

THE FIRST ENUMERATION OF MEMBERS OF THE TELOSCHISTACEAE (LICHEN-FORMING ASCOMYCETES) STATUS OF WHICH CONFIRMED BY THREE GENE PHYLOGENY

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Abstract: The first enumeration of members of the Teloschistaceae status of which hitherto confirmed by three gene phylogeny based on nrITS, nrLSU and mtSSU sequences is provided. The enumeration includes also taxa for which minimum two nuclear (nrITS or/and nrLSU) and mitochondrial DNA sequences hitherto available with references to publications where they are published.

The enumeration including 590 species is alphabetically arranged after 115 accepted generic names within five subfamilies, i.e.: Xanthorioideae (271 species), Caloplacoideae (217 species), Teloschistoideae (69 species), Brownlielloideae (23 species), and Ikaerioideae (10 species).

Accepted names are provided in bold and in italics, while synonymous names previously included in the genera *Caloplaca*, *Xanthoria* or *Teloschistes* as well as some taxa of the genera *Polycauliona*, *Gyalolechia*, *Dufourea* are provided in italics only. Recently described or combined taxa within genera segregated after molecular phylogeny data are briefly discussed.

Six new combinations are proposed for the following taxa: *Huriella osseophila* (for *Squamulea osseophila* Søchting et Bungartz), *Huriella phyllidizans* (for *Caloplaca phyllidizans* Wetmore), *Loekoelaszloa catillarioides* (for *Caloplaca catillarioides* Arup et van den Boom), *Pyrenodesmia areolata* (for *Caloplaca cerina* var. *areolata* Zahlbr.), *Pyrenodesmia emilii* (for *Caloplaca emilii* Vondrák, Khodos., Cl. Roux et V. Wirth), *Pyrenodesmia fuscoatroides* (for *Caloplaca fuscoatroides* J. Steiner).

Position of taxa hitherto identified only on the basis of ITS phylogeny, or on incomplete set of gene sequences are briefly discussed too.

Key words: enumeration, mtSSU, nrITS, nrLSU, sequences, three gene phylogeny

INTRODUCTION

The period of accumulation of molecular data for members of the Teloschistaceae has caused dramatical changes in its taxonomy at subfamily, generic and species level since the 1990s. So far, more than 6,400 sequences are available for

the members of this family in the GenBank. The Teloschistaceae is on the second position after the Parmeliaceae, the most well studied family among lichen-forming fungi.

Five subfamilies, i.e.: Xanthorioideae, Caloplacoideae, Teloschistoideae, Brownlielloideae, and Ikaerioideae (ARUP *et al.* 2013, GAYA *et al.* 2012, KONDRATYUK *et al.* 2015*d*; 2020, 2022, FAYYAZ *et al.* 2022). However, it should be mentioned that the subfamilies listed above are segregated mainly on molecular characters.

During last decade (2013–2022), several summarizing papers based on combined analysis of ITS nr DNA, 28S nrLSU and 12S mtSSU sequences (ARUP *et al.* 2013, KONDRATYUK *et al.* 2013, 2014*a–d*, 2015*a–f*, 2016*b*, 2017*a, b*, 2018*a, b*, 2020, 2022, MISHRA *et al.* 2020, FAYYAZ *et al.* 2022) created the basis for the well accepted three gene phylogeny of the Teloschistaceae. Similar three gene phylogeny studies of the Swiss team using another set of genes (i.e.: 23S mtSSU, beta-tubulin and 18S nrSSU), as well as polyphasic phylogeny of Gaya with colleagues (i.e.: 18S nrSSU, RPB2, RPB1 gene sequences) (GAYA *et al.* 2012, 2015) were carried out. Further sets of genes were recently used for multigene phylogeny of very small groups, i.e.: genera *Blastenia* or *Pyrenodesmia*.

Larger portion of genera of the Teloschistaceae nowadays confirmed by molecular phylogeny, i.e.: more than 70 of 100, are hitherto proposed on the basis of the molecular phylogeny data (ARUP *et al.* 2013, KONDRATYUK *et al.* 2013*c*, 2014*a–d*, 2015*a–f*, 2016*b*, 2017*a, b*, 2018*a, b*, 2020, 2022, SØCHTING *et al.* 2014*a, b*, BUNGARTZ *et al.* 2020, MISHRA *et al.* 2020, FAYYAZ *et al.* 2022). For bigger portion of segregated genera there is a very good correlation of morphological, chemical and molecular characters, while there are few cases when a direct correlation of morphological and chemical characters is still not obtained. It is worth mentioning that among generic groups there are still unidentified branches after the separation of gene phylogeny (i.e.: nrITS, mtSSU or RPB2 or other genes). However, far complete data on minimum three genes of the same taxon are missing, and we have to wait for getting them in the future.

It should be mentioned that a number of taxa at species level were recently described within the genera segregated on the basis of results of the molecular phylogeny or with usage of molecular characters.

At species level, molecular data are still available only for smaller number of taxa of the family Teloschistaceae. ARUP *et al.* (2013) have announced molecular data on about 320 taxa of the Teloschistaceae, however they have provided only nrITS data for the majority of taxa accepted (about 160 taxa).

Since 2013, a number of new genera based on three gene phylogeny were resurrected and described (ARUP *et al.* 2013, KONDRATYUK *et al.* 2013c, 2014a–d, 2015a–f, 2016b, 2017a, b, 2018a, b, 2020, 2022, SØCHTING *et al.* 2014a, b, BUNGARTZ *et al.* 2020, MISHRA *et al.* 2020, FAYYAZ *et al.* 2022). However, only some of them were accepted in regional checklists or Flora (Germany – WIRTH *et al.* 2013, Alps – NIMIS *et al.* 2018, etc.).

Unfortunately, publications on molecular phylogeny of the Teloschistaceae are mostly scattered in various periodicals and sometimes can be neglected by specialists. Furthermore, data on the same taxa provided by different scientific teams sometimes are rather contradictions (see *Gallowayella weberi* and *Honeggeria rosemariae* (ARUP *et al.* 2013 and KONDRATYUK *et al.* 2013, 2015d), *Squamulea kiamae* and *Thelliana pseudokiamae* (see ARUP *et al.* 2013 and KONDRATYUK *et al.* 2013, 2015d).

The aim of this paper is to provide the first list of taxa at generic and species level, the position of which is hitherto confirmed by three gene phylogeny, as well as to analyse list of taxa which were combined with recently created / resurrected genera based only on ITS phylogeny or without any molecular data.

This list is based mainly on taxa for which sequences on three genes, i.e.: nrITS, nrLSU and mtSSU are available. References to papers are included for each taxon where three gene data set, i.e.: sequences on three genes (nrITS, nrLSU and mtSSU) are provided. However, taxa or groups of taxa are also included in list with consequent notes where only ITS nrDNA and mtSSU sequences are provided.

There is also separate group of taxa for which there are available data on other gene sequences, such as 18S nrSSU, 23S mtLSU, RPB2 and RPB1, beta-tubulin and other genes (see GAYA *et al.* 2012, 2015, VONDRÁK *et al.* 2020, FROLOV *et al.* 2021). However, these data are available only for small number of taxa / specimens and they were not included into phylogeny of the whole family or separate subfamilies so far. These data will be summarised in the future.

A number of taxa were recently described or combined as members of the genera also recently segregated on the basis of three gene phylogeny (i.e.: *Orientophila* – KONDRATYUK *et al.* 2015f; genera *Rusavskia*, *Oxneria*, *Rufoplaca*, *Ovealmbornia*, *Gondwania*, KONDRATYUK *et al.* 2015b, 2016c, 2017b, 2018c, etc; *Eilifdahlia* – KONDRATYUK *et al.* 2017a), where molecular data on taxa mentioned are still not provided. Usually, all these taxa are included to checklist with consequent comments or brief discussion.

Several groups of lichen species of the Xanthorioideae and Caloplacoideae the position of which still cannot be settled with hitherto available only ITS data are especially discussed.

There is also a number of taxa, which were described only as members of newly described / segregated genera (i.e.: *Gondwania*, *Xanthaptychia*), and there are synonyms known as we have usual situations with other taxa described in previous pre-molecular period (mainly *Caloplaca*, *Teloschistes* and *Xanthoria*). So, separate task of this paper was to provide some data on synonyms of the Teloschistaceae which are hitherto proved by molecular phylogenetic data as a handbook for scientists working with regional lists.

On the one hand, a number of combinations of lichen names of the genera *Blastenia*, *Pyrenodesmia*, as well as *Oxneria*, *Rusavskia*, *Xanthomendoza*, etc. were proposed in pre-molecular period, i.e.: without confirmation by molecular data. The same situation as with newly described species of the genera of *Caloplaca* and *Xanthoria* (see below): we did not include any names belonging to recently created/resurrected genera if data on any molecular characters are still missing (especially on data from well-accepted in the Teloschistaceae three gene phylogeny, i.e.: nrITS, nrLSU and mtSSU).

On the other hand, a number of species described since 2013 as members of the genera *Caloplaca* (i.e.: *C. halasensis*, *C. coreana*, *C. taranii*, *C. safavidiorum*, etc.) and *Xanthoria* (i.e.: *X. polessica*, *X. juniperina*, *X. schummii*, *X. lapalmensis*, etc.) which still waiting for getting molecular data are also included into this checklist. It will be a task for another contribution and will be published elsewhere.

There is a large amount of species described by several scientific teams on the basis of single ITS or mtSSU phylogeny (VONDRÁK *et al.* 2017, DIEDERICH and ERTZ 2020). These taxa were often included in 'old' genera *Caloplaca*, while some of these papers have proposed taxa of the genera *Athallia*, *Flavoplaca*, *Blastenia*, *Pyrenodesmia*, etc.

Arrangement of the enumeration

Accepted names (names of genera and species status of which is confirmed by three gene phylogeny) are provided in bold, while synonymous names used usually in pre-molecular (before 2013) period are provided in italics. In case of contradictions of opinions of some genera / clades (i.e.: *Polycauliona*, *Dufourea*, *Xanthomendoza*) synonymous names are also provided.

Each taxon is accompanied by basionyms/synonyms used in pre-molecular period (i.e.: genera *Caloplaca*, *Teloschistes* or *Xanthodactylon*, *Xanthoria*, etc.) or

in molecular era (i.e.: genera *Dufourea* s. l., *Gyalolechia* s. l., *Polycauliona* s. l. and *Xanthomendoza* s. l.).

Molecular data are discussed in the third paragraph of each taxon. There is information in which papers three gene data set are presented, as well as a number of voucher specimens for which molecular data are provided.

Taxa for still incomplete data from molecular phylogeny are marked in the following way.

Several cases where molecular data were submitted to GenBank under wrong names are particularly discussed, or consequent references are provided (see data on *Gallowayella*, *Honeggeria*, *Oxneria*, etc).

Data on the species of the genus *Calogaya* were sometimes submitted under name of genus *Rusavskia*. However, we hope that the chance of wrong identifications of molecular data will be much smaller in future due to the accumulation of new sets of molecular data on the Teloschistaceae.

Totally 115 genera of the five subfamilies of the Teloschistaceae hitherto confirmed by three gene phylogeny are listed in Table 1. It should be also mentioned that list of genera of separate subfamilies, i.e.: Caloplacoideae (KONDRATYUK *et al.* 2018a), or Xanthorioideae (KONDRATYUK *et al.* 2015e), as well as the whole family (KONDRATYUK *et al.* 2020, 2022, MISHRA *et al.* 2020, FAYYAZ *et al.* 2022) were recently provided. They are also updated here and provided for all subfamilies.

Tables with genera and type species of the subfamilies Xanthorioideae, Caloplacoideae, Teloschistoideae and Brownlielloideae are provided in some of our previous papers (KONDRATYUK *et al.* 2015e, 2018b, MISHRA *et al.* 2020).

As it is seen from Tables 1 and 2, total positions of about 146 taxa were clarified on the basis of three gene phylogeny, i.e.: combined analysis based on the nrITS, nrLSU and mtSSU sequences obtained from 367 voucher specimens. The same combinations for more than 178 taxa were based only on the ITS phylogeny alone. Status of these taxa is still waiting for confirmation from nrLSU and mtSSU data.

Additionally, about 55 taxa have been described or combined into recently created genera, while molecular data have neither been published nor available in GenBank yet. The list of the recently described / combined taxa, for which any molecular data are still missing, is the following: *Huriella pohangensis*, *Huriella salyangiana*, *Orientophila fauriei*, *Orientophila leucerythrella*, *Orientophila diffluens*, *Orientophila jungakimae*, *Orientophila yokjidoensis*, *Oxneria ussuriensis*, *Rufoplaca kaernefeltiana*, *Rufoplaca ulleungensis*, *Rusavskia upretii*, *Rusavskia indica*.

Table 1. Genera of the five subfamilies of the Teloschistaceae on the world scale proposed on the bases of three gene phylogeny based on nrITS, nrLSU and mtSSU sequences.

Subfamily (total number of genera)	Genera (described – in bold, confirmed with asterisk (*) [cited only the first paper], accepted, but not confirmed with two asterisks (**))	Reference where genera described or confirmed*	Total number of species
Xanthorioideae (44 genera)	<i>Amundsenia</i> , <i>Athallia</i> , <i>Austroplaca</i> , <i>Calogaya</i> , <i>Cerothallia</i> , <i>Charcotiana</i> , <i>Coppinsiella</i> , <i>Dufourea</i> *, <i>Erichansenia</i> , <i>Flavoplaca</i> , <i>Fominiella</i> , <i>Gallowayella</i> , <i>Golubkovaea</i> *** [as <i>Golubkovia</i> see AHTI <i>et al.</i> 2015], <i>Gondwania</i> , <i>Honeggeria</i> , <i>Huriella</i> , <i>Jackelixia</i> , <i>Jesmurraya</i> , <i>Igneoplaca</i> , <i>Kudratoviella</i> , <i>Langeottia</i> , <i>Martinjahnsia</i> , <i>Massjukiella</i> , <i>Orientophila</i> , <i>Ovealmbornia</i> , <i>Oxneria</i> *, <i>Pachypeltis</i> , <i>Parvoplaca</i> , <i>Polycaulionia</i> *, <i>Rusavskia</i> *, <i>Scythioria</i> , <i>Seawardiella</i> , <i>Shackletonia</i> , <i>Solitaria</i> , <i>Squamulea</i> , <i>Teuvoabtiana</i> , <i>Tomnashia</i> , <i>Verrucoplaca</i> , <i>Xanthocarpia</i> *, <i>Xanthokarrooa</i> , <i>Xanthomendoza</i> *, <i>Xanthopeltis</i> , <i>Xanthoria</i> *, <i>Zeroviella</i>	FEDORENKO <i>et al.</i> 2009, 2012, ARUP <i>et al.</i> 2013, SØCHTING <i>et al.</i> 2014b, KONDRATYUK <i>et al.</i> 2014c, 2015e, 2017a, 2020, 2022	271
Caloplacoideae (33 genera)	<i>Blastenia</i> *, <i>Bryoplaca</i> , <i>Caloplaca</i> *, <i>Eilifdablia</i> , <i>Elenkiniana</i> , <i>Fauriea</i> , <i>Franwilsia</i> , <i>Fulgensia</i> *, <i>Gintarasiella</i> , <i>Gyalolechia</i> *, <i>Hanstrassia</i> , <i>Hunneckia</i> , <i>Jasonburia</i> , <i>Ioplaca</i> ***, <i>Klauderuiella</i> , <i>Lacrima</i> , <i>Laundonia</i> , <i>Lendemeriella</i> , <i>Leproplaca</i> *, <i>Loekoesia</i> , <i>Mikhtomia</i> , <i>Olegblumia</i> , <i>Opeltia</i> , <i>Oxneriopsis</i> , <i>Pisutiella</i> , <i>Pyrenodesmia</i> *, <i>Rufoplaca</i> , <i>Seirophora</i> *, <i>Upretia</i> , <i>Usnochroma</i> , <i>Variospora</i> , <i>Xanthaptychia</i> , <i>Yoshimuria</i>	FEDORENKO <i>et al.</i> 2009, ARUP <i>et al.</i> 2013, KONDRATYUK <i>et al.</i> 2014a, 2015c, 2016b, 2017a, 2018a	217
Teloschistoideae (27 genera)	<i>Aridoplaca</i> , <i>Catenarina</i> , <i>Cinnabaria</i> , <i>Elixjohnia</i> , <i>Filsoniana</i> , <i>Follmannia</i> *, <i>Fulgogasparrea</i> , <i>Haloplaca</i> , <i>Harusavskia</i> , <i>Hosseusiella</i> , <i>Josefpoeltia</i> *, <i>Iqbalia</i> , <i>Kaernefia</i> , <i>Lazarenkoioopsis</i> , <i>Neobrowniella</i> , <i>Nevilleiella</i> , <i>Niorma</i> *, <i>Rehmanniella</i> , <i>Scutaria</i> , <i>Sirenophila</i> *, <i>Stellarangia</i> , <i>Tassiloa</i> , <i>Teloschistes</i> *, <i>Teloschistopsis</i> , <i>Villophora</i> , <i>Wetmoreana</i>	FEDORENKO <i>et al.</i> 2009, ARUP <i>et al.</i> 2013, KONDRATYUK <i>et al.</i> 2013c, 2015a, 2015d, 2017a, 2018b, SØCHTING <i>et al.</i> 2014a, KONDRATYUK and MOSYAKIN 2022	69
Brownlielloideae (9 genera)	<i>Brownliella</i> , <i>Dijigiella</i> , <i>Lazarenkoella</i> , <i>Marchantiana</i> , <i>Raesäneniana</i> , <i>Streimanniella</i> , <i>Taraginia</i> , <i>Tayloriellina</i> , <i>Thelliana</i>	KONDRATYUK <i>et al.</i> 2013c, 2015d, 2017a	23
Ikaerioideae (2 genera)	<i>Ikaeria</i> , <i>Loekoeslaszloa</i>	KONDRATYUK <i>et al.</i> 2020	10
Total			590

Table 2. Number of species and vouchers of members of the Teloschistaceae for which molecular data of three gene phylogeny are provided (A = Total number of species; B = Total no. of species / taxa with full set of molecular data/number of vouchers; C = Number of taxa with data on mtSSU and one nrDNA gene; D = Number of taxa with data on nrITS and nrLSU; E = Data on nrITS only provided; F = Without molecular data).

	A	B	C	D	E	F
<i>Amundsenia</i> [Xanthorioideae]	2	1/1		1		–
<i>Aridoplaca</i> [Teloschistoideae]	1	1/3				
<i>Athallia</i> [Xanthorioideae]	11	4/6			5	2
<i>Austroplaca</i> [Xanthorioideae]	9	7/7			2	
<i>Blastenia</i> * [Caloplacoideae]	25	3/4			22	
<i>Brownliella</i> [Brownlielloideae]	2	2/5				
<i>Bryoplaca</i> [Caloplacoideae]	3	3/3				
<i>Calogaya</i> [Xanthorioideae]	9	3/5	–		5	
<i>Caloplaca</i> * [Caloplacoideae]	16	2/2	1		6	3
<i>Catenarina</i> [Teloschistoideae]	3	–	2			1
<i>Cerothallia</i> [Xanthorioideae]	4	3/3	1			
<i>Charcotiana</i> [Xanthorioideae]	1	1/1				
<i>Cinnabaria</i> [Teloschistoideae]	1	1/1				
<i>Coppinsiella</i> [Xanthorioideae]	5	2/2	1		2	
<i>Dijigiella</i> [Brownlielloideae]	2	2/3				
<i>Dufourea</i> * [Xanthorioideae]	11	1/1	4		5	6
<i>Eilifdahlia</i> [Caloplacoideae]	4	2/5				2
<i>Elenkiniana</i> [Caloplacoideae]	3	2/6			1	
<i>Elixjohnia</i> [Teloschistoideae]	4	4/6				
<i>Erichansenia</i> [Xanthorioideae]	3	1/1		1		
<i>Fauriea</i> [Caloplacoideae]	2	2/3				
<i>Filsoniana</i> [Teloschistoideae]	5	3/6		1		1
<i>Flavoplaca</i> [Xanthorioideae]	27	5/8	5		22	
<i>Follmannia</i> * [Teloschistoideae]	1		1			
<i>Fominiella</i> [Xanthorioideae]	2	1/1			1	
<i>Franwilsia</i> [Caloplacoideae]	3	2/5	1			
<i>Fulgensia</i> [Caloplacoideae]	11	4/9			5	2
<i>Fulgogasparrea</i> [Teloschistoideae]	5	2/2			2	1
<i>Gallowayella</i> [Xanthorioideae]	11	4/4	4		3	
<i>Gintarasiella</i> [Caloplacoideae]	1	1/3				
<i>Golubkovaea</i> [Xanthorioideae]	1	1/1				
<i>Gondwania</i> [Xanthorioideae]	4	2/2	1		1	
<i>Gyalolechia</i> * [Caloplacoideae]	5	3/3			2	
<i>Haloplaca</i> [Teloschistoideae]	3	–	1		2	
<i>Hanstrassia</i> [Caloplacoideae]	2	–	1		1	
<i>Harusavskia</i> [Teloschistoideae]	1	1/3				

Table 2. (continued)

	A	B	C	D	E	F
<i>Honeggeria</i> [Xanthorioideae]	3	1/1			2	
<i>Hosseusiella</i> [Teloschistoideae]	3	1/1			2	
<i>Huneckia</i> [Caloplacoideae]	4	3/5			1	
<i>Huriella</i> [Xanthorioideae]	8	1/1	1		3	3
<i>Igneoplaca</i> [Xanthorioideae]	1	1/1				
<i>Ikaeria</i> [Ikaerioideae]	2	2/5				
<i>Iqbalia</i> [Teloschistoideae]	1	1/2				
<i>Ioplaca</i> ** [Caloplacoideae]	2	–			1	1
<i>Jackelixia</i> [Xanthorioideae]	11	3/4	3			5
<i>Jasonhuria</i> [Caloplacoideae]	1	1/4				
<i>Jesmurraya</i> [Xanthorioideae]	1	1/1				
<i>Josefpoeltia</i> * [Teloschistoideae]	2	2/4				
<i>Kaernefia</i> [Teloschistoideae]	3	3/7				
<i>Klauderuiella</i> [Caloplacoideae]	3	3/3				
<i>Kudratoviella</i> [Xanthorioideae]	5	–			4	1
<i>Lacrima</i> [Caloplacoideae]	4	2/2			2	
<i>Langeottia</i> [Xanthorioideae]	2	2/4				1
<i>Laundonia</i> [Caloplacoideae]	2	1/1			1	
<i>Lazarenkoella</i> [Brownlielloideae]	3	1/3			1	1
<i>Lazarenkoiopsis</i> [Teloschistoideae]	1	1/2	1			
<i>Lendemeriella</i> [Caloplacoideae]	9	2/2			5	2
<i>Leproplaca</i> * [Caloplacoideae]	5	3/3			2	
<i>Loekoesia</i> [Caloplacoideae]	3	1/3				
<i>Loekoeslaszloa</i> [Ikaerioideae]	8	7/10			1	
<i>Marchantiana</i> [Brownlielloideae]	2	2/3				
<i>Martinjahnsia</i> [Xanthorioideae]	1	1/1				
<i>Massjukiella</i> [Xanthorioideae]	7	3/7	3		1	
<i>Mikhtomia</i> [Caloplacoideae]	3	–	3			
<i>Neobrownliella</i> [Teloschistoideae]	3	2/4		1		
<i>Nevilleiella</i> [Teloschistoideae]	2	2/3				
<i>Niorma</i> * [Teloschistoideae]	4	3/3			1	
<i>Olegblumia</i> [Caloplacoideae]	1	1/3				
<i>Opeltia</i> [Caloplacoideae]	5	3/3	1		1	
<i>Orientophila</i> [Xanthorioideae]	14	1/1	1		1	11
<i>Ovealmbornia</i> [Xanthorioideae]	3	3/5				
<i>Oxneria</i> * [Xanthorioideae]	8	3/6	2		3	1
<i>Oxneriopsis</i> [Caloplacoideae]	3	1	1		1	
<i>Pachypeltis</i> [Xanthorioideae]	6	1/1	1		4	
<i>Parvoplaca</i> [Xanthorioideae]	6	1/1			5	
<i>Pisutiella</i> [Caloplacoideae]	6	2/2			2	2

Table 2. (continued)

	A	B	C	D	E	F
<i>Polycauliona</i> * [Xanthorioideae]	11	4/4			7	
<i>Pyrenodesmia</i> * [Caloplacoideae]	35	31/41	1		1	
<i>Raesaeneniana</i> [Brownlielloideae]	5	1/1	1		1	
<i>Rehmanniella</i> [Teloschistoideae]	1	1/1				
<i>Rufoplaca</i> [Caloplacoideae]	12	2/2			3	7
<i>Rusavskia</i> * [Xanthorioideae]	13	2/6	1			10
<i>Scutaria</i> [Teloschistoideae]	1	1/2				
<i>Scythioria</i> [Xanthorioideae]	3	2/2			1	
<i>Seawardiella</i> [Xanthorioideae]	2	1/3			1	
<i>Seirophora</i> * [Caloplacoideae]	6	4/6			2	
<i>Shackletonia</i> [Xanthorioideae]	5	1/1		2	2	
<i>Sirenophila</i> [Teloschistoideae]	4	4/5				
<i>Solitaria</i> [Xanthorioideae]	1	1/2				
<i>Squamulea</i> [Xanthorioideae]	11	3/3			5	
<i>Stellarangia</i> [Teloschistoideae]	3	2/2		1		
<i>Streimanniella</i> [Brownlielloideae]	4	3/4	1			
<i>Tarasginia</i> [Brownlielloideae]	2	1/2			1	
<i>Tassiloa</i> [Teloschistoideae]	3	1/1	1		1	
<i>Tayloriellina</i> [Brownlielloideae]	2	2/3				
<i>Teloschistes</i> * [Teloschistoideae]	8	2/4	2	1	3	
<i>Teloschistopsis</i> [Teloschistoideae]	3	2/2			1	
<i>Teuvoahiana</i> [Xanthorioideae]	3	2/4	1			
<i>Tbelliana</i> [Brownlielloideae]	1	1/2				
<i>Tomnashia</i> [Xanthorioideae]	4	1/1			1	1
<i>Upretia</i> [Caloplacoideae]	3	1/1	1			1
<i>Usnochroma</i> [Caloplacoideae]	2	2/4				
<i>Variospora</i> [Caloplacoideae]	14	4/6			8	2
<i>Verrucoplaca</i> [Xanthorioideae]	1	1/1				
<i>Villophora</i> [Teloschistoideae]	1	1/1				
<i>Wetmoreana</i> [Teloschistoideae]	1	1/2				
<i>Wilketalia</i> (= <i>Andina</i>) [Teloschistoideae]	1	–	1	–	–	–
<i>Xanthaptychia</i> [Caloplacoideae]	4	1/1	2		1	
<i>Xanthocarpia</i> * [Xanthorioideae]	14	5/7	1		8	
<i>Xanthokarrooa</i> [Xanthorioideae]	2	1/1				1
<i>Xanthomendoza</i> * [Xanthorioideae]	3	1/1	1			1
<i>Xanthopeltis</i> [Xanthorioideae]	1	1/1				
<i>Xanthoria</i> * [Xanthorioideae]	13	4/8	4		1	4
<i>Yoshimuria</i> [Caloplacoideae]	5	3/3				2
<i>Zeroviella</i> [Xanthorioideae]	8	–	6		2	
Total	590	146/367	63	8	183	75

An enumeration of accepted and synonym names of Teloschistaceae
with notes on molecular data

Amundsenia Søchting, Garrido-Ben., Arup et Frödén,

in Søchting et al., *Lichenologist* 46: 774 (2014) [Xanthorioideae]

Type species: *Amundsenia austrocontinentalis* Garrido-Ben., Søchting, Pérez-Ort. et Seppelt

Amundsenia approximata (Lynge) Søchting, Arup et Frödén, in Søchting et al., *Lichenologist* 46: 774 (2014). – Bas.: *Caloplaca vitellinula* f. *approximata* Lynge, Rep. Sci. Res. Norweg. Exped. Novaya Zemlya, 1921 43: 222 (1928). ≡ *Caloplaca approximata* (Lynge) H. Magn. – Three gene data are so far provided only for one specimen of this species.

Amundsenia austrocontinentalis Garrido-Ben., Søchting, Pérez-Ort. et Seppelt, in Søchting et al., *Lichenologist* 46: 774 (2014). – Data on nrITS and nrLSU sequences of single voucher are so far provided for this species.

Andina Wilk, Pabijan et Lücking → *Wilketalia* S. Y. Kondr., in Kondratyuk and Mosyakin
Andina citrinoides Wilk et Lücking → *Wilketalia citrinoides* (Wilk et Lücking) S. Y. Kondr.

Aridoplaca Wilk, Pabijan et Lücking,

in Wilk et al., *Mycologia* 113(2): 292 (2021) [Teloschistoideae]

Type species: *Aridoplaca peltata* Wilk et Lücking

Aridoplaca peltata Wilk et Lücking, in Wilk et al., *Mycologia* 113(2): 292 (2021). – Data on three genes of three vouchers of this species are hitherto provided (WILK *et al.* 2021).

Athallia Arup, Frödén et Søchting,

in Arup et al., *Nordic J. Bot.* 31(1): 36 (2013) [Xanthorioideae]

Type species: *Athallia holocarpa* (Hoffm.) Arup, Frödén et Søchting

Athallia alnetorum (Giralt, Nimis et Poelt) Arup, Frödén et Søchting – Bas.: *Caloplaca alnetorum* Giralt, Nimis et Poelt – ARUP *et al.* (2013: 36): *combination is based only on ITS phylogeny.

Athallia baltistanica (Poelt et Hinter.) Halıcı et Vondrák, in Vondrák et al., *Turkish J. Bot.* 40: 320 (2016), nom. inval., Art. 39.1 (Melbourne). – Bas.: *Caloplaca baltistanica* Poelt et Hinter., *Bibl. Lichenol.* 50: 82 (1993), nom. inval., Arts 39.1, 40.1 (Melbourne). – Combination is proposed without providing molecular data.

Athallia brachyspora (Mereschk.) Halıcı et Vondrák, in Vondrák et al., *Turkish J. Bot.* 40: 322 (2016). – Bas.: *Caloplaca brachyspora* Mereschk., *Lich. Flor. Ross. Occid. Exsicc.*: no. 22 (1913). – So far only data on nrITS sequences of this species are available.

Athallia cerinella (Nyl.) Arup, Frödén et Søchting – Bas.: *Lecanora cerinella* Nyl. ≡ *Caloplaca cerinella* (Nyl.) Flagey – ARUP *et al.* (2013: 36): *combination is based only on ITS phylogeny.

- Athallia cerinelloides* (Erichsen) Arup, Frödén et Søchting – Bas.: *Caloplaca cerinelloides* (Erichsen) Poelt, in Poelt and Hinteregger – Data on three genes of single voucher are so far provided for this species (ARUP *et al.* 2013: 36).
- Athallia holocarpa* (Hoffm.) Arup, Frödén et Søchting – Bas.: *Verrucaria holocarpa* Hoffm. (1796). ≡ *Lichen holocarpus* (Hoffm.) Ach. ≡ *Caloplaca holocarpa* (Hoffm.) A. E. Wade – Data on three genes of single voucher are so far provided for this species (ARUP *et al.* 2013: 36).
- Athallia necator* (Poelt et Clauzade) Vondrák, Halıcı, Güllü et Demirel, in Vondrák *et al.*, Turkish J. Bot. 40: 319 (2016), nom. inval., Art. F.5.1 (Shenzhen). – Bas.: *Caloplaca necator* Poelt et Clauzade – No molecular data are so far available for this species.
- Athallia pyracea* (Ach.) Arup, Frödén et Søchting – Bas.: *Parmelia cerina* var. *pyracea* Ach. (1803). ≡ *Caloplaca pyracea* (Ach.) Zwackh. – Data on three genes of single voucher are so far provided for this species (ARUP *et al.* 2013: 36).
- Athallia saxifragarum* (Poelt) Arup, Frödén et Søchting – Bas.: *Caloplaca saxifragarum* Poelt – ARUP *et al.* (2013: 36): *combination is based only on ITS phylogeny.
- Athallia scopularis* (Nyl.) Arup, Frödén et Søchting – Bas.: *Lecanora scopularis* Nyl. ≡ *Caloplaca scopularis* (Nyl.) Lettau – ARUP *et al.* (2013: 36): data on three genes for three vouchers are so far provided for this species. GAYA *et al.* (2012): LSU and mtSSU data only.
- Athallia vitellinula* (Nyl.) Arup, Frödén et Søchting – Bas.: *Lecanora vitellinula* Nyl. ≡ *Caloplaca vitellinula* (Nyl.) H. Olivier – ARUP *et al.* (2013: 36): *combination is based only on ITS phylogeny.
- Athallia skii* (Khodos., Vondrák et Šoun) Arup, Frödén et Søchting → *Fominiella skii* (Khodos., Vondrák et Šoun) S. Y. Kondr., Upreti et Hur

***Austroplaca* Søchting, Frödén et Arup,**

in Arup *et al.*, Nordic J. Bot. 31(1): 37 (2013) [Xanthorioideae]

Type species: *Austroplaca ambitiosa* (Darb.) Søchting, Frödén et Arup

- Austroplaca ambitiosa* (Darb.) Søchting, Frödén et Arup – Bas.: *Placodium ambitiosum* Darb. ≡ *Caloplaca ambitiosa* (Darb.) Zahlbr. – Data on three genes of single voucher are so far provided for this species (ARUP *et al.* 2013: 37).
- Austroplaca cirrochrooides* (Vain.) Søchting, Frödén et Arup – Bas.: *Placodium cirrochrooides* Vain. ≡ *Caloplaca cirrochrooides* (Vain.) Zahlbr. – Data on three genes of single voucher are so far provided for this species (ARUP *et al.* 2013: 37).
- Austroplaca darbshirei* (C. W. Dodge et G. E. Baker) Søchting, Frödén et Arup – Bas.: *Pyrenodesmia darbshirei* C. W. Dodge et G. E. Baker ≡ *Caloplaca darbshirei* (C. W. Dodge et G. E. Baker) Cretz. – Data on three genes of single voucher are so far provided for this species (ARUP *et al.* 2013: 37).
- Austroplaca erecta* (Arup et Mayrhofer) Søchting, Frödén et Arup – Bas.: *Caloplaca erecta* Arup et Mayrhofer – ARUP *et al.* (2013: 37): *combination is based only on ITS phylogeny.

- Austroplaca hookeri* (C. W. Dodge) Søchting, Frödén et Arup – Bas.: *Gasparrinia hookeri* C. W. Dodge ≡ *Caloplaca hookeri* (C. W. Dodge) Søchting, Øvstedal et Sancho – Data on three genes of single voucher are so far provided for this species (ARUP *et al.* 2013: 37). KONDRATYUK *et al.* (2014c): additional specimen ITS data only.
- Austroplaca johnstonii* (C. W. Dodge) Søchting, Frödén et Arup – Bas.: *Blastenia johnstonii* C. W. Dodge ≡ *Caloplaca johnstonii* (C. W. Dodge) Søchting et Olech – ARUP *et al.* (2013: 37): *combination is based only on ITS phylogeny.
- Austroplaca lucens* (Nyl.) Søchting, Frödén et Arup – Bas.: *Caloplaca lucens* (Nyl.) Zahlbr. – Data on three genes of single voucher are so far provided for this species (ARUP *et al.* 2013: 38).
- Austroplaca millegrana* (Müll. Arg.) Søchting, Frödén et Arup – Bas.: *Amphilonema millegranum* Müll. Arg. ≡ *Caloplaca millegrana* (Müll. Arg.) Zahlbr. – Data on three genes of single voucher are so far provided for this species (ARUP *et al.* 2013: 38).
- Austroplaca soropelta* (E. S. Hansen, Poelt et Søchting) Søchting, Frödén et Arup – Bas.: *Caloplaca citrina* var. *soropelta* E. S. Hansen, Poelt et Søchting ≡ *Caloplaca soropelta* (E. S. Hansen, Poelt et Søchting) Søchting – Data on three genes of single voucher are so far provided for this species (ARUP *et al.* 2013: 38).
- Austroplaca* sp. 7, sp. 9, sp. 10. – ARUP *et al.* (2013): with data on ITS, nrLSU and mtSSU.
- Austroplaca* sp. 8. – ARUP *et al.* (2013): only with ITS data.

Blastenia A. Massal.,

Flora, Regensburg 35: 573 (1852) [Caloplacoideae]

Type species: *Blastenia ferruginea* (Huds.) A. Massal.

Of 9 species accepted by ARUP *et al.* (2013) 6 species were combined to this genus after ITS phylogeny only.

- Blastenia ammiospila* (Wahlenb.) Arup, Søchting et Frödén – Bas.: *Lecidea ammiospila* Wahlenb. in Acharius (1803 suppl., p. 13). – GAYA *et al.* (2012): nrLSU and mtSSU data only. ARUP *et al.* (2013: 67): only nrLSU and mtSSU data are provided.
- Blastenia afroalpina* Vondrák, in Vondrák *et al.*, J. Syst. Evol. 58(3): 313 (2019). – Only nrITS data are so far available for this species.
- Blastenia anatolica* Halıcı, Arup et Vondrák, in Vondrák *et al.*, J. Syst. Evol. 58(3): 314 (2019). – Only nrITS data are so far available for this species.
- Blastenia catalinae* (H. Magn.) E. D. Rudolf, in Kondratyuk *et al.*, Ukr. Bot. J. 72(6): 582 (2015). – Bas.: *Caloplaca catalinae* H. Magn., Bot. Notiser: 71 (1944). – Only nrITS data are so far available for this species (KONDRATYUK *et al.* 2015e).
- Blastenia caucasica* I. V. Frolov et Vondrák, in Vondrák *et al.*, J. Syst. Evol. 58(3): 315 (2019). – Only nrITS data are so far available for this species.
- Blastenia circumpolaris* Søchting, Frödén et Arup = [Replaced synonym:] *Caloplaca wilsonii* S. Y. Kondr. et Kärnefelt in Kondratyuk *et al.* (2009, p. 271). – ARUP *et al.* (2013: 67): *new name proposed only from the ITS phylogeny.

- Blastenia coralliza* (Arup et Åkelius) Arup, Søchting et Frödén – Bas.: *Caloplaca coralliza* Arup et Åkelius (2009, p. 471). – ARUP *et al.* (2013: 67): *combination proposed only from the ITS phylogeny.
- Blastenia crenularia* (With.) Arup, Søchting et Frödén – Bas.: *Lichen crenularius* With. (1801, p. 21). – Data on three genes of single voucher are so far provided for this species (ARUP *et al.* 2013: 67).
- Blastenia ferruginea* (Huds.) A. Massal. – Bas.: *Lichen ferrugineus* Huds. (1762, p. 444). – Data on three genes of single voucher are so far provided for this species (ARUP *et al.* 2013: 67).
- Blastenia festivella* (Nyl.) Vondrák, in Vondrák *et al.*, J. Syst. Evol. 58(3): 317 (2019). – Bas.: *Lecanora ferruginea* var. *festivella* Nyl., Flora, Regensburg 56(13): 197 (1873). – Only nrITS data are so far available for this species.
- Blastenia furfuracea* (H. Magn.) Arup, Søchting et Frödén – Bas.: *Caloplaca furfuracea* H. Magn. (1944, p. 33). – ARUP *et al.* (2013: 67): *combination proposed only from the ITS phylogeny.
- Blastenia gennargentuae* Vondrák, in Vondrák *et al.*, J. Syst. Evol. 58(3): 318 (2019). – Only nrITS data are so far available for this species.
- Blastenia herbidella* (Hue) Servít – Bas.: *Blastenia caesiorufa* f. *herbidella* Nyl. ex Hue (1913 [1911], p. 151). – ARUP *et al.* (2013: 67): *combination proposed only from the ITS phylogeny.
- Blastenia hungarica* (H. Magn.) Arup, Søchting et Frödén – Bas.: *Caloplaca hungarica* H. Magn. (1944, p. 28). – ARUP *et al.* (2013: 68): *combination proposed only from the ITS phylogeny.
- Blastenia lauri* Vondrák, in Vondrák *et al.*, J. Syst. Evol. 58(3): 319 (2019). – Only nrITS data are so far available for this species.
- Blastenia monticola* Arup et Vondrák, in Vondrák *et al.*, J. Syst. Evol. 58(3): 320 (2019). – Only nrITS data are so far available for this species.
- Blastenia palmae* Vondrák, in Vondrák *et al.*, J. Syst. Evol. 58(3): 320 (2019). – Only nrITS data are so far available for this species.
- Blastenia psychrophila* Halıcı et Vondrák, in Vondrák *et al.*, J. Syst. Evol. 58(3): 320 (2019). – Only nrITS data are so far available for this species.
- Blastenia purpurea* Vondrák, in Vondrák *et al.*, J. Syst. Evol. 58(3): 321 (2019). – Only nrITS data are so far available for this species.
- Blastenia relicta* Arup et Vondrák, in Vondrák *et al.*, J. Syst. Evol. 58(3): 321 (2019). – Only nrITS data are so far available for this species.
- Blastenia remota* Obermayer et Vondrák, in Vondrák *et al.*, J. Syst. Evol. 58(3): 321 (2019). – Only nrITS data are so far available for this species.
- Blastenia scabrosa* (Søchting, Lorentsen et Arup) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur – Bas.: *Caloplaca scabrosa* Søchting, Lorentsen et Arup, Nova Hedwigia 87(1–2): 89 (2008). – Only nrITS data are so far available for this species (KONDRATYUK *et al.* 2015*d*).
- Blastenia subathallina* (H. Magn.) Arup et Vondrák, in Vondrák *et al.*, J. Syst. Evol. 58(3): 322 (2019). – Bas.: *Caloplaca subathallina* H. Magn., Bot. Notiser: 82 (1951). – Only nrITS data are so far available for this species.

Blastenia subochracea (Wedd.) Arup, Søchting et Frödén – Bas.: *Lecanora aurantiaca* var. *subochracea* Wedd. (1873, p. 363). – ARUP *et al.* (2013: 68): *combination proposed only from the ITS phylogeny.

Blastenia xerothermica Vondrák, Arup et I. V. Frolov, in Vondrák *et al.*, J. Syst. Evol. 58(3): 322 (2019). – Only nrITS data are so far available for this species.

Blastenia cerussata (Hue) Darb. → *Yoshimuria cerussata* (Hue) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur

Blastenia johnstonii C. W. Dodge → *Austroplaca johnstonii* (C. W. Dodge) Søchting, Frödén et Arup

Blastenia latzelii Servít → *Variospora latzelii* (Servít) S. Y. Kondr.

Blastenia obscurella J. Lahm → *Pyrenodesmia obscurella* (J. Lahm) M. Choisy

Blastenia pollinii A. Massal. → *Huneckia pollinii* (A. Massal.) S. Y. Kondr., Elix, Kärnefelt, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur

Blastenia fernandeziana Zahlbr. → *Teuvoabtiana fernandeziana* (Zahlbr.) S. Y. Kondr. et Hur

Brownliella S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur,
in Kondratyuk *et al.*, Acta Bot. Hung. 55(3–4): 265 (2013) [Brownlielloideae]
Type species: *Brownliella aequata* (Zahlbr.) S. Y. Kondr., Kärnefelt, Elix, A.
Thell et Hur

Brownliella aequata (Zahlbr.) S. Y. Kondr., Kärnefelt, Elix, A. Thell et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 55(3–4): 265 (2013). – Bas.: *Caloplaca aequata* Zahlbr., Cat. Lich. Univers. 7: 211 (1931). = [Replaced synonym:] *Lecanora aequata* Hue, Ann. Mycol. 13(2): 78 (1915).

Brownliella kobeana (Nyl.) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 57(3–4): 339 (2015). – Bas.: *Lecanora kobeana* Nyl., Lich. Japon.: 36 (1890). ≡ *Caloplaca kobeana* (Nyl.) Zahlbr., Cat. Lich. Univers. 7: 241 (1931).

Bryoplaca Søchting, Frödén et Arup,
in Arup *et al.*, Nordic J. Bot. 31(1): 68 (2013) [Caloplacoideae]
Type species: *Bryoplaca sinapisperma* (Lam.) Søchting, Frödén et Arup

Bryoplaca jungermanniae (Vahl) Søchting, Frödén et Arup – Bas.: *Lichen jungermanniae* Vahl. (1792, p. 6). – ARUP *et al.* (2013: 68): *combination proposed only from the ITS and mtSSU phylogeny. Data on nrLSU and mtSSU sequences for one voucher are so far provided (BUNGARTZ *et al.* 2020).

Bryoplaca sinapisperma (Lam.) Søchting, Frödén et Arup – Bas.: *Lichen sinapispermus* Lam. (1813, p. 369). – ARUP *et al.* (2013: 68): *combination proposed only from the ITS phylogeny. Data on nrLSU sequence for one voucher are so far provided (BUNGARTZ *et al.* 2020).

Bryoplaca tetraspora (Nyl.) Søchting, Frödén et Arup – Bas.: *Lecanora tetraspora* Nyl. (1863b, p. 397). – ARUP *et al.* (2013: 68): *combination proposed only from the ITS and mtSSU phylogeny. Data on nrLSU sequence for one voucher are so far provided (BUNGARTZ *et al.* 2020).

Calogaya Arup, Frödén et Søchting,

in Arup et al., Nordic J. Bot. 31(1): 38 (2013) [Xanthorioideae]

Type species: *Calogaya biatorina* (A. Massal.) Arup, Frödén et Søchting

- Calogaya alaskensis* (Wetmore) Arup, Frödén et Søchting – Bas.: *Caloplaca alaskensis* Wetmore – ARUP *et al.* (2013: 38): *combination is based only on ITS phylogeny.
- Calogaya arnoldii* (Wedd.) Arup, Frödén et Søchting – Bas.: *Lecanora arnoldii* Wedd. ≡ *Caloplaca arnoldii* (Wedd.) Zahlbr. ex Ginzb. – Data on three genes of single voucher are so far provided for this species (ARUP *et al.* 2013: 38).
- Calogaya arnoldiiconfusa* (Gaya et Nav.-Ros.) Arup, Frödén et Søchting – Bas.: *Caloplaca arnoldiiconfusa* Gaya et Nav.-Ros. in Gaya – ARUP *et al.* (2013: 38): *combination is based only on ITS phylogeny.
- Calogaya biatorina* (A. Massal.) Arup, Frödén et Søchting – Bas.: *Physcia elegans* var. *biatorina* A. Massal., Atti Inst. Veneto Sci. lett., ed Arti, Sér. 2, 3(App. 3): 51 (1852). ≡ *Caloplaca biatorina* (A. Massal.) J. Steiner – ARUP *et al.* (2013: 38): *combination is based only on ITS phylogeny.
- Calogaya bryochryson* (Poelt) Vondrák, in Vondrák et al., Lichenologist 48(3): 177 (2016). – Bas.: *Caloplaca bryochryson* Poelt, Feddes Repert. Spec. Nov. Regni veg. 58: 175 (1955). – Only nrITS sequences of three molecular markers mentioned here are so far provided for this species.
- Calogaya decipiens* (Arnold) Arup, Frödén et Søchting – Bas.: *Physcia decipiens* Arnold ≡ *Caloplaca decipiens* (Arnold) Blomb. et Forssell – Data on three genes of single voucher are so far provided for this species (ARUP *et al.* 2013: 38).
- Calogaya ferrugineoides* (H. Magn.) Arup, Frödén et Søchting – Bas.: *Caloplaca ferrugineoides* H. Magn. – ARUP *et al.* (2013: 38): *combination is based only on ITS phylogeny.
- Calogaya mogoltanica* (S. Y. Kondr. et Kudratov) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur – Bas.: *Caloplaca mogoltanica* S. Y. Kondr. et Kudratov, Ukr. bot. Zh. 60(1): 67 (2003). – Data on three genes of three vouchers are so far provided for this species (KONDRATYUK *et al.* 2014c).
- Calogaya pusilla* (A. Massal.) Arup, Frödén et Søchting – Bas.: *Physcia pusilla* A. Massal. ≡ *Caloplaca pusilla* (A. Massal.) Zahlbr. – ARUP *et al.* (2013: 39): *combination is based only on ITS phylogeny.
- Calogaya saxicola* (Hoffm.) Vondrák, in Vondrák et al., Lichenologist 48(3): 178 (2016). – Bas.: *Psora saxicola* Hoffm., Descr. Adumb. Plant. Lich. 1(3): 82 (1790). ≡ *Caloplaca saxicola* (Hoffm.) Nordin – Only nrITS sequences of three molecular markers mentioned here are so far provided for this species.
- Calogaya schistidii* (Anzi) Arup, Frödén et Søchting – Bas.: *Gyalolechia schistidii* Anzi ≡ *Caloplaca schistidii* (Anzi) Zahlbr. – ARUP *et al.* (2013: 39): *combination is based only on ITS phylogeny.

Caloplaca Th. Fr.,

Lich. arct. (Uppsala): 118 (1860) [Caloplacoideae]

Type species: *Caloplaca cerina* (Hedw.) Th. Fr.

Of 16 species accepted by ARUP *et al.* (2013) 7 species were based only on ITS data, 2 species were included without any molecular data.

Caloplaca cerina (Hedw.) Th. Fr. – Bas.: *Lichen cerinus* Hedw., Descr. micr.-anal. musc. frond. (Lipsiae) 2: 62 (1789). – FEDORENKO *et al.* (2009): nrITS and mtSSU data for two voucher specimens. GAYA *et al.* (2012): data on nrLSU. ARUP *et al.* (2013): data on three genes of single voucher are so far provided for this species.

Caloplaca chlorina (Flot.) Sandst. – Bas.: *Zeora cerina* a* *chlorina* Flot., Uebers. Arbeiten Veränd. Schles. Ges. Vaterl. Kultur [27]: 126 (1850) [1849]. – ARUP *et al.* (2013): data on three genes of single voucher are so far provided for this species.

Caloplaca hanneshertelii S. Y. Kondr. et Kärnefelt – ARUP *et al.* (2013): *only ITS data provided.

Caloplaca isidiigera Vězda – ARUP *et al.* (2013): *only ITS data provided.

Caloplaca monacensis (Leder.) Lettau – Bas.: *Pyrenodesmia monacensis* Leder., Ber. bayer. bot. Ges. 4: 26 (1896). – ARUP *et al.* (2013): *only ITS data provided.

Caloplaca pelodella H. Magn. – KONDRATYUK *et al.* (2013c): nrITS and mtSSU data for one voucher specimen.

Caloplaca pinicola H. Magn. – ARUP *et al.* (2013): *no molecular data are provided.

Caloplaca sterilis Šoun, Khodos. et Vondrák – ARUP *et al.* (2013): *no molecular data are provided.

Caloplaca stillicidiorum (Vahl.) Lyngé – Bas.: *Lichen stillicidiorum* Vahl, Icon. Plant. Dan. 6(18): 6 (1792). – ARUP *et al.* (2013): *no molecular data are provided.

Caloplaca subalpina Vondrák, Šoun et Palice – ARUP *et al.* (2013): *only ITS data provided.

Caloplaca thrachopontica Vondrák et Šoun – ARUP *et al.* (2013): *only ITS data provided.

Caloplaca turkuensis (Vain.) Zahlbr. – Bas.: *Placodium turkuense* Vain., Ann. bot. Soc. Zool.-Bot. fenn. Vanamo 6: 320 (1929). – ARUP *et al.* (2013): *only ITS and mtSSU data were provided in original paper, while data on nrLSU for one voucher are provided (BUNGARTZ *et al.* 2020).

Caloplaca ulmorum (Fink) Fink – ARUP *et al.* (2013): *only ITS data provided.

‘*Caloplaca*’ *cupulifera* (Vain.) Zahlbr., Cat. Lich. Univers. 7: 226 (1931). – Position of this species outside of the *Caloplaca* branch is hitherto illustrated only on the basis of nrITS data (BUNGARTZ *et al.* 2020).

‘*Caloplaca*’ *floridana* (Tuck.) S. C. Tucker, Bryologist 82(2): 132 (1979). – Position of this species outside of the *Caloplaca* branch is hitherto illustrated only on the basis of nrITS data (BUNGARTZ *et al.* 2020).

‘*Caloplaca*’ *quadrilocularis* (Nyl.) Zahlbr., Cat. Lich. Univers. 7: 202 (1931). – Data on two genes of one voucher of this species are hitherto provided (WILK *et al.* 2021).

Caloplaca aegaea Sipman → *Variospora aegaea* (Sipman) Arup, Frödén et Søchting

Caloplaca aequata (Hue) Zahlbr. → *Brownliella kobeana* (Nyl.) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur

Caloplaca aggregata Kantvilas et S. Y. Kondr. → *Gintarasiella aggregata* (Kantvilas et S. Y. Kondr.) S. Y. Kondr. et Hur

Caloplaca alaskensis Wetmore → *Calogaya alaskensis* (Wetmore) Arup, Frödén et Søchting

- Caloplaca albocrenulata* S. Y. Kondr. et V. Wirth → *Kaernefia albocrenulata* (V. Wirth et S. Y. Kondr.) S. Y. Kondr., A. Thell, Elix, J. Kim, A. S. Kondratyuk et J.-S. Hur
- Caloplaca albolutescens* (Nyl.) H. Olivier → *Pyrenodesmia albolutescens* (Nyl.) S. Y. Kondr.
- Caloplaca alcarum* Poelt → *Coppinsiella alcarum* (Poelt) E. S. Hansen et S. Y. Kondr.
- Caloplaca allochroa* Y. Joshi, Vondrák et Hur → *Gyalolechia allochroa* (Y. Joshi, Vondrák et Hur) Søchting, Frödén et Arup
- Caloplaca alnetorum* Giralt, Nimis et Poelt → *Athallia alnetorum* (Giralt, Nimis et Poelt) Arup, Frödén et Søchting
- Caloplaca alociza* (A. Massal.) Mig. → *Pyrenodesmia alociza* (A. Massal.) Arnold
- Caloplaca altoandina* (Malme) Zahlbr. → *Teuvoabtiana altoandina* (Malme) S. Y. Kondr. et Hur
- Caloplaca amarkantakana* Y. Joshi et Upreti → *Upretia amarkantakana* (Y. Joshi et Upreti) S. Y. Kondr. et A. Thell
- Caloplaca ambitiosa* (Darb.) Zahlbr. → *Austroplaca ambitiosa* (Darb.) Søchting, Frödén et Arup
- Caloplaca ammiospila* (Wahlenb.) H. Olivier → *Blastenia ammiospila* (Wahlenb.) Arup, Søchting et Frödén
- Caloplaca andina* (Räsänen) Scutari, Søchting et Rosato → *Scutaria andina* (Räsänen) Søchting, Frödén et Arup
- Caloplaca appressa* Wetmore et Kärnefelt → *Fulgogasparrea appressa* (Wetmore et Kärnefelt) S. Y. Kondr., Elix, Kärnefelt et A. Thell
- Caloplaca approximata* (Lynge) H. Magn. → *Amundsenia approximata* (Lynge) Søchting, Arup et Frödén
- Caloplaca aquensis* Houmeau et Cl. Roux → *Xanthocarpia aquensis* (Houmeau et Cl. Roux) Frödén, Arup et Søchting
- Caloplaca arcis* (Poelt et Vězda) Arup → *Flavoplaca arcis* (Poelt et Vězda) Arup, Frödén et Søchting
- Caloplaca arcisproxima* Vondrák, Říha, Arup et Søchting → *Flavoplaca arcisproxima* (Vondrák, Říha, Arup et Søchting) Arup, Søchting et Frödén
- Caloplaca arenaria* (Pers.) Müll. Arg. → *Rufoplaca arenaria* (Pers.) Arup, Søchting et Frödén
- Caloplaca arizonica* H. Magn. → *Opeltia arizonica* (H. Magn.) S. Y. Kondr. et Lökös
- Caloplaca arnoldii* (Wedd.) Zahlbr. ex Ginzb. → *Calogaya arnoldii* (Wedd.) Arup, Frödén et Søchting
- Caloplaca arnoldiiconfusa* Gaya et Nav.-Ros. → *Calogaya arnoldiiconfusa* (Gaya et Nav.-Ros.) Arup, Frödén et Søchting
- Caloplaca asserigena* (Stizenb.) Della Torre et Sarnth. → *Marchantiana asserigena* (Stizenb.) Søchting et Arup
- Caloplaca athallina* Darb. → *Parvoplaca athallina* (Darb.) Arup, Søchting et Frödén
- Caloplaca atroflava* (Turner) Mong. → *Pyrenodesmia atroflava* (Turner) S. Y. Kondr.
- Caloplaca aurantia* (Pers.) Hellb. → *Klauderuiella aurantia* (Pers.) S. Y. Kondr. et Hur
- Caloplaca aurantiellina* Harm. → *Ikaeria aurantiellina* (Harm.) S. Y. Kondr., Upreti et Hur
- Caloplaca aurea* (Schaer.) Zahlbr. → *Gyalolechia aurea* (Schaer.) A. Massal.
- Caloplaca australiensis* S. Y. Kondr., Kärnefelt et Filson → *Filsoniana australiensis* (S. Y. Kondr., Kärnefelt et Filson) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratyuk et J.-S. Hur
- Caloplaca australis* (Arnold) Zahlbr. → *Variospora australis* (Arnold) Arup, Frödén et Søchting
- Caloplaca austrocitrina* Vondrák, Říha, Arup et Søchting → *Flavoplaca austrocitrina* (Vondrák, Říha, Arup et Søchting) Arup, Søchting et Frödén
- Caloplaca austrocoreana* S. Y. Kondr., Lökös et Hur → *Loekoesia austrocoreana* S. Y. Kondr., Jung Kim, A. S. Kondr., S. O. Oh et Hur
- Caloplaca badioreagens* Tretiach et Muggia → *Pyrenodesmia badioreagens* (Tretiach et Muggia) Søchting, Arup et Frödén
- Caloplaca baltistanica* Poelt et Hinter. → *Athallia baltistanica* (Poelt et Hinter.) Halıcı et Vondrák
- Caloplaca bassiae* (Ach.) Zahlbr. → *Oxneriopsis bassiae* (Ach.) S. Y. Kondr., Upreti et Hur

- Caloplaca bastowii* S. Y. Kondr. et Kärnefelt → *Franwilsia bastowii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Caloplaca bermaguiana* S. Y. Kondr. et Kärnefelt → *Elixjohnia bermaguiana* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr. et Hur
- Caloplaca biatorina* (A. Massal.) J. Steiner → *Calogaya biatorina* (A. Massal.) Arup, Frödén et Søchting
- Caloplaca bogilana* Y. Joshi et Hur → *Jasonhuria bogilana* (Y. Joshi et Hur) S. Y. Kondr., Lökös, Jung Kim, A. S. Kondr. et S. O. Oh
- Caloplaca bolacina* (Tuck.) Herre → *Polycauliona bolacina* (Tuck.) Arup, Frödén et Søchting
- Caloplaca bolanderi* (Tuck.) H. Magn. → *Tomnashia luteominia* (Tuck.) S. Y. Kondr. et Hur
- Caloplaca bonae-spei* Almb. et Poelt → *Teloschistopsis bonae-spei* (Almb. et Poelt) Frödén, Arup et Søchting
- Caloplaca borysthenica* Khodos. et S. Y. Kondr. → *Xanthocarpia borysthenica* (Khodos. et S. Y. Kondr.) Frödén, Arup et Søchting
- Caloplaca brachyspora* Mereschk. → *Athallia brachyspora* (Mereschk.) Halıcı et Vondrák
- Caloplaca bracteata* (Hoffm.) Jatta → *Fulgensia bracteata* (Hoffm.) Räsänen
- Caloplaca brattiae* W. A. Weber → *Polycauliona brattiae* (W. A. Weber) Arup, Frödén et Søchting
- Caloplaca britannica* R. Sant. → *Haloplaca britannica* (R. Sant.) Arup, Frödén et Søchting
- Caloplaca brouardii* (B. de Lesd.) Zahlbr. → *Fulgogasparrea brouardii* (B. de Lesd.) S. Y. Kondr.
- Caloplaca brownlieae* S. Y. Kondr., Elix et Kärnefelt → *Neobrownliella brownlieae* (S. Y. Kondr., Elix et Kärnefelt) S. Y. Kondr., Elix, Kärnefelt et A. Thell
- Caloplaca bryochryson* Poelt → *Calogaya bryochryson* (Poelt) Vondrák
- Caloplaca buelliae* Olech et Søchting → *Shackletonia buelliae* (Olech et Søchting) Søchting, Frödén et Arup
- Caloplaca burneyensis* S. Y. Kondr. et Kärnefelt → *Streimanniella burneyensis* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur
- Caloplaca caesioisidiata* Arup et van den Boom → *Loekoeslaszloa caesioisidiata* (Arup et van den Boom) S. Y. Kondr.
- Caloplaca caesiosorediata* Arup et van den Boom → *Loekoeslaszloa caesiosorediata* (Arup et van den Boom) S. Y. Kondr.
- Caloplaca calcitraba* Nav.-Ros., Gaya et Cl. Roux → *Flavoplaca calcitraba* (Nav.-Ros., Gaya et Cl. Roux) Arup, Frödén et Søchting
- Caloplaca cancarixiticola* Nav.-Ros., Egea et Llimona → *Variospora cancarixiticola* (Nav.-Ros., Egea et Llimona) Arup, Frödén et Søchting
- Caloplaca carphinea* (Fr.) Jatta → *Usnochroma carphineum* (Fr.) Søchting, Arup et Frödén
- Caloplaca castellana* (Räsänen) Poelt → *Pachypeltis castellana* (Räsänen) Søchting, Frödén et Arup
- Caloplaca catalinae* H. Magn. → *Blastenia catalinae* (H. Magn.) E. D. Rudolf
- Caloplaca catillarioides* Arup et van den Boom → *Loekoeslaszloa catillarioides* (Arup et van den Boom) S. Y. Kondr.
- Caloplaca cerinella* (Nyl.) Flagey → *Athallia cerinella* (Nyl.) Arup, Frödén et Søchting
- Caloplaca cerinelloides* (Erichsen) Poelt → *Athallia cerinelloides* (Erichsen) Arup, Frödén et Søchting
- Caloplaca chalybaea* (Fr.) Müll. Arg. → *Pyrenodesmia chalybaea* (Fr.) A. Massal.
- Caloplaca chejuensis* S. Y. Kondr. et Hur → *Orientophila chejuensis* (S. Y. Kondr. et Hur) S. Y. Kondr., Lökös et Hur
- Caloplaca chelyae* Pérez-Vargas → *Parvoplaca chelyae* (Pérez-Vargas) Vondrák, Halıcı et Arup
- Caloplaca chrysodeta* (Vain.) Dombr. [as 'chrysodetum'] → *Leproplaca chrysodeta* (Vain.) J. R. Laundon et Ahti
- Caloplaca chrysophthalma* Degel. → *Solitaria chrysophthalma* (Degel.) Arup, Søchting et Frödén
- Caloplaca cinnabarina* (Ach.) Zahlbr. → *Neobrownliella cinnabarina* (Ach.) S. Y. Kondr., Upreti et A. Thell

- Caloplaca cirrochroa* (Ach.) Th. Fr. → ***Leproplaca cirrochroa*** (Ach.) Arup, Frödén et Søchting
Caloplaca cirrochrooides (Vain.) Zahlbr. → ***Austroplaca cirrochrooides*** (Vain.) Søchting, Frödén et Arup
Caloplaca citrina (Hoffm.) Th. Fr. → ***Flavoplaca citrina*** (Hoffm.) Arup, Frödén et Søchting
Caloplaca citrina var. *arcis* Poelt et Vězda → ***Flavoplaca arcis*** (Poelt et Vězda) Arup, Frödén et Søchting
Caloplaca citrina var. *maritima* B. de Lesd. → ***Flavoplaca maritima*** (B. de Lesd.) Arup, Frödén et Søchting
Caloplaca cladodes (Tuck.) Zahlbr. → ***Pachypeltis cladodes*** (Tuck.) Søchting, Frödén et Arup
Caloplaca cliffwetmorei S. Y. Kondr. et Kärnefelt → ***Sirenophila cliffwetmorei*** (S. Y. Kondr. et Kärnefelt) S. Y. Kondr.
Caloplaca communis Vondrák, Říha, Arup et Søchting → ***Flavoplaca communis*** (Vondrák, Říha, Arup et Søchting) Arup, Søchting et Frödén
Caloplaca concreticola Vondrák et Khodos. → ***Pyrenodesmia concreticola*** (Vondrák et Khodos.) Søchting, Arup et Frödén
Caloplaca confusa Vondrák, Říha, Arup et Søchting → ***Flavoplaca confusa*** (Vondrák, Říha, Arup et Søchting) Arup, Søchting et Frödén
Caloplaca coralliza Arup et Åkelius → ***Blastenia coralliza*** (Arup et Åkelius) Arup, Søchting et Frödén
Caloplaca coralloides (Tuck.) Hulting → ***Polycauliona coralloides*** (Tuck.) Hue
Caloplaca coronata (Kremp. ex Körb.) J. Steiner → ***Flavoplaca coronata*** (Kremp. ex Körb.) Arup, Frödén et Søchting
Caloplaca cranfieldii S. Y. Kondr. et Kärnefelt → ***Flavoplaca cranfieldii*** (S. Y. Kondr. et Kärnefelt) Arup, Frödén et Søchting
Caloplaca crassa (Malme) Zahlbr. → ***Rusavskia crassa*** (Malme) S. Y. Kondr. et Kärnefelt
Caloplaca crenularia (With.) J. R. Laundon → ***Blastenia crenularia*** (With.) Arup, Søchting et Frödén
Caloplaca crenulatella (Nyl.) H. Olivier → ***Xanthocarpia crenulatella*** (Nyl.) Frödén, Arup et Søchting
Caloplaca cribrata (Hue) Zahlbr. → ***Gondwania cribrata*** (Hue) Søchting, Frödén et Arup
Caloplaca dahlia Elix, S. Y. Kondr. et Kärnefelt → ***Eilifdahlia dahlia*** (Elix, S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur
Caloplaca darbshirei (C. W. Dodge et G. E. Baker) Cretz. → ***Austroplaca darbshirei*** (C. W. Dodge et G. E. Baker) Søchting, Frödén et Arup
Caloplaca decipiens (Arnold) Blomb. et Forssell → ***Calogaya decipiens*** (Arnold) Arup, Frödén et Søchting
Caloplaca decipioides Arup → ***Fulgogasparrea decipioides*** (Arup) S. Y. Kondr., M. H. Jeong, Kärnefelt, Elix, A. Thell et Hur
Caloplaca demissa (Flot. ex Körb.) Arup et Grube → ***Olegblumia demissa*** Flot. ex S. Y. Kondr., Lökös, Jung Kim, A. S. Kondr., S. O. Oh et Hur
Caloplaca dichroa Arup → ***Flavoplaca dichroa*** (Arup) Arup, Frödén et Søchting
Caloplaca diffluens (Hue) Zahlbr. → ***Orientophila diffluens*** (Hue) S. Y. Kondr., Lökös et Hur
Caloplaca diffusa Vondrák et Llimona → ***Xanthocarpia diffusa*** (Vondrák et Llimona) Frödén, Arup et Søchting
Caloplaca digitaurea Søgaard, Søchting et Sancho → ***Tassiloa digitaurea*** (Søgaard, Søchting et Sancho) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur
Caloplaca dolomiticola (Hue) Zahlbr. → ***Variospora dolomiticola*** (Hue) Arup, Frödén et Søchting
Caloplaca duplicata (Vain.) H. Olivier → ***Pyrenodesmia duplicata*** (Vain.) S. Y. Kondr., Lökös et Hur
Caloplaca durietzii H. Magn. → ***Scythioria duritzii*** (H. Magn.) S. Y. Kondr.
Caloplaca ehrenbergii (Müll. Arg.) Zahlbr. → ***Elenkiniana ehrenbergii*** (Müll. Arg.) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur
Caloplaca elegans var. *laxa* (Müll. Arg.) Jatta → ***Zeroviella laxa*** (Müll. Arg.) S. Y. Kondr. et J.-S. Hur
Caloplaca elegans var. *musciicola* Jatta → ***Rusavskia musciicola*** (Jatta) S. Y. Kondr. et Kärnefelt

- Caloplaca elegantissima* (Nyl.) Zahlbr. → *Stellarangia elegantissima* (Nyl.) Frödén, Arup et Söchting
Caloplaca eos S. Y. Kondr. et Kärnefelt → *Sirenophila eos* (S. Y. Kondr. et Kärnefelt) Arup, Frödén et Söchting
Caloplaca epierodens Cl. Roux et M. Bertrand → *Variospora epierodens* (Cl. Roux et M. Bertrand) Cl. Roux et M. Bertrand
Caloplaca epigaea Söchting, Huneck et Etayo → *Xanthocarpia epigaea* (Söchting, Huneck et Etayo) Frödén, Arup et Söchting
Caloplaca epiphyta Lynge → *Opeltia epiphyta* (Lynge) S. Y. Kondr.
Caloplaca erecta Arup et Mayrhofer → *Austroplaca erecta* (Arup et Mayrhofer) Söchting, Frödén et Arup
Caloplaca erichanseni S. Y. Kondr., A. Tell, Kärnefelt et Elix → *Xanthocarpia erichanseni* (S. Y. Kondr., A. Thell, Kärnefelt et Elix) Frödén, Arup et Söchting
Caloplaca erodens Tretiach, Pinna et Grube → *Pyrenodesmia erodens* (Tretiach, Pinna et Grube) Söchting, Arup et Frödén
Caloplaca erythrina (Müll. Arg.) Zahlbr. → *Variospora erythrina* (Müll. Arg.) Arup, Frödén et Söchting
Caloplaca erythrostickta (Taylor) Zahlbr. → *Tayloriellina erythrostickta* (Taylor) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur
Caloplaca eudoxa (Müll. Arg.) Zahlbr. → *Teloschistopsis eudoxa* (Müll. Arg.) Frödén, Arup et Söchting
Caloplaca feracissima H. Magn. → *Xanthocarpia feracissima* (H. Magn.) Frödén, Arup et Söchting
Caloplaca ferdinandmuelleri S. Y. Kondr. et Kärnefelt → *Filsoniana ferdinandmuelleri* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratyuk et J.-S. Hur
Caloplaca fernandeziana (Zahlbr.) Follmann et Redón → *Teuwoahiana fernandeziana* (Zahlbr.) S. Y. Kondr. et Hur
Caloplaca ferrarii (Bagl.) Jatta → *Xanthocarpia ferrarii* (Bagl.) Frödén, Arup et Söchting
Caloplaca ferruginea (Huds.) Th. Fr. → *Blastenia ferruginea* (Huds.) A. Massal.
Caloplaca ferrugineoides H. Magn. → *Calogaya ferrugineoides* (H. Magn.) Arup, Frödén et Söchting
Caloplaca fiumana Zahlbr. → *Coppinsiella fiumana* (Zahlbr.) I. V. Frolov
Caloplaca flavescens (Huds.) J. R. Laundon → *Klauderuiella flavescens* (Huds.) S. Y. Kondr. et Hur
Caloplaca flavocitrina (Nyl.) H. Olivier → *Flavoplaca flavocitrina* (Nyl.) Arup, Frödén et Söchting
Caloplaca flavogranulosa Arup → *Scythioria flavogranulosa* (Arup) S. Y. Kondr.
Caloplaca flavorubescens (Huds.) J. R. Laundon → *Opeltia flavorubescens* (Huds.) S. Y. Kondr. et Hur
Caloplaca flavovirescens (Wulfen) Dalla Torre et Sarnth. → *Laundonia flavovirescens* (Wulfen) S. Y. Kondr., Lökös et Hur
Caloplaca fuerteventurae van den Boom et Etayo → *Variospora fuerteventurae* (van den Boom et Etayo) van den Boom et Etayo
Caloplaca furfuracea H. Magn. → *Blastenia furfuracea* (H. Magn.) Arup, Söchting et Frödén
Caloplaca galactophylla (Tuck.) Riddle → *Squamulea galactophylla* (Tuck.) Arup, Söchting et Frödén
Caloplaca galbina S. Y. Kondr. et Hur → *Yoshimuria galbina* (S. Y. Kondr. et J.-S. Hur) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur
Caloplaca gallowayi S. Y. Kondr., Kärnefelt et Filson → *Elixjohnia gallowayi* (S. Y. Kondr., Kärnefelt et Filson) S. Y. Kondr. et Hur
Caloplaca geleverjae Khodos. et S. Y. Kondr. → *Flavoplaca geleverjae* (Khodos. et S. Y. Kondr.) Arup, Frödén et Söchting
Caloplaca germanica H. Magn. → *Rufoplaca germanica* (H. Magn.) Arup, Söchting et Frödén
Caloplaca gilfillaniorum G. Kantvilas et S. Y. Kondr. → *Kaernefia gilfillaniorum* (G. Kantvilas et S. Y. Kondr.) S. Y. Kondr., A. Thell, Elix, J. Kim, A. S. Kondratyuk et J.-S. Hur
Caloplaca gintarasii S. Y. Kondr. et Kärnefelt → *Sirenophila gintarasii* (S. Y. Kondr. et Kärnefelt) Arup, Frödén et Söchting
Caloplaca glomerata Arup → *Variospora glomerata* (Arup) Arup, Frödén et Söchting

- Caloplaca gloriae* Llimona et Werner → *Elenkiniana gloriae* (Llimona et Werner) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Caloplaca gomerana* J. Steiner → *Elenkiniana gomerana* (J. Steiner) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Caloplaca gordejevii* (Tomin) Oxner ex Khodos. → *Mikhtomia gordejevii* (Tomin) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Caloplaca granulosa* (Müll. Arg.) J. Steiner → *Flavoplaca granulosa* (Müll. Arg.) Arup, Frödén et Søchting
- Caloplaca havaasii* H. Magn. → *Flavoplaca havaasii* (H. Magn.) Arup, Frödén et Søchting
- Caloplaca herbidella* (Arnold) H. Magn. → *Blastenia herbidella* (Hue) Servít
- Caloplaca hertelii* Søchting, Øvstedal et Sancho → *Shackletonia hertelii* (Søchting, Øvstedal et Sancho) Søchting, Frödén et Arup
- Caloplaca holocarpa* (Hoffm.) A. E. Wade → *Athallia holocarpa* (Hoffm.) Arup, Frödén et Søchting
- Caloplaca hookeri* (C. W. Dodge) Søchting, Øvstedal et Sancho → *Austroplaca hookeri* (C. W. Dodge) Søchting, Frödén et Arup
- Caloplaca hungarica* H. Magn. → *Blastenia hungarica* (H. Magn.) Arup, Søchting et Frödén
- Caloplaca ignea* Arup → *Igneoaplaca ignea* (Arup) S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur
- Caloplaca impolita* Arup → *Polycauliona impolita* (Arup) Arup, Frödén et Søchting
- Caloplaca inconnexa* var. *nesodes* Poelt et Nimis → *Squamulea nesodes* (Poelt et Nimis) S. Y. Kondr.
- Caloplaca inconspicua* Arup → *Polycauliona inconspicua* (Arup) Arup, Frödén et Søchting
- Caloplaca insignis* Søchting et Øvstedal → *Shackletonia insignis* (Søchting et Øvstedal) Søchting, Frödén et Arup
- Caloplaca interfulgens* (Nyl.) J. Steiner → *Xanthocarpia interfulgens* (Nyl.) Frödén, Arup et Søchting
- Caloplaca intrudens* H. Magn. → *Pachypeltis intrudens* (H. Magn.) Søchting, Frödén et Arup
- Caloplaca invadens* Lyngby → *Pachypeltis invadens* Søchting, Frödén et Arup
- Caloplaca iomma* Olech et Søchting → *Catenarina iomma* (Olech et Søchting) Søchting et Søgaard
- Caloplaca isidioclada* Zahlbr. → *Villophora isidioclada* (Zahlbr.) Søchting, Frödén et Arup
- Caloplaca jackelioxii* S. Y. Kondr., Kärnefelt et A. Thell → *Elixjohnia jackelioxii* (S. Y. Kondr., Kärnefelt et A. Thell) S. Y. Kondr. et Hur
- Caloplaca jerramungupensis* S. Y. Kondr., Kärnefelt et Elix → *Xanthocarpia jerramungupensis* (S. Y. Kondr., Kärnefelt et Elix) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Caloplaca johnstonii* (C. W. Dodge) Søchting et Olech → *Austroplaca johnstonii* (C. W. Dodge) Søchting, Frödén et Arup
- Caloplaca jungermanniae* (Vahl) Th. Fr. → *Bryoplaca jungermanniae* (Vahl) Søchting, Frödén et Arup
- Caloplaca juniperina* Tomin → *Opeltia juniperina* (Tomin) S. Y. Kondr. et Lökös
- Caloplaca kaernefeltii* S. Y. Kondr., Elix et A. Thell → *Kaernefia kaernefeltii* (S. Y. Kondr., Elix et A. Thell) S. Y. Kondr., Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Caloplaca kalbiorum* S. Y. Kondr. et Kärnefelt → *Streimanniella kalbiorum* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur
- Caloplaca kantvilasii* S. Y. Kondr. et Kärnefelt → *Flavoplaca kantvilasii* (S. Y. Kondr. et Kärnefelt) Arup, Frödén et Søchting
- Caloplaca kiamae* S. Y. Kondr. et Kärnefelt → *Squamulea kiamae* (S. Y. Kondr. et Kärnefelt) Arup, Søchting et Frödén
- Caloplaca kiamae* S. Y. Kondr. et Kärnefelt → (see also) *Filsoniana kiamae* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur → (see also) *Thelliana pseudokiamae* S. Y. Kondr., Kärnefelt, Elix et Hur
- Caloplaca kilcundaensis* S. Y. Kondr. et Kärnefelt → *Franwilsia kilcundaensis* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Caloplaca kobeana* (Nyl.) Zahlbr. → *Browniella kobeana* (Nyl.) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur

- Caloplaca kudratovii* S. Y. Kondr., Zarei-Darki et Hur → *Variospora kudratovii* (S. Y. Kondr., B. Zarei-Darki et J.-S. Hur) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Caloplaca lateritia* (Taylor) Zahlbr. → *Nevilleiella lateritia* (Taylor) S. Y. Kondr. et Hur
- Caloplaca latzelii* (Servít) Clauzade et Cl. Roux → *Variospora latzelii* (Servít) S. Y. Kondr.
- Caloplaca lenae* Søchting et G. Figueras → *Hanstrassia lenae* (Søchting et G. Figueras) S. Y. Kondr.
- Caloplaca leucerythrella* (Nyl.) Zahlbr. → *Orientophila leucerythrella* (Nyl.) S. Y. Kondr., Lökös et Hur
- Caloplaca limonia* Nimis et Poelt → *Flavoplaca limonia* (Nimis et Poelt) Arup, Frödén et Søchting
- Caloplaca lobulata* (Flörke) Hellb. → *Seawardiella lobulata* (Flörke) S. Y. Kondr., I. Kärnefelt et A. Thell
- Caloplaca loekoesii* S. Y. Kondr. et J.-S. Hur → *Orientophila loekoesii* (S. Y. Kondr. et J.-S. Hur) Arup, Søchting et Frödén
- Caloplaca lucens* (Nyl.) Zahlbr. → *Austroplaca lucens* (Nyl.) Søchting, Frödén et Arup
- Caloplaca ludificans* Arup → *Tomnashia ludificans* (Arup) S. Y. Kondr. et Hur
- Caloplaca luteoalba* (Turner) Th. Fr. → *Cerothallia luteoalba* (Turner) Arup, Frödén et Søchting
- Caloplaca luteominia* (Tuck.) Zahlbr. → *Tomnashia luteominia* (Tuck.) S. Y. Kondr. et Hur
- Caloplaca maccarthyi* S. Y. Kondr., Kärnefelt et Elix → *Sirenophila maccarthyi* (S. Y. Kondr., Kärnefelt et Elix) Arup, Frödén et Søchting
- Caloplaca macrocarpa* (Anzi) Zahlbr. → *Variospora macrocarpa* (Anzi) Arup, Frödén et Søchting
- Caloplaca marchantii* S. Y. Kondr. et Kärnefelt → *Nevilleiella marchantii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr. et Hur
- Caloplaca marina* (Wedd.) Zahlbr. → *Flavoplaca marina* (Wedd.) Arup, Frödén et Søchting
- Caloplaca maritima* (B. de Lesd.) B. de Lesd. → *Flavoplaca maritima* (B. de Lesd.) Arup, Frödén et Søchting
- Caloplaca marmorata* (Bagl.) Jatta → *Xanthocarpia marmorata* (Bagl.) Frödén, Arup et Søchting
- Caloplaca mereschkowskiana* S. Y. Kondr. et Kärnefelt → *Flavoplaca mereschkowskiana* (S. Y. Kondr. et Kärnefelt) Arup, Søchting et Frödén
- Caloplaca michelagoensis* Elix, S. Y. Kondr. et Kärnefelt → *Streimanniella michelagoensis* (Elix, S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur
- Caloplaca micromera* (Hue) Zahlbr. → *Squamulea micromera* (Hue) S. Y. Kondr., Lökös et Hur
- Caloplaca micromontana* Frolov, Wilk et Vondrák → *Pyrenodesmia micromontana* (Frolov, Wilk et Vondrák) Hafellner et Türk
- Caloplaca microphyllina* (Tuck.) Hasse → *Villophora microphyllina* (Tuck.) S. Y. Kondr.
- Caloplaca microstepposa* Frolov, Nadyeina, Khodos. et Vondrák → *Pyrenodesmia microstepposa* (Frolov, Nadyeina, Khodos. et Vondrák) Hafellner et Türk
- Caloplaca microthallina* Wedd. → *Flavoplaca microthallina* (Wedd.) Arup, Frödén et Søchting
- Caloplaca millegrana* (Müll. Arg.) Zahlbr. → *Austroplaca millegrana* (Müll. Arg.) Søchting, Frödén et Arup
- Caloplaca mogoltanica* S. Y. Kondr. et Kudratov → *Calogaya mogoltanica* (S. Y. Kondr. et Kudratov) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur
- Caloplaca montisfracti* S. Y. Kondr. et Kärnefelt → *Neobrowniella montisfracti* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Elix, Kärnefelt et A. Thell
- Caloplaca multicolor* (Hue) S. Y. Kondr. et Hur → *Mikhtomia multicolor* (Hue) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Caloplaca namibensis* Kärnefelt → *Stellarangia namibensis* (Kärnefelt) Frödén, Arup et Søchting
- Caloplaca nashii* Nav.-Ros., Gaya et Hladún → *Tomnashia nashii* (Nav.-Ros., Gaya et Hladún) S. Y. Kondr. et Hur
- Caloplaca navasiana* Nav.-Ros. et Cl. Roux → *Flavoplaca navasiana* (Nav.-Ros. et Cl. Roux) Arup, Søchting et Frödén
- Caloplaca necator* Poelt et Clauzade → *Athallia necator* (Poelt et Clauzade) Vondrák, Halıcı, Güllü et Demirel

- Caloplaca neobaltistanica* S. Y. Kondr., Lökös et Hur → *Opeltia neobaltistanica* (S. Y. Kondr., Lökös et Hur) S. Y. Kondr. et Lökös
- Caloplaca nigromarina* Vondrák, Říha, Arup et Söchting → *Flavoplaca nigromarina* (Vondrák, Říha, Arup et Söchting) Arup, Söchting et Frödén
- Caloplaca oasis* (A. Massal.) Szat. → *Flavoplaca oasis* (A. Massal.) Arup, Frödén et Söchting
- Caloplaca obliterans* (Nyl.) Blomb. et Forssell → *Leproplaca obliterans* (Nyl.) Arup, Frödén et Söchting
- Caloplaca obscurella* (J. Lahm) Th. Fr. → *Pyrenodesmia obscurella* (J. Lahm) M. Choisy
- Caloplaca occidentalis* Elix, S. Y. Kondr. et Kärnefelt → *Marchantiana occidentalis* (Elix, S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Caloplaca ochracea* f. *lactea* (A. Massal.) Jatta → *Xanthocarpia lactea* (A. Massal.) A. Massal.
- Caloplaca ochracea* (Schaer.) Flagey → *Xanthocarpia ochracea* (Schaer.) A. Massal. et De Not.
- Caloplaca ora* Poelt et Nimis → *Flavoplaca ora* (Poelt et Nimis) Arup, Frödén et Söchting
- Caloplaca orthoclada* Zahlbr. → *Follmannia orthoclada* (Zahlbr.) Frödén, Arup et Söchting
- Caloplaca oxfordensis* Fink → *Rufoplaca oxfordensis* (Fink) Arup, Söchting et Frödén
- Caloplaca oxneri* S. Y. Kondr. et Söchting → *Oxneriopsis oxneri* (S. Y. Kondr. et Söchting) S. Y. Kondr., Upreti et Hur
- Caloplaca parviloba* Wetmore → *Squamulea parviloba* (Wetmore) Arup, Söchting et Frödén
- Caloplaca paulii* Poelt → *Variospora paulii* (Poelt) Arup, Frödén et Söchting
- Caloplaca persica* (J. Steiner) M. Steiner et Poelt → *Lazarenkoella persica* (J. Steiner) S. Y. Kondr. et Lökös
- Caloplaca persimilis* Wetmore → *Laundonia persimilis* (Wetmore) S. Y. Kondr., Lökös et Hur
- Caloplaca phlogina* (Ach.) Flagey → *Scythioria phlogina* (Ach.) S. Y. Kondr., Kärnefelt, Elix, A. Thell et Hur
- Caloplaca pindarensis* (Räsänen) D. D. Awasthi → *Ioplaca pindarensis* (Räsänen) Poelt et Hinter.
- Caloplaca pollinii* (A. Massal.) Jatta → *Huneckia pollinii* (A. Massal.) S. Y. Kondr., Elix, Kärnefelt, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Caloplaca polycarpa* (A. Massal.) Zahlbr. → *Flavoplaca polycarpa* (A. Massal.) Arup, Frödén et Söchting
- Caloplaca polycarpoides* (J. Steiner) M. Steiner et Poelt → *Lazarenkoella polycarpoides* (J. Steiner) S. Y. Kondr. et Lökös
- Caloplaca proteus* Poelt → *Leproplaca proteus* (Poelt) Arup, Frödén et Söchting
- Caloplaca pruinosa* (Körb.) Zahlbr. → *Fulgensia pruinosa* (Körb.) Poelt
- Caloplaca pusilla* (A. Massal.) Zahlbr. → *Calogaya pusilla* (A. Massal.) Arup, Frödén et Söchting
- Caloplaca pyracea* (Ach.) Zwackh → *Athallia pyracea* (Ach.) Arup, Frödén et Söchting
- Caloplaca raesaenenii* Bredkina → *Xanthocarpia raesaenenii* (Bredkina) S. Y. Kondr.
- Caloplaca regalis* (Vain.) Zahlbr. → *Gondwania regalis* (Vain.) Söchting, Frödén et Arup
- Caloplaca renatae* V. Wirth et S. Y. Kondr. → *Franwilsia renatae* (V. Wirth et S. Y. Kondr.) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Caloplaca rexfilsonii* S. Y. Kondr. et Kärnefelt → *Filsoniana rexfilsonii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Caloplaca rheinigera* Elix et S. Y. Kondr. → *Huneckia rheinigera* (Elix et S. Y. Kondr.) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Caloplaca rosei* Hasse → *Tomnashia rosei* (Hasse) S. Y. Kondr. et Hur
- Caloplaca rugulosa* (Nyl.) Zahlbr. → *Teuvoahtiana rugulosa* (Nyl.) S. Y. Kondr. et Hur
- Caloplaca sauronii* Söchting et Øvstedal → *Shackletonia sauronii* (Söchting et Øvstedal) Söchting, Frödén et Arup
- Caloplaca saxicola* (Hoffm.) Nordin → *Calogaya saxicola* (Hoffm.) Vondrák
- Caloplaca saxifragarum* Poelt → *Athallia saxifragarum* (Poelt) Arup, Frödén et Söchting
- Caloplaca scabrosa* Söchting, Lorentsen et Arup → *Blastenia scabrosa* (Söchting, Lorentsen et Arup) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur

- Caloplaca scarlatina* Zahlbr. → *Filsoniana scarlatina* (Zahlbr.) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratyuk et J.-S. Hur
- Caloplaca schistidii* (Anzi) Zahlbr. → *Calogaya schistidii* (Anzi) Arup, Frödén et Søchting
- Caloplaca scopularis* (Nyl.) Lettau → *Athallia scopularis* (Nyl.) Arup
- Caloplaca scoriophila* (A. Massal.) Zahlbr. → *Usnochroma scoriophilum* (A. Massal.) Søchting, Arup et Frödén
- Caloplaca scotoplaca* (Nyl.) H. Magn. → *Rufoplaca scotoplaca* (Nyl.) Arup, Søchting et Frödén
- Caloplaca seppeltii* S. Y. Kondr. et Kärnefelt → *Streimanniella seppeltii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur
- Caloplaca sergeyana* Kantvilas → *Eilifdahlia sergeyana* (Kantvilas) S. Y. Kondr., Elix, Kärnefelt et A. Thell
- Caloplaca servitiana* Szatala → *Parvoplaca servitiana* (Szatala) Arup, Søchting et Frödén
- Caloplaca sinapisperma* (DC.) Maheu et A. Gillet → *Bryoplaca sinapisperma* (Lam.) Søchting, Frödén et Arup
- Caloplaca siphonospora* Olech et Søchting → *Shackletonia siphonospora* (Olech et Søchting) Søchting, Frödén et Arup
- Caloplaca skii* Khodos., Vondrák et Šoun → *Fominiella skii* (Khodos., Vondrák et Šoun) S. Y. Kondr., Upreti et Hur
- Caloplaca soralifera* Vondrák et Hrouzek → *Pyrenodesmia soralifera* (Vondrák et Hrouzek) S. Y. Kondr.
- Caloplaca sorediata* (Vain.) Du Rietz → *Rusavskia sorediata* (Vain.) S. Y. Kondr. et Kärnefelt
- Caloplaca sorediella* Arup → *Haloplaca sorediella* (Arup) Arup, Frödén et Søchting
- Caloplaca soropelta* (E. S. Hansen, Poelt et Søchting) Søchting → *Austroplaca soropelta* (E. S. Hansen, Poelt et Søchting) Søchting, Frödén et Arup
- Caloplaca spodoplaca* (Nyl.) Zahlbr. → *Yoshimuria spodoplaca* (Nyl.) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Caloplaca squamosa* (B. de Lesd.) Zahlbr. → *Squamulea squamosa* (B. de Lesd.) Arup, Søchting et Frödén
- Caloplaca stantonii* W.A. Weber ex Arup → *Gyalolechia stantonii* (W. A. Weber ex Arup) Søchting, Frödén et Arup
- Caloplaca stellata* Wetmore et Kärnefelt → *Polycauliona stellata* (Wetmore et Kärnefelt) Arup, Frödén et Søchting
- Caloplaca stipitata* Wetmore → *Gyalolechia stipitata* (Wetmore) Søchting, Frödén et Arup
- Caloplaca suaedae* O.L. Gilbert et Coppins → *Haloplaca suaedae* (O. L. Gilbert et Coppins) Arup, Frödén et Søchting
- Caloplaca subbracteata* (Nyl.) Lettau → *Fulgensia subbracteata* (Nyl.) Poelt
- Caloplaca subflavorubescens* Y. Joshi et Hur → *Mikhtomia subflavorubescens* (Y. Joshi et Hur) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Caloplaca sublobulata* (Nyl.) Zahlbr. → *Gondwania sublobulata* (Nyl.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur
- Caloplaca subluteoalba* S. Y. Kondr. et Kärnefelt → *Cerothallia subluteoalba* (S. Y. Kondr. et Kärnefelt) Arup, Frödén et Søchting
- Caloplaca subochracea* (Wedd.) Werner → *Blastenia subochracea* (Wedd.) Arup, Søchting et Frödén
- Caloplaca subpallida* H. Magn. → *Rufoplaca subpallida* (H. Magn.) Arup, Søchting et Frödén
- Caloplaca subsopularis* (Arup et Frisch) S. Y. Kondr. → *Orientophila subsopularis* Arup et Frisch
- Caloplaca subsoluta* (Nyl.) Zahlbr. → *Squamulea subsoluta* (Nyl.) Arup, Søchting et Frödén
- Caloplaca substerilis* Vondrák, Palice et van den Boom → *Coppinsiella substerilis* (Vondrák, Palice et van den Boom) S.Y. Kondr. et Lökös
- Caloplaca substerilis* subsp. *orbicularis* Moniri, Vondrák et Malíček → *Coppinsiella fiumana* (Zahlbr.) I. V. Frolov

- Caloplaca tavaresiana* Nav.-Ros. et Cl. Roux → *Flavoplaca tavaresiana* (Nav.-Ros. et Cl. Roux) Arup, Frödén et Søchting
- Caloplaca teicholyta* (Ach.) J. Steiner → *Pyrenodesmia teicholyta* (Ach.) E. D. Rudolph
- Caloplaca testudinea* V. Wirth et Kärnefelt → *Stellarangia testudinea* (V. Wirth et Kärnefelt) Frödén, Arup et Søchting
- Caloplaca tetraspora* (Nyl.) H. Olivier → *Bryoplaca tetraspora* (Nyl.) Søchting, Frödén et Arup
- Caloplaca texana* Wetmore et Kärnefelt → *Wetmoreana texana* (Wetmore et Kärnefelt) Arup, Frödén et Søchting
- Caloplaca thallincola* (Wedd.) Du Rietz → *Klauderuiella thallincola* (Wedd.) S. Y. Kondr. et Hur
- Caloplaca thamnodes* Poelt → *Polycauliona thamnodes* (Poelt) Arup, Frödén et Søchting
- Caloplaca tiroliensis* Zahlbr. → *Parvoplaca tiroliensis* (Zahlbr.) Arup, Søchting et Frödén
- Caloplaca tomareeana* S. Y. Kondr. et Kärnefelt → *Tarasginia tomareeana* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur
- Caloplaca trachyphylla* (Tuck.) Zahlbr. → *Golubkovaeva trachyphylla* (Tuck.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur
- Caloplaca tristiuscula* H. Magn. → *Rufoplaca tristiuscula* (H. Magn.) Arup, Søchting et Frödén
- Caloplaca ussuriensis* Oxner, S. Y. Kondr. et Elix → *Lazarenkoioopsis ussuriensis* (Oxner, S. Y. Kondr. et Elix) S. Y. Kondr., Lökös et Hur
- Caloplaca ulcerosa* Coppins et P. James → *Coppinsiella ulcerosa* (Coppins et P. James) S. Y. Kondr. et Lökös
- Caloplaca variabilis* (Pers.) Müll. Arg. → *Pyrenodesmia variabilis* (Pers.) A. Massal.
- Caloplaca velana* (A. Massal.) Du Rietz → *Variospora velana* (A. Massal.) Arup, Frödén et Søchting
- Caloplaca verruculifera* (Vain.) Zahlbr. → *Verrucoplaca verruculifera* (Vain.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur
- Caloplaca vitellinula* (Nyl.) H. Olivier → *Athallia vitellinula* (Nyl.) Arup, Frödén et Søchting
- Caloplaca wetmorei* Nimis, Poelt et Tretiach → *Tassiloa wetmorei* (Nimis, Poelt et Tretiach) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur
- Caloplaca whinrayi* S. Y. Kondr. et Kärnefelt → *Tarasginia whinrayi* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur
- Caloplaca wilsonii* S. Y. Kondr. et Kärnefelt → *Blastenia circumpolaris* Søchting, Frödén et Arup
- Caloplaca xantholyta* (Nyl.) Jatta → *Leproplaca xantholyta* (Nyl.) Nyl.
- Caloplaca xanthostigmoidea* (Räsänen) Zahlbr. → *Gyalolechia xanthostigmoidea* (Räs.) Søchting, Frödén et Arup
- Caloplaca xerica* Poelt et Vězda → *Pyrenodesmia xerica* (Poelt et Vězda) S. Y. Kondr.
- Caloplaca yarraensis* S. Y. Kondr. et Kärnefelt → *Cerothallia yarraensis* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur
- Caloplaca yeosuensis* S. Y. Kondr. et Hur → *Oxneriopsis yeosuensis* (S. Y. Kondr. et Hur) S. Y. Kondr., Upreti et Hur
- Caloplaca yorkensis* S. Y. Kondr. et Kärnefelt → *Cerothallia yorkensis* (S. Y. Kondr. et Kärnefelt) Arup, Frödén et Søchting
- Caloplaca zoroasteriorum* S. Y. Kondr. et Moniri → *Lazarenkoella zoroasteriorum* S. Y. Kondr. et Moniri ex S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur

Catenarina Søchting, Søgaard, Arup, Elvebakk et Elix,
in Søchting et al., *Lichenologist* 46(2): 182 (2014) [Teloschistoideae]
Type species: *Catenarina desolata* Søchting, Søgaard et Elvebakk

So far no data on nrLSU sequences of this genus are available.

Catenarina desolata Söchting, Søgaard et Elvebakk, in Söchting et al., Lichenologist 46(2): 182 (2014). – Combination is proposed only on nrITS and mtSSU data (SÖCHTING *et al.* 2014a).

Catenarina iomma (Olech et Söchting) Söchting et Søgaard, in Söchting et al., Lichenologist 46(2): 185 (2014). Bas.: *Caloplaca iomma* Olech et Söchting, Lichenologist 25(3): 263 (1993). – Combination is proposed without providing molecular data on this species (SÖCHTING *et al.* 2014a).

Catenarina vivasiana Søgaard et Söchting, in Söchting et al., Lichenologist 46(2): 185 (2014). – Combination is proposed only on nrITS and mtSSU data (SÖCHTING *et al.* 2014a).

***Cerothallia* Arup, Frödén et Söchting,**

in Arup et al., Nordic J. Bot. 31(1): 40 (2013) [Xanthorioideae]

Type species: *Cerothallia luteoalba* (Turner) Arup, Frödén et Söchting

Cerothallia luteoalba (Turner) Arup, Frödén et Söchting – Bas.: *Lichen luteoalbus* Turner – Data on three genes of single voucher specimen are still provided (ARUP *et al.* 2013: 40).

Cerothallia subluteoalba (S. Y. Kondr. et Kärnefelt) Arup, Frödén et Söchting – Bas.: *Caloplaca subluteoalba* S. Y. Kondr. et Kärnefelt in Kondratyuk et al. – ARUP *et al.* (2013: 40): *combination is based only on ITS and mtSSU phylogeny, data on nrLSU atill missing.

Cerothallia yarraensis (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur – Data on three genes of single voucher specimen are still provided (KONDRATYUK *et al.* 2014c).

Cerothallia yorkensis (S. Y. Kondr. et Kärnefelt) Arup, Frödén et Söchting – Bas.: *Caloplaca yorkensis* S. Y. Kondr. et Kärnefelt in Lumbsch et al. – Data on three genes of single voucher specimen are still provided (ARUP *et al.* 2013: 40).

***Charcotiana* Söchting, Garrido-Ben. et Arup 2014,**

in Söchting et al., Lichenologist 46: 769 (2014) [Xanthorioideae]

Type species: *Charcotiana antarctica* Söchting, Garrido-Ben., Pérez-Ortega, Seppelt et Castello

Charcotiana antarctica Söchting, Garrido-Ben., Pérez-Ortega, Seppelt et Castello, in Söchting et al., Lichenologist 46: 772 (2014). – Data on three genes of single voucher specimen are still provided.

***Cinnabaria* Wilk, Pabijan et Lücking,**

in Wilk et al., Mycologia 113(2): 293 (2021) [Teloschistoideae]

Type species: *Cinnabaria boliviana* Wilk et Lücking

Cinnabaria boliviana Wilk et Lücking, in Wilk et al., Mycologia 113(2): 293 (2021). – Data on three genes of one voucher of this species are so far provided (WILK *et al.* 2021).

***Coppinsiella* S. Y. Kondr. et Lőkös,**

in Kondratyuk et al., Acta bot. hung. 60(3-4): 370 (2018) [Xanthorioideae]

Type species: *Coppinsiella ulcerosa* (Coppins et P. James) S. Y. Kondr. et Lőkös

Coppinsiella alcarum (Poelt) E. S. Hansen et S. Y. Kondr., in Hansen, Studia bot. hung. 53(1): 87 (2022). – Bas.: *Caloplaca alcarum* Poelt, Mitt. bot. StSamml., München 11: 25 (1954). – Data on nrITS are so far provided for this species.

Coppinsiella extremiorientalis I. V. Frolov, Yakovczenko et A. Ezhkin, in Frolov et al., Phytotaxa 549 (2): 222 (2022). – Data on nrITS and mtSSU are so far provided for this species.

Coppinsiella fiumana (Zahlbr.) I. V. Frolov, in Frolov et al., Phytotaxa 549 (2): 224 (2022). – Bas.: *Caloplaca fiumana* Zahlbr., Annln K. K. naturh. Hofmus. Wien 25: 248 (1911). Type: Hungaria [currently Croatia]. Ad saxa calcarea prope Fiume [Rijeka], J. Schuler (PRM, lectotype, designated by MALÍČEK *et al.* 2018: 471). = *Caloplaca substerilis* subsp. *orbicularis* Moniri, Vondrák & Malíček, in Vondrák et al., Nordic J. Bot. 35: 370 (2017). ≡ *Coppinsiella orbicularis* (Moniri, Vondrák et Malíček) S. Y. Kondr. et Lőkös, in Kondratyuk et al., Acta bot. hung. 60: 383 (2018). – Data only on nrITS are so far provided for this species.

Coppinsiella substerilis (Vondrák, Palice & van den Boom) S.Y. Kondr. & Lőkös, in Kondratyuk et al., Acta bot. hung. 60(3-4): 383 (2018). – Bas.: *Caloplaca substerilis* Vondrák, Palice et van den Boom, in Vondrák et al., Lichenologist 45(6): 715 (2013). Three gene data for one voucher specimen are so far provided for this taxon.

Coppinsiella ulcerosa (Coppins et P. James) S. Y. Kondr. et Lőkös, in Kondratyuk et al., Acta bot. hung. 60(3-4): 383 (2018). – Bas.: *Caloplaca ulcerosa* Coppins et P. James, Lichenologist 11(2): 139 (1979). – Three gene data for one voucher specimen are so far provided for this species.

Coppinsiella orbicularis (Moniri, Vondrák et Malíček) S. Y. Kondr. et Lőkös → *Coppinsiella fiumana* (Zahlbr.) I. V. Frolov

***Dijigiella* S. Y. Kondr. et Lőkös,**

in Kondratyuk et al., Acta Bot. Hung. 59(1-2): 79 (2017) [Xanthorioideae]

Type species: *Dijigiella kaernefeltiana* S. Y. Kondr.

Dijigiella kaernefeltiana S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 59(1-2): 80 (2017). – Data on three genes of two voucher specimen are hitherto provided (KONDRATYUK *et al.* 2017a).

Dijigiella subaggregata S. Y. Kondr. et Kärnefelt, in Kondratyuk et al., Acta Bot. Hung. 59(1-2): 83 (2017). – Data on three genes of single voucher specimen are still provided (KONDRATYUK *et al.* 2017a).

***Dufourea* Ach.**

in Luyken, Tent. Hist. Lich.: 93 (1809) [Xanthorioideae]

Type species: *Dufourea flammea* (L. f.) Ach.

- Dufourea africana* (Almb.) Frödén, Arup et Søchting – Bas.: *Xanthoria africana* Almb., Bot. Notiser 116(2): 165 (1963). – ARUP *et al.* (2013: 41): *combination is proposed without providing any molecular data.
- Dufourea alexanderbaai* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting – Bas.: *Xanthoria alexanderbaai* S. Y. Kondr. et Kärnefelt in Kärnefelt *et al.* (2002, p. 341). – Data only on mtSSU were provided (FEDORENKO *et al.* 2009). ARUP *et al.* (2013: 42): *combination is proposed without providing any molecular data.
- Dufourea australis* (Zahlbr.) Frödén, Arup et Søchting – Bas.: *Xanthoria parietina* var. *australis* Zahlbr. (1917 p. 49). – ARUP *et al.* (2013: 42): *combination is proposed only on the basis of nrITS data.
- Dufourea capensis* (Kärnefelt, Arup et L. Lindblom) Frödén, Arup et Søchting – Bas.: *Xanthoria capensis* Kärnefelt, Arup et L. Lindblom, Bibl. Lichenol. 57: 254 (1995). – Data only on nrITS and mtSSU were provided (FEDORENKO *et al.* 2009). ARUP *et al.* (2013: 42): *combination is proposed only from the ITS phylogeny.
- Dufourea doidgeae* (Eichenberger, Aptroot et Honegger) Frödén, Arup et Søchting – Bas.: *Xanthoria doidgeae* Eichenb., Aptroot et Honegger, Lichenologist 39(5): 456 (2007). – ARUP *et al.* (2013: 42): *combination is proposed without providing any molecular data.
- Dufourea flammea* (L. f.) Ach. – Bas.: *Lichen flammeus* L. f., Suppl. Pl.: 451 (1781). – Data only on nrITS and mtSSU for 2 specimens were provided (FEDORENKO *et al.* 2009), while data on three gene of single voucher were provided by ARUP *et al.* (2013: 42).
- Dufourea inflata* (Eichenberger, Aptroot et Honegger) Frödén, Arup et Søchting – Bas.: *Xanthoria inflata* Eichenb., Aptroot et Honegger, Lichenologist 39(5): 455 (2007). – ARUP *et al.* (2013: 43): *combination is proposed without providing any molecular data.
- Dufourea marlothii* (Zahlbr.) Frödén, Arup et Søchting – Bas.: *Xanthoria marlothii* Zahlbr., Bot. Jb. 60: 544 (1926). – ARUP *et al.* (2013: 43): *combination is proposed without providing any molecular data.
- Dufourea physcioides* A. Massal. – ARUP *et al.* (2013: 43): *taxon included into genus cited without providing any molecular data.
- Dufourea sipmanii* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting – Bas.: *Xanthoria sipmanii* S. Y. Kondr. et Kärnefelt, in Kondratyuk *et al.*, Sauteria 15: 277 (2008). – Data only on nrITS and mtSSU were provided (FEDORENKO *et al.* 2009). ARUP *et al.* (2013: 43): *combination is proposed without providing any molecular data.
- Dufourea turbinata* (Vain.) Frödén, Arup et Søchting – Data only on nrITS and mtSSU for three specimens were provided (FEDORENKO *et al.* 2009), while ARUP *et al.* (2013: 43): *combination is proposed only on the basis of nrITS phylogeny.
- Dufourea* sp. 13, sp. 14, sp. 15, sp. 16 – Only ITS data provided (ARUP *et al.* 2013).
- Dufourea angustata* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting → *Jackelixia angustata* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell
- Dufourea bonae-spei* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting → *Ovealbornia bonae-spei* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix et A. Thell

- Dufourea dissectula* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting → *Jackelixia dissectula* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell
- Dufourea elixii* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting → *Jackelixia elixii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell
- Dufourea filsonii* (Elix) Frödén, Arup et Søchting → *Jackelixia filsonii* (Elix) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell
- Dufourea hirsuta* (Eichenberger, Aptroot et Honegger) Frödén, Arup et Søchting → *Langeottia hirsuta* (Eichenb., Aptroot et Honegger) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur
- Dufourea incavata* (Stirt.) Frödén, Arup et Søchting → *Jackelixia incavata* (Stirt.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell
- Dufourea karrooensis* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting → *Xanthokarrooa karrooensis* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix et A. Thell
- Dufourea ligulata* (Körb.) Frödén, Arup et Søchting → *Jackelixia ligulata* (Körb.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell
- Dufourea streimannii* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting → *Jackelixia streimannii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell

Eilifdahlia S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur,
in Kondratyuk et al. Acta Bot. Hung. 56(1–2): 96 (2014) [Caloplacoideae]
Type species: *Eilifdahlia dahlia* (Elix, S. Y. Kondr. et Kärnefelt) S. Y. Kondr.,
Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur

- Eilifdahlia dahlia*** (Elix, S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur, in Kondratyuk et al., Acta Bot. Hung. 56(1–2): 110 (2014). – Bas.: *Caloplaca dahlia* Elix, S. Y. Kondr. et Kärnefelt, in Kondratyuk et al., Bibl. Lichenol. 99: 267 (2009). – Data on three genes for three voucher specimens are provided (KONDRATYUK *et al.* 2014a).
- Eilifdahlia schwarzii*** F. Schumm et S. Y. Kondr., in Kondratyuk et al., Graphis Scripta 29(1–2): 19 (2017). – Recently described species with references to molecular data (KONDRATYUK *et al.* 2017c), however nrITS data are still not published and submitted to GenBank.
- Eilifdahlia sergeyana*** (Kantvilas) S. Y. Kondr., Elix, Kärnefelt et A. Thell, in Kondratyuk et al., Graphis Scripta 29(1–2): 21 (2017). – Bas.: *Caloplaca sergeyana* Kantvilas, J. Adelaide Bot. Gard. 26: 57 (2016). – Recently described species with references to molecular data (KONDRATYUK *et al.* 2017c), however nrITS data are still not published and submitted to GenBank.
- Eilifdahlia wirthii*** S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 56(1–2): 106 (2014). – KONDRATYUK *et al.* (2014a): full set for two voucher specimens.

Elenkiniana S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur,
in Kondratyuk et al., Acta Bot. Hung. 56(1–2): 97 (2014) [Caloplacoideae]
Type species: *Elenkiniana gloriae* (Llimona et Werner) S. Y. Kondr., Kärnefelt,
Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur

- Elenkiniana gloriae* (Llimona et Werner) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur, in Kondratyuk et al., Acta Bot. Hung. 56(1–2): 111 (2014). – Bas.: *Caloplaca gloriae* Llimona et Werner, Acta Phytotax. Barcinon. 16: 13 (1975). – Data on three genes for three voucher specimens are provided (KONDRATYUK et al. 2014a).
- Elenkiniana ehrenbergii* (Müll. Arg.) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur, in Kondratyuk et al., Acta Bot. Hung. 56(1–2): 111 (2014). – Bas.: *Amphiloma ehrenbergii* Müll. Arg. (1880, p. 41). ≡ *Gyalolechia ehrenbergii* (Müll. Arg.) Søchting, Frödén et Arup – ARUP et al. (2013: 70 as *Gyalolechia ehrenbergii* (Müll. Arg.) Søchting, Frödén et Arup): *combination was proposed only from the ITS phylogeny; KONDRATYUK et al. (2014a).
- Elenkiniana gomerana* (J. Steiner) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur, in Kondratyuk et al., Acta Bot. Hung. 56(1–2): 111 (2014). – Bas.: *Caloplaca gomerana* J. Steiner (1911, p. 181). ≡ *Gyalolechia gomerana* (J. Steiner) Søchting, Frödén et Arup – Data on nrLSU and mtSSU provided (LUTZONI et al. 2001). ARUP et al. (2013:71 as *Gyalolechia gomerana* (J. Steiner) Søchting, Frödén et Arup) provided data on three genes for three voucher specimens; KONDRATYUK et al. (2014a).

Elixjohnia S. Y. Kondr. et Hur,

in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 86 (2017) [Teloschistoideae]

Type species: *Elixjohnia jackelixii* (S. Y. Kondr., Kärnefelt et A. Thell) S. Y. Kondr. et Hur

- Elixjohnia bermaguiana* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr. et Hur, in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 120 (2017). – Bas.: *Caloplaca bermaguiana* S. Y. Kondr. et Kärnefelt, in Kondratyuk et al., Bibl. Lichenol. 95: 348 (2007). ≡ *Sirenophila bermaguiana* (S. Y. Kondr. et Kärnefelt) Søchting, Arup et Frödén – ARUP et al. (2013, sub *Sirenophila bermaguiana* (S. Y. Kondr. et Kärnefelt) Søchting, Arup et Frödén) provided data on three genes for one voucher specimen; KONDRATYUK et al. 2013c additional specimen; KONDRATYUK et al. (2017a).
- Elixjohnia gallowayi* (S. Y. Kondr., Kärnefelt et Filson) S. Y. Kondr. et Hur, in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 120 (2017). – Bas.: *Caloplaca gallowayi* S. Y. Kondr., Kärnefelt et Filson, in Kondratyuk et al., Bibl. Lichenol. 95: 358 (2007). ≡ *Sirenophila gallowayii* (S. Y. Kondr., Kärnefelt et Filson) Søchting, Arup et Frödén – ARUP et al. (2013 sub *Sirenophila gallowayii* (S. Y. Kondr., Kärnefelt et Filson) Søchting, Arup et Frödén) provided data on three genes for one voucher specimens; KONDRATYUK et al. (2017a).
- Elixjohnia jackelixii* (S. Y. Kondr., Kärnefelt et A. Thell) S. Y. Kondr. et Hur, in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 120 (2017). – Bas.: *Caloplaca jackelixii* S. Y. Kondr., Kärnefelt et A. Thell, in Kondratyuk et al., Bibl. Lichenol. 100: 251 (2009). ≡ *Sirenophila jackelixii* (S. Y. Kondr., Kärnefelt et A. Thell) Søchting, Arup et Frödén – ARUP et al. (2013 sub *Sirenophila jackelixii* (S. Y. Kondr., Kärnefelt et

A. Thell) Søchting, Arup et Frödén) provided data on three genes for one voucher specimen; KONDRATYUK *et al.* (2013c) provided data on three genes for three additional voucher specimens; KONDRATYUK *et al.* (2017a).

Elixjohnia ovis-atra (Søchting, Søgaard et Sancho) S. Y. Kondr., in Kondratyuk *et al.*, Acta Bot. Hung. 60(1–2): 111 (2018). – Bas.: *Sirenophila ovis-atra* Søchting, Søgaard et Sancho, in Søchting *et al.*, Opuscula Philolichenum 15(2): 2 (2016). – Three gene data for one voucher specimen of this species are hitherto provided (SØCHTING *et al.* 2016).

Erichansenia S. Y. Kondr., Kärnefelt et A. Thell,

in Kondratyuk *et al.*, Acta Bot. Hung. 62(1–2): 112 (2020) [Xanthorioideae]

Type species: *Erichansenia epithallina* (Lyngé) S. Y. Kondr., Kärnefelt et A. Thell

Erichansenia cryodesertorum (Garrido-Ben., Søchting et Pérez-Ort.) S. Y. Kondr., Kärnefelt et A. Thell, in Kondratyuk *et al.*, Acta Bot. Hung. 62(1–2): 121 (2020). – Bas.: *Shackletonia cryodesertorum* Garrido-Ben., Søchting et Pérez-Ort., in Garrido-Benavent, Søchting, de los Ríos et Pérez-Ortega, Mycol. Progr. 15: 7 (2016). – Data only on nrLSU of three gene used in the phylogeny of the Teloschistaceae so far are available for this species.

Erichansenia epithallina (Lyngé) S. Y. Kondr., Kärnefelt et A. Thell, in Kondratyuk *et al.*, Acta Bot. Hung. 62(1–2): 120 (2020). – Bas.: *Caloplaca epithallina* Lyngé, Skr. Svalbard Ishavet (Oslo) (no. 81): 113 (1940). – Data only on nrITS of three gene used in the phylogeny of the Teloschistaceae so far are available for this species.

Erichansenia sauronii (Søchting et Øvstedal) S. Y. Kondr., Kärnefelt et A. Thell, in Kondratyuk *et al.*, Acta Bot. Hung. 62(1–2): 121 (2020). – Bas.: *Caloplaca sauronii* Søchting et Øvstedal, in Søchting *et al.*, Bibl. Lichenol. 88: 626 (2004). ≡ *Shackletonia sauronii* (Søchting et Øvstedal) Søchting, Frödén et Arup, in Arup *et al.*, Nordic J. Bot. 31(1): 55 (2013). – Data on three genes from one voucher specimen are still provided for this species (ARUP *et al.* 2013: 55, KONDRATYUK *et al.* 2020).

Fauriea S. Y. Kondr., L. Lökös et J.-S. Hur,

in Kondratyuk *et al.*, Acta Bot. Hung. 58: 305 (2016) [Caloplacoideae]

Type species: *Fauriea chujaensis* (S. Y. Kondr., L. Lökös et Hur) S. Y. Kondr., L. Lökös, J. Kim, A. S. Kondratiuk, S.-O. Oh et J.-S. Hur

Fauriea chujaensis (S. Y. Kondr., L. Lökös et Hur) S. Y. Kondr., L. Lökös, J. Kim, A. S. Kondratiuk, S.-O. Oh et J.-S. Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 58: 313 (2016). – Bas.: *Caloplaca chujaensis* S. Y. Kondr., L. Lökös et J.-S. Hur, in Kondratyuk *et al.* Acta Bot. Hung. 57(1–2): 86 (2015). – KONDRATYUK *et al.* (2016b) provided data on three genes for one voucher specimens of this species.

Fauriea orientochinensis S. Y. Kondr., X. Y. Wang et J.-S. Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 58: 307 (2016). – KONDRATYUK *et al.* (2016b) provided data on three genes for two voucher specimens of this species.

Filsoniana S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur,
in Kondratyuk et al., *Acta Bot. Hung.* 55(3–4): 267 (2013) [Teloschistoideae]
Type species: *Filsoniana australiensis* (S. Y. Kondr., Kärnefelt et Filson) S. Y.
Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratyuk et J.-S. Hur

Filsoniana australiensis (S. Y. Kondr., Kärnefelt et Filson) S. Y. Kondr., Kärnefelt, Elix,
A. Thell, J. Kim, A. S. Kondratyuk et J.-S. Hur – Bas.: *Caloplaca australiensis* S. Y.
Kondr., Kärnefelt et Filson, in Kondratyuk et al., *Bibl. Lichenol.* 95: 346 (2007). –
KONDRATYUK *et al.* (2013a) provided data on three genes for three voucher speci-
mens of this species.

Filsoniana ferdinandmuelleri (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A.
Thell, Elix, J. Kim, A. S. Kondratyuk et J.-S. Hur – Bas.: *Caloplaca ferdinandmuel-
leri* S. Y. Kondr. et Kärnefelt, in Kondratyuk, Kärnefelt, Elix et Thell, *Bibl. Lichenol.*
100: 241 (2009). – KONDRATYUK *et al.* (2013a): combination proposed without
providing molecular data.

Filsoniana lhasanensis X. M. Wen, Shahidin et A. Abbas, *Mycotaxon* 134(4): 669 (2020)
[2019]. – Three gene data for two voucher specimens are provided for this species.

Filsoniana rexfilsonii (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix,
J. Kim, A. S. Kondratyuk et J.-S. Hur – Bas.: *Caloplaca rexfilsonii* S. Y. Kondr. et
Kärnefelt, in Kondratyuk et al., *Bibl. Lichenol.* 95: 371 (2007). – KONDRATYUK
et al. (2013a): full set for one voucher specimens and three additional specimens.

Filsoniana scarlatina (Zahlbr.) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kond-
ratyuk et J.-S. Hur – Bas.: *Caloplaca scarlatina* Zahlbr., *Denkschr. Kaiserl. Akad.
Wiss. Wien, Math.-Naturwiss. Kl.* 104: 366 (1941). – Only nrITS and nrLSU data
available (data on mtSSU sequence are still absent) (KONDRATYUK *et al.* 2013a).

Filsoniana kiamae (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S.
Kondratyuk et J.-S. Hur → see *Thelliana pseudokiamae* S. Y. Kondr., Kärnefelt, Elix et Hur

Flavoplaca Arup, Søchting et Frödén,

in Arup et al., *Nordic J. Bot.* 31(1): 44 (2013) [Xanthorioideae]

Type species: *Flavoplaca citrina* (Hoffm.) Arup, Frödén et Søchting

Of 26 species of the genus *Flavoplaca* by ARUP *et al.* (2013) 21 species was
combined only on the basis of nrITS phylogeny, and one species was combined
without any molecular data.

Flavoplaca arcis (Poelt et Vězda) Arup, Frödén et Søchting – Bas.: *Caloplaca citrina* var.
arcis Poelt et Vězda, in Vězda, *Lichenes Selecti Exsiccati, Fasc. (Prùhonice)* 99(nos
2451–2475): no. 2475 (1990). – ARUP *et al.* (2013: 44): *combination is proposed
only from the ITS phylogeny.

Flavoplaca arcisproxima (Vondrák, Říha, Arup et Søchting) Arup, Søchting et Frödén
– Bas.: *Caloplaca arcisproxima* Vondrák, Říha, Arup et Søchting, in Vondrák et al.,

- Lichenologist 41(6): 588 (2009). – ARUP *et al.* (2013: 44): *combination is proposed only from the ITS phylogeny.
- Flavoplaca austrocitrina* (Vondrák, Říha, Arup et Söchting) Arup, Söchting et Frödén – Bas.: *Caloplaca austrocitrina* Vondrák, Říha, Arup et Söchting, in Vondrák *et al.*, Lichenologist 41(6): 588 (2009). – ARUP *et al.* (2013: 44): *combination is proposed only from the ITS phylogeny.
- Flavoplaca calcitrata* (Nav.-Ros., Gaya et Cl. Roux) Arup, Frödén et Söchting – Bas.: *Caloplaca calcitrata* Nav.-Ros., Gaya et Cl. Roux, Bull. Soc. linn. Provence 51: 147 (2000). – ARUP *et al.* (2013: 44): *combination is proposed only from the ITS phylogeny.
- Flavoplaca citrina* (Hoffm.) Arup, Frödén et Söchting – Bas.: *Verrucaria citrina* Hoffm., Deutschl. Fl., Zweiter Theil (Erlangen): 198 (1796) [1795]. – ARUP *et al.* (2013: 44) provided nrLSU and mtSSU data for this species.
- Flavoplaca communis* (Vondrák, Říha, Arup et Söchting) Arup, Söchting et Frödén – Bas.: *Caloplaca communis* Vondrák, Říha, Arup et Söchting, in Vondrák *et al.*, Lichenologist 41(6): 591 (2009). – ARUP *et al.* (2013: 44): *combination is proposed only from the ITS phylogeny.
- Flavoplaca confusa* (Vondrák, Říha, Arup et Söchting) Arup, Söchting et Frödén – Bas.: *Caloplaca confusa* Vondrák, Říha, Arup et Söchting, in Vondrák *et al.*, Lichenologist 41(6): 593 (2009). – ARUP *et al.* (2013: 45): *combination is proposed only from the ITS phylogeny.
- Flavoplaca coronata* (Kremp. ex Körb.) Arup, Frödén et Söchting – Bas.: *Callopisma aurantiacum* var. *coronatum* Kremp. ex Körb., Parerga lichenol. (Breslau) 1: 66 (1859) [1865]. – ARUP *et al.* (2013: 45): *combination is proposed only from the ITS phylogeny.
- Flavoplaca cranfieldii* (S. Y. Kondr. et Kärnefelt) Arup, Frödén et Söchting – Bas.: *Caloplaca cranfieldii* S. Y. Kondr. et Kärnefelt, in Kondratyuk *et al.*, Bibl. Lichenol. 95: 352 (2007). – ARUP *et al.* (2013: 45): *combination is proposed only from the ITS phylogeny. KONDRATYUK *et al.* (2014c) provided data on mtSSU sequences for 2 specimens.
- Flavoplaca dichroa* (Arup) Arup, Frödén et Söchting – Bas.: *Caloplaca dichroa* Arup, Lichenologist 38(1): 13 (2006). – ARUP *et al.* (2013: 45): *combination is proposed only from the ITS phylogeny.
- Flavoplaca flavocitrina* (Nyl.) Arup, Frödén et Söchting – Bas.: *Lecanora flavocitrina* Nyl., Flora, Regensburg 69: 461 (1886). – ARUP *et al.* (2013: 45): *combination is proposed only from the ITS phylogeny.
- Flavoplaca geleverjæ* (Khodos. et S. Y. Kondr.) Arup, Frödén et Söchting – Bas.: *Caloplaca geleverjæ* Khodos. et S. Y. Kondr., in Khodosovtsev *et al.*, Ukr. bot. Zh. 60(3): 294 (2003). – ARUP *et al.* (2013: 45): *combination is proposed only from the ITS phylogeny.
- Flavoplaca granulosa* (Müll. Arg.) Arup, Frödén et Söchting – Bas.: *Amphiloma granulosa* Müll. Arg., Mém. Soc. Phys. Hist. nat. Genève 16(2): 380 (1862). – ARUP *et al.* (2013: 45): *combination is proposed only from the ITS phylogeny.
- Flavoplaca havaasii* (H. Magn.) Arup, Frödén et Söchting – Bas.: *Caloplaca havaasii* H. Magn., in Havaas, Bergens Mus. Årbok, Naturv. række(no. 12): 16, 19 (1954). – ARUP *et al.* (2013: 45): *combination is proposed only from the ITS phylogeny.

- Flavoplaca kantvilasii* (S. Y. Kondr. et Kärnefelt) Arup, Frödén et Søchting – Bas.: *Caloplaca kantvilasii* S. Y. Kondr. et Kärnefelt, in Kondratyuk et al., *Bibl. Lichenol.* 95: 363 (2007). – ARUP *et al.* (2013: 45): *combination is proposed only from the ITS phylogeny. KONDRATYUK *et al.* (2014c) provided mtSSU data for 3 additional specimens.
- Flavoplaca limonia* (Nimis et Poelt) Arup, Frödén et Søchting – Bas.: *Caloplaca limonia* Nimis et Poelt, in Nimis et al., *Bull. Soc. linn. Provence* 45: 252 (1994). – ARUP *et al.* (2013: 45): *combination is proposed only from the ITS phylogeny. KONDRATYUK *et al.* (2014c) provided data on mtSSU sequences for 2 additional specimens.
- Flavoplaca lutea* (J. R. Laundon) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur – Bas.: *Leproplaca lutea* J. R. Laundon ≡ *Caloplaca lutea* (J. R. Laundon) D. J. Galloway – KONDRATYUK *et al.* (2014c) provided data on three genes for three voucher specimens.
- Flavoplaca marina* (Wedd.) Arup, Frödén et Søchting – Bas.: *Lecanora marina* Wedd., *Mém. Soc. Imp. Sci. Nat. Cherbourg* 19: 275 (1875). – Data on three genes for one voucher specimen (ARUP *et al.* 2013: 45). GAYA *et al.* (2012) provided additional data on nrLSU and mtSSU sequences.
- Flavoplaca maritima* (B. de Lesd.) Arup, Frödén et Søchting – Bas.: *Caloplaca citrina* var. *maritima* B. de Lesd. in Zahlbruckner – ARUP *et al.* (2013: 46): *combination is based only on ITS phylogeny.
- Flavoplaca mereschkowskiana* (S. Y. Kondr. et Kärnefelt) Arup, Søchting et Frödén – Bas.: *Caloplaca mereschkowskiana* S. Y. Kondr. et Kärnefelt in Lumsch et al. – ARUP *et al.* (2013: 46): *combination is based only on ITS phylogeny.
- Flavoplaca microthallina* (Wedd.) Arup, Frödén et Søchting – Bas.: *Lecanora microthallina* Wedd. – Data on three genes for one voucher specimen (ARUP *et al.* 2013: 46).
- Flavoplaca navasiana* (Nav.-Ros. et Cl. Roux) Arup, Søchting et Frödén – Bas.: *Caloplaca navasiana* Nav.-Ros. et Cl. Roux – ARUP *et al.* (2013: 46): *combination is based only on ITS phylogeny.
- Flavoplaca nigromarina* (Vondrák, Říha, Arup et Søchting) Arup, Søchting et Frödén – Bas.: *Caloplaca nigromarina* Vondrák, Říha, Arup et Søchting – ARUP *et al.* (2013: 46): *combination is based only on ITS phylogeny.
- Flavoplaca oasis* (A. Massal.) Arup, Frödén et Søchting – Bas.: *Calloplisma aurantiacum* var. *oasis* A. Massal. ≡ *Caloplaca oasis* (A. Massal.) Szat. – Data on three genes for one voucher specimen (ARUP *et al.* 2013: 46).
- Flavoplaca ora* (Poelt et Nimis) Arup, Frödén et Søchting – Bas.: *Caloplaca ora* Poelt et Nimis – ARUP *et al.* (2013: 46): *combination is based only on ITS phylogeny.
- Flavoplaca polycarpa* (A. Massal.) Arup, Frödén et Søchting – Bas.: *Calloplisma aurantiacum* var. *polycarpum* A. Massal. ≡ *Caloplaca polycarpa* (A. Massal.) Zahlbr. – ARUP *et al.* (2013: 46): *combination is based only on ITS phylogeny.
- Flavoplaca tavaresiana* (Nav.-Ros. et Cl. Roux) Arup, Frödén et Søchting – Bas.: *Caloplaca tavaresiana* Nav.-Ros. et Cl. Roux – ARUP *et al.* (2013: 46): *combination is based only on ITS phylogeny.

Flavoplaca sp. 17 – ARUP *et al.* (2013): with data on ITS, nrLSU and mtSSU.

***Follmannia* C. W. Dodge,**

Nova Hedwigia 12(3–4): 334 (1967) [1966] [Teloschistoideae]

Type species: *Follmannia orthoclada* (Zahlbr.) Frödén, Arup et Søchting

Follmannia orthoclada (Zahlbr.) Frödén, Arup et Søchting – Bas.: *Caloplaca orthoclada* Zahlbr. (1924, p. 398). = *Follmannia rufa* C. W. Dodge (1967, p. 335). – ARUP *et al.* (2013: 61) provided only ITS and nrLSU data for one voucher specimen (data on mtSSU sequences still missing). KONDRATYUK *et al.* (2018b) provided only ITS data for three additional voucher specimens.

***Fominiella* S. Y. Kondr., Upreti et Hur,**in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 87 (2017) [Brownlielloideae]Type species: *Fominiella tenerifensis* S. Y. Kondr., Kärnefelt, A. Thell et Feuerer

Fominiella skii (Khodos., Vondrák et Šoun) S. Y. Kondr., Upreti et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 121 (2017). – Bas.: *Caloplaca skii* Khodos., Vondrák et Šoun, in Vondrák *et al.*, Lichenologist 44(1): 83 (2011) [2012]. ≡ *Athallia skii* (Khodos., Vondrák et Šoun) Arup, Frödén et Søchting – ARUP *et al.* (2013: 37, sub *Athallia skii* (Khodos., Vondrák et Šoun) Arup, Frödén et Søchting)): *combination is based only on ITS phylogeny; KONDRATYUK *et al.* (2017a). So far only nrITS data are available for this species.

Fominiella tenerifensis S. Y. Kondr., Kärnefelt, A. Thell et Feuerer, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 89 (2017). – KONDRATYUK *et al.* (2017a) provided three gene data for one voucher of this species.

***Franwilsia* S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur,**in Kondratyuk *et al.*, Acta Bot. Hung. 56(1–2): 97 (2014) [Caloplacoideae]Type species: *Franwilsia bastowii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur

Franwilsia bastowii (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 56(1–2): 111 (2014). – Bas.: *Caloplaca bastowii* S. Y. Kondr. et Kärnefelt, in Kondratyuk *et al.*, Bibl. Lichenol. 99: 260 (2009). – KONDRATYUK *et al.* (2014a) provided data on three genes for two voucher specimens.

Franwilsia kilcundaensis (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 56(1–2): 111 (2014). – Bas.: *Caloplaca kilcundaensis* S. Y. Kondr. et Kärnefelt, in Kondratyuk *et al.*, Bibl. Lichenol. 100: 256 (2009). – KONDRATYUK *et al.* (2014a) provided data on three genes for three voucher specimens.

Franwilsia renatae (V. Wirth et S. Y. Kondr.) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 56(1–2): 111 (2014). – Bas.: *Caloplaca renatae* V. Wirth et S. Y. Kondr., Herzogia 23(2): 185 (2010). – KONDRATYUK *et al.* (2014a) provided data on nrITS and mtSSU for three voucher specimens.

***Fulgensia* A. Massal. et De Not.,**
in Massalongo, *Alcuni Gen. Lich.*: 10 (1853) [Caloplacoideae]
Type species: *Fulgensia fulgens* (Sw.) Elenkin

Data of KASALICKY *et al.* (2000) include nrITS, as well as nrLSU data, while they were submitted mainly as ITS sequences.

- Fulgensia bracteata*** (Hoffm.) Räsänen, *Acta Fauna Fl. Universali* 1(5–6): 9 (1933). – Bas.: *Psora bracteata* Hoffm. (1796 [1795], p. 169). ≡ *Gyalolechia bracteata* (Hoffm.) A. Massal. – Three gene data are provided for two voucher specimens of this species.
- Fulgensia canariensis*** Follmann et Poelt, *Philippia* 4(5): 370 (1981). ≡ *Caloplaca canariensis* (Follmann et Poelt) Breuss ≡ *Gyalolechia canariensis* (Follmann et Poelt) Søchting, Frödén et Arup – Three gene data are provided for two voucher specimens of this species (ARUP *et al.* 2013: 70, KONDRATYUK *et al.* 2014a).
- Fulgensia cranfieldii*** S. Y. Kondr. et Kärnefelt, in Kondratyuk *et al.*, *Bibl. Lichenol.* 96: 165 (2007). ≡ *Gyalolechia cranfieldii* (S. Y. Kondr. et Kärnefelt) Søchting, Frödén et Arup – KONDRATYUK *et al.* (2014a) provided data on three genes for three voucher specimens.
- Fulgensia delphinensis*** Poelt, *Mitt. bot. StSamml., Münch.* 5: 599 (1965). ≡ *Caloplaca delphinensis* Poelt (1965, p. 599); ≡ *Gyalolechia delphinensis* (Poelt) Søchting, Frödén et Arup – ARUP *et al.* (2013: 70): *combination was proposed without providing any molecular data.
- Fulgensia desertorum*** (Tomin) Poelt, *Mitt. bot. StSamml., Münch.* 5: 600 (1965) – Bas.: *Placodium desertorum* Tomin (1925, p. 11); ≡ *Gyalolechia desertorum* (Tomin) Søchting, Frödén et Arup. – ARUP *et al.* (2013: 70): *combination was proposed only from the ITS phylogeny.
- Fulgensia epiplacynthium*** Etayo, *Guineana* 16: 170 (2010). ≡ *Gyalolechia epiplacynthium* (Etayo) Diederich, in Diederich, Lawrey et Ertz, *Bryologist* 121(3): 393 (2018). – So far no molecular data for this species are provided.
- Fulgensia fulgens*** (Sw.) Elenkin, *Lich. Fl. Ross. Med.* 2: no. 246 (1907). – Bas.: *Lichen fulgens* Sw. (1784, p. 246). ≡ *Gyalolechia fulgens* (Sw.) Søchting, Frödén et Arup – ARUP *et al.* (2013: 70) provided data on three genes for one voucher specimen. KONDRATYUK *et al.* (2014a) provided data on three genes for two additional voucher specimens.
- Fulgensia fulgida*** (Nyl.) Szatala, in Degen, *Flora Velebitica* 3: 372 (1938). – Bas.: *Placodium fulgidum* Nyl. (1865, p. 212). ≡ *Gyalolechia fulgida* (Nyl.) Søchting, Frödén et Arup – ARUP *et al.* (2013: 70): *combination is provided only from the ITS phylogeny.
- Fulgensia klementii*** Kalb, *Herzogia* 1(4): 439 (1970). ≡ *Gyalolechia klementii* (Kalb) Søchting, Frödén et Arup – Data on nrITS and nrLSU sequences are so far available for this species.
- Fulgensia pruinosa*** (Körb.) Poelt, *Mitt. bot. StSamml., Münch.* 5: 596 (1965). – Bas.: *Gyalolechia pruinosa* Körb. (1867a, p. 613), (1867b addendum, pp. 703–704). – ARUP *et al.* (2013: 71): *combination is provided only from the ITS phylogeny.
- Fulgensia subbracteata*** (Nyl.) Poelt, *Lich. Alp.* 7: no. 137 (1961). – Bas.: *Lecanora subbracteata* Nyl. (1883, p. 534). ≡ *Gyalolechia subbracteata* (Nyl.) Søchting, Frödén et Arup. – ARUP *et al.* (2013: 72): *combination is provided only from the ITS phylogeny.

Fulgogasparrea S. Y. Kondr., N.-H. Jeong, Kärnefelt, Elix, A. Thell et J.-S. Hur, in Kondratyuk et al., Acta Bot. Hung. 55(3–4): 268 (2013) [Teloschistoideae]

Type species: *Fulgogasparrea decipiooides* (Arup) S. Y. Kondr., M. H. Jeong, Kärnefelt, Elix, A. Thell et Hur

Fulgogasparrea appressa (Wetmore et Kärnefelt) S. Y. Kondr., Elix, Kärnefelt et A. Thell, in Kondratyuk et al., Acta Bot. Hung. 57(3–4): 339 (2015). – Bas.: *Caloplaca appressa* Wetmore et Kärnefelt, Bryologist 10(2): 233 (1998). ≡ *Wetmoreana appressa* (Wetmore et Kärnefelt) Arup, Frödén et Søchting – Only nrITS data are so far provided (KONDRATYUK *et al.* 2013a, ARUP *et al.* 2013 : 66, sub *Wetmoreana appressa* (Wetmore et Kärnefelt) Arup, Frödén et Søchting).

Fulgogasparrea awasthii (Y. Joshi et Upreti) S. Y. Kondr., Upreti et A. Thell, in Mishra et al., Acta Bot. Hung. 62(3–4): 349 (2020). – Bas.: *Caloplaca awasthii* Y. Joshi et Upreti, Bot. J. Linn. Soc. 155(1): 149 (2007). – Molecular data on this species are still not submitted to GenBank.

Fulgogasparrea brouardii (B. de Lesd.) S. Y. Kondr., in Kondratyuk et al., Ukr. Bot. J. 72(6): 582 (2015). – Bas.: *Placodium brouardii* B. de Lesd. ≡ *Caloplaca brouardii* (B. de Lesd.) Zahlbr. ≡ *Wetmoreana brouardii* (B. de Lesd.) Wilk et Søchting, in Bungartz et al., Plant Fung. Syst. 65(2): 562 (2020). – Three gene data for one voucher specimen are so far available for this species (KONDRATYUK *et al.* 2013a).

Fulgogasparrea decipiooides (Arup) S. Y. Kondr., M. H. Jeong, Kärnefelt, Elix, A. Thell et Hur, in Kondratyuk et al., Acta Bot. Hung. 55(3–4): 272 (2013). – Bas.: *Caloplaca decipiooides* Arup, in Lumbsch et al., Phytotaxa 18: 29 (2011). ≡ *Wetmoreana decipiooides* (Arup) Arup, Frödén et Søchting – KONDRATYUK *et al.* (2013a): nrITS and mtSSU data for to additional specimens. ARUP *et al.* (2013: 66, sub *Wetmoreana decipiooides* (Arup) Arup, Frödén et Søchting) provided data on three genes of one voucher specimen of this species.

Fulgogasparrea intensa Aptroot et M. Cáceres, in Aptroot et al., Cryptog. Mycol. 42(11): 183 (2021). – Only nrITS data are so far provided for this species.

Gallowayella S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, J.-S. Hur et A. Thell, in Fedorenko et al., Bibl. Lichenol. 108: 52 (2012) [Xanthorioideae]

Type species: *Gallowayella gallowayi* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell

Gallowayella aphrodites (Kalb, Poelt et S. Y. Kondr.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko et al., Bibl. Lichenol. 108: 57 (2012). – Bas.: *Xanthoria aphrodites* Kalb, Poelt et S. Y. Kondr., in Kondratyuk and Poelt, Lichenologist 29(2): 180 (1997). – Only nrITS data are so far available for this species.

Gallowayella awasthiana S. Y. Kondr. et D. K. Upreti, in Kondratyuk et al., Acta Bot. Hung. 60(1–2): 141 (2018). – No molecular data so far provided for this species.

Gallowayella borealis (R. Sant. et Poelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell (2012). – Bas.: *Xanthoria borealis* R. Sant. et Poelt, Nova Hed-

wigia 54(1–2): 15 (1992). – ARUP *et al.* (2013, sub *Xanthomendoza borealis*) provided data on three genes of one voucher specimen of this species.

Gallowayella fulva (Hoffm.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell (2012). – Bas.: *Lobaria fulva* Hoffm. \equiv *Xanthoria fulva* (Hoffm.) Poelt et Petut., Nova Hedwigia 54(1–2): 24 (1992). – FEDORENKO *et al.* (2009): nrITS and mtSSU data only were provided. ARUP *et al.* (2013, sub *Xanthomendoza fulva*): *data only on ITS phylogeny provided).

Gallowayella galericulata (L. Lindblom) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko *et al.*, Bibl. Lichenol. 108: 57 (2012). – Bas.: *Xanthomendoza galericulata* L. Lindblom, Bryologist 109(1): 2 (2006). – FEDORENKO *et al.* (2009): nrITS and mtSSU data only were provided. ARUP *et al.* (2013, sub *Xanthomendoza galericulata*): *data only on ITS phylogeny provided.

Gallowayella hasseana (Räsänen) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko *et al.*, Bibl. Lichenol. 108: 57 (2012). – Bas.: *Xanthoria hasseana* Räsänen (1944). – ARUP *et al.* (2013, sub *Xanthomendoza hasseana*) provided data on three genes of one voucher specimen of this species.

Gallowayella montana (L. Lindblom) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko *et al.*, Bibl. Lichenol. 108: 57 (2012). – Bas.: *Xanthoria montana* L. Lindblom, J. Hattori Bot. Lab. 83: 143 (1997). – FEDORENKO *et al.* (2009): nrITS and mtSSU data only were provided. ARUP *et al.* (2013, sub *Xanthomendoza montana*): *data only on ITS phylogeny provided.

Gallowayella oregana (Gyeln.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell [as '*oregana*'], in Fedorenko *et al.*, Bibl. Lichenol. 108: 57 (2012). – Bas.: *Xanthoria oregana* Gyeln., Rev. Bryol. Lichénol., N.S. 5: 33 (1932). – FEDORENKO *et al.* (2009): nrITS and mtSSU data only were provided. ARUP *et al.* (2013, sub *Xanthomendoza oregana*): *data only on ITS phylogeny provided.

Gallowayella poeltii (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko *et al.*, Bibl. Lichenol. 108: 59 (2012). – Bas.: *Xanthoria poeltii* S. Y. Kondr. et Kärnefelt, Lichenologist 29(5): 425 (1997). – ARUP *et al.* (2013, sub *Xanthomendoza poeltii*) provided data on three genes of one voucher specimen of this species.

Gallowayella sogdiana (S. Y. Kondr. et Kudratov) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko *et al.*, Bibl. Lichenol. 108: 59 (2012). – FEDORENKO *et al.* (2009): nrITS data only were provided.

Gallowayella tibellii (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko *et al.*, Bibl. Lichenol. 108: 60 (2012). – Bas.: *Xanthoria tibellii* S. Y. Kondr. et Kärnefelt [as '*tibellii*'], Ukr. bot. Zh. 60(2): 125 (2003). – Combination is proposed without providing molecular data for this species.

Gallowayella weberi (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko *et al.*, Bibl. Lichenol. 108: 59 (2012). – FEDORENKO *et al.* (2009): nrITS data only are so far provided.

Gintarasiella S. Y. Kondr. et Hur,

in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 90 (2017) [Caloplacoideae]

Type species: *Gintarasiella aggregata* (Kantvilas et S. Y. Kondr.) S. Y. Kondr. et Hur

Gintarasiella aggregata (Kantvilas et S. Y. Kondr.) S. Y. Kondr. et Hur, in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 121 (2017). – Bas.: *Caloplaca aggregata* Kantvilas et S. Y. Kondr., in Kantvilas, J. Adelaide Bot. Gard. 26: 56 (2016). – KONDRATYUK *et al.* (2017a) provided three gene data for three voucher specimens of this species.

Golubkovaea S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur,

in Kondratyuk et al., Acta Bot. Hung. 56(1–2): 154 (2014) [as '*Golubkovia*'
[Xanthorioideae]

Type species: *Golubkovaea trachyphylla* (Tuck.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur

Golubkovaea trachyphylla (Tuck.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur – Bas.: *Placodium elegans* var. *trachyphyllum* Tuck. ≡ *Golubkovia trachyphylla* (Tuck.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, Jung Kim, M. H. Jeong, N. N. Yu, A. S. Kondr. et Hur – ARUP *et al.* (2013, sub *Xanthomendoza trachyphylla* (Tuck.) Frödén, Arup et Søchting) provided data on three genes of one voucher specimen of this species. KONDRATYUK *et al.* (2014c) provided nrITS and mtSSU data for 6 voucher specimens.

Gondwania Søchting, Frödén et Arup,

in Arup et al., Nordic J. Bot. 31(1): 46 (2013) [Xanthorioideae]

Type species: *Gondwania cribrosa* (Hue) Søchting, Frödén et Arup

Gondwania cribrosa (Hue) Søchting, Frödén et Arup, in Arup et al. (2013: 46). – Bas.: *Polycauliona cribrosa* Hue – ARUP *et al.* (2013) provided data on three genes of one voucher specimen of this species.

Gondwania regalis (Vain.) Søchting, Frödén et Arup, in Arup et al. (2013: 47). – Bas.: *Placodium regale* Vain. – ARUP *et al.* (2013) provided data on three genes of one voucher specimen of this species. KONDRATYUK *et al.* (2014c) provided nrITS and mtSSU data for 3 additional voucher specimens.

Gondwania sejongensis S. Y. Kondr. et J.-S. Hur, in Kondratyuk et al. (2014: 158). – KONDRATYUK *et al.* (2014c) provided nrITS and mtSSU data for 2 voucher specimens.

Gondwania sublobulata (Nyl.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur – Bas.: *Placodium sublobulatum* Nyl., Lichenes Fuegiae et Patagoniae: 7 (1887). – KIM *et al.* (2006) and LEE *et al.* (2008) provided nrITS and nrLSU data for this taxon (see also KONDRATYUK *et al.* 2014c).

Gondwania sp. 18 – ARUP *et al.* (2013): with data on ITS, nrLSU and mtSSU.

Gyalolechia A. Massal.,

Ric. auton. lich. crost. (Verona): 17 (1852) [Caloplacoideae]

Type species: *Gyalolechia aurea* (Schaer.) A. Massal.

Of 17 species accepted in ARUP *et al.* (2013) 10 species were combined only on the basis of ITS data while 2 species are included in this genus without any molecular data.

Gyalolechia allochroa (Y. Joshi, Vondrák et Hur) Søchting, Frödén et Arup – Bas.: *Caloplaca allochroa* Y. Joshi, Vondrák et Hur, in Joshi *et al.* (2011, p. 263). – ARUP *et al.* (2013: 70): *combination is proposed only from the ITS phylogeny.

Gyalolechia aurea (Schaer.) A. Massal. – Bas.: *Lecidea aurea* Schaer. (1818, p. 11). – Three gene data are so far provided for one voucher of this species.

Gyalolechia stantonii (W. A. Weber ex Arup) Søchting, Frödén et Arup – Bas.: *Caloplaca stantonii* W. A. Weber ex Arup, in Arup (1992, p. 454). – ARUP *et al.* (2013: 71) provided data on three genes for one voucher specimens.

Gyalolechia stipitata (Wetmore) Søchting, Frödén et Arup – Bas.: *Caloplaca stipitata* Wetmore (1999, p. 102). – ARUP *et al.* (2013: 72) provided data on three genes for one voucher specimens.

Gyalolechia xanthostigmoidea (Räs.) Søchting, Frödén et Arup – Bas.: *Placodium xanthostigmoideum* Räs. (1933, p. 15). – ARUP *et al.* (2013: 72): *combination is provided only from the ITS phylogeny.

Gyalolechia arizonica (H. Magn.) Søchting, Frödén et Arup → ***Opeltia arizonica*** (H. Magn.) S. Y. Kondr. et Lökös

Gyalolechia bracteata (Hoffm.) A. Massal. → ***Fulgensia bracteata*** (Hoffm.) Räsänen

Gyalolechia cranfieldii (S. Y. Kondr. et Kärnefelt) Søchting, Frödén et Arup → ***Fulgensia cranfieldii*** S. Y. Kondr. et Kärnefelt

Gyalolechia delphinensis (Poelt) Søchting, Frödén et Arup → ***Fulgensia delphinensis*** Poelt

Gyalolechia desertorum (Tomin) Søchting, Frödén et Arup → ***Fulgensia desertorum*** (Tomin) Poelt

Gyalolechia ehrenbergii (Müll. Arg.) Søchting, Frödén et Arup → ***Elenkiniana ehrenbergii*** (Müll. Arg.) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur

Gyalolechia flavovirescens (Wulfen) Søchting, Frödén et Arup → ***Laundonia flavovirescens*** (Wulfen) S. Y. Kondr., Lökös et Hur

Gyalolechia fulgens (Sw.) Søchting, Frödén et Arup → ***Fulgensia fulgens*** (Sw.) Elenkin

Gyalolechia fulgida (Nyl.) Søchting, Frödén et Arup → ***Fulgensia fulgida*** (Nyl.) Szatala

Gyalolechia gomerana (J. Steiner) Søchting, Frödén et Arup → ***Elenkiniana gomerana*** (J. Steiner) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur

Gyalolechia juniperina (Tomin) Søchting, Frödén et Arup → ***Opeltia juniperina*** (Tomin) S. Y. Kondr. et Lökös

Gyalolechia klementii (Kalb) Søchting, Frödén et Arup → ***Fulgensia klementii*** Kalb

Gyalolechia lenae (Søchting et G. Figueras) Søchting, Frödén et Arup → ***Hanstrassia lenae*** (Søchting et G. Figueras) S. Y. Kondr.

Gyalolechia oxneri (S. Y. Kondr. et Søchting) Søchting, Frödén et Arup → ***Oxneriopsis oxneri*** (S. Y. Kondr. et Søchting) S. Y. Kondr., Upreti et Hur

Gyalolechia persimilis (Wetmore) Søchting, Frödén et Arup → ***Laundonia persimilis*** (Wetmore) S. Y. Kondr., Lökös et Hur

*Gyalolechia pruinos*a Körb. → *Fulgensia pruinos*a (Körb.) Poelt
Gyalolechia schistidii Anzi → *Calogaya schistidii* (Anzi) Arup, Frödén et Søchting
Gyalolechia subbracteata (Nyl.) Søchting, Frödén et Arup → *Fulgensia subbracteata* (Nyl.) Poelt
Gyalolechia ussuriensis (Oxner, S. Y. Kondr. et Elix) Vondrák → *Lazarenkoiopsis ussuriensis* (Oxner, S. Y. Kondr. et Elix) S. Y. Kondr., Lökös et Hur

Haloplaca Arup, Søchting et Frödén,

in Arup et al., *Nordic J. Bot.* 31(1): 61 (2013) [Teloschistoideae]

Type species: *Haloplaca britannica* (R. Sant.) Arup, Frödén et Søchting

Status of the genus *Haloplaca* is still waiting for confirmation as far data on nrLSU sequences are hitherto missing. Two of three species are combined to this genus only on the basis of nrITS phylogeny.

Haloplaca britannica (R. Sant.) Arup, Frödén et Søchting – Bas.: *Caloplaca britannica* R. Sant., in Laundon (1992, p. 2). – Only nrITS data are still available for this species (ARUP *et al.* 2013: 61).

Haloplaca soreidiella (Arup) Arup, Frödén et Søchting – Bas.: *Caloplaca soreidiella* Arup (2006c, p. 499). – Only nrITS data are still available for this species (ARUP *et al.* 2013: 61).

Haloplaca suaedae (O. L. Gilbert et Coppins) Arup, Frödén et Søchting – Bas.: *Caloplaca suaedae* O. L. Gilbert et Coppins, in Gilbert (2001, p. 416). – Only nrITS and mtSSU data available, data on nrLSU sequences are still missing (ARUP *et al.* 2013: 61).

Hanstrassia S. Y. Kondr.,

in Kondratyuk et al., *Acta Bot. Hung.* 59(1–2): 91 (2017) [Caloplacoideae]

Type species: *Hanstrassia lenae* (Søchting et G. Figueras) S. Y. Kondr.

Hanstrassia jaeseounhurii S. Y. Kondr., C. H. Park et Lökös, in Kondratyuk et al., *Acta Bot. Hung.* 59(1–2): 92 (2017). – KONDRATYUK *et al.* (2017a) have provided data only on nrITS sequences of this species.

Hanstrassia lenae (Søchting et G. Figueras) S. Y. Kondr., in Kondratyuk et al., *Acta Bot. Hung.* 59(1–2): 121 (2017). ≡ *Caloplaca lenae* Søchting et G. Figueras, *Lichenologist* 39(1): 8 (2007). ≡ *Gyalolechia lenae* (Søchting et G. Figueras) Søchting, Frödén et Arup. – ARUP *et al.* (2013: 71 as *Gyalolechia lenae* (Søchting et G. Figueras) Søchting, Frödén et Arup): *combination was provided only from the ITS phylogeny. KONDRATYUK *et al.* (2017a) provided data on nrITS and mtSSU sequences for two vouchers of this species.

Harusavskia S. Y. Kondr.,

in Kondratyuk et al., *Acta Bot. Hung.* 59(1–2): 96 (2017) [Teloschistoideae]

Type species: *Harusavskia elenkinianoides* S. Y. Kondr., X. Yuan Wang, S. O. Oh et Hur

Harusavskia elenkinianoides S. Y. Kondr., X. Yuan Wang, S. O. Oh et Hur, in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 97 (2017). – KONDRATYUK *et al.* (2017a) provided three gene data for three voucher specimens of this species.

Honeggeria S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, J.-S. Hur et A. Thell, in Fedorenko et al. (2012, p. 53) [Xanthorioideae]
Type species: *Honeggeria rosmariae* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, J.-S. Hur et A. Thell

Honeggeria leoncita (Søchting et Bungartz) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 64: 322 (2022). – Bas.: *Xanthomendoza leoncita* Bungartz et Søchting, in Bungartz et al., Plant Fung. Syst. 65(2): 569 (2020). – Data on single nrITS sequence of this species were recently added (BUNGARTZ *et al.* 2020).

Honeggeria rosmariae (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, J.-S. Hur et A. Thell – Bas.: *Xanthomendoza rosmariae* S. Y. Kondr. et Kärnefelt – The voucher was incorrectly identified as *Xanthomendoza weberi*, provided data on three genes for one voucher specimens (ARUP *et al.* 2013). Data on additional nrITS sequence of this species (under name *Xanthomendoza weberi*) were recently added (BUNGARTZ *et al.* 2020).

Honeggeria wetmorei (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 64: 322 (2022). – Bas.: *Xanthoria wetmorei* S. Y. Kondr. et Kärnefelt [as ‘*wetmori*’], Ukr. Bot. Zh. 60(2): 128 (2003). ≡ *Oxneria wetmorei* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr. et Kärnefelt [as ‘*wetmori*’], Ukr. Bot. Zh. 60(4): 432 (2003). ≡ *Gallowayella wetmorei* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko et al., Bibl. Lichenol. 108: 60 (2012). – Data on single nrITS sequence of this species were recently added (BUNGARTZ *et al.* 2020).

Hosseussiella S. Y. Kondr., L. Lökös, Kärnefelt et A. Thell,
in Kondratyuk et al., Acta Bot. Hung. 60: 97 (2018) [Teloschistoideae]
Type species: *Hosseussiella chilensis* (Kärnefelt, S. Y. Kondr., Frödén et Arup) S. Y. Kondr., L. Lökös, Kärnefelt et A. Thell

Hosseussiella chilensis (Kärnefelt, S. Y. Kondr., Frödén et Arup) S. Y. Kondr., L. Lökös, Kärnefelt et A. Thell, in Kondratyuk et al., Acta Bot. Hung. 60: 100 (2018). – Bas.: *Caloplaca chilensis* Kärnefelt, S. Y. Kondr., Frödén et Arup, in Kärnefelt et al., The Bryologist 105: 302 (2002). – Three gene data for one voucher specimen were so far provided for this species. KONDRATYUK *et al.* (2018b) provided only nrITS data for two additional voucher specimens.

Hosseussiella gallowayiana S. Y. Kondr., L. Lökös, J.-S. Hur, Kärnefelt et A. Thell, in Kondratyuk et al., Acta Bot. Hung. 60: 102 (2018). – KONDRATYUK *et al.* (2018b) provided only ITS data for three voucher specimens.

Hosseussiella pergracilis (Zahlbr.) S. Y. Kondr., L. Lökös et A. Thell, in Kondratyuk et al., Acta Bot. Hung. 60: 105 (2018). – Bas.: *Caloplaca pergracilis* Zahlbr., Medd. Göteb. Bot. Trädg. 2: 20 (1925). ≡ *Gasparrinia pergracilis* (Zahlbr.) Follmann, Nova Hed-

wigia 14: 265 (1967). – KONDRATYUK *et al.* (2018*b*) provided only ITS data for two voucher specimens.

Huneckia S. Y. Kondr., Elix, Kärnefelt, A. Thell et J.-S. Hur,
in Kondratyuk *et al.*, Acta Bot. Hung. 56(1–2): 102 (2014) [Caloplacoideae]
Type species: *Huneckia pollinii* (A. Massal.) S. Y. Kondr., Elix, Kärnefelt, A.
Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur

Huneckia crocina (Kremp.) Wilk, Mycotaxon 136(2): 395 (2021) – Bas.: *Lecidea crocina*
Kremp., Flora, Regensburg 61: 519 (1878). – Data on three genes of one voucher of
this species are so far provided (BUNGARTZ *et al.* 2020).

Huneckia pollinii (A. Massal.) S. Y. Kondr., Elix, Kärnefelt, A. Thell, J. Kim, A. S. Kondra-
tiuk et J.-S. Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 56(1–2): 111 (2014). – Bas.:
Blastenia pollinii A. Massal. ≡ *Caloplaca pollinii* (A. Massal.) Jatta = [Replaced syno-
nym:] *Lecidea gibberosa* Pollini, 1824 – KONDRATYUK *et al.* (2014*a*) provided data on
three genes for three voucher specimens. Additional data on nrITS sequences of this
species are recently provided (BUNGARTZ *et al.* 2020).

Huneckia rheinigera (Elix et S. Y. Kondr.) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim,
A. S. Kondratiuk et J.-S. Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 56(1–2): 111
(2014). – Bas.: *Caloplaca rheinigera* Elix et S. Y. Kondr., in Kondratyuk *et al.*, Bibl.
Lichenol. 95: 375 (2007). – Data on nrITS sequence for this species hitherto are
only provided (KONDRATYUK *et al.* 2014*a*, BUNGARTZ *et al.* 2020).

Huneckia wrightii (Tuck.) Arup, Søchting et Bungartz, in Bungartz *et al.*, Plant Fung.
Syst. 65(2): 530 (2020). – Bas.: *Placodium ferrugineum* f. *wrightii* Tuck., Syn. N.
Amer. Lich. (Boston) 1: 178 (1882). – Data on three genes of one voucher of this
species are hitherto provided (BUNGARTZ *et al.* 2020).

Huriella S. Y. Kondr.,
in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 101 (2017) [Xanthorioideae]
Type species: *Huriella loekoessiana* S. Y. Kondr. et Upreti

Huriella aeruginosa B. G. Lee et Hur, MycoKeys 84: 47 (2021). – Data on nrITS sequence
for this species hitherto are only provided (LEE and HUR 2021).

Huriella flakusii Wilk, Lichenologist 52(1): 39 (2020). ≡ *Squamulea flakusii* (Wilk) Arup,
Søchting et Bungartz, in Bungartz *et al.*, Plant Fung. Syst. 65(2): 564 (2020). – Data
on three genes of one voucher of this species are so far provided.

Huriella loekoessiana S. Y. Kondr. et Upreti, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2):
102 (2017). ≡ *Squamulea loekoessiana* (S. Y. Kondr. et Upreti) Arup, Søchting et Bun-
gartz, in Bungartz *et al.*, Plant Fung. Syst. 65(2): 569 (2020). – Data on nrITS and mtSSU
sequences for this species hitherto are only provided (KONDRATYUK *et al.* 2017*a*).

Huriella osseophila (Søchting et Bungartz) S. Y. Kondr., *comb. nova* – MycoBank No.: MB
847173 – Basionym: *Squamulea osseophila* Søchting et Bungartz, in Bungartz *et al.*,
Plant Fung. Syst. 65(2): 566 (2020). – Position of this species in the *Huriella* branch
is hitherto illustrated only on the basis of nrITS data (BUNGARTZ *et al.* 2020).

Huriella phyllidizans (Wetmore) S. Y. Kondr., *comb. nova* – MycoBank No.: MB 847174 – Basionym: *Caloplaca phyllidizans* Wetmore, Bryologist 106(1): 149 (2003). ≡ *Squamulea phyllidizans* (Wetmore) Söchting et Bungartz, in Bungartz et al., Plant Fung. Syst. 65(2): 567 (2020). – Position of this species in the *Huriella* branch is hitherto illustrated only on the basis of nrITS data (BUNGARTZ *et al.* 2020).

Huriella pohangensis S. Y. Kondr., L. Lökös et J.-S. Hur, in Kondratyuk et al., Acta Bot. Hung. 60(1–2): 149 (2018). – Molecular data still not published for this species (KONDRATYUK *et al.* 2018c).

Huriella salyangiana S. Y. Kondr. et J.-S. Hur, in Kondratyuk et al., Acta Bot. Hung. 60(1–2): 153 (2018). – Molecular data still not published for this species (KONDRATYUK *et al.* 2018c).

Huriella upretiana S. Y. Kondr., G. K. Mishra, Nayaka et A. Thell, in Mishra et al., Acta Bot. Hung. 62(3–4): 351 (2020). – Molecular data on this species are still not published (MISHRA *et al.* 2020).

Igneoplaca S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur,
in Kondratyuk et al., Acta Bot. Hung. 56(1–2): 154 (2014) [Xanthorioideae]
Type species: *Igneoplaca ignea* (Arup) S. Y. Kondr., Kärnefelt, Elix, A. Thell et
J.-S. Hur

Igneoplaca ignea (Arup) S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur – Bas.: *Caloplaca ignea* Arup ≡ *Polycauliona ignea* (Arup) Arup, Frödén et Söchting. – ARUP *et al.* (2013: 51) provided data on three genes for one voucher specimen (sub *Polycauliona ignea* (Arup) Arup, Frödén et Söchting).

Ikaeria S. Y. Kondr., Upreti et Hur,
in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 105 (2017) [Ikaerioideae]
Type species: *Ikaeria aurantiellina* (Harm.) S. Y. Kondr., Upreti et Hur

Ikaeria aurantiellina (Harm.) S. Y. Kondr., Upreti et Hur, in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 121 (2017). – Bas.: *Caloplaca aurantiellina* Harm., in Pitard and Harmand, Bull. Soc. bot. Fr. 58(Mém. no. 22): 46 (1911). – Data on three genes of two vouchers of this species are so far provided (KONDRATYUK *et al.* 2017a, SIPMAN and APTROOT 2020).

Ikaeria serusiauxii Sipman, in Sipman and Aptroot, Plant Fung. Syst. 65(1): 122 (2020). – Data on two genes of three vouchers of this species are so far provided (SIPMAN and APTROOT 2020).

Iqbalia Fayyaz, Afshan et S. Y. Kondr.,
in Fayyaz et al., Mycol. Progr. 21: 68 (2022) [Teloschistoideae]
Type species: *Iqbalia kashmirensis* Fayyaz, Afshan, Niazi et Khalid

Iqbalia kashmirensis Fayyaz, Afshan, Niazi et Khalid, in Fayyaz et al., Mycol. Progr. 21: 68 (2022). – Three gene data for two voucher specimens are so far provided.

***Ioplaca* Poelt,**

Khumbu Himal 6: 443 (1977) [Caloplacoideae]

Type species: *Ioplaca sphafera* Poelt

Ioplaca pindarensis (Räsänen) Poelt et Hinter., *Bibl. Lichenol.* 50: 235 (1993). – Bas.: *Callopisma pindarensis* Räsänen, *Ann. Soc. Zool.-Bot. fenn. Vanamo* 6(no. 2): 83 (1952). – Only nrITS data are so far provided for this species.

Ioplaca sphafera Poelt, *Khumbu Himal* 6(3): 443 (1977). – Molecular data are so far not provided for this species.

Jackelixia S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell,

in Fedorenko et al., *Bibl. Lichenol.* 100: 74 (2009) [Xanthorioideae]Type species: *Jackelixia elixii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell

Jackelixia angustata (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 100: 77 (2009). – Bas.: *Xanthoria angustata* S. Y. Kondr. et Kärnefelt in Kondratyuk et al. (2009, p. 285). ≡ *Dufourea angustata* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting. – FEDORENKO *et al.* (2009) have provided only nrITS and mtSSU data for this species. ARUP *et al.* (2013: 41) provided three gene data for one voucher specimen.

Jackelixia dissectula (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 100: 77 (2009). – Bas.: *Xanthoria dissectula* S. Y. Kondr. et Kärnefelt, in Kondratyuk et al., *Bibl. Lichenol.* 88: 355 (2004). ≡ *Dufourea dissectula* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting – ARUP *et al.* (2013: 42) provided three gene data for one voucher specimen.

Jackelixia elixii (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 100: 77 (2009). – Bas.: *Xanthoria elixii* S. Y. Kondr. et Kärnefelt, in Kondratyuk et al., *Nuytsia* 16(1): 64 (2006). ≡ *Dufourea elixii* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting – FEDORENKO *et al.* (2009) provided data on nrITS and mtSSU sequences only. ARUP *et al.* (2013: 42) provided data only on the ITS.

Jackelixia filsonii (Elix) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 100: 78 (2009). – Bas.: *Xanthoria filsonii* Elix, *Lichenes Australasici Exsiccati, Fascicle 7 (nos 151–175) (Canberra): [4], no. 174* (1988). ≡ *Dufourea filsonii* (Elix) Frödén, Arup et Søchting – FEDORENKO *et al.* (2009) provided data on nrITS and mtSSU sequences only. ARUP *et al.* (2013: 42) provided data only on the ITS.

Jackelixia hypogymnioides (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 100: 78 (2009). – Bas.: *Xanthoria hypogymnioides* S. Y. Kondr. et Kärnefelt – No molecular data are so far provided for this species.

Jackelixia incavata (Stirt.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 100: 78 (2009). Bas.: *Physcia incavata* Stirt. ≡ *Xanthoria*

- incavata* (Stirt.) Zahlbr. (1941). ≡ *Dufourea incavata* (Stirt.) Frödén, Arup et Søchting, in Arup et al., Nordic J. Bot. 31(1): 43 (2013). – FEDORENKO *et al.* (2009) and ARUP *et al.* (2013: 43) proposed new combinations without providing any molecular data.
- Jackelixia kangarooensis*** (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell, in Fedorenko et al., Bibl. Lichenol. 100: 78 (2009). – Bas.: *Xanthoria kangarooensis* S. Y. Kondr. et Kärnefelt, in Kondratyuk et al., Bibl. Lichenol. 100: 279 (2009). – No molecular data are so far provided for this species.
- Jackelixia ligulata*** (Körb.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell, in Fedorenko et al., Bibl. Lichenol. 100: 78 (2009). – Bas.: *Physcia ligulata* Körb. ≡ *Xanthoria ligulata* (Körb.) P. James, in Galloway, N.Z. J. Bot. 21(2): 198 (1983). ≡ *Dufourea ligulata* (Körb.) Frödén, Arup et Søchting – Three gene data are provided for two voucher specimens of this species (ARUP *et al.* 2013: 43, FEDORENKO *et al.* 2009).
- Jackelixia streimannii*** (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell, in Fedorenko et al., Bibl. Lichenol. 100: 78 (2009). – Bas.: *Xanthoria streimannii* S. Y. Kondr. et Kärnefelt, in Kondratyuk et al., Nuytsia 16(1): 72 (2006). ≡ *Dufourea streimannii* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting – So far only nrITS and mtSSU data are provided for this species (ARUP *et al.* 2013: 43, FEDORENKO *et al.* 2009).
- Jackelixia whinrayi*** (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell, in Fedorenko et al., Bibl. Lichenol. 100: 78 (2009). – Bas.: *Xanthoria whinrayi* S. Y. Kondr. et Kärnefelt – No any molecular data are so far provided for this species.
- Jackelixia yorkensis*** (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell, in Fedorenko et al., Bibl. Lichenol. 100: 78 (2009). – Bas.: *Xanthoria yorkensis* S. Y. Kondr. et Kärnefelt – No any molecular data are so far provided for this species.

Jasonhuria S. Y. Kondr., Lökös et S. O. Oh,

in Kondratyuk et al., Mycobiology 43(3): 198 (2015) [Caloplacoideae]

Type species: *Jasonhuria bogilana* (Y. Joshi et Hur) S. Y. Kondr., Lökös, Jung Kim, A. S. Kondr. et S. O. Oh

- Jasonhuria bogilana*** (Y. Joshi et Hur) S. Y. Kondr., Lökös, Jung Kim, A. S. Kondr. et S. O. Oh, in Kondratyuk et al., Mycobiology 43(3): 198 (2015). – Bas.: *Caloplaca bogilana* Y. Joshi et Hur, Lichenologist 42(6): 716 (2010). – Three gene data are provided for four voucher specimens of this species (KONDRATYUK *et al.* 2015c).

Jesmurraya S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, J.-S. Hur et A. Thell, in Fedorenko et al., Bibl. Lichenol. 108: 53 (2012) [Xanthorioideae]

Type species: *Jesmurraya novozelandica* (Hillmann) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, J.-S. Hur et A. Thell

- Jesmurraya novozelandica*** (Hillmann) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, J.-S. Hur et A. Thell – Bas.: *Xanthoria novozelandica* Hillmann, Reprrium nov.

Spec. Regni veg. 45: 176 (1938). ≡ *Xanthomendoza novozelandica* (Hillmann) Søchting, Kärnefelt et S. Y. Kondr., Mitt. Inst. Allg. Bot. Hamburg 30–32: 237 (2002). – Three gene data are provided for one voucher specimen of this species (ARUP *et al.* 2013, FEDORENKO *et al.* 2009, KONDRATYUK *et al.* 2017).

Josefpoeltia S. Y. Kondr. et Kärnefelt,

Bibl. Lichenol. 68: 22 (1997) [Teloschistoideae]

Type species: *Josefpoeltia boliviensis* S. Y. Kondr. et Kärnefelt

Josefpoeltia parva (Räsänen) Frödén et L. Lindblom (2002, p. 447). – Bas.: *Xanthoria parva* Räsänen (1941, p. 102). ≡ *Josefpoeltia boliviensis* S. Y. Kondr. et Kärnefelt – Three gene data are provided for one voucher specimen of this species (ARUP *et al.* 2013, EICHENBERGER 2007).

Josefpoeltia solediosa S. Y. Kondr. et Kärnefelt (1997, p. 24). – Three gene data are provided for three voucher specimens of this species (ARUP *et al.* 2013, KONDRATYUK *et al.* 2013a).

Kaernefia S. Y. Kondr., Elix, A. Thell et J.-S. Hur,

in Kondratyuk *et al.*, Acta Bot. Hung. 55(3–4): 269 (2013) [Teloschistoideae]

Type species: *Kaernefia kaernefeltii* (S. Y. Kondr., Elix et A. Thell) S. Y. Kondr., Elix, A. Thell, J. Kim, A. S. Kondratyuk et J.-S. Hur

Kaernefia albocrenulata (V. Wirth et S. Y. Kondr.) S. Y. Kondr., A. Thell, Elix, J. Kim, A. S. Kondratyuk et J.-S. Hur – Bas.: *Caloplaca albocrenulata* S. Y. Kondr. et V. Wirth, in Wirth and Kondratyuk, Herzogia 23(2): 180 (2010). – KONDRATYUK *et al.* (2013c) provided three gene data for two voucher specimens.

Kaernefia gilfillaniorum (G. Kantvilas et S. Y. Kondr.) S. Y. Kondr., A. Thell, Elix, J. Kim, A. S. Kondratyuk et J.-S. Hur – Bas.: *Caloplaca gilfillaniorum* Kantvilas et S. Y. Kondr., J. Adelaide Bot. Gard. 26(2): 10 (2013). – KONDRATYUK *et al.* (2013c) provided three gene data for two voucher specimens.

Kaernefia kaernefeltii (S. Y. Kondr., Elix et A. Thell) S. Y. Kondr., Elix, A. Thell, J. Kim, A. S. Kondratyuk et J.-S. Hur – Bas.: *Caloplaca kaernefeltii* S. Y. Kondr., Elix et A. Thell, in Kondratyuk *et al.*, Bibl. Lichenol. 100: 254 (2009). – KONDRATYUK *et al.* (2013c) provided three gene data for three voucher specimens.

Klauderuiella S. Y. Kondr. et Hur,

in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 107 (2017) [Caloplacoideae]

Type species: *Klauderuiella thallincola* (Wedd.) S. Y. Kondr. et Hur

Klauderuiella aurantia (Pers.) S. Y. Kondr. et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 121 (2017). – Bas.: *Variospora aurantia* (Pers.) Arup, Frödén et Søchting – ARUP *et al.* (2013) provided three gene data for one voucher specimen, KONDRATYUK *et al.* (2017a).

Klauderuiella flavescens (Huds.) S. Y. Kondr. et Hur, in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 121 (2017). – Bas.: *Variospora flavescens* (Huds.) Arup, Frödén et Søchting – ARUP *et al.* (2013) provided three gene data for one voucher specimen, KONDRATYUK *et al.* (2017a).

Klauderuiella thallincola (Wedd.) S. Y. Kondr. et Hur, in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 121 (2017). – Bas.: *Variospora thallincola* (Wedd.) Arup, Frödén et Søchting – ARUP *et al.* (2013) provided three gene data for one voucher specimen, KONDRATYUK *et al.* (2017a).

Kudratoviella S. Y. Kondr., L. Lökös, Kärnefelt et A. Thell,
in Kondratyuk et al., Acta Bot. Hung. 64: 322 (2022) [Xanthorioideae]
Type species: *Kudratoviella zeorina* (B. G. Lee et Hur) S. Y. Kondr., L. Lökös, I.
Kärnefelt et A. Thell

Kudratoviella anularis (Clauzade et Poelt) S. Y. Kondr., L. Lökös, I. Kärnefelt et A. Thell,
in Kondratyuk et al., Acta Bot. Hung. 64: 322 (2022). – Bas.: *Caloplaca anularis*
Clauzade et Poelt, Herzogia 2(1): 305 (1972). – Only nrITS data are so far provided.

Kudratoviella bohlinii (H. Magn.) S. Y. Kondr., L. Lökös, I. Kärnefelt et A. Thell, in
Kondratyuk et al., Acta Bot. Hung. 64: 322 (2022). – Bas.: *Caloplaca bohlinii* H.
Magn., Lichens Central Asia 1: 137 (1940). ≡ *Gasparrinia bohlinii* (H. Magn.) N.
S. Golubk., Ukr. Bot. Zh. 35(2): 186 (1978). – Only nrITS data are so far provided.

Kudratoviella rajasthanica (S. Y. Kondr., Upreti et G. P. Sinha) S. Y. Kondr., L. Lökös, I.
Kärnefelt et A. Thell, in Kondratyuk et al., Acta Bot. Hung. 64: 322 (2022). – Bas.:
Caloplaca rajasthanica S. Y. Kondr., Upreti et G. P. Sinha in Mishra et al., Acta Bot.
Hung. 62(3–4): 340 (2020). – No molecular data so far provided.

Kudratoviella scrobiculata (H. Magn.) S. Y. Kondr., L. Lökös, I. Kärnefelt et A. Thell, in
Kondratyuk et al., Acta Bot. Hung. 64: 322 (2022). – Bas.: *Caloplaca scrobiculata* H.
Magn., Lichens Central Asia 1: 143 (1940). ≡ *Gasparrinia scrobiculata* (H. Magn.)
Kudratov, Ukr. Bot. Zh. 35(2): 187 (1978). – Only nrITS data are so far provided.

Kudratoviella zeorina (B. G. Lee et Hur) S. Y. Kondr., L. Lökös, I. Kärnefelt et A. Thell,
in Kondratyuk et al., Acta Bot. Hung. 64: 322 (2022). – Bas.: *Caloplaca zeorina* B. G.
Lee et Hur, in Lee et al., Mycotaxon 133(1): 119 (2018). – Only nrITS and mtSSU
data are so far provided.

Lacrima Bungartz, Arup et Søchting,
in Bungartz et al., Plant Fung. Syst. 65(2): 534 (2020) [Caloplacoideae]
Type species: *Lacrima epiphora* (Taylor) Bungartz, Søchting et Arup

Lacrima aphanotripta (Nyl.) Bungartz, Søchting et Arup, in Bungartz et al., Plant Fung.
Syst. 65(2): 534 (2020). – Bas.: *Lecanora aphanotripta* Nyl., Lich. Japon.: 104 (1890).
– Combination of this species within the *Lacrima* branch is based only on nrITS
data (BUNGARTZ *et al.* 2020).

Lacrima epiphora (Taylor) Bungartz, Søchting et Arup, in Bungartz et al., Plant Fung.
Syst. 65(2): 534 (2020). – Bas.: *Lecanora epiphora* Taylor, London J. Bot. 6: 159

(1847). – Data on three genes of one voucher of this species are so far provided (BUNGARTZ *et al.* 2020).

Lacrima galapagoensis Bungartz et Søchting, in Bungartz *et al.*, Plant Fung. Syst. 65(2): 538 (2020). – Data on three genes of one voucher of this species are so far provided (BUNGARTZ *et al.* 2020).

Lacrima sonorae (Wetmore) Søchting, Arup et Bungartz, in Bungartz *et al.*, Plant Fung. Syst. 65(2): 540 (2020). – Bas.: *Caloplaca sonorae* Wetmore, Bryologist 99(3): 309 (1996). – Combination of this species within the *Lacrima* branch is based only on nrITS data (BUNGARTZ *et al.* 2020).

Langeottia S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur,
in Kondratyuk *et al.*, Acta Bot. Hung. 56(1–2): 155 (2014) [Xanthorioideae]
Type species: *Langeottia ottolangei* (S. Y. Kondr., V. Wirth et Kärnefelt) S.
Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S.
Kondratiuk et J.-S. Hur

Langeottia ottolangei (S. Y. Kondr., V. Wirth et Kärnefelt) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur – Bas.: *Jackelixia ottolangei* S. Y. Kondr., V. Wirth et Kärnefelt, in Wirth and Kondratyuk, Herzogia 23(2): 190 (2010). – KONDRATYUK *et al.* (2014c) provided three gene data for four voucher specimens.

Langeottia hirsuta (Eichenb., Aptroot et Honegger) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur – Bas.: *Xanthoria hirsuta* Eichenberger, Aptroot et Honegger ≡ *Dufourea hirsuta* (Eichenberger, Aptroot et Honegger) Frödén, Arup et Søchting – Combinations are so far proposed without providing any molecular data.

Laundonia S. Y. Kondr., Lökös et Hur,
in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 108 (2017) [Caloplacoideae]
Type species: *Laundonia flavovirescens* (Wulfen) S. Y. Kondr., Lökös et Hur

Laundonia flavovirescens (Wulfen) S. Y. Kondr., Lökös et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 121 (2017). ≡ *Gyalolechia flavovirescens* (Wulfen) Søchting, Frödén et Arup – ARUP *et al.* (2013) provided three gene data for one voucher specimen; KONDRATYUK *et al.* (2017a).

Laundonia persimilis (Wetmore) S. Y. Kondr., Lökös et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 121 (2017). – Bas.: *Caloplaca persimilis* Wetmore, Bryologist 107(4): 513 (2004). ≡ *Gyalolechia persimilis* (Wetmore) Søchting, Frödén et Arup – ARUP *et al.* (2013) provided new combination is provided only from the ITS phylogeny; KONDRATYUK *et al.* (2017a).

Lazarenkoella S. Y. Kondr., Kärnefelt, A. Thell, Elix et Hur,
in Kondratyuk *et al.*, Acta Bot. Hung. 57(3–4): 328 (2015) [Brownlielloideae]

Type species: *Lazarenkoella zoroasteriorum* S. Y. Kondr. et Moniri ex S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur

Lazarenkoella persica (J. Steiner) S. Y. Kondr. et Lökös, in Kondratyuk et al., Acta Bot. Hung. 60(3–4): 383 (2018). – Bas.: *Xanthoria polycarpoides* var. *persica* J. Steiner ≡ *Caloplaca persica* (J. Steiner) M. Steiner et Poelt ≡ *Calogaya persica* (J. Steiner) Arup, Frödén et Søchting – Only nrITS data are so far provided for this species. – ARUP et al. (2013: 39): *combination is proposed without providing any molecular data.

Lazarenkoella polycarpoides (J. Steiner) S. Y. Kondr. et Lökös, in Kondratyuk et al., Acta Bot. Hung. 60(3–4): 383 (2018). – Bas.: *Xanthoria polycarpoides* J. Steiner, Ann. Mycol. 8(2): 241 (1910). ≡ *Caloplaca polycarpoides* (J. Steiner) M. Steiner et Poelt ≡ *Calogaya polycarpoides* (J. Steiner) Arup, Frödén et Søchting – Only nrITS data are so far provided for this species (ARUP et al. 2013: 39).

Lazarenkoella zoroasteriorum S. Y. Kondr. et Moniri ex S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur, in Kondratyuk et al., Acta Bot. Hung. 57(3–4): 340 (2015). – Bas.: *Caloplaca zoroasteriorum* S. Y. Kondr. et Moniri, in Kondratyuk et al., Acta Bot. Hung. 55(1–2): 56 (2013). ≡ *Calogaya zoroasteriorum* (S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur) Moniri et Vondrák, in Vondrák et al., Mycol. Progr. 17(8): 914 (2018). – KONDRATYUK et al. (2015d) provided three gene data for three voucher specimens of this species.

Lazarenkoiopsis S. Y. Kondr., Lökös et Hur,

in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 109 (2017) [Teloschistoideae]

Type species: *Lazarenkoiopsis ussuriensis* (Oxner, S. Y. Kondr. et Elix) S. Y. Kondr., Lökös et Hur

Lazarenkoiopsis ussuriensis (Oxner, S. Y. Kondr. et Elix) S. Y. Kondr., Lökös et Hur, in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 121 (2017). – Bas.: *Caloplaca ussuriensis* Oxner, S. Y. Kondr. et Elix, Folia cryptog. Estonica 48: 21 (2011). – KONDRATYUK et al. (2014a) provided three gene data for two voucher specimens of this species.

Lendemeriella S. Y. Kondr.,

in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 116 (2020) [Caloplacoideae]

Type species: *Lendemeriella reptans* (Lendemer et B. P. Hodk.) S. Y. Kondr.

Lendemeriella aureopruinosa I. V. Frolov, Vondrák, Arup, Konoreva, S. Chesnokov, Yakovczenko et Davydov, in Frolov et al., Lichenologist 53(3): 239 (2021). – So far no molecular data on such species are available.

Lendemeriella borealis (Vain.) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 121 (2020). – Bas.: *Lecanora pyracea* f. *borealis* Vain., Meddn Soc. Fauna Flora fenn. 6: 146 (1881). ≡ *Caloplaca borealis* (Vain.) Poelt, Best. europ. Flecht. (Vaduz): 172 (1969). – Three gene data on one voucher specimen are so far accumulated.

Lendemeriella dakotensis (Wetmore) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 121 (2020). – Bas.: *Caloplaca dakotensis* Wetmore, Mycologia 86(6): 823 (1995) [1994]. – So far no molecular data on such species are available.

- Lendemeriella exsecuta*** (Nyl.) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 121 (2020). – Bas.: *Lecanora exsecuta* Nyl., Flora, Regensburg 63: 388 (1880). ≡ *Caloplaca exsecuta* (Nyl.) Dalla Torre et Sarnth., Fl. Tirol, Vorarlberg, Liechtenstein, IV Band. Die Flechten von Tirol: 191 (1902). – Only nrITS data are so far accumulated for this species.
- Lendemeriella lucifuga*** (G. Thor) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 121 (2020). – Bas.: *Caloplaca lucifuga* G. Thor, Lichenologist 20(2): 175 (1988). – Only nrITS data are so far accumulated for this species.
- Lendemeriella nivalis*** (Körb.) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 121 (2020). – Bas.: *Zeora nivalis* Körb., Denkschr. Feier fünfz. Best. her. Schles. Gesellsch. Vaterl. Kultur: 321 (1853). – Only nrITS data are so far accumulated for this species.
- Lendemeriella reptans*** (Lendemer et B. P. Hodk.) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 121 (2020). – Bas.: *Caloplaca reptans* Lendemer et B. P. Hodk., Syst. Bot. 37(4): 841 (2012). – Three gene data on one voucher specimen are so far accumulated.
- Lendemeriella sorocarpa*** (Vain.) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 121 (2020). – Bas.: *Placodium sorocarpum* Vain., Ann. bot. Soc. Zool.-Bot. fenn. Vanamo 6: 320 (1929). ≡ *Caloplaca sorocarpa* (Vain.) Zahlbr., Cat. Lich. Univers. 8: 589 (1932). – Only nrITS data are so far accumulated for this species.
- Lendemeriella tornoensis*** (H. Magn.) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 122 (2020). – Bas.: *Caloplaca tornoensis* H. Magn. [as ‘tornoënsis’], Göteborgs Kungl. Vetensk. Samhälles Handl., Ser. B, Math. Naturv. Skr. 3(no. 1): 17 (1944). – Only nrITS data are so far accumulated for this species.

Leproplaca (Nyl.) Nyl.,

in Hue, Rev. Bot. Bull. Mens. 6: 148 (1888) [1887–88] [Caloplacoideae]

Type species: *Leproplaca xantholyta* (Nyl.) Hue

- Leproplaca cirrochroa*** (Ach.) Arup, Frödén et Søchting – Bas.: *Lecanora cirrochroa* Ach. (1814, p. 181). – ARUP *et al.* (2013: 72): *combination is proposed only after the ITS phylogeny.
- Leproplaca chrysodeta*** (Vain. ex Räs.) J. R. Laundon ex Ahti, in Ahti *et al.*, Graphis Scripta 27(1–2): 39 (2015). – Bas.: *Placodium chrysodetum* Vain. ex Räs. (1931, p. 113). – ARUP *et al.* (2013: 72) provided three gene data for one voucher specimen. Additional data on single mtSSU sequence of this species were recently added (BUNGARTZ *et al.* 2020).
- Leproplaca obliterans*** (Nyl.) Arup, Frödén et Søchting – Bas.: *Placodium obliterans* Nyl. (1874, p. 7). – ARUP *et al.* (2013: 72) provided three gene data for one voucher specimen.
- Leproplaca proteus*** (Poelt) Arup, Frödén et Søchting – Bas.: *Caloplaca proteus* Poelt (1953, p. 329). – ARUP *et al.* (2013: 73): *combination is proposed only after the ITS phylogeny.
- Leproplaca xantholyta*** (Nyl.) Hue – Bas.: *Lecanora xantholyta* Nyl. (1879, p. 361). – ARUP *et al.* (2013: 73) provided three gene data for one voucher specimen.

Loekoesia S. Y. Kondr., S. O. Oh et Hur,

in Kondratyuk et al., Mycobiology 43(3): 198 (2015) [Caloplacoideae]

Type species: *Loekoesia austrocoreana* S. Y. Kondr., Lökös et Hur ex S. Y. Kondr., Jung Kim, A. S. Kondr., S. O. Oh et Hur

Loekoesia austrocoreana S. Y. Kondr., Jung Kim, A. S. Kondr., S. O. Oh et Hur, in Kondratyuk et al., Mycobiology 43(3): 198 (2015). – Bas.: *Caloplaca austrocoreana* S. Y. Kondr., Lökös et Hur 2013, nom. inval. (Art. F.5.1 (Shenzhen)). Published as a combination, but the ‘basonym’ (*Caloplaca austrocoreana* S. Y. Kondr., Lökös et Hur 2013) is invalid. – KONDRATYUK *et al.* (2015c) provided three gene data for three voucher specimens of this species.

Loekoesia apostatica (Nyl.) Ertz et Diederich, in Diederich and Ertz, Plant Fung. Syst. 65(1): 42 (2020). – Bas.: *Lecanora apostatica* Nyl., in Crombie, J. Bot., Lond. 14: 263 (1876). – Only mtSSU data are still available for this species.

Loekoesia yuchiorum (Lendemer et C. A. Morse) Arup et Søchting, in Bungartz et al., Plant Fung. Syst. 65(2): 570 (2020). – Bas.: *Caloplaca yuchiorum* Lendemer et C. A. Morse, J. Torrey bot. Soc. 137(4): 328 (2010). – No molecular data are so far provided for this species.

Loekoeslaszloa S. Y. Kondr., Kärnefelt, A. Thell et Hur,

in Kondratyuk et al., Acta Bot. Hung. 61(3–4): 338 (2019) [Ikaerioideae]

Type species: *Loekoeslaszloa geumohdoensis* (S. Y. Kondr., D. Liu et Hur) S. Y. Kondr., Yoshik. Yamam. et Hur

Loekoeslaszloa caesioisidiata (Arup et van den Boom) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 64: 322 (2022). – Bas.: *Caloplaca caesioisidiata* Arup et van den Boom, Bibl. Lichenol. 106: 2 (2011). ≡ *Oceanoplaca caesioisidiata* (Arup et van den Boom) Arup, in Bungartz et al., Plant Fung. Syst. 65(2): 546 (2020). – Data on three genes of one voucher of this species are hitherto provided (BUNGARTZ *et al.* 2020).

Loekoeslaszloa caesiosorediata (Arup et van den Boom) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 64: 322 (2022). – Bas.: *Caloplaca caesiosorediata* Arup et van den Boom, Bibl. Lichenol. 106: 3 (2011). ≡ *Oceanoplaca caesiosorediata* (Arup et van den Boom) Arup, in Bungartz et al., Plant Fung. Syst. 65(2): 546 (2020). – Data on three genes of one voucher of this species are hitherto provided (BUNGARTZ *et al.* 2020).

Loekoeslaszloa catillarioides (Arup et van den Boom) S. Y. Kondr., *comb. nova* – MycoBank No.: MB 847175 – Basonym: *Caloplaca catillarioides* Arup et van den Boom, Bibl. Lichenol. 106: 4 (2011). ≡ *Oceanoplaca catillarioides* (Arup et van den Boom) Arup, in Bungartz et al., Plant Fung. Syst. 65(2): 546 (2020). – Data on three genes of one voucher of this species are hitherto provided (BUNGARTZ *et al.* 2020).

Loekoeslaszloa chemoisidiosa (Søchting et Bungartz) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 64: 322 (2022). – Bas.: *Oceanoplaca chemoisidiosa* Søchting et Bungartz, in Bungartz et al., Plant Fung. Syst. 65(2): 540 (2020). – Data on three genes of one voucher of this species are hitherto provided (BUNGARTZ *et al.* 2020).

- Loekoeslaszloa geumohdoensis* (S. Y. Kondr., D. Liu et Hur) S. Y. Kondr., Yoshik. Yamam. et Hur, in Kondratyuk et al., Acta Bot. Hung. 61(3–4): 333 (2019). – Bas.: *Mikhtomia geumohdoensis* S. Y. Kondr., D. Liu et Hur, in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 164 (2017). – Data on three genes of three vouchers of this species are so far provided (KONDRATYUK *et al.* 2017a).
- Loekoeslaszloa huriana* S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 61(3–4): 339 (2019). – Combination of this species within the *Loekoeslaszloa* branch is based only on nrITS data.
- Loekoeslaszloa isidiosa* (Vain.) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 64: 322 (2022). – Bas.: *Placodium isidiosum* Vain., Acta Soc. Fauna Flora fenn. 7(no. 1): 118 (1890). ≡ *Ocenoplaca isidiosa* (Vain.) Bungartz, Söchting et Arup, in Bungartz et al., Plant Fung. Syst. 65(2): 541 (2020). – Data on three genes of one voucher of this species are hitherto provided (BUNGARTZ *et al.* 2020).
- Loekoeslaszloa sideritoides* (Söchting et Bungartz) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 64: 323 (2022). – Bas.: *Oceanoplaca sideritoides* Söchting et Bungartz, in Bungartz et al., Plant Fung. Syst. 65(2): 544 (2020). – Data on three genes of two vouchers of this species are hitherto provided (BUNGARTZ *et al.* 2020).
- Marchantiana* S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur, in Kondratyuk et al., Acta Bot. Hung. 56(1–2): 103 (2014) [Brownlielloideae]
Type species: *Marchantiana occidentalis* (Elix, S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur
- Marchantiana asserigena* (Stizenb. ex J. Lahm) Söchting et Arup, Graphis Scripta 30(6): 118 (2018). – Bas.: *Callopisma asserigenum* Stizenb. ex J. Lahm, Jber. Westfäl. Prov.-Vereins 11: 107 (1883) [1882]. – Data on three genes of one voucher of this species are hitherto provided (BUNGARTZ *et al.* 2020).
- Marchantiana occidentalis* (Elix, S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur – Bas.: *Caloplaca occidentalis* Elix, S. Y. Kondr. et Kärnefelt, in Kondratyuk et al., Bibl. Lichenol. 100: 264 (2009). – KONDRATYUK *et al.* (2014a) provided three gene data for two voucher specimens.
- Marchantiana burneyensis* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur → *Streimanniella burneyensis* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur
- Marchantiana kalbiorum* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur → *Streimanniella kalbiorum* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur
- Marchantiana maulensis* S. Y. Kondr. et J.-S. Hur → *Raesaeniana maulensis* (S. Y. Kondr. et Hur) S. Y. Kondr., Elix, Kärnefelt et A. Thell
- Marchantiana michelagoensis* (Elix, S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur → *Streimanniella michelagoensis* (Elix, S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur
- Marchantiana seppeltii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur → *Streimanniella seppeltii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur

- Martinjahnsia* S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 108: 54 (2012) [Xanthorioideae]
Type species: *Martinjahnsia resendei* (Poelt et Tav.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Martinjahnsia resendei* (Poelt et Tav.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 108: 61 (2012). – Bas.: *Xanthoria resendei* Poelt et Tav. (1968, p. 203). – Three gene data are provided for one voucher specimen (ARUP *et al.* 2013, FEDORENKO *et al.* 2009, MARTIN and WINKA 2000).
- Massjukiella* S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 108: 54 (2012) [Xanthorioideae]
Type species: *Massjukiella polycarpa* (Hoffm.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Massjukiella alaskana* (J. W. Thomson) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 108: 60 (2012). – FEDORENKO *et al.* (2009) have provided only nr ITS and mtSSU data for specimens of this species.
- Massjukiella candelaria* (L.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 108: 60 (2012). – Bas.: *Lichen candelarius* L. ≡ *Polycauliona candelaria* (L.) Frödén, Arup et Søchting – Three gene data are so far provided for three voucher specimens of this species (ARUP *et al.* 2013: 51; FEDORENKO *et al.* 2009; GAYA *et al.* 2015).
- Massjukiella kaernefeltii* (S. Y. Kondr., D. J. Galloway et Goward) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et Elix, in Fedorenko et al., *Bibl. Lichenol.* 108: 60 (2012). – Bas.: *Xanthoria kaernefeltii* S. Y. Kondr., D. J. Galloway et T. Goward in Oxner, *Flora Lischaïnikiv Ukraïni* (Kiev) 2(3): 444 (2010). ≡ *Polycauliona kaernefeltii* (S. Y. Kondr., D. J. Galloway et T. Goward) Frödén, Arup et Søchting – Data of nrITS and mtSSU are available for this species (ARUP *et al.* 2013: 52, FEDORENKO *et al.* 2009). Combination in ARUP *et al.* (2013: 52) is based only on ITS phylogeny.
- Massjukiella nowakii* (S. Y. Kondr. et Bielczyk) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 108: 60 (2012). – Bas.: *Xanthoria nowakii* S. Y. Kondr. et Bielczyk, in Kondratyuk et al. (2001, p. 351). – Only nrITS data are so far provided for this species (VONDRÁK *et al.* 2017).
- Massjukiella polycarpa* (Hoffm.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 108: 60 (2012). – Bas.: *Lobaria polycarpa* Hoffm. ≡ *Polycauliona polycarpa* (Hoffm.) Frödén, Arup et Søchting – Three gene data are provided only for two voucher specimens (ARUP *et al.* 2013: 53; FEDORENKO *et al.* 2009; GAYA *et al.* 2012).
- Massjukiella tenax* (L. Lindblom) S. Y. Kondr., in Kondratyuk et al., *Acta Bot. Hung.* 62(3–4): 279 (2020). – Bas.: *Xanthoria tenax* L. Lindblom, *J. Hattori Bot. Lab.* 83: 158 (1997). ≡ *Polycauliona tenax* (L. Lindblom) Frödén, Arup et Søchting, in Arup et

al., *Nordic J. Bot.* 31(1): 53 (2013). ≡ *Wetmoreana tenax* (L. Lindblom) S. Y. Kondr., Kärnefelt, Elix, A. Thell, M. H. Jeong et Hur, in Kondratyuk et al., *Acta Bot. Hung.* 55(3–4): 273 (2013). – Three gene data are provided only for two voucher specimens.

Massjukiella ucrainica (S. Y. Kondr.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 108: 61 (2012). – Bas.: *Xanthoria ucrainica* S. Y. Kondr. ≡ *Massjukiella ucrainica* subsp. *ucrainica* (S. Y. Kondr.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 108: 61 (2012). ≡ *Polycauliona ucrainica* (S. Y. Kondr.) Frödén, Arup et Søchting – Only nrITS and mtSSU data are hitherto available for this species (FEDORENKO *et al.* 2009). ARUP *et al.* (2013: 53) proposed new combination without providing any molecular data.

Massjukiella ucrainica subsp. *marginata* (Räsänen) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 108: 61 (2012). – Bas.: *Xanthoria candelaria* var. *marginata* Räsänen, *Ann. Acad. Sci. fenn., Ser. A*, 34(no. 4): 108 (1931).

Mikhtomia S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur,
in Kondratyuk et al., *Acta Bot. Hung.* 56(1–2): 104 (2014) [Caloplacoideae]
Type species: *Mikhtomia gordejvii* (Tomin) S. Y. Kondr., Kärnefelt, Elix, A.
Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur

Mikhtomia gordejvii (Tomin) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur, in Kondratyuk et al., *Acta Bot. Hung.* 56(1–2): 112 (2014). – Bas.: *Placodium gordejvii* Tomin, *Bull. South. Ussuri Branch State Russ. Geograph. Soc.*: 217 (1926). – KONDRATYUK *et al.* (2014a) provided data on nrITS and mtSSU of two voucher specimens.

Mikhtomia multicolor (Hue) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur, in Kondratyuk et al., *Acta Bot. Hung.* 56(1–2): 112 (2014). – Bas.: *Lecidea multicolor* Hue, *Nouv. Arch. Mus. Hist. Nat., Paris*, 5 sér., 3: 145 (1913) [1911]. ≡ *Caloplaca multicolor* (Hue) S. Y. Kondr. et Hur, in Kondratyuk et al., *Acta Bot. Hung.* 54(3–4): 332 (2012). – KONDRATYUK *et al.* (2014a) provided data on nrITS and mtSSU of two voucher specimens.

Mikhtomia subflavorubescens (Y. Joshi et Hur) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur, in Kondratyuk et al., *Acta Bot. Hung.* 56(1–2): 112 (2014). – Bas.: *Caloplaca subflavorubescens* Y. Joshi et Hur, *Lichenologist* 42(6): 718 (2010). – KONDRATYUK *et al.* (2014a) provided data on nrITS and mtSSU of two voucher specimens.

Neobrownliella S. Y. Kondr., Elix, Kärnefelt et A. Thell,
in Kondratyuk et al., *Acta Bot. Hung.* 57(3–4): 330 (2015) [Teloschistoideae]
Type species: *Neobrownliella brownlieae* (S. Y. Kondr., Elix et Kärnefelt) S. Y.
Kondr., Elix, Kärnefelt et A. Thell

- Neobrownliella brownlieae*** (S. Y. Kondr., Elix et Kärnefelt) S. Y. Kondr., Elix, Kärnefelt et A. Thell, in Kondratyuk et al., *Acta Bot. Hung.* 57(3–4): 340 (2015). – Bas.: *Caloplaca brownlieae* S. Y. Kondr., Elix et Kärnefelt, in Lumbsch et al., *Phytotaxa* 18: 28 (2011). ≡ *Brownliella aequata* (Hue) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratyuk et J.-S. Hur pr.p. – KONDRATYUK *et al.* (2013c, sub *Brownliella aequata* (Hue) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratyuk et J.-S. Hur pr.p.): full set for two voucher specimens; KONDRATYUK *et al.* 2015d).
- Neobrownliella cinnabarina*** (Ach.) S. Y. Kondr., Upreti et A. Thell, in Mishra et al., *Acta Bot. Hung.* 62(3–4): 362 (2020). – Bas.: *Lecanora cinnabarina* Ach., *Lich. Univ.*: 402 (1810). ≡ *Brownliella cinnabarina* (Ach.) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur, in Kondratyuk et al., *Acta Bot. Hung.* 55(3–4): 271 (2013). – Only data on nrLSU sequence are so far available for this species.
- Neobrownliella montisfracti*** (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Elix, Kärnefelt et A. Thell, in Kondratyuk et al., *Acta Bot. Hung.* 57(3–4): 340 (2015). – Bas.: *Caloplaca montisfracti* S. Y. Kondr. et Kärnefelt, in Kondratyuk et al., *Bibl. Lichenol.* 95: 370 (2007). ≡ *Brownliella montisfracti* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratyuk et J.-S. Hur – KONDRATYUK *et al.* (2013c, sub *Brownliella montisfracti* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratyuk et J.-S. Hur): full set for two voucher specimens; KONDRATYUK *et al.* (2015d).

Nevilleiella S. Y. Kondr. et Hur,

in Kondratyuk et al., *Acta Bot. Hung.* 59(1–2): 111 (2017) [Teloschistoideae]

Type species: *Nevilleiella marchantii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr. et Hur

- Nevilleiella lateritia*** (Taylor) S. Y. Kondr. et Hur, in Kondratyuk et al., *Acta Bot. Hung.* 59(1–2): 122 (2017). – Bas.: *Lecidea lateritia* Taylor, *London J. Bot.* 6: 149 (1847). ≡ *Caloplaca lateritia* (Taylor) Zahlbr., *Cat. Lich. Univers.* 7: 154 (1930) [1931]. – Three gene data for two voucher specimens are so far available for this species (KONDRATYUK *et al.* 2017a).

- Nevilleiella marchantii*** (S. Y. Kondr. et Kärnefelt) S. Y. Kondr. et Hur, in Kondratyuk et al., *Acta Bot. Hung.* 59(1–2): 121 (2017). – Bas.: *Caloplaca marchantii* S. Y. Kondr. et Kärnefelt, in Kondratyuk et al., *Bibl. Lichenol.* 95: 367 (2007). – Three gene data for one voucher specimen are so far available for this species (KONDRATYUK *et al.* 2017a).

Niorma A. Massal.,

Mem. Imp. Reale Ist. Veneto 10: 83 (1861) [Teloschistoideae]

Type species: *Niorma derelicta* A. Massal.

- Niorma arabica*** (Frödén) S. Y. Kondr., Kärnefelt, Elix, A. Thell, N.-H. Jeong et J.-S. Hur, in Kondratyuk et al., *Acta Bot. Hung.* 55(3–4): 272 (2013). – Bas.: *Teloschistes arabicus* Frödén, in Frödén and Kärnefelt, *Bibl. Lichenol.* 95: 185 (2007). – ARUP *et al.* (2013): only nrITS data provided; KONDRATYUK *et al.* (2013a).

- Niorma chrysophthalma* (L.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, N.-H. Jeong et J.-S. Hur, in Kondratyuk et al., *Acta Bot. Hung.* 55(3–4): 272 (2013). – Bas.: *Lichen chrysophthalmus* L. [as ‘*chrysophthalmos*’], *Mantissa Altera*: 311 (1771). – ARUP *et al.* (2013): only nrITS data provided; GAYA *et al.* (2008, 2012): full set for one voucher specimen; KONDRATYUK *et al.* (2013): full set for one voucher specimen.
- Niorma hosseusiana* (Gyeln.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, N.-H. Jeong et J.-S. Hur, in Kondratyuk et al., *Acta Bot. Hung.* 55(3–4): 272 (2013). – Bas.: *Teloschistes hosseusianus* Gyeln., *Borbásia nova* 9: 1 (1942). – ARUP *et al.* (2013): only nrITS data provided; GAYA *et al.* (2012): full set for one voucher specimen; KONDRATYUK *et al.* (2013a).
- Niorma hypoglauca* (Nyl.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, N.-H. Jeong et J.-S. Hur, in Kondratyuk et al., *Acta Bot. Hung.* 55(3–4): 272 (2013). – Bas.: *Physcia hypoglauca* Nyl., *Syn. meth. lich. (Parisiis)* 1(2): 409 (1860). – ARUP *et al.* (2013): full set for one voucher specimen; KONDRATYUK *et al.* (2013a).

- Oceanoplaca* Arup, Söchting et Bungartz → *Loekoelaszloa* S. Y. Kondr., Kärnefelt, A. Thell
- Oceanoplaca caesioisidiata* (Arup et van den Boom) Arup → *Loekoelaszloa caesioisidiata* (Arup et van den Boom) S. Y. Kondr.
- Oceanoplaca caesiosorediata* (Arup et van den Boom) Arup → *Loekoelaszloa caesiosorediata* (Arup et van den Boom) S. Y. Kondr.
- Oceanoplaca catillarioides* (Arup et van den Boom) Arup → *Loekoelaszloa catillarioides* (Arup et van den Boom) S. Y. Kondr.
- Oceanoplaca chemoisidiosa* Söchting et Bungartz → *Loekoelaszloa chemoisidiosa* (Söchting et Bungartz) S. Y. Kondr.
- Oceanoplaca isidiosa* (Vain.) Bungartz, Söchting et Arup → *Loekoelaszloa isidiosa* (Vain.) S. Y. Kondr.
- Oceanoplaca sideritoides* Söchting et Bungartz → *Loekoelaszloa sideritoides* (Söchting et Bungartz) S. Y. Kondr.

Olegblumia S. Y. Kondr., S. O. Oh et Hur,

in Kondratyuk et al., *Mycobiology* 43(3): 200 (2015) [Caloplacoideae]

Type species: *Olegblumia demissa* Flot. ex S. Y. Kondr., Lőkös, Jung Kim, A. S. Kondr., S. O. Oh et Hur

- Olegblumia demissa* Flot. ex S. Y. Kondr., Lőkös, Jung Kim, A. S. Kondr., S. O. Oh et Hur, in Kondratyuk et al., *Mycobiology* 43(3): 200 (2015). – Bas.: *Imbricaria demissa* Flot. 1850 invalid, “*Caloplaca demissa* (Körb.) Arup et Grube. – Three gene data set for three voucher specimens are so far provided (ARUP *et al.* 2013, KONDRATYUK *et al.* 2014a).

Opeltia S. Y. Kondr. et Lőkös,

in Kondratyuk et al., *Acta Bot. Hung.* 59(1–2): 112 (2017) [Caloplacoideae]

Type species: *Opeltia neobaltistanica* (S. Y. Kondr., Lőkös et Hur) S. Y. Kondr. et Lőkös

- Opeltia arizonica* (H. Magn.) S. Y. Kondr. et Lőkös, in Kondratyuk et al., *Acta Bot. Hung.* 59(1–2): 122 (2017). – Bas.: *Caloplaca arizonica* H. Magn. (1944b, p. 69). ≡ *Gyalo-*

lechia arizonica (H. Magn.) Söchting, Frödén et Arup – ARUP *et al.* (2013: 70 as *Gyalolechia arizonica* (H. Magn.) Söchting, Frödén et Arup): full set for one voucher specimen; KONDRATYUK *et al.* (2017a).

Opeltia epiphyta (Lynge) S.Y. Kondr., in Kondratyuk, Lökös, Farkas, Jang, Liu, Halda, Persson, Hansson, Kärnefelt, Thell, Fačkovcová, Yamamoto et Hur, Acta Bot. Hung. 61(3–4): 334 (2019). – Bas.: *Caloplaca epiphyta* Lynge, Skr. Svalbard Ishavet (Oslo) (no. 81): 119 (1940). ≡ *Gyalolechia epiphyta* (Lynge) Vondrák, in Vondrák *et al.*, Lichenologist 48(3): 181 (2016). – Data on nrITS and mtSSU are so far available for this species.

Opeltia flavorubescens (Huds.) S. Y. Kondr. et Hur, in Mishra *et al.*, Acta Bot. Hung. 62(3–4): 365 (2020). – Bas.: *Lichen flavorubescens* Huds. (1762, p. 443). ≡ *Gyalolechia flavorubescens* (Huds.) Söchting, Frödén et Arup – ARUP *et al.* (2013: 70) provided data on three genes for one voucher specimen.

Opeltia juniperina (Tomin) S. Y. Kondr. et Lökös, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 122 (2017). – Bas.: *Caloplaca juniperina* Tomin, (1953, p. 11). ≡ *Gyalolechia juniperina* (Tomin) Söchting, Frödén et Arup – ARUP *et al.* (2013: 71 as *Gyalolechia juniperina* (Tomin) Söchting, Frödén et Arup): *combination was provided only from the ITS phylogeny]; KONDRATYUK *et al.* (2017a).

Opeltia neobaltistanica (S. Y. Kondr., Lökös et Hur) S. Y. Kondr. et Lökös, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 122 (2017). – Bas.: *Caloplaca neobaltistanica* S. Y. Kondr., Lökös et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 57(1–2): 89 (2015). – KONDRATYUK *et al.* (2017a).

Orientophila Arup, Söchting et Frödén,

in Arup *et al.*, Nordic J. Bot. 31(1): 47 (2013) [Xanthorioideae]

Type species: *Orientophila subscopularis* Arup et Frisch

Data on nrLSU are still not published for this genus, while they are obtained and are in preparation to publication (KONDRATYUK *et al.* in prep.).

Orientophila chejuensis (S. Y. Kondr. et Hur) S. Y. Kondr., Lökös et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 172 (2017). – Bas.: *Caloplaca chejuensis* S. Y. Kondr. et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 54(3–4): 314 (2012). – No molecular data so far provided for this species.

Orientophila corticola B. G. Lee, in Lee and Hur, Mycoscience 61(5): 214 (2020). – Only data on nrITS and mtSSU are so far provided for this species.

Orientophila diffluens (Hue) S. Y. Kondr., Lökös et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 173 (2017). – Bas.: *Lecanora diffluens* Hue, Ann. Mycol. 13(2): 81 (1915). ≡ *Caloplaca diffluens* (Hue) Zahlbr., Cat. Lich. Univers. 7: 114 (1930) [1931]. – No molecular data so far provided for this species.

Orientophila dodongana S. Y. Kondr., Lökös et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 61(3–4): 344 (2019). – Molecular data on this species are not available so far.

Orientophila dodongensis S. Y. Kondr., Lökös et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 168 (2017). – Molecular data on this species are not available so far.

- Orientophila fauriei* S. Y. Kondr., L. Lökös et J.-S. Hur, in Kondratyuk et al., *Graphis Scripta* 28(1–2): 51 (2015). – Molecular data on this species are not available so far.
- Orientophila imjadoensis* S. Y. Kondr., Lökös et Hur, in Kondratyuk et al., *Acta Bot. Hung.* 61(3–4): 347 (2019). – Molecular data on this species are not available so far.
- Orientophila incheonensis* S. Y. Kondr., Lökös et Hur, in Kondratyuk et al., *Acta Bot. Hung.* 61(3–4): 350 (2019). – Molecular data on this species are not available so far.
- Orientophila infirma* I. V. Frolov, Vondrák, Konoreva et S. Chesnokov, in Frolov et al., *Lichenologist* 53(3): 241 (2021). – Molecular data on this species are not available so far.
- Orientophila jungakimae* S. Y. Kondr., S.-O. Oh et J.-S. Hur, in Kondratyuk et al., *Graphis Scripta* 28(1–2): 53 (2015). – Molecular data on this species are so far not available.
- Orientophila leucerythrella* (Nyl.) S. Y. Kondr., Lökös et Hur, in Kondratyuk et al., *Acta Bot. Hung.* 59(1–2): 243 (2017). – Bas.: *Lecanora leucerythrella* Nyl., *Lich. Japon.*: 38 (1890). – Molecular data on this species are not available so far.
- Orientophila loekoesii* (S. Y. Kondr. et J.-S. Hur) Arup, Søchting et Frödén. – Bas.: *Caloplaca loekoesii* S. Y. Kondr. et J.-S. Hur, in Kondratyuk et al. – ARUP *et al.* (2013: 47): *combination is based only on ITS phylogeny. KONDRATYUK *et al.* (2014c): nrITS and mtSSU data on 4 specimens.
- Orientophila subscopularis* Arup et Frisch – ARUP *et al.* (2013: 47): *combination is based only on ITS and mtSSU phylogeny. Data on nrLSU are missing in original paper. KONDRATYUK *et al.* (2014c): nrITS data on 3 additional specimens.
- Orientophila yokjidoensis* S. Y. Kondr., S.-O. Oh et J.-S. Hur, in Kondratyuk et al., *Graphis Scripta* 28(1–2): 55 (2015). – Molecular data on this species are so far not available.

Orientophila sp. 21, sp. 22 – ARUP *et al.* (2013): with data on ITS, nrLSU and mtSSU.

Ovealmbornia S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix et A. Thell, in Fedorenko et al., *Bibl. Lichenol.* 100: 75 (2009) [Xanthorioideae]

Type species: *Ovealmbornia bonae-spei* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix et A. Thell

Ovealmbornia bonae-spei (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix et A. Thell. – Bas.: *Xanthoria bonae-spei* S. Y. Kondr. et Kärnefelt in Kondratyuk et al. (2004, p. 350). ≡ *Dufourea bonae-spei* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting – FEDORENKO *et al.* (2009): data on ITS and mtSSU only; ARUP *et al.* (2013: 42, as *Dufourea bonae-spei* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting): full set for one specimen, but see KONDRATYUK *et al.* (2015f) about identification of this material.

Ovealmbornia reginae S. Y. Kondr., Kärnefelt et Hur, in Kondratyuk et al., *Herzogia* 28(2/1): 468 (2015). – Three gene data on two voucher specimens are so far provided for this species.

Ovealmbornia volkmarwirthii S. Y. Kondr., in Kondratyuk et al., *Acta Bot. Hung.* 56(1–2): 161 (2014). ≡ *Dufourea volkmarwirthii* (S. Y. Kondr.) Wilk et Lücking, in Wilk et al., *Mycologia* 113(2): 295 (2021). – Three gene data on two voucher specimens are so far provided for this species (KONDRATYUK *et al.* 2014d).

***Oxneria* S. Y. Kondr. et Kärnefelt,**

Ukr. bot. Zh. 60(4): 428 (2003) [Xanthorioideae]

Type species: *Oxneria alfredii* (S. Y. Kondr. et Poelt) S. Y. Kondr. et Kärnefelt

- Oxneria alfredii*** (S. Y. Kondr. et Poelt) S. Y. Kondr. et Kärnefelt [as ‘*alfredi*’], Ukr. bot. Zh. 60(4): 431 (2003). – Bas.: *Xanthoria alfredii* S. Y. Kondr. et Poelt [as ‘*alfredi*’], Lichenologist 29(2): 178 (1997). – FEDORENKO *et al.* (2009): data on ITS and mtSSU only; ARUP *et al.* (2013): *data only on ITS phylogeny provided.
- Oxneria aphrodites*** (Kalb, Poelt et S. Y. Kondr.) S. Y. Kondr. et Kärnefelt, Ukr. bot. Zh. 60(4): 431 (2003). – Bas.: *Xanthoria aphrodites* Kalb, Poelt et S. Y. Kondr., in Kondratyuk and Poelt, Lichenologist 29(2): 180 (1997). – ARUP *et al.* (2013): *data only on ITS phylogeny provided.
- Oxneria fallax*** (Arnold) S. Y. Kondr. et Kärnefelt, Ukr. bot. Zh. 60(4): 431 (2003). – Bas.: *Xanthoria fallax* Arnold, Verh. zool.-bot. Ges. Wien 30: 121 (1880). – ARUP *et al.* (2013: 57, sub *Xanthomendoza fallax*): full set for one specimen; maybe all previous data belong to *Oxneria huculica*.
- Oxneria hermonii*** (S. Y. Kondr.) S. Y. Kondr. et Kärnefelt, Ukr. bot. Zh. 60(4): 431 (2003). – Bas.: *Xanthoria hermonii* S. Y. Kondr., in Kondratyuk and Zelenko, Ukr. bot. Zh. 59(5): 599 (2002). – ARUP *et al.* (2013: 57, sub *Xanthomendoza hermonii* (S. Y. Kondr.) Frödén, Søchting et Arup): *data only on ITS phylogeny provided.
- Oxneria huculica*** S. Y. Kondr., Flora Lischäinikiv Ukraïni (Kiev) 2(3): 435 (2010). = *Xanthoria fallax* p. p. [epiphytic material]. – Three gene data for two voucher specimens are so far provided (FEDORENKO *et al.* (2009): data on ITS and mtSSU only; GAYA *et al.* (2012): data on nrLSU; ARUP *et al.* (2013: 57, sub *Xanthomendoza fallax*)).
- Oxneria soechtingii*** (S. Y. Kondr.) S. Y. Kondr. et Kärnefelt, Ukr. bot. Zh. 60(4): 432 (2003). – Bas.: *Xanthoria soechtingii* S. Y. Kondr. [as ‘*soechtingi*’], J. Hattori Bot. Lab. 89: 261 (2000). ≡ *Xanthomendoza soechtingii* (S. Y. Kondr.) Kärnefelt et S. Y. Kondr., in Søchting *et al.*, Mitt. Inst. Allg. Bot. Hamburg 30–32: 238 (2002). – Data on single nrITS sequence of this species were recently added (BUNGARTZ *et al.* 2020).
- Oxneria ulophyllodes*** (Räsänen) S. Y. Kondr. et Kärnefelt, Ukr. bot. Zh. 60(4): 432 (2003). – Bas.: *Xanthoria ulophyllodes* Räsänen, Die Flecht. Estl. 1: 105 (1931). ≡ *Xanthomendoza ulophyllodes* (Räsänen) Søchting *et al.*, Mitt. Inst. Allg. Bot. Hamburg 30–32: 238 (2002). – FEDORENKO *et al.* (2009): data on ITS and mtSSU only; ARUP *et al.* (2013: 57): full set for three specimen sub *Xanthomendoza ulophyllodes*.
- Oxneria ussuriensis*** S. Y. Kondr., S. O. Oh et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 56(1–2): 136 (2014). – No molecular data are so far provided for this species.
- Oxneria borealis* (R. Sant. et Poelt) S. Y. Kondr. et Kärnefelt → *Gallowayella borealis* (R. Sant. et Poelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Oxneria fulva* (Hoffm.) S. Y. Kondr. et Kärnefelt → *Gallowayella fulva* (Hoffm.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Oxneria gallowayi* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr. et Kärnefelt → *Gallowayella gallowayi* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Oxneria hasseana* (Räsänen) S. Y. Kondr. et Kärnefelt → *Gallowayella hasseana* (Räsänen) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell

- Oxneria incavata* (Stirt.) S. Y. Kondr. et Kärnefelt → *Jackelixia incavata* (Stirt.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell
- Oxneria montana* (L. Lindblom) S. Y. Kondr. et Kärnefelt → *Gallowayella montana* (L. Lindblom) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Oxneria novozelandica* (Hillmann) S. Y. Kondr. et Kärnefelt → *Jesmurraya novozelandica* (Hillmann) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, J.-S. Hur et A. Thell
- Oxneria oregana* (Gyeln.) S. Y. Kondr. et Kärnefelt → *Gallowayella oregana* (Gyeln.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Oxneria poeltii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr. et Kärnefelt → *Gallowayella poeltii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Oxneria sogdiana* S. Y. Kondr. et Kärnefelt → *Gallowayella sogdiana* (S. Y. Kondr. et Kudratov) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Oxneria tibellii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr. et Kärnefelt → *Gallowayella tibellii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Oxneria wetmorei* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr. et Kärnefelt → *Honeggeria wetmorei* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr. S. Y. Kondr. et Kärnefelt

Oxneriopsis S. Y. Kondr., Upreti et Hur,

in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 113 (2017) [Caloplacoideae]

Type species: *Oxneriopsis oxneri* (S. Y. Kondr. et Söchting) S. Y. Kondr., Upreti et Hur

- Oxneriopsis bassiae* (Ach.) S. Y. Kondr., Upreti et Hur, in Mishra et al., Acta Bot. Hung. 62(3–4): 367 (2020). – Bas.: *Lepraria bassiae* Ach., Methodus, Sectio prior (Stockholmiae): 5 (1803). ≡ *Isidium bassiae* (Ach.) Ach. (1810, p. 579). ≡ *Gyalolechia bassiae* (Ach.) Söchting, Frödén et Arup – ARUP *et al.* (2013: 70): *combination was proposed only from the ITS phylogeny.
- Oxneriopsis oxneri* (S. Y. Kondr. et Söchting) S. Y. Kondr., Upreti et Hur, in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 122 (2017). – Bas.: *Caloplaca oxneri* S. Y. Kondr. et Söchting, in Kondratyuk et al., Nat. Hist. Res. 4(1): 17 (1996). ≡ *Gyalolechia oxneri* (S. Y. Kondr. et Söchting) Söchting, Frödén et Arup. (Combination *Mikhtomia oxneri* (S. Y. Kondr. et Söchting) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur [as ‘*oxnerii*’] in KONDRATYUK *et al.* (2014a) was based on wrong identification material of voucher specimens of *Mikhtomia subflavorubescens*, see also KONDRATYUK *et al.* (2017a). – ARUP *et al.* (2013: 71, as *Gyalolechia oxneri* (S. Y. Kondr. et Söchting) Söchting, Frödén et Arup): *combination was provided only from the ITS phylogeny; KONDRATYUK *et al.* (2014a, sub *Mikhtomia oxneri* (S. Y. Kondr. et Söchting) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur [as ‘*oxnerii*’]) provided data on nrITS and mtSSU of two voucher specimens; KONDRATYUK *et al.* (2017a).
- Oxneriopsis yeosuensis* (S. Y. Kondr. et Hur) S. Y. Kondr., Upreti et Hur, in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 122 (2017). – Bas.: *Caloplaca yeosuensis* S. Y. Kondr. et Hur, in Kondratyuk et al., Acta Bot. Hung. 55(1–2): 52 (2013) Nom. inval., Art. 42.1 (Melbourne). – KONDRATYUK *et al.* (2014a) provided three gene data for one voucher specimen; KONDRATYUK *et al.* (2017a).

***Pachypeltis* Söchting, Arup et Frödén,**in Arup et al., *Nordic J. Bot.* 31(1): 48 (2013) [Xanthorioideae]Type species: *Pachypeltis castellana* (Räsänen) Söchting, Frödén et Arup

Pachypeltis castellana (Räsänen) Söchting, Frödén et Arup – Bas.: *Placodium castellanum* Räsänen – ARUP *et al.* (2013: 48): *combination is based only on ITS and mtSSU phylogeny. Data on nrLSU still missing.

Pachypeltis cladodes (Tuck.) Söchting, Frödén et Arup – Bas.: *Placodium cladodes* Tuck. – ARUP *et al.* (2013: 48): *combination is based only on ITS phylogeny.

Pachypeltis insularis (Poelt) Vondrák et I. V. Frolov, in Vondrák et al., *Phytotaxa* 396(1): 28 (2019). – Bas.: *Caloplaca insularis* Poelt, *Planta* 51: 300 (1958). – VONDRÁK *et al.* (2019) proposed new combination basing only on ITS phylogeny.

Pachypeltis intrudens (H. Magn.) Söchting, Frödén et Arup – Bas.: *Caloplaca intrudens* H. Magn. – ARUP *et al.* (2013: 48): *combination is based only on ITS phylogeny.

Pachypeltis invadens (Lynge) Söchting, Frödén et Arup – Bas.: *Caloplaca invadens* Lynge – ARUP *et al.* (2013: 49): full set for one specimen.

Pachypeltis phoenicopta (Poelt et Hinter.) Vondrák, in Vondrák et al., *Phytotaxa* 396(1): 29 (2019). – Bas.: *Caloplaca phoenicopta* Poelt et Hinter., *Bibl. Lichenol.* 50: 175 (1993). – VONDRÁK *et al.* (2019) proposed new combination basing only on ITS phylogeny.

Pachypeltis sp. 23, sp. 24 – ARUP *et al.* (2013): full set for one specimen with ITS, nrLSU and mtSSU data.

***Parvoplaca* Arup, Söchting et Frödén,**in Arup et al., *Nordic J. Bot.* 31(1): 49 (2013) [Xanthorioideae]Type species: *Parvoplaca tiroliensis* (Zahlbr.) Arup, Söchting et Frödén

Parvoplaca athallina (Darb.) Arup, Söchting et Frödén – Bas.: *Caloplaca athallina* Darb. – ARUP *et al.* (2013: 49): *combination is based only on ITS phylogeny.

Parvoplaca chelyae (Pérez-Vargas) Vondrák, Halıcı et Arup, in Arup et al., *Lichenologist* 47(6): 382 (2015). – Bas.: *Caloplaca chelyae* Pérez-Vargas, in Pérez-Vargas and Pérez de Paz, *Bryologist* 112(4): 840 (2009). – ARUP *et al.* (2015): combination is based only on ITS phylogeny.

Parvoplaca nigroblastidiata Arup, Halıcı et Vondrák, in Arup et al., *Lichenologist* 47(6): 384 (2015). – ARUP *et al.* (2015): combination is based only on ITS phylogeny.

Parvoplaca servitiana (Szatala) Arup, Söchting et Frödén – Bas.: *Caloplaca servitiana* Szatala in Rechinger – ARUP *et al.* (2013: 49): *combination is based only on ITS phylogeny.

Parvoplaca suspiciosa (Nyl.) Arup, Söchting et Frödén – Bas.: *Lecanora suspiciosa* Nyl. – ARUP *et al.* (2013: 49): *combination is based only on ITS phylogeny.

Parvoplaca tiroliensis (Zahlbr.) Arup, Söchting et Frödén – Bas.: *Caloplaca tiroliensis* Zahlbr. – ARUP *et al.* (2013: 49) provided three gene data only for one voucher specimen.

Parvoplaca sp. 25 – ARUP *et al.* (2013): with data only on ITS nrDNA.

Parvoplaca sp. 26 – ARUP *et al.* (2013): with data on ITS, nrLSU and mtSSU.

***Pisutiella* S. Y. Kondr., Lökös et Farkas,**

in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 118 (2020) [Caloplacoideae]

Type species: *Pisutiella conversa* (Kremp.) S. Y. Kondr., Lökös et Farkas

Pisutiella congregiens (Nyl.) S. Y. Kondr., Lökös et Farkas, in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 122 (2020). – Bas.: *Lecanora congregiens* Nyl., Flora, Regensburg 66(7): 100 (1883). ≡ *Caloplaca congregiens* (Nyl.) Zahlbr., Cat. Lich. Univers. 7: 110 (1930) [1931]. – Only data on nrITS for this species are so far accumulated.

Pisutiella conversa (Kremp.) S. Y. Kondr., Lökös et Farkas, in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 122 (2020). – Bas.: *Calloplisma conversum* Kremp., Denkschr. Kgl. Bayer. Bot. Ges., Abt. 2 4: 162 (1861). ≡ *Caloplaca conversa* (Kremp.) Jatta, Syll. Lich. Ital. (Trano): 254 (1900). – Three gene data on one voucher specimen are so far accumulated.

Pisutiella furax (Egea et Llimona) S. Y. Kondr., Lökös et Farkas, in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 122 (2020). – Bas.: *Caloplaca furax* Egea et Llimona, Collanea bot., Barcinone Bot. Institut. 14: 266 (1983). ≡ *Kuettlingeria furax* (Egea et Llimona) I. V. Frolov, Vondrák et Arup, in Frolov et al., J. Syst. Evol. 59(3): 468 (2020). – Three gene data on one voucher specimen are so far accumulated.

Pisutiella grimmiae (Nyl.) S. Y. Kondr., Lökös et Farkas, in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 122 (2020). – Bas.: *Lecanora grimmiae* Nyl., Flora, Regensburg 69: 97 (1886). ≡ *Caloplaca grimmiae* (Nyl.) H. Olivier, Mém. Soc. natn. Sci. nat. Cherbourg 37: 119 (1909). – No molecular data are so far available for this species.

Pisutiella ivanpisutii (S. Y. Kondr., Lökös et Hur) S. Y. Kondr., Lökös et Farkas, in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 122 (2020). – Bas.: *Caloplaca ivanpisutii* S. Y. Kondr., Lökös et Hur, in Kondratyuk et al., Acta Bot. Hung. 60(1–2): 131 (2018). – No molecular data are so far available for this species.

Pisutiella phaeothamnos (Kalb et Poelt) S. Y. Kondr., Lökös et Farkas, in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 122 (2020). – Bas.: *Caloplaca phaeothamnos* Kalb et Poelt, in Poelt, Kalb, Flora, Jena 176: 137 (1985). – Only data on nrITS for this species are so far accumulated.

Placodium ambitiosum Darb. → *Austroplaca ambitiosa* (Darb.) Søchting, Frödén et Arup

Placodium aurantiacum var. *macrocarpum* Anzi → *Variospora macrocarpa* (Anzi) Arup, Frödén et Søchting

Placodium bolacinum Tuck. → *Polycauliona bolacina* (Tuck.) Arup, Frödén et Søchting

Placodium brouardii B. de Lesd. → *Fulgogasparrea brouardii* (B. de Lesd.) S. Y. Kondr.

Placodium castellanum Räsänen → *Pachypeltis castellana* (Räsänen) Søchting, Frödén et Arup

Placodium cerinum var. *ulmorum* Fink → *Caloplaca ulmorum* (Fink) Fink

Placodium chrysodetum Vain. → *Leproplaca chrysodeta* (Vain.) J. R. Laundon et Ahti

Placodium cirrochrooides Vain. → *Austroplaca cirrochrooides* (Vain.) Søchting, Frödén et Arup

Placodium cladodes Tuck. → *Pachypeltis cladodes* (Tuck.) Søchting, Frödén et Arup

Placodium coralloides Tuck. → *Polycauliona coralloides* (Tuck.) Hue

Placodium desertorum Tomin → *Fulgensia desertorum* (Tomin) Poelt

Placodium elegans var. *trachyphyllum* Tuck. → *Golubkovaea trachyphylla* (Tuck.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, Jung Kim, M. H. Jeong, N. N. Yu, A. S. Kondr. et Hur

Placodium fulgidum Nyl. → *Fulgensia fulgida* (Nyl.) Szatala

- Placodium galactophyllum* Tuck. → *Squamulea galactophylla* (Tuck.) Arup, Søchting et Frödén
Placodium geophilum Räsänen → *Xanthocarpia raesaenenii* (Bredkina) S. Y. Kondr.
Placodium gordejvii Tomin → *Mikhtomia gordejvii* (Tomin) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, A. S. Kondratiuk et J.-S. Hur
Placodium isidiosum Vain. → *Loekoeslaszloa isidiosa* (Vain.) S. Y. Kondr.
Placodium luteominium Tuck. [as 'luteo-minium'] → *Tomnashia luteominia* (Tuck.) S. Y. Kondr. et Hur
Placodium microphyllum Tuck. → *Villophora microphyllina* (Tuck.) S. Y. Kondr.
Placodium obliterans Nyl. → *Leproplaca obliterans* (Nyl.) Arup, Frödén et Søchting
Placodium papilliferum Vain. → *Zeroviella papillifera* (Vain.) S. Y. Kondr. et J.-S. Hur
Placodium regale Vain. → *Gondwania regalis* (Vain.) Søchting, Frödén et Arup
Placodium rugulosum Nyl. → *Teuvoabtiana rugulosa* (Nyl.) S. Y. Kondr. et Hur
Placodium scoriophilum A. Massal. → *Usnochroma scoriophilum* (A. Massal.) Søchting, Arup et Frödén
Placodium squamosum B. de Lesd. → *Squamulea squamosa* (B. de Lesd.) Arup, Søchting et Frödén
Placodium subfruticosum Elenkin → *Rusavskia subfruticulosa* (Elenkin) S. Y. Kondr. et Kärnefelt
Placodium sublobulatum Nyl. → *Gondwania sublobulata* (Nyl.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur
Placodium turkuense Vain. → *Caloplaca turkuensis* (Vain.) Zahlbr.
Placodium verruculiferum Vain. → *Verrucoplaca verruculifera* (Vain.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur
Placodium xanthostigmoideum Räsänen → *Gyalolechia xanthostigmoidea* (Räs.) Søchting, Frödén et Arup

Polycauliona Hue,

Bull. Soc. linn. Normandie, sér. 6, 1: 75 (1908) [1907] [Xanthorioideae]

Type species: *Polycauliona coralloides* (Tuck.) Hue

- Polycauliona ascendens* (S. Y. Kondr.) Frödén, Arup et Søchting – Bas.: *Xanthoria ascendens* S. Y. Kondr. – ARUP *et al.* (2013: 51): *combination is based only on ITS phylogeny.
Polycauliona bolacina (Tuck.) Arup, Frödén et Søchting – Bas.: *Placodium bolacinum* Tuck. – ARUP *et al.* (2013: 51): *combination is based only on ITS phylogeny.
Polycauliona brattiae (W. A. Weber) Arup, Frödén et Søchting – Bas.: *Caloplaca brattiae* W. A. Weber – ARUP *et al.* (2013: 51): *combination is based only on ITS phylogeny.
Polycauliona coralloides (Tuck.) Hue (1909b, p. 87). – Bas.: *Placodium coralloides* Tuck. – ARUP *et al.* (2013: 51): full set for one specimen.
Polycauliona impolita (Arup) Arup, Frödén et Søchting – Bas.: *Caloplaca impolita* Arup – ARUP *et al.* (2013: 52): *combination is based only on ITS phylogeny.
Polycauliona inconspicua (Arup) Arup, Frödén et Søchting – Bas.: *Caloplaca inconspicua* Arup – ARUP *et al.* (2013: 52): *combination is based only on ITS phylogeny.
Polycauliona pollinarioides (L. Lindblom et D. M. Wright) Frödén, Arup et Søchting – Bas.: *Xanthoria pollinarioides* L. Lindblom et D. M. Wright in Lindblom – ARUP *et al.* (2013: 53): *combination is based only on ITS phylogeny.
Polycauliona stellata (Wetmore et Kärnefelt) Arup, Frödén et Søchting – Bas.: *Caloplaca stellata* Wetmore et Kärnefelt – ARUP *et al.* (2013: 53) provided three gene data for one voucher specimen of this species.

Polycauliona tenax (L. Lindblom) Frödén, Arup et Søchting – Bas.: *Xanthoria tenax* L. Lindblom – ARUP *et al.* (2013: 53): *combination is based only on ITS phylogeny.

Polycauliona tenuiloba (L. Lindblom) Frödén, Arup et Søchting – Bas.: *Xanthoria tenuiloba* L. Lindblom – ARUP *et al.* (2013: 53) provided three gene data for one voucher specimen of this species.

Polycauliona thamnodes (Poelt) Arup, Frödén et Søchting – Bas.: *Caloplaca thamnodes* Poelt, in Poelt and Pelleter – ARUP *et al.* (2013: 53) provided three gene data for one voucher specimen of this species.

Polycauliona sp. 28, sp. 31, sp. 33, sp. 36 – Data only on ITS provided (ARUP *et al.* 2013).

Polycauliona sp. 29, sp. 30, sp. 32, sp. 34, sp. 35 – Data only on ITS, nrLSU and mtSSU provided (ARUP *et al.* 2013).

Polycauliona sp. 37 – Data only on ITS and mtSSU provided (ARUP *et al.* 2013).

Polycauliona candelaria (L.) Frödén, Arup et Søchting → *Massjukiella candelaria* (L.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell

Polycauliona cribrosa Hue → *Gondwania cribrosa* (Hue) Søchting, Frödén et Arup

Polycauliona flavogranulosa (Arup) Arup, Frödén et Søchting → *Scythioria flavogranulosa* (Arup) S. Y. Kondr.

Polycauliona ignea (Arup) Arup, Frödén et Søchting → *Igneoplaca ignea* (Arup) S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur

Polycauliona kaernefeltii (S. Y. Kondr., D. J. Galloway et T. Goward) Frödén, Arup et Søchting → *Massjukiella kaernefeltii* (S. Y. Kondr., D. J. Galloway et Goward) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et Elix

Polycauliona ludificans (Arup) Arup, Frödén et Søchting → *Tomnashia ludificans* (Arup) S. Y. Kondr. et Hur

Polycauliona luteominia var. *bolanderi* (Tuck.) Arup, Frödén et Søchting → *Tomnashia luteominia* (Tuck.) S. Y. Kondr. et Hur

Polycauliona luteominia (Tuck.) Arup, Frödén et Søchting → *Tomnashia luteominia* (Tuck.) S. Y. Kondr. et Hur

Polycauliona nashii (Nav.-Ros., Gaya et Hladún) Arup, Frödén et Søchting → *Tomnashia nashii* (Nav.-Ros., Gaya et Hladún) S. Y. Kondr. et Hur

Polycauliona phlogina (Ach.) Arup, Frödén et Søchting → *Scythioria phlogina* (Ach.) S. Y. Kondr., Kärnefelt, Elix, A. Thell et Hur

Polycauliona polycarpa (Hoffm.) Frödén, Arup et Søchting → *Massjukiella polycarpa* (Hoffm.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell

Polycauliona rosei (Hasse) Arup, Frödén et Søchting → *Tomnashia rosei* (Hasse) S. Y. Kondr. et Hur

Polycauliona ucrainica (S. Y. Kondr.) Frödén, Arup et Søchting → *Massjukiella ucrainica* (S. Y. Kondr.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell

Polycauliona verruculifera (Vain.) Arup, Frödén et Søchting → *Verrucoplaca verruculifera* (Vain.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur

Pyrenodesmia A. Massal.,

Atti Inst. Veneto Sci. lett., ed Arti, Sér. 2, 3(App. 3): 119 (1852) [Caloplacoideae]

Type species: *Pyrenodesmia chalybaea* (Fr.) A. Massal.

Of 6 accepted species of the genus *Pyrenodesmia* by ARUP *et al.* (2013) four species were combined only on results of ITS phylogeny.

- Pyrenodesmia albolutescens* (Nyl.) S. Y. Kondr., in Kondratyuk *et al.*, Acta Bot. Hung. 62(1–2): 122 (2020). – Bas.: *Lecanora albolutescens* Nyl., Flora, Regensburg 64: 177 (1881). ≡ *Caloplaca albolutescens* (Nyl.) H. Olivier, Mém. Soc. natn. Sci. nat. Cherbourg 37: 127 (1909). ≡ *Kuettlingeria albolutescens* (Nyl.) I. V. Frolov, Vondrák *et al.*, in Frolov *et al.*, J. Syst. Evol. 59(3): 468 (2020). – ARUP *et al.* (2013) provided only nrITS and mtSSU data on this species, while three gene data on two voucher specimens are so far accumulated.
- Pyrenodesmia albopruinosa* (Arnold) S. Y. Kondr., in Kondratyuk *et al.*, Acta Bot. Hung. 62(3–4): 280 (2020). – Bas.: *Biatorina albopruinosa* Arnold, Flora, Regensburg 42(10): 152 (1859). – Three gene data on two voucher specimens are so far accumulated.
- Pyrenodesmia albopustulata* (Khodos. *et al.* S. Y. Kondr.) I. V. Frolov *et al.*, in Frolov *et al.*, J. Syst. Evol. 59(3): 469 (2020). – Bas.: *Caloplaca albopustulata* Khodos. *et al.* S. Y. Kondr., in Khodosovtsev *et al.*, Graphis Scripta 13(1): 6 (2002). – Three gene data on two voucher specimens are so far accumulated.
- Pyrenodesmia alociza* (A. Massal.) Arnold – Bas.: *Biatorina alociza* A. Massal. (1855a, p. 42). – ARUP *et al.* (2013: 73): *only ITS data provided; KONDRATYUK *et al.* (2014a) provided nrITS and mtSSU data for this species, while three gene data on three voucher specimens are since that time accumulated.
- Pyrenodesmia aractina* (Fr.) S. Y. Kondr., in Kondratyuk *et al.*, Acta Bot. Hung. 62(1–2): 122 (2020). – Bas.: *Parmelia aractina* Fr., Syst. orb. veg. (Lundae) 1: 284 (1825). ≡ *Sanguineodiscus aractinus* (Fr.) I. V. Frolov *et al.*, in Frolov *et al.*, J. Syst. Evol. 59(3): 471 (2020). – Three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia areolata* (Zahlbr.) S. Y. Kondr., *comb. nova* – MycoBank No.: MB 847176 – Basionym: *Caloplaca cerina* var. *areolata* Zahlbr., Öst. bot. Z. 53: 289 (1903). ≡ *Kuettlingeria areolata* (Zahlbr.) I. V. Frolov, Vondrák *et al.*, in Frolov *et al.*, J. Syst. Evol. 59(3): 468 (2020). – Three gene data on two voucher specimens are so far accumulated.
- Pyrenodesmia atroalba* (Tuck.) I. V. Frolov *et al.*, in Frolov *et al.*, J. Syst. Evol. 59(3): 470 (2020). – Bas.: *Placodium atroalbum* Tuck., Proc. Amer. Acad. Arts & Sci. 12: 172 (1877). – Three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia atroflava* (Turner) S. Y. Kondr., in Kondratyuk *et al.*, Acta Bot. Hung. 62(1–2): 122 (2020). – Bas.: *Lecidea atroflava* Turner, Trans. Linn. Soc. London 9: 142 (1808). ≡ *Caloplaca atroflava* (Turner) Mong., Bull. Acad. Intern. Géogr. Bot. 23: 192 (1914). ≡ *Kuettlingeria atroflava* (Turner) I. V. Frolov, Vondrák *et al.*, in Frolov *et al.*, J. Syst. Evol. 59(3): 468 (2020). – Three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia badioreagens* (Tretiach *et al.* Muggia) Søchting, Arup *et al.* Frödén – bas.: *Caloplaca badioreagens* Tretiach *et al.* Muggia (2006, p. 224). – ARUP *et al.* (2013: 73): *only ITS data provided, while three gene data on one voucher specimen are since that time accumulated.

- Pyrenodesmia bicolor* (H. Magn.) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 123 (2020). – Bas.: *Caloplaca bicolor* H. Magn., Lichens Central Asia: 132 (1940). ≡ *Sanguineodiscus bicolor* (H. Magn.) I. V. Frolov et Vondrák, in Frolov et al., J. Syst. Evol. 59(3): 471 (2020). – Three gene data on two voucher specimens are so far accumulated.
- Pyrenodesmia chalybaea* (Fr.) A. Massal. – Bas.: *Parmelia chalybaea* Fr. (1831, p. 125). – GAYA et al. (2012) provided nrITS and nrLSU data; ARUP et al. (2013: 73) provided the first three gene data set for one specimen, while three gene data on three voucher specimens are since that time accumulated.
- Pyrenodesmia circumalbata* (Delile) I. V. Frolov et Vondrák, in Frolov et al., J. Syst. Evol. 59(3): 470 (2020). – Bas.: *Lecidea circumalbata* Delile, Fl. Égypte: Explic. Pl. (Paris): 156, tab. 59, fig. 8 (1813). – Three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia concretica* (Vondrák et Khodos.) Søchting, Arup et Frödén – Bas.: *Caloplaca concretica* Vondrák et Khodos., in Vondrák et al. (2008, p. 98). – ARUP et al. (2013: 73): *only ITS data provided, while three gene data on one voucher specimen are since that time accumulated.
- Pyrenodesmia cretensis* (Zahlbr.) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(3–4): 280 (2020). – Bas.: *Blastenia cretensis* Zahlbr., Sber. Akad. Wiss. Wien, Math.-naturw. Kl., Abt. 1 115: 519 (1906). ≡ *Kuettlingeria cretensis* (Zahlbr.) I. V. Frolov et Vondrák [as ‘cretense’], in Frolov et al., J. Syst. Evol. 59(3): 468 (2020). – Three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia diphyodes* (Nyl.) M. Choisy, Bull. mens. Soc. linn. Soc. Bot. Lyon 20: 199 (1951). – Bas.: *Lecanora diphyodes* Nyl., Flora, Regensburg 55: 353 (1872). ≡ *Kuettlingeria diphyodes* (Nyl.) Frolov et Vondrák, in Frolov et al., J. Syst. Evol. 59(3): 468 (2020). – Three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia duplicata* (Vain.) S. Y. Kondr., Lökös et Hur, in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 250 (2017). – Bas.: *Lecanora duplicata* Vain., Meddn Soc. Fauna Flora fenn. 2: 55 (1878). ≡ *Caloplaca duplicata* (Vain.) H. Olivier, Mém. Soc. natn. Sci. nat. Cherbourg 37: 124 (1909). – Only nrITS data are so far provided for this species.
- Pyrenodesmia emilii* (Vondrák, Khodos., Cl. Roux et V. Wirth) S. Y. Kondr., *comb. nova* – MycoBank No.: MB 847177 – Basionym: *Caloplaca emilii* Vondrák, Khodos., Cl. Roux et V. Wirth, in Vondrák, et al., Lichenologist 45(6): 709 (2013). ≡ *Kuettlingeria emilii* (Vondrák, Khodos., Cl. Roux et V. Wirth) I. V. Frolov, Vondrák et Arup, in Frolov et al., J. Syst. Evol. 59(3): 468 (2020). – Three gene data on two voucher specimens are so far accumulated.
- Pyrenodesmia erodens* (Tretiach, Pinna et Grube) Søchting, Arup et Frödén – Bas.: *Caloplaca erodens* Tretiach, Pinna et Grube (2003, p. 129). – ARUP et al. (2013: 73): *only ITS data provided, while three gene data on three voucher specimens are since that time accumulated.
- Pyrenodesmia erythrocarpa* (Pers.) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(3–4): 280 (2020). – Bas.: *Patellaria erythrocarpa* Pers., Ann. Wetter. Gesellsch. Ges. Naturk. 2(1): 12 (1810). ≡ *Kuettlingeria erythrocarpa* (Pers.) I. V. Frolov, Vondrák et Arup, in Frolov et al., J. Syst. Evol. 59(3): 468 (2020). – Three gene data on one voucher specimen are so far accumulated.

- Pyrenodesmia fuscoatroides* (J. Steiner) S. Y. Kondr., *comb. nova* – MycoBank No.: MB 847178 – Basionym: *Caloplaca fuscoatroides* J. Steiner, Verh. zool.-bot. Ges. Wien 69: 69 (1919). ≡ *Kuettlingeria fuscoatroides* (J. Steiner) I. V. Frolov, Vondrák et Arup, in Frolov et al., J. Syst. Evol. 59(3): 468 (2020). – Three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia haematites* (Chaub. ex St.-Amans) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(3–4): 280 (2020). – Bas.: *Lecanora haematites* Chaub. ex St.-Amans, in Saint-Amans, Fl. agen.: 492 (1821). ≡ *Sanguineodiscus haematites* (Chaub. ex St.-Amans) I. V. Frolov et Vondrák, in Frolov et al., J. Syst. Evol. 59(3): 471 (2020). – Three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia helygeoides* (Vain.) Arnold – Bas.: *Lecanora helygeoides* Vain., Meddn Soc. Fauna Flora fenn. 6: 148 (1881). ≡ *Caloplaca helygeoides* (Vain.) Dalla Torre et Sarnth., Fl. Tirol, Vorarlberg, Liechtenstein, IV Band. Die Flechten von Tirol: 197 (1902). – Three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia micromarina* (Frolov, Khodos. et Vondrák) I. V. Frolov et Vondrák, in Frolov et al., J. Syst. Evol. 59(3): 470 (2020). – Bas.: *Caloplaca micromarina* Frolov, Khodos. et Vondrák, in Frolov et al., Ann. bot. fenn. 53(3–4): 251 (2016). – Three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia micromontana* (Frolov, Wilk et Vondrák) Hafellner et Türk, Stapfia 104(1): 173 (2016). – Bas.: *Caloplaca micromontana* Frolov, Wilk et Vondrák, in Frolov et al., Ann. bot. fenn. 53(3–4): 255 (2016). – Three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia microstepposa* (Frolov, Nadyeina, Khodos. et Vondrák) Hafellner et Türk, Stapfia 104(1): 173 (2016). – Bas.: *Caloplaca microstepposa* Frolov, Nadyeina, Khodos. et Vondrák, in Frolov et al., Ann. bot. fenn. 53(3–4): 256 (2016). – Three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia molariformis* (Frolov, Vondrák, Nadyeina et Khodos.) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 123 (2020). – Bas.: *Caloplaca molariformis* Frolov, Vondrák, Nadyeina et Khodos., in Vondrák et al., Lichenologist 45(6): 712 (2013). – Three gene data on two voucher specimens are so far accumulated.
- Pyrenodesmia neotaurica* (Vondrák, Khodos., Arup et Søchting) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 123 (2020). – Bas.: *Caloplaca neotaurica* Vondrák, Khodos., Arup et Søchting, in Vondrák et al., Lichenologist 44(3): 414 (2012). ≡ *Kuettlingeria neotaurica* (Vondrák, Khodos., Arup et Søchting) I. V. Frolov, Vondrák et Arup, in Frolov et al., J. Syst. Evol. 59(3): 468 (2020). – Three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia obscurella* (J. Lahm) M. Choisy. – Bas.: *Blastenia obscurella* J. Lahm ex Körb., Parerga lichenol. (Breslau) 2: 130 (1860) [1865]. ≡ *Caloplaca obscurella* (J. Lahm ex Körb.) Th. Fr., Lich. Scand. (Upsaliae) (1): 182 (1871). – Data on nrITS and nrLSU are so far available for this species.
- Pyrenodesmia peliophylla* (Tuck.) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(1–2): 123 (2020). – Bas.: *Placodium peliophyllum* Tuck., Gen. lich. (Amherst): 108 (1872). ≡ *Caloplaca peliophylla* (Tuck.) Zahlbr., Cat. Lich. Univers. 7: 262 (1931). – Only data on nrITS for this species are so far accumulated.

- Pyrenodesmia percrocata* (Arnold) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(3–4): 280 (2020). – Bas.: *Blastenia percrocata* Arnold, Flora, Regensburg 67(15): 309 (1884). ≡ *Kuettlingeria percrocata* (Arnold) I. V. Frolov, Vondrák et Arup, in Frolov et al., J. Syst. Evol. 59(3): 468 (2020). – Three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia pratensis* (Wetmore) I. V. Frolov et Vondrák, in Frolov et al., J. Syst. Evol. 59(3): 470 (2020). – Bas.: *Caloplaca pratensis* Wetmore, Bryologist 112(2): 382 (2009). – Three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia soralifera* (Vondrák et Hrouzek) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(3–4): 280 (2020). – Bas.: *Caloplaca soralifera* Vondrák et Hrouzek, Graphis Scripta 18(1): 8 (2006). ≡ *Kuettlingeria soralifera* (Vondrák et Hrouzek) I. V. Frolov, Vondrák et Arup, in Frolov et al., J. Syst. Evol. 59(3): 469 (2020). – ARUP et al. (2013) provided only nrITS data for this species, while three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia teicholyta* (Ach.) E. D. Rudolph, Diss. Abstr. 15(8): 1301 (1955). – Bas.: *Lecanora teicholyta* Ach., Lich. Univ.: 425 (1810). ≡ *Kuettlingeria teicholyta* (Ach.) Trevis., Revta Period. Lav. Regia Accad. Sci., Padova 5: 73 (1857). – Three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia tianshanensis* (Xahidin, A. Abbas et J. C. Wei) I. V. Frolov et Vondrák, in Frolov et al., J. Syst. Evol. 59(3): 470 (2020). – Bas.: *Caloplaca tianshanensis* Xahidin, A. Abbas et J. C. Wei, Mycotaxon 114: 3 (2011) [2010]. – So far only data on mtSSU sequence of three gene mentioned in this paper are provided for this species.
- Pyrenodesmia transcaspica* (Nyl.) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(3–4): 280 (2020). – Bas.: *Lecanora transcaspica* Nyl., in Brotherus, Öfvers. Finska Vetensk.-Soc. Förh. 40: 9 (1897). – ARUP et al. (2013) provided only nrITS data for this species while three gene data on one voucher specimen are so far accumulated.
- Pyrenodesmia variabilis* (Pers.) A. Massal. – Bas.: *Lichen variabilis* Pers. (1794, p. 26). – GAYA et al. (2011) provided only ITS data; ARUP et al. (2013: 73) provided three gene set for one specimen; KONDRATYUK et al. (2014a) provided only mtSSU data.
- Pyrenodesmia xerica* (Poelt et Vězda) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 62(3–4): 280 (2020). – Bas.: *Caloplaca xerica* Poelt et Vězda, Mitt. bot. StSamml., Münch. 12: 1 (1975). ≡ *Kuettlingeria xerica* (Poelt et Vězda) I. V. Frolov, Vondrák et Arup, in Frolov et al., J. Syst. Evol. 59(3): 469 (2020). – ARUP et al. (2013) provided only nrITS data for this species while three gene data on one voucher specimen are so far accumulated.

Raesaeneniana S. Y. Kondr., Kärnefelt, A. Thell, Elix et Hur,
in Kondratyuk et al., Acta Bot. Hung. 57(3–4): 331 (2015) [Brownlielloideae]
Type species: *Raesaeneniana maulensis* (S. Y. Kondr. et Hur) S. Y. Kondr., Elix,
Kärnefelt et A. Thell

Raesaeneniana darwiniana (Söchting, Søgaard et Arup) S. Y. Kondr., in Kondratyuk et al., Acta Bot. Hung. 64: 323 (2022). – Bas.: *Villophora darwiniana* Söchting, Sø-

gaard et Arup, in Søchting et al., *Lichenologist* 53(3): 250 (2021). – Data on nrITS and nrLSU sequences are so far provided for this species.

Raesaeneniana maulensis (S. Y. Kondr. et Hur) S. Y. Kondr., Elix, Kärnefelt et A. Thell, in Kondratyuk et al., *Acta Bot. Hung.* 57(3–4): 340 (2015). – Bas.: *Marchantiana maulensis* S. Y. Kondr. et J.-S. Hur, in Kondratyuk et al., *Acta Bot. Hung.* 56(1–2): 108 (2014). ≡ *Villophora maulensis* (S. Y. Kondr. et Hur) Søchting, in Søchting et al., *Lichenologist* 53(3): 248 (2021). = *Villophora onas* Søchting, Søgaard et Arup, in Søchting et al., *Lichenologist* 53(3): 252 (2021). – KONDRATYUK *et al.* (2014a) provide three gene data on one voucher specimens, while BUNGARTZ *et al.* (2020) provided additional data for this species.

Raesaeneniana patagonica (Søchting et Søgaard) S. Y. Kondr., in Kondratyuk et al., *Acta Bot. Hung.* 64: 323 (2022). – Bas: *Villophora patagonica* Søchting et Søgaard in Søchting et al., *Lichenologist* 53(3): 253 (2021). – Only nrITS data are so far available for this species.

Raesaeneniana rimicola (Søchting) S. Y. Kondr., in Kondratyuk et al., *Acta Bot. Hung.* 64: 323 (2022). – Bas: *Villophora rimicola* Søchting, in Søchting et al., *Lichenologist* 53(3): 253 (2021). – Only nrITS data are so far available for this species.

Raesaeneniana wallaceana (Søchting et Søgaard) S. Y. Kondr., in Kondratyuk et al., *Acta Bot. Hung.* 64: 323 (2022). – Bas.: *Villophora wallaceana* Søchting et Søgaard in Søchting et al., *Lichenologist* 53(3): 254 (2021). – Only nrITS data are so far available for this species.

Rehmanniella S. Y. Kondr. et J.-S. Hur,
in Kondratyuk et al., *Acta Bot. Hung.* 60: 107 (2018) [Teloschistoideae]
Type species: *Rehmanniella wirthii* S. Y. Kondr.

Rehmanniella wirthii S. Y. Kondr., in Kondratyuk et al., *Acta Bot. Hung.* 60: 108 (2018). – KONDRATYUK *et al.* (2018b) provided three gene data for one voucher specimen and mtSSU data for one additional voucher specimen.

Rufoplaca Arup, Søchting et Frödén,
in Arup et al., *Nordic J. Bot.* 31(1): 74 (2013) [Caloplacoideae]
Type species: *Rufoplaca subpallida* (H. Magn.) Arup, Søchting et Frödén

Of 6 species of the genus *Rufoplaca* accepted in ARUP *et al.* (2013) only 2 species were combined based on full set of molecular data, while 3 species are combined only from the nrITS phylogeny, and one species – without any molecular data.

Rufoplaca aesanensis S. Y. Kondr. et Hur, in Kondratyuk et al., *Acta Bot. Hung.* 62(3–4): 272 (2020). – No molecular data are so far provided for this species.

- Rufoplaca arenaria* (Pers.) Arup, Søchting et Frödén – Bas.: *Lichen arenarius* Pers. (1794, p. 27). – ARUP *et al.* (2013: 74): *combination was proposed only from the ITS phylogeny.
- Rufoplaca cecericola* (B. de Lesd.) Cl. Roux, in Roux *et al.*, Bull. Inf. Ass. Franç. Lichén. 47(1): 30 (2022). – Bas.: *Caloplaca cecericola* B. de Lesd. [as '*cecericola*'], Bull. Soc. bot. Fr. 99(4–6): 145 (1952). – No molecular data are so far provided for this species.
- Rufoplaca germanica* (H. Magn.) Arup, Søchting et Frödén – Bas.: *Caloplaca germanica* H. Magn (1944c, p. 65). – ARUP *et al.* (2013: 74): *combination was proposed without providing any molecular data for this species.
- Rufoplaca kaernefeltiana* S. Y. Kondr., Lökös et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 193 (2017). – No molecular data are so far provided for this species.
- Rufoplaca oxfordensis* (Fink) Arup, Søchting et Frödén – Bas.: *Caloplaca oxfordensis* Fink, in Hedrick (1934, p. 162). – ARUP *et al.* (2013: 74): *combination was proposed only from the ITS phylogeny.
- Rufoplaca rubroaurantiaca* (B. de Lesd.) Cl. Roux, in Roux *et al.*, Bull. Inf. Ass. Franç. Lichén. 47(1): 30 (2022). – Bas.: *Caloplaca rubroaurantiaca* B. de Lesd., Bull. Soc. bot. Fr. 97: 169 (1950). – No molecular data are so far provided for this species.
- Rufoplaca scotoplaca* (Nyl.) Arup, Søchting et Frödén – Bas.: *Lecanora scotoplaca* Nyl. (1876, p. 232). – ARUP *et al.* (2013: 74): three gene data set for one voucher specimen provided.
- Rufoplaca subpallida* (H. Magn.) Arup, Søchting et Frödén – Bas.: *Caloplaca subpallida* H. Magn. (1945, p. 305). – ARUP *et al.* (2013: 74): *combination was proposed only from the ITS phylogeny.
- Rufoplaca toktoana* S. Y. Kondr., Lökös et Hur, in Kondratyuk *et al.*, Mycobiology 47: 361 (2019). – No molecular data are so far provided for this species.
- Rufoplaca tristiuscula* (H. Magn.) Arup, Søchting et Frödén – Bas.: *Caloplaca tristiuscula* H. Magn. (1944c, p. 50). – ARUP *et al.* (2013: 74): three gene data set for one voucher specimen provided.
- Rufoplaca ulleungensis* S. Y. Kondr., Lökös et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 60(1–2): 167 (2018). – No molecular data are so far provided for this species.
- Rufoplaca* sp. 43 – sensu ARUP *et al.* (2013): three gene data set for one voucher specimen provided. It is probably planned to be published as *Rufoplaca griseomarginata* Vondrák et Svoboda, but description is still not available.

***Rusavskia* S. Y. Kondr. et Kärnefelt,**

Ukr. bot. Zh. 60(4): 433 (2003) [Xanthorioideae]

Type species: *Rusavskia elegans* (Link) S. Y. Kondr. et Kärnefelt

- Rusavskia crassa* (Malme) S. Y. Kondr. et Kärnefelt. – Bas.: *Callopisma crassum* Malme ≡ *Caloplaca crassa* (Malme) Zahlbr., Cat. Lich. Univers. 7: 226 (1931). – No molecular data on this species are so far provided (ARUP *et al.* 2013: 54).

- Rusavskia dasanensis* S. Y. Kondr., Galanina et J.-S. Hur – Sso far only nrITS and mtSSU data provided for this species (KONDRATYUK *et al.* 2014c).
- Rusavskia drevlyanica* S. Y. Kondr. et O. O. Orlov, in Kondratyuk *et al.*, Acta Bot. Hung. 62(1–2): 88 (2020). – No molecular data on this species are so far provided.
- Rusavskia ectaniza* (Boistel) S. Y. Kondr. et Kärnefelt, in Ahti *et al.*, Graphis Scripta 27(1–2): 40 (2015). – Bas.: *Xanthoria parietina* f. *ectaniza* Boistel, Nouv. Fl. Lich. (Paris) 2: 71 (1903). – No molecular data on this species are so far provided.
- Rusavskia elegans* (Link) S. Y. Kondr. et Kärnefelt – Bas.: *Lichen elegans* Link – Three gene data for five voucher specimens are so far provided.
- Rusavskia granulifera* (Giralt, Nimis et Poelt) S. Y. Kondr. et Kärnefelt, Ukr. bot. Zh. 60(4): 434 (2003). – Bas.: *Xanthoria elegans* var. *granulifera* Giralt, Nimis et Poelt, J. Hattori bot. Lab. 74: 274 (1993). – No molecular data on this species are so far provided.
- Rusavskia hafellneri* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr. et Kärnefelt, Ukr. bot. Zh. 60(4): 434 (2003). – Bas.: *Xanthoria hafellneri* S. Y. Kondr. et Kärnefelt, Ukr. bot. Zh. 60(2): 123 (2003). – No molecular data on this species are so far provided.
- Rusavskia indica* S. Y. Kondr. et Upreti, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 197 (2017). – No molecular data on this species are so far provided.
- Rusavskia indochinensis* S. Y. Kondr., G. K. Mishra, S. Nayaka et D. K. Upreti, in Kondratyuk *et al.*, Acta Bot. Hung. 62(1–2): 94 (2020). – No molecular data on this species are so far provided.
- Rusavskia muscicola* (Savicz) S. Y. Kondr. et Kärnefelt, in Ahti *et al.*, Graphis Scripta 27(1–2): 40 (2015). – Bas.: *Gasparrinia elegans* var. *muscicola* Savicz, Nov. sist. Niz. Rast., 1967: 280 (1967). – No molecular data on this species are so far provided.
- Rusavskia soreciata* (Vain.) S. Y. Kondr. et Kärnefelt – Bas.: *Lecanora elegans* var. *soreciata* Vain. ≡ *Xanthoria soreciata* (Vain.) Poelt – Three gene data for two voucher specimens of this species are so far provided.
- Rusavskia subfruticulosa* (Elenkin) S. Y. Kondr. et Kärnefelt, Ukr. bot. Zh. 60(4): 434 (2003). – Bas.: *Placodium subfruticulosum* Elenkin, Ann. Mycol. 4(1): 37 (1906). – No molecular data on this species are so far provided.
- Rusavskia upretii* S. Y. Kondr., G. K. Mishra et Nayaka, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 202 (2017). – No molecular data on this species are so far provided.
- Rusavskia* sp. 44 – ARUP *et al.* (2013): data only on ITS provided.
- Rusavskia capensis* (Kärnefelt, Arup et L. Lindblom) S. Y. Kondr. et Kärnefelt → *Dufourea capensis* (Kärnefelt, Arup et L. Lindblom) Frödén, Arup et Søchting
- Rusavskia coreana* S. Y. Kondr. et Hur → *Zeroviella coreana* (S. Y. Kondr. et J.-S. Hur) S. Y. Kondr. et J.-S. Hur
- Rusavskia digitata* (S. Y. Kondr.) S. Y. Kondr. et Kärnefelt → *Zeroviella digitata* (S. Y. Kondr.) S. Y. Kondr. et Hur
- Rusavskia domogledensis* (Vězda) S. Y. Kondr. et Kärnefelt → *Zeroviella domogledensis* (Vězda) S. Y. Kondr. et Hur
- Rusavskia mandshurica* (Zahlbr.) S. Y. Kondr. et Kärnefelt → *Zeroviella mandshurica* (A. Zahlbr.) S. Y. Kondr. et J.-S. Hur

- Rusavskia papillifera* (Vain.) S. Y. Kondr. et Kärnefelt → *Zeroviella papillifera* (Vain.) S. Y. Kondr. et J.-S. Hur
- Rusavskia resendei* (Poelt et Tav.) S. Y. Kondr. et Kärnefelt → *Martinjahnsia resendei* (Poelt et Tav.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Rusavskia ussurica* S. Y. Kondr. et Hur → *Zeroviella ussurica* (S. Y. Kondr. et J.-S. Hur) S. Y. Kondr. et J.-S. Hur

***Scutaria* Söchting, Arup et Frödén,**

in Arup et al., *Nordic J. Bot.* 31(1): 62 (2013) [Teloschistoideae]

Type species: *Scutaria andina* (Räsänen) Söchting, Frödén et Arup

- Scutaria andina* (Räsänen) Söchting, Frödén et Arup – Bas.: *Xanthoria andina* Räsänen (1939, p. 140). – Three gene data sets for two voucher specimens are so far available.

***Scythioria* S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur,**

in Kondratyuk et al., *Acta bot. hung.* 56(1–2): 156 (2014) [Xanthorioideae]

Type species: *Scythioria phlogina* (Ach.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur

Many taxa mentioned by ARUP *et al.* (2013, as *Polycauliona* sp.) belong to the genus *Scythioria*, too.

- Scythioria duritzii* (H. Magn.) S. Y. Kondr., in Kondratyuk et al., *Ukr. Bot. J.* 72(6): 582 (2015). – Bas.: *Caloplaca durietzii* H. Magn., *Bot. Notiser*: 188 (1953). – Three gene data set for one specimen is provided.

- Scythioria flavogranulosa* (Arup) S. Y. Kondr., in Kondratyuk et al., *Ukr. Bot. J.* 72(6): 582 (2015). – Bas.: *Caloplaca flavogranulosa* Arup ≡ *Polycauliona flavogranulosa* (Arup) Arup, Frödén et Söchting – ARUP *et al.* (2013: 51, as *Polycauliona flavogranulosa* (Arup) Arup, Frödén et Söchting): *combination is based only on ITS phylogeny.

- Scythioria phlogina* (Ach.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur. – Bas.: *Parmelia citrina* var. *phlogina* Ach. ≡ *Caloplaca phlogina* (Ach.) Flagey, *Mém. Soc. ému. Doubs, sér. 6, 1*: 250 (1886). ≡ *Polycauliona phlogina* (Ach.) Arup, Frödén et Söchting – ARUP *et al.* (2013: 53, sub *Polycauliona phlogina* (Ach.) Arup, Frödén et Söchting) provided three gene data set for one specimen, while ITS data of various specimens are provided by VONDRÁK *et al.* (2010).

***Seawardiella* S. Y. Kondr., I. Kärnefelt et A. Thell,**

in Kondratyuk et al., *Acta Bot. Hung.* 60(3–4): 374 (2018) [Xanthorioideae]

Type species: *Seawardiella lobulata* (Flörke) S. Y. Kondr., I. Kärnefelt et A. Thell

- Seawardiella lobulata* (Flörke) S. Y. Kondr., I. Kärnefelt et A. Thell, in Kondratyuk et al., *Acta Bot. Hung.* 60(3–4): 384 (2018). – Bas.: *Lecanora lobulata* Flörke ≡ *Caloplaca lobulata* (Flörke) Hellb. ≡ *Calogaya lobulata* (Flörke) Arup, Frödén et Söchting – Combination is based only on ITS phylogeny.

Sewardiella tasmaniensis S. Y. Kondr., I. Kärnefelt et A. Thell, in Kondratyuk et al., Acta Bot. Hung. 60(3–4): 378 (2018). – Data on three genes of three vouchers are so far provided for this species.

***Seiophora* Poelt,**

Flora, Regensburg 174(5–6): 440 (1983) [Caloplacoideae]

Type species: *Seiophora magara* (Kremp.) Poelt, Flora, Regensburg 174(5–6): 440 (1983)

Of 6 species accepted in this genus (*Seiophora*) four species were combined only on the basis of the nrITS phylogeny.

Seiophora austroarabica (Sipman) Frödén, in Frödén and Lassen, Lichenologist 36(5): 297 (2004). – Bas.: *Teloschistes austroarabicus* Sipman, Willdenowia 32(1): 128 (2002). – ARUP *et al.* (2013): *only ITS data provided.

Seiophora californica (Sipman) Frödén, in Frödén and Lassen, Lichenologist 36(5): 297 (2004). – Bas.: *Teloschistes californicus* Sipman, Willdenowia 23(1–2): 312 (1993). – ARUP *et al.* (2013) provided only ITS data, while three gene data are so far available for one voucher specimen of this species.

Seiophora lacunosa (Rupr.) Frödén, in Frödén and Lassen, Lichenologist 36(5): 297 (2004). – Bas.: *Ramalina lacunosa* Rupr., Mém. Acad. Imp. Sci. St.-Pétersb. 6: 235 (1845). ≡ *Teloschistes lacunosus* (Rupr.) Savicz, Acta Inst. Bot. Acad. Sci. USSR Plant. Crypt., Ser. II, 2: 313 (1935). – Three gene data are so far available for two voucher specimens of this species (ARUP *et al.* 2013, GAYA *et al.* 2012).

Seiophora scorigena (Mont.) Frödén, in Frödén and Lassen, Lichenologist 36(5): 297 (2004). – Bas.: *Evernia scorigena* Mont., in Webb and Berthelot, Hist. nat. Iles Canar. (Paris) 3(2): 97 (1840). ≡ *Teloschistes scorigenus* (Mont.) Vain., in Hiern, Cat. Afr. Pl. 2(2): 407 (1901). – Three gene data are so far available for one voucher specimen of this species (ARUP *et al.* 2013, KONDRATYUK *et al.* 2014a).

Seiophora stenophylla (Tav.) Frödén, in Frödén and Lassen, Lichenologist 36(5): 297 (2004). – Bas.: *Teloschistes villosus* var. *stenophyllus* Tav., Revta Biol., Lisb. 4: 142 (1964). ≡ *Teloschistes stenophyllus* (Tav.) Sipman, Willdenowia 32(1): 130 (2002). – ARUP *et al.* (2013): *only ITS data provided.

Seiophora villosa (Ach.) Frödén, in Frödén and Lassen, Lichenologist 36(5): 297 (2004). – Bas.: *Parmelia villosa* Ach., Methodus, Sectio post. (Stockholmia): 254 (1803). ≡ *Teloschistes villosus* (Ach.) Norman, Conat. Praem. Gen. Lich.: 18 (1852). – ARUP *et al.* (2013) provided only ITS data, while three gene data are so far available for two voucher specimens of this species.

Seiophora aurantiaca (R. Br.) Frödén → *Xanthaptychia aurantiaca* (R. Br.) S. Y. Kondr. et Ravera
Seiophora blumii S. Y. Kondr. et Moniri → *Xanthaptychia blumii* (S. Y. Kondr. et M. Haji Moniri)
 S. Y. Kondr. et Ravera

Seiophora contortuplicata (Ach.) Frödén → *Xanthaptychia contortuplicata* (Ach.) S. Y. Kondr. et Ravera
Seiophora orientalis Frödén → *Xanthaptychia orientalis* (Frödén) S. Y. Kondr. et Ravera

***Shackletonia* Söchting, Frödén et Arup,**in Arup et al., *Nordic J. Bot.* 31(1): 55 (2013) [Xanthorioideae]Type species: *Shackletonia hertelii* (Söchting, Øvstedal et Sancho) Söchting, Frödén et Arup

- Shackletonia backorii*** M. G. Halıcı, M. Güllü, E. Bölükbaşı, M. Kahraman Yiğit, *Turk. J. Bot.* 46(5): 501 (2022). – Data only on nrITS and nrLSU are so far provided.
- Shackletonia buelliae*** (Olech et Söchting) Söchting, Frödén et Arup – Bas.: *Caloplaca buelliae* Olech et Söchting – ARUP *et al.* (2013: 55): *data on nrLSU are still missing.
- Shackletonia hertelii*** (Söchting, Øvstedal et Sancho) Söchting, Frödén et Arup – Bas.: *Caloplaca hertelii* Söchting, Øvstedal et Sancho – Three gene data for one voucher specimen are so far provided for this species (ARUP *et al.* 2013: 55).
- Shackletonia insignis*** (Söchting et Øvstedal) Söchting, Frödén et Arup – Bas.: *Caloplaca insignis* Söchting et Øvstedal – ARUP *et al.* (2013: 55): *data only on ITS phylogeny are still provided.
- Shackletonia siphonospora*** (Olech et Söchting) Söchting, Frödén et Arup – Bas.: *Caloplaca siphonospora* Olech et Söchting – ARUP *et al.* (2013: 55): *data only on ITS phylogeny are still provided.

***Sirenophila* Arup, Söchting et Frödén,**in Arup et al., *Nordic J. Bot.* 31(1): 63 (2013) [Teloschistoideae]Type species: *Sirenophila gintarasii* (S. Y. Kondr. et Kärnefelt) Arup, Frödén et Söchting

So far only nrITS sequences were provided for the type species of the genus *Sirenophila* (see KONDRATYUK *et al.* 2017a). After providing full set of molecular data on type species of the genus *Sirenophila*, the genus *Elixjohnia* was segregated (see above). Furthermore two species of the genus *Sirenophila* included to this genus only on the basis of the nrITS phylogeny are now members of the genus *Tarasginia* (the Brownlielloideae).

- Sirenophila cliffwetmorei*** (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., in Kondratyuk *et al.*, *Ukr. Bot. J.* 72(6): 582 (2015). – Bas.: *Caloplaca cliffwetmorei* S. Y. Kondr. et Kärnefelt, in Kondratyuk *et al.*, *Bibl. Lichenol.* 100: 236 (2009). – KONDRATYUK *et al.* (2015e) provided three gene data for one voucher specimen of this species.
- Sirenophila eos*** (S. Y. Kondr. et Kärnefelt) Arup, Frödén et Söchting – Bas.: *Caloplaca eos* S. Y. Kondr. et Kärnefelt in Kondratyuk *et al.* (2007a, p. 355). – Three gene data sets for two voucher specimens of this species are hitherto provided.
- Sirenophila gintarasii*** (S. Y. Kondr. et Kärnefelt) Arup, Frödén et Söchting – Bas.: *Caloplaca gintarasii* S. Y. Kondr. et Kärnefelt in Kondratyuk *et al.* (2009, p. 246). – ARUP *et al.* (2013: 63): only data on the nrITS sequence, while three gene data for one voucher specimen of this species are hitherto provided.

Sirenophila maccarthyi (S. Y. Kondr., Kärnefelt et Elix) Arup, Frödén et Søchting – Bas.: *Caloplaca maccarthyi* S. Y. Kondr., Kärnefelt et Elix in Kondratyuk et al. (2009, p. 258). – Three gene data for one voucher specimen of this species are hitherto provided.

Sirenophila sp. 20 – ARUP *et al.* (2013): full set for one voucher specimen.

Sirenophila sp. 21 – ARUP *et al.* (2013): only nrITS data for one voucher specimen.

Sirenophila bermaguiana (S. Y. Kondr. et Kärnefelt) Søchting, Arup et Frödén → *Elixjohnia bermaguiana* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr. et Hur

Sirenophila gallowayii (S. Y. Kondr., Kärnefelt et Filson) Søchting, Arup et Frödén → *Elixjohnia gallowayi* (S. Y. Kondr., Kärnefelt et Filson) S. Y. Kondr. et Hur

Sirenophila jackelixii (S. Y. Kondr., Kärnefelt et A. Thell) Søchting, Arup et Frödén → *Elixjohnia jackelixii* (S. Y. Kondr., Kärnefelt et A. Thell) S. Y. Kondr. et Hur

Sirenophila tomareeana (S. Y. Kondr. et Kärnefelt) Arup, Frödén et Søchting → *Tarasginia tomareeana* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur

Solitaria Arup, Søchting et Frödén,

in Arup *et al.*, *Nordic J. Bot.* 31(1): 55 (2013) [Xanthorioideae]

Type species: *Solitaria chrysophthalma* (Degel.) Arup, Søchting et Frödén

Solitaria chrysophthalma (Degel.) Arup, Søchting et Frödén – Bas.: *Caloplaca chrysophthalma* Degel. – Three gene data for two voucher specimens are hitherto provided.

Squamulea Arup, Søchting et Frödén,

in Arup *et al.*, *Nordic J. Bot.* 31(1): 55 (2013) [Xanthorioideae]

Type species: *Squamulea subsoluta* (Nyl.) Arup, Søchting et Frödén

Squamulea galactophylla (Tuck.) Arup, Søchting et Frödén, in Arup *et al.*, *Nordic J. Bot.* 31(1): 56 (2013) – Bas.: *Placodium galactophyllum* Tuck., *Proc. Amer. Acad. Arts & Sci.* 12: 171 (1877). – ARUP *et al.* (2013: 56): *data only on ITS phylogeny provided. Position of this species is so far not confirmed by molecular data (ARUP *et al.* 2013).

Squamulea kiamae (S. Y. Kondr. et Kärnefelt) Arup, Søchting et Frödén – Bas.: *Caloplaca kiamae* S. Y. Kondr. et Kärnefelt in Kondratyuk *et al.* – ARUP *et al.* (2013: 56): *data only on ITS phylogeny provided.

Squamulea micromera (Hue) S. Y. Kondr., Lökös et Hur, in Kondratyuk *et al.*, *Acta Bot. Hung.* 59(1–2): 122 (2017). – Bas.: *Lecanora micromera* Hue, *Ann. Mycol.* 13(2): 82 (1915). ≡ *Caloplaca micromera* (Hue) Zahlbr., *Cat. Lich. Univers.* 7: 157 (1930) [1931]. – No molecular data so far provided for this species.

Squamulea nesodes (Poelt et Nimis) S. Y. Kondr., in Kondratyuk *et al.*, *Ukr. Bot. J.* 72(6): 582 (2015). – Bas.: *Caloplaca inconnexa* var. *nesodes* Poelt et Nimis, in Nimis and Poelt, *Stud. Geobot.* 7(suppl. 1): 66 (1987). – Three gene data for one voucher specimen so far provided.

Squamulea parviloba (Wetmore) Arup, Søchting et Frödén – Bas.: *Caloplaca parviloba* Wetmore – ARUP *et al.* (2013: 56): *data only on ITS phylogeny provided.

- Squamulea squamosa* (B. de Lesd.) Arup, Søchting et Frödén – Bas.: *Placodium squamosum* B. de Lesd. – ARUP *et al.* (2013: 56): three gene data for one voucher specimen are so far provided.
- Squamulea subsoluta* (Nyl.) Arup, Søchting et Frödén – Bas.: *Lecanora murorum* var. *subsoluta* Nyl. in Weddell – ARUP *et al.* (2013: 56): full set for one specimen; KONDRATYUK *et al.* (2014c) additional 2 specimens with ITS data.
- Squamulea uttarkashiana* S. Y. Kondr., Upreti, Nayak et A. Thell, in Mishra *et al.*, Acta Bot. Hung. 62(3–4): 376 (2020). – Position of this species in the *Squamulea* branch is hitherto illustrated only on the basis of nrITS data (MISHRA *et al.* 2020).
- ‘*Squamulea*’ *chelonina* Bungartz et Søchting, in Bungartz *et al.*, Plant Fung. Syst. 65(2): 563 (2020). – Position of this species outside of the *Squamulea* branch is hitherto illustrated only on the basis of nrITS data (BUNGARTZ *et al.* 2020).
- ‘*Squamulea*’ *humboldtiana* Bungartz et Søchting, in Bungartz *et al.*, Plant Fung. Syst. 65(2): 656 (2020). – Position of this species outside of the *Squamulea* branch is hitherto illustrated only on the basis of nrITS data (BUNGARTZ *et al.* 2020).
- ‘*Squamulea*’ *oceanica* Bungartz et Søchting, in Bungartz *et al.*, Plant Fung. Syst. 65(2): 566 (2020). – Position of this species outside of the *Squamulea* branch is hitherto illustrated only on the basis of nrITS data (BUNGARTZ *et al.* 2020).

***Stellarangia* Frödén, Arup et Søchting,**

in Arup *et al.*, Nordic J. Bot. 31(1): 64 (2013) [Teloschistoideae]

Type species: *Stellarangia elegantissima* (Nyl.) Frödén, Arup et Søchting

Of three species included to the genus *Stellarangia* two taxa are combined to this genus only after nrITS phylogeny.

- Stellarangia elegantissima* (Nyl.) Frödén, Arup et Søchting – Bas.: *Lecanora elegantissima* Nyl. (1868, p. 510). ≡ *Caloplaca elegantissima* (Nyl.) Zahlbr. – Three gene data for one voucher specimen are provided (ARUP *et al.* 2013: 64).
- Stellarangia namibensis* (Kärnefelt) Frödén, Arup et Søchting – Bas.: *Caloplaca namibensis* Kärnefelt (1988, p. 54). – ARUP *et al.* (2013: 64) provided only data on nrITS sequence, while three gene data for one voucher specimen are provided later.
- Stellarangia testudinea* (V. Wirth et Kärnefelt) Frödén, Arup et Søchting – Bas.: *Caloplaca testudinea* V. Wirth et Kärnefelt in Wirth *et al.* (2005, p. 300). – ARUP *et al.* (2013: 64) provided only data on nrITS sequence, while data on nrLSU are available for this species, too.

***Streimanniella* S. Y. Kondr., Kärnefelt, A. Thell, Elix et Hur,**

in Kondratyuk *et al.*, Acta Bot. Hung. 57(3–4): 334 (2015) [Brownlielloideae]

Type species: *Streimanniella michelagoensis* (Elix, S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur

- Streimanniella burneyensis*** (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur, in Kondratyuk et al., *Acta Bot. Hung.* 57(3–4): 340 (2015). – Bas.: *Caloplaca burneyensis* S. Y. Kondr. et Kärnefelt, in Kondratyuk et al., *Bibl. Lichenol.* 100: 235 (2009). ≡ *Marchantiana burneyensis* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur. – KONDRATYUK et al. (2014a, sub *Marchantiana burneyensis* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur) provided data on nrITS and mtSSU sequences only for one specimen; KONDRATYUK et al. (2015d).
- Streimanniella kalbiorum*** (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur, in Kondratyuk et al., *Acta Bot. Hung.* 57(3–4): 340 (2015) – Bas.: *Caloplaca kalbiorum* S. Y. Kondr. et Kärnefelt, in Kondratyuk et al., *Bibl. Lichenol.* 96: 158 (2007). ≡ *Marchantiana kalbiorum* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur – KONDRATYUK et al. (2014a, sub *Marchantiana kalbiorum* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur) provided three gene data set for one voucher specimen; KONDRATYUK et al. (2015d).
- Streimanniella michelagoensis*** (Elix, S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur, in Kondratyuk et al., *Acta Bot. Hung.* 57(3–4): 340 (2015). – Bas.: *Caloplaca michelagoensis* Elix, S. Y. Kondr. et Kärnefelt, in Kondratyuk et al., *Bibl. Lichenol.* 100: 262 (2009). ≡ *Marchantiana michelagoensis* (Elix, S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur – KONDRATYUK et al. (2014a, sub *Marchantiana michelagoensis* (Elix, S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur) provided three gene data set for one voucher specimen; KONDRATYUK et al. (2015d).
- Streimanniella seppeltii*** (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur, in Kondratyuk et al., *Acta Bot. Hung.* 57(3–4): 340 (2015). – Bas.: *Caloplaca seppeltii* S. Y. Kondr. et Kärnefelt, in Kondratyuk et al., *Bibl. Lichenol.* 100: 267 (2009). ≡ *Marchantiana seppeltii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur – KONDRATYUK et al. (2014a, sub *Marchantiana seppeltii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur) provided three gene data set for two voucher specimens; KONDRATYUK et al. (2015d).

Tarasginia S. Y. Kondr., Kärnefelt, A. Thell, Elix et Hur,
in Kondratyuk et al., *Acta Bot. Hung.* 57(3–4): 335 (2015) [Brownlielloideae]
Type species: *Tarasginia whinrayi* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr.,
Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur

Tarasginia tomareeana (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur, in Kondratyuk et al., *Acta Bot. Hung.* 57(3–4): 340 (2015). – Bas.: *Caloplaca tomareeana* S. Y. Kondr. et Kärnefelt, in Kondratyuk et al., *Bibl. Lichenol.* 95: 379 (2007). ≡ *Sirenophila tomareeana* (S. Y. Kondr. et Kärnefelt) Arup, Frödén et Søchting – ARUP et al. (2013, sub *Sirenophila tomareeana* (S. Y.

Kondr. et Kärnefelt) Arup, Frödén et Søchting) have provided only nrITS data for this species; KONDRATYUK *et al.* (2015*d*).

Tarasginia whinrayi (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur, in Kondratyuk *et al.*, *Acta Bot. Hung.* 57(3–4): 340 (2015). – Bas.: *Caloplaca whinrayi* S. Y. Kondr. et Kärnefelt, in Kondratyuk *et al.*, *Bibl. Lichenol.* 95: 381 (2007). – Three gene data for two voucher specimens are hitherto provided for this species (KONDRATYUK *et al.* 2015*d*).

Tassiloa S. Y. Kondr., Kärnefelt, A. Thell, Elix et Hur,
in Kondratyuk *et al.*, *Graphis Scripta* 27(1–2): 24 (2015) [Teloschistoideae]
Type species: *Tassiloa digitaurea* (Søgaard, Søchting et Sancho) S. Y. Kondr.,
Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur

Tassiloa digitaurea (Søgaard, Søchting et Sancho) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur, *Graphis Scripta* 27(1–2): 24 (2015). – Bas.: *Caloplaca digitaurea* Søgaard, Søchting et Sancho, in Lumbsch *et al.*, *Phytotaxa* 18: 31 (2011). – Data on nrITS and mtSSU sequences for two voucher specimens are provided for this species (KONDRATYUK *et al.* 2015*a*).

Tassiloa magellanica (Søchting et Sancho) S. Y. Kondr., in Kondratyuk *et al.*, *Acta Bot. Hung.* 61(3–4): 334 (2019). – Bas.: *Caloplaca magellanica* Søchting et Sancho, *Bibl. Lichenol.* 108: 216 (2012). – Three gene data for one voucher specimen of this species are recently provided (BUNGARTZ *et al.* 2020).

Tassiloa wetmorei (Nimis, Poelt et Tretiach) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur, *Graphis Scripta* 27(1–2): 24 (2015). – Bas.: *Caloplaca wetmorei* Nimis, Poelt et Tretiach, *Bryologist* 97(2): 183 (1994). – KONDRATYUK *et al.* (2015*a*): nrITS sequence for one voucher specimen is provided for this species.

Tayloriellina S. Y. Kondr., Kärnefelt, A. Thell, Elix et Hur,
in Kondratyuk *et al.*, *Acta Bot. Hung.* 58(3–4): 315 (2016) [Brownlielloideae]
Type species: *Tayloriellina erythrosticta* (Taylor) S. Y. Kondr., Kärnefelt, A.
Thell, Elix, Jung Kim, A. S. Kondr. et Hur

Tayloriellina erythrosticta (Taylor) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur, in Kondratyuk *et al.*, *Acta Bot. Hung.* 58(3–4): 315 (2016). – Bas.: *Tayloriella erythrosticta* (Taylor) S. Y. Kondr., Kärnefelt, A. Thell, Elix, Jung Kim, A. S. Kondr. et Hur, in Kondratyuk *et al.*, *Acta Bot. Hung.* 57(3–4): 341 (2015). – Three gene data on one voucher specimen of this species are so far provided (KONDRATYUK *et al.* 2015*d*).

Tayloriellina microphyllina (Tuck.) Søchting et Arup, in Søchting *et al.*, *Lichenologist* 53(3): 248 (2021). – Bas.: *Placodium microphyllum* Tuck., *Syn. N. Amer. Lich. (Boston)* 1: 174 (1882). ≡ *Caloplaca microphyllina* (Tuck.) Hasse, *Contr. U.S. natnl. Herb.* 17(1): 114 (1913). ≡ *Villophora microphyllina* (Tuck.) S. Y. Kondr., in Kondratyuk *et al.*, *Ukr. Bot. J.* 72(6): 582 (2015). – Three gene data on two voucher specimens are so far provided.

Teloschistes Norm.,

Conat. Praem. Gen. Lich.: 17 (1852) [Teloschistoideae]

Type species: *Teloschistes flavicans* (Sw.) Norman

Teloschistes capensis (L. f.) Müll. Arg., Ark. Bot. 20A(no. 9): 47 (1926). – ARUP *et al.* (2013) provided only data on nrITS sequence.

Teloschistes exilis (Michx.) Vain., Acta Soc. Fauna Flora fenn. 7(no. 1): 115 (1890). – Three gene data for one voucher specimen is provided for this species.

Teloschistes fasciculatus Hillmann, Reprium nov. Spec. Regni veg. 49: 176 (1938). – ARUP *et al.* (2013) provided only data on nrITS sequence.

Teloschistes flavicans (Sw.) Norman, Conat. Praem. Gen. Lich.: 18 (1852). – Totally three gene data on three voucher specimens of this species are hitherto available (ARUP *et al.* 2013, FEDORENKO *et al.* (2009); GAYA *et al.* 2012).

Teloschistes inflatus Frödén, in Frödén and Kärnefelt, Bibl. Lichenol. 95: 200 (2007). – ARUP *et al.* (2013): only data on nrITS sequence.

Teloschistes nodulifer (Nyl.) Hillmann, Hedwigia 69: 326 (1930). – Only data on nrLSU and mtSSU sequences are available, while data on nrITS are still missing for this species.

Teloschistes sieberianus (Laurer) Hillmann, Hedwigia 69: 315 (1930). – Only data on nrITS and mtSSU sequences are available for this species.

Teloschistes velifer F. Wilson, Victorian Nat. 6: 69 (1889). – ARUP *et al.* (2013) provided only data on nrITS and mtSSU sequences are available for this species.

Teloschistes arabicus Frödén → *Niorma arabica* (Frödén) S. Y. Kondr., Kärnefelt, Elix, A. Thell, N.-H. Jeong et J.-S. Hur

Teloschistes austroarabicus Sipman → *Seiophora austroarabica* (Sipman) Frödén

Teloschistes californicus Sipman → *Seiophora californica* (Sipman) Frödén

Teloschistes chrysocarpoides Vain. → *Teloschistopsis chrysocarpoides* (Vain.) Frödén, Arup et Søchting

Teloschistes chrysophthalmus (L.) Norman ex Tuck. → *Niorma chrysophthalma* (L.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, N.-H. Jeong et J.-S. Hur

Teloschistes contortuplicatus (Ach.) Clauzade et Rondon → *Xanthaptychia contortuplicata* (Ach.) S. Y. Kondr. et Ravera

Teloschistes hosseusianus Gyeln. → *Niorma hosseusiana* (Gyeln.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, N.-H. Jeong et J.-S. Hur

Teloschistes hypoglaucus (Nyl.) Zahlbr. → *Niorma hypoglauca* (Nyl.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, N.-H. Jeong et J.-S. Hur

Teloschistes lacunosus (Rupr.) Savicz → *Seiophora lacunosa* (Rupr.) Frödén

Teloschistes scorigenus (Mont.) Vain. → *Seiophora scorigena* (Mont.) Frödén

Teloschistes stenophyllus (Tav.) Sipman → *Seiophora stenophylla* (Tav.) Frödén

Teloschistes villosus var. *stenophyllus* Tav. → *Seiophora stenophylla* (Tav.) Frödén

Teloschistes villosus (Ach.) Norman → *Seiophora villosa* (Ach.) Frödén

Teloschistopsis Frödén, Søchting et Arup,in Arup *et al.*, Nordic J. Bot. 31(1): 65 (2013) [Teloschistoideae]Type species: *Teloschistopsis chrysocarpoides* (Vain.) Frödén, Arup et Søchting

Teloschistopsis bonae-spei (Almb. et Poelt) Frödén, Arup et Søchting – Bas.: *Caloplaca bonae-spei* Almb. et Poelt, in Poelt and Pelleter (1984, p. 63). – ARUP *et al.* (2013: 65): full set for one voucher specimen.

Teloschistopsis chrysocarpoides (Vain.) Frödén, Arup et Søchting – Bas.: *Teloschistes chrysocarpoides* Vain. in Schinz (1900, p. 4). – ARUP *et al.* (2013: 65): only nrITS data for this species so far available.

Teloschistopsis eudoxa (Müll. Arg.) Frödén, Arup et Søchting – Bas.: *Amphiloma eudoxum* Müll. Arg. (1888, p. 44). ≡ *Caloplaca eudoxa* (Müll. Arg.) Zahlbr. – ARUP *et al.* (2013: 65): full set for one voucher specimen.

Teuvoabtiana S. Y. Kondr. et Hur,

in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 115 (2017) [Xanthorioideae]

Type species: *Teuvoabtiana rugulosa* (Nyl.) S. Y. Kondr. et Hur

Teuvoabtiana altoandina (Malme) S. Y. Kondr. et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 122 (2017). – Bas.: *Caloplaca altoandina* (Malme) Zahlbr. – ARUP *et al.* (2013, sub '*Caloplaca*' *altoandina* (Malme) Zahlbr.) provided data on ITS, nrLSU and mtSSU sequences for this species.

Teuvoabtiana fernandeziana (Zahlbr.) S. Y. Kondr. et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 123 (2017). – Only nrITS and mtSSU data are so far available for this species.

Teuvoabtiana rugulosa (Nyl.) S. Y. Kondr. et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 123 (2017). – Three gene data for three voucher specimens of this species are provided.

Caloplaca sp. 2, *Caloplaca* sp. 4, and *Caloplaca* sp. 41 – ARUP *et al.* (2013): full set for one specimen each.

Caloplaca sp. 1, *Caloplaca* sp. 3, and *Caloplaca* sp. 40 – ARUP *et al.* (2013): only ITS data each.

Thelliana S. Y. Kondr., Kärnefelt, Elix et Hur,

in Kondratyuk *et al.*, Acta Bot. Hung. 57(3–4): 337 (2015) [Brownlielloideae]

Type species: *Thelliana pseudokiamae* S. Y. Kondr., Kärnefelt, Elix et Hur

Thelliana pseudokiamae S. Y. Kondr., Kärnefelt, Elix et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 57(3–4): 338 (2015). – Molecular data (i.e. three gene data for two voucher specimens SK926, SK925) to GenBank under *Squamulea kiamae* belong to this species (KONDRATYUK *et al.* 2015d).

Tomnashia S. Y. Kondr. et Hur,

in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 117 (2017) [Xanthorioideae]

Type species: *Tomnashia rosei* (Hasse) S. Y. Kondr. et Hur

Tomnashia ludificans (Arup) S. Y. Kondr. et Hur, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 123 (2017). – Bas.: *Caloplaca ludificans* Arup – ARUP *et al.* (2013: 52, as

Polycauliona ludificans (Arup) Arup, Frödén et Søchting): *combination is based only on ITS phylogeny.

Tomnashia luteominia (Tuck.) S. Y. Kondr. et Hur, in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 123 (2017). – Bas.: *Placodium luteominium* Tuck. ≡ *Polycauliona luteominia* (Tuck.) Arup, Frödén et Søchting in Arup et al. (2013). = *Caloplaca bolanderi* (Tuck.) H. Magn. – ARUP et al. (2013: 52, as *Polycauliona luteominia* var. *bolanderi* (Tuck.) Arup, Frödén et Søchting): *combination is proposed without any molecular data.

Tomnashia nashii (Nav.-Ros., Gaya et Hladún) S. Y. Kondr. et Hur, in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 123 (2017). – Bas.: *Caloplaca nashii* Nav.-Ros., Gaya et Hladún – ARUP et al. (2013: 52, as *Polycauliona nashii* (Nav.-Ros., Gaya et Hladún) Arup, Frödén et Søchting): *combination is based only on ITS phylogeny.

Tomnashia rosei (Hasse) S. Y. Kondr. et Hur, in Kondratyuk et al., Acta Bot. Hung. 59(1–2): 123 (2017). – Bas.: *Caloplaca rosei* Hasse ≡ *Polycauliona rosei* (Hasse) Arup, Frödén et Søchting – Three gene data for one voucher specimen are provided for this species (ARUP et al. 2013: 53 as *Polycauliona rosei* (Hasse) Arup, Frödén et Søchting).

***Upretia* S. Y. Kondr., A. Thell et J. S. Hur,**

in Kondratyuk et al., Cryptogam Biodiversity and Assessment. Special Volume, e-ISSN : 2456-0251, 24 (2018) [Caloplacoideae]

Type species: *Upretia amarkantakana* (Y. Joshi et Upreti) S. Y. Kondr. et A. Thell

Upretia amarkantakana (Y. Joshi et Upreti) S. Y. Kondr. et A. Thell – Bas.: *Caloplaca amarkantakana* Y. Joshi et Upreti, Lichenologist 38(6): 537 (2006). – KONDRATYUK et al. (2018a) have provided data on nrITS and mtSSU sequences of this species.

Upretia hueana (B. de Lesd.) S. Y. Kondr. et Upreti, in Mishra et al., Acta Bot. Hung. 62(3–4): 380 (2020). – Bas.: *Caloplaca hueana* B. de Lesd., Lich. Mexique: 12 (1914). – Molecular data are so far not provided for this species.

Upretia squamulosa Y. Y. Zhang et Li S. Wang, in Zhang et al., Phytotaxa 402(6): 292 (2019). – Three gene data are so far provided for three voucher specimens of this species.

***Usnochroma* Søchting, Arup et Frödén,**

in Arup et al., Nordic J. Bot. 31(1): 75 (2013) [Caloplacoideae]

Type species: *Usnochroma carphineum* (Fr.) Søchting, Arup et Frödén

Usnochroma carphineum (Fr.) Søchting, Arup et Frödén – Bas.: *Parmelia carphinea* Fr. (1831, p. 110). – Three gene data for two specimens of this species are provided.

Usnochroma scoriophilum (A. Massal.) Søchting, Arup et Frödén – Bas.: *Placodium scoriophilum* A. Massal. (1861, p. 55). – Three gene data for two specimens of this species are provided.

***Variospora* Arup, Søchting et Frödén,**

in Arup et al., Nordic J. Bot. 31(1): 75 (2013) [Caloplacoideae]

Type species: *Variospora velana* (A. Massal.) Arup, Frödén et Søchting

Of 9 species of the genus *Variospora* 6 taxa were combined only from the ITS phylogeny data.

- Variospora aegaea* (Sipman) Arup, Frödén et Søchting – Bas.: *Caloplaca aegaea* Sipman in Sipman and Raus (2002, p. 366). – ARUP *et al.* (2013: 76): *only ITS data provided.
- Variospora australis* (Arnold) Arup, Frödén et Søchting – Bas.: *Physcia australis* Arnold (1875, p. 154). ≡ *Caloplaca australis* (Arnold) Zahlbr., in Beck, Annl. K. K. naturh. Hofmus. Wien 4: 353 (1889). ≡ *Fulgensia australis* (Arnold) Poelt, Mitt. bot. StSamml., Münch. 5: 594 (1965). – ARUP *et al.* (2013: 76): *only ITS data provided.
- Variospora cancarixiticola* (Nav.-Ros., Egea et Llimona) Arup, Frödén et Søchting – Bas.: *Caloplaca cancarixiticola* Nav.-Ros., Egea et Llimona (2000b, p. 130). – ARUP *et al.* (2013: 76): *only ITS data provided.
- Variospora dolomiticola* (Hue) Arup, Frödén et Søchting – Bas.: *Lecanora dolomiticola* Hue (1915, p. 83). – ARUP *et al.* (2013: 76): full set for one specimen.
- Variospora epierodens* (Cl. Roux et M. Bertrand) Cl. Roux et M. Bertrand, in Roux *et al.*, Bull. Soc. linn. Provence 72: 74 (2021). – Bas.: *Caloplaca epierodens* Cl. Roux et M. Bertrand, Bull. Inf. Ass. Franç. Lichén. 44(1): 2 (2019). – No molecular data are so far provided for this species.
- Variospora erythrina* (Müll. Arg.) Arup, Frödén et Søchting – Bas.: *Amphiloma erythrinum* Müll. Arg. (1880, p. 42). – ARUP *et al.* (2013: 76): *only ITS data provided.
- Variospora fuerteventurae* (van den Boom et Etayo) van den Boom et Etayo, Ascomycete. org 9(4): 129 (2017). – Bas.: *Caloplaca fuerteventurae* van den Boom et Etayo, Cryptog. Mycol. 27(4): 347 (2006). – No molecular data are so far provided for this species.
- Variospora glomerata* (Arup) Arup, Frödén et Søchting – Bas.: *Caloplaca glomerata* Arup (1990, p. 329). – ARUP *et al.* (2013: 76): full set for one specimen.
- Variospora kudratovii* (S. Y. Kondr., B. Zarei-Darki et J.-S. Hur) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur. – Bas.: *Caloplaca kudratovii* S. Y. Kondr., Zarei-Darki et Hur – KONDRATYUK *et al.* (2013a): three gene data are provided for three specimens of this species (and three additional specimens).
- Variospora latzelii* (Servít) S. Y. Kondr., in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 123 (2017). – Bas.: *Blastenia latzelii* Servít [as ‘latzeli’], Hedwigia 74(2): 151 (1934). ≡ *Caloplaca latzelii* (Servít) Clauzade et Cl. Roux, Bull. Soc. bot. Centre-Ouest, Nouv. sér., num. spec. 7: 824 (1985). – Only nrITS data are so far available for this species.
- Variospora macrocarpa* (Anzi) Arup, Frödén et Søchting – Bas.: *Placodium aurantiacum* var. *macrocarpon* Anzi (1860, p. 43). – ARUP *et al.* (2013: 76): *only ITS data provided.
- Variospora paulii* (Poelt) Arup, Frödén et Søchting – Bas.: *Caloplaca paulii* Poelt (1954, p. 21). – ARUP *et al.* (2013: 76): *only ITS data provided.
- Variospora sororicida* (M. Steiner et Poelt) Vondrák, in Vondrák *et al.*, Phytotaxa 396(1): 36 (2019). – Bas.: *Caloplaca sororicida* M. Steiner et Poelt, in Poelt and Hinteregger, Bibl. Lichenol. 50: 201 (1993). – So far only nrITS data are provided for this species.
- Variospora velana* (A. Massal.) Arup, Frödén et Søchting – Bas.: *Callopisma aurantiacum* var. *velanum* A. Massal. (1852a, p. 570). – ARUP *et al.* (2013: 77): full set for one specimen.

Verrucoplaca S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur,
in Kondratyuk et al., *Acta Bot. Hung.* 56(1–2): 157 (2014) [Xanthorioideae]
Type species: *Verrucoplaca verruculifera* (Vain.) S. Y. Kondr., Kärnefelt, Elix, A.
Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S.

Verrucoplaca verruculifera (Vain.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H.
Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur – Bas.: *Placodium verruculiferum*
Vain. ≡ *Polycauliona verruculifera* (Vain.) Arup, Frödén et Søchting – GAYA et al.
(2008): only ITS data; GAYA et al. (2012): data on nrLSU and mtSSU; ARUP et
al. (2013: 53): full set for one specimen as *Polycauliona verruculifera* (Vain.) Arup,
Frödén et Søchting).

Villophora Søchting, Arup et Frödén,
in Arup et al., *Nordic J. Bot.* 31(1): 66 (2013) [Teloschistoideae]
Type species: *Villophora isidioclada* (Zahlbr.) Søchting, Frödén et Arup

Villophora isidioclada (Zahlbr.) Søchting, Frödén et Arup – Bas.: *Caloplaca isidioclada*
Zahlbr. (1924, p. 396). – ARUP et al. (2013: 66): full set for one voucher specimen.

Villophora sp. 48 – ARUP et al. (2013): full set for one voucher specimen.

Villophora sp. 50 – ARUP et al. (2013): nrITS and nrLSU data for one voucher specimen.

Villophora sp. 46, *Villophora* sp. 47, *Villophora* sp. 49, *Villophora* sp. 51 – ARUP et al. (2013):
only nrITS data for one voucher specimen.

Villophora darwiniana Søchting, Søgaard et Arup → *Raesaeneniana darwiniana* (Søchting, Sø-
gaard et Arup) S. Y. Kondr.

Villophora onas Søchting, Søgaard et Arup → *Raesaeneniana maulensis* (S. Y. Kondr. et Hur) S. Y.
Kondr., Elix, Kärnefelt et A. Thell

Villophora maulensis (S. Y. Kondr. et Hur) Søchting → *Raesaeneniana maulensis* (S. Y. Kondr. et
Hur) S. Y. Kondr., Elix, Kärnefelt et A. Thell

Villophora patagonica Søchting et Søgaard → *Raesaeneniana patagonica* (Søchting et Søgaard) S. Y.
Kondr.

Villophora rimicola Søchting → *Raesaeneniana rimicola* (Søchting) S. Y. Kondr.

Villophora wallaceana Søchting et Søgaard → *Raesaeneniana wallaceana* (Søchting et Søgaard) S.
Y. Kondr.

Wetmoreana Arup, Søchting et Frödén,
in Arup et al., *Nordic J. Bot.* 31(1): 66 (2013) [Teloschistoideae]
Type species: *Wetmoreana texana* (Wetmore et Kärnefelt) Arup, Frödén et
Søchting

Wetmoreana texana (Wetmore et Kärnefelt) Arup, Frödén et Søchting – Bas.: *Caloplaca*
texana Wetmore et Kärnefelt (1998, p. 247). – ARUP et al. (2013: 66): full set for one
voucher specimen; KONDRATYUK et al. (2013c): full set for two additional voucher
specimens.

Wetmoreana sp. 54 – ARUP *et al.* (2013): full set for one voucher specimen.

Wetmoreana appressa (Wetmore et Kärnefelt) Arup, Frödén et Søchting → *Fulgogasparrea appressa* (Wetmore et Kärnefelt) S. Y. Kondr., Elix, Kärnefelt et A. Thell

Wetmoreana brouardii (B. de Lesd.) Wilk et Søchting → *Fulgogasparrea brouardii* (B. de Lesd.) S. Y. Kondr.

Wetmoreana decipioides (Arup) Arup, Frödén et Søchting → *Fulgogasparrea decipioides* (Arup) S. Y. Kondr., M. H. Jeong, Kärnefelt, Elix, A. Thell et Hur

***Wilketalia* S. Y. Kondr.,**

in Kondratyuk and Mosyakin, Ukr. Bot. J. 79(1): 4 (2022) [Syn.: *Andina* Wilk, Pabijan et Lücking, in Wilk *et al.*, Mycologia 113(2): 289 (2021)]

Type species: *Wilketalia citrinoides* (Wilk et Lücking) S. Y. Kondr.

Wilketalia citrinoides (Wilk et Lücking) S. Y. Kondr., in Kondratyuk and Mosyakin, Ukr. Bot. J. 79(1): 4 (2022). – Bas.: *Andina citrinoides* Wilk et Lücking, in Wilk *et al.*, Mycologia 113(2): 289 (2021). – Data only on nrITS2 and mtSSU are provided for this species (i.e. data on nrITS1 and nrLSU sequence are still missing) (WILK *et al.* 2021).

***Xanthaptychia* S. Y. Kondr. et Ravera,**

in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 118 (2017) [Caloplacoideae]

Type species: *Xanthaptychia orientalis* (Frödén) S. Y. Kondr. et Ravera

Xanthaptychia aurantiaca (R. Br.) S. Y. Kondr. et Ravera, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 123 (2017). – Bas.: *Borrera aurantiaca* R. Br., Chloris Melvilliana: 47 (1823). ≡ *Seiophora aurantiaca* (R. Br.) Frödén, in Frödén and Lassen, Lichenologist 36(5): 295 (2004). – ARUP *et al.* (2013, as *Seiophora aurantiaca*): *only ITS data provided; KONDRATYUK *et al.* 2017a).

Xanthaptychia blumii (S. Y. Kondr. et M. Haji Moniri) S. Y. Kondr. et Ravera, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 123 (2017). – Bas.: *Seiophora blumii* S. Y. Kondr. et Moniri, in Kondratyuk *et al.*, Acta Bot. Hung. 55(3–4): 310 (2013). – KONDRATYUK *et al.* (2017a) provided three gene data for one voucher specimen of this species.

Xanthaptychia contortuplicata (Ach.) S. Y. Kondr. et Ravera, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 123 (2017). – Bas.: *Parmelia contortuplicata* Ach., Syn. meth. lich. (Lund): 210 (1814). ≡ *Seiophora contortuplicata* (Ach.) Frödén, in Frödén and Lassen, Lichenologist 36(5): 297 (2004). – FEDORENKO *et al.* (2009): only mtSSU data for one specimens; ARUP *et al.* (2013, as *Seiophora contortuplicata*): *only ITS data provided; KONDRATYUK *et al.* (2014a): only mtSSU data for one specimens; KONDRATYUK *et al.* (2017a).

Xanthaptychia orientalis (Frödén) S. Y. Kondr. et Ravera, in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 123 (2017). – Bas.: *Seiophora orientalis* Frödén, in Frödén and Litterski, Graphis Scripta 17(1): 22 (2005). = *Xanthoanaptychia kotovii* S. Y. Kondr. et Kudratov, Ukr. bot. Zh. 63(3): 342 (2006). – FEDORENKO *et al.* (2009, as *Xanthoanap-*

tychia kotovii): only nrITS and mtSSU data for one specimen; ARUP *et al.* (2013, as *Seiophora orientalis*): *only ITS data provided; KONDRATYUK *et al.* (2014a): only nrITS and mtSSU data for one voucher specimen; KONDRATYUK *et al.* (2017a).

Xanthocarpia A. Massal. et D. Not.,

in Massalongo, *Alcuni Gen. Lich.*: 11 (1853) [Xanthorioideae]

Type species: *Xanthocarpia ochracea* (Schaer.) A. Massal. et De Not. in
Massalongo

Of 13 species accepted within the genus *Xanthocarpia* after ARUP *et al.* (2013) 8 species were combined to this genus only after nrITS phylogeny, and one taxon was included without any molecular data.

Xanthocarpia aquensis (Houmeau et Cl. Roux) Frödén, Arup et Søchting – Bas.: *Caloplaca aquensis* Houmeau et Cl. Roux – ARUP *et al.* (2013: 57): *data only on ITS phylogeny provided.

Xanthocarpia borysthenica (Khodos. et S. Y. Kondr.) Frödén, Arup et Søchting – Bas.: *Caloplaca borysthenica* Khodos. et S. Y. Kondr., in Kondratyuk *et al.* – ARUP *et al.* (2013: 57): *data only on ITS phylogeny provided.

Xanthocarpia crenulatella (Nyl.) Frödén, Arup et Søchting – Bas.: *Lecanora crenulatella* Nyl. – ARUP *et al.* (2013: 57): three gene data for one voucher specimen; KONDRATYUK *et al.* (2014c) additional specimen with ITS only.

Xanthocarpia diffusa (Vondrák et Llimona) Frödén, Arup et Søchting – Bas.: *Caloplaca diffusa* Vondrák et Llimona in Vondrák *et al.* – ARUP *et al.* (2013: 57): *data only on ITS phylogeny provided.

Xanthocarpia epigaea (Søchting, Huneck et Etayo) Frödén, Arup et Søchting – Bas.: *Caloplaca epigaea* Søchting, Huneck et Etayo – ARUP *et al.* (2013: 57): three gene data for one voucher specimen.

Xanthocarpia erichansenii (S. Y. Kondr., A. Thell, Kärnefelt et Elix) Frödén, Arup et Søchting – Bas.: *Caloplaca erichansenii* S. Y. Kondr., A. Thell, Kärnefelt et Elix – ARUP *et al.* (2013: 57): *data only on ITS phylogeny provided.

Xanthocarpia feracissima (H. Magn.) Frödén, Arup et Søchting – Bas.: *Caloplaca feracissima* H. Magn. – ARUP *et al.* (2013: 57): *data only on ITS phylogeny provided.

Xanthocarpia ferrarii (Bagl.) Frödén, Arup et Søchting – Bas.: *Callopisma ferrarii* Bagl. – ARUP *et al.* (2013: 57): *data only on ITS phylogeny provided.

Xanthocarpia jerramungupensis (S. Y. Kondr., Kärnefelt et Elix) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratyuk et J.-S. Hur – KONDRATYUK *et al.* 2014c): three gene data for three voucher specimens.

Xanthocarpia interfulgens (Nyl.) Frödén, Arup et Søchting – Bas.: *Lecanora interfulgens* Nyl. – ARUP *et al.* (2013: 57): *data only on ITS phylogeny provided.

Xanthocarpia lactea (A. Massal.) A. Massal. – Bas.: *Callopisma ochraceum* var. *lacteam* A. Massal. ≡ *Caloplaca ochracea* f. *lactea* (A. Massal.) Jatta – Data on nrITS sequences are so far provided for this species (ARUP *et al.* 2013: 57).

- Xanthocarpia marmorata* (Bagl.) Frödén, Arup et Søchting – Bas.: *Callopisma marmoratum* Bagl. – ARUP *et al.* (2013: 57): three gene data for one voucher specimen.
- Xanthocarpia ochracea* (Schaer.) A. Massal. et De Not. in Massalongo – Bas.: *Lecidea ochracea* Schaer. – GAYA *et al.* (2012): data on nrITS and nrLSU data; ARUP *et al.* (2013: 57): three gene data for one voucher specimen; KONDRATYUK *et al.* (2014c) additional specimen with ITS data only.
- Xanthocarpia tominii* (Savicz) Frödén, Arup et Søchting – Bas.: *Caloplaca tominii* Savicz – ARUP *et al.* (2013: 57): *data only on ITS and nrLSU sequences are so far provided for this species.

Three gene data are also provided for three more voucher specimens with preliminary names *Xanthocarpia* sp. or *Xanthocarpia* cf. *jerramungupensis*.

- Xanthokarrooa* S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix et A. Thell, in Fedorenko *et al.*, *Bibl. Lichenol.* 100: 76 (2009) [Xanthorioideae]
Type species: *Xanthokarrooa karrooensis* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix et A. Thell

Xanthokarrooa elsiae S. Y. Kondr., L. Lökös, I. Kärnefelt et A. Thell, in Kondratyuk *et al.* *Acta Bot. Hung.* 64: 363 (2022). – Molecular data for this species are so far not provided.

Xanthokarrooa karrooensis (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix et A. Thell – Bas.: *Xanthoria karrooensis* S. Y. Kondr. et Kärnefelt ≡ *Dufourea karrooensis* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting – ARUP *et al.* (2013: 43 as *Dufourea karrooensis* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting): full set for one specimen.

Xanthomendoza S. Y. Kondr. et Kärnefelt,
Bibl. Lichenol. 68: 26 (1997) [Xanthorioideae]

Type species: *Xanthomendoza mendozae* (Räsänen) S. Y. Kondr. et Kärnefelt

Xanthomendoza mendozae (Räsänen) S. Y. Kondr. et Kärnefelt – FEDORENKO *et al.* (2009): only nrITS and mtSSU data for 3 voucher specimens. ARUP *et al.* (2013): full set for one specimen; GAYA *et al.* (2012).

Xanthomendoza kashiwadanii S. Y. Kondr. et Kärnefelt – Only mtSSU data for 1 voucher specimen (FEDORENKO *et al.* 2009, as *Xanthomendoza* sp.). Data on single nrITS sequence of this species were recently added (BUNGARTZ *et al.* 2020).

Xanthomendoza subramulosa (Räsänen) Søchting, Kärnefelt et S. Y. Kondr., *Mitt. Inst. Allg. Bot. Hamburg* 30–32: 238 (2002). – Bas.: *Xanthoria subramulosa* Räsänen, *Die Flecht. Estl.* 1: 105 (1931). – Status of this species is still unclear, molecular data are also not provided so far.

Xanthomendoza alfredii (S. Y. Kondr. et Poelt) Søchting, Kärnefelt et S. Y. Kondr. → *Oxneria alfredii* (S. Y. Kondr. et Poelt) S. Y. Kondr. et Kärnefelt

- Xanthomendoza aphrodites* (Kalb, Poelt et S. Y. Kondr.) Søchting, Kärnefelt et S. Y. Kondr. → *Oxneria aphrodites* (Kalb, Poelt et S. Y. Kondr.) S. Y. Kondr. et Kärnefelt
- Xanthomendoza borealis* (R. Sant. et Poelt) Søchting, Kärnefelt et S. Y. Kondr. → *Gallowayella borealis* (R. Sant. et Poelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthomendoza coppinsii* S. Y. Kondr. et Kärnefelt → *Gallowayella coppinsii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix et A. Thell
- Xanthomendoza fallax* Søchting, Kärnefelt et S. Y. Kondr. → *Oxneria fallax* (Arnold) S. Y. Kondr. et Kärnefelt
- Xanthomendoza fulva* (Hoffm.) Søchting, Kärnefelt et S. Y. Kondr. → *Gallowayella fulva* (Hoffm.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthomendoza galericulata* L. Lindblom → *Gallowayella galericulata* (L. Lindblom) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthomendoza gallowayi* (S. Y. Kondr. et Kärnefelt) Søchting, Kärnefelt et S. Y. Kondr. → *Gallowayella gallowayi* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthomendoza hasseana* (Räsänen) Søchting, Kärnefelt et S. Y. Kondr. → *Gallowayella hasseana* (Räsänen) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthomendoza hermonii* (S. Y. Kondr.) Frödén, Arup et Søchting → *Oxneria hermonii* (S. Y. Kondr.) S. Y. Kondr. et Kärnefelt
- Xanthomendoza huculica* (S. Y. Kondr.) Diederich → *Oxneria huculica* S. Y. Kondr.
- Xanthomendoza montana* (L. Lindblom) Søchting, Kärnefelt et S. Y. Kondr. → *Gallowayella montana* (L. Lindblom) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthomendoza novozelandica* (Hillmann) Søchting, Kärnefelt et S. Y. Kondr. → *Jesmurraya novozelandica* (Hillmann) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthomendoza oregana* (Gyeln.) Søchting, Kärnefelt et S. Y. Kondr. → *Gallowayella oregona* (Gyeln.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthomendoza poeltii* (S. Y. Kondr. et Kärnefelt) Søchting, Kärnefelt et S. Y. Kondr. → *Gallowayella poeltii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthomendoza rosmariae* S. Y. Kondr. et Kärnefelt → *Honeggeria rosmariae* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthomendoza trachyphylla* (Tuck.) Frödén, Arup et Søchting → *Golubkovaea trachyphylla* (Tuck.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, Jung Kim, M. H. Jeong, N. N. Yu, A. S. Kondr. et Hur
- Xanthomendoza ulophyllodes* (Räsänen) Søchting, Kärnefelt et S. Y. Kondr. → *Oxneria ulophyllodes* (Räsänen) S. Y. Kondr. et Kärnefelt
- Xanthomendoza weberi* (S. Y. Kondr. et Kärnefelt) L. Lindblom → *Gallowayella weberi* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell

Xanthopeltis R. Sant.,

Svensk bot. Tidskr. 43: 560 (1949) [Xanthorioideae]

Type species: *Xanthopeltis rupicola* R. Sant.

Xanthopeltis rupicola R. Sant. (1949, p. 560). – ARUP *et al.* (2013: 59): full set for one specimen.

Xanthoria Th. Fr.,

Lich. arct. (Uppsala): 66 (1860) [Xanthorioideae]

Type species: *Xanthoria parietina* (L.) Th. Fr.

- Xanthoria aureola* (Ach.) Erichsen – ARUP *et al.* (2013): *data only on ITS phylogeny provided], while three gene data on one voucher specimen are provided.
- Xanthoria calcicola* Oxner – FEDORENKO *et al.* (2009): ITS and mt SSU data for some specimens; GAYA *et al.* (2012): data on nrLSU; ARUP *et al.* (2013): three gene data set for two specimens are hitherto provided.
- Xanthoria coomae* S. Y. Kondr. et Kärnefelt, in Kondratyuk *et al.*, Bibl. Lichenol. 96: 167 (2007). – FEDORENKO *et al.* (2009): ITS and mt SSU data for some specimens; ARUP *et al.* (2013): *data only on ITS phylogeny provided.
- Xanthoria ectaneoides* (Nyl.) Zahlbr. [as 'ectanoides'], Cat. Lich. Univers. 7: 287 (1931). – FEDORENKO *et al.* (2009): ITS and mt SSU data; ARUP *et al.* (2013): *data only on ITS phylogeny provided.
- Xanthoria juniperina* S. Y. Kondr., Acta Bot. Hung. 55(3–4): 358 (2013). – So far no molecular data provided for this species.
- Xanthoria ibizaensis* S. Y. Kondr. et A. S. Kondr., in Kondratyuk *et al.*, Acta Bot. Hung. 62(1–2): 96 (2020). – So far no molecular data provided for this species.
- Xanthoria lapalmaensis* Schumm et S. Y. Kondr., in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 213 (2017). – So far no molecular data provided for this species.
- Xanthoria mediterranea* Giralt, Nimis et Poelt – FEDORENKO *et al.* (2009): ITS and mt SSU data. ARUP *et al.* (2013): *data only on ITS phylogeny provided.
- Xanthoria monofoliola* S. Y. Kondr. – FEDORENKO *et al.* (2009) provided only nrITS and mtSSU data.
- Xanthoria parietina* (L.) Th. Fr. – LUTZONI *et al.* (2001): data on nrLSU sequence for one voucher specimen. FEDORENKO *et al.* (2009): ITS and mt SSU data for three specimens. GAYA *et al.* (2012) data on nrLSU sequence. ARUP *et al.* (2013): two different vouchers, which belong probably to different species. Three gene data are so far provided for four vouchers of this species, while some of these data may belong to another species.
- Xanthoria polessica* S. Y. Kondr. et Yatsyna, Acta Bot. Hung. 55(3–4): 355 (2013). – Only nrITS data are so far provided.
- Xanthoria schummii* S. Y. Kondr., in Kondratyuk *et al.*, Acta Bot. Hung. 59(1–2): 217 (2017). – So far no molecular data provided for this species.
- Xanthoria stiligera* Giralt, Nimis et Poelt – Three gene data for one voucher specimens are still provided (ARUP *et al.* 2013, sub *Xanthoria stiligera*).

Molecular data (sequences of ITS nr DNA, 18S nrSSU, 23S mtLSU, beta-tubulin, hydrophobin) on more than 100 voucher specimens identified as *Xanthoria* sp. were submitted to GenBank by the Swiss team (EICHENBERGER 2007).

Xanthoria africana Almb. → *Dufourea africana* (Almb.) Frödén, Arup et Søchting

- Xanthoria alascana* J. W. Thomson → *Massjukiella alaskana* (J. W. Thomson) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthoria alexanderbaai* S. Y. Kondr. et Kärnefelt → *Dufourea alexanderbaai* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting
- Xanthoria alfredii* S. Y. Kondr. et Poelt → *Oxneria alfredii* (S. Y. Kondr. et Poelt) S. Y. Kondr. et Kärnefelt
- Xanthoria andina* Räsänen → *Scutaria andina* (Räsänen) Søchting, Frödén et Arup
- Xanthoria angustata* S. Y. Kondr. et Kärnefelt → *Jackelixia angustata* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell
- Xanthoria aphrodites* Kalb, Poelt et S. Y. Kondr. → *Oxneria aphrodites* (Kalb, Poelt et S. Y. Kondr.) S. Y. Kondr. et Kärnefelt
- Xanthoria ascendens* S. Y. Kondr. → *Polycauliona ascendens* (S. Y. Kondr.) Frödén, Arup et Søchting
- Xanthoria bonae-spei* S. Y. Kondr. et Kärnefelt → *Ovealmbornia bonae-spei* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix et A. Thell
- Xanthoria borealis* R. Sant. et Poelt → *Gallowayella borealis* (R. Sant. et Poelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthoria candelaria* (L.) Th. Fr. → *Massjukiella candelaria* (L.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthoria candelaria* f. *marginata* (Räsänen) Trass → *Massjukiella ucrainica* subsp. *marginata* (Räsänen) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthoria candelaria* var. *marginata* Räsänen → *Massjukiella ucrainica* subsp. *marginata* (Räsänen) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthoria capensis* Kärnefelt, Arup et L. Lindblom → *Dufourea capensis* (Kärnefelt, Arup et L. Lindblom) Frödén, Arup et Søchting
- Xanthoria chrysophthalma* (L.) Stizenb. → *Niorma chrysophthalma* (L.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, N.-H. Jeong et J.-S. Hur
- Xanthoria digitata* S. Y. Kondr. → *Zeroviella digitata* (S. Y. Kondr.) S. Y. Kondr. et J.-S. Hur
- Xanthoria dissectula* S. Y. Kondr. et Kärnefelt → *Jackelixia dissectula* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell
- Xanthoria doidgeae* Eichenb., Aptroot et Honegger → *Dufourea doidgeae* (Eichenberger, Aptroot et Honegger) Frödén, Arup et Søchting
- Xanthoria domogledensis* Vězda → *Zeroviella domogledensis* (Vězda) S. Y. Kondr. et J.-S. Hur
- Xanthoria elegans* var. *granulifera* Giralt, Nimis et Poelt → *Rusavskia granulifera* (Giralt, Nimis et Poelt) S. Y. Kondr. et Kärnefelt
- Xanthoria elegans* (Link) Th. Fr. → *Rusavskia elegans* (Link) S. Y. Kondr. et Kärnefelt
- Xanthoria elixii* S. Y. Kondr. et Kärnefelt → *Jackelixia elixii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell
- Xanthoria fallax* Arnold → *Oxneria fallax* (Arnold) S. Y. Kondr. et Kärnefelt
- Xanthoria filsonii* Elix → *Jackelixia filsonii* (Elix) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell
- Xanthoria fulva* (Hoffm.) Poelt et Petut. → *Gallowayella fulva* (Hoffm.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthoria gallowayi* S. Y. Kondr. et Kärnefelt → *Gallowayella gallowayi* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthoria hafellneri* S. Y. Kondr. et Kärnefelt → *Rusavskia hafellneri* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr. et Kärnefelt
- Xanthoria hasseana* Räsänen → *Gallowayella hasseana* (Räsänen) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell

- Xanthoria hermonii* S. Y. Kondr. → *Oxneria hermonii* (S. Y. Kondr.) S. Y. Kondr. et Kärnefelt
Xanthoria hirsuta Eichenberger, Aptroot et Honegger → *Langeottia hirsuta* (Eichenb., Aptroot et Honegger) S. Y. Kondr., Kärnefelt, Elix, A. Thell, J. Kim, M.-H. Jeong, N.-N. Yu, A. S. Kondratiuk et J.-S. Hur
Xanthoria hypoglauca (Nyl.) Stizenb. → *Niorma hypoglauca* (Nyl.) S. Y. Kondr., Kärnefelt, Elix, A. Thell, N.-H. Jeong et J.-S. Hur
Xanthoria hypogymnioides S. Y. Kondr. et Kärnefelt → *Jackelixia hypogymnioides* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell
Xanthoria incavata (Stirt.) Zahlbr. → *Jackelixia incavata* (Stirt.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell
Xanthoria kaernefeltii S. Y. Kondr., D. J. Galloway et Goward → *Massjukiella kaernefeltii* (S. Y. Kondr., D. J. Galloway et Goward) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et Elix
Xanthoria karrooensis S. Y. Kondr. et Kärnefelt → *Xanthokarrooa karrooensis* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix et A. Thell
Xanthoria ligulata (Körb.) P. James → *Jackelixia ligulata* (Körb.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell
Xanthoria mandschurica (Zahlbr.) Asahina → *Zeroviella mandschurica* (A. Zahlbr.) S. Y. Kondr. et J.-S. Hur
Xanthoria marlothii Zahlbr. → *Dufourea marlothii* (Zahlbr.) Frödén, Arup et Søchting
Xanthoria mendozae Räsänen → *Xanthomendoza mendozae* (Räsänen) S. Y. Kondr. et Kärnefelt
Xanthoria montana L. Lindblom → *Gallowayella montana* (L. Lindblom) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
Xanthoria novozelandica Hillmann → *Jesmurraya novozelandica* (Hillmann) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, J.-S. Hur et A. Thell
Xanthoria nowakii S. Y. Kondr. et Bielczyk → *Massjukiella nowakii* (S. Y. Kondr. et Bielczyk) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
Xanthoria oregona Gyeln. → *Gallowayella oregona* (Gyeln.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
Xanthoria papillifera (Vain.) Poelt → *Zeroviella papillifera* (Vain.) S. Y. Kondr. et J.-S. Hur
Xanthoria parietina f. *ectaniza* Boistel → *Rusavskia ectaniza* (Boistel) S. Y. Kondr. et Kärnefelt
Xanthoria parietina var. *australis* Zahlbr. → *Dufourea australis* (Zahlbr.) Frödén, Arup et Søchting
Xanthoria parietina var. *mandschurica* Zahlbr. → *Zeroviella mandschurica* (A. Zahlbr.) S. Y. Kondr. et J.-S. Hur
Xanthoria parva Räsänen → *Josefpoeltia parva* (Räsänen) Frödén et L. Lindblom
Xanthoria poeltii S. Y. Kondr. et Kärnefelt → *Gallowayella poeltii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
Xanthoria pollinarioides L. Lindblom et D. M. Wright → *Polycauliona pollinarioides* (L. Lindblom et D. M. Wright) Frödén, Arup et Søchting
Xanthoria polycarpa (Hoffm.) Rieber → *Massjukiella polycarpa* (Hoffm.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
Xanthoria polycarpoides → *Lazarenkoella polycarpoides* (J. Steiner) S. Y. Kondr. et Lökös
Xanthoria polycarpoides var. *persica* → *Lazarenkoella persica* (J. Steiner) S. Y. Kondr. et Lökös
Xanthoria resendei Poelt et Tav. → *Martinjahnsia resendei* (Poelt et Tav.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
Xanthoria sipmanii S. Y. Kondr. et Kärnefelt → *Dufourea sipmanii* (S. Y. Kondr. et Kärnefelt) Frödén, Arup et Søchting
Xanthoria soechtingii S. Y. Kondr. → *Oxneria soechtingii* (S. Y. Kondr.) S. Y. Kondr. et Kärnefelt

- Xanthoria sogdiana* S. Y. Kondr. et Kärnefelt → *Gallowayella sogdiana* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthoria sorediata* (Vain.) Poelt → *Rusavskia sorediata* (Vain.) S. Y. Kondr. et Kärnefelt
- Xanthoria streimannii* S. Y. Kondr. et Kärnefelt → *Jackelixia streimannii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell
- Xanthoria subfruticulosa* var. *subfruticulosa* (Elenkin) Piin → *Rusavskia subfruticulosa* (Elenkin) S. Y. Kondr. et Kärnefelt
- Xanthoria subramulosa* Räsänen → *Xanthomendoza subramulosa* (Räsänen) Søchting, Kärnefelt et S. Y. Kondr.
- Xanthoria tenax* L. Lindblom → *Massjukiella tenax* (L. Lindblom) S. Y. Kondr.
- Xanthoria tenuiloba* L. Lindblom → *Polycauliona tenuiloba* (L. Lindblom) Frödén, Arup et Søchting
- Xanthoria tibellii* S. Y. Kondr. et Kärnefelt → *Gallowayella tibellii* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthoria turbinata* Vain. → *Dufourea turbinata* (Vain.) Frödén, Arup et Søchting
- Xanthoria ucrainica* S. Y. Kondr. → *Massjukiella ucrainica* (S. Y. Kondr.) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthoria ulophyllodes* Räsänen → *Oxneria ulophyllodes* (Räsänen) S. Y. Kondr. et Kärnefelt
- Xanthoria weberi* S. Y. Kondr. et Kärnefelt [as '*Oxneria weberi*?'] → *Gallowayella weberi* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur et A. Thell
- Xanthoria wetmorei* S. Y. Kondr. et Kärnefelt → *Honeggeria wetmorei* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr.
- Xanthoria whinrayi* S. Y. Kondr. et Kärnefelt → *Jackelixia whinrayi* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell
- Xanthoria yorkensis* S. Y. Kondr. et Kärnefelt → *Jackelixia yorkensis* (S. Y. Kondr. et Kärnefelt) S. Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt et A. Thell

Yoshimuria S. Y. Kondr., Kärnefelt, Elix, A. Thell et J.-S. Hur,
in Kondratyuk et al., Acta Bot. Hung. 56(1–2): 105 (2014) [Caloplacoideae]
Type species: *Yoshimuria spodoplaca* (Nyl.) S. Y. Kondr., Kärnefelt, A. Thell,
Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur

- Yoshimuria cerussata*** (Hue) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur, in Kondratyuk et al., Acta Bot. Hung. 56(1–2): 113 (2014). – Bas.: *Lecidea cerussata* Hue, Deux. Expéd. Antarct. Franç., 1908–10, Lichens: 101 (1915). – KONDRATYUK *et al.* (2014a): only nrITS data.
- Yoshimuria galbina*** (S. Y. Kondr. et J.-S. Hur) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur, in Kondratyuk et al., Acta Bot. Hung. 56(1–2): 113 (2014). – Bas.: *Caloplaca galbina* S. Y. Kondr. et Hur, in Kondratyuk et al., Acta bot. hung. 54(3–4): 318 (2012). – KONDRATYUK *et al.* (2014a): only nrITS and mtSSU data. Additional data on three genes of single voucher of this species were recently added (BUNGARTZ *et al.* 2020).
- Yoshimuria ivanpisutiana*** S. Y. Kondr., Lökös et Hur, in Kondratyuk et al., Acta Bot. Hung. 61(3–4): 357 (2019). – No molecular data so far provided for this species.
- Yoshimuria seokpoensis*** S. Y. Kondr., Lökös et Hur, in Kondratyuk et al., Acta Bot. Hung. 61(3–4): 361 (2019). – No molecular data so far provided for this species.

Yoshimuria spodoplaca (Nyl.) S. Y. Kondr., Kärnefelt, A. Thell, Elix, J. Kim, A. S. Kondratiuk et J.-S. Hur, in Kondratyuk et al., Acta Bot. Hung. 56(1–2): 113 (2014). – Bas.: *Lecanora spodoplaca* Nyl., Lich. Japon.: 38 (1890). ≡ *Caloplaca spodoplaca* (Nyl.) Zahlbr., Cat. Lich. Univers. 7: 183 (1931). – KONDRATYUK *et al.* (2014a): only nrITS and mtSSU data. Additional data on one nrLSU sequence of this species were recently added (BUNGARTZ *et al.* 2020).

Zeroviella S. Y. Kondr. et J.-S. Hur,

in Kondratyuk et al., Ukr. Bot. J. 72(6): 578 (2015) [Xanthorioideae]

Type species: *Zeroviella papillifera* (Vain.) S. Y. Kondr. et J.-S. Hur

Zeroviella coreana (S. Y. Kondr. et J.-S. Hur) S. Y. Kondr. et J.-S. Hur, in Kondratyuk et al., Ukr. Bot. J. 72(6): 581 (2015). – Bas.: *Rusavskia coreana* S. Y. Kondr. et Hur, in Kondratyuk et al., Acta Bot. Hung. 57(1–2): 118 (2015). – Only nrITS and mtSSU data so far available for this species.

Zeroviella digitata (S. Y. Kondr.) S. Y. Kondr. et J.-S. Hur, in Kondratyuk et al., Ukr. Bot. J. 72(6): 582 (2015). – Bas.: *Xanthoria digitata* S. Y. Kondr., in Kondratyuk and Kärnefelt, Ukr. bot. Zh. 60(2): 122 (2003). – Only nrITS and mtSSU data so far available for this species.

Zeroviella domogledensis (Vězda) S. Y. Kondr. et J.-S. Hur, in Kondratyuk et al., Ukr. Bot. J. 72(6): 582 (2015). – Bas.: *Xanthoria domogledensis* Vězda, Lichenes Selecti Exsiccati, Fasc. (Průhonice) 52: 6 (no. 1294) (1975). – Only nrITS and mtSSU data so far available for this species.

Zeroviella esfahanensis S. Y. Kondr., B. Zarei-Darki et J.-S. Hur, in Kondratyuk et al., Ukr. Bot. J. 72(6): 579 (2015). – Only nrITS and mtSSU data so far available for this species.

Zeroviella laxa (Müll. Arg.) S. Y. Kondr. et J.-S. Hur, in Kondratyuk et al., Ukr. Bot. J. 72(6): 582 (2015). – Bas.: *Amphiloma elegans* var. *laxum* Müll. Arg., Flora, Regensburg 67(24): 465 (1884). – Only nrITS and mtSSU data so far available for this species.

Zeroviella mandshurica (A. Zahlbr.) S. Y. Kondr. et J.-S. Hur, in Kondratyuk et al., Ukr. Bot. J. 72(6): 582 (2015). – Bas.: *Xanthoria parietina* var. *mandshurica* Zahlbr. ≡ *Rusavskia mandshurica* (Zahlbr.) S. Y. Kondr. et Kärnefelt – Only nrITS data so far available for this species (ARUP *et al.* 2013: 54, as *Rusavskia mandshurica* (Zahlbr.) S. Y. Kondr. et Kärnefelt).

Zeroviella papillifera (Vain.) S. Y. Kondr. et J.-S. Hur, in Kondratyuk et al., Ukr. Bot. J. 72(6): 582 (2015). – Bas.: *Placodium papilliferum* Vain., Term. Füz. 22: 294 (1899). ≡ *Rusavskia papillifera* (Vain.) S. Y. Kondr. et Kärnefelt, Ukr. bot. Zh. 60(4): 434 (2003). – ARUP *et al.* (2013: 54 as *Rusavskia papillifera* (Vain.) S. Y. Kondr. et Kärnefelt): *data only on ITS phylogeny provided.

Zeroviella ussurica (S. Y. Kondr. et J.-S. Hur) S. Y. Kondr. et J.-S. Hur, in Kondratyuk et al., Ukr. Bot. J. 72(6): 582 (2015). – Bas.: *Rusavskia ussurica* S. Y. Kondr. et Hur, in Kondratyuk et al., Acta Bot. Hung. 57(1–2): 122 (2015). – Only nrITS and mtSSU data so far available for this species.

* * *

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REFERENCES

- AHTI, T., KONDRATYUK, S. Y., KÄRNEFELT, I. and THELL, A. (2015): Nomenclatural corrections and notes on some taxa in the Teloschistaceae (lichenized ascomycetes). – *Graphis Scripta* **27**(1–2): 37–41.
- ARUP, U., SØCHTING, U. and FRÖDÉN, P. (2013): A new taxonomy of the family Teloschistaceae. – *Nordic J. Bot.* **31**(1): 16–83. <https://doi.org/10.1111/j.1756-1051.2013.00062.x>
- ARUP, U., VONDRÁK, J. and HALICI, M. G. (2015): *Parvoplaca nigroblastidiata*, a new corticolous lichen (Teloschistaceae) in Europe, Turkey and Alaska. – *Lichenologist* **47**(6): 379–385. <https://doi.org/10.1017/S0024282915000389>
- BUNGARTZ, F., SØCHTING, U. and ARUP, U. (2020): Teloschistaceae (lichenized Ascomycota) from the Galapagos Islands: a phylogenetic revision based on morphological, anatomical, chemical, and molecular data. – *Plant Fung. Syst.* **65**(2): 515–576. <https://doi.org/10.35535/pfsyst-2020-0030>
- DIEDERICH, P. and ERTZ, D. (2020): First checklist of lichens and lichenicolous fungi from Mauritius, with phylogenetic analyses and description of new taxa. – *Plant Fung. Syst.* **65**(1): 13–75. <https://doi.org/10.35535/pfsyst-2020-0003>
- EICHENBERGER, C. (2007): *Molecular phylogenies of representatives of Xanthoria and Xanthomendoza (lichen-forming Ascomycetes)*. – Dissertation, Univ. Zürich, Zürich, 126 pp.
- FAYYAZ, I., KOUSER, R., AFSHAN, N. S., NIAZI, A. R., ZULFIQAR, R., KHALID, A. N. and KONDRATYUK, S. Y. (2022): *Iqbalia kashmirensis* gen. et sp. nov. from Pakistan (Teloschistaceae, lichenized ascomycetes) based on multigene phylogeny. – *Mycol. Progress* **21**: 68. <https://doi.org/10.1007/s11557-022-01823-y>
- FEDORENKO, N. M., STENROOS, S., THELL, A., KÄRNEFELT, I. and KONDRATYUK, S. Y. (2009): A phylogenetic analysis of xanthorioid lichens (Teloschistaceae, Ascomycota) based on ITS and mtSSU sequences. – *Bibl. Lichenol.* **100**: 49–84.
- FEDORENKO, N. M., STENROOS, S., THELL, A., KÄRNEFELT, I., ELIX, J. A., HUR, J.-S. and KONDRATYUK, S. Y. (2012): Molecular phylogeny of xanthorioid lichens (Teloschistaceae, Ascomycota), with notes on their morphology. – *Bibl. Lichenol.* **108**: 45–64.
- FROLOV, I., VONDRÁK, J., KOŠNAR, J. and ARUP, U. (2021): Phylogenetic relationships within *Pyrenodesmia* sensu lato and the role of pigments in its taxonomic interpretation. – *J. Syst. Evol.* **59**(3): 454–474. <https://doi.org/10.1111/jse.12717>
- GAYA, E., REDELINGS, B. D., NAVARRO-ROSINÉS, P., LLIMONA, X., DE CÁCERES, M. and LUTZONI, F. (2011): Align or not to align? Resolving species complexes within the *Caloplaca saxicola* group as a case study. – *Mycologia* **103**(2): 361–378.
- GAYA, E., HÖGNABBA, F., HOLGUIN, Á., MOLNÁR, K., FERNÁNDEZ-BRIME, S., STENROOS, S., ARUP, U., SØCHTING, U., VAN DEN BOOM, P., LÜCKING, R., SIPMAN, H. J. M. and LUTZONI, F. (2012): Implementing a cumulative supermatrix approach for a comprehensive phyloge-

- netic study of the Teloschistales (Pezizomycotina, Ascomycota). – *Mol. Phyl. Evol.* **63**: 374–387. <https://doi.org/10.1016/j.ympev.2012.01.012>.
- GAYA, E., FERNÁNDEZ-BRIME, S., VARGAS, R., LACHLAN, R. F., GUEIDAN, C., RAMÍREZ-MEJÍA, M. and LUTZONI, F. (2015): The adaptive radiation of lichen-forming Teloschistaceae is associated with sunscreens pigments and a bark-to-rock substrate shift. – *Proc. Nat. Acad. Sci. US* **112**(37): 11600–11605. <https://doi.org/10.1073/pnas.1507072112>
- KASALICKY, T., DOERING, H., RAMBOLD, G. and WEDIN, M. (2000): A comparison of ITS and LSU nrDNA phylogenies of Fulgensia (Teloschistaceae, Lecanorales), a genus of lichenised ascomycetes. – *Can. J. Bot.* **78**: 1580–1589. <https://doi.org/10.1139/cjb-78-12-1580>
- KÄRNEFELT, I. (1989): Morphology and phylogeny in the Teloschistales. – *Crypt. Bot.* **1**: 147–203.
- KIM, J. H., AHN, I. Y., HONG, S. G., ANDREEV, M., LIM, K. M., OH, M. J., KOH, Y. J. and HUR, J.-S. (2006): Lichen flora around the Korean Antarctic Scientific Station, King George Island, Antarctic. – *J. Microbiol.* **44**(5): 480–491.
- KONDRATYUK, S. Y. and MOSYAKIN, S. L. (2022): Wilketalia S. Y. Kondr., a new name for Andina Wilk, Pabijan & Lücking, nom. illeg. (Teloschistaceae, lichenized Ascomycota). – *Ukr. Bot. J.* **79**(1): 3–5. <https://doi.org/10.15407/ukrbotj79.01.003>
- KONDRATYUK, S. and POELT, J. (1997): Two new Asian Xanthoria species (Teloschistaceae, lichenized Ascomycotina). – *Lichenologist* **29**: 173–190. <https://doi.org/10.1017/S0024282997000200>
- KONDRATYUK, S., KÄRNEFELT, I., ELIX, J. and THELL, A. (2009): New Caloplaca species from Australia. – *Bibl. Lichenol.* **99**: 259–278.
- KONDRATYUK, S. Y., LÖKÖS, L., ZAREI-DARKI, B., HAJI MONIRI, M., TCHABANENKO, S. I., GALANINA, I., YAKOVCHENKO, L., HOOSHMAND, F., EZHKIN, A. K. and HUR, J.-S. (2013a): Five new Caloplaca species (Teloschistaceae, Ascomycota) from Asia. – *Acta Bot. Hung.* **55**(1–2): 41–60. <https://doi.org/10.1556/abot.55.2013.1-2.4>
- KONDRATYUK, S. Y., YATSYNA, A. P., LÖKÖS, L., GALANINA, I., HAJI MONIRI, M. and HUR, J.-S. (2013b): Three new Xanthoria and Rusavskia species (Teloschistaceae, Ascomycota) from Europe. – *Acta Bot. Hung.* **55**(3–4): 351–365. <https://doi.org/10.1556/ABot.55.2013.3-4.10>
- KONDRATYUK, S., JEONG, M.-H., YU, N.-H., KÄRNEFELT, I., THELL, A., ELIX, J. A., KIM, J., KONDRATYUK, A. S. and HUR, J.-S. (2013c): Four new genera of teloschistoid lichens (Teloschistaceae, Ascomycota) based on molecular phylogeny. – *Acta Bot. Hung.* **55**(3–4): 251–274. <https://doi.org/10.1556/abot.55.2013.3-4.8>
- KONDRATYUK, S. Y., JEONG, M.-H., YU, N. N., KÄRNEFELT, I., THELL, A., ELIX, J. A., KIM, J., KONDRATIUK, A. S. and HUR, J.-S. (2014a): A revised taxonomy for the subfamily Caloplacoideae (Teloschistaceae, Ascomycota), based on molecular phylogeny. – *Acta Bot. Hung.* **56**(1–2): 93–123. <https://doi.org/10.1556/ABot.56.2014.1-2.10>
- KONDRATYUK, S. Y., JEONG, M. H., GALANINA, I. A., YAKOVCHENKO, L. S., YATSYNA, A. P. and HUR, J.-S. (2014b): Molecular phylogeny of placodioid lichen-forming fungi reveal a new genus, Sedelnikovaea. – *Mycotaxon* **129**(2): 269–282. <https://doi.org/10.5248/129.269>
- KONDRATYUK, S. Y., KÄRNEFELT, I., THELL, A., ELIX, J. A., KIM, J., JEONG, M.-H., YU, N.-H., KONDRATIUK, A. S. and HUR, J.-S. (2014c): A revised taxonomy of the subfamily Xanthorioideae (Teloschistaceae, Ascomycota) based on molecular phylogeny. – *Acta Bot. Hung.* **56**(1–2): 141–178. <https://doi.org/10.1556/ABot.56.2014.1-2.12>
- KONDRATYUK, S. Y., LÖKÖS, L. and HUR, J.-S. (2014d): New lichen-forming and lichenicolous fungi from Ukraine. – *Acta Bot. Hung.* **56**(3–4): 361–368. <https://doi.org/10.1556/abot.56.2014.3-4.11>
- KONDRATYUK, S. Y., KÄRNEFELT, I., THELL, A., ELIX, J. A., KIM, J., KONDRATIUK, A. S. and HUR, J.-S. (2015a): Tassiloo, a new genus in the Teloschistaceae (lichenized Ascomycetes). – *Graphis Scripta* **27**(1–2): 22–26.

- KONDRATYUK, S. Y., LÖKÖS, L., FARKAS, E., OH, S. O. and HUR, J.-S. (2015*b*): New and noteworthy lichen-forming and lichenicolous fungi, 2. – *Acta Bot. Hung.* 57(1–2): 77–141. <https://doi.org/10.1556/abot.57.2015.1-2.10>
- KONDRATYUK, S. Y., LÖKÖS, L., KIM, J. A., KONDRATIUK, A. S., JEONG, M. H., JANG, S. H., OH, S. O. and HUR, J.-S. (2015*c*): Three new monotypic genera of the caloplacoid lichens (Teloschistaceae, lichen-forming Ascomycetes). – *Mycobiology* 43(3): 195–202. <https://doi.org/10.5941/myco.2015.43.3.195>
- KONDRATYUK, S. Y., KÄRNEFELT, I., THELL, A., ELIX, J. A., KIM, J., KONDRATIUK, A. S. and HUR, J.-S. (2015*d*): Brownlielloideae, a new subfamily in the Teloschistaceae (Lecanoromycetes, Ascomycota). – *Acta Bot. Hung.* 57(3–4): 321–343. <https://doi.org/10.1556/034.57.2015.3-4.6>
- KONDRATYUK, S. Y., KIM, J. A., YU, N. H., JEONG, M. H., JANG, S. H., KONDRATIUK, A. S., ZAREI-DARKI, B. and HUR, J.-S. (2015*e*): Zeroviella, a new genus of xanthorioid lichens (Teloschistaceae, Ascomycota) proved by three gene phylogeny. – *Ukr. Bot. J.* 72(6): 574–584. <https://doi.org/10.15407/ukrbotj72.06.574>
- KONDRATYUK, S. Y., KÄRNEFELT, I., THELL, A., ELIX, J., KIM, J. A., KONDRATIUK, A. S. and HUR, J.-S. (2015*f*): Ovealmbornia reginae (Teloschistaceae, Ascomycetes), a new xanthorioid lichen from South Africa. – *Herzogia* 28(2): 465–472. <https://doi.org/10.13158/hea.28.2.2015.465>
- KONDRATYUK, S. Y., MISHRA, G. K., NAYAKA, S. and UPRETI, D. K. (2016*a*): New record or otherwise interesting species of Teloschistaceae (lichenized fungi) from India. – *Cryptogam Biodiversity and Assessment* 2(1): 8–13. <https://doi.org/10.21756/cab.v2i01.8611>
- KONDRATYUK, S. Y., LÖKÖS, L., KIM, J. A., KONDRATIUK, A. S., JEONG, M.-H., JANG, S. H., OH, S.-O., WANG, X. Y. and HUR, J.-S. (2016*b*): Fauriea, a new genus of the lecanoroid caloplacoid lichens (Teloschistaceae, lichen-forming Ascomycetes). – *Acta Bot. Hung.* 58(3–4): 303–318. <https://doi.org/10.1556/ABot.58.2016.3-4.6>
- KONDRATYUK, S. Y., LÖKÖS, L., HALDA, J. P., UPRETI, D. K., MISHRA, G. K., HAJI MONIRI, M., FARKAS, E., PARK, J. S., LEE, B. G., LIU, D., WOO, J.-J., JAYALAL, R. G. U., OH, S.-O. and HUR, J.-S. (2016*c*): New and noteworthy lichen-forming and lichenicolous fungi 5. – *Acta Bot. Hung.* 58(3–4): 319–396. <https://doi.org/10.1556/abot.58.2016.3-4.7>
- KONDRATYUK, S. Y., LÖKÖS, L., UPRETI, D. K., NAYAKA, S., MISHRA, G. K., RAVERA, S., JEONG, M. H., JANG, S.-H., PARK, J. S. and HUR, J.-S. (2017*a*): New monophyletic branches of the Teloschistaceae (lichen-forming Ascomycota) proved by three gene phylogeny. – *Acta Bot. Hung.* 59(1–2): 71–136. <https://doi.org/10.1556/034.59.2017.1-2.6>
- KONDRATYUK, S. Y., LÖKÖS, L., HALDA, J. P., ROUX, C., UPRETI, D. K., SCHUMM, F., MISHRA, G. K., NAYAKA, S., FARKAS, E., PARK, J. S., LEE, B. G., LIU, D., WOO, J.-J. and HUR, J.-S. (2017*b*): New and noteworthy lichen-forming and lichenicolous fungi 6. – *Acta Bot. Hung.* 59(1–2): 137–260. <https://doi.org/10.1556/034.59.2017.1-2.7>
- KONDRATYUK, S. Y., SCHUMM, F., ELIX, J. A., KÄRNEFELT, I., THELL, A. and HUR, J.-S. (2017*c*): Eilifdahlia schwarzii (Caloplacoideae, Teloschistaceae) a new species from Western Australia. – *Graphis Scripta* 29(1–2): 18–23.
- KONDRATYUK, S. Y., PERSSON, P.-E., HANSSON, M., MISHRA, G. K., NAYAKA, S., LIU, D., HUR, J.-S. and THELL, A. (2018*a*): Upretia, a new caloplacoid lichen genus (Teloschistaceae, lichen-forming Ascomycota) from India. – *Crypt. Biodiv. Assessm., Spec. Vol.* (2018): e-ISSN: 2456-0251, 22-31
- KONDRATYUK, S. Y., PERSSON, P.-E., HANSSON, M., LÖKÖS, L., LIU, D., HUR, J.-S., KÄRNEFELT, I. and THELL, A. (2018*b*): Hosseusiella and Rehmanniella, two new genera in the Teloschistaceae. – *Acta Bot. Hung.* 60(1–2): 89–113. <https://doi.org/10.1556/034.60.2018.1-2.7>
- KONDRATYUK, S. Y., LÖKÖS, L., HALDA, J. P., FARKAS, E., UPRETI, D. K., THELL, A., WOO, J.-J., OH, S.-O. and HUR, J.-S. (2018*c*): New and noteworthy lichen-forming and lichenicolous fungi 7. – *Acta Bot. Hung.* 60(1–2): 115–184. <https://doi.org/10.1556/034.60.2018.1-2.8>

- KONDRATYUK, S. Y., KÄRNEFELT, I., LÖKÖS, L., HUR, J.-S. and THELL, A. (2018d): Coppinsiella and Seawardiella – two new genera of the Xanthorioideae (Teloschistaceae, lichen-forming Ascomycota). – *Acta Bot. Hung.* **60**(3–4): 369–386. <https://doi.org/10.1556/034.60.2018.3-4.8>
- KONDRATYUK, S. Y., LÖKÖS, L., FARKAS, E., JANG, S.-H., LIU, D., HALDA, J., PERSSON, P.-E., HANSSON, M., KÄRNEFELT, I., THELL, A., FAČKOVCOVÁ, Z., YAMAMOTO, Y. and HUR, J.-S. (2019): New and noteworthy lichen-forming and lichenicolous fungi 9. – *Acta Bot. Hung.* **61**(3–4): 325–367. <https://doi.org/10.1556/034.61.2019.3-4.6>
- KONDRATYUK, S. Y., LÖKÖS, L., FARKAS, E., KÄRNEFELT, I., THELL, A., YAMAMOTO, Y. and HUR, J.-S. (2020): Three new genera of the Teloschistaceae proved by three gene phylogeny. – *Acta Bot. Hung.* **62**(1–2): 109–136. <https://doi.org/10.1556/034.62.2020.1-2.7>
- KONDRATYUK, S. Y., PERSSON, P.-E., HANSSON, M., LÖKÖS, L., KONDRATIUK, A. S., FAYYAZ, I., KOUSER, R., AFSHAN, N. S., NIAZI, A. R., ZULFIQAR, R., KHALID, A. N., KÄRNEFELT, I., FARKAS, E., HUR, J.-S. and THELL, A. (2022): Contributions to molecular phylogeny of lichens 4. New names in the Teloschistaceae. – *Acta Bot. Hung.* **64**(3–4): 313–336. <https://doi.org/10.1556/034.64.2022.3-4.7>
- LEE, B. G. and HUR, J.-S. (2021): Two new calcicolous caloplacoid lichens from South Korea, with a taxonomic key to the species of Huriella and Squamulea. – *MycKeys* **84**: 35–55. <https://doi.org/10.3897/mycokeys.84.71227>
- LEE, J. S., LEE, H. K., HUR, J.-S., ANDREEV, M. and HONG, S. G. (2008): Diversity of the lichenized fungi in King George Island, Antarctica, revealed by phylogenetic analysis of partial large subunit rDNA sequences. – *J. Microbiol. Biotechnol.* **18**(6): 1016–1023.
- LUTZONI, F., PAGEL, M. and REEB, V. (2001): Major fungal lineages are derived from lichen symbiotic ancestors. – *Nature* **411**(6840): 937–940. <https://doi.org/10.1038/35082053>
- MALÍČEK, J., PALICE, Z. and VONDRÁK, J. (2018): Additions and corrections to the lichen biota of the Czech Republic. – *Herzogia* **31**(1): 453–475. <https://doi.org/10.13158/hea.31.1.2018.453>
- MARTIN, M. P. and WINKA, K. (2000): Alternative methods of extracting and amplifying DNA from lichens. – *Lichenologist* **32**(2): 189–196. <https://doi.org/10.1006/lich.1999.0254>
- MISHRA, G. K., UPRETI, D. K., NAYAKA, S., THELL, A., KÄRNEFELT, I., LÖKÖS, L., SINHA, G. P. and KONDRATYUK, S. Y. (2020): Current taxonomy of the lichen family Teloschistaceae from India with descriptions of new species. – *Acta Bot. Hung.* **62**(3–4): 309–391. <https://doi.org/10.1556/034.62.2020.3-4.3>
- NIMIS, P. L., HAFELLNER, J., ROUX, C., CLERC, P., MAYRHOFER, H., MARTELLOS, S. and BILOVITZ, P. O. (2018): The lichens of the Alps – an annotated checklist. – *MycKeys* **31**: 1–634. <https://doi.org/10.3897/mycokeys.31.23568>
- SIPMAN, H. J. M. and APTROOT, A. (2020): Ikaeria serusiauxii, a new Caloplaca-like lichen from Macaronesia and mainland Portugal, with a lichen checklist for Porto Santo. – *Plant Fung. Syst.* **65**(1): 120–130. <https://doi.org/10.35535/pfsyst-2020-0006>
- SÖCHTING, U., SØGAARD, M. Z., ELIX, J. A., ARUP, U., ELVEBAKK, A. and SANCHO, L. G. (2014a): Catenarina (Teloschistaceae, Ascomycota), a new Southern Hemisphere genus with 7-chlorocatenarin. – *Lichenologist* **46**(2): 175–187. <https://doi.org/10.1017/S002428291300087X>
- SÖCHTING, U., GARRIDO-BENAVENT, I., SEPPELT, R., CASTELLO, M., PÉREZ-ORTEGA, S., DE LOS RÍOS MURILLO, A., SANCHO, L. G., FRÖDÉN, P. and ARUP, U. (2014b): Charcotiana and Amundsenia, two new genera in Teloschistaceae (lichenized Ascomycota, subfamily Xanthorioideae) hosting two new species from continental Antarctica and Austroplaca frigida, a new name for a continental Antarctic species. – *Lichenologist* **46**(6): 763–782. <https://doi.org/10.1017/S0024282914000395>
- SÖCHTING, U., SØGAARD, M. Z., SANCHO, L. P., FRÖDÉN, P. and ARUP, U. (2016): Sirenophila ovis-atra a new species of maritime Teloschistaceae from the Southern Hemisphere. – *Opusc. Philolich.* **15**: 1–5.

- SØCHTING, U., SØGAARD, M. Z., Sancho, L. G. and ARUP, U. (2021): The lichen genus *Vilophora* (Teloschistaceae, Ascomycota). – *Lichenologist* **53**: 245–255.
<https://doi.org/10.1017/S0024282921000141>
- VONDRÁK, J., ŠOUN, J., SØGAARD, M. Z., SØCHTING, U. and ARUP, U. (2010): *Caloplaca phlogina*, a lichen with two facies; an example of infraspecific variability resulting in the description of a redundant species. – *Lichenologist* **42**(6): 685–692.
<https://doi.org/10.1017/S0024282910000435>
- VONDRÁK, J., ISMAILOV, A. and URBANAVICHUS, G. (2017): Lichens of the family Teloschistaceae in Dagestan, an eastern part of the Caucasian biodiversity hot-spot. – *Nova Hedwigia* **104**(4): 483–498.
- VONDRÁK, J., FROLOV, I., DAVYDOV, E. A., YAKOVCHENKO, L., MALÍČEK, J., SVOBODA, S. and KUBÁSEK, J. (2019): The lichen family Teloschistaceae in the Altai-Sayan region (Central Asia). – *Phytotaxa* **396**: 1–66.
- VONDRÁK, J., FROLOV, I., KOŠNAR, J., ARUP, U., VESELSKÁ, T., HALICI, G., MALÍČEK, J., and SØCHTING, U. (2020): Substrate switches, phenotypic innovations and allopatric speciation formed taxonomic diversity within the lichen genus *Blastenia*. – *J. Syst. Evol.* **58**(3): 295–330.
<https://doi.org/10.1111/jse.12503>
- WEN, X. M., SHAHIDIN, H. and ABBAS, A. (2020): *Filsoniana lhasanensis* sp. nov. from Tibet, China. – *Mycotaxon* **134**(4): 663–675.
- WILK, K., PABIJAN, M., SAŁUGA, M., GAYA, E. and LÜCKING, R. (2021): Phylogenetic revision of South American Teloschistaceae (lichenized Ascomycota, Teloschistales) reveals three new genera and species. – *Mycologia* **113**(2): 278–299. <https://doi.org/10.1080/00275514.2020.1830672>
- WIRTH, V., HAUCK, M. and SCHULTZ, M. (2013): *Die Flechten Deutschlands*. Band 1–2. – Ulmer, Stuttgart, 1244 pp.

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