myriocarpa* DC., Nylander (1900, p. 16) Ceylon – taxon nomencl. syn. of *Buellia punctata* (Hoffm.) Mass. in CATAL. 7: 392–94. 1931.
- * *Buellia nubiloides* Zahlbr. Cat. Lich. Univ. 7: 384. 1931; – *Lecidea nubila* Nyl. Acta Soc. Sci. Fenn. 26 (10): 16. 1900. Ceylon, leg. Almquist. Type in S, H – (non Norm.).
- Buellia papillata* (Sommerf.) Tuck. – CATAL. 7: 386. 1931 – Awasthi (1963, p. 35) Nepal.
- Buellia pulchella* (Schrad.) Tuck. – CATAL. 7: 386. 1931 – Awasthi (1963, p. 36) Nepal.
- * *Buellia pusillula* (Nyl.) Zahlbr. Cat. Lich. Univ. 7: 403. 1931; – *Lecidea pusillula* Nyl. Acta Soc. Sci. Fenn. 26 (10) 16. 1900. Ceylon, leg. Almquist. Type in S, H.
- Buellia stellulata* (Tayl.) Mudd. – CATAL. 7: 413. 1931 – Müll. Arg. (1892, p. 223) Manipur.
- Buellia triphragmia* (Nyl.) Arn.; – *Lecidea triphragmia* Nyl., Nylander (1867, p. 5) Calcutta; Stirton (1876, p. 159) Calcutta; Hue (1892, p. 225) Calcutta; Nylander (1900, p. 16) Ceylon – taxon nomencl. syn. of *Buellia lauricassiae* (Fée) Müll. Arg. in CATAL. 7: 451. 1931.
- Buellia verruculosa* (Sm.) Mudd. f. *ferruginosa* (Nyl.) Zahlbr. – CATAL. 7: 428. 1931; – *Lecidea ocellata* f. *ferruginosa* Nyl., Hue (1892, p. 224) Himalaya.

BYSSOLOMA Trevis. (Byssolomaceae)

- Byssoloma leucoblepharum* (Nyl.) Vain. em. R. Santesson (1952, p. 483–87) Assam – nomencl. syn. of *Byssoloma tricholomum* (Mont.) Zahlbr. in CATAL. 8: 233. 1932.
- Byssoloma rotuliforme* (Müll. Arg.) R. Santesson (1952, p. 490–93) Ceylon – syn. of *Bacidia rotuliformis* (Müll. Arg.) Zahlbr. in CATAL. 4: 139. 1927.

**BYSSOPHRAGMIA* Choisy (Affinity not known)

**Byssophragmia monospora* Choisy, Bull. Soc. Bot. France 78: 454. 1931. Madura, Kodaikanal, leg. Foreau. Type in ? – CATAL. 8: 604. 1932.

CALICIUM Pers. (Caliciaceae)

Calicium quercinum Pers., Nylander (1900, p. 4) Ceylon – taxon nomencl. syn. of *Calicium lenticulare* (Hoffm.) Fr. in CATAL. 1: 607. 1922.

CALOPLACA Th. Fr. (Caloplacaceae)

**CALOPLACA ALMORENSIS* (Räs.) Comb. nov.; – *Callopisma almorense* Räs. Arch. Soc. Zool. Bot. "Vanamo" 6 (2): 83. 1952. Almora, N. W. Himalaya, leg. Awasthi. Type in H, isotype in Aw. *Caloplaca aurantiaca* (Lightf.) Th. Fr. – CATAL. 7: 69. 1931 – Hue (1892, p. 131) India; – *Lecanora aurantiaca*, Nylander (1867, p. 4) Calcutta; – *Callopisma aurantiaca*, Jatta (1902, p. 12) India.

Caloplaca bullata (Müll. Arg.) Zahlbr. – CATAL. 7: 80. 1931 – Poelt (1961, p. 91) N. W. Karakorum.

Caloplaca cerina (Ehrh.) Th. Fr. – CATAL. 7: 84. 1931 – Poelt (1961, p. 91) N. W. Karakorum.

Caloplaca cerina var. *cyanolepra* (DC.) Kickx – CATAL. 7: 92. 1931; – *Callopisma cerinum* v. *cyanolepra* Fr., Jatta (1905, p. 181) Mussoorie.

Caloplaca cerina var. *stillicidiorum* (Vahl) Th. Fr. – CATAL. 7: 95. 1931 – Awasthi (1963, p. 34) Kashmir.

Caloplaca elegans (Link.) Th. Fr. – CATAL. 7: 231. 1931 – Asahina (1955, p. 63) Nepal; – *Parmelia elegans* Ach., Babington (1852, p. 249) Kumaon; – *Placodium elegans* DC. Paulson (1925 p. 191) Mt. Everest; – *Xanthoria elegans* (Link.) Poelt (1961, p. 91) N. W. Karakorum.

Caloplaca elegans var. *discreta* (Schaer.) Körb. – CATAL. 7: 236. 1931; – *Placodium elegans* v. *discretum* (Schaer.), Jatta (1905, p. 180) Pangi.

Caloplaca elegans var. *laxa* (Müll. Arg.) Jatta – CATAL. 7: 237. 1931; – *Placodium elegans* v. *laxum* Müll. Arg., Jatta (1905, p. 180) Pangi.

**Caloplaca encephalarti* (Krempelh.) Zahlbr. Cat. Lich. Univ. 7: 115. 1931; – *Lecanora encephalarti* Krempelh. in Nyl. Flora 50: 4. 1867. Calcutta, leg. Kurz. Type in H. Hue (1892, p. 132) Calcutta.

- **Caloplaca frigida* (Pauls.) Zahlbr. Cat. Lich. Univ. 7: 139. 1931; –
Placodium frigidum Pauls. Journ. Bot. 63: 191. 1925. Mt. Everest,
leg. Somervelle. Type in ?.
- Caloplaca fulvolutea* (Arn.) Jatta; – *Callopisma fulvolutea* Nyl., Jatta
(1905, p. 181) Pangi – taxon nomencl. syn. of *Caloplaca jungermanniae* (Vahl) Th. Fr. in CATAL. 7: 148. 1931.
- **Caloplaca holochracea* (Nyl.) Zahlbr. Cat. Lich. Univ. 7: 144. 1931; –
Lecanora holochracea Nyl. in Crombie, Journ. Linn. Soc. Bot. 15:
171. 1876. Mt. Khasia, leg. Hooker; Himalaya, leg. Kurz. Type in
H!; Hue (1892, p. 130) Himalaya.
- Caloplaca insularis* Poelt, Poelt (1961, p. 91) N.W. Karakorum.
- **Caloplaca kurzii* (Krempelh.) Zahlbr. Cat. Lich. Univ. 7: 149. 1931;
– *Lecanora kurzii* Krempelh. in Nyl. Bull. Soc. Linn. Normand. II,
7: 165. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 135)
Andaman.
- Caloplaca leptopisma* (Nyl.) Zahlbr. – CATAL. 7: 242. 1931 – Bhatia
(1957, p. 38) N.W. Himalaya.
- **CALOPLACA MALAENSIS* (Räs.) Comb. nov.; – *Callopisma malaense* Räs. Arch. Soc. Zool. Bot. "Vanamo" 6 (2): 83. 1952.
Uttar Pradesh, Mala, leg. Awasthi. Type in H, isotype in Aw.
- Caloplaca murorum* (Hoffm.) Th. Fr. – CATAL. 7: 248. 1931 –
Awasthi (1963, p. 35) Himalayas.
- Caloplaca murorum* f. *arnoldi* A.L. Smith – Paulson (1925, p. 191)
Mt. Everest – taxon not recorded in CATAL. – Reference to the
form by A.L. Smith not traceable, probably a *nomen nudum*.
- **CALOPLACA PINDARENsis* (Räs.) Comb. nov.; – *Callopisma pindarensse* Räs. Arch. Soc. Zool. Bot. "Vanamo" 6 (2): 83. 1952.
Almora, N.W. Himalaya, leg. Awasthi. Type in H, isotype in Aw.
- Caloplaca soreciata* (Vain.) DuRietz – CATAL. 7: 264. 1931; –
Xanthoria soreciata (Vain.), Poelt (1961, p. 91) N.W. Karakorum.
- **Caloplaca subdolosa* (Nyl.) Zahlbr. Cat. Lich. Univ. 7: 184. 1931; –
Lecanora subdolosa Nyl. Acta Soc. Sci. Fenn. 26 (10): 10. 1900.
Ceylon, leg. Almquist. Type in S, H.
- Caloplaca trachyphylla* (Tuck.) Zahlbr. – CATAL. 7: 189. 1931 –
Awasthi (1963, p. 35) N.W. Himalaya.

CAMPYLOTHELIUM Müll. Arg. (Paratheliaceae)

- **Campylothelium superbum* (Fr.) Müll. Arg. Flora 68: 251. 1885 –
CATAL. 1: 512. 1922; – *Trypethelium superbum* Fr. Syst. Orb.
Veget. pars 1: 287. 1825. India Orientalis. Type in UPS.

CANDELARIA Mass. (Parmeliaceae)

Candelaria concolor (Dicks.) Arn. – CATAL. 6: 4. 1930 – Grover and Seshadri (1959, p. 238–40) Kashmir; Poelt (1961, p. 88) N.W. Karakorum.

**Candelaria fibrosa* (Fr.) Müll. Arg. f. *indica* Hue, Nouv. Arch. Mus. IV, 2: 52. 1900. India; leg. ?. Type in PC; Hue (1900b, p. 264) Nilgiri – CATAL. 6: 9. 1930 – Moreau (1952, p. 141) Palni hills.

CANDELARIELLA Müll. Arg. (Lecanoraceae)

Candelariella aurella (Hoffm.) Zahlbr. – CATAL. 5: 790. 1928 – Poelt (1961, p. 88) N.W. Karakorum.

Candelariella vitellina (Ehrh.) Müll. Arg. – CATAL. 5: 803. 1928 – Paulson (1925, p. 191) Mt. Everest; Poelt (1961, p. 88) N.W. Karakorum; – *Parmelia vitellina* Ach., Babington (1852, p. 249) Kumaon.

Candelariella xanthostigma (Pers.) Lett. – Poelt (1961, p. 88) N.W. Karakorum – taxon syn. of *Candelariella vitellina* v. *xanthostigma* (Pers.) Elenk. in CATAL. 5: 811. 1928.

CATILLARIA Th. Fr. (Lecideaceae)

Catillaria bouteillei (Desm.) Zahlbr. – CATAL. 4: 32. 1927 – Santesson (1952, p. 430–35) Ceylon.

**Catillaria cervinofusca* (Nyl.) Zahlbr. Cat. Lich. Univ. 4: 33. 1927; – *Lecidea cervinofusca* Nyl. Bull. Soc. Linn. Normand. II, 7: 170. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 192) Andaman.

**Catillaria indica* B. de Lesdain, Bull. Soc. Bot. France 57: 238. 1910. India, leg. ?. Type in ? – (not seen) – CATAL. 4: 47. 1927.

Catillaria intermixta (Nyl.) Arn. – CATAL. 4: 47. 1927 – Awasthi (1963, p. 30) Ootacamund; – *Lecidea intermixta* Nyl., Nylander (1900, p. 14) Ceylon.

Catillaria intermixta var. *parasemoides* (Nyl.) Arn.; – *Lecidea intermixta* v. *parasemoides* Nyl., Nylander (1900, p. 14) Ceylon – taxon nomencl. syn. of *Catillaria intermixta* v. *microspora* (Arn.) Zahlbr. in CATAL. 4: 48. 1927.

Catillaria leptocheiloides (Nyl.) Zahlbr. – CATAL. 4: 19. 1927; – *Patellaria leptocheiloides* Nyl., Müll. Arg. (1892, p. 222) Manipur.

**Catillaria metaleptodes* (Nyl.) Zahlbr. Cat. Lich. Univ. 4: 57. 1927; – *Lecidea metaleptodes* Nyl. Acta Soc. Sci. Fenn. 26 (10): 15. 1900. Ceylon, leg. Almquist. Type in S, H.

Catillaria semecarpi Vain. – CATAL. 4: 70. 1927 – Awasthi (1963, p. 30) Madurai, Shembaganur.

**Catillaria sikkimensis* (Müll. Arg.) Zahlbr. Cat. Lich. Univ. 4: 70. 1927; – *Patellaria sikkimensis* Müll. Arg. Bull. Herb. Boiss. 3: 195. 1895. Darjeeling, leg. Stevens. Type in G.

Catillaria sordidula (Nyl.) Zahlbr. – CATAL. 4: 71. 1927; – *Lecidea sordidula* Nyl., Hue (1892, p. 212) Sone river, India.

CETRARIA Ach. (Parmeliaceae)

**Cetraria ambigua* Bab. Hook. Journ. Bot. 4: 244. 1852. Kumaon, Garhwal, leg. Strachey and Winterbottom. Type in BM, K, DD! – CATAL. 6: 283. 1930 – Räsänen (1952a, p. 14, 27) E. Himalaya; Asahina (1955, p. 55) Nepal; – *Platysma ambiguum* (Bab.) Nylander (1860, p. 311) Sikkim, Himalaya; Hue (1892, p. 68) Himalaya.

Cetraria asahinae Sato, Awasthi (1961, p. 36) NEFA.

Cetraria crispa Nyl. var. *japonica* Asah., Asahina (1955, p. 55) Nepal.

Cetraria cucullata (Bell.) Ach. – CATAL. 6: 320. 1930 – Asahina (1955, p. 57) Nepal.

**Cetraria everniella* (Nyl.) Krempelh. Verhandl. Zool. Bot. Gesellsch. Wien 18: 315. 1868 – CATAL. 6: 323. 1930 – Räsänen (1952a, p. 15, 27) Himalaya; Asahina (1955, p. 57) Nepal; Awasthi (1960c, p. 174) Nepal; – *Platysma everniellum* Nyl. Synop. Lich. 1: 311. 1860. Himalaya, leg. ?; Hue (1892, p. 67) Himalaya; – *Evernia stracheyi* Bab. in Hook. Journ. Bot. 4: 244. 1852. Kumaon, leg. Strachey and Winterbottom. Type in BM, H, K, DD.

**Cetraria everniella* f. *subteres* Asahina in Kihara, Fauna and Flora Nepal Himalaya 1: 58. 1955. Nepal, leg. Nakao. Type in ?.

Cetraria fahlunensis (L.) Schaer. – CATAL. 6: 287. 1930; – *Platysma fahlunensis* (L.) Nylander (1860, p. 309) Himalaya; Hue (1892, p. 67) Himalaya.

Cetraria glauca (L.) Ach. – CATAL. 6: 291. 1930; – *Platysma glaucum* (L.), Nylander (1860, p. 313) Himalaya; Hue (1892, p. 68) Himalaya.

**Cetraria hypotrachyna* Müll. Arg. Flora 74: 373. 1891. Manipur, leg. G. Watt. Type in K, G. Müll. Arg. (1892, p. 217) Manipur. – CATAL. 6: 301. 1930 – Räsänen (1952a, p. 15, 29) Manipur, Himalaya.

Cetraria islandica (L.) Ach. – CATAL. 6: 325. 1930 – Nylander (1860, p. 298) Himalaya; Hue (1892, p. 65) Himalaya.

**Cetraria leucostigma* Lév. in Jaquemont, Voyage l'Inde, Bot. 1841–44, p. 180. India, leg. ?. Type in ? – Räsänen (1952a, p. 15, 29) Himalaya; Awasthi (1961, p. 35) NEFA; – *Platysma leucostignum* (Lév.), Nylander (1860, p. 305) Nepal; Hue (1892, p. 67) Himalaya; Hue (1899, p. 212) India; Jatta (1911, p. 310) Darjeeling.

**Cetraria megaleia* (Nyl.) Räs. Kuopion Luonnon Ystav. Yhdist. Julk. Sarja B, 2 (6): 15, 32. 1952. Himalaya; – *Parmelia megaleia* Nylander, Synop. Lich. 1: 378. 1860. Sikkim, Himalaya, leg. Hooker. Type in H, K, BM. – Lindsay (1866, p. 510) Himalaya; – *Platysma megaleium* (Nyl.), Hue (1892, p. 66) India; Jatta (1902, p. 8) Simla; Jatta (1905, p. 171) Mussoorie – taxon nomencl. syn. of *Cetraria sanguinea* Schaer. in CATAL. 6: 316. 1930.

**Cetraria melaloma* (Nyl.) Krempelh. Verhandl. Zool. Bot. Gesellsch. Wien 18: 315. 1868 (not seen) – CATAL. 6: 337. 1930; – *Platysma melalomum* Nyl. Synop. Lich. 1: 303. 1860 – Sikkim, Himalaya, leg. Hooker and Thomson. Type in H, K. Hue (1892, p. 66) Himalaya – taxon nomencl. syn. of *Nephromopsis rhytidocarpa* (Mont.) Zahlbr. in Räsänen (1952a, p. 47), Himalaya.

**Cetraria nepalensis* Awasthi, Proc. Indian Acad. Sci. 45 B: 130. 1957. Nepal, leg. Awasthi. Type in Aw.

**Cetraria nigricans* Nyl. var. *himalayana* Asahina in Kihara, Fauna and Flora Nepal Himalaya 1: 55. 1955. Nepal, leg. Nakao. Type in ?.

Cetraria nivalis (L.) Ach. – CATAL. 6: 338. 1930 – Paulson (1925, p. 190) Mt. Everest.

Cetraria pallescens Schaer. – CATAL. 6: 309. 1930 – Räsänen (1952a, p. 16, 18) Himalaya; Asahina (1955, p. 56) Nepal.

**Cetraria pallida* Awasthi, Proc. Indian Acad. Sci. 45 B: 130. 1957. Nepal, leg. Awasthi. Type in Aw.

Cetraria pinastri (Scop.) Röhl. – CATAL. 6: 309. 1930; – *Platysma pinastri* (Scop.), Jatta (1905, p. 179) Pangi.

Cetraria reticulata Krempelh. in litt., Räsänen (1952a, p. 28, 44) Himalaya – *nomen nudum*.

Cetraria cfr. *rhytidocarpa* – Asahina (1955, p. 58) Nepal.

Cetraria saepincola (Ehrh.) Ach. – CATAL. 6: 313. 1930; – *Platysma saepincola* (Ehrh.), Hue (1892, p. 67) Himalaya.

Cetraria sanguinea Schaer. – CATAL. 6: 316. 1930 – Müll. Arg. (1892, p. 218) Manipur; Räsänen (1952a, p. 32) Himalaya.

**Cetraria sanguinea* var. *dissecta* Müll. Arg. Journ. Linn. Soc. Bot. 29: 218. 1892. Manipur, leg. G. Watt. Type in K, G – CATAL. 6: 317. 1930 – Räsänen [1952a, p. 52 syn. of *Cetraria megaleia* (Nyl.) Räs.]; – *Parmelia thomsonii* var. *dissecta* (Müll. Arg.) Culberson (1962, p. 307) Himalaya.

**Cetraria sikkimensis* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 25. 1950. Sikkim, leg. Awasthi. Type in H, isotype in Aw – nomencl. syn. of *Nephromopsis rhytidocarpa* (Mont.) Zahlbr. in Räsänen (1952a, p. 47–48).

Cetraria straminea Vain. – CATAL. 6: 319. 1930 – Awasthi (1961, p. 36) NEFA.

Cetraria teysmanni Mont. et v. d. Bosch – Räsänen (1952a, p. 16, 28) Himalaya – taxon nomencl. syn. of *Cetraria pallescens* in CATAL. 6: 309. 1930.

**Cetraria thomsonii* (Stirt.) Müll. Arg. Flora 74: 373. 1891; Müll. Arg. (1892, p. 218) Manipur – CATAL. 6: 319. 1930 – Räsänen (1952a, p. 16, 31) Himalaya; Asahina (1955, p. 56) Nepal; Awasthi (1961, p. 35) NEFA; – *Platysma thomsonii* Stirt. Proc. Phil. Soc. Glasgow 11: 321. 1879. Darjeeling, leg. Thomson. Type in BM, GLAM, G; – *Parmelia thomsonii* (Stirt.) Culberson (1962, p. 304–307) Himalaya, Nepal.

**Cetraria wallichiana* (Tayl.) Müll. Arg. Flora 71: 139. 1888; Müll. Arg. (1892, p. 218) Manipur – CATAL. 6: 319. 1930 – Räsänen (1952a, p. 16, 28) Himalaya; Asahina (1955, p. 56) Nepal; Awasthi (1961, p. 35) NEFA; – *Sticta wallichiana* Tayl. London Journ. Bot. 6: 177. 1847. Nepal, leg. Wallich. Type in FH!; – *Platysma wallichianum* (Tayl.) Hue (1892, p. 67) Himalaya; Hue (1899, p. 211) Manipur; Nepal.

**Cetraria wallichiana* var. *isidioidea* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 25. 1950. Himalaya, leg. Awasthi. Type in H, isotype in Aw – taxon nomencl. syn. of *Cetraria hypotrachyna* Müll. Arg. in Räsänen (1952a, p. 40).

**CHAUDHURIA* Zahlbr.

**Chaudhuria indica* Zahlbr. Ann. Mycol. 30: 433. 1931. Darjeeling, leg. Chaudhuri. Type in W. Taxon nomencl. syn. of *Anaptychia diademata* (Tayl.) Kurokawa in Kurokawa (1962, p. 28).

CHIODECTON Ach. (Chiodectionaceae)

Chiodection farinaceum Fée – CATAL. 2: 486. 1923 – Leighton (1869, p. 182) Ceylon.

- **Chiodection flavicans* Müll. Arg. Journ. Linn. Soc. Bot. 29: 229. 1892.
Manipur, leg. G. Watt. Type in K, G – CATAL. 2: 486. 1923.
- **Chiodection heterotropum* Nyl. Flora 50: 8. 1867. Calcutta, leg. Kurz.
Type in H!; Hue (1892, p. 273) Calcutta – CATAL. 2: 487. 1923.
- Chiodection hypochnoides* Nyl. – CATAL. 2: 496. 1923 – Leighton (1869, p. 182) Ceylon.
- **Chiodection intermissum* Nyl. Bull. Soc. Linn. Normand. II, 7: 173.
1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 274) Andaman – CATAL. 2: 488. 1923.
- **Chiodection micrographum* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 480.
1923; – *Stigmatidium micrographum* Nyl. Flora 50: 6. 1867. Calcutta, leg. Kurz. Type in H!; Hue (1892, p. 259) Calcutta.
- **Chiodection pallidella* (Nyl.) Vain. see *Enterographa pallidella* (Nyl.) Redinger.
- Chiodection philippinum* Vain. – CATAL. 2: 491. 1923 – A. L. Smith (1931, p. 128) Calcutta; Chopra (1934, p. 21) Calcutta.
- Chiodection praepallens* (Nyl.) Vain. – CATAL. 2: 480. 1923; – *Stigmatidium praepallens* Nyl., Nylander (1900, p. 19) Ceylon.
- **Chiodection punctulatum* Stirt. Proc. Phil. Soc. Glasgow 13: 190. 1881.
Assam, leg. A. Watt. Type in BM!, GLAM – CATAL. 2: 491. 1923.
- Chiodection sphaerale* Ach. – CATAL. 2: 492. 1923 – Leighton (1869, p. 182) Ceylon; Nylander (1900, p. 19) Ceylon.
- **Chiodection stigmaticum* (Krempelh.) Zahlbr. Cat. Lich. Univ. 2: 482.
1923; – *Platygrapha stigmatica* Krempelh. in Nylander, Flora 50:
6. 1867. Calcutta, leg. Kurz. Type in H!.
- **Chiodection subfarinaceum* Stirt. Proc. Phil. Soc. Glasgow 10: 158.
1876. Kumaon, leg. Dickie. Type in BM!, GLAM – CATAL. 2:
493. 1923.

CHROODISCUS (Müll. Arg.) Müll. Arg. (Thelotremaeae)

Chroodiscus coccineus (Leight.) Müll. Arg., Santesson (1952, p. 309–11)
Ceylon – taxon nomencl. syn. of *Phyllophthalmaria coccinea* (Leight.) Zahlbr. in CATAL. 2: 642. 1923.

CLADONIA (Hill) Vain. (Cladoniaceae)

Cladonia aggregata (Sw.) Ach. – CATAL. 4: 437. 1927 – Vainio (1887,
p. 227) Nepal; Hue (1892, p. 51) Himalaya; Hue (1898, p. 258)
India; Asahina (1955, p. 47) Nepal; Awasthi (1960c, p. 171) Nepal.

Cladonia alpestris (L.) Rabenh. – CATAL. 4: 438. 1927 – Abbayes (1958a, p. 201) Nepal; Ahti (1961a, p. 47–51) Nepal.

- Cladonia amaurocraea* (Floerke) Schaer. – CATAL. 4: 441. 1927 –
Abbayes (1958a, p. 203) Nepal.
- Cladonia amaurocraea* f. *celotea* (Ach.) Vain. – CATAL. 4: 442. 1927 –
Abbayes (1958a, p. 203) Nepal.
- Cladonia amaurocraea* f. *oxyceras* (Ach.) Vain. – CATAL. 4: 443. 1927 –
Abbayes (1958a, p. 203) Nepal.
- **Cladonia appianata* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 27.
1950. Sikkim, Himalaya, leg. Awasthi. Type in H, isotype in Aw.
- Cladonia bacillaris* Nyl. – CATAL. 4: 444. 1927 – Vainio (1887, p. 91)
Ceylon; Leighton (1869, p. 163) Ceylon.
- Cladonia bacillaris* f. *clavata* (Ach.) Vain. – CATAL. 4: 445. 1927 –
Hue (1898, p. 260) India.
- Cladonia bellidiflora* (Ach.) Schaer. – CATAL. 4: 448. 1927 – Awasthi
(1961, p. 30) NEFA.
- **Cladonia botrytes* (Hag.) Willd. var. *exsoluta* Nyl. Acta Soc. Sci. Fenn.
26 (10): 5. 1900. Ceylon, leg. Almquist. Type in S, H – CATAL. 4:
452. 1927.
- Cladonia caespitica* (Pers.) Floerke – CATAL. 4: 452. 1927 – Moreau
(1952, p. 140) Kodaikanal.
- Cladonia calycantha* (Del.) Nyl. – CATAL. 4: 452. 1927 – Vainio
(1887, p. 202) Nepal; Abbayes (1958a, p. 206) Nepal.
- Cladonia campbelliana* (Vain.) Gyel., Abbayes (1958a, p. 211) Ceylon
– syn. of *Cladonia gracilis* v. *campbelliana* Vain. in CATAL. 4: 542.
1927.
- Cladonia cenotea* (Ach.) Schaer. – CATAL. 4: 458. 1927 – Abbayes
(1958a, p. 211) W. Pakistan.
- Cladonia ceratophylla* (Sw.) Spreng. – CATAL. 4: 461. 1927 – Ny-
lander (1860, p. 191) Nilgiri; Hue (1892, p. 41) Nilgiri.
- Cladonia ceratophyllina* (Nyl.) Vain. – CATAL. 4: 461. 1927 – Asahina
(1955, p. 47) Nepal.
- Cladonia chlorophaea* (Floerke) Spreng., Abbayes (1958a, p. 206)
Nepal; Abbayes (1958b, p. 212) W. Pakistan – syn. of *Cladonia*
pyxidata v. *chlorophaea* Floerke in CATAL. 4: 575, 1927.
- Cladonia coccifera* (L.) Willd. var. *stemmatina* Ach. – CATAL. 4: 468.
1927 – Vainio (1887, p. 160) Himalaya.
- Cladonia coniocraea* (Floerke) Sandst., Jatta (1905, p. 167) Nepal;
Jatta (1911, p. 312) Himalaya; Abbayes (1958b, p. 212) W.
Pakistan – syn. of *Cladonia fimbriata* v. *coniocraea* (Floerke) in
CATAL. 4: 497. 1927.

Cladonia cornuta (L.) Schaer. – CATAL. 4: 470. 1927 – Vainio (1887, p. 132) Sikkim.

Cladonia corymbosa (Ach.) Nyl., Nylander (1900, p. 5) Ceylon – syn. of *Cladonia furcata* var. *corymbosa* (Ach.) Nyl. in CATAL. 4: 526. 1927.

Cladonia deformis Hoffm. – CATAL. 4: 480. 1927 – Nylander (1860, p. 222) Himalaya; Vainio (1887, p. 191) Himalaya; Hue (1892, p. 48) Himalaya.

Cladonia degenerans (Floerke) Spreng. – CATAL. 4: 482. 1927 – Nylander (1860, p. 199) Himalaya; Vainio (1887, p. 143) Sikkim; Hue (1892, p. 44) Himalaya.

Cladonia degenerans var. *pleolepis* Floerke – CATAL. 4: 486. 1927 – Hue (1892, p. 44) India.

Cladonia degenerans var. *trachyna* Floerke – CATAL. 4: 486. 1927 – Müll. Arg. (1892, p. 217) Manipur.

Cladonia delavayi Abbayes, Candollea 16: 203–204. 1958. Nepal; Ahti (1961b, p. 256–57) Himalaya.

Cladonia delessertii (Nyl.) Vain. – CATAL. 4: 486. 1927 – Hue (1898, p. 268) Himalaya.

Cladonia delicata (Ehrh.) Floerke f. *subsquamosa* Nyl. – CATAL. 4: 489. 1927 – Leighton (1869, p. 253) Ceylon.

Cladonia digitata Schaer. – CATAL. 4: 490. 1927 – Nylander (1860, p. 222) Himalaya; Vainio (1887, p. 126) Himalaya; Hue (1892, p. 48) Himalaya.

Cladonia divulsa Nyl., Hue (1892, p. 43) India; – *Cladonia gracilis* v. *divulsa*, Nylander (1860, p. 197) India – taxon not recorded in CATAL.

Cladonia fimbriata (L.) Fr. – CATAL. 4: 494. 1927 – Vainio (1894, p. 246–53) Nilgiri; Jatta (1902, p. 4) Kumaon, and Kashmir; Abbayes (1958b, p. 212) W. Pakistan; Poelt (1961, p. 87) N.W. Karakorum.

Cladonia fimbriata var. *coniocraea* Floerke – see *Cladonia coniocraea* (Floerke) Sandst.

Cladonia fimbriata var. *ochrochlora* (Floerke) Vain. – CATAL. 4: 502. 1927; – *Cladonia ochrochlora* Floerke, Nylander (1900, p. 5) Ceylon; Jatta (1905, p. 167) Mussoorie.

Cladonia fimbriata var. *radiata* (Schreb.) Coem. – CATAL. 4: 505. 1927 – Nylander (1860, p. 195) Himalaya.

Cladonia fimbriata var. *subulata* (L.) Vain. – CATAL. 4: 510. 1927 – Vainio (1894, p. 284) Sikkim.

- Cladonia fimbriata* var. *subulata* f. *abortiva* (Floerke) Harm. – CATAL. 4: 511. 1927 – Jatta (1905, p. 167) Nepal; – *Cladonia fimbriata* v. *abortiva* Floerke, Jatta (1911, p. 312) Himalaya.
- Cladonia floerkeana* (Fr.) Sommerf. var. *carcata* (Ach.) Nyl. – CATAL. 4: 518. 1927; – *Cladonia carcata* Ach., Nylander (1900, p. 6) Ceylon.
- Cladonia foliacea* (Huds.) Schaer. var. *convoluta* (Lam.) Vain. – CATAL. 4: 525. 1927 – Vainio (1894, p. 399) Sikkim.
- Cladonia furcata* (Huds.) Schrad. – CATAL. 4: 525. 1927 – Nylander (1860, p. 205) Himalaya; Vainio (1887, p. 322) Himalaya; Hue (1892, p. 45) Himalaya.
- Cladonia furcata* var. *asperata* Müll. Arg. – not recorded in CATAL. – An intermediate form between f. *adspersum* and f. *surrectum* in Vainio (1887, p. 346) – Müll. Arg. (1892, p. 217) Manipur.
- Cladonia furcata* var. *corymbosa* Ach. – see *Cladonia corymbosa* (Ach.) Nyl.
- Cladonia furcata* var. *pinnata* (Floerke) Vain. – CATAL. 4: 529. 1927 – A. L. Smith (1931, p. 130) Darjeeling; Chopra (1934, p. 41) Darjeeling; Awasthi (1961, p. 29) NEFA.
- Cladonia furcata* var. *racemosa* (Hoffm.) Floerke – CATAL. 4: 531. 1927 – Jatta (1905, p. 168) Sikkim; Abbayes (1958a, p. 205) Nepal.
- Cladonia furcata* var. *surrecta* Floerke – CATAL. 4: 535. 1927 – Jatta (1905, p. 168) Sikkim; Jatta (1911, p. 312) Himalaya.
- Cladonia gracilenta* Nyl., Abbayes (1958b, p. 213) Ceylon – taxon not recorded in CATAL.
- Cladonia gracilis* (L.) Willd. var. *aspera* Floerke – CATAL. 4: 542. 1927 – Hue (1892, p. 272) India.
- Cladonia gracilis* var. *campbelliana* Vain. – see *Cladonia campbelliana* (Vain.) Gyeln.
- Cladonia gracilis* var. *elongata* (Jaqu.) Floerke – CATAL. 4: 548. 1927 – Abbayes (1958a, p. 206) Nepal; Awasthi (1961, p. 29) NEFA.
- Cladonia gracilis* var. *elongata* f. *hugueninii* Del. – CATAL. 4: 549. 1927 – Abbayes (1958a, p. 206) Nepal.
- Cladonia gracilis* var. *elongata* f. *laontera* (Del.) Arn., Asahina (1955, p. 47) Nepal.
- Cladonia grayi* Merrill – CATAL. 8: 458. 1932 – Poelt (1961, p. 87) N. W. Karakorum.
- Cladonia impexa* Harm. – CATAL. 4: 550. 1927 – Awasthi (1961, p. 29) NEFA.

- Cladonia macilenta* Hoffm. – CATAL. 4: 555. 1927 – Vainio (1887, p. 102) Ceylon.
- Cladonia mitis* Sandst. – CATAL. 4: 561. 1927 – Abbayes (1939, p. 120–29) Sikkim, Himalaya; Awasthi (1960c, p. 170) Nepal.
- Cladonia pleurota* (Floerke) Schaer. – CATAL. 8: 467. 1932 – Asahina (1955, p. 47) Nepal; Awasthi (1960c, p. 171) Nepal.
- Cladonia pleurota* var. *esorediata* Asahina, Asahina (1955, p. 47) Nepal.
- Cladonia pityrea* (Floerke) Fr. – CATAL. 4: 566. 1927 – Vainio (1894, p. 357) Himalaya; Hue (1900b, p. 252) Nilgiri; A. L. Smith (1931, p. 130) Sikkim; Chopra (1934, p. 41) Sikkim; Abbayes (1958b, p. 213) Himalaya.
- Cladonia pityrea* f. *megathallina* Vain. – CATAL. 4: 567. 1927 – Hue (1898, p. 278) Nilgiri; Hue (1900b, p. 252) Nilgiri.
- Cladonia polyphylla* Mont. et v. d. Bosch., Abbayes (1958b, p. 213) Ceylon.
- Cladonia pyxidata* (L.) Fr. – CATAL. 4: 573. 1927 – Babington (1852, p. 250) Kumaon; Vainio (1894, p. 229) N.W. Himalaya; Jatta (1905, p. 167) Pangi; A. L. Smith (1931, p. 129) Kashmir; Abbayes (1958a, p. 206) Nepal; Awasthi (1960c, p. 171) Nepal; Poelt (1961, p. 87) N. W. Karakorum.
- Cladonia pyxidata* var. *chlorophaea* Floerke – see *Cladonia chlorophaea* (Floerke) Spreng.
- Cladonia pyxidata* var. *neglecta* (Floerke) Mass. – CATAL. 4: 579. 1927 – Vainio (1894, p. 229) Sikkim; Asahina (1955, p. 47) Nepal.
- Cladonia rangiferina* (L.) Web. – CATAL. 4: 583. 1927 – Vainio (1887, p. 14) Himalaya.
- Cladonia rangiferina* ssp. *rangiferina* var. *rangiferina* – Ahti (1961, p. 86–90) Sikkim, Nepal.
- Cladonia rangiformis* Hoffm. var. *pungens* (Ach.) Vain. – CATAL. 4: 590. 1927 – Vainio (1887, p. 361–63) Khasia hills.
- Cladonia reticulata* (Russell) Vain. – CATAL. 4: 592. 1927 – Vainio (1887, p. 282) Himalaya.
- Cladonia scabriuscula* (Coem) Sandst. – CATAL. 8: 473. 1932 – Abbayes (1958a, p. 205) Nepal.
- Cladonia squamosa* (Scop.) Hoffm. – CATAL. 4: 594. 1927 – Nylander (1900, p. 5) Ceylon.
- Cladonia squamosa* var. *denticollis* (Hoffm.) Floerke f. *squamosissima* Floerke – CATAL. 4: 597. 1927 – Moreau (1952, p. 137) Shembaganur, Madurai.

Cladonia squamosa var. *muricella* (Del.) Vain. – CATAL. 4: 599. 1927 – A. L. Smith (1931, p. 130) Darjeeling; Chopra (1934, p. 41) Darjeeling.

Cladonia sylvatica (L.) Hoffm. – CATAL. 4: 609. 1927 – Vainio (1887, p. 24) Himalaya; Jatta (1911, p. 312) Sikkim; Asahina (1955, p. 47) Nepal; Awasthi (1960c, p. 171) Nepal.

Cladonia tenuis (Floerke) Harm. var. *tenuis* – Ahti (1961a, p. 57–61) India, Nepal – taxon within the species in CATAL. 4: 614. 1927, no variety.

Cladonia turgida (Ehrh.) Hoffm. – CATAL. 4: 616. 1927 – Nylander (1860, p. 205) Himalaya; Hue (1892, p. 45) Himalaya.

Cladonia turgida f. *stricta* Nyl. – CATAL. 4: 617. 1927 – Asahina (1955, p. 47) Nepal.

Cladonia uncialis (L.) Web. – CATAL. 4: 617. 1927 – Vainio (1887, p. 259) Himalaya.

Cladonia verticillata Hoffm. – CATAL. 4: 621. 1927 – Vainio (1894, p. 183) Manipur; Müll. Arg. (1892, p. 217) Manipur; Awasthi (1961, p. 30) Assam.

Cladonia verticillata var. *cervicornis* (Ach.) Floerke – CATAL. 4: 623. 1927 – Vainio (1894, p. 191) India.

Cladonia vulcanica Zoll., Abbayes (1958b, p. 211) Ceylon – syn. of *Cladonia didyma* var. *vulcanica* Zoll. in CATAL. 4: 490. 1927.

Cladonia yunnana (Vain.) des Abb., Abbayes (1958a, p. 202) Nepal – taxon syn. of *Cladonia transcendens* var. *yunnana* Vain. in CATAL. 4: 615. 1927.

CLATHROPORINA Müll. Arg. (Pyrenulaceae)

**Clathroporina* (?) *anoptella* (Stirt.) Zahlbr. Cat. Lich. Univ. 1: 415. 1922; – *Verrucaria anoptella* Stirt. Proc. Phil. Soc. Glasgow 13: 190. 1881. Assam, leg. A. Watt. Type in BM, GLAM.

**Clathroporina duplicascens* (Nyl.) Zahlbr. Cat. Lich. Univ. 1: 416. 1922; – *Verrucaria duplicascens* Nyl. Bull. Soc. Linn. Normand. II, 7: 178. 1873. Andaman, leg. Kurz. Type in H, BM!.

COCCOCARPIA Pers. (Pannariaceae)

Coccocarpia molybdea Pers., Montagne (1842, p. 20) Nilgiri; Hue (1892, p. 123) Andaman; Nylander (1900, p. 9) Ceylon – taxon nomencl. syn. of *Coccocarpia pellita* var. *parmelioides* (Hook.) Müll. Arg. in CATAL. 3: 287–88. 1925.

Coccocarpia pellita (Ach.) Müll. Arg. – CATAL. 3: 285. 1925 – A.L. Smith (1931, p. 129) Darjeeling; Chopra (1934, p. 28) Darjeeling; Awasthi (1961, p. 25) Assam.

**Coccocarpia pellita* var. *atrocaesia* Räs. Arch. Soc. Zool. Bot. "Vano" 6 (2): 84. 1952. Himalaya, leg. Awasthi. Type in H, isotype in Aw.

Coccocarpia pellita var. *cronia* Tuck. – CATAL. 3: 282. 1925; – *Coccocarpia cronia* (Tuck.) Vain., Jatta (1905, p. 180) Andaman; Awasthi (1963, p. 29) Quilon, Travancore.

Coccocarpia pellita var. *genuina* Müll. Arg., Jatta (1905, p. 180) Andaman – taxon syn. of *Coccocarpia pellita* in CATAL. 3: 285. 1925.

Coccocarpia pellita var. *incisa* (Pers.) Müll. Arg. – CATAL. 3: 286. 1925 – Jatta (1905, p. 180) Andaman; Moreau (1952, p. 138) Shembaganur, Madurai; – *Coccocarpia molybdea* var. *incisa* (Pers.), Nylander (1873, p. 165) Andaman; – *Coccocarpia incisa* Pers., Hue (1892, p. 123) Andaman.

Coccocarpia pellita var. *pannosa* Müll. Arg. – CATAL. 3: 287. 1925 – Jatta (1905, p. 180) Andaman.

Coccocarpia pellita var. *parmelioides* (Hook.) Müll. Arg. – CATAL. 3: 287. 1925 – Jatta (1905, p. 180) Andaman; Moreau (1952, p. 138) Palni hills; – *Coccocarpia parmelioides* (Hook.), Leighton (1869, p. 166) Ceylon.

Coccocarpia pellita var. *smaragdina* (Pers.) Müll. Arg. – CATAL. 3: 289. 1925; – *Coccocarpia smaragdina* Pers., Leighton (1869, p. 166) Ceylon.

Coccocarpia pellita var. *tenuir* (Nyl.) Müll. Arg. – Müll. Arg. (1882, p. 321) Ceylon – taxon nomencl. syn. of *Coccocarpia pellita* var. *lividorufo* (Mey. et Flot.) Zahlbr. in CATAL. 3: 287. 1925.

COENOGONIUM Ehrb. (Coenogoniaceae)

**Coenogonium cancellatum* Leight. Trans. Linn. Soc. London 27: 172. 1869. Ceylon, leg. Thwaites. Type in BM! – CATAL. 2: 736. 1923.

**Coenogonium corrugatum* Leight. Trans. Linn. Soc. London 27: 172. 1869. Ceylon, leg. Thwaites. Type in BM! – taxon not recorded in CATAL.

Coenogonium implexum Nyl. – CATAL. 2: 737. 1923 – Leighton (1869, p. 172) Ceylon.

Coenogonium leprieurii (Mont.) Nyl. – CATAL. 2: 738. 1923 – Leighton (1869, p. 172) Ceylon.

- **Coenogonium retistriatum* Leight. Trans. Linn. Soc. London 27: 172. 1869. Ceylon, leg. Thwaites. Type in BM! – CATAL. 2: 740. 1923.
- **Coenogonium tenuissimum* Krempelh. Nouv. Giorn. Bot. Ital. 7: 26. 1875. Ceylon, leg. ?. Type in G (not seen) – CATAL. 2: 741. 1923.

COLLEMA (Wigg.) Zahlbr. (Collemaceae)

- Collema actinoptychum* Nyl. – CATAL. 3: 32. 1925; – *Synchoblastus actinoptychus* Nyl., Jatta (1905, p. 185) Andaman.
- Collema aggregatum* (Ach.) Röhl. – CATAL. 3: 32. 1925 – Stirton (1876, p. 158) Ceylon; – *Synchoblastus aggregatus*, Quraishi (1928, p. 228) Mussoorie.
- **Collema coccophyllum* Nyl. Synop. Lich. 1: 112. 1860. Nilgiri, leg. Perrottet. Type in H, PC; Hue (1892, p. 22) India – CATAL. 3: 71. 1925.
- Collema fasciculare* (L.) Wigg. – CATAL. 3: 35. 1925 – Montagne (1842, p. 20) Nilgiri.
- Collema flaccidum* Ach., Moreau (1952, p. 137) Palni hills; – *Synchoblastus flaccidus* (Ach.), Jatta (1902, p. 13) India; Jatta (1911, p. 312) Himalaya – taxon nomencl. syn. of *Collema rupestre* (Sw.) Rabenh. in CATAL. 3: 57. 1925.
- Collema furvum* (Ach.) DC – CATAL. 3: 78. 1925 – Jatta (1902, p. 13) Kumaon.
- Collema granulatum* (L.f.) Röhl. – CATAL. 3: 84. 1925; – *Collema pulposum* var. *granulatum* (Sw.), Jatta (1905, p. 185) Andaman.
- Collema implicatum* Nyl. – CATAL. 3: 39. 1925; – *Synchoblastus implicatus* Nyl., Jatta (1905, p. 188) Kurseong, Sikkim.
- Collema nigrescens* (Huds.) DC – CATAL. 3: 51. 1925 – Montagne (1842, p. 20) Nilgiri; Babington (1852, p. 252) Kumaon; Leighton (1869, p. 162) Ceylon; Moreau (1952, p. 137) Kodaikanal.
- **Collema nigrescens* var. *biliosum* Mont. Ann. Sci. Nat. Bot. II, 18: 20. 1842. Nilgiri, leg. Perrottet. Type in (?) PC – CATAL. 3: 56. 1925.
- Collema nigrescens* var. *furfuraceum* (Schaer.) Oliv. – CATAL. 3: 56. 1925 – Moreau (1952, p. 137) Palni hills.
- Collema polycarpon* Hoffm. – CATAL. 3: 43. 1925 – Awasthi (1963, p. 29) Pratapgarh fort, Maharashtra.
- **Collema proboscidale* Mont. Ann. Sci. Nat. Bot. II, 18: 20. 1842. Ootacamund, Nilgiri, leg. Perrottet. Type in (?) PC – CATAL. 3: 45. 1925.

**Collemarottleri* Ach. Lichenogr. Univ. 1810, p. 657. India. Type in (?) H, UPS – CATAL. 3: 57. 1925.

Collemaryssoleum (Tuck.) Tuck. – CATAL. 3: 46. 1925 – Awasthi (1963, p. 29) Madurai, Shembaganur.

Collema subnigrescens Degel. – Awasthi (1963, p. 29) Ootacamund.

CORNICULARIA Ach. (Parmeliaceae)

Corniculariaculeata (Schreb.) Ach.; – *Cetrariaaculeata* Fr., Hue (1899, p. 83) Himalaya – taxon nomencl. syn. of *Corniculariatenuissima* (L.) Zahlbr. in CATAL. 6: 420–24. 1930.

CROCYNIA Mass. (Chrysotrichaceae)

**Crocynia indica* B. de Lesd. in Hue, Bull. Soc. Bot. France 17: 395. 1924. Pangi. Type in PC – CATAL. 8: 239. 1932.

Crocynialanuginosa (Ach.) Hue; – *Amphiloma lanuginosa* Nyl., Jatta (1905, p. 179) Pangi, and Mussoorie, N.W. Himalaya – taxon nomencl. syn. of *Crocyniamembranacea* (Dicks.) Zahlbr. in CATAL. 2: 576–78. 1923.

**CRYPTOTHECIA* (Stirt.) A.L. Smith (Cryptotheeciaceae)

Cryptotheciacandida (Krempelh.) R. Sant. – Santesson (1952, p. 65 to 68) Ceylon – taxon under *Arthothelium candidum* (Krempelh.) Müll. Arg. in CATAL. 2: 122. 1923.

**Cryptotheciaconferta* A.L. Smith, Trans. Brit. Mycol. Soc. 11: 194. 1926. Assam, leg. ?. Type in BM – CATAL. 8: 148. 1932.

**Cryptotheciainvoluta* Stirt. Proc. Phil. Soc. Glasgow 11: 319. 1879. Assam, leg. Watt. Type in BM, GLAM – CATAL. 2: 142. 1923.

**Cryptotheciastirtonii* A.L. Smith, Trans. Brit. Mycol. Soc. 11: 193. 1926. Tongloo, Darjeeling. leg. ?. Type in BM – CATAL. 8: 148. 1932.

**Cryptotheciabnidulans* Stirt. Proc. Phil. Soc. Glasgow 10: 164. 1876. Nilgiri, leg. ?. Type in BM, GLAM – CATAL. 2: 143. 1923.

**Cryptotheciabtecta* Stirt. Proc. Phil. Soc. Glasgow 11: 320. 1879. Chinsurah, Assam, leg. G. Watt. Type in BM, GLAM – CATAL. 2: 143. 1923.

CYPHELIUM (Ach.) Th. Fr. (Cypheliaceae)

Cypheliumleucampyx (Tuck.) Zahlbr. – CATAL. 1: 667. 1922; – *Trachylia leucampyx* Tuck., Leighton (1869, p. 163) Ceylon.

Cyphelium stigonellum Ach.; – *Calicium stigonellum* Ach., Bélanger (1838, p. 137) Peninsular India – taxon nomencl. syn. of *Cyphelium sessile* (Pers.) Trevis. in CATAL. 1: 670. 1922.

DENDRISCOCAULON Nyl. (Uncertain affinity)

Dendriscocaulon umhausensis (Auersw.) Degel. – Awasthi (1963, p. 29) Kodaikanal – taxon syn. of *Dendriscocaulon bolacinum* (Ach.) Nyl. in CATAL. 3: 183. 1925.

DERMATINA Almqu. (Mycoporaceae)

- **Dermatina deplanata* (Müll. Arg.) Zahlbr. Cat. Lich. Univ. 1: 548. 1922; – *Mycoporum deplanatum* Müll. Arg. Journ. Linn. Soc. Bot. 29: 229. 1892. Manipur, leg. G. Watt. Type in K, G.
**Dermatina indica* (Müll. Arg.) Zahlbr. Cat. Lich. Univ. 1: 549. 1922; – *Mycoporum indicum* Müll. Arg. Journ. Linn. Soc. Bot. 29: 229. 1892. Manipur, leg. G. Watt. Type in K, G.

DERMATOCARPON (Eschw.) Th. Fr. (Dermatocarpaceae)

- **DERMATOCARPON CHOISYI* Awasthi Nom. nov.; – *Dermatocarpon rhizinosum* Choisy, Bull. Soc. Bot. France 78: 455. 1931. Kodaikanal, leg. Foreau. Type in ? – CATAL. 8: 600. 1932 – [non *Dermatocarpon rhizinosum* (Müll. Arg.) Zahlbr. Cat. Lich. Univ. 1: 233. 1922].

Dermatocarpon miniatum (L.) Mann. – CATAL. 1: 221. 1922; – *Endocarpon miniatum* (L.), Jatta (1905, p. 183) Pangi.

Dermatocarpon miniatum var. *complicatum* (Lightf.) Hellb. – CATAL. 1: 226. 1922 – A. L. Smith (1931, p. 128) Waziristan; Chopra (1934, p. 13) Waziristan.

Dermatocarpon moulinsii (Mont.) Zahlbr. – CATAL. 1: 230. 1922 – A. L. Smith (1931, p. 128) Kashmir; Chopra (1934, p. 13) Kashmir; Moreau (1952, p. 136) Palni hills; Asahina (1955, p. 43) Nepal; Bhatia (1957, p. 38) N.W. Himalaya; – *Endocarpon moulinsii* Mont., Hue (1892, p. 277) Himalaya.

Dermatocarpon rufescens (Ach.) Th. Fr. – CATAL. 1: 233. 1922 – A. L. Smith (1931, p. 128) Waziristan; Chopra (1934, p. 14) Waziristan.

- **Dermatocarpon vellereum* Zschacke in Rabenh. Krypt. Flora 9 (1.1): 638. 1934. Pangi, N.W. Himalaya, leg. Skoliezka – CATAL. 10: 66. 1940.

DICTYONEMA (C. Ag.) Zahlbr. (Thelephoraceae)

Dictyonema sericeum (Sw.) Berk. – CATAL. 7: 746. 1931; – *Dichonema sericeum* (Sw.), Nylander (1863, p. 51) India.

DIMERELLA Trevis. (Gyalectaceae)

Dimerella lutea (Dicks.) Trevis.; – *Lecidea lutea* (Dicks.), Nylander (1869, p. 70) Bengal; Leighton (1869, p. 172) Ceylon; Hue (1892, p. 183) India – taxon as syn. *Microphiale lutea* (Dicks.) Zahlbr. in CATAL. 2: 697. 1923.

Dimerella epiphylla (Müll. Arg.) Malme, Santesson (1952, p. 395–99) Ceylon – taxon syn. of *Microphiale epiphylla* (Müll. Arg.) Zahlbr. in CATAL. 2: 696. 1923.

DIPLOSCHISTES Norm. (Diploschistaceae)

Diploschistes actinostomus (Pers.) Zahlbr. – CATAL. 2: 651. 1923; – *Urceolaria actinostoma* Pers., Hue (1892, p. 181) India; Müll. Arg. (1892, p. 220) Manipur.

Diploschistes bryophilus (Ehrh.) Zahlbr. – CATAL. 2: 657. 1923; – *Diploschistes scruposus* var. *bryophilus* (Ehrh.) Hepp, Asahina (1955, p. 43) Nepal.

Diploschistes cinereocaesius (Sw.) Vain. – CATAL. 2: 660. 1923 – Bhateria (1957, p. 38) N.W. Himalaya; Awasthi (1963, p. 28) Oootacamund.

Diploschistes gypsaceus (Ach.) Zahlbr.; – *Urceolaria gypsacea* Ach., Nylander (1900, p. 18) Ceylon – taxon nomencl. syn. of *Diploschistes albissimus* (Ach.) Dalla Torre et Sarnth in CATAL. 2: 654–56. 1923.

**Diploschistes rampoddensis* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 665. 1923; – *Urceolaria rampoddensis* Nyl. Acta Soc. Sci. Fenn. 26 (10): 18. 1900. Ceylon, leg. Almquist. Type in S, H.

Diploschistes scruposus (Schreb.) Norm. – CATAL. 2: 665. 1923 – Poelt (1961, p. 86) N.W. Karakorum; – *Urceolaria scruposa* Ach., Leighton (1869, p. 166) Ceylon.

Diploschistes scruposus var. *arenarius* (Schaer.) Müll. Arg. – CATAL. 2: 671. 1923 – Poelt (1961, p. 86) N.W. Karakorum.

DIPLOTOMMA Mass. (pr. p. *Buellia* DeNot.) (Buellaceae)

Diplotomma hungarica Szat., Poelt (1961, p. 91) N.W. Karakorum.

DIRINA Fr. (Dirinaceae)

- **Dirina byssiseda* Müll. Arg. Journ. Linn. Soc. Bot. 29: 223. 1892.
Manipur, leg. G. Watt. Type in K, G – CATAL. 2: 506. 1923.
Dirina ceratoniae (Ach.) Fr. – CATAL. 2: 506. 1923 – Leighton (1869,
p. 166) Ceylon.
Dirina repanda Fr. – CATAL. 2: 508–509. 1923, India.

ECHINOPLACA Fée (Asterothyriaceae)

- Echinoplaca pellicula* (Müll. Arg.) R. Sant., Santesson (1952, p. 367
to 369) Ceylon – taxon under *Arthonia pellicula* Müll. Arg. in
CATAL. 2: 73. 1923.

ENDOCARPON (Hedw.) Zahlbr. (Dermatocarpaceae)

- Endocarpon pusillum* Hedw. – CATAL. 1: 246. 1922 – A. L. Smith
(1931, p. 128) Gujranwala, Punjab; Chopra (1934, p. 14) Gujran-
wala, Punjab.

ENTEROGRAPHA Fée (Opegraphaceae) sensu Santesson

- **Enterographa multiseptata* R. Sant. Symb. Bot. Upsal. 12: 108. 1952.
Ceylon, leg. Almquist. Type in UPS.
**Enterographa pallidella* (Nyl.) Redinger, Fedde Repert. 43: 61. 1939; –
Platygrapha pallidella Nyl. Flora 50: 6. 1867. Calcutta, leg. Kurz.
Type in H!; Hue (1892, p. 255) Calcutta – taxon under syn. *Chiodecton pallidellum* (Nyl.) Vain. in CATAL. 2: 480. 1923, and er-
ronously also under *Schismatomma palidella* (Nyl.) Zahlbr. in
CATAL. 2: 560. 1923.

**ENTERODICTYON* Müll. Arg. (Chiodectionaceae)

- **Enterodictyon indicum* Müll. Arg. Journ. Linn. Soc. Bot. 29: 230.
1892. Manipur, leg. G. Watt. Type in K, G – CATAL. 2: 470. 1923.

ERIODERMA Fée (Pannariaceae)

- Erioderma groendalianum* (Ach.) Hue – CATAL. 3: 278. 1925; –
Sticta groendaliana Ach., Montagne (1842, p. 18) Nilgiri.
**Erioderma meiocarpum* Nyl. Synop. Lich. 2: 47. 1863. Nilgiri, leg.
Perrottet. Type in H, PC; Hue (1892, p. 124) Nilgiri – CATAL. 3:
279. 1925.
Erioderma polycarpum Fée – CATAL. 3: 279. 1925 – Leighton (1869,
p. 166) Ceylon.

Erioderma unguigerum (Bory) Nyl. – CATAL. 3: 279. 1925 – Leighton (1869, p. 166) Ceylon.

Erioderma wrightii Tuck. – CATAL. 3: 280. 1925 – Jatta (1905, p. 180) Andaman.

EVERNIA Ach. (Usneaceae)

Evernia divaricata (L.) Ach. – CATAL. 6: 348. 1930 – Nylander (1860, p. 285) Himalaya; Hue (1892, p. 70) Himalaya.

Evernia mesomorpha Ach. – Asahina (1955, p. 62) Nepal – taxon nomencl. syn. of *Evernia thamnodes* (Fw.) Arn. in CATAL. 6: 361. 1930.

**Evernia stracheyi* Bab. London Journ. Bot. 4: 44. 1852. Kumaon, leg. Strachey and Winterbottom. Type in BM, K, DD. – Reference incorrectly recorded under *Nephromopsis stracheyi* in CATAL. 6: 344. 1930. – Taxon nomencl. syn. of *Cetraria everniella* Nyl. Synop. Lich. 1: 311. 1860, and CATAL. 6: 323. 1930.

GLYPHIS (Ach.) Fée (Chiodectionaceae)

Glyphis cicatricosa Ach. – CATAL. 2: 454. 1923 – Nylander (1867, p. 8) Calcutta; Hue (1892, p. 272) Calcutta; Nylander (1900, p. 23) Ceylon.

Glyphis cicatricosa var. *confluens* (Zenk.) Zahlbr. – CATAL. 2: 455. 1923; – *Glyphis confluens* Zenk., Leighton (1869, p. 181) Ceylon; Nylander (1900, p. 23) Ceylon.

**Glyphis duriuscula* Stirt. Proc. Phil. Soc. Glasgow 13: 189. 1881. Assam, leg. A. Watt. Type in BM!, GLAM – CATAL. 2: 456. 1923.

Glyphis favulosa Ach. – Stirton (1876, p. 157) Calcutta; Hue (1892, p. 272) Calcutta; Nylander (1900, p. 23) Ceylon – taxon nomencl. syn. of *Glyphis cicatricosa* Ach. in CATAL. 2: 454. 1923.

GLYPHOLECIA Nyl. (Acarosporaceae)

Glypholecia scabra (Pers.) Th. Fr. – CATAL. 5: 110. 1928 – Poelt (1961, p. 88) N. W. Karakorum; Awasthi (1963, p. 32) N. W. Himalaya.

GRAPHINA Müll. Arg. (Graphidaceae)

Graphina acharii (Fée) Müll. Arg. – CATAL. 2: 391. 1923 – A. L. Smith (1931, p. 128) Darjeeling; Chopra (1934, p. 19) Darjeeling, Sikkim.

**Graphina aeola* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 394. 1923; – *Graphis aeola* Stirt. Proc. Phil. Soc. Glasgow 11: 316. 1879. Chinsurah, Assam, leg. G. Watt. Type in BM!, GLAM.

- Graphina anguina* (Mont.) Müll. Arg. var. *pulverulenta* (Sm. et Sowarb) A. L. Smith – CATAL. 2: 397. 1923 – Quraishi (1928, p. 228) Mussoorie.
- Graphina anguina* var. *radiata* (Leight.) B. de Lesd. – CATAL. 2: 397. 1923 – Quraishi (1928, p. 228) Mussoorie.
- Graphina balbisii* (Fée) Müll. Arg. – CATAL. 2: 399. 1923; – *Graphis balbisii* Fée, Leighton (1869, p. 176) Ceylon.
- Graphina bilabiata* (Nyl.) Zahlbr. – CATAL. 2: 399. 1923, Ceylon (an error) – in the reference of the basionym *Graphis bilabiata* Nyl. Acta Soc. Sci. Fenn. 26 (10): 23. 1900, the locality cited is Labaun.
- **Graphina caesioradians* (Leight.) Müll. Arg. Bull. Herb. Boiss. 2: 92. 1894 – CATAL. 2: 399. 1923; – *Graphis caesioradians* Leight. Trans. Linn. Soc. London 27: 176. 1869. Ceylon, leg. Thwaites. Type in BM!.
- Graphina canaliculata* (Fée) Müll. Arg. – CATAL. 2: 400. 1923; – *Opegrapha canaliculata* (Fée), Bélanger (1838, p. 134) Peninsular India.
- **Graphina cingalina* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 401. 1923; – *Graphis cingalina* Nyl. Acta Soc. Sci. Fenn. 26 (10): 21. 1900. Ceylon, leg. Almquist. Type in H, S.
- *(*Graphina*) *concolor* (Nyl.); – *Graphis concolor* Nyl. Acta Soc. Sci. Fenn. 26 (10): 22. 1900. Ceylon, leg. Almquist. Type in H, S – taxon nomencl. syn. of *Graphina boschiana* Müll. Arg. in CATAL. 2: 399. 1923.
- **Graphina dimorphodes* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 404. 1923; – *Graphis dimorphodes* Nyl. in Leighton, Trans. Linn. Soc. London 27: 176. 1869. Ceylon, leg. Thwaites. Type in BM!; Hue (1892, p. 284) Ceylon; – *Fissurina dimorphodes* (Nyl.), Nylander (1900, p. 23) Ceylon.
- **Graphina discoides* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 404. 1923; – *Graphis discoides* Stirt. Proc. Phil. Soc. Glasgow 13: 187–88. 1881. Assam, leg. A. Watt. Type in BM!, GLAM.
- Graphina dividens* (Nyl.) Müll. Arg. – CATAL. 2: 404. 1923; – *Graphis dividens* Nyl., Leighton (1869, p. 175) Ceylon.
- Graphina fasciata* (Eschw.) Müll. Arg. – CATAL. 2: 406. 1923 – Müll. Arg. (1892, p. 226) Manipur.
- **Graphina fissofurcata* (Leight.) Müll. Arg. Flora 65: 385. 1882 – CATAL. 2: 406. 1923; – *Graphis fissofurcata* Leight. Trans. Linn. Soc. London 27: 177. 1869. Ceylon, leg. Thwaites. Type in BM!.
- Graphina gracilis* (Fr.) Müll. Arg. – CATAL. 2: 407. 1923; – *Graphis gracilis* (Fr.), Leighton (1869, p. 174) Ceylon.

- **Graphina incondita* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 409. 1923; –
Graphis incondita Nyl. Bull. Soc. Linn. Normand. II, 7: 176. 1873.
 Andaman, leg. Kurz. Type in H!; Hue (1892, p. 249) Andaman.
- **Graphina intortula* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 411. 1923; –
Graphis intortula Stirt. Proc. Phil. Soc. Glasgow 13: 186. 1881.
 Assam, leg. A. Watt. Type in BM!, GLAM.
- Graphina intricata* (Eschw.) Müll. Arg. – CATAL. 2: 411. 1923; –
Graphis intricata Eschw., Leighton (1869, p. 174) Ceylon.
- **Graphina leprographa* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 412. 1923; –
Graphis leprographa Nyl. Acta Soc. Sci. Fenn. 26 (10): 21. 1900.
 Ceylon, leg. Almquist. Type in H, S.
- **Graphina leucocarpoides* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 412. 1923;
 – *Graphis leucocarpoides* Nyl. Bull. Soc. Linn. Normand. II, 7: 76.
 1873. Andaman, leg. Kurz. Type in H!.
- **Graphina leuconecephala* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 413. 1923;
 – *Fissurina leuconecephala* Nyl. Flora 52: 73. 1869. Bengal, leg. Kurz.
 Type in H!; Hue (1892, p. 247) Bengal.
- **Graphina multistriata* Müll. Arg. Journ. Linn. Soc. Bot. 29: 227. 1892.
 Manipur, leg. G. Watt. Type in K, G – CATAL. 2: 414. 1923.
- Graphina obtecta* (Nyl.) Müll. Arg. – CATAL. 2: 415. 1923 – Müll. Arg.
 (1892, p. 227) Manipur; Moreau (1952, p. 136) Palni hills, Manalur;
 – *Graphis obtecta* Nyl., Nylander (1867, p. 8) Calcutta; Nylander
 (1869, p. 72) Bengal; Hue (1892, p. 244) India; Nylander (1900,
 p. 22) Ceylon.
- **Graphina obtecta* var. *oligospora* Müll. Arg. Journ. Linn. Soc. Bot. 29:
 227. 1892. Manipur, leg. G. Watt. Type in K, G – CATAL. 2: 415.
 1923.
- **Graphina particeps* (Nyl.) Müll. Arg. Flora 65: 386. 1882 – CATAL.
 2: 417. 1923; – *Graphis particeps* Nyl. Bull. Soc. Linn. Normand.
 II, 7: 177. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892,
 p. 244) Andaman; Nylander (1900, p. 22) Ceylon.
- **Graphina perstriatula* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 418. 1923; –
Graphis perstriatula Nyl. Bull. Soc. Linn. Normand. II, 7: 176.
 1873. Andaman, leg. Kurz. Type in H!. Hue (1892, p. 238) Andaman.
- **Graphina platycarpa* (Eschw.) Zahlbr. var. *parallela* (Müll. Arg.)
 Zahlbr. Cat. Lich. Univ. 2: 419. 1923; – *Graphina sophistica* var.
parallela Müll. Arg. Journ. Linn. Soc. Bot. 29: 226. 1892. Manipur,
 leg. G. Watt. Type in K, G.
- Graphina poitiaeai* (Fée) Müll. Arg. – CATAL. 2: 420. 1923; – *Graphis*
poitiaeai Fée, Leighton (1869, p. 175) Ceylon.

- **Graphina semirigida* Müll. Arg. Journ. Linn. Soc. Bot. 29: 226. 1892.
Manipur, leg. G. Watt. Type in K, G – CATAL. 2: 424. 1923.
- **Graphina simulans* (Leight.) Müll. Arg. Hedwigia 30: 52. 1891 –
CATAL. 2: 425. 1923; – *Graphis simulans* Leight. Trans. Linn.
Soc. London 27: 177. 1869. Ceylon, leg. Thwaites. Type in BM!.
- Graphina sophistica* (Nyl.) Müll. Arg.; – *Graphis sophistica* Nyl.,
Nylander (1900, p. 21) Ceylon; Jatta (1905, p. 183) Darjeeling –
taxon nomencl. syn. of *Graphina platycarpa* (Eschw.) Zahlbr. in
CATAL. 2: 418. 1923.
- **Graphina spilota* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 425. 1923; –
Graphis spilota Stirt. Proc. Phil. Soc. Glasgow 13: 187. 1881.
Assam, leg. A. Watt. Type in BM!, GLAM.
- **Graphina streblocarpa* (Bél.) Müll. Arg. Flora 65: 502. 1882 – CATAL.
2: 426. 1923; – *Opegrapha streblocarpa* Bél. Voyag. Ind. Orient. 2:
134. 1838. Bengal, leg. Bélanger, Type in ?.
- **Graphina subobtecta* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 427. 1923; –
Graphis subobtecta Nyl. Bull. Soc. Linn. Normand. II, 7: 177. 1873.
Andaman, leg. Kurz. Type in H!; Hue (1892, p. 244) Andaman.
- Graphina subserpentina* (Nyl.) Müll. Arg. – CATAL. 2: 427. 1923; –
Graphis subserpentina Nyl., Hue (1892, p. 235) Ceylon; Nylander
(1900, p. 21) Ceylon.
- Graphina substriatula* (Nyl.) Zahlbr. – CATAL. 2: 427. 1923; –
Graphis substriatula Nyl., Leighton (1869, p. 175) Ceylon.
- **GRAPHINA SUBTORQUENS* (Nyl.) Comb. nov.; – *Graphis*
subtorquens Nyl. Bull. Soc. Linn. Normand. II, 7: 177. 1873.
Andaman, leg. Kurz. Type in H; – taxon not recorded in CATAL.
- **Graphina tuberculosa* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 429. 1923; –
Graphis tuberculosa Stirt. Proc. Phil. Soc. Glasgow 11: 317. 1879.
Assam, leg. G. Watt. Type in BM!, GLAM.

GRAPHIS (Adans.) Müll. Arg. (Graphidaceae)

- Graphis afzelii* Ach. – CATAL. 2: 291. 1923 – Leighton (1869, p. 175)
Ceylon.
- Graphis anguilliformis* Tayl. – Leighton (1869, p. 173) Ceylon – taxon
nomencl. syn. of *Graphis illinata* Eschw. in CATAL. 2: 312. 1923.
- Graphis assimilis* Nyl. – Nylander (1900, p. 20) Ceylon – taxon
nomencl. syn. of *Graphis intricata* Fée in CATAL. 2: 313. 1923.
- **Graphis capillacea* Stirt. Proc. Phil. Soc. Glasgow 11: 315. 1879. Chinsu-
rah, Assam, leg. G. Watt. Type in BM!, GLAM – CATAL. 2: 297. 1923.

- **Graphis celata* Stirt. Proc. Phil. Soc. Glasgow 11: 316. 1879. Assam, leg. G. Watt. Type in BM!, GLAM – CATAL. 2: 297. 1923.
- **Graphis ceylanica* Zahlbr. Cat. Lich. Univ. 2: 297. 1923. Ceylon; – *Graphis irradians* Nyl. Acta Soc. Sci. Fenn. 26 (10): 21. 1900. Ceylon, leg. Almquist. Type in H, S.
- Graphis circumradians* Nyl. – CATAL. 2: 299. 1923 – Nylander (1873, p. 177) Andaman; Hue (1892, p. 248) Andaman.
- Graphis cinerea* Féé var. *conglomerata* (Féé) Müll. Arg. – CATAL. 2: 298. 1923; – *Graphis conglomerata* (Féé), Leighton (1869, p. 175) Ceylon.
- **Graphis coarctata* Stirt. Proc. Phil. Soc. Glasgow 11: 314. 1879. Assam, leg. G. Watt. Type in BM!, GLAM – CATAL. 2: 299. 1923.
- Graphis comma* Ach. – Jatta (1905, p. 183) Kurseong, Sikkim – taxon nomencl. syn. of *Graphis lineola* in CATAL. 2: 316. 1923.
- Graphis connata* (Eschw.) Nyl., Leighton (1869, p. 174) Ceylon – taxon nomencl. syn. of *Graphis anfractuosa* (Eschw.) Eschw. in CATAL. 2: 292. 1923.
- **Graphis contortuplicata* Müll. Arg. Journ. Linn. Soc. Bot. 29: 225. 1892. Manipur, leg. G. Watt. Type in K, G – CATAL. 2: 300. 1923.
- Graphis duplicata* Ach. – CATAL. 2: 303. 1923 – Müll. Arg. (1892, p. 224) Manipur; Müll. Arg. (1895, p. 195) Sikkim; – *Opegrapha duplicata* Ach., Bélanger (1838, p. 134) Peninsular India.
- Graphis duplicata* var. *sublaevis* (Nyl.) Müll. Arg., Müll. Arg. (1892, p. 224) Manipur – taxon nomencl. syn. of *Graphis duplicata* var. *peruviana* (Féé) Zahlbr. in CATAL. 2: 303. 1923.
- Graphis furfuracea* Leight. – CATAL. 2: 309. 1923 – Hue (1892, p. 246) Ceylon.
- Graphis grammatis* Féé – CATAL. 2: 310. 1923; – *Opegrapha grammatis* (Féé), Bélanger (1838, p. 136) Peninsular India.
- **Graphis implexula* Stirt. Proc. Phil. Soc. Glasgow 13: 186. 1881. Assam, leg. A. Watt. Type in BM!, GLAM – CATAL. 2: 313. 1923.
- **Graphis intermediella* Stirt. Proc. Phil. Soc. Glasgow 11: 316. 1879. Assam, leg. G. Watt. Type in BM!, GLAM – CATAL. 2: 313. 1923.
- **Graphis intricata* Féé f. *rectiuscula* Nyl. in Hue, Nouv. Arch. Mus. III, 3: 152. 1891, and (1892, p. 234) Himalaya, leg. ?. Type in PC – CATAL. 2: 314. 1923.
- **Graphis irradians* Nyl. – see *Graphis ceylanica* Zahlbr.
- **Graphis longiramea* Müll. Arg. Journ. Linn. Soc. Bot. 29: 225. 1892. Manipur, leg. G. Watt. Type in K, G – CATAL. 2: 317. 1923.

- **Graphis nematoidea* Leight. Trans. Linn. Soc. London 27: 176. 1869. Ceylon, leg. Thwaites. Type in BM! – CATAL. 2: 360. 1923.
- **Graphis nigroglauca* Leight. Trans. Linn. Soc. London 27: 174. 1869. Ceylon, leg. Thwaites. Type in ? BM – CATAL. 2: 318. 1923.
- **Graphis persulcata* Stirt. Proc. Phil. Soc. Glasgow 11: 315. 1879. Assam, leg. G. Watt. Type in BM!, GLAM – CATAL. 2: 320. 1923.
- **Graphis rimulosa* Trevis. var. *parallela* Müll. Arg. Journ. Linn. Soc. Bot. 29: 224. 1892. Manipur, leg. G. Watt. Type in K, G – taxon not recorded in CATAL.
- Graphis scripta* (L.) Ach. – CATAL. 2: 324. 1923 – Nylander (1867, p. 8) Calcutta; Leighton (1869, p. 174) Ceylon; Hue (1892, p. 232) India; Nylander (1900, p. 20) Ceylon; A. L. Smith (1931, p. 128) Darjeeling.
- Graphis scripta* var. *flexuosa* Mass. – CATAL. 2: 325. 1923 – Stirton (1876, p. 156) Calcutta.
- Graphis scripta* var. *pulverulenta* (Pers.) Ach. – CATAL. 2: 342. 1923 – Nylander (1867, p. 8) Calcutta; Leighton (1869, p. 174) Ceylon; Hue (1892, p. 232) India; – *Opegrapha pulverulenta* (Pers.), Bélanger (1838, p. 135) Peninsular India.
- **Graphis scripta* var. *sanguinolenta* Räs. Arch. Soc. Zool. Bot. "Vannamo" 6 (2): 86. 1952. Orissa, leg. Awasthi. Type in H, isotype in Aw.
- Graphis scripta* var. *serpentina* (Ach.) Meyer – CATAL. 2: 345. 1923 – Leighton (1869, p. 174) Ceylon; – *Opegrapha serpentina* (Ach.), Bélanger (1838, p. 135) Peninsular India.
- Graphis striatula* (Ach.) Spreng. – CATAL. 2: 354. 1923 – Leighton (1869, p. 175) Ceylon; Nylander (1873, p. 176) Andaman; Müll. Arg. (1892, p. 224) Manipur; Nylander (1900, p. 21) Ceylon; Moreau (1952, p. 137) Palni hills; – *Opegrapha striatula* (Ach.), Hue (1892, p. 238) Andaman.
- **Graphis subdisserpens* Nyl. Bull. Soc. Linn. Normand. II, 7: 175. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 234) Andaman – CATAL. 2: 355. 1923.
- Graphis subvirginea* Nyl. – CATAL. 2: 357. 1923; – *Graphis scripta* v. *subvirginea* Nyl., Nylander (1867, p. 8) Calcutta; Leighton (1869, p. 174) Ceylon; Hue (1892, p. 232) Calcutta.
- **Graphis supertecta* Müll. Arg. Journ. Linn. Soc. Bot. 29: 224. 1892. Manipur, leg. G. Watt. Type in K, G – CATAL. 2: 357. 1923.

Graphis tenella Ach. – CATAL. 2: 358. 1923 – Nylander (1900, p. 20) Ceylon.

**Graphis verminosa* Müll. Arg. Journ. Linn. Soc. Bot. 29: 224. 1892. Manipur, leg. G. Watt. Type in K, G – CATAL. 2: 360. 1923.

G YALECTA (Ach.) Zahlbr. (Gyalectaceae)

Gyalecta carneolutea (Turn.) Oliv. – CATAL. 2: 706. 1923; – *Lecidea carneolutea* (Turn.), Nylander (1867, p. 4) Calcutta.

**Gyalecta carneolutea* f. *minor* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 707. 1923 – basionym referred *Lecidea carneolutea* f. *minor* Nyl. Flora 50: 4. 1867 but in this reference no formal epithet of f. *minor* has been suggested by Nylander; Hue (1892, p. 183) Calcutta.

**Gyalecta effervescens* Nyl. Lich. Envir. Paris 1896, p. 76. Ceylon, leg. Almquist. Type in H, S. Nylander (1900, p. 13) Ceylon – CATAL. 2: 708. 1923.

**Gyalecta tropica* Bél. Voyage Ind. Orient. 2: 127. 1838. Peninsular India, leg. Bélanger. Type in ? PC – CATAL. 2: 728. 1923.

G YALECTIDIUM Müll. Arg. (Asterothyriaceae)

Gyalectidium aspidotum (Vain.) R. Sant., Santesson (1952, p. 360–62) Assam, Ceylon – taxon as *Sporopodium aspidotum* (Vain.) Zahlbr. in CATAL. 2: 679. 1923.

Gyalectidium filicinum Müll. Arg. – Awasthi (1963, p. 29) Madurai, Shembaganur – taxon as *Sporopodium filicinum* (Müll. Arg.) Zahlbr. in CATAL. 2: 679. 1923.

**G YMNODERMA* Nyl. (Cladoniaceae)

**Gymnoderma coccocarpum* Nyl. Synop. Lich. 2: 26. 1863. Tongloo, Sikkim, leg. Hooker and Thomson. Type in H, K. Hue (1892, p. 127) Himalaya – CATAL. 4: 428. 1927.

GYROPHORA Ach. (taxa included in *Umbilicaria* Hoffm. em. Frey)

GYROPHOROPSIS Elenk. et Sav.

(taxa included in *Umbilicaria* Hoffm. em. Frey)

GYROSTOMUM Fr. (Thelotremaeae)

Gyrostomum scyphuliferum (Ach.) Fr. – CATAL. 2: 644. 1923 – Nylander (1867, p. 4) Calcutta; Leighton (1869, p. 172) Ceylon; Hue (1892, p. 178) India.

HAE MATOMMA Mass. (Lecanoraceae)

Haematomma puniceum (Sw.) Mass. – CATAL. 5: 768. 1928 – A.L. Smith (1931, p. 130) Darjeeling; Chopra (1934, p. 52) Darjeeling; Moreau (1952, p. 141) Manalur, Palni hills; – *Parmelia punicea* Ach., Montagne (1842, p. 20) Nilgiri; – *Lecanora punicea* Ach., Lindsay (1866, p. 537–38) Sikkim; Stirton (1876, p. 159) Ceylon; Nylander (1900, p. 13) Ceylon; – *Lecania punicea* (Ach.), Leighton (1869, p. 166) Ceylon; Müll. Arg. (1892, p. 220) Manipur.

**Haematomma puniceum* var. *accolens* (Stirt.) Zahlbr. Cat. Lich. Univ. 5: 770. 1928; – *Lecanora punicea* var. *accolens* Stirt. Proc. Phil. Soc. Glasgow 13: 184. 1881. Assam, leg. A. Watt. Type in BM, GLAM; – *Lecania punicea* var. *accolens* (Stirt.), Müll. Arg. (1892, p. 220) Manipur.

Haematomma ventosum (L.) Mass. – CATAL. 5: 771. 1928 – Awasthi (1963, p. 33) Nepal.

**Haematomma wattii* (Stirt.) Zahlbr. Cat. Lich. Univ. 5: 776. 1928; Hillmann (1940, p. 37) India; – *Lecanora wattii* Stirt. Trans. New Zealand Instit. 30: 383. 1898. Darjeeling, leg. G. Watt. Type in BM, GLAM – taxon wrongly cited from “Nova Zealandia” in CATAL.

HELMINTHOCARPON Fée (Graphidaceae)

Helminthocarpon columbianum (Nyl.) Zahlbr. – CATAL. 2: 499. 1923; – *Graphis columbianum* Nyl., Nylander (1900, p. 22) Ceylon.

HEPPIA Naeg. (Heppiaceae)

Heppia patellata (Bagl.) Stiz. – CATAL. 3: 192. 1925 – Bhatia (1957, p. 39) Punjab, subhimalayan tract.

**HOLOGYMНИA* ? Nyl. (of uncertain affinity)

**Hologymnia subflabellans* Nyl. Acta Soc. Sci. Fenn. 26 (10): 7. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 6: 363. 1930.

ICMADOPHILA Trevis. (Lecanoraceae)

Icmadophila ericetorum (L.) Zahlbr. – CATAL. 5: 705. 1982; – *Baecomyces icmadophilus* Nyl., Nylander (1860, p. 183) Nepal; Hue (1892, p. 35) Nepal.

LAURERA Reichb. (Trypetheliaceae)

- Laurera madreporiformis* (Eschw.) Riddle – CATAL. 1: 504. 1922; –
Trypethelium madreporiformis Eschw., Nylander (1869, p. 73) Bengal; Hue (1892, p. 302) Bengal.
- Laurera megasperma* (Mont.) Riddle – CATAL. 1: 505. 1922; –
Trypethelium megaspermum Mont., Leighton (1869, p. 185) Ceylon.
- **Laurera subdiscreta* (Nyl.) Zahlbr. Cat. Lich. Univ. 1: 506. 1922; –
Trypethelium subdiscretum Nyl. Flora 52: 73. 1869. Bengal, leg. Kurz. Type in H! – Hue (1892, p. 302) Bengal.

LECANACTIS Eschw. (Lecanactidaceae)

- **Lecanactis concordans* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 534. 1923; –
Lecidea concordans Nyl. Bull. Soc. Linn. Normand. II, 7: 170. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 220) Andaman.
- Lecanactis patellariooides* (Nyl.) Vain. – CATAL. 2: 540. 1923; –
Lecidea patellariooides Nyl., Nylander (1867, p. 5) Calcutta.
- **Lecanactis premnea* (Ach.) Arn. var. *melargyra* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 544. 1923; – *Lecidea premnea* v. *melargyra* Nyl. Flora 50: 5. 1867. Calcutta, leg. Kurz. Type in H!; Hue (1892, p. 219) Calcutta.
- Lecanactis quassiae* (Fée) Zahlbr. var. *plurilocularis* (Nyl.) Zahlbr. – CATAL. 2: 545. 1923; – *Lecidea plurilocularis* Nyl., Nylander (1869, p. 71) Bengal; Hue (1892, p. 220) Bengal; – *Lecanactis premnea* v. *plurilocularis* Zahlbr., Moreau (1952, p. 136) Manalur, Madurai.

LECANIA (Mass.) Zahlbr. (Lecanoraceae)

- **Lecania achroelloides* (Nyl.) Zahlbr. Cat. Lich. Univ. 5: 713. 1928; –
Lecanora achroelloides Nyl. Acta Soc. Sci. Fenn. 26 (10): 13. 1900. Ceylon, leg. Almquist. Type in H, S.
- Lecania erysibe* (Ach.) Mudd. – CATAL. 5: 724. 1928 – Paulson (1925, p. 192) Mt. Everest.
- **Lecania pertenera* (Nyl.) Zahlbr. Cat. Lich. Univ. 5: 739. 1928; –
Lecanora pertenera Nyl. Acta Soc. Sci. Fenn. 26 (10): 13. 1900. Ceylon, leg. Almquist. Type in H, S – Santesson (1952, p. 438) – “types fragmentary, probably parasymbiont or parasite on some lichen thallus.”

LECANORA (Ach.) Th. Fr. (Lecanoraceae)

**Lecanora achroella* Nyl. var. *infinitula* Nyl. Acta Soc. Sci. Fenn. 26 (10): 11. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 5: 361. 1928.

Lecanora albella Ach. – Müll. Arg. (1892, p. 220) Manipur; Moreau (1952, p. 136) Palni hills – taxon nomencl. syn. of *Lecanora pallida* (Schreb.) Rabenh. in CATAL. 5: 496. 1928.

Lecanora allophana Röhl. var. *glabrata* (Ach.) Stein. – CATAL. 5: 373. 1928; – *Lecanora subfuscata* var. *glabrata* Ach., Müll. Arg. (1892, p. 393) Manipur.

**LECANORA ALMORENSIS* (Räs.) Comb. nov.; – *Aspicilia almorensis* Räs. Arch. Soc. Zool. Bot. “Vanamo” 6 (2): 82. 1952. Almora, N. W. Himalaya, leg. Awasthi. Holotype in H, isotype in Aw.

Lecanora alphoplaca (Wahlenb.) Ach. – CATAL. 5: 605. 1928 – Poelt (1961, p. 88) N. W. Karakorum; Awasthi (1963, p. 33) Kangra, N. W. Himalaya.

Lecanora angulosa Ach. – Leighton (1869, p. 166) Ceylon – taxon nomencl. syn. of *Lecanora carpinea* (L.) Vain. in CATAL. 5: 403. 1928.

Lecanora atra (Huds.) Ach. – CATAL. 5: 378. 1928 – Leighton (1869, p. 166) Ceylon; Nylander (1900, p. 10) Ceylon; Awasthi (1963, p. 33) Kodaikanal.

Lecanora atra var. *americana* Fée – CATAL. 5: 384. 1928 – Müll. Arg. (1892, p. 220) Manipur.

Lecanora baicalensis Zahlbr. – CATAL. 5: 607. 1928 – Poelt (1961, p. 89) N. W. Karakorum.

Lecanora caesiocinerea Nyl. – CATAL. 5: 267. 1928 – Awasthi (1963, p. 33) Kangra, N. W. Himalaya.

Lecanora calcarea (L.) Sommerf. – CATAL. 5: 268. 1928; – *Parmelia calcarea* (L.), Babington (1852, p. 244) Kumaon.

Lecanora cancriiformis (Hoffm.) Vain. – CATAL. 5: 401. 1928 – Moreau (1952, p. 140) Kodaikanal.

Lecanora carnulenta Nyl. – CATAL. 5: 402. 1928 – A. L. Smith (1931, p. 130) Darjeeling; Chopra (1934, p. 51) Darjeeling.

Lecanora cenisia Ach. – CATAL. 5: 410. 1928 – Müll. Arg. (1892, p. 220) Manipur.

**Lecanora ceylanica* Zahlbr. Cat. Lich. Univ. 5: 412. 1928. Ceylon; – *Lecanora pulverata* Nyl. Acta Soc. Sci. Fenn. 26 (10): 12. 1900. Ceylon, leg. Almquist. Type in H, S – non ex anno 1881.

Lecanora chlarona (Ach.) Nyl. – CATAL. 5: 413. 1928 – Nylander (1869, p. 70) Bengal; Hue (1892, p. 145) Bengal; Nylander (1900, p. 11) Ceylon; A.L. Smith (1931, p. 130) Calcutta; – *Lecanora subfusca* v. *chlaronia* Ach., Stirton (1876, p. 159) Calcutta; Müll. Arg. (1892, p. 220) Manipur.

Lecanora chlarotera Nyl. – CATAL. 5: 418. 1928 – *Lecanora subfusca* v. *chlaronia* Nyl., Jatta (1905, p. 181) Darjeeling.

Lecanora chondroderma Zahlbr. – CATAL. 8: 543. 1932 – Poelt (1958, p. 455) Sikkim.

Lecanora chrysoleuca (Sm.) Ach. – Hue (1892, p. 142) Himalaya; A.L. Smith (1931, p. 130) Kashmir; Chopra (1934, p. 49) Kashmir; – *Parmelia chrysoleuca* Ach., Babington (1852, p. 249) Kumaon; – *Squamaria chrysoleuca* Ach., Jatta (1905, p. 180) Pangi, Punjab – taxon nomencl. syn. of *Lecanora rubina* (Vill.) Ach. in CATAL. 5: 656. 1928.

Lecanora cinerea (L.) Röhl. – CATAL. 5: 278. 1928 – Paulson (1925, p. 192) Mt. Everest.

Lecanora cinereorufescens (Ach.) Hepp – CATAL. 5: 288. 1928 – Paulson (1925, p. 192) Mt. Everest.

Lecanora cinereorufescens var. *diamarta* (Ach.) Nyl. – CATAL. 5: 290. 1928 – Hue (1892, p. 156) Himalaya.

Lecanora coarctata (Turn.) Ach. – see *Lecidea coarctata* (Turn.) Nyl.

Lecanora coilocarpa (Ach.) Nyl. – CATAL. 5: 428. 1928 – Nylander (1900, p. 11) Ceylon; A.L. Smith (1931, p. 130) Darjeeling; – *Lecanora subfusca* var. *coilocarpa* Ach., Müll. Arg. (1892, p. 220) Manipur.

**Lecanora collaeans* Nyl. Acta Soc. Sci. Fenn. 26 (10): 11. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 5: 432. 1928.

Lecanora dispersoareolata (Schaer.) Lamy – CATAL. 5: 620. 1928 – Poelt (1961, p. 89) N.W. Karakorum.

**Lecanora dissipans* Nyl. Acta Soc. Sci. Fenn. 26 (10): 11. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 5: 445. 1928.

Lecanora distans (Pers.) Nyl. – CATAL. 5: 445. 1928 – Hue (1892, p. 151) Calcutta; – *Lecanora subfusca* v. *distans* Ach., Nylander (1867, p. 4) Calcutta; Müll. Arg. (1892, p. 220) Manipur; Jatta (1905, p. 181) Mussoorie.

**LECANORA DWALIENSIS* (Räs.) Comb. nov.; – *Aspicilia dwaliensis* Räs. Arch. Soc. Zool. Bot. "Vanamo" 6 (2): 82. 1952. Almora district, Dwali, leg. Awasthi. Holotype in H, isotype in Aw.

- * *Lecanora emergens* Müll. Arg. Journ. Linn. Soc. Bot. 29: 220. 1892.
Manipur, leg. G. Watt. Type in K, G – CATAL. 5: 447. 1892.
- * *Lecanora fimbriatula* Stir. Proc. Phil. Soc. Glasgow 11: 311. 1879.
Nilgiri, leg. G. Watt. Type in BM!, GLAM – CATAL. 5: 452. 1928.
- Lecanora flava* Hepp – CATAL. 5: 308. 1928 – Awasthi (1963,
p. 34) Tehri Garhwal.
- Lecanora furfurosa* Tuck. – CATAL. 5: 458. 1928 – Nylander (1900,
p. 12) Ceylon.
- Lecanora frustulosa* (Dicks.) Ach. – CATAL. 5: 454. 1928 – Poelt
(1961, p. 89) N.W. Karakorum.
- Lecanora frustulosa* var. *argopholis* (Ach.) Link. – CATAL. 5: 455.
1928 – Jatta (1905, p. 181) Pangi, N.W. Himalaya.
- Lecanora garovagliai* (Körb.) Zahlbr. – CATAL. 5: 623. 1928 – Poelt
(1961, p. 89) N.W. Karakorum.
- Lecanora granifera* (Ach.) Nyl. – Müll. Arg. (1892, p. 219) Manipur;
Nylander (1900, p. 12) Ceylon; Moreau (1952, p. 140) Palni hills –
taxon syn. of *Lecidea granifera* (Ach.) in CATAL. 3: 768. 1925.
- * *LECANORA GRISEOCINEREA* (Räs.) Comb. nov.; – *Aspicilia griseocinerea* Räs. Arch. Soc. Zool. Bot. “Vanamo” 6 (2): 82.
1952. Almora district, Munsyari, leg. Awasthi. Holotype in H,
isotype in Aw.
- Lecanora horiza* (Ach.) Röhl. – Jatta (1902, p. 12) Kumaon; – *Lecanora subfuscata* v. *horiza* (Ach.), Jatta (1905, p. 181) Kurseong,
Darjeeling – taxon nomencl. syn. of *Lecanora allophana* var. *parisiensis* Stein. in CATAL. 5: 375. 1928.
- * *Lecanora indica* Zahlbr. Cat. Lich. Univ. 5: 626. 1928; – *Placodium demissum* Stir. Proc. Phil. Soc. Glasgow 11: 311. 1879. Nilgiri, leg.
G. Watt. Type in BM!, GLAM (non Körb.).
- Lecanora ingesta* Stir., [Stirton (1879, p. 311) Rangoon, Burma] –
wrong citation of “India Orientalis” in CATAL. 5: 474. 1928.
- Lecanora kansuensis* H. Magn.; – *Squamaria kansuensis* (H. Magn.)
Poelt (1961, p. 90) N.W. Karakorum.
- * *Lecanora khatiensis* Räs. Arch. Soc. Zool. Bot. “Vanamo” 6 (2): 81.
1952. Kumaon, Khati, leg. Awasthi. Holotype in H, isotype in Aw.
- * *Lecanora kumaonensis* Räs. Arch. Soc. Zool. Bot. “Vanamo” 6 (2): 81.
1952. Kumaon, Almora, Berinag, leg. Awasthi. Holotype in H, iso-
type in Aw.
- Lecanora lacustris* (With.) Nyl. – CATAL. 5: 322. 1928 – Hue (1892,
p. 155) Himalaya; Nylander (1900, p. 12) Ceylon.

Lecanora lesleyana Darb. – CATAL. 5: 327. 1928 – Paulson (1925, p. 192) Mt. Everest.

**Lecanora lobulosa* Nyl. in Hue (1892, p. 143) Himalaya – *nomen nudum* – not recorded in CATAL.

**Lecanora lecideoides* (Choisy) Zahlbr. Cat. Lich. Univ. 8: 537. 1932; – *Dirinella lecideoides* Choisy, Bull. Soc. Bot. France 78: 455. 1931. Kodaikanal, leg. Foreau. Type in ?.

Lecanora maculata H. Magn. – Awasthi (1963, p. 34) N.W. Himalaya, Spiti valley.

Lecanora melanaspis Ach. – CATAL. 5: 631. 1928; – *Parmelia melanaspis* (Ach.), Babington (1852, p. 249) Kumaon.

Lecanora melanophthalma (Ram.) Ram. – Poelt (1961, p. 89) N.W. Karakorum; Awasthi (1963, p. 34) Spiti valley; N.W. Himalaya – recorded as *Lecanora rubina* var. *melanophthalma* (Ram.) Zahlbr. in CATAL. 5: 659. 1928.

Lecanora muralis (Schreb.) Rabenh. – CATAL. 5: 631. 1928 – Poelt (1961, p. 89) N.W. Karakorum; – *Parmelia muralis* (Schreb.), Babington (1852, p. 249) Kumaon.

Lecanora mutabilis (Ach.) Mass. – CATAL. 5: 333. 1928 – Poelt (1961, p. 89) N.W. Karakorum.

Lecanora pallida (Schreb.) Rabenh. – CATAL. 5: 496. 1928 – Moreau (1952, p. 140) Shembaganur, Palni hills.

Lecanora phaedrophthalma Poelt – Poelt (1961, p. 89) N.W. Karakorum.

Lecanora placentiformis Stein. – CATAL. 5: 509. 1928 – Poelt (1961, p. 89) N.W. Karakorum.

Lecanora polytropa (Ehrh.) Rabenh. – CATAL. 5: 511. 1928 – Poelt (1961, p. 90) N.W. Karakorum.

Lecanora polytropa f. *subglobosa* Cromb. – CATAL. 5: 516. 1928 – Paulson (1925, p. 192) Mt. Everest.

Lecanora peltata (Ram.) Steud. – CATAL. 5: 644. 1928 – Poelt (1961, p. 89) N.W. Karakorum; Awasthi (1963, p. 34) Kangra district, N.W. Himalaya.

Lecanora praeradiosa Nyl. – CATAL. 5: 646. 1928 – Poelt (1961, p. 90) N.W. Karakorum.

Lecanora pulverata Nyl. – see *Lecanora ceylanica* Zahlbr.

Lecanora rubina (Vill.) Ach. – CATAL. 5: 656. 1928 – Paulson (1925, p. 192) Mt. Everest.

- Lecanora rugosa* (Pers.) Nyl. – Nylander (1900, p. 11) Ceylon – taxon nomencl. syn. of *Lecanora rugosella* Zahlbr. in CATAL. 5: 524. 1928.
- Lecanora sambuci* (Pers.) Nyl. – CATAL. 5: 539. 1928 – Quraishi (1928, p. 228) Mussoorie.
- **Lecanora sarcopis* (Wahlenb.) Röhl. f. *subeffusa* Nyl. Flora 50: 4. 1867. Calcutta, leg. Kurz. Type in H; Hue (1892, p. 150) Calcutta – CATAL. 5: 541. 1928.
- Lecanora scrupulosa* Ach. – CATAL. 5: 544. 1928; – *Lecanora subfuscata* v. *scrupulosa* (Ach.), Jatta (1905, p. 181) Mussoorie.
- Lecanora scabridula* H. Magn. – Poelt (1961, p. 90) N.W. Karakorum.
- *(*Lecanora*) *sikkimensis* (Räs.); – *Placolecanora sikkimensis* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 26. 1950. Sikkim, leg. Awasthi. Type in H, isotype in Aw – taxon nomencl. syn. of *Lecanora chondroderma* Zahlbr. in Poelt (1958, p. 455).
- **Lecanora somervellii* Pauls. Journ. Bot. 63: 192. 1925. Mt. Everest, leg. Somerville. Type in ? – CATAL. 5: 546. 1928 (typographic error into *sommervellii*).
- **Lecanora sorediella* Nyl. Acta Soc. Sci. Fenn. 26 (10): 12. 1900. Ceylon, leg. Almqvist. Type in H, S – CATAL. 5: 546. 1928.
- Lecanora subeffusa* (L.) Ach. – CATAL. 5: 551. 1928 – Leighton (1869, p. 166) Ceylon; Nylander (1900, p. 11) Ceylon; A. L. Smith (1931, p. 130) Darjeeling; Chopra (1934, p. 49) Darjeeling.
- Lecanora subfuscata* (L.) Ach. – CATAL. 5: 551. 1928 – Leighton (1869, p. 166) Ceylon; Nylander (1900, p. 11) Ceylon; A. L. Smith (1931, p. 130) Darjeeling; Chopra (1934, p. 49) Darjeeling; – *Parmelia subfuscata* Ach., Montagne (1842, p. 20) Nilgiri.
- Lecanora subfuscata* var. *argentata* (Ach.) Ach. – CATAL. 5: 557. 1928 – Müll. Arg. (1892, p. 220) Manipur.
- Lecanora subfuscata* var. *cinereocarnea* Eschw., Müll. Arg. (1892, p. 220) Manipur – taxon nomencl. syn. of *Lecanora leprosa* Fée in CATAL. 5: 480–81. 1928.
- Lecanora subfuscata* var. *linea* (Fr.) Körb. – CATAL. 5: 565. 1928 – Müll. Arg. (1892, p. 220) Manipur.
- Lecanora subfuscata* var. *rugosa* Nyl. – CATAL. 5: 566. 1928; – *Lecanora rugosa* Nyl., Nylander (1900, p. 11) Ceylon; A. L. Smith (1931, p. 130) Darjeeling; Chopra (1934, p. 50) Darjeeling.
- Lecanora subfuscata* var. *subcrenulata* Nyl. – CATAL. 5: 567. 1928 – Nylander (1869, p. 70) Bengal; – *Lecanora subcrenulata* Nyl., Hue (1892, p. 144) Bengal.

Lecanora tropica Zahlbr. Cat. Lich. Univ. 5: 589. 1928. Bengal – probably erroneously cited from Bengal as syn. *Lecanora subcrenulata* Nyl., by Hue (1891, p. 62) and in Hue (1892, p. 144). Refer to *Lecanora subfusca* var. *subcrenulata* Nyl.

Lecanora varia (Ehrh.) Ach. – CATAL. 5: 592. 1928 – Leighton (1869, p. 166) Ceylon; Nylander (1900, p. 11) Ceylon; – *Parmelia varia* (Ach.) Babington (1852, p. 249) Kumaon.

Lecanora varia var. *subvaria* (Nyl.) Oliv. – CATAL. 5: 598. 1928; – *Lecanora subvaria* Nyl., Nylander (1900, p. 12) Ceylon.

**Lecanora varia* var. *subducens* Nyl. Acta Soc. Sci. Fenn. 26 (10): 11. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 5: 598. 1928.

Lecanora verrucosa (Ach.) Laur. – Poelt (1961, p. 90) N. W. Karakorum; – *Lecanora verrucosa* (Ach.) Ach. in CATAL. 5: 357. 1928.

LECIDEA (Ach.) Zahlbr. (Lecideaceae)

**Lecidea advena* Nyl. in Hue, Nouv. Arch. Mus. III, 3: 133. 1891, and (1892, p. 215) Himalaya, leg. ?. Type in H! – CATAL. 3: 499. 1925.

**Lecidea albicans* Nyl. in Hue, Nouv. Arch. Mus. III, 3: 109. 1891, and (1892, p. 191) India, Parsunath, leg. ? (ex herb. Hooker). Type in H! – CATAL. 3: 731. 1925.

Lecidea albocoeruleascens (Wulf.) Ach. – CATAL. 3: 504. 1925 – Müll. Arg. (1892, p. 222) Manipur.

Lecidea altensis Th. Fr. – CATAL. 3: 512. 1925; – *Lecidella altensis* Th. Fr., Jatta (1905, p. 182) Mussoorie.

Lecidea arctica Sommerf. – CATAL. 3: 514. 1925 – Paulson (1925, p. 193) Mt. Everest.

Lecidea armeniaca (DC.) Fr. – CATAL. 3: 516. 1925 – Babington (1852, p. 252) Kumaon; Hue (1892, p. 216) Himalaya.

Lecidea assimilata Nyl. – CATAL. 3: 520. 1925 – Paulson (1925, p. 193) Mt. Everest.

Lecidea assimilis Th. Fr. – CATAL. 3: 521. 1925 – Paulson (1925, p. 193) Mt. Everest.

Lecidea atrobrunnea (Ram.) Schaer. – CATAL. 3: 522. 1925 – Poelt (1961, p. 86) N. W. Karakorum.

Lecidea auriculata Th. Fr. – CATAL. 3: 526. 1925 – Paulson (1925, p. 193) Mt. Everest; Awasthi (1963, p. 30) Kangra, N. W. Himalaya.

Lecidea aurigera (Fée) Müll. Arg., Müll. Arg. (1892, p. 222) Manipur – taxon nomenc. syn. of *Lecidea granifera* (Ach.) Vain. in CATAL. 3: 768–69. 1925.

- * *Lecidea awasthiana* Räs. Arch. Soc. Zool. Bot. "Vanamo" 6 (2): 85. 1952. Almora district, N.W. Himalaya, leg. Awasthi. Holotype in H, isotype in Aw.
- Lecidea carpathica* (Körb.) Szat. – Poelt (1961, p. 86) N.W. Karakorum.
- Lecidea cinnabarina* Fée – Bélanger (1838, p. 129) Peninsular India – taxon nomencl. syn. of *Lecidea piperis* var. *erythroplaca* (Fée) Krempelh. in CATAL. 3: 812. 1925.
- Lecidea coarctata* (Turn.) Nyl. – Awasthi (1963, p. 30) Almora, N.W. Himalaya; – *Lecanora coarctata* (Turn.) Ach., Nylander (1900, p. 10) Ceylon – CATAL. 5: 421. 1928.
- Lecidea decipiens* (Hedw.) Ach. – CATAL. 3: 867. 1925 – Paulson (1925, p. 193) Mt. Everest; A.L. Smith (1931, p. 129) Waziristan; Chopra (1934, p. 34) Waziristan; Poelt (1961, p. 86) N.W. Karakorum.
- * *Lecidea deminuens* Nyl. Acta Soc. Sci. Fenn. 26 (10): 13. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 3: 754. 1925.
- Lecidea elegantior* H. Magn. – Awasthi (1963, p. 31) Nepal.
- Lecidea enteroleuca* Ach. – Nylander (1900, p. 15) Ceylon – taxon nomencl. syn. of *Lecidea parasema* (Ach.) Ach. in CATAL. 3: 654. 1925.
- * *Lecidea fuscorubescens* Nyl. Bull. Soc. Linn. Normand. II, 7: 169. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 191) Andaman – taxon nomencl. syn. of *Lecidea caliginosa* Stirt. in CATAL. 3: 530. 1925.
- * *Lecidea fuscorubida* Nyl. Bull. Soc. Linn. Normand. II, 7: 170. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 191) Andaman – CATAL. 3: 763. 1925.
- Lecidea granifera* (Ach.) Vain. – CATAL. 3: 768. 1925; – *Lecanora granifera* Ach., Nylander (1867, p. 4) Calcutta; Müll. Arg. (1892, p. 219) Manipur; Nylander (1900, p. 12) Ceylon.
- * *Lecidea griseococcinea* Nyl. in Hue, Nouv. Arch. Mus. III, 3: 104. 1891, and (1892, p. 186) Himalaya, leg. Hooker. Type in H! – CATAL. 3: 779. 1925.
- Lecidea hedini* H. Magn., Poelt (1961, p. 86) N.W. Karakorum.
- * *Lecidea homochromoides* Nyl. Acta Soc. Sci. Fenn. 26 (10): 15. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 3: 597. 1925.
- * *Lecidea himalayana* (Bab.) Zahlbr. Cat. Lich. Univ. 3: 878. 1925; – *Biatora himalayana* Bab. Hook. London Journ. Bot. 4: 251. 1852. Kumaon, leg. Strachey and Winterbottom. Type in ? BM.

- Lecidea incongruens* Stirt. – An erroneous and superfluous entry in CATAL. 3: 895. 1925. The taxon has correctly been cited as *Bacidia incongruens* (Stirt.) Zahlbr. in CATAL. 4: 208. 1927.
- Lecidea lucida* (Ach.) Ach. – CATAL. 3: 792. 1925; – *Biatora lucida* (Ach.) Fr., Grover and Seshadri (1959, p. 238–40) Kumaon.
- Lecidea luridescens* Nyl. – CATAL. 3: 795. 1925 – Hue (1892, p. 187) Himalaya.
- Lecidea macrocarpa* (DC.) Steud. – CATAL. 3: 626. 1925 – Awasthi (1963, p. 31) Nepal.
- **Lecidea manipurensis* (Müll. Arg.) Zahlbr. Cat. Lich. Univ. 3: 884. 1925; – *Psora manipurensis* Müll. Arg. Journ. Linn. Soc. Bot. 29: 219. 1892. Manipur, leg. G. Watt. Type in K, G.
- Lecidea meiocarpa* Nyl. – Nylander (1900, p. 31) Ceylon – nomencl. syn. of *Lecidea minuta* (Schaer.) Nyl. in CATAL. 3: 799. 1925.
- Lecidea parasema* Ach. – CATAL. 3: 651. 1925 – Bélanger (1838, p. 129) Peninsular India.
- **Lecidea parasema* var. *mulleri* Zahlbr. Cat. Lich. Univ. 3: 663. 1925. Manipur; – *Lecidea parasema* var. *microcarpa* Müll. Arg. Journ. Linn. Soc. Bot. 29: 222. 1892. Manipur, leg. G. Watt. Type in K, G – (non Ach.).
- **Lecidea permabilis* Müll. Arg. Journ. Linn. Soc. Bot. 29: 221. 1925. Manipur, leg. G. Watt. Type in K, G – CATAL. 3: 810. 1925.
- **Lecidea pindarensis* Räs. Arch. Soc. Zool. Bot. “Vanamo” 6 (2): 85. 1952. Kumaon, leg. Awasthi. Type in H, isotype in Aw.
- Lecidea piperis* (Spreng.) Nyl. – CATAL. 3: 811. 1925 – Leighton (1869, p. 172) Ceylon.
- Lecidea portensis* Nadv. – Poelt (1961, p. 87) N.W. Karakorum.
- Lecidea rubina* Ach. – CATAL. 3: 822. 1925; – *Biatora rubina* (Ach.), Bélanger (1838, p. 128) India.
- Lecidea russula* Ach. var. *leprosa* Hue – CATAL. 3: 824. 1925 – Müll. Arg. (1892, p. 222) Manipur.
- Lecidea stigmata* Ach. – Poelt (1961, p. 87) N.W. Karakorum – taxon recorded as *Lecidea elaeochroma* Ach. in CATAL. 3: 568. 1925.
- **Lecidea sublutea* Nyl. Acta Soc. Sci. Fenn. 26 (10): 13. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 3: 833. 1925.
- Lecidea subrufescens* Nyl. Acta Soc. Sci. Fenn. 26 (10): 14. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 3: 834. 1925.
- Lecidea tessellata* (Ach.) Floerke – Poelt (1961, p. 87) N.W. Karakorum – taxon under *Lecidea cyanea* (Ach.) Röhl. in CATAL. 3: 553. 1925.

Lecidea vernalis (L.) Ach. – CATAL. 3: 852. 1925 – Leighton (1869, p. 172) Ceylon.

Lecidea vitellinaria Nyl., Poelt (1961, p. 87) N.W. Karakorum.

LEPRARIA Ach. (Imperfect Lichen)

Lepraria candelarius (L.) Fr. – CATAL. 7: 757. 1931 – Grover and Seshadri (1959, p. 238–40) Nilgiri.

Lepraria chlorina (DC.) Ach. – CATAL. 7: 759. 1931 – Grover and Seshadri (1959, p. 238–40) N.W. Himalaya.

Lepraria flava (Schreb.) Ach., Nylander (1900, p. 25) Ceylon – taxon nomencl. syn. of *Lepraria candelarius* Fr. in CATAL. 7: 757–58. 1931.

LEPTOGIDIUM Nyl. (Ephebaceae)

Leptogidium intricatum (Nyl.) Nyl. – CATAL. 2: 756. 1923 – Jatta (1911, p. 312) Malabar.

LEPTOGIUM (S. Gray) Zahlbr. (Collemaceae)

Leptogium azureum (Sw.) Mont. – Jatta (1905, p. 184) Kurseong, Sikkim, Andaman – taxon syn. of *Leptogium tremelloides* var. *azureum* (Sw.) Nyl. in CATAL. 3: 159. 1925.

Leptogium brebissonii Mont. – CATAL. 3: 126. 1925 – Montagne (1842, p. 20) Nilgiri.

Leptogium bullatum (Sw.) Mont. – CATAL. 3: 128. 1925 – Nylander (1860, p. 129) India; Lindsay (1866, p. 522) Kumaon; Hue (1892, p. 28) India; Bhatia (1957, p. 37) W. Himalaya.

Leptogium caesium (Ach.) Vain. – CATAL. 3: 129. 1925 – A. L. Smith (1931, p. 129) Darjeeling; Chopra (1934, p. 25) Darjeeling.

Leptogium caesium var. *pichneum* (Ach.) Vain. – CATAL. 3: 131. 1925; – *Leptogium pichneum* Ach., Nylander (1900, p. 1) Ceylon; – *Leptogium tremelloides* var. *pichneum* (Ach.), Jatta (1905, p. 184) Andaman.

Leptogium callithamnium (Tayl.) Nyl. – CATAL. 3: 182. 1925 – Leighton (1869, p. 162) Ceylon.

Leptogium chloromelum (Ach.) Nyl. – CATAL. 3: 131. 1925 – Nylander (1860, p. 128) India; Hue (1892, p. 27) India.

Leptogium cyanescens Nyl., Leighton (1869, p. 162) Ceylon – taxon nomencl. syn. of *Leptogium cyanizum* Nyl. in CATAL. 3: 133. 1925.

Leptogium cyanizum Nyl. – CATAL. 3: 133. 1925; – *Stephanophoron cyanizum* Nyl., Nylander (1900, p. 4) Ceylon.

**Leptogium devertens* (Nyl.) Zahlbr. Cat. Lich. Univ. 3: 134. 1925; – *Stephanophoron devertens* Nyl. Acta Soc. Sci. Fenn. 26 (10): 4. 1900. Ceylon, leg. Almquist. Type in H, S.

Leptogium diaphanum (Sw.) Mont. – Nylander (1900, p. 1) Ceylon – taxon nomencl. syn. of *Leptogium moluccanum* (Pers.) Vain. in CATAL. 3: 145. 1925.

Leptogium delavayi Hue – CATAL. 3: 176. 1925 – Jatta (1905, p. 185) Mussoorie.

Leptogium fallax Müll. Arg. – CATAL. 3: 134. 1925 – Jatta (1902, p. 14) Mussoorie; Jatta (1905, p. 183) N.W. Himalaya; Jatta (1911, p. 312) Malabar.

Leptogium fallax var. *congestum* Müll. Arg. – CATAL. 3: 135. 1925 – Jatta (1905, p. 183) Kurseong, Sikkim.

Leptogium hildenbrandii (Garov.) Nyl. – CATAL. 3: 176. 1925 – Jatta (1902, p. 14) Kumaon.

Leptogium inflexum Nyl. var. *isidiosulum* Nyl. – CATAL. 3: 136. 1925 – Stirton (1876, p. 157) Kumaon.

Leptogium marginellum (Sw.) S. Gray – CATAL. 3: 143. 1925 – Nylander (1873, p. 164) Andaman; Hue (1898, p. 227) Andaman; Moreau (1952, p. 137) Palni hills; – *Leptogium tremelloides* var. *marginellum* Nyl., Hue (1892, p. 26) Andaman.

Leptogium menziesii (Sm.) Mont. – CATAL. 3: 177. 1925 – Nylander (1860, p. 128) Sikkim; Hue (1892, p. 27) Himalaya; Hue (1898, p. 230) India; Jatta (1902, p. 14) Himalaya; Jatta (1905, p. 184) Himalaya; Jatta (1911, p. 312) Himalaya; A.L. Smith (1931, p. 129) Darjeeling; Kashmir; Chopra (1934, p. 24) Darjeeling and Kashmir; Asahina (1955, p. 46) Nepal.

Leptogium menziesii var. *fuliginosum* Müll. Arg. – CATAL. 3: 178. 1925 – Hue (1898, p. 230) Himalaya; Hue (1900b, p. 251) Nilgiri; A.L. Smith (1931, p. 129) Himalaya; Chopra (1934, p. 25) Darjeeling; Moreau (1952, p. 138) Kodaikanal.

Leptogium moluccanum (Pers.) Vain. – CATAL. 3: 145. 1925 – A.L. Smith (1931, p. 129) Darjeeling; Chopra (1934, p. 26) Darjeeling.

Leptogium palmatum (Huds.) Mont. – CATAL. 3: 147. 1925 – A.L. Smith (1931, p. 129) Darjeeling; Chopra (1934, p. 26) Darjeeling.

Leptogium phyllocarpum (Pers.) Mont. – CATAL. 3: 149. 1925 – Nylander (1860, p. 130) India; Hue (1892, p. 28) India.

**Leptogium phyllocarpum* var. *crassiusculum* (Tayl.) Zahlbr. Cat. Lich. Univ. 3: 149. 1925; – *Collema crassiusculum* Tayl. London Journ. Bot. 6: 195. 1847. Madras, leg. Wight. Type in FH!.

Leptogium phyllocarpum var. *isidiosum* Nyl. – Stirton (1876, p. 157) Kumaon – taxon nomencl. syn. of *Leptogium phyllocarpum* var. *coralloideum* (Mey. et Flot.) in CATAL. 3: 149. 1925.

Leptogium phyllocarpum var. *macrocarpum* Nyl. – CATAL. 3: 150. 1925 – Leighton (1869, p. 162) Ceylon; Hue (1898, p. 228) Ceylon.

Leptogium puiggarrii Müll. Arg. – CATAL. 3: 150. 1925 – Jatta (1905, p. 184) Andaman.

Leptogium saturninum (Dicks.) Nyl. – CATAL. 3: 178. 1925 – Leighton (1869, p. 162) Ceylon; Jatta (1902, p. 14) Kashmir; Moreau (1952, p. 138) Kodaikanal; Poelt (1961, p. 86) N.W. Karakorum; Awasthi (1961, p. 25) Assam; – *Collema saturninum* Ach., Montagne (1842, p. 20) Nilgiri; Babington (1852, p. 252) Kumaon.

Leptogium subtile (Schrad.) Torss – CATAL. 3: 170. 1925 – Quraishi (1928, p. 228) Mussoorie.

Leptogium tenuissimum (Dicks.) Fr. – CATAL. 3: 171. 1925 – Quraishi (1928, p. 228) Mussoorie.

Leptogium tremelloides (L.f.) S. Gray – CATAL. 3: 155. 1925 – Leighton (1869) Ceylon; Nylander (1873, p. 164) Andaman; Hue (1892, p. 26) India; Jatta (1902, p. 15) Sikkim; and Mussoorie; Jatta (1905, p. 183) Nepal, Himalaya; Hue (1900b, p. 251) Nilgiri; Moreau (1952, p. 138) Kodaikanal; – *Collema tremelloides* Ach., Babington (1852, p. 252) Kumaon.

Leptogium tremelloides var. *rugulosum* Nyl. – Jatta (1905, p. 184) Andaman – taxon nomencl. syn. of *Leptogium cimiciodorum* Mass. in CATAL. 3: 132. 1925.

**Leptogium trichophorum* Müll. Arg. Flora 72: 505. 1889. India, leg. Levier. Type in NAP, G. Jatta (1902, p. 15) Himalaya; Jatta (1905, p. 185) Himalaya; CATAL. 3: 182. 1925; A.L. Smith (1931, p. 129) Darjeeling; Chopra (1934, p. 27) Darjeeling.

Leptogium cfr. *trichophorum* f. *fuliginosum* Müll. Arg. – Asahina (1955, p. 45) Nepal.

LEPTORAPHIS Körb. (Pyrenulaceae)

Leptoraphis epidermidis (Ach.) Th. Fr. var. *albissima* (Ach.); – *Verrucaria epidermidis* var. *albissima* Ach., Bélanger (1838, p. 14) Peninsular India – taxon syn. under *Leptoraphis epidermidis* (Ach.) Th. Fr. in CATAL. 1: 340. 1922.

**Leptorhaphis stenobola* (Nyl.) Zahlbr. Cat. Lich. Univ. 1: 344. 1922; – *Verrucaria stenobola* Nyl. in Hue, Nouv. Arch. Mus. III, 4: 141. 1892, and Hue (1892, p. 313). Ceylon, leg. Almquist. Type in H, S, PC. Nylander (1900, p. 25) Ceylon.

LEPTOTREMA Mont. et v. d. Bosch (Thelotremaeae)

**Leptotrema allosporoides* (Nyl.) Müll. Arg. Bull. Herb. Boiss. 2: Append. 1: 25. 1894 – CATAL. 2: 631. 1923; – *Thelotrema allosporoides* Nyl. Bull. Soc. Linn. Normand. II, 7: 167. 1873. Andaman, leg. Kurz. Type in H!.

**Leptotrema andamanicum* (Nyl.) A.L. Smith, Journ. Linn. Soc. Bot. 46. 74. 1922 – CATAL. 2: 631. 1923; – *Thelotrema andamanicum* Nyl. Bull. Soc. Linn. Normand. II, 7: 167. 1873. Andaman, leg. Kurz. Type in H!.

Leptotrema compunctum (Sm.) Müll. Arg. – CATAL. 2: 632. 1923; – *Thelotrema compunctum* Nyl., Leighton (1869, p. 168) Ceylon.

Leptotrema epitrypum (Nyl.) A.L. Smith – CATAL. 2: 634. 1923; – *Thelotrema epitrypum* Nyl., Nylander (1900, p. 17) Ceylon.

**Leptotrema exalbidum* (Stirt.) Zahlbr. – CATAL. 2: 634. 1923; – *Thelotrema exalbidum* Stirt. Proc. Phil. Soc. Glasgow 13: 184. 1881. Assam, leg. A. Watt. Type in BM!, GLAM.

Leptotrema phaeosporum (Nyl.) Müll. Arg. – CATAL. 2: 638. 1923; – *Thelotrema phaeosporum* Nyl., Leighton (1869, p. 168) Ceylon.

**Leptotrema reclusum* (Krempelh.) Zahlbr. Cat. Lich. Univ. 2: 639. 1923; – *Thelotrema reclusum* Krempelh. in Nyl. Bull. Soc. Linn. Normand. II, 7: 168. 1873. Andaman, leg. Kurz. Type in H!. Hue (1892, p. 175) Andaman.

**Leptotrema subconcretum* (Leight.) Müll. Arg. Nouv. Giorn. Bot. Ital. 23: 277. 1891; CATAL. 2: 640. 1923; – *Thelotrema subconcretum* Leighton, Trans. Linn. Soc. London 27: 169. 1869. Ceylon, leg. Thwaites. Type in BM!.

Leptotrema subgeminum (Nyl.) Zahlbr. – CATAL. 2: 640. 1923 – locality erroneously cited in CATAL. “Insula Andaman” – original references do not mention this locality.

**Leptotrema wightii* (Tayl.) Müll. Arg. Flora 65: 499. 1882 – CATAL. 2: 641. 1923 – Moreau (1952, p. 137) Palni hills; – *Endocarpon wightii* Tayl. London Journ. Bot. 6: 155. 1847. Madras, leg. Wight. Type in FH!.

LETHARIA Zahlbr. (Usneaceae)

Letharia vulpina (L.) Hue – CATAL. 6: 364. 1930 – Awasthi (1960c, p. 176) Nepal.

LOBARIA (Schreb.) Zahlbr. (Stictaceae)

Lobaria adpressa (Müll. Arg.) Zahlbr. – CATAL. 3: 293. 1925; – *Sticta adpressa* Müll. Arg., Müll. Arg. (1892, p. 218) Manipur.

Lobaria adscripta (Nyl.) Hue – CATAL. 3: 293. 1925 – Hue (1901, p. 26) Ceylon.

Lobaria adscripturiens (Nyl.) Hue – CATAL. 3: 294. 1925 – Moreau (1952, p. 138) Kodaikanal.

**LOBARIA AWASTHIANA* (Räs.) Comb. nov.; – *Lobarina awasthiana* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 28. 1950. Himalaya, leg. Awasthi. Type in H, isotype in Aw.

**LOBARIA DICTYOTA* (Stirt.) Comb. nov.; – *Stictina dictyota* Stirt. Proc. Phil. Soc. Glasgow 10: 157. 1876. Kumaon, leg. Dickie. Type in BM!, GLAM – taxon erroneously referred *Sticta dictyota* Stirt. in original reference in CATAL. 3: 378. 1925. I have examined the type at BM and find it a true *Lobaria* and not *Sticta*.

Lobaria discolor (Bory) Hue – CATAL. 3: 299. 1925 – Hue (1901, p. 23) India; Moreau (1952, p. 139) Kodaikanal; Awasthi (1961, p. 26) NEFA; – *Ricasolia discolor* (Bory), Nylander (1860, p. 367) Himalaya; Hue (1892, p. 99) Himalaya.

Lobaria glomulifera (Lightf.) Hoffm.; – *Ricasolia glomulifera* Nyl., Hue (1901, p. 28) Nilgiri – taxon nomencl. syn. of *Lobaria amplissima* (Scop.) Forss. in CATAL. 3: 294. 1925.

Lobaria herbacea (Huds.) DC.; – *Sticta herbacea* Ach., Montagne (1842, p. 18) Nilgiri; Babington (1852, p. 247) Kumaon; Müll. Arg. (1892, p. 218) Manipur; – *Ricasolia herbacea* (Huds.), Leighton (1869, p. 164) Ceylon – taxon nomencl. syn. of *Lobaria laetevirens* (Lightf.) Zahlbr. in CATAL. 3: 302. 1925.

**Lobaria isidiosa* (Müll. Arg.) Vain. Philippine Journ. of Sci. sect. C, 8: 129. 1914 – CATAL. 3: 321. 1925 – Asahina (1955, p. 47) Nepal; Awasthi (1960c, p. 170) Nepal; – *Stictina retigera* f. *isidiosa* Müll. Arg. Flora 65: 300. 1882. Nepal, leg. Wallich; Ceylon, leg. Nieter. Type in G; Moreau (1952, p. 138) Kodaikanal; – *Lobaria retigera* f. *isidiosa* (Müll. Arg.), Hue (1901, p. 39) Nepal.

**Lobaria isidiosa* var. *squamuligera* Awasthi, Proc. Indian Acad. Sci. 54 B: 27. 1961. Assam, leg. G. Panigrahi. Type in Assam and in Aw.

Lobaria linita (Ach.) Rabenh. – CATAL. 3: 305. 1925 – Jatta (1902, p. 5) N. W. Himalaya.

**Lobaria pindarensis* Räs. Arch. Soc. Zool. Bot. "Vanamo" 6 (2): 81. 1952. Almora district, Kumaon, leg. Awasthi. Type in H, isotype in Aw.

Lobaria pulmonaria (L.) Hoffm. – CATAL. 3: 309. 1925 – A. L. Smith (1931, p. 129) Darjeeling.

Lobaria pulmonaria f. *hypomela* (Del.) Cromb. – CATAL. 3: 315. 1925; – *Sticta pulmonacea* v. *hypomela* Babington (1852, p. 247) Kumaon; Müll. Arg. (1892, p. 218) Manipur.

Lobaria quercizans (Ach.) Michx – CATAL. 3: 317. 1925; – *Stictina quercizans* Ach., Jatta (1911, p. 310) Malabar.

(*Lobaria*) *ravenelii* (Tuck.); – *Ricasolia ravenelii* Tuck., Stirton (1876, p. 157) Kumaon – taxon nomencl. syn. of *Lobaria quercizans* (Ach.) Michx in CATAL. 3: 317–18. 1925.

Lobaria retigera (Bory) Trevis. – CATAL. 3: 321. 1925 – Hue (1901, p. 38) India; Asahina (1955, p. 46) Nepal; Awasthi (1961, p. 26) Assam, NEFA; – *Sticta retigera* Ach., Montagne (1842, p. 18) Nilgiri; Babington (1852, p. 247) Kumaon; Nylander (1860, p. 351) India; Stirton (1876, p. 159) Kumaon; – *Stictina retigera*, Müll. Arg. (1892, p. 218) Manipur; – *Lobarina retigera*, Hue (1892, p. 86) India; Nylander (1900, p. 8) Ceylon; Jatta (1902, p. 6) Himalaya; Jatta (1905, p. 170) Himalaya.

**Lobaria retigera* f. *erythrocardia* (Müll. Arg.) Zahlbr. Cat. Lich. Univ. 3: 322. 1925; – *Stictina retigera* f. *erythrocardia* Müll. Arg. Bull. Herb. Boiss. 3: 194. 1895. Kurseong, Darjeeling, leg. Stevens. Type in G.

LOPADIUM Körb. (Lecideaceae)

Lopadium fuscum Müll. Arg. – CATAL. 4: 304. 1927 – Santesson (1952, p. 532–34) Ceylon.

Lopodium leucoxanthoides (Vain.) Zahlbr. – CATAL. 4: 305. 1927 – Awasthi (1963, p. 31) Shembaganur, Madurai.

Lopodium leucoxanthum (Spreng.) Zahlbr. – CATAL. 4: 306. 1927; – *Lecidea leucoxantha* Spreng., Leighton (1869, p. 173) Ceylon; Stirton (1876, p. 156) Kumaon.

Lopodium puiggarii (Müll. Arg.) Zahlbr. – CATAL. 4: 313. 1927 – Santesson (1952, p. 535–38) Ceylon.

**Lopodium saxicolum* H. Magn. Bot. Notiser 2: 194. 1954. Dwarahat, Almora, leg. Mehra. Type in Herb. Magnusson.

* *Lopadium venustulum* (Stirt.) Zahlbr. Cat. Lich. Univ. 4: 316. 1927;
– *Lecidea venustula* Stirt. Proc. Phil. Soc. Glasgow 11: 313. 1879.
Chinsurah, Assam, leg. G. Watt. Type in BM!, GLAM.

Lopodium subcoerulescens Zahlbr. – CATAL. 8: 417. 1932 – Awasthi
(1963, p. 31) Shembaganur.

Lopodium vulpinum (Tuck.) Zahlbr. – CATAL. 4: 417. 1927; –
Heterothecium vulpinum (Tuck.), Müll. Arg. (1892, p. 223) Ma-
nipur.

MARONEA Mass. (Acarosporaceae)

* *Maronea manipurensis* H. Magn. Meddel. Goteborgs Bot. Tradgard
9: 46, 50. 1934. Manipur, leg. G. Watt. Type in K – CATAL. 10:
423. 1940; – *Lecania (Maronea) melanocarpa*, Müll. Arg. (1892,
p. 220) Manipur.

MAZOSIA Mass. (Chiodectionaceae)

* *Mazosia phyllosema* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 503. 1923 –
Santesson (1952, p. 123–27) Andaman; – *Platygrapha phyllosema*
Nyl. Bull. Soc. Linn. Normand. II, 7: 171. 1873. Andaman, leg.
Kurz. Type in H!; Hue (1892, p. 256) Andaman.

MEALOPSORA Vain. (Parmeliaceae)

* *Megalopsora cylindrophora* (Tayl.) Vain. Ann. Acad. Sci. Fenn. ser. A,
15 (6): 29. 1921 – CATAL. 6: 2. 1930; – *Parmelia cylindrophora*
Tayl. London Journ. Bot. 6: 165. 1847. Madras, leg. Wight. Type
in FH!; – *Psoroma cylindrophorum*, Hue (1892, p. 126) India.

MEALOSPORA Mey. et Flot. (Lecideaceae)

* *Megalospora marginiflexa* (Hook. et Tayl.) Zahlbr. var. *nilgherrensis*
(Nyl.) Zahlbr. Cat. Lich. Univ. 4: 88. 1927 (*nomen nudum*); –
Lecidea marginiflexa var. *nilgherrensis* Nyl. Mem. Soc. Sci. Nat.
Cherbough 5: 122. 1857 (*nomen nudum*); Hue (1892, p. 195) *nomen
nudum*.

* *Megalospora megaspora* (Leight.) Zahlbr. Cat. Lich. Univ. 4: 88.
1927; – *Lecidea megaspora* Leight. Trans. Linn. Soc. London 27:
173. 1869. Ceylon, leg. Thwaites. Type in BM!.

Megalospora versicolor (Fée) Zahlbr. – CATAL. 4: 91. 1927; – *Lecidea
versicolor* (Fée), Nylander (1900, p. 14) Ceylon.

MELAMPIDIUM Stirt. (Lecanactidaceae)

Melampidium metabolum (Nyl.) Müll. Arg. – CATAL. 2: 567. 1923;
– *Melaspilea metabola* Nyl., Nylander (1873, p. 177) Andaman;
Hue (1892, p. 271) Andaman.

MELANOTHECA (Fée) Müll. Arg. (Trypetheliaceae)

Melanotheca aggregata (Fée) Müll. Arg. – CATAL. 1: 478. 1922; –
Verrucaria aggregata Fée, Leighton (1869, p. 117) Ceylon; Stirton
(1876, p. 157) Kumaon.

- * *Melanotheca coactella* Stirt. Proc. Phil. Soc. Glasgow 13: 193. 1881.
Assam, leg. A. Watt. Type in BM!, GLAM – CATAL. 1: 479. 1922.
- * *Melanotheca indica* Nyl. Flora 50: 9. 1867. Calcutta, leg. Kurz. Type
in H!; Hue (1892, p. 303) Calcutta – CATAL. 1: 482. 1922.
- * *Melanotheca indica* var. *vaga* Nyl. Flora 50: 9. 1867. Calcutta, leg.
Kurz. Type in H!; Hue (1892, p. 303) Calcutta – CATAL. 1. 482.
1922.
- * *Melanotheca leucotrypa* (Nyl.) Müll. Arg. Flora 68: 253. 1885 –
CATAL. 1: 482. 1922; – *Trypethelium leucotrypum* Nyl. Flora 50:
9. 1867. Calcutta, leg. Kurz. Type in H!; Hue (1892, p. 300)
Calcutta.

MELASPILEA Nyl. (Graphidaceae)

Melaspilea heterocarpa (Fée) Müll. Arg. – CATAL. 2: 275. 1923; –
Graphis heterocarpa Fée, Leighton (1869, p. 175) Ceylon.

- * *Melaspilea insitiva* Stirt. Proc. Phil. Soc. Glasgow 11: 314. 1879.
Chinsurah, Assam, leg. G. Watt. Type in BM!, GLAM – CATAL.
2: 276. 1923.
- * *Melaspilea perminuta* Nyl. Acta Soc. Sci. Fenn. 26 (10): 20. 1900.
Ceylon, leg. Almquist. Type in H, S – CATAL. 2: 283. 1923.
- * *Melaspilea subdeformis* Nyl. Acta Soc. Sci. Fenn. 26 (10): 20. 1900.
Ceylon, leg. Almquist. Type in H, S – CATAL. 2: 283. 1923.

MICROGLAENA Körb. (Verrucariaceae)

- * *Microglaena thelostomoides* (Nyl.) Zahlbr. Cat. Lich. Univ. 1: 196.
1922; – *Verrucaria thelostomoides* Nyl. Expos. Synopt. Pyreno-
carpeae, 1858, p. 41. India, leg. ? (not seen). Type in ? H; Hue
(1892, p. 286) India.

MICROPHIALE (Stiz.) Zahlbr. – see *DIMERELLA* Trevis.

Microphiale lutea (Dicks.) Zahlbr. – see *Dimerella lutea* Trevis.

MICROTHELIA Körb. (Pyrenulaceae)

- * *Microthelia (?) arctata* (Stirt.) Zahlbr. Cat. Lich. Univ. 1: 255. 1922; – *Verrucaria arctata* Stirt. Proc. Phil. Soc. Glasgow 11: 320. 1879. Assam, leg. G. Watt. Type in GLAM.
- * *Microthelia clavaeformis* (Stirt.) Zahlbr. Cat. Lich. Univ. 1: 258. 1922; – *Verrucaria clavaeformis* Stirt. Proc. Phil. Soc. Glasgow 11: 320. 1879. Nilgiri, leg. G. Watt. Type in BM!, GLAM.
- * *Microthelia conothelena* (Nyl.) Zahlbr. Cat. Lich. Univ. 1: 258. 1922; – *Verrucaria conothelena* Nyl. Bull. Soc. Linn. Normand. II, 7: 180. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 298) Andaman.
- * *Microthelia conothelena* var. *errans* (Nyl.) Zahlbr. Cat. Lich. Univ. 1: 258. 1922; – *Verrucaria conothelena* var. *errans* Nyl. Bull. Soc. Linn. Normand. II, 7: 180. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 298) Andaman.
- * *Microthelia nonensis* (Stirt.) Zahlbr. Cat. Lich. Univ. 1: 264. 1922; – *Verrucaria nonensis* Stirt. Proc. Phil. Soc. Glasgow 11: 320. 1879. Nilgiri, leg. G. Watt. Type in BM!, GLAM.

Microthelia thelena (Ach.) Trevis. – CATAL. 1: 266. 1922; – *Verrucaria thelena* Ach., Bélanger (1838, p. 143) Peninsular India.

MYCOBILIMBIA Rehm. (Lecideaceae)

- * *Mycobilimbia calcuttensis* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 29. 1950. Calcutta, leg. Awasthi. Type in H, isotype in Aw.

MYCOCALICIUM Vain. (Caliciaceae)

- * *Mycocalicium himalayense* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 31. 1950. Darjeeling, leg. Awasthi. Type in H, isotype in Aw.

NAEVIA Mass. (Arthoniaceae)

- * *Naevia pandani* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 31. 1950. Orissa, leg. Awasthi. Type in H; isotype in Aw.

NEPHROMA Ach. (Peltigeraceae)

Nephroma expallidum Nyl. – CATAL. 3: 425. 1925 – A. L. Smith (1931, p. 129) Kashmir.

Nephroma helveticum Ach. – Leighton (1869, p. 163) Ceylon; Hue (1892, p. 102) India; Hue (1900, p. 105) Ceylon; Moreau (1952, p. 140) Shembaganur, Palni hills; – *Nephromium tomentosum* v. *helveticum* (Ach.), Nylander (1860, p. 319) Sikkim – taxon syn. of *Nephroma resupinatum* f. *helveticum* (Ach.) Rabenh. in CATAL. 3: 439. 1925.

**Nephroma nakaoi* Asahina in Kihara, Fauna and Flora Nepal Himalaya, Lichens 1: 45. 1955. Nepal, leg. Nakao. Type in ?.

Nephroma parile (Ach.) Ach. sensu Wetmore (1960, p. 440); – *Nephromium laevigatum* f. *parile* (Ach.), Jatta (1905, p. 169) Pangi, N.W. Himalaya – taxon referred as *Nephroma laevigatum* f. *parile* (Ach.) Mudd. in CATAL. 3: 429. 1925.

**Nephroma sikkimense* Asahina, Journ. Jap. Bot. 38 (7): 193–195. 1963. Sikkim, leg. ? (not seen).

Nephroma tropicum (Müll. Arg.) Zahlbr. – CATAL. 3: 442. 1925; – *Nephromium tropicum* Müll. Arg., Müll. Arg. (1883, p. 21) India and Ceylon – taxon as *Nephroma helveticum* v. *helveticum* in Wetmore (1960, p. 421).

NEPHROMOPSIS Müll. Arg. (Parmeliaceae)

Nephromopsis rhytidocarpa (Mont.) Zahlbr. – CATAL. 8: 570. 1932; – the taxa *Cetraria melaloma* and *Cetraria sikkimensis* considered syn. of *Nephromopsis rhytidocarpa* by Räsänen (1952a, p. 33) and hence this taxon from Himalaya.

**Nephromopsis stracheyi* (Bab.) Müll. Arg. Flora 74: 374. 1891, and Müll. Arg. (1892, p. 217) Manipur; Hue (1899, p. 217) Manipur, India – CATAL. 6: 344. 1930 – Räsänen (1952a, p. 33) Himalaya; Awasthi (1961, p. 37) NEFA; – *Cetraria stracheyi* Bab. London Journ. Bot. 4: 245. 1852. Kumaon, leg. Strachey and Winterbottom. Type in BM, K, DD; – *Platysma stracheyi* (Bab.), Nylander (1860, p. 305) Himalaya; Hue (1892, p. 66) Himalaya.

**Nephromopsis stracheyi* f. *ectocarpisma* Hue, Nouv. Arch. Mus. IV, 1: 218. 1899. Himalaya, leg. ?. Type in PC – CATAL. 6: 344. 1930.

**Nephromopsis stracheyi* var. *nephromoides* (Nyl.) Räs. Kuopion Luonn. Ystav. Yhdist. Julk. Sarja B, 2 (6): 46. 1952. Himalaya; – *Platysma nephromoides* Nyl. Flora 52: 442. 1869. Himalaya, leg. ?. Type in H; Hue (1892, p. 66) Himalaya; – under *Nephromopsis stracheyi* in CATAL. 6: 344. 1930.

OCELLULARIA (Mey.) Müll. Arg. (Thelotremaeae)

**Ocellularia albidiformis* (Leight.) Zahlbr. Ann. Mycol. 14: 50. 1916;
– *Thelotrema albidiforme* Leight. Trans. Linn. Soc. London 27: 170.
1869. Ceylon, leg. Thwaites. Type in BM – taxon nomencl. syn. of
Ocellularia porinoides (Mont. et v. d. Bosch) Zahlbr. in CATAL. 2: 599. 1923.

**Ocellularia allosporiza* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 583. 1923;
– *Thelotrema allosporiza* Nyl. Bull. Soc. Linn. Normand. II, 7: 167.
1873. Andaman, leg. Kurz. Type in H; Hue (1892, p. 176) Andaman.

Ocellularia calvescens (Fée) Müll. Arg. – CATAL. 2: 584. 1923; –
Thelotrema calvescens Fée, Leighton (1869, p. 168) Ceylon.

(*Ocellularia*) *cavatum* var. *granuliferum* (Nyl.); – *Thelotrema cavatum*
v. *granuliferum* Nyl. Mem. Soc. Sci. Nat. Cherbourg 5: 118. 1857.
(not seen) – Hue (1892, p. 172) – CATAL. 2: 585. 1923 – taxon
nomen nudum.

**Ocellularia chonestoma* (Leight.) Zahlbr. Cat. Lich. Univ. 2: 586. 1923;
– *Ascidium chonestomum* Leight. Trans. Linn. Soc. London 27:
171. 1869. Ceylon, leg. Thwaites. Type in BM!.

Ocellularia dolichospora (Nyl.) Müll. Arg. – CATAL. 2: 589. 1923; –
Thelotrema dolichosporum Nyl., Nylander (1900, p. 17) Ceylon.

Ocellularia dolichotata (Nyl.) Zahlbr. – CATAL. 2: 589. 1923; –
Thelotrema dolichotatum Nyl., Nylander (1900, p. 17) Ceylon.

**Ocellularia exanthismocarpa* (Leight.) Zahlbr. Cat. Lich. Univ. 2: 590.
1923; – *Thelotrema exanthismocarpum* Leight. Trans. Linn. Soc.
London 27: 169. 1869. Ceylon, leg. Thwaites. Type in BM!.

**Ocellularia leightoni* Zahlbr. Cat. Lich. Univ. 2: 593. 1923 – *nomen*
specificum *mutandum* ob *Ocellularia granulosa* (Tuck.) Zahlbr.; –
Ascidium granulosum Leight. Trans. Linn. Soc. London 27: 171.
1869. Ceylon, leg. Thwaites. Types in BM!.

**Ocellularia leptospora* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 594. 1923; –
Thelotrema leptosporum Nyl. in Leight. Trans. Linn. Soc. London
27: 167. 1869. Ceylon, leg. Thwaites. Type in BM!.

**Ocellularia leucotylia* (Nyl.) Müll. Arg. Hedwigia 30: 51. 1891; CATAL.
2: 594. 1923; – *Thelotrema leucotylium* Nyl. Bull. Soc. Linn. Normand. II, 7: 166. 1873. Andaman, leg. Kurz. Type in H!.

Ocellularia microspora (Mont.) Müll. Arg. – CATAL. 2: 595. 1923; –
Thelotrema microsporum Mont., Nylander (1869, p. 70) Bengal;
Leighton (1869, p. 167) Ceylon; Hue (1892, p. 170) India.

- (*Ocellularia*) *myriotrema* (Nyl.); – *Thelotrema myriotrema* Nyl., Leighton (1869, p. 168) Ceylon – taxon nomencl. syn. of *Ocellularia alba* (Fée) Müll. Arg. in CATAL. 2: 582. 1923.
- (*Ocellularia*) *olivaceum* (Fée); – *Thelotrema olivaceum* Mont., Leighton (1869, p. 168) Ceylon – taxon nomencl. syn. of *Ocellularia bonplandiae* (Fée) Müll. Arg. in CATAL. 2: 584. 1923.
- **Ocellularia papillata* (Leight.) Zahlbr. Cat. Lich. Univ. 2: 597. 1923; – *Thelotrema papillatum* Leight. Trans. Linn. Soc. London 27: 169. 1869. Ceylon, leg. Thwaites. Type in BM!.
- **Ocellularia pertusariaeformis* (Leight.) Zahlbr. Cat. Lich. Univ. 2: 598. 1923; – *Ascidium pertusariaeformis* Leight. Trans. Linn. Soc. London 27: 170. 1869. Ceylon, leg. Thwaites. Type in BM!.
- Ocellularia platystoma* (Mont.) Zahlbr. – CATAL. 2: 598. 1923; – *Thelotrema platystoma* Mont., Leighton (1869, p. 167) Ceylon.
- Ocellularia porinoides* (Mont. et v. d. Bosch) Zahlbr. – CATAL. 2: 599. 1923; – *Thelotrema porinoides* Mont. et v. d. Bosch, Nylander (1900, p. 17) Ceylon; Hue (1892, p. 171) Ceylon.
- **Ocellularia punctulata* (Leight.) Zahlbr. corr. Awasthi; – *Ascidium punctulatum* Leight. Trans. Linn. Soc. London 27: 171. 1869. Ceylon, leg. Thwaites. Type in ? BM – typographical error in CATAL. 2: 599. 1923 of the specific epithet into “pustulata” and “pustulatum.”
- Ocellularia sphinctrinella* (Nyl.) Zahlbr. – CATAL. 2: 601. 1923; – *Thelotrema sphinctrinella* Nyl., Leighton (1869, p. 167) Ceylon.
- **Ocellularia terebrans* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 602. 1923; – *Thelotrema terebrans* Nyl. Bull. Soc. Linn. Normand. II, 7: 166. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 174) Andaman.
- **Ocellularia thelotremoides* (Leight.) Zahlbr. Cat. Lich. Univ. 2: 603. 1923 – Moreau (1952, p. 136) Manalur, Palni hills; – *Ascidium thelotremoides* Leight. Trans. Linn. Soc. London 27: 170. 1869. Ceylon, leg. Thwaites. Type in BM!.

OCHROLECHIA Mass. (Lecanoraceae)

- Ochrolechia pallescens* (L.) Mass. – CATAL. 5: 682. 1928 – Verseghy (1962, p. 57–60) Sikkim; – *Parmelia pallescens* Ach., Montagne (1842, p. 20) Nilgiri; – *Lecanora pallescens* (L.), Müll. Arg. (1892, p. 220) Manipur.
- Ochrolechia parella* (L.) Mass. – CATAL. 5: 686. 1928; – *Parmelia pallescens* f. *parella* Fée, Bélanger (1838, p. 125) Peninsular India

**Ochrolechia parella* var. *gyroza* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 26. 1950. Darjeeling, leg. Awasthi. Type in H, isotype in Aw – taxon syn. of *Ochrolechia rosella* (Müll. Arg.) Verseghy in Verseghy (1962, p. 110–111).

Ochrolechia rosella (Müll. Arg.) Verseghy (1962, p. 110–111) Himalaya.

Ochrolechia tartarea (L.) Mass. – CATAL. 5: 693. 1928; – *Lecanora tartarea* Ach., Leighton (1869, p. 166) Ceylon; Nylander (1900, p. 12) Ceylon.

OPEGRA PHA Humb. (Opegraphaceae) sensu Santesson

Opegrapha bonplandi Fée – CATAL. 2: 178. 1923 – Nylander (1869, p. 71) Bengal; Hue (1892, p. 253) Bengal.

Opegrapha herpetica Ach. – CATAL. 2: 201. 1923 – Moreau (1952, p. 137) Manalur, Palni hills.

Opegrapha herpetica f. *fuscata* Schaer. – CATAL. 2: 205. 1923 – Nylander (1869, p. 71) Bengal; Hue (1892, p. 254) Bengal.

Opegrapha hysteroides Stir. – see *Opegrapha stirtoni* Zahlbr.

Opegrapha inaequalis Fée – CATAL. 2: 211. 1923 – Nylander (1867, p. 6) Calcutta; Hue (1892, p. 253) India; Nylander (1900, p. 18) Ceylon.

**Opegrapha laeta* Stir. Proc. Phil. Soc. Glasgow 11: 317. 1879. Bengal, leg. Thomson. Type in BM!, GLAM – CATAL. 2: 212. 1923.

**Opegrapha leptoterodes* Nyl. Acta Soc. Sci. Fenn. 26 (10): 18. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 2: 213. 1923.

**Opegrapha longula* Nyl. Bull. Soc. Linn. Normand. II, 7: 171. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 253) Andaman – CATAL. 2: 220. 1923.

**Opegrapha martii* Krempelh. in Nyl. Flora 50: 5. 1867. Calcutta, leg. Kurz. Type in H!; Hue (1892, p. 250) Calcutta – CATAL. 2: 223. 1923.

Opegrapha prosodea Ach. – CATAL. 2: 232. 1923 – Nylander (1873, p. 171) Andaman; Hue (1892, p. 253) Andaman.

Opegrapha pulicaris (Hoffm.) Schrad. – CATAL. 2: 233. 1923; – *Opegrapha varia* v. *pulicaris* (Hoffm.), Nylander (1867, p. 5) Calcutta; Hue (1892, p. 251) Calcutta.

Opegrapha siderella Ach. – CATAL. 2: 247. 1923 – Leighton (1869, p. 178) Ceylon.

**Opegrapha stirtoni* Zahlbr. Cat. Lich. Univ. 2: 248. 1923; – *Opegrapha hysteroides* Stirton Proc. Phil. Soc. Glasgow 10: 159. 1876. Ceylon, leg. ?. Type in GLAM. – (non Duf.).

- **Opegrapha subsulcata* Müll. Arg. Journ. Linn. Soc. Bot. 29: 224. 1892.
Manipur, leg. G. Watt. Type in K, G – CATAL. 2: 251. 1923.
- **Opegrapha subvulgata* Nyl. Flora 52: 71. 1869. Bengal, leg. Kurz.
Type in H!; Hue (1892, p. 253) Bengal – CATAL. 2: 251. 1923; –
Opegrapha vulgata Ach. in Nylander (1867, p. 5) Calcutta.
- **Opegrapha tenuir* Stirt. Proc. Phil. Soc. Glasgow 11: 317. 1879.
Chinsurah, Assam, leg. G. Watt. Type in BM!, GLAM – CATAL.
2: 251. 1923.

Opegrapha viridis Pers. – CATAL. 2: 255. 1923 – Quraishi (1928,
p. 228) Mussoorie.

Opegrapha vulgata Ach. – Nylander (1867, p. 5) Calcutta is *Opegrapha subvulgata* Nyl. in Nylander (1869, p. 71).

PANNARIA Del. (Pannariaceae)

- **Pannaria leiostroma* Nyl. in Leight. Trans. Linn. Soc. London 27:
165. 1869. Ceylon, leg. Thwaites. Type in H, ? BM – CATAL. 3:
244. 1925.

Pannaria leucosticta Tuck. – CATAL. 3: 244. 1925 – Nylander (1900,
p. 9, 28) Ceylon.

Pannaria rubiginosa (Thunb.) Del. – CATAL. 3: 256. 1925 – Ny-
lander (1863, p. 29) Indian mountains; Leighton (1869, p. 165)
Ceylon; Hue (1892, p. 120) India; – *Parmelia rubiginosa* Ach.,
Montagne (1842, p. 20) Nilgiri.

Pannaria stylophora Vain. – CATAL. 3: 260. 1925 – Awasthi (1963,
p. 29) Ootacamund.

PARMELIA (Ach.) DeNot. (Parmeliaceae)

Parmelia abessinica Nyl. – CATAL. 6: 223. 1930 – Sastri and Seshadri
(1942, p. 137–40) Andhra Pradesh.

Parmelia acetabulum (Neck.) Duby – CATAL. 6: 75. 1930 – Bhatia
(1957, p. 37) N.W. Himalaya.

- **Parmelia adducta* Nyl. Flora 68: 610. 1885. Assam, leg. Masters. Type
in H!; Hue (1892, p. 76) Assam – CATAL. 6: 151. 1930.

- **Parmelia amplexens* Stirt. Scott. Naturalist 4: 201. 1877–88. “India
Orientalis” (not seen) – CATAL. 6: 121. 1930.

Parmelia aptata Krempelh. – CATAL. 6: 224. 1930 – Hue (1892,
p. 76) N.W. Himalaya.

Parmelia blastica Vain. – CATAL. 6: 226. 1930 – Hue (1900b, p. 259)
Nilgiri.

Parmelia borreri Turn. – CATAL. 6: 153. 1930 – Nylander (1860, p. 389) Himalaya; Stirton (1876, p. 157) Kumaon; Hue (1892, p. 78) India; Jatta (1905, p. 175) Pangi, N.W. Himalaya.

Parmelia caperata (L.) Ach. – CATAL. 6: 226. 1930 – Babington (1852, p. 248) Kumaon; Nylander (1860, p. 376) Himalaya; Stirton (1876, p. 157) Ceylon; Hue (1892, p. 71) India; Hue (1899, p. 180) India; Hue (1900b, p. 259) Nilgiri; Jatta (1902, p. 9) Simla; Moreau (1952, p. 141) Kodaikanal; Asahina (1955, p. 54) Nepal.

Parmelia caperata var. *cylisphora* Vain. – Awasthi (1960c, p. 173) Nepal.

Parmelia cervicornis Tuck. – Jatta (1911, p. 310) Malabar; – *Parmelia laevigata* v. *cervicornis* Tuck., Leighton (1869, p. 164) Ceylon – taxon nomencl. syn. of *Parmelia caraccensis* Tayl. in CATAL. 6: 58. 1930.

Parmelia cetrarioides Del. – CATAL. 6: 233. 1930 – A. L. Smith (1931, p. 130) Darjeeling; Chopra (1934, p. 55) Darjeeling; Asahina (1955, p. 55) Nepal.

Parmelia cetrata Ach. – CATAL. 6: 160. 1930 – Nylander (1900, p. 7) Ceylon; Hue (1900b, p. 259) Nilgiri; Asahina (1955, p. 54) Nepal.

Parmelia cetrata f. *ciliosa* V.G. Marais – CATAL. 6: 160. 1930 – Moreau (1952, p. 141) Kodaikanal.

Parmelia cetrata var. *sorediifera* Vain. – Müll. Arg. (1892, p. 218) Manipur; Hue (1899, p. 174) Darjeeling; Hue (1900b, p. 259) Nilgiri – taxon nomencl. syn. of *Parmelia reticulata* Tayl. in CATAL. 6: 192–193. 1930.

* *Parmelia cingalensis* Stirt. Proc. Phil. Soc. Glasgow 10: 159. 1876. Ceylon, leg. ?. Type in BM, GLAM – CATAL. 6: 161. 1930.

* *Parmelia cirrhata* Fr. Syst. Orb. Veget. 1825, p. 283. Nepal. Type in UPS – CATAL. 6: 59. 1930 – Moreau (1952, p. 141) Kodaikanal; Asahina (1955, p. 52) Nepal; Awasthi (1960c, p. 172) Nepal.

* *Parmelia cirrhata* var. *divaricata* (Tayl.) Zahlbr. Cat. Lich. Univ. 6: 60. 1930; – *Parmelia divaricata* Tayl. London Journ. Bot. 6: 166. 1847. Nepal, leg. Wallich. Type in FH!.

Parmelia cirrhata var. *fistulata* (Tayl.) Zahlbr. – CATAL. 6: 60. 1930; – *Parmelia kamschadalis* var. *fistulata* (Tayl.), Müll. Arg. (1895, p. 194) Darjeeling.

* *Parmelia cirrhata* var. *intricata* (Jatta) Zahlbr. Cat. Lich. Univ. 6: 60. 1930; – *Parmelia kamschadalis* v. *intricata* Jatta, Malpighia 19: 174. 1905. Darjeeling. Type in NAP.

- Parmelia cirrhata* f. *tenuis* (Müll. Arg.) Zahlbr. – CATAL. 6: 60. 1930; – *Parmelia kamschadalensis* var. *tenuis* Müll. Arg., Jatta (1905, p. 174) Mussoorie, N.W. Himalaya.
- Parmelia conspersa* Ach. – CATAL. 6: 125. 1930 – Stirton (1876, p. 157, 159) Kumaon and Ceylon; A.L. Smith (1931, p. 130) Kashmir.
- Parmelia conspersa* var. *constrictans* (Nyl.) Müll. Arg. – CATAL. 6: 131. 1930; – *Parmelia constrictans* Nyl., Jatta (1905, p. 175) Pangi, N.W. Himalaya.
- Parmelia conspersa* var. *hypoclistoides* Müll. Arg. – CATAL. 6: 132. 1930 – Jatta (1905, p. 175) Pangi, N.W. Himalaya.
- * *Parmelia conspersa* var. *imitans* Müll. Arg. Flora 74: 378. 1891. Nila, N.W. Himalaya, leg. Duthie. Type in K – CATAL. 6: 132. 1930.
- Parmelia conspersa* var. *subconspersa* (Nyl.) Stein. – CATAL. 6: 134. 1930; – *Parmelia subconspersa* Nyl., Stirton (1876, p. 159) Kumaon, and Ceylon.
- Parmelia coralloidea* (Mey. et Flot.) Vain., Jatta (1902, p. 8) Simla; A.L. Smith (1931, p. 130) Himalaya; Chopra (1934, p. 57) Sikkim – taxon nomencl. syn. of *Parmelia tinctorum* Despr. in CATAL. 6: 268–69. 1930.
- Parmelia corniculans* Nyl. – CATAL. 6: 235. 1930 – Dhar *et al.* (1959, p. 112) Mussoorie.
- Parmelia crinita* Ach. – CATAL. 6: 236. 1930 – Leighton (1869, p. 164) Ceylon; Jatta (1905, p. 172) Mussoorie, N.W. Himalaya.
- * *Parmelia cristifera* Tayl. London Journ. Bot. 6: 165. 1847. Calcutta, leg. Wallich. Type in FH! – CATAL. 6: 237. 1930 – A.L. Smith (1931, p. 130) Darjeeling; Chopra (1934, p. 59) Darjeeling; Awasthi (1961, p. 33) NEFA.
- * *Parmelia denegens* Nyl. Acta Soc. Sci. Fenn. 26 (10): 6. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 6: 164. 1930.
- Parmelia disjuncta* Erich. – Poelt (1961, p. 90) N.W. Karakorum.
- Parmelia dissecta* Nyl. – CATAL. 6: 165. 1930 – Awasthi (1957b, p. 124) Kodaikanal.
- Parmelia dubia* (Wulf.) Schaer. – Hue (1892, p. 151) Himalaya – taxon nomencl. syn. of *Parmelia borreri* Turn. in CATAL. 6: 153. 1930.
- * *Parmelia ecoronata* Nyl. Bull. Soc. Linn. Normand. II, 7: 164. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 79) Andaman; Jatta (1905, p. 175) Andaman – CATAL. 6: 136. 1930.

- Parmelia enteromorpha* Ach. – CATAL. 6: 32. 1930; – *Parmelia physodes* var. *enteromorpha* (Ach.), Lindsay (1866, p. 512) Sikkim.
- Parmelia exasperata* (Ach.) De Not. – CATAL. 6: 83. 1930 – Quraishi (1928, p. 228) Mussoorie.
- Parmelia exasperatula* Nyl. – CATAL. 6: 85. 1930 – Poelt (1961, p. 90) N. W. Karakorum.
- Parmelia furfuracea* (L.) Ach. – CATAL. 6: 61. 1930; – *Evernia furfuracea* Fr., Jatta (1905, p. 167) Pangi, N. W. Himalaya; Jatta (1911, p. 309) Himalaya; Chopra (1934, p. 63) Himalaya.
- * *Parmelia ghattensis* Hue, Nouv. Arch. Mus. IV, 1: 198. 1899. Coonoor, Western Ghats, leg. Gray. Type in PC; Hue (1900b, p. 261) Coonoor – CATAL. 6: 239. 1930.
- Parmelia glomellifera* Nyl. – CATAL. 6: 92. 1930 – Poelt (1961, p. 90) N. W. Karakorum.
- * *Parmelia grayana* Hue, Nouv. Arch. Mus. IV, 1: 184. 1899. Coonoor, leg. Gray. Type in PC; Hue (1900b, p. 260) Coonoor – CATAL. 6: 239. 1930.
- * *Parmelia himalayensis* Nyl. Flora 68: 605. 1885. Himalaya, leg. Skoliczka. Type in H; Hue (1892, p. 71) Himalaya; Hue (1899, p. 182) Himalaya – CATAL. 6: 138. 1930 – Asahina (1955, p. 54) Nepal.
- * *Parmelia homogenes* Nyl. Flora 68: 607. 1885. India, leg. Hooker and Thomson. Type in H, K. Hue (1892, p. 72) India – CATAL. 6: 168. 1930 – A. L. Smith (1931, p. 131) Himalaya; Chopra (1934, p. 58) Sikkim.
- Parmelia homogenes* var. *vestita* Zahlbr. – CATAL. 8: 560. 1932 – A. L. Smith (1931, p. 131) Sikkim.
- Parmelia hyprysalea* (Vain.) Vain. – CATAL. 6: 240. 1930 – Aghoramurthy et al. (1954, p. 327) Simla.
- * *Parmelia hypotrypa* Nyl. Synop. Lich. 1: 403. 1860. Sikkim, Himalaya, leg. Hooker and Thomson. Type in H, K. Hue (1892, p. 85) Himalaya; Hue (1899, p. 126) India – CATAL. 6: 33. 1930 (typographical error of specific epithet into hypotropa).
- Parmelia infumata* Nyl. – CATAL. 6: 93. 1930 – Poelt (1961, p. 90) N. W. Karakorum.
- Parmelia isidiosa* (Müll. Arg.) Hale – Poelt (1961, p. 90) N. W. Karakorum.
- * *Parmelia kamschadalensis* Mont. Ann. Sci. Nat. Bot. II, 18: 17. 1842. Nilgiri, leg. Perrottet. Type in ?PC. Nylander (1860, p. 387) Himalaya; Hue (1892, p. 80) Himalaya; Müll. Arg. (1892, p. 218) Mani-

pur; Müll. Arg. (1895, p. 194) Darjeeling; Hue (1899, p. 136) Simla and Nepal; Nylander (1900, p. 7) Ceylon; Jatta (1911, p. 55) Himalaya, and Malabar; A.L. Smith (1931, p. 130) Himalaya; Chopra (1934, p. 55) Himalaya – taxon nomencl. syn. of *Parmelia cirrhata* Fr. in CATAL. 6: 59. 1930.

Parmelia kamschadalis var. *americana* (Mey. et Flot.) Nyl. – Leighton (1869, p. 165) Ceylon; Stirton (1876, p. 157) Kumaon; Müll. Arg. (1895, p. 194) Darjeeling; Hue (1899, p. 136) India; Jatta (1902, p. 9) Himalaya; Jatta (1905, p. 174) Himalaya; Jatta (1911, p. 310) Himalaya, and Malabar – taxon nomencl. syn. under *Parmelia cirrhata* Fr. in CATAL. 6: 59. 1930.

Parmelia laevigata (Sm.) Ach. – CATAL. 6: 171. 1930 – Babington (1852, p. 248) Kumaon; Leighton (1869, p. 164) Ceylon; Müll. Arg. (1892, p. 218) Manipur; Nylander (1900, p. 6) Ceylon; Jatta (1905, p. 172) Nepal, and Sikkim; Moreau (1952, p. 141) Shembaganur, Madurai.

Parmelia laevigata f. *isidiosa* Müll. Arg., Müll. Arg. (1892, p. 377) India – taxon nomencl. syn. of *Parmelia dissecta* Nyl. in CATAL. 6: 165. 1930.

* *Parmelia laevigata* var. *exsecta* (Tayl.) Zahlbr. Cat. Lich. Univ. 6: 172. 1930; – *Parmelia exsecta* Tayl. London Journ. Bot. 6: 166. 1847. Nepal, leg. Wallich. Type in FH!.

Parmelia latissima Fée – CATAL. 6: 241. 1930 – Jatta (1905, p. 172) Punjab; A.L. Smith (1931, p. 130) Darjeeling.

Parmelia latissima f. *isidiosa* Müll. Arg. – CATAL. 6: 241. 1930 – Müll. Arg. (1892, p. 218) Manipur; Jatta (1911, p. 310) Malabar; A.L. Smith (1931, p. 130) Darjeeling.

Parmelia latissima var. *sorediata* Nyl. – CATAL. 6: 242. 1930 – Müll. Arg. (1892, p. 218) Manipur; A.L. Smith (1931, p. 130) Darjeeling.

* *Parmelia mallii* Räs. Arch. Soc. Zool. Bot. "Vanamo" 6 (2): 81. 1952. Saugor, India; leg. Mall. Type in H, isotype in Aw.

Parmelia marmoriza Nyl. – CATAL. 6: 175. 1930; – *Parmelia latissima* var. *marmoriza* Nyl., A.L. Smith (1931, p. 130) Darjeeling; Chopra (1934, p. 57) Darjeeling.

* *Parmelia meizospora* (Nyl.) Nyl. Flora 68: 611. 1885. India; Hue (1892, p. 76) India; Jatta (1905, p. 173) Mussoorie; CATAL. 6: 175. 1930; – *Parmelia tiliacea* var. *meizospora* Nyl. Synop. Lich. 1: 383. 1860. Himalaya, leg. ?. Type in H.

* *Parmelia mesotropa* Müll. Arg. f. *sorediosa* Müll. Arg. Flora 74: 377. 1891. Cachar, leg. Keenan. Type in K – CATAL. 6: 244. 1930.

Parmelia mülleri Vain. – CATAL. 6: 176. 1930 – Bhatia (1957, p. 37)

N.W. Himalaya.

Parmelia mundata Nyl. – CATAL. 6: 34–35. 1930; – *Parmelia physodes* var. *mundata* (Nyl.), Jatta (1911, p. 310) Malabar.

* *Parmelia nepalensis* Tayl. London Journ. Bot. 6: 172. 1847. Nepal, leg. Wallich. Type in FH! – taxon nomencl. syn. of *Parmelia cirrhata* Fr. in CATAL. 6: 59. 1930.

* *Parmelia nilgherrensis* Nyl. Flora 52: 291. 1869. Nilgiri, leg. Perrottet. Type in H; Nylander (1885, p. 608) Nilgiri; Hue (1892, p. 74) India; Hue (1900b, p. 261) Nilgiri; CATAL. 6: 246. 1930 – A.L. Smith (1931, p. 130) Himalaya; Chopra (1934, p. 60) Darjeeling; Awasthi (1960c, p. 174) Nepal.

Parmelia nimandairana Zahlbr. – CATAL. 10: 527. 1940 – Asahina (1955, p. 53) Nepal; Awasthi (1960c, p. 173) Nepal.

Parmelia olivacea (L.) Nyl. – CATAL. 6: 96. 1930 – Nylander (1860, p. 395) Himalaya; Hue (1892, p. 82) Himalaya.

Parmelia olivaria (Ach.) Th. Fr. – CATAL. 6: 246. 1930 – Hue (1900b, p. 261) Nilgiri; – *Parmelia perlata* var. *olivaria* Ach., Jatta (1905, p. 171) Andaman.

Parmelia perforata (Wulf.) Ach. – CATAL. 6: 249. 1930 – Babington (1852, p. 247) Kumaon; Stirton (1876, p. 156) Kumaon; Nylander (1900, p. 7) Ceylon; Jatta (1902, p. 7) Simla, Mahasu; Jatta (1905, p. 172) Kurseong, Sikkim; Moreau (1952, p. 141) Kodaikanal.

Parmelia perforata var. *ciliata* Nyl. – CATAL. 6: 252. 1930 – Jatta (1911, p. 310) Malabar.

* *Parmelia perforata* var. *denticulata* Linds. Trans. Roy. Soc. Edinburgh 22: 213. 1859, and Trans. Linn. Soc. London 25: 510. 1866. India, Himalaya, Sikkim, leg. ?. Type in ? BM, K – CATAL. 6: 252. 1930.

Parmelia perforata var. *ulophylla* (Mey. et Flot.) Müll. Arg. – Jatta (1905, p. 172) Sikkim, and Darjeeling; Jatta (1911, p. 310) Malabar – taxon nomencl. syn. of *Parmelia olivaria* (Ach.) Th. Fr. in CATAL. 6: 246–48. 1930.

Parmelia perlata (Huds.) Ach. – CATAL. 6: 253. 1930 – Montagne (1842, p. 19) Nilgiri; Bélanger (1838, p. 121) Peninsular India; Babington (1852, p. 248) Kumaon; Nylander (1860, p. 379) Himalaya; Nylander (1867, p. 3) Calcutta; Lindsay (1866, p. 510) Assam; Simla; Leighton (1869, p. 164) Ceylon; Hue (1892, p. 72) India; Jatta (1902, p. 7) Bilaspur; Jatta (1905, p. 171) Darjeeling, and Sikkim.

- Parmelia perlata* var. *ciliata* (DC.) Duby – CATAL. 6: 258. 1930 – Leighton (1869, p. 164) Ceylon; Jatta (1905, p. 171) Nepal.
- * *Parmelia perisidians* Nyl. Acta Soc. Sci. Fenn. 26 (10): 6. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 6: 183. 1930.
- Parmelia pertusa* (Schrink.) Schaer. – CATAL. 6: 53. 1930 – Nylander (1860, p. 402) Himalaya; Hue (1892, p. 85) Himalaya; Hue (1899, p. 128) India; Asahina (1955, p. 52) Nepal; Awasthi (1961, p. 31) NEFA.
- Parmelia physodes* (L.) Ach. – CATAL. 6: 36. 1930 – Montagne (1842, p. 19) Nilgiri; Nylander (1860, p. 400) Himalaya; Hue (1892, p. 84) Himalaya; Hue (1900b, p. 257) Nilgiri; Jatta (1905, p. 174) Kurseong, and Sikkim.
- Parmelia physodes* f. *nigrovittata* Mont. – CATAL. 6: 43. 1930 – Montagne (1842, p. 19) Nilgiri.
- Parmelia pilosella* Hue var. *excrescens* (Arn.) Hue – CATAL. 6: 184. 1930; – *Parmelia perlata* var. *excrescens* Arn., Jatta (1905, p. 171) Sikkim.
- Parmelia platiphyllina* Nyl. – CATAL. 6: 262. 1930 – Awasthi (1961, p. 33) Assam.
- Parmelia proboscidea* Tayl. – CATAL. 6: 262. 1930 – Hue (1900b, p. 261) Nilgiri; Jatta (1902, p. 8) Simla, and Mahasu; Jatta (1911, p. 310) Himalaya.
- * *Parmelia proboscidea* f. *bulbulifera* Hue, Nouv. Arch. Mus. IV, 1: 197. 1899. Nilgiri, Coonoor, leg. Gray. Type in PC – CATAL. 6: 262. 1930.
- * *Parmelia pseudobitteriana* Awasthi, Current Sci. 26 (4): 123. 1957. Kodaikanal, leg. Hoeg. Type in Aw.
- * *Parmelia pseudohyporysalea* Asahina in Kihara, Flora and Fauna Nepal Himalaya. Lichens 1: 54. 1955. Nepal, leg. Nakao. Type in ?.
- Parmelia quercina* (Willd.) Vain. var. *rimulosa* (Müll. Arg.) Zahlbr. – CATAL. 6: 191. 1930; – *Parmelia tiliacea* var. *rimulosa* Müll. Arg. – Jatta (1905, p. 173) Simla, Punjab; Jatta (1911, p. 310) Malabar.
- * *Parmelia rampoddensis* Nyl. Acta Soc. Sci. Fenn. 26 (10): 6. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 6: 263. 1930.
- Parmelia relicina* Fr. – CATAL. 6: 145. 1930 – Nylander (1900, p. 7) Ceylon.
- Parmelia reticulata* Tayl. – CATAL. 6: 192. 1930 – Awasthi (1960c, p. 173) Nepal; Awasthi (1961, p. 32) NEFA.

Parmelia revoluta Floerke – CATAL. 6: 193. 1930 – Leighton (1869, p. 164) Ceylon; Hue (1892, p. 78) India; Jatta (1902, p. 8) Simla; – *Parmelia laevigata* v. *revoluta* (Floerke), Nylander (1860, p. 385) India.

Parmelia rudenta Ach. – CATAL. 6: 197. 1930 – Jatta (1911, p. 310) Malabar.

Parmelia ruderata Vain. – CATAL. 6: 198. 1930 – Awasthi (1961, p. 32) NEFA.

Parmelia saxatilis (L.) Ach. – CATAL. 6: 198. 1930 – Nylander (1860, p. 388) Himalaya; Hue (1892, p. 162) Himalaya.

Parmelia scortea (Ach.) Ach. – CATAL. 6: 207. 1930 – Jatta (1902, p. 8) Simla; Jatta (1905, p. 173) Pangi, N.W. Himalaya; – *Parmelia tiliacea* var. *scortea* Ach., Hue (1899, p. 156) Ceylon.

Parmelia sinuosa var. *angustifolia* Mont., Montagne (1842, p. 19) Nilgiri – taxon nomencl. syn. of *Parmelia caraccensis* f. *pulvinata* (Fee) Zahlbr. in CATAL. 6: 58. 1930.

Parmelia soredica Nyl. – CATAL. 6: 265. 1930 – Aghoramurty *et al.* (1954, p. 327) Simla.

Parmelia stenophylla (Ach.) Du Rietz – Dhar *et al.* (1959, p. 112) Kashmir; Awasthi (1960c, p. 173) Nepal.

* *Parmelia subaurulenta* Nyl. Flora 68: 606. 1885. India, Himalaya, leg. Hooker and Thomson, and Skoliczka. Type in H, K. Hue (1892, p. 72) India; Nylander (1900, p. 6) Ceylon – CATAL. 6: 168. 1930.

Parmelia subcrinita Nyl. – CATAL. 6: 266. 1930 – Awasthi (1961, p. 33) NEFA.

Parmelia subdissecta Nyl. – CATAL. 6: 214. 1930 – Hue (1900b, p. 257) Nilgiri.

* *Parmelia sublaevigata* (Nyl.) Nyl. Ann. Sci. Nat. V, 7: 306. 1867; Nylander (1885, p. 611) India; Hue (1892, p. 76) India; Jatta (1905, p. 173) Sikkim, and Darjeeling – CATAL. 6: 213. 1930 – Moreau (1952, p. 141) Kodaikanal; Awasthi (1961, p. 33) Assam, and NEFA; – *Parmelia tiliacea* var. *sublaevigata* Nyl. Synop. Lich. 1: 383. 1860. Nilgiri, leg. ?. Type in H.

Parmelia subquercifolia Hue – CATAL. 6: 215. 1930 – Bhatia (1957, p. 37) N.W. Himalaya.

Parmelia subrudecta Nyl. f. *rodriguesii* Hue – CATAL. 6: 215. 1930 – Hue (1900b, p. 257) Nilgiri.

Parmelia sulcata Tayl. – CATAL. 6: 216. 1930 – Quraishi (1928, p. 228) Mussoorie; Dhar *et al.* (1959, p. 112) Dehradun.

- * *Parmelia symmiga* Hue, Nouv. Arch. Mus. IV, 1: 168. 1899. Coonoor, Nilgiri, leg. Gray. Type in PC. Hue (1900b, p. 258) Coonoor – CATAL. 6: 219. 1930.
- Parmelia tenuirima* Tayl. var. *sorediata* Müll. Arg. – CATAL. 6: 220. 1930 – Jatta (1905, p. 175) Pangi, N.W. Himalaya.
- * *Parmelia tephrina* Hue, Nouv. Arch. Mus. IV, 1: 183. 1899. Nilgiri, Coonoor, leg. Gray. Type in PC. Hue (1900b, p. 259) Nilgiri, Coonoor – CATAL. 6: 268. 1930.
- * *Parmelia thomsoniana* Müll. Arg. Flora 74: 379. 1891. Sikkim, leg. Thomson. Type in G – CATAL. 6: 48. 1930.
- Parmelia tiliacea* Ach., Montagne (1842, p. 19) Nilgiri; Nylander (1860, p. 382) Himalaya; Hue (1892, p. 75) Himalaya; Hue (1899, p. 155) Himalaya, Manipur; Müll. Arg. (1892, p. 218) Manipur; Jatta (1902, p. 8) Kumaon; Jatta (1905, p. 173) Nepal; Jatta (1911, p. 310) Himalaya – taxon nomencl. syn. of *Parmelia quercina* (Willd.) Vain. in CATAL. 6: 186. 1930.
- Parmelia tinctorum* Despr. – CATAL. 6: 268. 1930 – Nylander (1900, p. 6) Ceylon; Hue (1900b, p. 262) Nilgiri; A.L. Smith (1931, p. 130) Sikkim; Asahina (1955, p. 54) Nepal; Awasthi (1957b, p. 124) Kodaikanal; Awasthi (1960c, p. 174) Nepal; Awasthi (1961, p. 33) Assam, and NEFA.
- Parmelia tubulosa* (Schaer.) Bitter – CATAL. 6: 48. 1930 – Bitter (1901, p. 206–213) Pangi, N.W. Himalaya.
- Parmelia vittata* (Ach.) Röhl. – CATAL. 6: 49. 1930 – Bitter (1901, p. 223–233) Himalaya, and Sikkim; Asahina (1955, p. 52) Nepal; Awasthi (1960c, p. 172) Nepal.
- Parmelia verruculifera* Nyl. – CATAL. 6: 199. 1930 – Hue (1892, p. 83) Himalaya.
- * *Parmelia wallichiana* Tayl. London Journ. Bot. 6: 176. 1847. Nepal, leg. Wallich. Type in FH!. Müll. Arg. (1892, p. 218) Manipur; Müll. Arg. (1895, p. 195) Darjeeling – CATAL. 6: 270. 1930.
- * *Parmelia wattiana* Müll. Arg. Flora 74: 379. 1891. Manipur, leg. G. Watt. Type in K – Müll. Arg. (1892, p. 218) Manipur – CATAL. 6. 52. 1930.
- Parmelia xanthina* Vain. – CATAL. 6: 271. 1930 – Hue (1900b, p. 259) Nilgiri.
- * *Parmelia zeylanica* R. Sant. Bot. Notiser 22: 325–26. 1942. Ceylon, leg. Almquist. Type in S, H; – *Hypogymnia enteromorpha* of Nylander (1900, p. 6) Ceylon.

Parmelia zollingeri Hepp – CATAL. 6: 274. 1930 – Müll. Arg. (1892, p. 271) Manipur; Hue (1900 b, p. 263) Nilgiri.

PARMELIELLA Müll. Arg. (Pannariaceae)

Parmeliella microphylla (Sw.) Müll. Arg. – CATAL. 3: 213. 1925; – *Pannaria microphylla* (Sw.), Nylander (1863, p. 34) Himalaya; – *Pannularia microphylla* Nyl., Hue (1892, p. 122) Himalaya.

Parmeliella nigrocincta (Mont.) Müll. Arg. – CATAL. 3: 218. 1925; – *Pannaria nigrocincta* Mont., Leighton (1869, p. 165) Ceylon.

* *Parmeliella pannosa* (Sw.) Müll. Arg. var. *delicata* Jatta, Malpighia 19: 179. 1905. Andaman, leg. E. H. Man. Type in NAP – CATAL. 3: 220. 1925.

Parmeliella saubinetii (Mont.) Zahlbr. – CATAL. 3: 224. 1925; – *Pannaria saubinetii* Mont., Nylander (1863, p. 35) Himalaya.

PAMENTARIA Fée (Astrotheliaceae)

(*Parmentaria*) *americana* (Spreng.); – *Pyrenastrum americanum* Spreng., Bélanger (1838, p. 139) Carnatic – taxon nomencl. syn. of *Parmentaria astroidea* Fée in CATAL. 1: 523. 1922.

* *Parmentaria* (?) *assamensis* (Stirt.) Zahlbr. Cat. Lich. Univ. 1: 523. 1922; – *Verrucaria assamensis* Stirt. Proc. Phil. Soc. Glasgow 13: 190. 1881. Assam, leg. A. Watt. Type in BM!, GLAM.

Parmentaria astroidea Fée – CATAL. 1: 523. 1922; – *Verrucaria aspistea* var. *astroidea* Fée, Leighton (1869, p. 184) Ceylon.

Parmentaria interlatens (Nyl.) Müll. Arg. – CATAL. 1: 524. 1922; – *Astrothelium interlatens* (Nyl.), Stirton (1876, p. 160) Ceylon.

PECCANIA (Mass.) Forss. (Pyrenopsidaceae)

* *Peccania hoegii* Awasthi, Proc. Indian. Acad. Sci. 45 B: 137. 1957. Spiti, N. W. Himalaya, leg. O. A. Hoeg. Type in Aw.

PELTIGERA Pers. (Peltigeraceae)

Peltigera canina (L.) Willd. – CATAL. 3: 457. 1925 – Nylander (1860, p. 324) Himalaya; Hue (1892, p. 103) Himalaya; Jatta (1902, p. 5) Simla, and Kashmir; Chopra (1934, p. 31) Sikkim; Awasthi (1961, p. 28) NEFA; – *Peltidea canina* (L.) Ach., Babington (1852, p. 246) Kumaon.

Peltigera canina var. *membranacea* (Ach.) Duby – CATAL. 3: 463. 1925 – Asahina (1955, p. 44) Nepal; – *Peltigera membranacea* Nyl., Jatta (1902, p. 5) Simla; Jatta (1905, p. 169) Punjab; Jatta (1911, p. 310) Himalaya, and Malabar.

Peltigera canina f. *ulorrhiza* Schaer. – CATAL. 3: 465. 1925 – Hue (1900, p. 93) Himalaya.

Peltigera dolichorhiza Nyl. – CATAL. 3: 466. 1925 – Awasthi (1961, p. 28) Assam, and NEFA; – *Peltigera polydactyla* var. *dolichorhiza* Nyl., Jatta (1905, p. 168) Sikkim, and Mussoorie.

Peltigera horizontalis (Huds.) Baumg. – CATAL. 3: 467. 1925 – Poelt (1961, p. 86) N.W. Karakorum; – *Peltidea horizontalis*, Babington (1852, p. 246) Kumaon.

Peltigera leptoderma Nyl. – CATAL. 3: 472. 1925 – Jatta (1905, p. 169) Pangi, N. W. Himalaya.

Peltigera malacea (Ach.) Funck. – CATAL. 3: 472. 1925 – Nylander (1860, p. 323) Himalaya; Hue (1892, p. 102) Himalaya; Jatta (1902, p. 5) Kashmir; Jatta (1905, p. 169) Pangi.

Peltigera polydactyla (Neck.) Hoffm. – CATAL. 3: 475. 1925 – Jatta (1902, p. 5) Himalaya; Jatta (1905, p. 168) Himalaya.

Peltigera pusilla (Dill.) Körb. – CATAL. 3: 482. 1925 – Jatta (1902, p. 5) Simla.

Peltigera rufescens (Weis.) Humb. – CATAL. 3: 483. 1925 – Nylander (1860, p. 324) Himalaya; Hue (1892, p. 103) Himalaya; Jatta (1905, p. 169) N. W. Himalaya; Poelt (1961, p. 86) N. W. Karakorum; – *Peltigera canina* f. *rufescens*, Hue (1900, p. 94) Himalaya.

Peltigera cfr. *scabrosa* Th. Fr. – Asahina (1955, p. 44) Nepal.

Peltigera scutata (Dicks.) Duby – CATAL. 3: 489. 1925 – Jatta (1905, p. 168) Landour, Mussoorie; – *Peltigera polydactyla* var. *scutata*, Montagne (1842, p. 18) Nilgiri.

Peltigera spuria (Ach.) DC. – CATAL. 3: 492. 1925 – Leighton (1869, p. 163) Ceylon; Jatta (1905, p. 169) N. W. Himalaya; Moreau (1952, p. 140) Kodaikanal.

Peltigera venosa (L.) Baumg. – CATAL. 3: 452. 1925 – A. L. Smith (1931, p. 129) N. W. Himalaya; Chopra (1934, p. 31) N. W. Himalaya.

PERFORARIA Müll. Arg. (Pertusariaceae)

Perforaria cucurbitula (Mont.) Müll. Arg. – CATAL. 5: 110. 1928; – *Lecanora cucurbitula* Mont., Müll. Arg. (1884, p. 365) Ceylon; – *Pertusaria papillulata* Nyl. in Leighton (1869, p. 166) Ceylon, leg. Thwaites is *Perforaria cucurbitula* sensu Müll. Arg. (1884, p. 365).

PERTUSARIA DC. (Pertusariaceae)

- * *Pertusaria acuta* Müll. Arg. Flora 67: 353. 1884. Nilgiri, leg. ? (communicated by Bader). Type in G – CATAL. 5: 119. 1928.
- Pertusaria albidella* Nyl. – CATAL. 5: 119. 1928 – Leighton (1869, p. 166) Ceylon.
- Pertusaria bryontha* (Ach.) Nyl. – CATAL. 5: 233. 1928 – Awasthi (1963, p. 33) Nepal.
- * *Pertusaria ceylonica* Müll. Arg. Flora 67: 351. 1884. Ceylon, leg. Thwaites. Type in G – CATAL. 5: 129. 1928.
- * *Pertusaria cinchonae* Müll. Arg. Flora 67: 351. 1884. Nilgiri, leg. G. Watt. Type in G – CATAL. 5: 129. 1928.
- Pertusaria communis* DC. – Nylander (1869, p. 70) Bengal; Hue (1892, p. 164) India – taxon nomencl. syn. of *Pertusaria pertusa* (L.) Tuck. in CATAL. 5: 194–200. 1928.
- * *Pertusaria concinna* Erichs. Fedde Repert. 41: 79. 1936. Nilgiri, leg. Ziegler. – CATAL. 10: 446. 1940.
- Pertusaria cryptocarpa* Nyl. – CATAL. 5: 141. 1928 – Leighton (1869, p. 167) Ceylon.
- * *Pertusaria dehiscens* Müll. Arg. var. *depressior* Müll. Arg. Flora 67: 349. 1884. Nilgiri, leg. G. Watt. Type in G – CATAL. 5: 144. 1928.
- Pertusaria depressa* (Fée) Mont. et v.d. Bosch – CATAL. 5: 145. 1928; – *Porina depressa* Fée, Bélanger (1838, p. 138) Peninsular India.
- * *Pertusaria fulvescens* (Müll. Arg.) Vain. Mem. Herb. Boiss. no. 5: 13. 1900 – CATAL. 5: 152. 1928; – *Pertusaria wattiana* f. *fulvescens* Müll. Arg. Journ. Linn. Soc. Bot. 29: 221. 1892. Manipur, leg. G. Watt. Type in K.
- * *Pertusaria impressula* Müll. Arg. Flora 67: 460. 1884. Ceylon, leg. Thwaites. Type in G – CATAL. 5: 158. 1928.
- * *Pertusaria kodaikanalensis* Choisy, Contrib. Lichenogr. no. 4–5, 1931, tab. 33 (not seen) – CATAL. 10: 454. 1940. India.
- Pertusaria leioplaca* (Ach.) DC. – CATAL. 5: 164. 1928 – Leighton (1869, p. 164) Ceylon; Nylander (1900, p. 16) Ceylon.
- Pertusaria leioplaca* var. *octospora* Nyl. – Nylander (1869, p. 70) Bengal; Müll. Arg. (1892, p. 221) Manipur – taxon nomencl. syn. of *Pertusaria alpina* Hepp, in CATAL. 5: 120. 1928.
- Pertusaria leioplaca* var. *turgida* Müll. Arg. – CATAL. 5: 169. 1928 – Müll. Arg. (1892, p. 221) Manipur.

Pertusaria leioplacella Nyl. – CATAL. 5: 170. 1928 – Leighton (1869, p. 167) Ceylon.

Pertusaria leucosorodes Nyl. Acta Soc. Sci. Fenn. 26 (10): 16. 1900.

Ceylon, leg. Almquist. Type in H, S – CATAL. 5: 172. 1928 (typographical error of specific epithet into leucosoroides); Moreau (1952, p. 139) Kodaikanal.

Pertusaria melaleuca (Turn. et Borr.) Duby – CATAL. 5: 176. 1928 – Müll. Arg. (1892, p. 221) Manipur.

Pertusaria melaleuca var. *tetramera* Müll. Arg. – CATAL. 5: 178. 1928 – Müll. Arg. (1892, p. 221) Manipur.

* *Pertusaria melastomella* Nyl. Acta Soc. Sci. Fenn. 26 (10): 16. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 5: 179. 1928.

* *Pertusaria mesotropa* Müll. Arg. Flora 67: 350. 1884. Ceylon, leg. Thwaites. Type in G – CATAL. 5: 179. 1928.

Pertusaria multipuncta (Turn.) Nyl. – CATAL. 5: 181. 1928 – Müll. Arg. (1892, p. 220) Manipur; A. L. Smith (1931, p. 130) Darjeeling; Moreau (1952, p. 140) Manalur, Palni hills.

* *Pertusaria pallidula* Stirt. Proc. Phil. Soc. Glasgow 10: 158. 1876. Kumaon, leg. Dickie. Type in BM, GLAM – CATAL. 5: 192. 1928.

Pertusaria papillulata Nyl. – Leighton (1869, p. 166) Ceylon – see *Perforaria cucurbitula*.

* *Pertusaria pertusa* (L.) Tuck. f. *pertusula* (Nyl.) Zahlbr. Cat. Lich. Univ. 5: 200. 1928; – *Pertusaria communis* f. *pertusula* Nyl. Acta Soc. Sci. Fenn. 26 (10): 16. 1900. Ceylon, leg. Almquist. Type in H, S.

Pertusaria pertusella Müll. Arg. – CATAL. 5: 202. 1928 – Müll. Arg. (1892, p. 221) Manipur; Jatta (1902, p. 12) Bilaspur.

* *Pertusaria pseudococcodes* Müll. Arg. Flora 67: 287. 1884. Ceylon, leg. Nieter. Type in G – CATAL. 5: 204. 1928.

* *Pertusaria punctata* Nyl. Bull. Soc. Linn. Normand. II, 2: 71. 1868. Nilgiri, leg. Perrottet. Type in H. Hue (1892, p. 164) Nilgiri – CATAL. 5: 207. 1928.

Pertusaria quassiae (Fée) Nyl. – CATAL. 5: 209. 1928; – *Porina quassiae* Fée, Leighton (1869, p. 167) Ceylon.

* *Pertusaria rigida* Müll. Arg. Journ. Linn. Soc. Bot. 29: 221. 1892. Manipur, leg. G. Watt. Type in K – CATAL. 5: 210. 1928.

* *Pertusaria subdepressa* Müll. Arg. Flora 67: 289. 1884. Ceylon, leg. Thwaites. Type in G – CATAL. 5: 216. 1928.

* *Pertusaria subochracea* Stirt. Proc. Phil. Soc. Glasgow 11: 312. 1879. Nilgiri, leg. G. Watt. Type in BM!, GLAM – CATAL. 5: 217. 1928.

* *Pertusaria subradians* Müll. Arg. Flora 67: 463. 1884. Ceylon, leg. Thwaites. Type in G – CATAL. 5: 218. 1928.

* *Pertusaria tetrathalmia* (Fée) Nyl. var. *neilgherrensis* (Müll. Arg.) Müll. Arg. Rev. Mycol. 9: 84. 1887 (not seen) – CATAL. 5: 220. 1928; – *Pertusaria leioplacoides* var. *neilgherrensis* Müll. Arg. Flora 67: 301. 1884. Nilgiri, leg. Ziegler. Type in G.

* *Pertusaria thwaitesii* Müll. Arg. Flora 67: 460. 1884. Ceylon, leg. Thwaites. Type in G – CATAL. 5: 222. 1928.

* *Pertusaria trisperma* Müll. Arg. Flora 67: 398. 1884. Ceylon, leg. Thwaites. Type in G – CATAL. 5: 223. 1928.

* *Pertusaria tuberculifera* Nyl. Acta Soc. Sci. Fenn. 26 (10): 17. 1900. Ceylon, leg. Almquist. Type in H, S – taxon nomencl. syn. of *Pertusaria tetrathalmia* in CATAL. 5: 219. 1928.

Pertusaria velata (Turn.) Nyl. – CATAL. 5: 246. 1928 – Leighton (1869, p. 167) Ceylon; Nylander (1873, p. 166) Andaman; Müll. Arg. (1892, p. 220) Manipur; Hue (1892, p. 162) Andaman; Jatta (1905, p. 181) Andaman.

Pertusaria velata var. *variolosa* Müll. Arg. – Müll. Arg. (1892, p. 220) Manipur – taxon nomencl. syn. of *Pertusaria velata* var. *microcephala* (Fée) Zahlbr. in CATAL. 5: 157. 1928.

Pertusaria verrucosa (Fée) Mont. – Leighton (1869, p. 166) Ceylon – taxon nomencl. syn. of *Pertusaria granulata* (Ach.) Müll. Arg. in CATAL. 5: 157. 1928.

* *Pertusaria wattiana* Müll. Arg. Journ. Linn. Soc. Bot. 29: 221. 1892. Manipur, leg. G. Watt. Type in K – CATAL. 5: 225. 1928.

* *Pertusaria wattiana* f. *fulvescens* Müll. Arg. Journ. Linn. Soc. Bot. 29: 221. 1892. Manipur, leg. G. Watt. Type in K – not recorded in CATAL.

PHAEOGRAPHINA Müll. Arg. (Graphidaceae)

Phaeographina caesiopruinosa (Fée) Müll. Arg. – CATAL. 2: 424. 1923 – Müll. Arg. (1892, p. 227) Manipur.

Phaeographina chrysentera (Mont.) Müll. Arg. – CATAL. 2: 436. 1923 Müll. Arg. (1892, p. 227) Manipur; – *Graphis chrysentera* (Mont.), Nylander (1900, p. 22) Ceylon.

* *Phaeographina chrysenterodes* Nyl. Acta Soc. Sci. Fenn. 26 (10): 22. 1900. Ceylon, leg. Almquist. Type in H, S – taxon nomencl. syn. of *Phaeographina excellens* (Nyl.) Zahlbr. in CATAL. 2: 438. 1923.

- * *Phaeographina cirrhata* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 436. 1923;
 – *Graphis cirrhata* Stirt. Proc. Phil. Soc. Glasgow 13: 186. 1881.
 Assam, leg. A. Watt. Type in BM!, GLAM.
- Phaeographina colubrosa* (Nyl.) Müll. Arg. – CATAL. 2: 436. 1923; –
Graphis colubrosa Nyl., Leighton (1869, p. 176) Ceylon.
- Phaeographina contexta* (Pers.) Müll. Arg. – CATAL. 2: 437. 1923; –
Graphis contexta (Pers.), Leighton (1869, p. 174) Ceylon; Nylander
 (1873, p. 176) Andaman; Hue (1892, p. 246) Andaman.
- Phaeographina exserta* Müll. Arg. – A.L. Smith (1931, p. 128) Dar-
 jeeling; Chopra (1934, p. 20) Darjeeling – taxon syn. of *Phaeo-
 graphina quassiaecola* (Fée) Müll. Arg. in CATAL. 2: 444. 1923.
- * *Phaeographina firmula* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 438. 1923;
 – *Graphis firmula* Stirt. Proc. Phil. Soc. Glasgow 13: 186. 1881.
 Assam, leg. A. Watt. Type in BM!, GLAM.
- * *Phaeographina grisea* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 439. 1923; –
Graphis grisea Nyl. in Hue, Nouv. Arch. Mus. III, 3: 164. 1891,
 and Hue (1892, p. 246), Ceylon, leg. Gardener. Type in H, PC.
 Nylander (1900, p. 22) Ceylon.
- * (*Phaeographina*) *leprevostii* (Leight.); – *Helminthocarpon leprevostii*
 Leight. Trans. Linn. Soc. London 27: 178. 1869. Ceylon, leg.
 Thwaites. Type in BM – taxon nomencl. syn. of *Phaeographina
 quassiaecola* (Fée) Müll. Arg. in CATAL. 2: 444. 1923.
- * *Phaeographina phlyctidiformis* Müll. Arg. Journ. Linn. Soc. Bot. 29:
 228. 1892. Manipur, leg. G. Watt. Type in K, G – CATAL. 2: 443.
 1923.
- * *Phaeographina wattiana* Müll. Arg. Journ. Linn. Soc. Bot. 29: 227.
 1892. Manipur, leg. G. Watt. Type in K, G – CATAL. 2: 447. 1923.

PHAEOGRAPHIS Müll. Arg. (Graphidaceae)

- * *Phaeographis aulaxerpeta* (Leight.) Müll. Arg. Flora 65: 382. 1882 –
 CATAL. 2: 364. 1923; – *Platygrapha aulaxerpeta* Leight. Trans.
 Linn. Soc. London 27: 179. 1869. Ceylon, leg. Thwaites. Type
 in BM!.
- * *Phaeographis colligata* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 366. 1923;
 – *Graphis colligata* Stirt. Proc. Phil. Soc. Glasgow 13: 185. 1881.
 Assam, leg. A. Watt. Type in BM!, GLAM.
- * *Phaeographis convariata* (Krempelh.) Zahlbr. Cat. Lich. Univ. 2: 366.
 1923; – *Graphis convariata* Krempelh. Nouv. Giorn. Bot. Ital. 7:
 30. 1875. Ceylon, leg. ?. Type in ? (not seen).

- Phaeographis dendritica* (Ach.) Müll. Arg. – CATAL. 2: 366. 1923; –
Graphis dendritica Ach., Nylander (1900, p. 21) Ceylon.
- * *Phaeographis dendroides* (Leight.) Müll. Arg. Flora 65: 208. 1882 –
 CATAL. 2: 370. 1923; – *Platygrapha dendroides* Leight. Trans. Linn.
 Soc. London 27: 179. 1869. Ceylon, leg. Thwaites. Type in BM!.
- * *Phaeographis divaricoides* Räs. Arch. Soc. Zool. Bot. “Vanamo” 5
 (1): 31. 1950. Sikkim, leg. Awasthi. Holotype in H, isotype in Aw.
- Phaeographis diversa* (Nyl.) Müll. Arg. – Müll. Arg. (1892, p. 225)
 Manipur; – *Graphis diversa* Nyl., Nylander (1873, p. 16) Andaman;
 Hue (1892, p. 239) Andaman – taxon nomencl. syn. of *Phaeographis exaltata* (Mont. et v. d. Bosch) Müll. Arg. in CATAL. 2: 372. 1923.
- * *Phaeographis endophaeiza* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 371.
 1923; – *Graphis endophaeiza* Stirt. Proc. Phil. Soc. Glasgow 10:
 159. 1876. Ceylon, leg. Dickie. Type in BM!, GLAM.
- * *Phaeographis extrusa* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 372. 1923;
 – *Graphis extrusa* Stirt. Proc. Phil. Soc. Glasgow 13: 187. 1881.
 Assam, leg. A. Watt. Type in BM!, GLAM.
- * *Phaeographis extrusula* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 372. 1923;
 – *Graphis extrusula* Stirt. Proc. Phil. Soc. Glasgow 13: 187. 1881.
 Assam, leg. A. Watt. Type in BM!, GLAM.
- * *Phaeographis glaucoleucoes* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 373.
 1923; – *Graphis glaucoleucoes* Nyl. Acta Soc. Sci. Fenn. 26 (10):
 22. 1900. Ceylon, leg. Almquist. Type in H, S.
- Phaeographis glyphiza* (Nyl.) Zahlbr. – CATAL. 2: 373. 1923; –
Graphis glyphiza Nyl., Leighton (1869, p. 173) Ceylon.
- * *Phaeographis instrata* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 374. 1923;
 – *Graphis instrata* Stirt. Proc. Phil. Soc. Glasgow 11: 315. 1879.
 Chinsurah, Assam, leg. G. Watt. Type in BM!, GLAM.
- * *Phaeographis inusta* (Ach.) Müll. Arg. var. *parallela* Müll. Arg. Journ.
 Linn. Soc. Bot. 29: 225. 1892. Manipur, leg. G. Watt. Type in K, G
 – CATAL. 2: 377. 1923.
- Phaeographis leiogramma* (Nyl.) Zahlbr. – CATAL. 2: 378. 1923; –
Graphis leiogramma Nyl., Leighton (1869, p. 173) Ceylon.
- * *Phaeographis manipurensis* Müll. Arg. Journ. Linn. Soc. Bot. 29: 226.
 1892. Manipur, leg. G. Watt. Type in K, G – CATAL. 2: 381. 1923.
- * *Phaeographis megistocarpa* (Leight.) Müll. Arg. Flora 65: 336. 1882
 – CATAL. 2: 381. 1923; – *Platygrapha megistocarpa* Leight. Trans.
 Linn. Soc. London 27: 178. 1869. Ceylon, leg. Thwaites. Type
 in BM!.

- * *Phaeographis megistocarpa* f. *rotundata* (Leight.) Zahlbr. Cat. Lich. Univ. 2: 382. 1923; – *Platygrapha megistocarpa* f. *rotundata* Leight. Trans. Linn. Soc. London 27: 179. 1869. Ceylon, leg. Thwaites. Type in BM!.
- * *Phaeographis melanostalazans* (Leight.) Müll. Arg. Flora 65: 336. 1882 – CATAL. 2: 382. 1923; – *Platygrapha melanostalazans* Leight. Trans. Linn. Soc. London 27: 180. 1869. Ceylon, leg. Thwaites. Type in BM!.
- * *Phaeographis subdividens* (Leight.) Müll. Arg. Flora 65: 383. 1882 – CATAL. 2: 387. 1923; – *Graphis subdividens* Leight. Trans. Linn. Soc. London 27: 177. 1869. Ceylon, leg. Thwaites. Type in BM!.
- * *Phaeographis subinusta* (Leight.) Müll. Arg. Flora 65: 382. 1882 – CATAL. 2: 387. 1923; – *Graphis subinusta* Leight. Trans. Linn. Soc. London 27: 177. 1869. Ceylon, leg. Thwaites. Type in BM!.
- * *Phaeographis submarcescens* (Leight.) Zahlbr. Cat. Lich. Univ. 2: 387. 1923; – *Graphis submarcescens* Leight. Trans. Linn. Soc. London 27: 178. 1869. Ceylon, leg. Thwaites. Type in BM!.

PHAEOTREMA Müll. Arg. (Thelotremaeae)

- Phaeotrema auberianum* (Mont.) Müll. Arg. – CATAL. 2: 605. 1923; – *Thelotrema auberianum* Mont., Leighton (1869, p. 168) Ceylon.
- * *Phaeotrema subinalbescens* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 610. 1923; – *Thelotrema subinalbescens* Nyl. Acta Soc. Sci. Fenn. 26 (10): 18. 1900. Ceylon, leg. Almquist. Type in H, S.

PHLYCTELLA Krempelh. (Lecanoraceae)

- * *Phlyctella himalayensis* Nyl. Lich. Nova Zealand. 1888, p. 73. Himalaya, Sikkim, leg. Hooker and Thomson. Type in H, K. Hue (1892, p. 180) Himalaya – CATAL. 5: 786. 1928.

PHLYCTIS Flot. (Lecanoraceae)

- * *Phlyctis nepalensis* Räs. Arch. Soc. Zool. Bot. "Vanamo" 6 (2): 86. 1952. Nepal, leg. Awasthi. Holotype in H, isotype in Aw.
- * *Phlyctis polyphora* Stirt. Proc. Phil. Soc. Glasgow 13: 184. 1881. Assam, leg. A. Watt. Type in BM!, GLAM – CATAL. 5: 784. 1928.

PHYLLOPORINA Müll. Arg. (Pyrenulaceae)

- Phylloporina epiphylla* var. *praestans* Nyl. – see *Porina epiphylla* (Fée) Fée.

PHYLLOPSORA Müll. Arg. (Phyllopsoraceae)

Phyllopsora corallina (Eschw.) Müll. Arg. – CATAL. 4: 397. 1927 – Moreau (1952, p. 140) Manalur, Palni hills.

Phyllopsora parvifolia (Pers.) Müll. Arg. – CATAL. 4: 399. 1927 – Moreau (1952, p. 140) Manalur, Palni hills; – *Lecidea parvifolia* Pers., Leighton (1869, p. 172) Ceylon; – *Psora parvifolia* (Pers.), Müll. Arg. (1892, p. 219) Manipur.

Phyllopsora parvifolia var. *corallina* (Tuck.); – *Lecidea parvifolia* var. *corallina* Tuck., Leighton (1869, p. 172) Ceylon – taxon nomencl. syn. of *Phyllopsora parvifolia* var. *fibrillifera* (Nyl.) Müll. Arg. in CATAL. 4: 399–400. 1927.

Phyllopsora parvifolia var. *subgranulosa* (Tuck.) Müll. Arg. – CATAL. 4: 400. 1927; – *Psora parvifolia* var. *subgranulosa* (Tuck.), Müll. Arg. (1892, p. 219) Manipur.

PHYSCKIA (Ach.) Vain. (Physciaceae)

Physcia adscendens (Fr.) Oliv. – CATAL. 7: 588. 1931 – Poelt (1961, p. 92) N.W. Karakorum.

Physcia aegialita (Ach.) Nyl. – CATAL. 7: 580. 1931 – Nylander (1900, p. 9) Ceylon; Zahlbruckner (1911, p. 31) Ceylon; Moreau (1952, p. 142) Manalur, Palni hills; Kodaikanal; Asahina (1955, p. 63) Nepal; Awasthi (1960a, p. 9) Orissa, Travancore, Madurai and Nepal; – *Physcia picta* var. *aegialita* Ach., Hue (1892, p. 265) Nilgiri.

Physcia aipolia (Ehrh.) Hampe – CATAL. 7: 590. 1931 – Nylander (1900, p. 8) Ceylon; Awasthi (1960a, p. 17–18) N.W. Himalaya, and Kashmir; – *Parmelia stellaris* var. *aipolia*, Montagne (1842, p. 19) Nilgiri.

Physcia aspera H. Magn. – Awasthi (1960a, p. 5) Himalaya, S. India and Nepal.

Physcia aspera var. *alutacea* H. Magn. in Awasthi, Journ. Indian. Bot. Soc. 39: 7. 1960. Nepal, leg. Awasthi. Type in Aw.

*(*Physcia*) *atrocápilla* (Tayl.); – *Parmelia atrocápilla* Tayl. London Journ. Bot. 6: 162. 1847. Nepal, leg. Wallich. Type in FH! – taxon nomencl. syn. of *Physcia setosa* (Ach.) Nyl. in CATAL. 7: 679–680. 1931.

**Physcia askotensis* Awasthi, Proc. Indian Acad. Sci. 45 B: 131. 1957. Almora district, Askote, N.W. Himalaya, leg. Awasthi. Type in Aw; Awasthi (1960a, p. 13) N.W. Himalaya.

Physcia caesia (Hoffm.) Hampe – CATAL. 7: 600. 1931; – *Parmelia caesia* Ach., Babington (1852, p. 249) Kumaon.

* *Physcia confluens* (Fr.) Nyl. – Stirton (1876, p. 188) Calcutta; Jatta (1905, p. 178) Andaman; – *Parmelia confluens* Fr. Syst. Orb. Veget. 1825, p. 284. India Orientalis, leg. ?. Type in UPS. Montagne (1842, p. 19) Nilgiri – taxon nomencl. syn. of *Physcia aegialita* (Ach.) Nyl. in CATAL. 7: 580. 1931.

Physcia crispa (Pers.) Nyl. – CATAL. 7: 611. 1931 – Nylander (1900, p. 9) Ceylon; Jatta (1905, p. 177) Mussoorie.

Physcia crispa var. *hypomelaena* Tuck. – CATAL. 7: 612. 1931 – Hue (1900, p. 58) India.

Physcia crispula Müll. Arg. – CATAL. 7: 612. 1931 – Jatta (1902, p. 10) Kumaon.

Physcia detersa (Nyl.) Nyl. – Awasthi (1960a, p. 11) N.W. Himalaya, and Kashmir; Poelt (1961, p. 92) N.W. Karakorum – taxon syn. of *Physcia grisea* var. *detersa* (Nyl.) Lynge in CATAL. 7: 623. 1931.

Physcia dilatata Nyl. – CATAL. 7: 613. 1931 – Jatta (1905, p. 177) Kumaon, and Mussoorie.

Physcia domingensis (Ach.) Nyl. – Jatta (1902, p. 10) Mandla – taxon nomencl. syn. of *Physcia crispa* (Pers.) Nyl. in CATAL. 7: 611. 1931.

Physcia endococcina (Körb.) Th. Fr. – CATAL. 7: 615. 1931 – Awasthi (1960a, p. 11) N.W. Himalaya.

* *Physcia endococcina* var. *latiloba* H. Magn. in Awasthi, Proc. Indian Acad. Sci. 45 B: 134. 1957. Almora district, Askote, leg. Awasthi. Type in Aw; Awasthi (1960a, p. 12) Kashmir, and N.W. Himalaya.

* *Physcia endoxantha* Stirt. Proc. Phil. Soc. Glasgow 13: 184. 1881. Assam, leg. A. Watt. Type in BM, GLAM – CATAL. 7: 617. 1931.

Physcia farrea (Ach.) Vain. – Poelt (1961, p. 92) N.W. Karakorum – taxon nomencl. syn. of *Physcia grisea* (Lam.) Zahlbr. in CATAL. 7: 619–620. 1931.

Physcia hispida (Schreb.) Frege – CATAL. 7: 626. 1931 – A.L. Smith (1931, p. 132) Sikkim; Chopra (1934, p. 74) Sikkim.

Physcia integrata Nyl. – CATAL. 7: 636. 1931 – Awasthi (1960a, p. 17) Madurai district, Shembaganur.

Physcia integrata var. *obsessa* (Mont.) Vain. – CATAL. 7: 636. 1931 – Hue (1900b, p. 264) Nilgiri; Moreau (1952, p. 142) Kodaikanal; – *Physcia alba* var. *obsessa* (Mont.) Lynge, Awasthi (1960a, p. 18) Kodi, S. India.

- * *Physcia integrata* var. *obsessa* f. *hypoleuca* Moreau, Rev. Bryol. Lichenol. New Ser. 21: 142. 1952. Kodaikanal, leg. Foreau – *nomen nudum* (Latin diagnosis not provided).
- Physcia integrata* var. *sorediosa* Vain. – CATAL. 7: 637. 1931 – Moreau (1952, p. 142) Kodaikanal.
- * *Physcia karakorina* Poelt, Mitteil. Bot. Staatssamml. 4: 92. 1961. N.W. Karakorum, leg. Labbichler. Type in M.
- Physcia labrata* Mer. – CATAL. 7: 638. 1931 – Poelt (1961, p. 93) N.W. Karakorum.
- Physcia leptalea* (Ach.) DC. – Poelt (1961, p. 93) N.W. Karakorum – taxon syn. of *Physcia hispida* var. *leptalea* (Ach.) Zahlbr.
- * *Physcia melanotricha* Awasthi, Proc. Indian Acad. Sci. 45 B: 133. 1957. Nepal, leg. Awasthi. Type in Aw.
- Physcia melops* Duf. – Paulson (1925, p. 191) Mt. Everest – taxon nomencl. syn. of *Physcia albonigra* (Schl.) Dalla Torre et Sarnth.
- Physcia muscigena* (Ach.) Nyl. – CATAL. 7: 648. 1931 – Jatta (1905, p. 178) Pangi; Awasthi (1960a, p. 14) N.W. Himalaya and Kashmir; – *Parmelia pulverulenta* var. *muscigena* Ach., Babington (1852, p. 249) Kumaon.
- Physcia obscura* (Ehrh.) Hampe – CATAL. 7: 653. 1931 – Jatta (1902, p. 10) Mandla.
- Physcia obscura* var. *cycloselis* (Ach.) Kickx – CATAL. 7: 661. 1931 Jatta (1905, p. 178) Pangi, N.W. Himalaya.
- Physcia obscura* var. *ulothrix* (Ach.) Nyl. – Jatta (1905, p. 178) Mussoorie – taxon nomencl. syn. of *Physcia obscura* var. *ciliata* (Hoffm.) Tuck. – CATAL. 7: 658–660. 1931.
- * *Physcia papillulifera* Nyl. Acta Soc. Sci. Fenn. 26 (10): 9. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 7: 667. 1931 (typographical error of the specific epithet into “papillifera”).
- * *Physcia persoredians* Nyl. Acta Soc. Sci. Fenn. 26 (10): 8. 1900. Ceylon, leg. Almquist. Type in S, H – CATAL. 7: 667. 1931.
- Physcia pulverulenta* (Schreb.) Hampe – CATAL. 7: 668. 1931 – Jatta (1902, p. 10) Bilaspur; Jatta (1905, p. 178) Pangi; Paulson (1925, p. 191) Mt. Everest.
- Physcia pulverulenta* var. *argyphaea* (Ach.) Nyl. – CATAL. 7: 677. 1931 – Awasthi (1960a, p. 12–13) Kashmir.
- Physcia picta* (Sw.) Nyl. – CATAL. 7: 582. 1931 – Nylander (1860, p. 430) Ceylon; Nylander (1867, p. 3) Calcutta; Leighton (1869, p. 165) Ceylon; Nylander (1873, p. 164) Andaman; Hue (1892,

p. 114) Calcutta, Andaman, and Ceylon; Hue (1900, p. 80) India; Jatta (1902, p. 11) Bilaspur; Jatta (1905, p. 178) Andaman; Moreau (1952, p. 142) Manalur, Palni hills; Awasthi (1960a, p. 7–8) Assam, Almora and Dehradun.

* *Physcia picta* var. *endochroma* H. Magn. in Awasthi, Journ. Indian Bot. Soc. 39: 8. 1960. Nepal, leg. Awasthi. Type in Aw.

Physcia picta var. *isidiophora* Nyl. – CATAL. 7: 584. 1931 – Moreau (1952, p. 142) Manalur, Palni hills.

Physcia picta var. *sorediata* Müll. Arg. – Müll. Arg. (1892, p. 218) Manipur – taxon nomencl. syn. of *Physcia appланata* (Fée) Zahlbr. in CATAL. 7: 581. 1931.

* *Physcia rubricosa* Stirt. Proc. Phil. Soc. Glasgow 11: 310. 1879. Nilgiri, leg. G. Watt. Type in GLAM, BM – CATAL. 7: 679. 1931.

Physcia setosa (Ach.) Nyl. – CATAL. 7: 679. 1931 – Nylander (1860, p. 429) Himalaya; Hue (1892, p. 113) Himalaya; Hue (1900, p. 73) India; Hue (1900b, p. 265) Nilgiri; Jatta (1902, p. 10) Simla, Kumaon; Jatta (1905, p. 177) Mussoorie, Simla, and Dhanaulti; Jatta (1911, p. 311) Himalaya; A. L. Smith (1931, p. 132) E. Himalaya; Awasthi (1960a, p. 15–16) N. W. Himalaya, and S. India.

Physcia setosa var. *endococcinea* Müll. Arg. – CATAL. 7: 681. 1931 – Müll. Arg. (1892, p. 218) Manipur.

* *Physcia sikkimensis* Jatta, Bull. Orto Univers. Napoli 3: 311. 1911. Mungpos, Sikkim, leg. Long. Type in NAP – CATAL. 7: 681. 1931.

Physcia stellaris (L.) Nyl. – CATAL. 7: 681. 1931 – Leighton (1869, p. 165) Ceylon; Jatta (1905, p. 177) Mussoorie and Punjab; Awasthi (1960a, p. 19) N. W. Himalaya; – *Parmelia stellaris* (L.), Babington (1852, p. 249) Kumaon.

Physcia stenophyllina (Jatta) Jatta – CATAL. 7: 691. 1931 – Jatta (1902, p. 10) Chamba, Punjab.

Physcia tribacia (Ach.) Nyl. – CATAL. 7: 693. 1931 – Moreau (1952, p. 142) Manalur, Palni hills.

Physcia virella (Ach.) Flagey – CATAL. 7: 700. 1931; – *Physcia obscura* var. *virella* Nyl., Hue (1900b, p. 264) Nilgiri.

Physcia wainioi Räs. – CATAL. 7: 703. 1931 – Poelt (1961, p. 93) N. W. Karakorum.

PHYSMA Mass. (Collemaceae)

Physma byrsinum (Ach.) Müll. Arg. – CATAL. 3: 25. 1925; – *Collema byrsinum* Ach., Montagne (1842, p. 20) Nilgiri; Jatta (1905, p. 186) Andaman.

PILOPHORON Th. Fr. (Cladoniaceae)

* *Pilophoron awasthianum* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 28. 1950. Darjeeling, Sandakhpoo, leg. Awasthi. Holotype in H, isotype in Aw.

PLATYGRAPHOPSIS Müll. Arg. (Lecanactidaceae)

Platygraphopsis interrupta (Fée) Müll. Arg. – CATAL. 2: 566. 1923; – *Platygrapha interrupta* Fée, Leighton (1869, p. 178) Ceylon.

POLYBLASTIOPSIS Zahlbr. (Pyrenulaceae)

* *Polyblastiopsis* (?) *pustulosa* (Stirt.) Zahlbr. Cat. Lich. Univ. 1: 351. 1922; – *Verrucaria pustulosa* Stirt. Proc. Phil. Soc. Glasgow 13: 191. 1881. Assam, leg. A. Watt. Type in GLAM, BM.

PORINA (Ach.) Müll. Arg. (Pyrenulaceae)

Porina americana Fée – CATAL. 1: 365. 1922 – Bélanger (1838, p. 138) Peninsular India.

Porina cinerea (Pers.) Zahlbr. – CATAL. 1: 376. 1922; – *Verrucaria cinerea* Pers., Hue (1892, p. 284) India.

* *Porina concamerata* (Stirt.) Zahlbr. Cat. Lich. Univ. 1: 377. 1922; – *Verrucaria concamerata* Stirt. Proc. Phil. Soc. Glasgow 13: 192. 1881. Assam, leg. A. Watt. Type in BM!, GLAM.

Porina desquamescens Fée – CATAL. 1: 378. 1922; – *Verrucaria desquamescens* (Fée), Leighton (1869, p. 183) Ceylon.

Porina epiphylla (Fée) Fée – Müll. Arg. (1883, p. 333) India; Santesson (1952, p. 234–239) Mysore, Nilgiri, Andaman, and Ceylon – taxon as *Phylloporina epiphylla* (Fée) Müll. Arg. in CATAL. 1: 533. 1922; – *Verrucaria praestans* Nyl. Bull. Soc. Linn. Normand. II, 7: 178. 1873; Hue (1892, p. 284); and *Phylloporina epiphylla* var. *praestans* Nyl. in Nylander (1900, p. 24) are syn. of *Porina epiphylla* (Fée) Fée sensu Santesson (1952, p. 234–239).

Porina epiphylla var. *atriceps* Vain. – Santesson (1952, p. 239–40) Andaman – taxon as *Phylloporina epiphylla* var. *atriceps* (Vain.) Zahlbr. in CATAL. 1: 534. 1922.

Porina innata (Nyl.) Müll. Arg. – CATAL. 1: 386. 1922; – *Verrucaria innata* Nyl., Leighton (1869, p. 183) Ceylon.

* *Porina internigrans* (Nyl.) Müll. Arg. Rep. Austral. Soc. Advanc. Sci. 1895, p. 452 (not seen) – CATAL. 1: 387. 1922; – *Verrucaria internigrans* Nyl. Bull. Soc. Linn. Normand. II, 7: 177. 1873. Andaman,

leg. Kurz. Type in H!; Hue (1892, p. 285) Andaman; Jatta (1905, p. 183) Andaman.

* *Porina interspersa* (Nyl.) Zahlbr. Cat. Lich. Univ. 1: 387. 1922; – *Verrucaria interspersa* Nyl. Bull. Soc. Linn. Normand. II, 7: 181. 1873. Andaman, leg. Kurz. Type in H!. Hue (1892, p. 295) Andaman.

Porina interstes (Nyl.) Harm. – CATAL. 1: 387. 1922; – *Verrucaria interstes* Nyl., Nylander (1873, p. 178) Andaman; Hue (1892, p. 285) Andaman.

* *Porina luteopallens* (Nyl.) Zahlbr. Cat. Lich. Univ. 1: 392. 1922; – *Verrucaria luteopallens* Nyl. Acta Soc. Sci. Fenn. 26 (10): 23. 1900. Ceylon, leg. Almquist. Type in H, S.

Porina mastoidea (Ach.) Müll. Arg. – CATAL. 1: 394. 1922; – *Verrucaria mastoidea* Nyl., Hue (1892, p. 285) Andaman.

* *Porina mastoidella* (Nyl.) Müll. Arg. in Engler, Bot. Jahrbuch 6: 399. 1885 (not seen) – CATAL. 1: 394. 1922; – *Verrucaria matoidella* Nyl. Flora 50: 8. 1867. Calcutta, leg. Kurz. Type in H! – Hue (1892, p. 285) Calcutta.

* *Porina subinterstes* (Nyl.) Müll. Arg. Nouv. Giorn. Ital. 29: 364. 1899 – CATAL. 1: 405. 1922; – *Verrucaria subinterstes* Nyl. Bull. Soc. Linn. Normand. II, 7: 178. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 285) Andaman.

Porina subcutanea Ach. – CATAL. 1: 405. 1922 – Müll. Arg. (1885, p. 259) India.

* *PSEUDOCYPHELLARIA* Vain. (Stictaceae)

Pseudocypsellaria argyracea (Bory) Vain.; – *Stictina argyracea* Nyl., Leighton (1869, p. 164) Ceylon; Nylander (1900, p. 8) Ceylon; Jatta (1911, p. 310) Malabar; Moreau (1952, p. 140) Shembaganur, Palni hills; – *Sticta argyracea* Del., Hue (1901, p. 87) Ceylon – CATAL. 3: 370. 1925.

Pseudocypsellaria argyracea var. *aspera* (Laur) Vain.; – *Sticta aspera* Laur, Montagne (1842, p. 18) Ootacamund, Nilgiri – taxon as syn. of *Sticta argyracea* var. *aspera* (Laur) Krempelh. in CATAL. 3: 371. 1925.

Pseudocypsellaria aurata (Ach.) Vain. – Awasthi (1961, p. 27) NEFA; – *Sticta aurata* Ach., Montagne (1842, p. 18) Nilgiri; Stirton (1876, p. 157) Kumaon; Hue (1901, p. 51) Ceylon – CATAL. 3: 330. 1925.

* *Pseudocypsellaria ceylonensis* H. Magn. Meddel. Goteborgs Bot. Tradgard 14: 23. 1940. Ceylon, leg. Thwaites. Type in S.

Pseudocypsellaria crocata (L.) Vain.; – *Stictina crocata* (L.), Leighton (1869, p. 164) Ceylon. NB. Part or all the material cited is *Pseudocypsellaria ceylonensis* H. Magn. sensu Magnusson (1940, p. 25); Nylander (1900, p. 8) Ceylon; – *Sticta crocata* Ach., Hue (1901, p. 81) Ceylon – CATAL. 3: 376. 1925.

* *PSEUDOCYPSELLARIA JUNGHUHNIANA* (Müll. Arg.) Comb. nov.; – *Stictina junghuhniana* Müll. Arg. Flora 65: 300. 1882. Ceylon, leg. Thwaites, and another specimen by Nieter. Type in G – taxon as nomencl. syn. of *Sticta subpunctulata* (Nyl.) Hue in CATAL. 3: 399. 1925. NB. The use of the specific epithet *junguhhniana* in the specific rank dates earlier than the epithet *subpunctulata* in the same rank, hence the latter has to be rejected, in favour of a new combination for the former.

* *PSEUDOCYPSELLARIA JUNGHUHNIANA* var. *LAEVIS* (Müll. Arg.) Comb. nov.; – *Stictina junghuhniana* var. *laevis* Müll. Arg. Flora 65: 300. 1882. Ceylon, leg. Nieter. Type in G – taxon as nomencl. syn. of *Sticta subpunctulata* var. *laevis* (Müll. Arg.) Zahlbr. in CATAL. 3: 399. 1925.

* (*Pseudocypsellaria*) *punctulata* (Nyl.); – *Sticta punctulata* Nyl. Synop. Lich. 1: 364. 1860. Ceylon, leg. ?. Type in H. Hue (1892, p. 98) Ceylon; Nylander (1900, p. 7) Ceylon – taxon nomencl. syn. of *Sticta sulphurea* Schaer. in CATAL. 3: 365. 1925.

* *Pseudocypsellaria quercifolia* (Tayl.) Vain. Philipp. Journ. Sci. sect. C, 8: 117. 1913; – *Sticta quercifolia* Tayl. London Journ. Bot. 6: 177. 1847. Ceylon, leg. ? (Herb. Hooker). Type in FH!, K – taxon nomencl. syn. of *Sticta sulphurea* Schaer. in CATAL. 3: 365. 1925.

* *Pseudocypsellaria subpunctulata* (Nyl.) Vain. Philipp. Journ. Sci. sect. C, 8: 119. 1913; – *Stictina fragillima* var. *subpunctulata* Nyl. in Leight. Trans. Linn. Soc. London 27: 164. 1869. Ceylon, leg. Thwaites. Type in H, BM; – *Stictina subpunctulata* Nyl., Nylander (1900, p. 8) Ceylon – taxon syn. of *Pseudocypsellaria junghuhniana* (Müll. Arg.) Awasthi – taxon as *Sticta subpunctulata* (Nyl.) Hue in CATAL. 3: 399. 1925.

PSEUDOPYRENULA Müll. Arg. (Pyrenulaceae)

Pseudopyrenula diluta (Fée) Müll. Arg. – CATAL. 1: 355. 1922; – *Verrucaria diluta* Fée, Nylander (1867, p. 8) Calcutta; Hue (1892, p. 294) Calcutta.

(*Pseudopyrenula*) *cartilaginea* (Fée); – *Pyrenula cartilaginea* Fée, Bélanger (1838, p. 141) Peninsular India – taxon nomencl. syn. of *Pseudopyrenula pupula* (Ach.) Müll. Arg. in CATAL. 1: 358. 1922.

Pseudopyrenula subvelata (Nyl.) Müll. Arg. – CATAL. 1: 359. 1922;
– *Verrucaria subvelata* Nyl., Hue (1892, p. 294) India.

*(*Pseudopyrenula*) *uberina* (Leight.); – *Trypethelium uberinum* Leight.
Trans. Linn. Soc. London 27: 185. 1869. Ceylon, leg. Thwaites.
Type in BM – taxon nomencl. syn. of *Pseudopyrenula pupula*
(Ach.) Müll. Arg. in CATAL. 1: 358. 1922.

PSORELLA Müll. Arg. (Phyllopsoraceae)

**Psorella psorina* (Nyl.) Zahlbr. Cat. Lich. Univ. 4: 403. 1927; –
Lecidea psorina Nyl. in Hue, Nouv. Arch. Mus. III, 3: 120. 1891,
and Hue (1892, p. 202) Nilgiri, leg. ?. Type in H, PC.

PSOROMA Nyl. (Pannariaceae)

Psoroma hispidulum Nyl. – CATAL. 3: 269. 1925 – Jatta (1911,
p. 312) Malabar.

Psoroma pholidotum (Mont.) Müll. Arg. – CATAL. 3: 274. 1925; –
Pannaria pholidota Mont., Leighton (1869, p. 165) Ceylon.

PSOROTICHIA (Mass.) Forss. (Pyrenopsidaceae)

**Psorotichia commiscens* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 788. 1923;
– *Collemopsis commiscens* Nyl. Acta Soc. Sci. Fenn. 26 (10): 4.
1900. Ceylon, leg. Almquist. Type in H, S.

PTERYGIUM Nyl. (Lichenaceae)

**Pterygium zeylanense* Leight. Trans. Linn. Soc. London 27: 162.
1869. Ceylon, leg. Thwaites. Type in BM – CATAL. 3: 4. 1925.

PYRENASTRUM Eschw. (Astrotheliaceae)

**Pyrenastrum depressum* Müll. Arg. Flora 68: 248. 1885. Ceylon, leg.
Nieter. Type in G – CATAL. 1: 519. 1922.

PYRENULA (Ach.) Mass. (Pyrenulaceae)

Pyrenula adacta Fée – CATAL. 1: 422. 1922 – Müll. Arg. (1892,
p. 231) Manipur.

Pyrenula aspista Ach. – CATAL. 1: 423. 1922 – Bélanger (1838,
p. 140) Mysore; – *Verrucaria aspista* (Ach.), Leighton (1869, p. 183)
Ceylon; Nylander (1873, p. 180) Andaman; Hue (1892, p. 290)
Ceylon, and Andaman.

- * *Pyrenula discissa* (Nyl.) Zahlbr. Cat. Lich. Univ. 1: 428. 1922; –
Verrucaria discissa Nyl. Acta Soc. Sci. Fenn. 26 (10): 25. 1900.
 Ceylon, leg. Almquist. Type in H, S.
- * *Pyrenula immissa* (Stirt.) Zahlbr. Cat. Lich. Univ. 1: 433. 1922; –
Verrucaria immissa Stirt. Proc. Phil. Soc. Glasgow 13: 191. 1881.
 Assam, leg. A. Watt. Type in BM!, GLAM.
- Pyrenula interducta* (Nyl.) Zahlbr. – CATAL. 1: 433. 1922; – *Verrucaria interducta* Nyl., Nylander (1900, p. 25) Ceylon.
- * *Pyrenula introducta* (Stirt.) Zahlbr. Cat. Lich. Univ. 1: 433. 1922; –
Verrucaria introducta Stirt. Proc. Phil. Soc. Glasgow 13: 191. 1881.
 Assam, leg. A. Watt. Type in BM!, GLAM.
- Pyrenula mamillana* (Ach.) Trevis. – CATAL. 1: 436. 1922; – *Verrucaria mamillana* Ach., Nylander (1900, p. 24) Ceylon.
- Pyrenula marginata* Hook. – CATAL. 1: 438. 1922 – Leighton (1869,
 p. 182) Ceylon; Nylander (1900, p. 24) Ceylon.
- Pyrenula mastophora* (Nyl.) Nyl. – CATAL. 1: 438. 1922; – *Verrucaria mastophora* Nyl., Nylander (1873, p. 179) Andaman; Hue (1892,
 p. 290) Andaman.
- * *Pyrenula mastophoriza* (Nyl.) Zahlbr. Cat. Lich. Univ. 1: 439. 1922;
 – *Verrucaria mastophoriza* Nyl. Bull. Soc. Linn. Normand. II, 7:
 180. 1873. Andaman, leg. Kurz. Type in H!. Hue (1892, p. 290)
 Andaman.
- Pyrenula nitens* Fée – CATAL. 1: 440. 1922; – *Verrucaria nitens* Fée,
 Bélanger (1838, p. 143) Carnatic, Peninsular India.
- Pyrenula nitida* (Weig.) Ach. – CATAL. 1: 441. 1922 – Bélanger
 (1838, p. 140) Carnatic; Nylander (1873, p. 179) Andaman; –
Verrucaria nitida Schrad., Nylander (1867, p. 8) Calcutta; Stirton
 (1876, p. 160) Ceylon; Hue (1892, p. 289) Andaman; Nylander
 (1900, p. 24) Ceylon.
- Pyrenula nitidella* (Floerke) Müll. Arg. – CATAL. 1: 445. 1922; –
Verrucaria nitidella Floerke, Hue (1892, p. 290) Ceylon; Nylander
 (1900, p. 24) Ceylon.
- * *Pyrenula nodulata* (Stirt.) Zahlbr. Cat. Lich. Univ. 1: 447. 1922; –
Verrucaria nodulata Stirt. Proc. Phil. Soc. Glasgow 13: 192. 1881.
 Assam, leg. A. Watt. Type in BM!, GLAM.
- Pyrenula pinguis* Fée – CATAL. 1: 449. 1922 – Bélanger (1838,
 p. 141) Peninsular India.
- * *Pyrenula pulchella* Müll. Arg. Flora 68: 336. 1885. Ceylon, leg.
 Thwaites. Type in G – taxon nomencl. syn. of *Pyrenula adacta*
 Fée in CATAL. 1: 422. 1922.

Pyrenula punctella (Nyl.) Trevis., Leighton (1869, p. 183) Ceylon – taxon nomencl. syn. of *Pyrenula pinguis* Féé in CATAL. 1: 449. 1922.

Pyrenula santensis (Nyl.) Müll. Arg.; – *Verrucaria santensis* (Nyl.), Leighton (1869, p. 183) Ceylon; – *Verrucaria mamillana* var. *santensis* Nyl., Nylander (1900, p. 24) Ceylon – taxon nomencl. syn. of *Pyrenula mamillana* (Ach.) Trevis. in CATAL. 1: 436. 1922.

* *Pyrenula scutata* (Stirt.) Zahlbr. Cat. Lich. Univ. 1: 452. 1922; – *Verrucaria scutata* Stirt. Proc. Phil. Soc. Glasgow 13: 192. 1881. Assam, leg. A. Watt. Type in BM!, GLAM.

* *Pyrenula subnitidella* (Nyl.) Müll. Arg. Flora 66: 247. 1883 – CATAL. 1: 454. 1922; – *Verrucaria subnitidella* Nyl. Bull. Soc. Linn. Normand. II, 7: 179. 1873. Andaman, leg. Kurz. Type in H!.

* *P Y R G I D I U M* Nyl. (Caliciaceae)

* *Pyrgidium bengaliense* Krempelh. in Nyl. Flora 50: 3. 1867. Calcutta, leg. Kurz. Type in H!. Hue (1892, p. 32) Calcutta – CATAL. 1: 652. 1922.

P Y X I N E Fr. (Physciaceae)

Pyxine caesiopruinosa (Tuck.) Imshaug; – *Pyxine cocoës* var. *caesiopruinosa* Tuck., Jatta (1905, p. 179) Andaman – taxon under syn. *Pyxine sorediata* f. *caesiopruinosa* (Tuck.) Hue in CATAL. 7: 576. 1931.

Pyxine coccifera (Fée) Nyl. – CATAL. 7: 569. 1931 – Leighton (1869, p. 165) Ceylon; A. L. Smith (1931, p. 131) Darjeeling; Chopra (1934, p. 70) Parbatipur, Darjeeling.

Pyxine cocoës (Sw.) Nyl. – CATAL. 7: 569. 1931 – Nylander (1867, p. 3) Calcutta; Hue (1892, p. 115) Calcutta; Müll. Arg. (1892, p. 219) Manipur; Hue (1899, p. 84) Manipur, India; Zahlbrückner (1911, p. 31) Ceylon; – *Lecidea cocoës* Ach., Bélanger (1838, p. 128) Peninsular India.

Pyxine cocoës f. *sorediifera* Müll. Arg. – CATAL. 7: 570. 1931 – Moreau (1952, p. 142) Manalur, Palni hills.

* *Pyxine cognata* Stirt. Proc. Phil. Soc. Glasgow 11: 311. 1879. Nilgiri, leg. G. Watt. Type in BM, GLAM; Stirton (1898, p. 395) Nilgiri – CATAL. 7: 570. 1931.

* *Pyxine consimilis* (Stirt.) Stirt. Trans. New Zealand Instit. 30: 395. 1898 – CATAL. 7: 571. 1931; – *Physcia consimilis* Stirt. Proc. Phil. Soc. Glasgow 11: 310. 1879. India, leg. Thomson. Type in BM, GLAM.

Pyxine endochrysina Nyl. – CATAL. 7: 571. 1931 – Müll. Arg. (1892, p. 218) Manipur.

Pyxine isidiophora (Müll. Arg.) Imshaug, Trans. Amer. Microsc. Soc. 74 (3): 257. 1957; – *Pyxine cocoës* f. *isidiophora* Müll. Arg. Flora 65: 319. 1882. Type from Cuba, but another specimen leg. Thwaites from Ceylon also pertained to this taxon.

Pyxine meisneri Tuck. – CATAL. 7: 572. 1931 – Nylander (1867, p. 3) Calcutta; Leighton (1869, p. 165) Ceylon; Hue (1892, p. 115) India; Nylander (1900, p. 9) Ceylon; Hue (1900, p. 81) India; Hue (1900b, p. 265) Nilgiri – taxon nomencl. syn. of *Pyxine berteriana* (Fée) Imshaug, in Imshaug (1957, p. 254).

* *Pyxine meisnerina* Nyl. Bull. Soc. Linn. Normand. II, 7: 164. 1873. Andaman, leg. Kurz. Type in H!. Hue (1892, p. 116) Bengal, and Andaman – CATAL. 7: 573. 1931.

* *Pyxine prominula* Stirt. Trans. and Proc. New Zealand Instit. 30: 397. 1898. Chinsurah, Assam, leg. G. Watt. Type in BM, GLAM – CATAL. 7: 574. 1931.

Pyxine retirugella Nyl. – CATAL. 7: 574. 1931 – Müll. Arg. (1892, p. 219) Manipur; Jatta (1905, p. 179) Andaman.

* *Pyxine retirugella* var. *macrotheca* A. L. Smith, Trans. Brit. Mycol. Soc. 16: 132. 1931. Sikkim, leg. Chopra. Type in W!, BM – CATAL. 8: 595. 1932 – Chopra (1934, p. 72) Darjeeling.

* *Pyxine retirugella* var. *subtestacea* A. L. Smith, Trans. Brit. Mycol. Soc. 16: 131. 1931. Darjeeling, leg. Chopra. Type in W!, BM – CATAL. 8: 595. 1932 – Chopra (1934, p. 71) Darjeeling.

Pyxine sorediata (Ach.) Mont. – CATAL. 7: 575. 1931 – Hue (1892, p. 116) Ceylon; Hue (1900b, p. 265) Nilgiri; Nylander (1900, p. 9) Ceylon; Jatta (1902, p. 11) Mandla; Jatta (1905, p. 179) Mussoorie, and Andaman; Moreau (1952, p. 142) Palni hills; – *Pyxine cocoës* var. *sorediata* Ach., Chopra (1934, p. 70) Darjeeling.

RACIBORSKIELLA Hohnel (Strigulaceae)

Raciborskia prasina (Müll. Arg.) R. Sant. – Santesson (1952, p. 197 to 199) Ceylon.

RAMALINA Ach. (Usneaceae)

Ramalina angulosa Laur – CATAL. 6: 436. 1930 – Nylander (1867, p. 3) Calcutta; Leighton (1869, p. 163) Ceylon; Hue (1892, p. 53) India.

- **Ramalina arabum* (Ach.) Mey. et Flot. Nova Acta Acad. Leopold. Carol. 19: Suppl. 1843, p. 212 (not seen) – CATAL. 6: 438. 1930 – Hue (1892, p. 53) India; Hue (1899, p. 92) India; – *Alectoria arabum* Ach. Synop. Lich. 1814, p. 293. India. Type in UPS, H.
- Ramalina asahinana* Zahlbr. – CATAL. 6: 439. 1930 – Bhatia (1957, p. 37) N.W. Himalaya.
- **Ramalina berterii* Bél. Voyage Ind. Orient. 2: 115. 1838. Carnatic, leg. Bélanger. Type in ? – CATAL. 6: 440. 1930.
- Ramalina calicaris* (L.) Röhl. – CATAL. 6: 442. 1930 – Nylander (1867, p. 3) Calcutta; Müll. Arg. (1892, p. 217) Manipur; Hue (1892, p. 55) Himalaya; Müll. Arg. (1895, p. 194) Darjeeling; Hue (1900b, p. 255) Nilgiri; Asahina (1955, p. 60) Nepal.
- **Ramalina calicaris* var. *subampliata* Nyl. Bull. Soc. Linn. Normand. II, 4: 132. 1870. Himalaya and Nilgiri, leg. ?. Type in H – Müll. Arg. (1892, p. 217) Manipur; Hue (1892, p. 71) India; Hue (1900b, p. 255) Nilgiri – CATAL. 6: 448. 1930. .
- Ramalina calicaris* var. *subampliata* f. *subpapillosa* (Nyl.) Hue – CATAL. 6: 448. 1930 – Hue (1892, p. 56) India; Hue (1899, p. 71) India; Hue (1900b, p. 255) Nilgiri.
- Ramalina canaliculata* Tayl. – see *Ramalina tayloriana* Zahlbr.
- Ramalina complanata* (Sw.) Ach. – CATAL. 6: 452. 1930; – *Ramalina calicaris* f. *complanata* Ach., Nylander (1860, p. 295) India; Hue (1892, p. 67) India.
- Ramalina conduplicans* Vain. – CATAL. 6: 453. 1930 – Awasthi (1960c, p. 177) Nepal; Awasthi (1961, p. 38) NEFA.
- Ramalina denticulata* (Eschw.) Nyl. – CATAL. 6: 459. 1930 – Jatta (1902, p. 3) Simla; Jatta (1905, p. 165) Himalaya; Jatta (1911, p. 309) Himalaya, and Malabar.
- Ramalina denticulata* var. *canalicularis* Nyl. – CATAL. 6: 460. 1930 – Jatta (1905, p. 165) Himalaya.
- Ramalina farinacea* (L.) Ach. – CATAL. 6: 464. 1930 – Babington (1852, p. 244) Kumaon; Nylander (1870, p. 132) India; Hue (1892, p. 56) India; Hue (1900b, p. 255) Nilgiri; Nylander (1900, p. 6) Ceylon; A. L. Smith (1931, p. 131) Darjeeling; Moreau (1952, p. 141) Kodaikanal; – *Ramalina calicaris* f. *farinacea* Nylander (1867, p. 3) Calcutta.
- **Ramalina farinacea* var. *nervulosa* Müll. Arg. Flora 60: 21. 1883. S. India, leg. Campbell. Type in G; Hue (1899, p. 73) India; Hue (1900b, p. 255) Nilgiri – CATAL. 6: 471. 1930.

Ramalina farinacea var. *phalerata* Ach. – CATAL. 6: 472. 1930 – Jatta (1905, p. 166) Darjeeling, and Sikkim.

Ramalina fastigiata (Liljebl.) Ach. – CATAL. 6: 472. 1930 – Nylander (1870, p. 137) Nilgiri; Hue (1892, p. 56) India; – *Ramalina calicaris* f. *fastigiata* Ach., Montagne (1842, p. 18) Nilgiri; Bélanger (1838, p. 110) Coromandel coast.

**Ramalina flabelliformis* Asahina in Kihara, Fauna and Flora Nepal Himalaya. Lichens. 1: 61. 1955. Nepal, leg. Nakao. Type in ?.

Ramalina fraxinea (L.) Ach. – CATAL. 6: 478. 1930; – *Ramalina calicaris* f. *fraxinea* Ach., Bélanger (1838, p. 116) Coromandel coast; Nylander (1860, p. 294) Himalaya.

Ramalina geniculata Hook. et Tayl. – CATAL. 6: 490. 1930 – Jatta (1911, p. 309) Malabar.

Ramalina gracilis (Pers.) Nyl. – CATAL. 6: 490. 1930 – Jatta (1911, p. 309) Sikkim.

**Ramalina himalayensis* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 26. 1950. Sandakhpoo, Darjeeling, leg. Awasthi. Holotype in H, isotype in Aw.

**Ramalina indica* Fr. Kgl. Vetensk Akad. Handl. 1820, p. 43 (not seen). India, leg. ?. Type in UPS. – CATAL. 6: 493. 1930.

Ramalina inflata Hook. et Tayl. – CATAL. 6: 493. 1930 – Hue (1900b, p. 255) Nilgiri.

**Ramalina laciniata* Jatta, Malpighia 17: 4. 1902. Simla, leg. Doulea. Type in NAP; – CATAL. 6: 495. 1930.

Ramalina ligulata (Ach.) Brandt. – CATAL. 6: 497. 1930; – *Ramalina polymorpha* var. *ligulata* Ach., Bélanger (1838, p. 116) Carnatic.

Ramalina linearis (Sw.) Ach. – CATAL. 6: 497. 1930; – *Ramalina calicaris* f. *linearis* Ach., Nylander (1860, p. 295) India.

Ramalina pollinaria (Liljebl.) Ach. – CATAL. 6: 502. 1930 – Quraishi (1928, p. 228) Mussoorie.

Ramalina polymorpha var. *flabellulata* Ach. – CATAL. 6: 511. 1930 – Bélanger (1838, p. 116) Carnatic.

Ramalina pumila Mont. – CATAL. 6: 512. 1930 – Nylander (1870, p. 166) India; Hue (1892, p. 60) India; Hue (1899, p. 82) India.

Ramalina rigida Ach. – Montagne (1842, p. 17) Nilgiri; Stirton (1876, p. 157) Kumaon – taxon nomencl. syn. of *Ramalina attenuata* (Pers.) Howe in CATAL. 6: 439. 1930.

Ramalina roesleri (Hochst) Nyl. – CATAL. 6: 514. 1930 – Asahina (1955, p. 61) Nepal.

Ramalina scopulorum (Retz.) Ach. – CATAL. 6: 515. 1930 – Leighton (1869, p. 163) Ceylon.

Ramalina sinensis Jatta – CATAL. 6: 520. 1930 – Jatta (1905, p. 166) Punjab, Pangi; Asahina (1955, p. 61) Nepal; Awasthi (1960c, p. 176) Nepal; Awasthi (1961, p. 38) NEFA.

* *Ramalina subcomplanata* Nyl. Bull. Soc. Linn. Normand. II, 4: 134. 1870. India, Himalaya, leg. ?. Type in H. Hue (1892, p. 56) India; Jatta (1905, p. 165) Darjeeling, Sikkim – CATAL. 6: 522. 1930 – Awasthi (1960c, p. 177) Nepal.

* *Ramalina subpusilla* Nyl. Bull. Soc. Linn. Normand. II, 4: 164. 1870. India, leg. ?. Type in H!. Hue (1892, p. 60) India – CATAL. 6: 524. 1930.

Ramalina tayloriana Zahlbr. Cat. Lich. Univ. 6: 524. 1930; – *Ramalina canaliculata* Tayl. (non Dietrich), Nylander (1870, p. 128) Pondicherry; Hue (1892, p. 55) India; Hue (1899, p. 68) India; Jatta (1905, p. 165) Darjeeling, Sikkim.

Ramalina usneoides (Ach.) Mont. – Nylander (1860, p. 291) Nepal; Nylander (1870, p. 121) India; Hue (1892, p. 54) India – taxon nomencl. syn. of *Ramalina usnea* (L.) Howe jr. in CATAL. 6: 526. 1930.

Ramalina yemensis (Ach.) Nyl. – CATAL. 6: 528. 1930 – Nylander (1870, p. 144) India; Hue (1899, p. 74) India; Hue (1900b, p. 255) Nilgiri; Moreau (1952, p. 141) Kodaikanal.

Ramalina yemensis var. *eckloni* (Spreng.) Vain. – CATAL. 6: 528. 1930 – Jatta (1911, p. 309) Malabar.

RHIZOCARPON (Ram.) Th. Fr. (Lecideaceae)

Rhizocarpon geographicum (L.) DC. – CATAL. 4: 359. 1927; – *Lecidea geographica* Ach., Babington (1852, p. 252) Kumaon.

* *Rhizocarpon himalayense* Räs. Fedde Repertorium 52 (2): 142. 1943. Himalaya, leg. ?. Type in H.

Rhizocarpon montagnei (Flot.) Körb. – Poelt (1961, p. 87) N.W. Karakorum – taxon nomencl. syn. of *Rhizocarpon disporum* var. *montagnei* (Flot.) Zahlbr. in CATAL. 4: 355. 1927.

* *Rhizocarpon pindarensse* Räs. Arch. Soc. Zool. Bot. "Vanamo" 6 (2): 86. 1952. Kumaon, Almora district, leg. Awasthi. Holotype in H, isotype in Aw.

Rhizocarpon superficiale (Schaer.) Vain. – CATAL. 4: 342. 1927 – Runemark (1956, p. 53–58) Himalaya.

Rhizocarpon sublucidum Räs. – Runemark (1956, p. 107–109) India.

Rhizocarpon tinei (Tornab.) Runem. – Poelt (1961, p. 87) N.W. Karakorum.

**Rhizocarpon triseptatum* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 29. 1950. Sikkim, leg. Awasthi. Type in H.

RINODINA (S. Gray) Mass. (Buelliaceae)

**Rinodina aequalis* (Nyl.) Zahlbr. Cat. Lich. Univ. 7: 479. 1931; – *Lecidea aequalis* Nyl. Flora 52: 70. 1869. Bengal, leg. Kurz. Type in H!; – *Lecanora aequalis* (Nyl.), Hue (1892, p. 139) Bengal.

Rinodina altissima H. Magn. – Poelt (1961, p. 92) N.W. Karakorum.

Rinodina arenaria (Hepp) Th. Fr. – CATAL. 7: 483. 1931 – Paulson (1925, p. 191) Mt. Everest.

Rinodina colobina (Ach.) Th. Fr. – CATAL. 7: 497. 1931; – *Lecanora colobina* Ach., Nylander (1867, p. 4) Calcutta; Hue (1892, p. 138) Calcutta.

Rinodina exigua (Ach.) S. Gray – CATAL. 7: 514. 1931 – Müll. Arg. (1892, p. 220) Manipur; – *Lecanora exigua* (Ach.), Nylander (1900, p. 10) Ceylon.

**Rinodina intrusa* (Krempehl.) Malme, Bihang till Kgl. Svensk. Vetensk. Akad. Handl. 28 (31): 32. 1902 – CATAL. 7: 522. 1931; – *Lecanora intrusa* Krempehl. in Nyl. Flora 50: 4. 1867. Calcutta, leg. Kurz. Type in H!. Hue (1892, p. 138) Calcutta.

Rinodina kansuensis H. Magn. – Awasthi (1963, p. 36) N.W. Himalaya.

**Rinodina mackenziei* Räs. Arch. Soc. Zool. Bot. "Vanamo" 6 (2): 84. 1952. Pendra, Central India (= Madhya Pradesh), leg. Mackenzie. Holotype in H, isotype in Aw.

Rinodina mniarea (Ach.) Körb. – CATAL. 7: 531. 1931 – Paulson (1925, p. 191) Mt. Everest.

Rinodina nimbosa (Fr.) Th. Fr. – Poelt (1961, p. 92) N.W. Karakorum – taxon nomencl. syn. of *Rinodina phaeocarpa* (Sommerf.) Vain. in CATAL. 7: 564–565. 1931.

Rinodina orbata var. *roscida* (Sommerf.) Zahlbr. – Paulson (1925, p. 191) Mt. Everest – taxon nomencl. syn. of *Rinodina turfacea* var. *roscida* (Sommerf.) Zahlbr. in CATAL. 7: 540. 1931.

Rinodina oreina (Ach.) Mass. – CATAL. 7: 562. 1931 – Paulson (1925, p. 191) Mt. Everest; – *Parmelia oreina* (Ach.), Babington (1852, p. 249) Kumaon.

**Rinodina pallido-ochracea* Räs. Arch. Soc. Zool. Bot. "Vanamo" 6 (2): 84. 1952. Almora, N.W. Himalaya, leg. Awasthi. Holotype in H, isotype in Aw.

Rinodina sophodes (Ach.) Mass. – CATAL. 7: 549. 1931 – A. L. Smith (1931, p. 131) Calcutta.

Rinodina turfacea (Wahlenb.) Körb. – Awasthi (1963, p. 36) Nepal – taxon nomencl. syn. of *Rinodina orbata* (Ach.) Vain. in CATAL. 7: 537–38. 1931.

ROCCELLA DC. (Roccellaceae)

Roccella fuciformis (L.) DC. – CATAL. 2: 516. 1923 – Acharius (1810, p. 440) "India Orientalis"; – *Lichen fuciformis* L. Sp. Plant. 1753, p. 1147. India (NB. The taxon has not subsequently been reported from India, the specimens referred by Linnaeus and Acharius may most likely be *Roccella montagnei* Bél.).

**Roccella montagnei* Bél. Voyage Ind. Orient. 2: 117. 1838. Pondicherry, leg. ?. Type in ?PC, isotype in COLO. Montagne (1842, p. 18) Nilgiri; Hue (1892, p. 61) India; Darbshire (1898, p. 24) India – CATAL. 2: 521. 1923.

Roccella phycopsis Ach. Lichenogr. Univers. 1810, p. 440. "India Orientalis" – taxon nomencl. syn. of *Roccella fucoidea* (Neck.) Vain. in CATAL. 2: 518. 1923; but not recorded from India by Darbshire (1898, p. 34–35).

Roccella tinctoria DC. – CATAL. 2: 522. 1923 – Nylander (1860, p. 258) India; Hue (1892, p. 60) India. The taxon is not recorded from India by Darbshire (1898, p. 32).

SARCOGRAPHA Fée (Chiodectionaceae)

Sarcographa feei (Meissn.) Müll. Arg. – CATAL. 2: 460. 1923; – *Chiodection feei* Meissn., Leighton (1869, p. 182) Ceylon.

Sarcographa heteroclita (Mont.) Zahlbr.; – *Glyphis heteroclita* Mont., Leighton (1869, p. 181) Ceylon – taxon nomencl. syn. of *Sarcographa leprieurii* (Mont.) Müll. Arg. in CATAL. 2: 463. 1923.

Sarcographa intricans (Nyl.) Müll. Arg. – CATAL. 2: 461. 1923; – *Graphis intricans* Nyl., Leighton (1869, p. 175) Ceylon.

Sarcographa labyrinthica (Ach.) Müll. Arg. – CATAL. 2: 462. 1923; – *Glyphis labyrinthica* Ach., Leighton (1869, p. 181) Ceylon.

**Sarcographa maculosa* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 464. 1923; – *Glyphis maculosa* Stirt. Proc. Phil. Soc. Glasgow 13: 189. 1881. Assam, leg. A. Watt. Type in BM!, GLAM.

**Sarcographa subtorquescens* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 466. 1923; – *Glyphis subtorquescens* Nyl. Acta Soc. Sci. Fenn. 26 (10): 23. 1900. Ceylon, leg. Almquist. Type in H, S.

**Sarcographa subtricosa* (Leight.) Müll. Arg. Mem. Soc. Phys. et Hist. Nat. Geneve 29 (8): 63. 1887 – CATAL. 2: 466. 1923; – *Glyphis subtricosa* Leight. Trans. Linn. Soc. London 27: 181. 1869. Ceylon, leg. Thwaites. Type in BM!.

Sarcographa tricosa (Ach.) Müll. Arg. – CATAL. 2: 466. 1923; – *Graphis tricosa* Ach., Leighton (1869, p. 176) Ceylon.

SARCOGRAPHINA Müll. Arg. (Chiodectonaceae)

**Sarcographina gyrisans* (Leight.) Müll. Arg. Hedwigia 30: 187. 1891; CATAL. 2: 469. 1923; – *Glyphis gyrisans* Leight. Trans. Linn. Soc. London 27: 181. 1869. Ceylon, leg. Thwaites. Type in BM!.

Sarcographina torquescens (Nyl.) Zahlbr. – CATAL. 2: 470. 1923; – *Glyphis torquescens* Nyl., Nylander (1900, p. 23) Ceylon.

SARCOGYNE Flot. (Acarosporaceae)

**Sarcogyne sikkimensis* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 30. 1950. Sikkim, leg. Awasthi. Type in H.

SCHISMATOMMA Mass. (Lecanactidaceae)

**Schismatomma atomellum* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 553. 1923; – *Platygrapha atomella* Stirt. Proc. Phil. Soc. Glasgow 11: 317. 1879. Nilgiri, leg. G. Watt. Type in BM!, GLAM.

**Schismatomma cinereum* (Müll. Arg.) Zahlbr. Cat. Lich. Univ. 2: 555. 1923; – *Platygrapha cinerea* Müll. Arg. Journ. Linn. Soc. Bot. 29: 224. 1892. Manipur, leg. G. Watt. Type in K.

**Schismatomma flavisedellum* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 556. 1923; – *Platygrapha flavisedella* Nyl. Bull. Soc. Linn. Normand. II, 7: 172. 1873. Andaman, leg. Kurz. Type in H!.

**Schismatomma fractuosum* (Leight.) Zahlbr. Cat. Lich. Univ. 2: 556. 1923; – *Platygrapha fractuosa* Leight. Trans. Linn. Soc. London 27: 179. 1869. Ceylon, leg. Thwaites. Type in BM!.

**Schismatomma galactinum* (Leight.) Zahlbr. Cat. Lich. Univ. 2: 556. 1923; – *Platygrapha galactina* Leight. Trans. Linn. Soc. London 27: 179. 1869. Ceylon, leg. Thwaites. Type in BM!.

- **Schismatomma gemmatum* (Leight.) Zahlbr. Cat. Lich. Univ. 2: 557. 1923; – *Platygrapha gemmata* Leight. Trans. Linn. Soc. London 27: 179. 1869. Ceylon, leg. Thwaites. Type in BM!.
- **Schismatomma glaucomoides* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 557. 1923; – *Platygrapha glaucomoides* Nyl. Flora 50: 6. 1867. Calcutta, leg. Kurz. Type in H, BM!; Hue (1892, p. 256) Calcutta.
- **Schismatomma gregantulum* (Müll. Arg.) Zahlbr. Cat. Lich. Univ. 2: 558. 1923; – *Platygrapha gregantula* Müll. Arg. Journ. Linn. Soc. Bot. 29: 223. 1892. Manipur, leg. G. Watt. Type in K.
- **Schismatomma incurvulum* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 558. 1923; – *Platygrapha incurvula* Stirt. Proc. Phil. Soc. Glasgow 11: 318. 1879. Nilgiri, leg. Watt. Type in BM!, GLAM.
- **Schismatomma kurzii* (Krempelh.) Zahlbr. Cat. Lich. Univ. 2: 559. 1923; – *Chiodecton kurzii* Krempelh. in Nyl. Bull. Soc. Linn. Normand. II, 7: 172. 1873. Andaman, leg. Kurz. Type in H!; – *Platygrapha kurzii* (Nyl.), Hue (1892, p. 257) Andaman.
- **Schismatomma melastigma* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 559. 1923; – *Stigmatidium melastigma* Nyl. Flora 50: 6. 1867. Calcutta, leg. Kurz. Type in H!; – *Platygrapha melastigma* (Nyl.), Hue (1892, p. 257) Calcutta.
- Schismatomma palidellum* (Nyl.) Zahlbr. Cat. Lich. Univ. 2: 560. 1923 – a superfluous entry. For correct citation and transfer of the basionym see *Chiodecton pallidellum* (Nyl.) Vain.
- **Schismatomma stictoides* (Leight.) Zahlbr. Cat. Lich. Univ. 2: 565. 1923; – *Platygrapha stictoides* Leight. Trans. Linn. Soc. London 27: 180. 1869. Ceylon, leg. Thwaites. Type in BM!.

SIPHULA Fr. (Usneaceae)

- Siphula ceratites* (Wahlenb.) Fr. – CATAL. 6: 613. 1930 – Nylander (1860, p. 262) Himalaya; Hue (1892, p. 35) Himalaya; A. L. Smith (1931, p. 131) Sikkim; Chopra (1934, p. 68) Darjeeling, and Sikkim.
- **Siphula ceratites* var. *himalayensis* Räs. Arch. Soc. Zool. Bot. “Vannamo” 5 (1): 26. 1950. Sikkim, leg. Awasthi. Holotype in H, isotype in Aw.

SOLORINA Ach. (Peltigeraceae)

- Solorina crocea* (L.) Ach. – CATAL. 3: 411. 1925 – Nylander (1860, p. 329) Himalaya; Hue (1892, p. 105) Himalaya; A. L. Smith (1931, p. 129) N. W. Himalaya; Chopra (1934, p. 33) Himalaya.

Solorina crocoides (Nyl.) Gyel. – CATAL. 8: 314. 1932; – *Solorinina crocoides* Nyl., Hue (1892, p. 104) Himalaya.

Solorina saccata (L.) Ach. – CATAL. 3: 414. 1925 – Babington (1852, p. 246) Kumaon.

**Solorina saccata* var. *sacatella* Jatta, Malpighia 19: 169. 1905. Pangi, Punjab, leg. Marten. Type in NAP. – CATAL. 3: 418. 1925.

Solorina simensis Hochst. – CATAL. 3: 419. 1925 – Nylander (1860, p. 330) Himalaya; – *Solorinina simensis*, Hue (1892, p. 104) Nilgiri, and Himalaya; Hue (1900, p. 88) Himalaya.

SPHAEROPHORUS Pers. (Sphaerophoraceae)

Sphaerophorus australis Laur – CATAL. 1: 684. 1922 – Leighton (1869, p. 162) Ceylon; Hue (1898, p. 235) Ceylon.

Sphaerophorus compressum Ach. – Nylander (1900, p. 5) Ceylon – taxon nomencl. syn. of *Sphaerophorus melanocarpus* (Sw.) DC. in CATAL. 1: 693. 1922.

SPHINCTRINA Fr. (Caliciaceae)

**Sphinctrina exilis* Stirt. Proc. Phil. Soc. Glasgow 13: 183. 1881. Assam, leg. A. Watt. Type in BM!, GLAM – CATAL. 1: 654. 1922.

**Sphinctrina gomphilloides* Nyl. Synop. Lich. 1: 144. 1860. Nilgiri, leg. Perrottet. Type in H!; Hue (1892, p. 30) India – CATAL. 1: 657. 1922.

Sphinctrina microcephalum (Sm.) Nyl. – CATAL. 1: 658. 1922 – Leighton (1869, p. 162) Ceylon.

**Sphinctrina nitidula* Stirt. Proc. Phil. Soc. Glasgow 11: 309. 1879. Nilgiri, leg. G. Watt. Type in BM!, GLAM – CATAL. 1: 660. 1922.

SPORASTATIA Mass. (Acarosporaceae)

Sporastatia testudinea (Ach.) Mass. – see *Biatorella testudinea* (Ach.) Mass.

SPOROPODIUM Mont. em. R. Sant. (Lecideaceae)

Sporopodium phyllocharis (Mont.) Mass. – CATAL. 2: 680. 1923 – Santesson (1952, p. 515–518) Ceylon.

Sporopodium xantholeucum (Müll. Arg.) Zahlbr. – CATAL. 2: 681. 1923 – Awasthi (1963, p. 32) Shembaganur, Madurai.

STAUROTHELE (Norm.) Th. Fr. (*Verrucariaceae*)

Staurothele clopima (Wahlenb.) Th. Fr. – CATAL. 4: 164. 1922 – Poelt (1961, p. 86) N.W. Karakorum; Awasthi (1963, p. 28) N.W. Himalaya.

Staurothele umbrina (Wahlenb.) Hellb.; – *Verrucaria umbrina* Wahlenb., Hue (1892, p. 278) Himalaya; – taxon nomencl. syn. of *Staurothele lithina* (Ach.) Zahlbr. in CATAL. 4: 172. 1922.

STEREOCAULON Schreb. (*Stereocaulaceae*) sensu I. M. Lamb

Stereocaulon alpinum Laur – CATAL. 4: 632. 1927 – Paulson (1925, p. 193) Mt. Everest; Chopra (1934, p. 45) Darjeeling; Poelt (1961, p. 88) N.W. Karakorum.

**Stereocaulon arbuscula* Nyl. Synop. Lich. 1: 253. 1860. Himalaya, Sikkim, leg. Hooker and Thomson. Type in H, K – CATAL. 4: 634. 1927 – Chopra (1934, p. 44) Darjeeling; – *Leprocaulon arbuscula* Nyl., Hue (1892, p. 306) Himalaya.

**Stereocaulon botryophorum* Müll. Arg. Flora 74: 371. 1891. Himalaya, Ihala, leg. Duthie. Type in K – CATAL. 4: 635. 1927 – Asahina (1955, p. 51) Nepal.

Stereocaulon claviceps Th. Fr. – CATAL. 4: 635. 1927 – Asahina (1955, p. 50) Nepal; Awasthi (1961, p. 30) NEFA.

Stereocaulon condensatum Hoffm. – CATAL. 4: 635. 1927 – Nylander (1900, p. 5) Ceylon.

**Stereocaulon condyloideum* Nyl. – see *Stereocaulon leprocephalum* Vain.

Stereocaulon corallinum, Schreb. – Babington (1852, p. 250) Dubium!

Stereocaulon coralloides Fr. – CATAL. 4: 638. 1927 – Nylander (1860, p. 241) Himalaya; Hue (1892, p. 38) Himalaya; Hue (1898, p. 253) Himalaya.

**Stereocaulon foliolosum* Nyl. Synop. Lich. 1: 240. 1860. Himalaya, leg. Jacquement; Kumaon, leg. Strachey and Winterbottom. Type in H – CATAL. 4: 648. 1927 – Hue (1892, p. 38) Himalaya.

**Stereocaulon leprocephalum* Vain. Arkiv Bot. 8 (4): 35. 1909. Ceylon; – *Stereocaulon condyloideum* Nyl. (non Ach.) Acta Soc. Sci. Fenn. 26 (10): 5. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 4: 651. 1927.

**Stereocaulon macrocephalum* Müll. Arg. Flora 74: 371. 1891. Bhowani, N.W. Himalaya, leg. Duthie. Type in K – taxon nomencl. syn. of *Stereocaulon piluliferum* Th. Fr. in CATAL. 4: 660. 1927.

**Stereocaulon myriocarpoides* Nyl. Synop. Lich. 1: 245. 1860. Himalaya, leg. Hooker and Thomson. Type in H. K. Hue (1892, p. 39) Himalaya – CATAL. 4: 652. 1927.

Stereocaulon nesaeum Nyl. – CATAL. 4: 652. 1927 – Awasthi (1961, p. 30) NEFA.

Stereocaulon paschale (L.) Hoffm. – CATAL. 4: 653. 1927 – Nylander (1860, p. 242) Himalaya; Leighton (1869, p. 163) Ceylon; Hue (1892, p. 38) Himalaya.

**Stereocaulon piluliferum* Th. Fr. De *Stereocaulon* and *Pilophoron* Comment. 1857, p. 21. Himalaya, leg. ?. Type in UPS. Hue (1898, p. 250) India – CATAL. 4: 660. 1927; – Awasthi (1960c, p. 172) Nepal.

Stereocaulon piluliferum var. *sinense* (Hue) M. Lamb – Asahina (1955, p. 50) Nepal.

Stereocaulon quisquillare (Leers) Hoffm. – CATAL. 4: 661. 1927 – A. L. Smith (1931, p. 130) Darjeeling.

Stereocaulon ramulosum (Sw.) Raqueschel – CATAL. 4: 663. 1927 – A. L. Smith (1931, p. 130) Darjeeling; Chopra (1934, p. 43) Darjeeling, Sikkim.

**Stereocaulon strictum* (Bab.) Nyl. Synop. Lich. 1: 239. 1860. Himalaya; Müll. Arg. (1895, p. 194) Darjeeling; Jatta (1902, p. 4) Darjeeling, Sikkim; – *Stereocaulon ramulosum* var. *strictum* Bab. Hooker Journ. Bot. 4: 250. 1852. Kumaon, leg. Strachey and Winterbottom. Type in BM – taxon nomencl. syn. of *Stereocaulon piluliferum* Th. Fr. in CATAL. 4: 660. 1927.

Stereocaulon tomentosum Fr. – CATAL. 4: 668. 1927 – Babington (1852, p. 250) Kumaon; Nylander (1860, p. 243) Himalaya; Hue (1892, p. 39) Himalaya; Hue (1898, p. 254) Himalaya; Jatta (1905, p. 168) Pangi, N. W. Himalaya.

Stereocaulon tomentosum var. *orizabae* (Th. Fr.) M. Lamb – Asahina (1955, p. 50) Nepal; – *Stereocaulon myriocarpum* var. *orizabae* Th. Fr., Awasthi (1960c, p. 172) Nepal – taxon as syn. *Stereocaulon orizabae* (Th. Fr.) Vain. in CATAL. 4: 652. 1927.

Stereocaulon tomentosum ssp. *myriocarpum* (Th. Fr.) – Asahina (1955, p. 50) Nepal – taxon as syn. *Stereocaulon myriocarpum* Th. Fr. in CATAL. 4: 652. 1927.

Stereocaulon yunnanense (Hue) M. Lamb – Asahina (1955, p. 50) Nepal.

STICTA Schreb. (Stictaceae)

Sticta boschiana Mont. et v. d. Bosch – CATAL. 3: 373. 1925; – *Stictina boschiana*, Leighton (1869, p. 164) Ceylon; Nylander (1900, p. 8) Ceylon.

Sticta boschiana var. *lobata* (Nyl.) Zahlbr. – CATAL. 3: 373. 1925; – *Stictina boschiana* var. *lobata* Nyl., Nylander (1900, p. 8) Ceylon.

Sticta ciliaris Mont. et v. d. Bosch – CATAL. 3: 374. 1925; – *Stictina ciliaris* Mont. et v. d. Bosch, Leighton (1869, p. 164) Ceylon.

Sticta damaecornis (Sw.) Ach. – CATAL. 3: 337. 1925 – Montagne (1842, p. 18) Nilgiri; Lindsay (1866, p. 505) Madras.

**Sticta dictyota* Stirt. – see *Lobaria dictyota* (Stirt.) Awasthi.

**Sticta diplomorpha* (Müll. Arg.) Zahlbr. Cat. Lich. Univ. 3: 378. 1925; – *Stictina diplomorpha* Müll. Arg. Flora 65: 301. 1882. Ceylon, leg. Thwaites. Type in G.

Sticta filicina Ach. – CATAL. 3: 381. 1925 – Hue (1892, p. 92) India; Hue (1901, p. 101) India; – *Stictina filicina* (Ach.), Moreau (1952, p. 139) Kodaikanal.

Sticta fuliginosa (Dicks.) Ach. – CATAL. 3: 383. 1925 – Montagne (1842, p. 18) Nilgiri; – *Stictina fuliginosa* (Dicks.), Leighton (1869, p. 164) Ceylon; Moreau (1952, p. 139) Kodaikanal.

Sticta henryana Müll. Arg. – CATAL. 3: 349. 1925 – Awasthi (1960c, p. 170) Nepal; Awasthi (1961, p. 27) NEFA.

Sticta intricata Del. f. *thouarsii* (Del.) Mudd. – CATAL. 3: 389. 1925; – *Stictina argyracea* var. *thouarsii* Del., Nylander (1900, p. 8) Ceylon.

**Sticta nylanderiana* Zahlbr. Cat. Lich. Univ. 3: 356. 1925. Himalaya; – *Sticta platyphylla* Nyl. Synop. Lich. 1: 357. 1860. Nepal, Himalaya, leg. Hooker. Type in H, K (non Mass. ex anno 1853); Hue (1892, p. 95) India; Müll. Arg. (1892, p. 218) Manipur; Asahina (1955, p. 47) Nepal.

Sticta orbicularis Nyl. – CATAL. 3: 397. 1925 – Moreau (1952, p. 139) Kodaikanal.

Sticta platyphylla Nyl. – see *Sticta nylanderiana* Zahlbr.

**Sticta platyphylla* var. *praetextata* Räs. Arch. Soc. Zool. Bot. "Vanamo" 6 (2): 84. 1952. Dist. Almora, N. W. Himalaya, leg. Awasthi. Holotype in H, isotype in Aw.

Sticta platyphylloides Nyl. – CATAL. 3: 360. 1925 – Awasthi (1960c, p. 170) Nepal; Awasthi (1961, p. 27) NEFA.

Sticta tomentella Nyl. – CATAL. 3: 403. 1925; – *Stictina tomentella* Nyl., Leighton (1869, p. 164) Ceylon.

Sticta tomentosa (Sw.) Ach. var. *dilatata* Nyl. – CATAL. 3: 404. 1925 – Hue (1892, p. 90) India.

Sticta weigelii Isert – CATAL. 3: 404. 1925 – Hue (1901, p. 94) India; Moreau (1952, p. 139) Kodaikanal, Palni hills; Awasthi (1961, p. 28) Assam.

Sticta weigelii var. *peruviana* (Del.) Vain. – CATAL. 3: 406. 1925; – *Stictina quercizans* v. *peruviana* (Del.), Leighton (1869, p. 164) Ceylon; – *Stictina peruviana* (Del.), Nylander (1900, p. 8) Ceylon.

Sticta weigelii f. *beauvoisii* (Del.) Hue – CATAL. 3: 405. 1925 – Moreau (1952, p. 139) Shembaganur, Palni hills; Awasthi (1961, p. 28) NEFA.

STIRTONIA A. L. Smith (Cryptotheeciaceae)

**Stirtonia dubia* A. L. Smith, Trans. Brit. Mycol. Soc. 11: 195. 1926. Bengal, leg. ?. Type in BM – CATAL. 8: 148. 1932.

**Stirtonia obvallata* (Stirt.) A. L. Smith, Trans. Brit. Mycol. Soc. 11: 196. 1926. Bengal – CATAL. 8: 148. 1932; – *Cryptothecia obvallata* Stirt. Proc. Phil. Soc. Glasgow 11: 319. 1879. Nilgiri, leg. G. Watt. Type in BM.

STRIGULA Fr. (Strigulaceae)

Strigula complanata (Fée) Nyl. – CATAL. 1: 537. 1922 – Santesson (1952, p. 190–194) Ceylon.

Strigula complanata var. *nemathora* (Mont.) Müll. Arg. – Zahlbruckner (1911, p. 31) Ceylon.

Strigula elegans (Fée) Müll. Arg. – CATAL. 1: 538. 1922 – Santesson (1952, p. 160–170) Assam, Nepal, and Ceylon.

Strigula elegans var. *antillarum* (Fée) R. Sant., Santesson (1952, p. 171) India – taxon as syn. *Strigula antillarum* (Fée) Müll. Arg. in CATAL. 1: 537. 1922.

Strigula elegans f. *hirtella* Müll. Arg. – CATAL. 1: 539. 1922; – *Strigula elegans* var. *genuina* f. *hirtella* Müll. Arg., Zahlbruckner (1911, p. 31) Ceylon.

Strigula elegans var. *stellata* (Nyl.) R. Sant., Santesson (1952, p. 171) Ceylon.

Strigula nemathora Mont. – Santesson (1952, p. 149–154) Ceylon – taxon nomencl. syn. of *Strigula argyronema* Müll. Arg. in CATAL. 1: 537. 1922.

Strigula nitidula Mont. – CATAL. 1: 541. 1922 – Santesson (1952, p. 179–183) Calcutta, Mysore, and Ceylon.

Strigula subelegans Vain. – Santesson (1952, p. 158–160) Ceylon – CATAL. 8: 144. 1932.

Strigula subtilissima (Fée) Müll. Arg. – CATAL. 1: 541. 1922 – Santesson (1952, p. 183–186) Ceylon.

TELOSCHISTES Norm. (Teloschistaceae)

Teloschistes flavicans (Sw.) Norm. – CATAL. 7: 319. 1931 – Jatta (1911, p. 310) Malabar; – *Evernia flavicans* Fr., Montagne (1842, p. 17) Nilgiri, Western Ghats; – *Physcia flavicans*, Leighton (1869, p. 165) Ceylon.

Teloschistes flavicans var. *croceus* (Ach.) Müll. Arg. – CATAL. 7: 319. 1931; – *Physcia flavicans* var. *croceus* (Ach.), Stirton (1876, p. 157) Kumaon.

THAMNOLIA Ach. (Usneaceae)

Thamnolia subvermicularis Asah. – Asahina (1955, p. 62) Nepal.

Thamnolia vermicularis (L.) Schaer. – CATAL. 6: 608. 1930 – Nylander (1860, p. 264) Himalaya; Asahina (1955, p. 62) Nepal; Awasthi (1960c, p. 178) Nepal.

Thamnolia vermicularis var. *taurica* (Wulf.) Schaer. – CATAL. 6: 611. 1930; – *Cladonia vermicularis* var. *taurica* (Wulf.), Babington (1852, p. 250) Kumaon.

THELIDIOPSIS Vain. (Verrucariaceae)

* *Thelidiopsis mangiferae* Räs. Arch. Soc. Zool. Bot. "Vanamo" 6 (2): 86. 1952. Tanakpur, Uttar Pradesh, leg. Awasthi. Holotype in H, isotype in Aw.

THELOPSIS Nyl. (Pyrenulaceae)

* *Thelopsis (?) inordinata* Nyl. Flora 50: 9. 1867. Calcutta, leg. Kurz. Type in H; Hue (1892, p. 302) Calcutta – CATAL. 1: 413. 1922.

THELOTREMA (Ach.) Müll. Arg. (Thelotremaeae)

* *Thelotrema albopallens* Nyl. Bull. Soc. Linn. Normand. II, 7: 168. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 172) Andaman – CATAL. 2: 614. 1923.

- * *Thelotrema colobicum* Nyl. Bull. Soc. Linn. Normand. II, 7: 169. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 175) Andaman – CATAL. 2: 615. 1923.
- Thelotrema concretum* Fée – CATAL. 2: 615. 1923 – Leighton (1869, p. 168) Ceylon.
- * *Thelotrema crateriforme* Bél. Voyage Ind. Orient. 2: 138. 1838. Peninsular India. Type in ? – CATAL. 2: 616. 1923.
- * *Thelotrema dehiscens* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 616. 1923; – *Schistostoma dehiscens* Stirt. Proc. Phil. Soc. Glasgow 11: 312. Chinsurah, Assam, leg. G. Watt. Type in BM, GLAM.
- Thelotrema depressum* Mont. – CATAL. 2: 616. 1923; – *Ascidium depressum* Mont., Leighton (1869, p. 170) Ceylon.
- * *Thelotrema disciforme* Leight. Trans. Linn. Soc. London 27: 170. 1869. Ceylon, leg. Thwaites. Type in BM! – CATAL. 2: 617. 1923.
- * *Thelotrema elachistoteron* Leight. Trans. Linn. Soc. London 27: 169. 1869. Ceylon, leg. Thwaites. Type in BM! – CATAL. 2: 617. 1923.
- * *Thelotrema eumorphum* Stirt. Proc. Phil. Soc. Glasgow 10: 158. 1876. Kumaon, leg. Dickie. Type in BM!, GLAM – CATAL. 2: 617. 1923.
- * *Thelotrema exsertum* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 617. 1923; – *Ascidium exsertum* Stirt. Proc. Phil. Soc. Glasgow 11: 313. 1879. Nilgiri, leg. G. Watt. Type in BM!, GLAM.
- * *Thelotrema exsertum* var. *mollius* (Stirt.) Zahlbr. Cat. Lich. Univ. 2: 617. 1923; – *Ascidium exsertum* var. *mollius* Stirt. Proc. Phil. Soc. Glasgow 11: 313. 1879. Nilgiri, leg. G. Watt. Type in BM, GLAM.
- Thelotrema glaucopallens* Nyl. – CATAL. 2: 618. 1923 – Leighton (1869, p. 168) Ceylon.
- * *Thelotrema leightoni* Zahlbr. Cat. Lich. Univ. 2: 620. 1923; – *Ascidium pachystomum* Leight. Trans. Linn. Soc. London 27: 171. 1869. Ceylon, leg. Thwaites. Type in BM!. Non Nyl.
- Thelotrema lepadinum* Ach. – CATAL. 2: 620. 1923 – Nylander (1900, p. 17) Ceylon.
- * *Thelotrema lepadizum* Nyl. Acta Soc. Sci. Fenn. 26 (10): 17. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 2: 624. 1923.
- Thelotrema massalongii* (Mont.) Zahlbr. – CATAL. 2: 624. 1923; – *Ascidium massalongii* Mont., Müll. Arg. (1885, p. 515) India.
- * *Thelotrema patens* Nyl. Acta Soc. Sci. Fenn. 26 (10): 17. 1900. Ceylon, leg. Almquist. Type in H, S – CATAL. 2: 626. 1923.
- Thelotrema punctulatum* Nyl. – CATAL. 2: 627. 1923 – Leighton (1869, p. 168) Ceylon.

- * *Thelotrema rugatum* Nyl. Bull. Soc. Linn. Normand. II, 7: 168. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 175) Andaman – CATAL. 2: 628. 1923.
- * *Thelotrema schizostomoides* (Leight.) Zahlbr. Cat. Lich. Univ. 2: 628. 1923; – *Trypethelium schizostomoides* Leight. Trans. Linn. Soc. London 27: 184. 1869. Ceylon, leg. Thwaites. Type in BM!.
- * *Thelotrema subcalvescens* Nyl. Bull. Soc. Linn. Normand. II, 7: 168. 1873. Andaman, leg. Kurz. Type in H!; Hue (1892, p. 173) Andaman – CATAL. 2: 629. 1923.
- * ***THELOTREMA TETRASPORUM*** (Stirt.) Comb. nov.; – *Ascidium tetrasporum* Stirt. Proc. Phil. Soc. Glasgow 13: 185. 1881. Assam, leg. A. Watt. Type in BM!, GLAM – taxon erroneously mentioned *Thelotrema tetrasporum* Stirt. as basionym in CATAL. 2: 630. 1923.

***THYREA* Mass. (Pyrenopsidaceae)**

Thyrea pulvinata (Schaer.) Mass. – CATAL. 2: 809. 1923 – A.L.Smith (1931, p. 129) Waziristan; Chopra (1934, p. 22) Waziristan.

***TONINIA* (Mass.) Th. Fr. (Lecideaceae)**

Toninia coeruleonigricans (Lightf.) Th. Fr. – CATAL. 4: 266. 1927 – Awasthi (1963, p. 32) Srinagar, Kashmir.

***TRYPETHELIUM* Spreng. (Trypetheliaceae)**

- * *Trypethelium assimile* Stirt. Proc. Phil. Soc. Glasgow 13: 193. 1881. Assam, leg. A. Watt. Type in BM!, GLAM – CATAL. 1: 488. 1922.
- Trypethelium caterarium* (Fée) Tuck. – CATAL. 1: 488. 1922; – *Verrucaria cateraria* Fée, Leighton (1869, p. 182) Ceylon; Stirton (1876, p. 157) Calcutta.
- * *Trypethelium celatum* Stirt. Proc. Phil. Soc. Glasgow 13: 193. 1881. Assam, leg. A. Watt. Type in BM!, GLAM – taxon not recorded in CATAL.
- * *Trypethelium inamoenum* Müll. Arg. Journ. Linn. Soc. Bot. 29: 230. 1892. Manipur, leg. G. Watt. Type in K – CATAL. 1: 493. 1922.
- * *Trypethelium indutum* Stirt. Proc. Phil. Soc. Glasgow 13: 193. 1881. Tejapore, Assam, leg. A. Watt. Type in BM!, GLAM – CATAL. 1: 493. 1922.
- * *Trypethelium luteum* Tayl. London Journ. Bot. 6: 157. 1847. Madras, leg. Wight. Type in FH!, K – CATAL. 1: 494. 1922.

Trypethelium macrozoma (Fée); – *Verrucaria macrozoma* Fée, Bélanger (1838, p. 142) Peninsular India – taxon nomencl. syn. of *Trypethelium catervarium* (Fée) Tuck. in CATAL. 1: 488. 1922.

Trypethelium myriocarpum (Fée) Müll. Arg. – CATAL. 1: 495. 1922; – *Pyrenula myriocarpa* Fée, Bélanger (1838, p. 140) Peninsular India.

* *Trypethelium oblitescens* Stirt. Proc. Phil. Soc. Glasgow 11: 321. 1879. India, leg. G. Watt. Type in BM!, GLAM – CATAL. 1: 495. 1922.

Trypethelium ochroleucum (Eschw.) Nyl. – CATAL. 1: 496. 1922 – Hue (1892, p. 299) Calcutta.

Trypethelium ochroleucum var. *pallescens* (Fée) Müll. Arg. – CATAL. 1: 496. 1922; – *Trypethelium pallescens* Fée, Nylander (1867, p. 9) Calcutta.

Trypethelium pallescens Leighton (1869, p. 185) Ceylon – see *Astrothelium fallax* Müll. Arg.

* *Trypethelium pruinatum* Fr. Syst. Orb. Veget. 1825, p. 287. India Orientalis. Type in UPS – taxon not cited in CATAL.

* *Trypethelium refertum* Stirt. Proc. Phil. Soc. Glasgow 11: 321. 1879. Chinsurah, Assam, leg. G. Watt. Type in BM!, GLAM – CATAL. 1: 499. 1922.

Trypethelium spengelii Ach. – Bélanger (1838, p. 137) Carnatic, Peninsular India; Nylander (1867, p. 9) Calcutta – taxon nomencl. syn. of *Trypethelium eluteriae* Spreng. in CATAL. 1: 490. 1922.

Trypethelium tropicum (Ach.) Müll. Arg. – CATAL. 1: 501. 1922; – *Verrucaria tropica* Ach., Bélanger (1838, p. 143) Peninsular India; Nylander (1867, p. 8) Calcutta; Leighton (1869, p. 182) Ceylon; Hue (1892, p. 294) Calcutta.

Trypethelium uberinum (Fée) Nyl. – CATAL. 1: 502. 1922 – Leighton (1869, p. 185) Ceylon.

TYLOPHORON Nyl. (Cypheliaceae)

Tylophoron moderatum Nyl. – CATAL. 1: 678. 1922 – A. L. Smith (1931, p. 128) Sikkim; Chopra (1934, p. 17) Sikkim; Moreau (1952, p. 136) Palni hills.

* *Tylophoron nidulans* Stirt. Proc. Phil. Soc. Glasgow 13: 183. 1881. Assam, leg. A. Watt. Type in BM!, GLAM – CATAL. 1: 679. 1922.

Tylophoron pulchellum Stirt. Proc. Phil. Soc. Glasgow 11: 309. 1879. Chinsurah, Assam, leg. G. Watt. Type in BM!, GLAM – CATAL. 1: 679. 1922.

* *Tylophoron punctiforme* Stirt. Proc. Phil. Soc. Glasgow 13: 183. 1881.
Assam, leg. A. Watt. Type in BM!, GLAM – CATAL. 1: 679.
1922.

***UMBILICARIA* Hoffm. em. Frey (Umbilicariaceae)**

Umbilicaria badia Frey, Ber. Schweiz. Bot. Gesellsch. 59: 453. 1949.
India Orientalis, leg. ?. Type in BM.

Umbilicaria cylindrica (L.) Del. – CATAL. 8: 490. 1932; – *Gyrophora cylindrica* (L.) Ach. – CATAL. 4: 693. 1927 – A. L. Smith (1931, p. 130) Darjeeling; Chopra (1934, p. 46) Darjeeling.

Umbilicaria cylindrica var. *tornata* (Ach.) Nyl. – CATAL. 10: 401. 1940; – *Gyrophora cylindrica* var. *tornata* Nyl., Paulson (1925, p. 193) Mt. Everest – taxon as *Gyrophora tornata* Ach. in CATAL. 4: 736. 1927.

Umbilicaria depressa (Ach.) Duby – CATAL. 10: 402. 1940 – Babington (1852, p. 250) Kumaon; – *Gyrophora crustulosa* var. *depressa* Ach. in CATAL. 4: 692. 1927.

* ***UMBILICARIA DWALIENSIS* (Räs.) Comb. nov.**; – *Gyrophoropsis dwaliensis* Räs. Arch. Soc. Zool. Bot. "Vanamo" 6 (2): 80. 1952. Dwali, Almora district, leg. Awasthi. Holotype in H, isotype in Aw.

* ***UMBILICARIA HIMALAYENSIS* (Räs.) Comb. nov.**; – *Gyrophora himalayensis* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 25. 1950. Sikkim, leg. Awasthi. Holotype in H, isotype in Aw.

* *Umbilicaria indica* Frey, Ber. Schweiz. Bot. Gesellsch. 59: 456. 1949.
India, leg. ?. Type in ?.

* *Umbilicaria lecanocarpoides* Nyl. Synop. Lich. 2: 7. 1863. Himalaya,
leg. Skolicezka. Type in H!, K, FH!; Hue (1892, p. 117) Himalaya
– taxon as *Gyrophora lecanocarpoides* (Nyl.) Th. Fr. in CATAL. 4: 480. 1927 – taxon nomencl. syn. of *Omphalodiscus virginis* (Schaer.) Schol. in Llano (1950, p. 92–94).

* *Umbilicaria papillosa* Nyl. Synop. Lich. 2: 11. 1863. Himalaya, leg.
Hooker. Type in H!, K. Hue (1892, p. 118) Himalaya – taxon as
syn. *Gyrophora papillosa* (Nyl.) Nyl. in CATAL. 4: 720. 1927.

Umbilicaria pertusa Rassad.; – *Lasallia pertusa* (Rassad.) Llano in
Llano (1950, p. 48) Pangi, N. W. Himalaya.

Umbilicaria polyphylla (L.) Baumg. – Lindsay (1866, p. 519–20)
India – taxon as syn. *Gyrophora polyphylla* (L.) Funck in CATAL.
4: 721–723. 1927.

Umbilicaria pennsylvanica Hoffm. – CATAL. 4: 746. 1927 – Nylander (1863, p. 5) Himalaya; Hue (1892, p. 116) Himalaya.

* *Umbilicaria pennsylvanica* var. *truncicola* Frey, Ber. Schweiz. Bot. Gesellsch. 59: 445. 1949. Himalaya, leg. ?. Type in BM.

Umbilicaria polyrrhiza (L.) Ach. – CATAL. 10: 407. 1940 – Nylander (1863, p. 19) Himalaya; – *Gyrophora polyrrhiza* (L.) Körb. – CATAL. 4: 728. 1927 – Hue (1892, p. 119) Himalaya; Asahina (1955, p. 52) Nepal.

Umbilicaria proboscidea (L.) Schrad. – CATAL. 10: 407. 1940 – Hue (1900, p. 118–119) Himalaya; – *Gyrophora proboscidea* Ach., Hue (1892, p. 118) Himalaya; CATAL. 4: 731. 1927.

Umbilicaria pustulata (L.) Hoffm. var. *papulosa* (Ach.) Tuck. – CATAL. 4: 752. 1927 – Hue (1900, p. 113) Himalaya.

Umbilicaria yunnana (Nyl.) Hue – Awasthi (1961, p. 31) NEFA – taxon as syn. *Gyrophora yunnana* Nyl. in CATAL. 4: 742. 1927.

Umbilicaria vellea (L.) Ach. – CATAL. 10: 409. 1940 – Leighton (1869, p. 165) Ceylon; Jatta (1905, p. 179) Pangi, Punjab – taxon as syn. *Gyrophora vellea* (L.) Ach. in CATAL. 4: 737. 1927.

USNEA Wigg. em. Ach. (Usneaceae)

* *Usnea albopunctata* Nyl. in Cromb. Journ. Linn. Soc. Bot. 17: 554. 1880 Ceylon, leg. Brodier. Type in H!; Hue (1892, p. 63) Ceylon – CATAL. 6: 534. 1930 – Motyka (1936–38, p. 647) Ceylon.

Usnea angulata Ach. – CATAL. 6: 535. 1930 – Lindsay (1866, p. 526) Ceylon; Motyka (1936–38, p. 394) not reported from India or Ceylon; Moreau (1952, p. 141) Kodaikanal.

Usnea articulata (L.) Ach. – CATAL. 6: 537. 1930 – Jatta (1905, p. 165) Sikkim; Motyka (1936–38, p. 115) not reported from India; – *Usnea barbata* var. *articulata* (L.), Bélanger (1838, p. 113) Peninsular India.

Usnea articulata var. *intestiniformis* (Ach.) Cromb. – CATAL. 6: 540. 1930 – Motyka (1936–38, p. 119) Nilgiri; – *Usnea barbata* var. *intestiniformis* Ach., Montagne (1842, p. 17) Nilgiri.

Usnea asahinai Mot., Motyka (1936–38, p. 393) – CATAL. 10: 573. 1940 – Awasthi (1961, p. 40) Assam.

Usnea aspera (Eschw.) Vain. – CATAL. 6: 541. 1930 – Jatta (1905, p. 164) Himalaya; Motyka (1936–38, p. 643) not reported from India; – *Usnea barbata* var. *aspera*, Jatta (1902, p. 3) Mussoorie, N.W. Himalaya.

Usnea barbata var. *asperrina* Müll. Arg., Müll. Arg. (1892, p. 217) Manipur – taxon nomencl. syn. of *Usnea baileyi* (Stirt.) Zahlbr. in CATAL. 6: 542. 1930; and in Motyka (1936–38, p. 63). Not reported from India in Motyka (l.c.).

Usnea bimolluscula Zahlbr. – CATAL. 6: 542. 1930 – Motyka (1936–38, p. 451–52) Madura, and Kodaikanal.

Usnea ceratina Ach. – CATAL. 6: 544. 1930 – Montagne (1842, p. 17) Nilgiri, Ootacamund; Babington (1852, p. 243) Kumaon; Hue (1892, p. 63) India; Hue (1899, p. 39) Simla; Hue (1900b, p. 253) Coonoor, Nilgiri; Motyka (1936–38, p. 365–370) no report from India; Moreau (1952, p. 141) Kodaikanal; – *Usnea barbata* var. *ceratina* Ach., Leighton (1869, p. 163) Ceylon; Jatta (1905, p. 164) Darjeeling, Sikkim.

* *Usnea ceylonica* Mot. Lich. Gen. Usnea Monogr. 1936–38, p. 129–130. Ceylon, leg. Rietzner. Type in UPS. Also reported from S. India, and Darjeeling – CATAL. 10: 575. 1940.

* *Usnea cineraria* Mot. Lich. Gen. Usnea Monogr. 1936–38, p. 618–19. Darjeeling, leg. Gebauer. Type in W. Also reported from Sikkim, Himalaya, and Travancore – CATAL. 10: 576. 1940 – Awasthi (1961, p. 41) NEFA.

* *Usnea cladonioides* (Nyl.) DuRietz, Svensk Bot. Tidskr. 20: 91. 1926 – CATAL. 6: 599. 1930 – Motyka (1936–38, p. 44–45) Sikkim, Himalaya; Awasthi (1961, p. 39) NEFA; – *Chlorea cladonioides* Nyl. Synop. Lich. 1: 276. 1860. Sikkim, leg. Hooker and Thomson. Type in H!; Hue (1892, p. 62) Himalaya.

Usnea comosa (Ach.) Röhl. – Motyka (1936–38, p. 264–266) not reported from India – CATAL. 10: 577. 1940 – Chopra (1934, p. 65) Himalaya; – *Usnea florida* var. *comosa* (Ach.) Vain. – Müll. Arg. (1892, p. 217) Manipur; Hue (1899, p. 36) Simla, Calcutta, and Manipur; Hue (1900b, p. 252) Nilgiri; Jatta (1905, p. 164) Sikkim; A. L. Smith (1931, p. 131) Kashmir.

* *Usnea compressa* Tayl. London Journ. Bot. 6: 192. 1847. Nepal, leg. Wallich; Mysore, leg. Wight. Type in FH! – CATAL. 6: 548. 1930 – not recorded as a valid taxon in Motyka (1936–38).

Usnea contorta Jatta – CATAL. 6: 549. 1930 – Jatta (1911, p. 309) Malabar; Motyka (1936–38, p. 414) not reported from India.

Usnea corallina Mot. Lich. Gen. Usnea Monogr. 1936–38, p. 635. S. India, Anaimalai hills, leg. Fischer. Type in BM! – CATAL. 10: 578. 1940.

Usnea cornea Mot., Motyka (1936–38, p. 604) – CATAL. 10: 578. 1940 – Awasthi (1957c, p. 228) Himalaya.

Usnea cornuta Körb. – CATAL. 6: 549. 1930 – Jatta (1911, p. 309) Sikkim; Motyka (1936–38, p. 509) not reported from India; – *Usnea barbata* var. *cornuta* Körb., Nylander (1860, p. 269) Nilgiri.

Usnea dasypoga (Ach.) Röhl. – CATAL. 6: 550. 1930 – Motyka (1936–38, p. 189–204) not reported from Ceylon; – *Usnea barbata* var. *dasypoga* Ach., Leighton (1869, p. 163) Ceylon.

Usnea dasypogoides Nyl. – CATAL. 10: 579. 1940 – Jatta (1905, p. 163) Pangi, Punjab; Motyka (1936–38, p. 464) not reported from India.

* *Usnea dendritica* Stirt. Scott. Nat. 6: 296. 1882. Tongloo, Darjeeling, leg. G. Watt. Type in BM, GLAM – CATAL. 6: 562. 1930 – Motyka (1936–38, p. 617–18) Sikkim, and Kodaikanal; Awasthi (1961, p. 41) NEFA.

Usnea densirostra Tayl. – CATAL. 6: 562. 1930 – Hue (1899, p. 41) Manipur; Motyka (1936–38, p. 316–318) no report from India; – *Usnea barbata* var. *densirostra* (Tayl.), Müll. Arg. (1892, p. 217) Manipur.

Usnea diademensis Vain. – CATAL. 6: 563. 1930 – Motyka (1936–38, p. 326) – Awasthi (1957c, p. 228) Himalaya.

* *Usnea dichotoma* Fr. Syst. Orb. Veget. 1825, p. 282. Nepal, leg. Vahl. Type in UPS. Montagne (1842, p. 17) Nilgiri – CATAL. 6: 597. 1930 – Motyka (1936–38, p. 130–131) Sikkim, Darjeeling, and Nepal.

Usnea erubescens (Stein.) Mot., Motyka (1936–38, p. 333) – CATAL. 10: 582. 1940 – Awasthi (1957c, p. 228) Kodaikanal.

Usnea eumitrioides Mot., Motyka (1936–38, p. 322) Darjeeling – CATAL. 10: 582. 1940.

* *Usnea flexilis* Stirt. Scott. Nat. 6: 106. 1881. Nilgiri, leg. G. Watt. Type in BM, GLAM – CATAL. 6: 565. 1930 – Motyka (1936–38, p. 126–27) Sikkim, Simla, Coonoor, and Kodaikanal; Asahina (1955, p. 58) Nepal; Awasthi (1960c, p. 177) Nepal.

Usnea florida (L.) Wigg. – CATAL. 6: 565. 1930 – Hue (1892, p. 62) Himalaya; Hue (1900b, p. 252) Nilgiri, Coonoor; A. L. Smith (1931, p. 131) Darjeeling; Chopra (1934, p. 65) Himalaya; Motyka (1936–38, p. 236–241) none reported from India; – *Usnea barbata* var. *florida* Fr., Müll. Arg. (1895, p. 194) Darjeeling.

Usnea florida var. *perplexans* Vain. – Hue (1899, p. 36) India – vagum!

Usnea florida var. *scabrosa* (Ach.) Vain. – CATAL. 6: 572. 1930 – Jatta (1905, p. 164) Nepal, Sikkim; Jatta (1911, p. 309) Malabar – taxon nomencl. syn. of *Usnea inflata* Del. in Motyka (1936–38, p. 510).

Usnea florida var. *sorediifera* (Arn.) Hue – CATAL. 6: 573. 1930 – Hue (1900b, p. 253) Coonoor, Nilgiri – taxon nomencl. syn. of *Usnea glabrata* (Ach.) Vain. in Motyka (1936–38, p. 495).

Usnea flexuosa Nyl. – see *Usnea hookeri* Mot.

Usnea formosa (Stirt.) Zahlbr. – CATAL. 6: 575. 1930 – Motyka (1936–38, p. 62) India.

* *Usnea fragilis* Stirt. Scott. Nat. 6: 297. 1882. Nilgiri, leg. G. Watt. Type in BM, GLAM – CATAL. 6: 575. 1930 – Motyka (1936–38, p. 355–56) Coonoor, Nilgiri.

Usnea havaasii Mot., Motyka (1936–38, p. 450) Madura – CATAL. 10: 587. 1940.

* *Usnea himalayana* Bab. Hook. Journ. Bot. 4: 243. 1852. Binsur, Kumaon, leg. Strachey and Winterbottom. Type in BM. Nylander (1860, p. 269) Himalaya; Hue (1900b, p. 253) Coonoor, Nilgiri; Moreau (1952, p. 141) Kodaikanal; – *Usnea ceratina* var. *himalayana*, Stirton (1876, p. 157) Kumaon; – *Usnea plicata* f. *himalayana*, Hue (1892, p. 63) Himalaya – taxon nomencl. syn. of *Usnea dichotoma* Fr. in CATAL. 6: 597. 1930, and in Motyka (1936–38, p. 130).

Usnea hirta (L.) Wigg. – CATAL. 6: 576. 1930 – Motyka (1936–38, p. 83) no reports from Ceylon; – *Usnea florida* var. *hirta* Ach., Hue (1899, p. 37) Ceylon.

* *Usnea hookeri* Mot. Lich. Gen. Usnea Monogr. 1936–38, p. 45–46. Himalaya, leg. Hooker. Type in H! – CATAL. 10: 589. 1940 – Awasthi (1960c, p. 177) Nepal; – *Chlorea flexuosa* Nyl. Synop. Lich. 1: 276. 1860 (non Taylor), Sikkim, leg. Hooker. Type in H; – *Letharia flexuosa* (Nyl.), Hue (1892, p. 62) Himalaya; Paulson (1925, p. 190) Mt. Everest.

Usnea hossei Vain. – CATAL. 6: 581. 1930 – Motyka (1936–38, p. 415) – Awasthi (1957c, p. 228) Bihar; Awasthi (1960c, p. 178) Nepal.

Usnea implicita (Stirt.) Zahlbr. – CATAL. 6: 582. 1930 – Motyka (1936–38, p. 60–62) Assam, Sikkim, Tongloo, Darjeeling, and Kodaikanal; Awasthi (1961, p. 39) NEFA.

* *Usnea indica* Mot. Lich. Gen. Usnea Monogr. 1936–38, p. 380–81. N.W. Himalaya, leg. Skolicezka. Type in W – CATAL. 10: 590. 1940.

- Usnea insignis* Mot., Motyka (1936–38, p. 66) – CATAL. 10: 590. 1940 – Awasthi (1957c, p. 228) Darjeeling.
- Usena japonica* Vain., Motyka (1936–38, p. 459) – CATAL. 10: 589. 1940 – Neelkantan and Seshadri (1952, p. 340) Coorg, S. India.
- Usnea lacunosa* Willd. – Nylander (1860, p. 271) India; Hue (1892, p. 64) India – taxon nomencl. syn. of *Usnea cavernosa* Tuck. in CATAL. 6: 543. 1930, and in Motyka (1936–38, p. 77–79).
- Usnea livida* Mot., Motyka (1936–38, p. 419) – CATAL. 10. 592. 1940 – Awasthi (1957c, p. 228) Darjeeling.
- Usnea longissima* Ach. – CATAL. 6: 583. 1930 – Hue (1892, p. 63) Himalaya; Hue (1899, p. 51) Nepal, and India; Motyka (1936–38, p. 423) no reports from India and Nepal; Asahina (1955, p. 58) Nepal; Awasthi (1961, p. 39) NEFA.
- * *Usnea longissima* var. *himalayensis* Räs. Arch. Soc. Zool. Bot. "Vannamo" 6 (2): 81. 1952. Chakrata, N.W. Himalaya, leg. Awasthi. Type in H, isotype in Aw.
- Usnea lorea* Stirt. – see *Usnea stirtoniana* Zahlbr.
- * *Usnea lucea* Mot. Lich. Gen. Usnea Monogr. 1936–38, p. 534. Nilgiri, leg. Perrottet. Type in W. Also reported from Ootacamund, and Ceylon – CATAL. 10: 593. 1940.
- * *Usnea luridorufa* Stirt. Scott. Nat. 6: 104. 1881. Himalaya, leg. Hooker and Thomson. Type in BM, GLAM – CATAL. 6: 586. 1930 – Motyka (1936–38, p. 522–23) Sikkim, Himalaya, Madura, and Kodaikanal; Awasthi (1961, p. 41) Assam.
- * *Usnea mekista* Stirt. Scott. Nat. 6: 105. 1881. Himalaya, leg. Hooker and Thomson. Type in BM, GLAM – CATAL. 6: 587. 1930 – Motyka (1936–38, p. 405–406) Himalaya.
- Usnea misaminensis* (Vain.) Mot., Motyka (1936–38, p. 418–19) Assam – CATAL. 10: 595. 1940.
- Usnea mollis* Stirt. – Motyka (1936–38, p. 259) – CATAL. 10: 595. 1940; – *Usnea florida* var. *mollis* (Stirt.) Vain., Hue (1900b, p. 252) Coonoor, Nilgiri – taxon not reported from India in Motyka (l.c.).
- * *Usnea nepalensis* Awasthi (1957d, p. 228) Nepal – *nomen nudum*.
- Usnea orientalis* Mot., Motyka (1936–38, p. 547); CATAL. 10: 597. 1940 – Neelkantan and Seshadri (1952, p. 340) Kumaon, Himalaya, and Kodaikanal.
- * *Usnea pangiana* Stirt. Scott. Nat. 7: 77. 1883. Himalaya, leg. G. Watt. Type in BM, GLAM – CATAL. 6: 588. 1930 – Motyka (1936–38, p. 350–51) Sikkim, Himalaya.

- * *Usnea pectinata* Tayl. London Journ. Bot. 6: 191. 1847. Sylhet, Himalaya, leg. Wallich. Type in FH! – CATAL. 6: 588. 1930 – Motyka (1936–38, p. 422–23) Sikkim, Tongloo, Darjeeling, Kedarnath, Garhwal; Himalayas; Awasthi (1960c, p. 178) Nepal; Awasthi (1961, p. 39) NEFA.
- Usnea perplexata* Mot., Motyka (1936–38, p. 55–56) Kodaikanal – CATAL. 10: 598. 1940.
- * *Usnea perplexans* Stirt. Scott. Nat. 6: 103. 1881. Himalaya, Pangi, leg. G. Watt. Type in BM, GLAM – CATAL. 6: 589. 1930 – Motyka (1936–38, p. 293–94) N. W. Himalaya, Pangi, Kashmir, and Chini.
- Usnea plicata* (L.) Wigg. – Motyka (1936–38, p. 227) no reports from India or Ceylon – Müll. Arg. (1892, p. 217) Manipur; Nylander (1900, p. 6) Ceylon – CATAL. 10: 599. 1940; – *Usnea dasypoga* v. *plicata* (L.), Hue (1899, p. 47) Manipur.
- Usnea pulverulenta* (Müll. Arg.) Mot., Motyka (1936–38, p. 107–108) – CATAL. 10: 600. 1940; – *Usnea florida* var. *pulverulenta* (Müll. Arg.) Stiz. – CATAL. 6: 572. 1930 – Jatta (1900, p. 309) Malabar.
- Usnea reticulata* Hoffm. – Müll. Arg. (1892, p. 217) Manipur – *Dubium!*
- Usnea rubescens* (Stirt.) var. *rubrotincta* (Stirt.) Mot. – Motyka (1936–38, p. 348) Ceylon – CATAL. 10: 602. 1940.
- Usnea rubicunda* Stirt. – CATAL. 6: 590. 1930 – Motyka (1936–38, p. 339–343) Himalaya, Darjeeling, Sikkim, and Nilgiri; Awasthi (1961, p. 39) NEFA.
- Usnea scabrida* Tayl. – CATAL. 6: 591. 1930 – Jatta (1911, p. 309) Darjeeling; Motyka (1936–38, p. 524) no report from India.
- Usnea sernanderi* Mot. – Motyka (1936–38, p. 46) – CATAL. 10: 604. 1940 – Poelt (1961, p. 91) N. W. Karakorum.
- Usnea sikkimensis* Biswas, Common Medicinal Plant Darjeeling and Sikkim, Himalaya 1956. Type in CAL.
- * *Usnea sordida* Mot. Lich. Gen. Usnea Monogr. 1936–38, p. 619–20. Darjeeling, leg. Gebauer. Type in W – CATAL. 10: 604. 1940.
- * *Usnea spinosula* Stirt. Scott. Nat. 6: 107. 1881. Nilgiri, leg. G. Watt. Type in BM, GLAM – CATAL. 6: 592. 1930 – Motyka (1936–38, p. 528) Nilgiri, and Kodaikanal; Awasthi (1961, p. 40) NEFA.
- * *Usnea stigmata* Mot. Lich. Gen. Usnea Monogr. 1936–38, p. 131–132. Nilgiri, leg. Perrottet. Type in B.
- * *Usnea stirtoniana* Zahlbr. Cat. Lich. Univ. 6: 592. 1930. Himalaya; Motyka (1936–38, p. 128–129) Himalaya, and Nilgiri; – *Usnea lorea* Stirt. Scott. Nat. 7: 76. 1883. Himalaya, Sikkim, leg. G. Watt. Type in BM, GLAM. Non Fries.

- * *Usnea stirtoniana* var. *neutra* Räs. Arch. Soc. Zool. Bot. "Vanamo" 5 (1): 26. 1950. Darjeeling, leg. Awasthi. Holotype in H, isotype in Aw.
- Usnea strigosa* (Ach.) Eaton – Motyka (1936–38, p. 359) – CATAL. 10: 606. 1940 – Hue (1899, p. 34) India; Jatta (1911, p. 309) Himalaya; – *Usnea florida* var. *strigosa* Ach., Moreau (1952, p. 141) Kodaikanal.
- * *Usnea subchalybea* Zahlbr. Ann. Mycol. 7: 475. 1909. India, Kulhutty, leg. Meebold. Type in W – CATAL. 6: 593. 1930 – Motyka (1936–38, p. 647) India.
- Usnea subscabrosa* Nyl. in Motyka (1936–38, p. 313) – CATAL. 10: 608. 1940 – Awasthi p. 228) Kodaikanal.
- Usnea subelegans* (Vain.) Räs. – CATAL. 10: 606. 1940 – Motyka (1936–38, p. 520); – *Usnea florida* var. *subelegans* Vain., Hue (1900b, p. 252) Coonoor, Nilgiri; Jatta (1905, p. 165) Sikkim.
- * *Usnea subsordida* Stirt. Proc. Phil. Soc. Glasgow 11: 310. 1879. Nilgiri, leg. G. Watt. Type in BM, GLAM – Stirton (1881, p. 104) Himalaya – CATAL. 6: 594. 1930 – Motyka (1936–38, p. 532–33) Assam, Naga hills, Sikkim, Darjeeling, N. W. Himalaya, and Nilgiri; Awasthi (1961, p. 40) Assam.
- * *Usnea subflexilis* Stirt. Scott. Nat. 6: 106. 1881. Himalaya, leg. J. Thomson. Type in BM, GLAM – CATAL. 6: 593. 1930 – Motyka (1936–38, p. 130–131) under the nomencl. syn. of *Usnea dichotoma* Fr.
- * *Usnea thomsonii* Stirt. Scott. Nat. 6: 107. 1881. Darjeeling, leg. Thomson. Type in BM, GLAM – CATAL. 6: 594. 1930 – Motyka (1936–38, p. 615–617) Himalaya, Sikkim, Nilgiri, and Kodaikanal; Asahina (1955, p. 58) Nepal.
- * *Usnea thomsonii* ssp. *arborea* (Stirt.) Mot., Lich. Gen. Usnea Monogr. 1936–38, p. 617. Sikkim, Simla, and Kumaon – CATAL. 10: 609. 1940 – Awasthi (1960c, p. 178) Nepal; – *Usnea arborea* Stirt. Scott. Nat. 6: 296. 1881. Tongloo, Darjeeling, leg. G. Watt. Type in BM, GLAM.
- Usnea trichodea* Ach. – CATAL. 6: 595. 1930 – Jatta (1905, p. 165) Nepal; Jatta (1911, p. 309) Darjeeling – Motyka (1936–38, p. 183).
- Usnea tumida* Mot., Motyka (1936–38, p. 611–612) Nilgiri – CATAL. 10: 611. 1940.
- Usnea undulata* Stirt. – CATAL. 6: 594. 1930 – Motyka (1936–38, p. 517) – Awasthi (1960c, p. 228) Kumaon; Awasthi (1961, p. 40) Assam.

- * *Usnea vegae* Mot. Lich. Gen. Usnea Monogr. 1936–38, p. 636. Ceylon, leg. Almquist. Type in S – CATAL. 10: 611. 1940.
- * *Usnea venosa* Mot. Lich. Gen. Usnea Monogr. 1936–38, p. 474–75. India, leg. Hooker and Thomson. Type in W. Also from Nilgiri – CATAL. 10: 611. 1940.
- * *Usnea vulneraria* Mot. Lich. Gen. Usnea Monogr. 1936–38, p. 308–309, Nilgiri, leg. Sedgwick. Also from Kodaikanal. Type in BM – CATAL. 10: 612. 1940.

***VERRUCARIA* (Wigg.) Th. Fr. (Verrucariaceae)**

Verrucaria (Endococcus?) deportata Stirt. Proc. Phil. Soc. Glasgow 13: 192. 1881. Assam, leg. A. Watt. Type in BM, GLAM – not cited in CATAL. Of uncertain affinity!

Verrucaria maura Wahlb. – CATAL. 1: 64. 1922. – Hue (1892, p. 282) India.

***XANTHORIA* Th. Fr. (Teloschistaceae)**

Xanthoria candelaria (L.) Kickx – CATAL. 7: 277. 1931 – Poelt (1961, p. 91) N.W. Karakorum.

Xanthoria controversa (Mass.) Rabenh., Jatta (1905, p. 178) Pangi – taxon nomencl. syn. of *Xanthoria candelaria* (L.) Kickx in CATAL. 7: 277. 1931.

Xanthoria elegans (Link.) Th. Fr. – see *Caloplaca elegans* (Link.) Th. Fr.

Xanthoria fallax (Hepp) DuRietz – Bhatia (1957, p. 37) N.W. Himalaya; – taxon nomencl. syn. of *Xanthoria substellaris* (Ach.) Vain. in CATAL. 7: 307–308. 1931.

Xanthoria parietina (L.) Beltram – CATAL. 7: 288. 1931; – *Physcia parietina* (L.), Nylander (1860, p. 410) India; Hue (1892, p. 107) India; Hue (1900, p. 53) India.

Xanthoria parietina var. *aureola* (Lam.) Th. Fr. – CATAL. 7: 298. 1931; – *Physcia parietina* var. *aureola* Ach., Jatta (1905, p. 178) Pangi, Punjab.

Xanthoria parietina var. *subgranulosa* (Nyl.) Jatta – CATAL. 7: 303. 1931; – *Physcia parietina* var. *subgranulosa* (Nyl.), Jatta (1905, p. 178) India.

* *Xanthoria substellaris* var. *subsorediosa* Räs. Arch. Soc. Zool. Bot. "Vanamo" 6 (2): 83. 1952. Kashmir, leg. H. C. Rhagbir. Holotype in H, isotype in Aw.

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