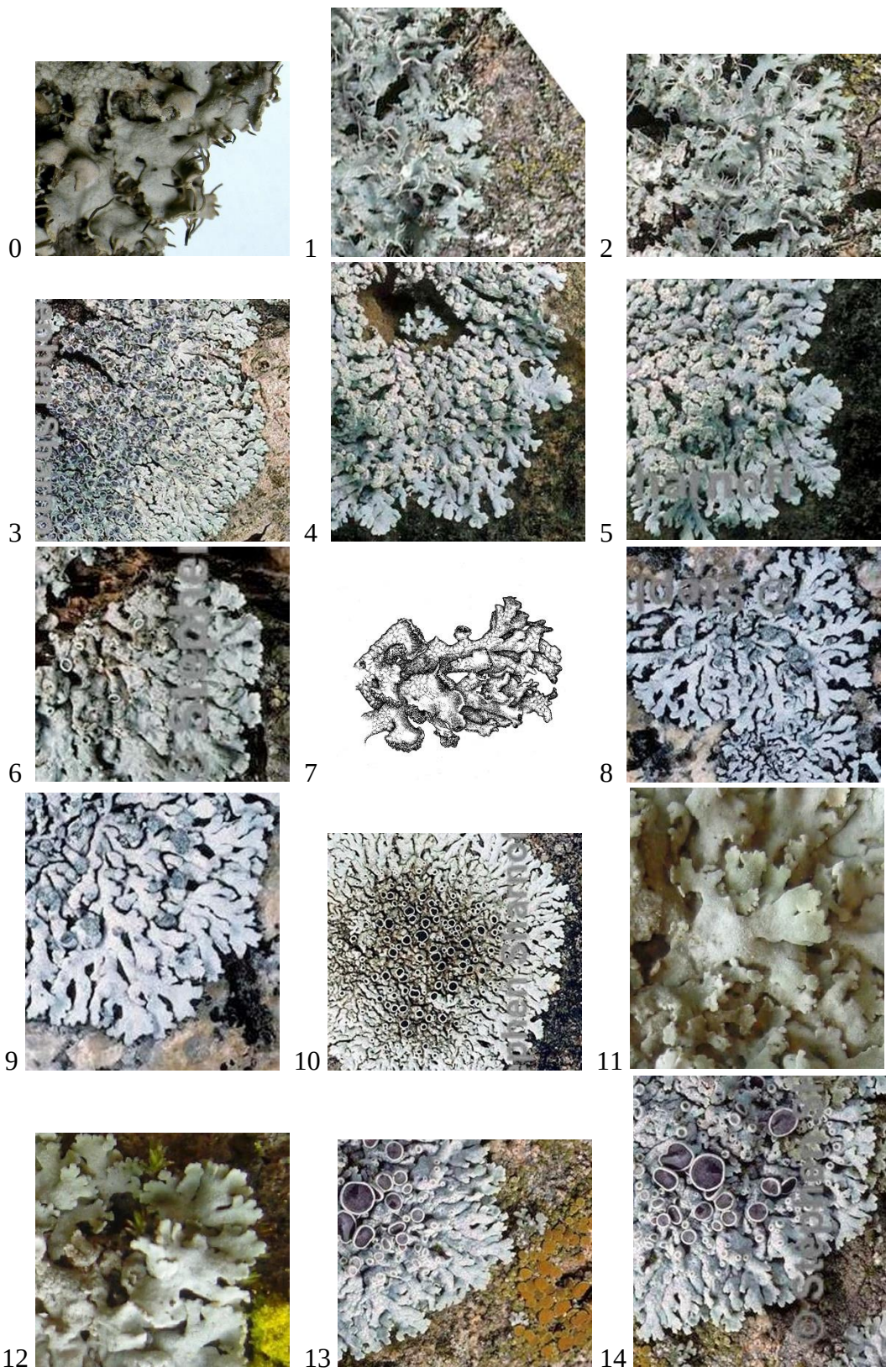
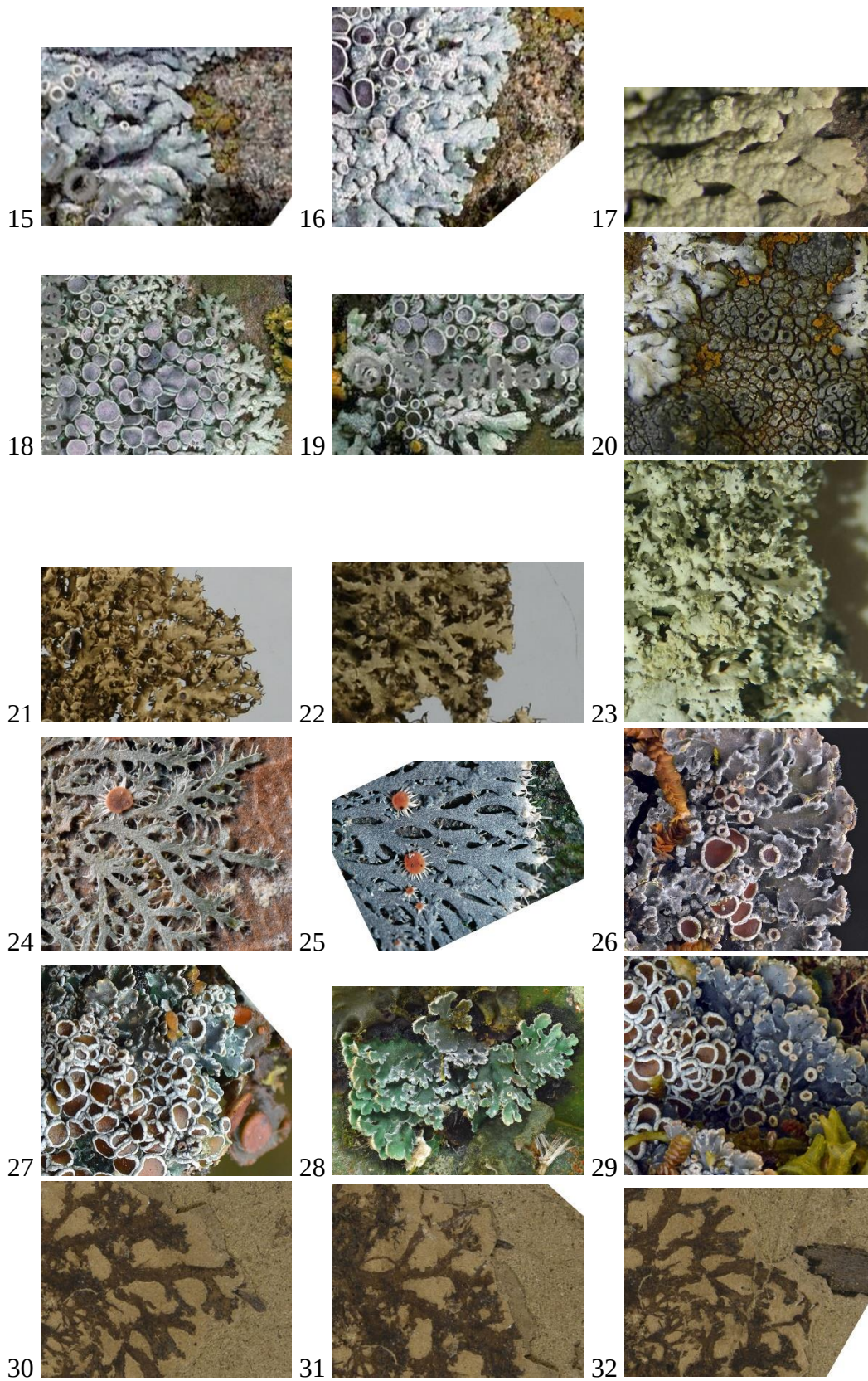
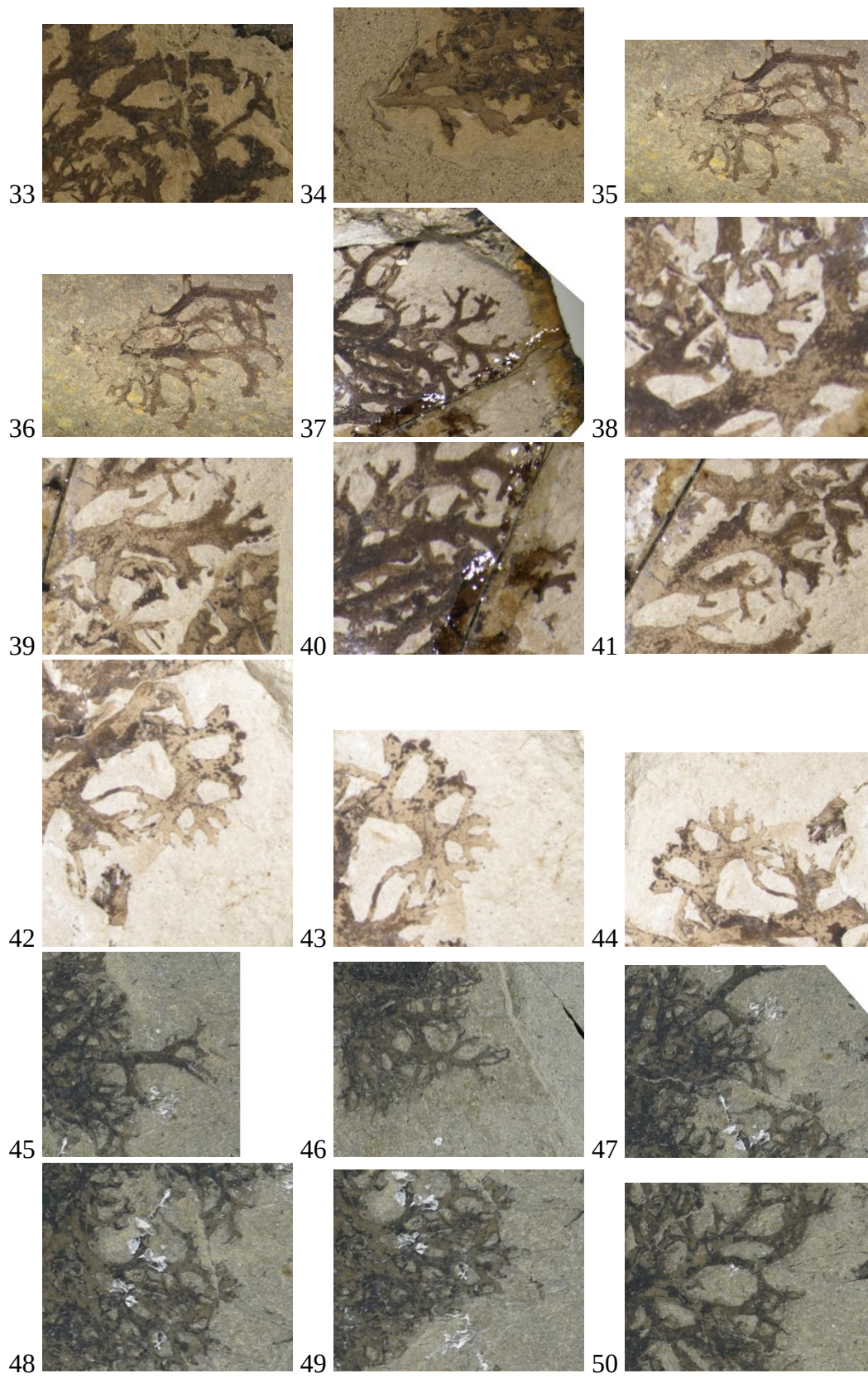
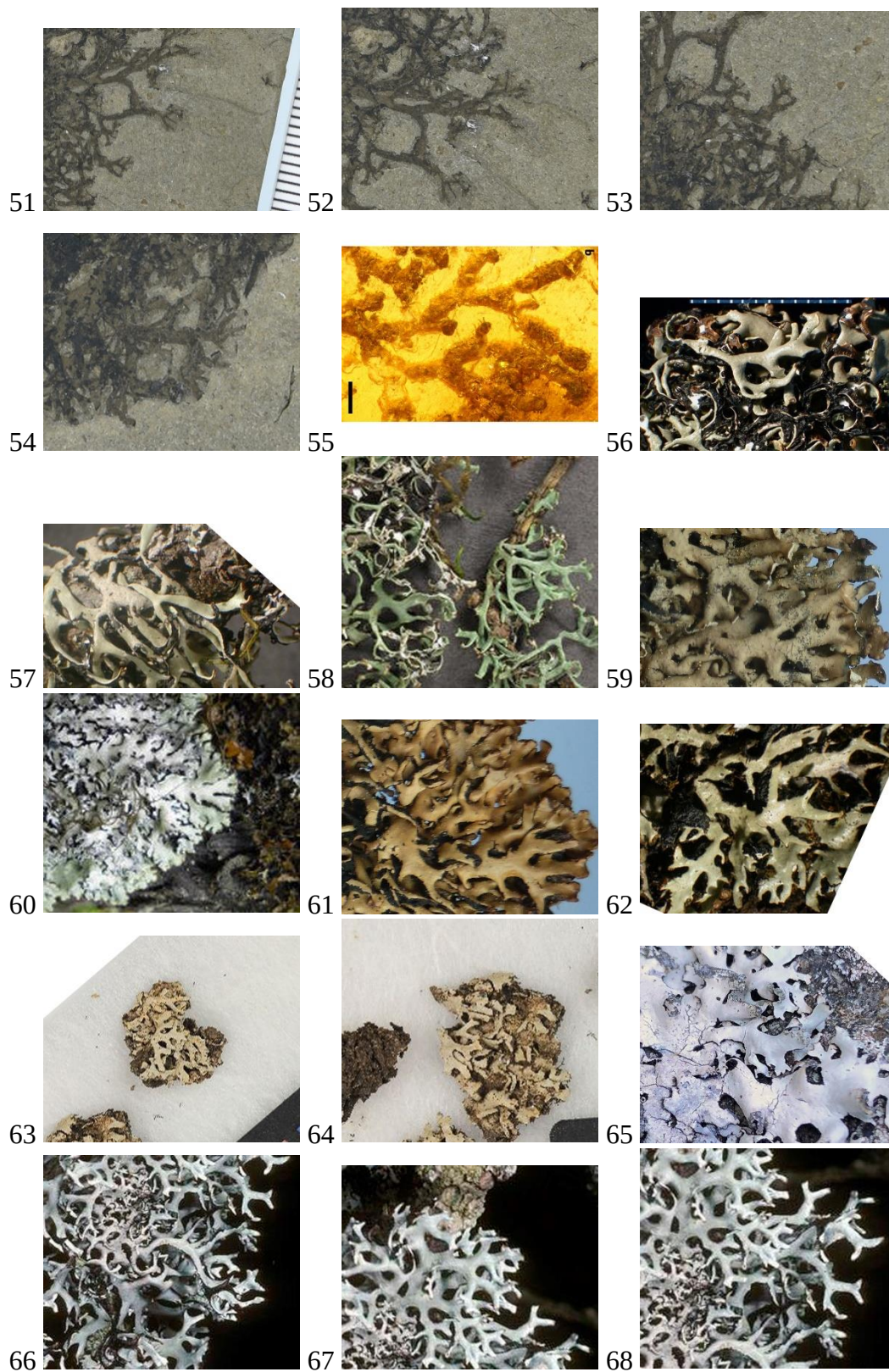
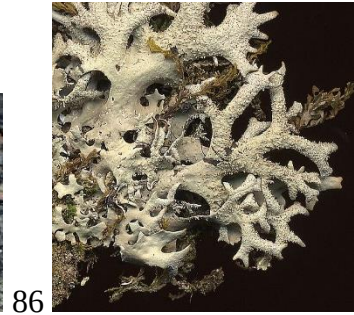












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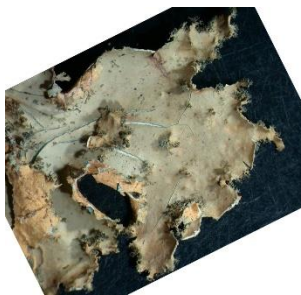
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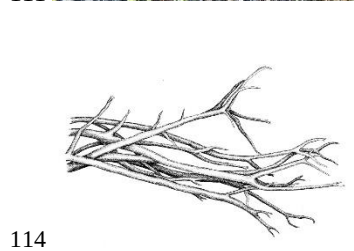
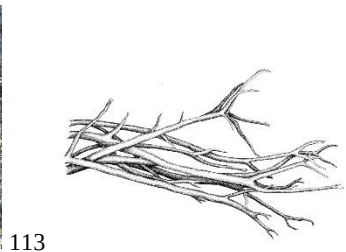
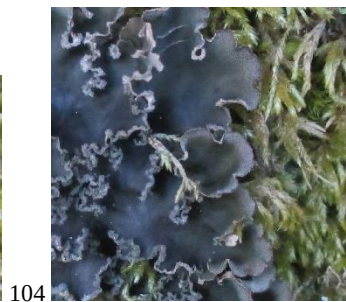


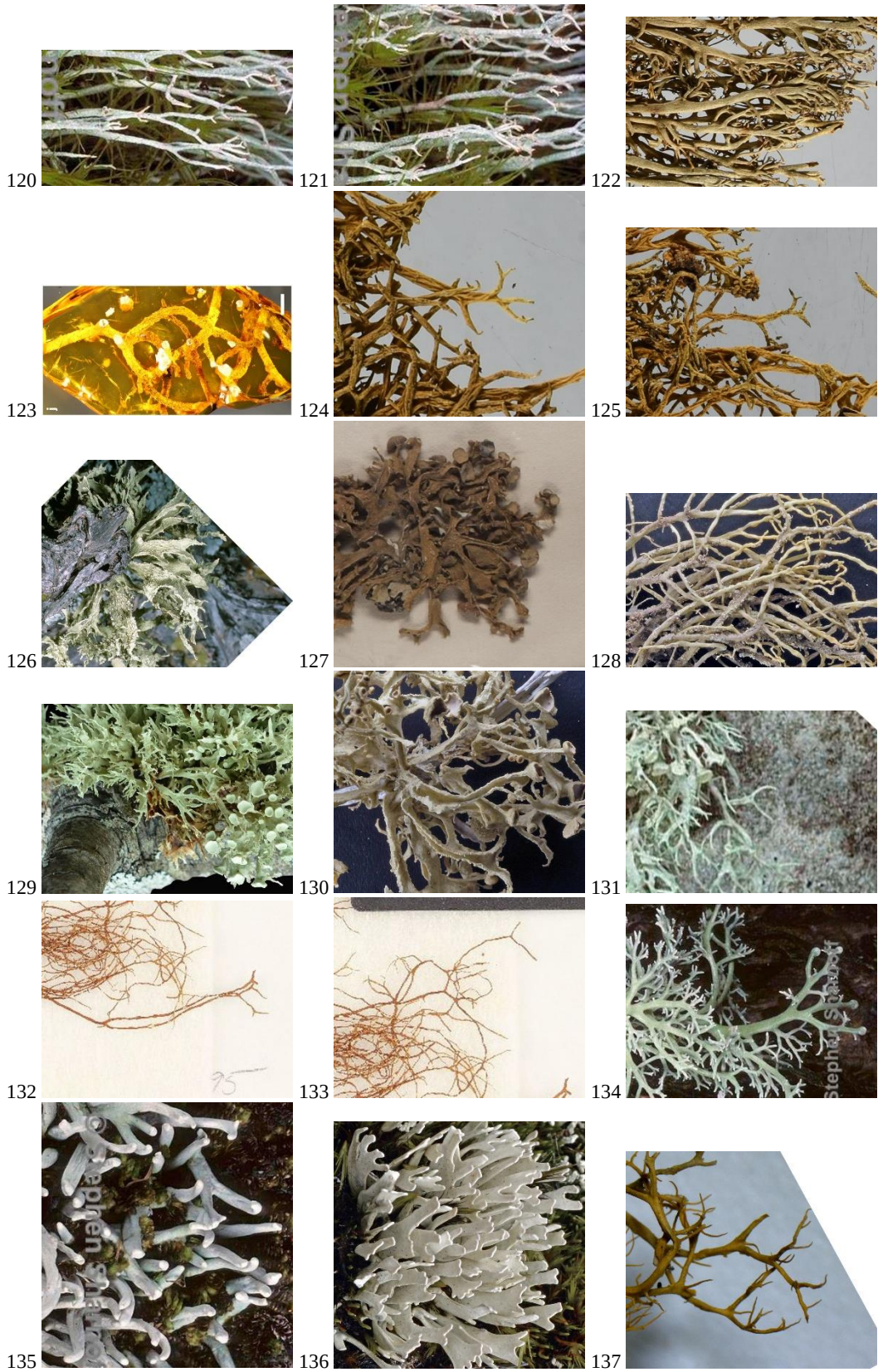
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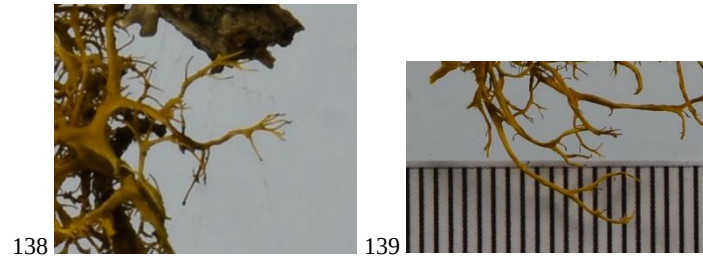


Fig. S1. The 140 images of five groups, i.e. microfoliose group, the *Daohugouthallus ciliiferus* fossil group, a long branches group, a wide-lobed group, and a fruticose group, used for geometric morphometric analysis and the order number in front of the image corresponds to the ID in Table S3.

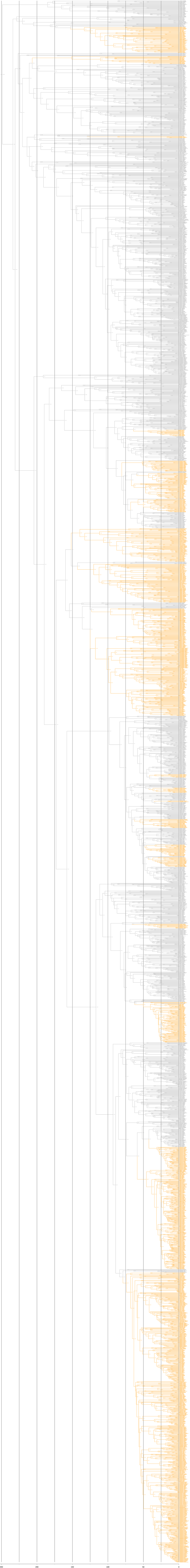


Fig. S2. Detailed time-calibrated ML phylogeny of 3,373 Lecanoromycetes fungi (based on *Nelsen et al., 2020*). Macrolichen lineages are indicated in orange.

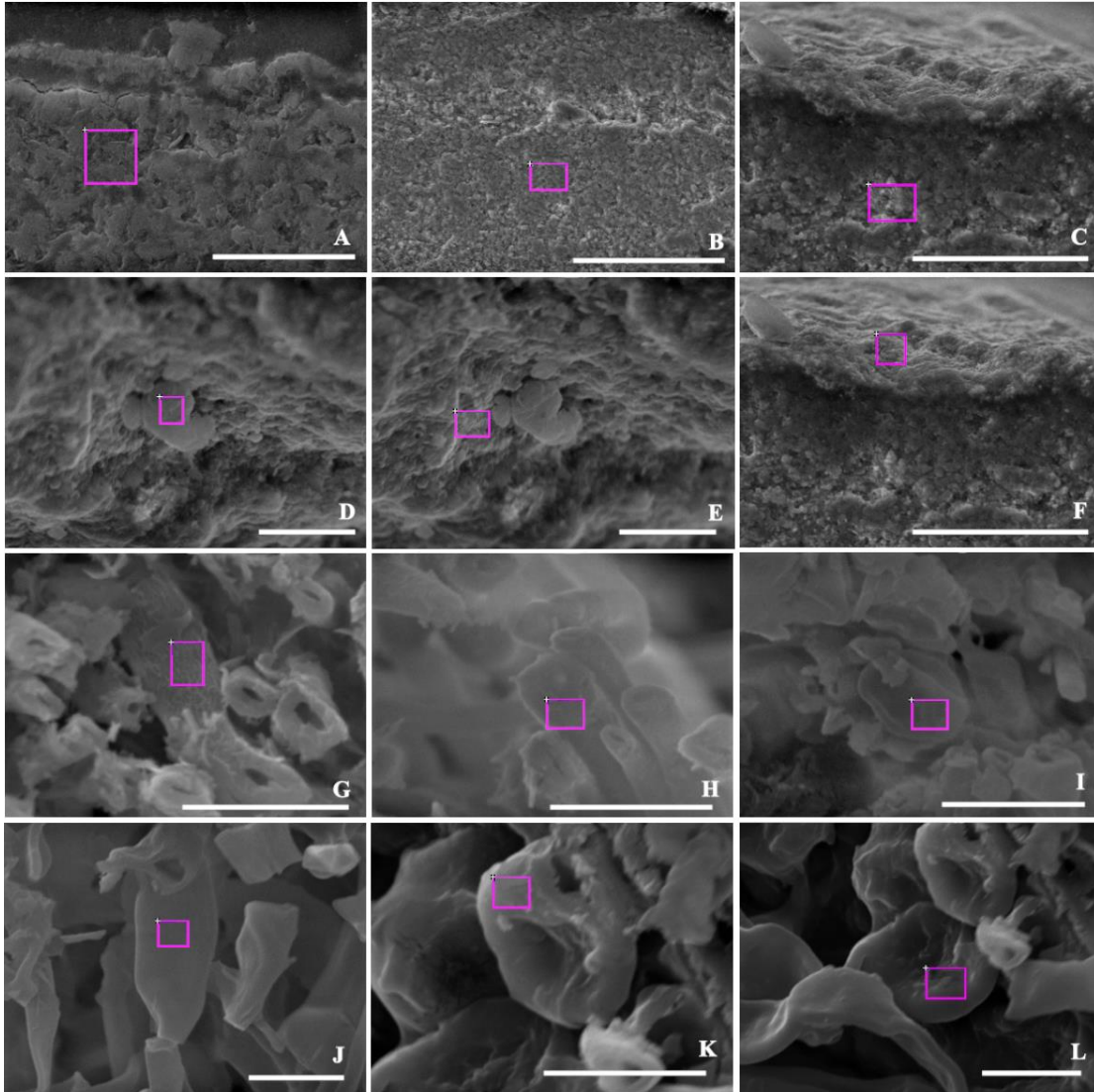


Fig. S3. Scanning Electron Microscopy (SEM) with Energy Dispersive X-Ray Spectroscopy (EDX/EDS). The EDS spectra values of the examined samples seen in Table S2. The examined locations of rock and lichen fossil *Daohugouthallus ciliiferus* CNU-LICHEN-NN2020001 marked by the purple square frames are as follows from A to F. **(A).** Random location 2 of rock areas. **(B).** Random location 1 of rock areas. **(C).** Rock under the lichen fossil. **(D).** Photobiont cell of fossil lichen. **(E).** Fungal hyphae of fossil lichen. **(F).** Lichen fossil. The examined locations of extant chlorolichen *Hypotrachyna cirrhata* HMAS-L 8322 marked by the purple square frames are as follows from G to I. **(G).** Fungal hyphae 1. **(H).** Fungal hyphae 2. **(I).** Green algal cell. The examined locations of extant cyanolichen *Peltigera praetextata* HMAS-L 13030 marked by the purple square frames are as follows from J to L. **(J).** Fungal hyphae. **(K).** Cyanobacterial cell 3. **(L).** Cyanobacterial cell 1. Scale bars: A=20μm; B=100μm; C, F=50μm; D, E, H–L=10μm; G=9μm.



Fig. S4. Description of the curves used in the geometric morphometric analysis. The curves of lobes or branches of the five groups (small branches group, *Daohugouthallus ciliiferus* fossil group, long branches group, wide lobes foliose group and fruticose group) shown in columns 1 and 2 are outlined in red color, then they were resampled in 60 semi-landmarks represented by red points shown in columns 3 and 4.

Table S1. The geometric morphometric analysis resulted in the variance and cumulative values for all the principal components

Principal component	Eigenvalues	Variance%	Cumulative %
1	0.03200622	24.376	24.376
2	0.02319641	17.666	42.042
3	0.01454791	11.079	53.121
4	0.01046854	7.973	61.094
5	0.0073343	5.586	66.679
6	0.006	4.57	71.249
7	0.00472941	3.602	74.851
8	0.00444899	3.388	78.239
9	0.00338804	2.58	80.819
10	0.00291705	2.222	83.041
11	0.00246823	1.88	84.921
12	0.00222106	1.692	86.612
13	0.0021387	1.629	88.241
14	0.00177234	1.35	89.591
15	0.00167563	1.276	90.867
16	0.00148536	1.131	91.998
17	0.00107806	0.821	92.819
18	0.00100053	0.762	93.581
19	0.00087003	0.663	94.244
20	0.00070831	0.539	94.783
21	0.00065028	0.495	95.279
22	0.00060754	0.463	95.741
23	0.00051279	0.391	96.132
24	0.00046675	0.355	96.487
25	0.00043885	0.334	96.821
26	0.00042747	0.326	97.147
27	0.00034762	0.265	97.412
28	0.00029405	0.224	97.636
29	0.00026663	0.203	97.839
30	0.00024143	0.184	98.023
31	0.00020254	0.154	98.177
32	0.00019285	0.147	98.324
33	0.00018533	0.141	98.465
34	0.00016945	0.129	98.594
35	0.0001465	0.112	98.706
36	0.00013846	0.105	98.811
37	0.00012771	0.097	98.908
38	0.00011912	0.091	98.999
39	0.0001087	0.083	99.082
40	0.00010072	0.077	99.158
41	0.00008652	0.066	99.224
42	0.00008538	0.065	99.289

43	0.00007168	0.055	99.344
44	0.00006718	0.051	99.395
45	0.00005783	0.044	99.439
46	0.00005578	0.042	99.482
47	0.00004892	0.037	99.519
48	0.00004683	0.036	99.555
49	0.00004168	0.032	99.586
50	0.00003921	0.03	99.616
51	0.00003592	0.027	99.644
52	0.00003432	0.026	99.67
53	0.00003169	0.024	99.694
54	0.00002899	0.022	99.716
55	0.00002772	0.021	99.737
56	0.00002557	0.019	99.756
57	0.00002491	0.019	99.775
58	0.0000216	0.016	99.792
59	0.00002129	0.016	99.808
60	0.00001817	0.014	99.822
61	0.00001739	0.013	99.835
62	0.00001461	0.011	99.846
63	0.00001424	0.011	99.857
64	0.00001318	0.01	99.867
65	0.00001241	0.009	99.877
66	0.00001202	0.009	99.886
67	0.00001102	0.008	99.894
68	0.00001024	0.008	99.902
69	0.00000998	0.008	99.91
70	0.00000892	0.007	99.916
71	0.00000794	0.006	99.922
72	0.00000741	0.006	99.928
73	0.00000727	0.006	99.934
74	0.00000635	0.005	99.938
75	0.00000598	0.005	99.943
76	0.00000591	0.005	99.948
77	0.00000553	0.004	99.952
78	0.00000491	0.004	99.955
79	0.00000457	0.003	99.959
80	0.00000429	0.003	99.962
81	0.0000041	0.003	99.965
82	0.0000037	0.003	99.968
83	0.00000348	0.003	99.971
84	0.00000318	0.002	99.973
85	0.00000307	0.002	99.976
86	0.00000271	0.002	99.978
87	0.00000253	0.002	99.98
88	0.00000252	0.002	99.981

89	0.00000245	0.002	99.983
90	0.00000227	0.002	99.985
91	0.00000208	0.002	99.987
92	0.00000197	0.002	99.988
93	0.00000167	0.001	99.989
94	0.00000154	0.001	99.991
95	0.00000148	0.001	99.992
96	0.00000131	0.001	99.993
97	0.0000013	0.001	99.994
98	0.00000112	0.001	99.995
99	0.000001	0.001	99.995
100	0.00000085	0.001	99.996
101	0.00000074	0.001	99.997
102	0.0000006	0	99.997
103	0.00000057	0	99.997
104	0.00000054	0	99.998
105	0.00000053	0	99.998
106	0.00000041	0	99.999
107	0.00000038	0	99.999
108	0.00000032	0	99.999
109	0.0000003	0	99.999
110	0.00000021	0	99.999
111	0.00000019	0	100
112	0.00000019	0	100
113	0.00000014	0	100
114	0.00000012	0	100
115	0.00000005	0	100
116	0.00000003	0	100

Table S2. Elements contained and atomic percentages in the examined samples using Energy Dispersive X-Ray Spectroscopy (EDX/EDS) analysis

	O	Si	C	K	Al	Na	Fe	Ca	Mg	Nb
Random location 1 of rock areas	51.65	18.95	23.48	2.35	3.57	0.00	0.00	0.00	0.00	0.00
Random location 2 of rock areas	53.24	22.34	15.41	3.14	4.87	0.99	0.00	0.00	0.00	0.00
Rock under the lichen fossil	55.87	17.46	20.22	1.82	4.15	0.00	0.48	0.00	0.00	0.00
Lichen fossil	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Photobiont cell of fossil lichen	22.04	2.49	74.37	0.55	0.00	0.00	0.00	0.55	0.00	0.00
Fungal hyphae of fossil lichen	17.43	2.21	79.43	0.93	0.00	0.00	0.00	0.00	0.00	0.00
Fungal hyphae 1 of extant lichen 1	26.50	0.00	72.84	0.00	0.00	0.00	0.00	0.66	0.00	0.00
Fungal hyphae 2 of extant lichen 1	33.57	0.00	66.29	0.14	0.00	0.00	0.00	0.00	0.00	0.00
Fungal hyphae 3 of extant lichen 1	30.40	0.00	69.16	0.23	0.00	0.00	0.00	0.20	0.00	0.00
Green algal cell of extant lichen 1	18.96	0.00	81.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fungal hyphae of extant lichen 2	41.53	0.00	57.43	1.05	0.00	0.00	0.00	0.00	0.00	0.00
Cyanobacterial cell 1 of extant lichen 2	42.33	0.80	55.67	0.86	0.00	0.00	0.00	0.00	0.35	0.00
Cyanobacterial cell 2 of extant lichen 2	34.51	0.00	64.21	0.77	0.00	0.00	0.00	0.00	0.00	0.51
Cyanobacterial cell 3 of extant lichen 2	41.15	0.00	57.91	0.65	0.00	0.00	0.00	0.00	0.29	0.00

Notes: lichen fossil=*Daohugouthallus ciliiferus* CNU-LICHEN-NN2020001; lichen 1=extant chlorolichen *Hypotrachyna cirrhata* HMAS-L 8322; lichen 2=extant cyanolichen *Peltigera praetextata* HMAS-L 13030.

Table S3. The photos information of 59 representative extant species and two fossil species in different orders of Lecanoromycetes used in the geometric morphometrics analysis

Sample information	Species	Family	Order
CNALH Image Library (2 photo)	<i>Cladonia amaurocraea</i>	Cladoniaceae	Lecanorales
CNALH Image Library (1 photo)	<i>Cl. arbuscula</i>	Cladoniaceae	Lecanorales
HMAS-L 7879, Hubei, China (2 photos)	<i>Cl. furcata</i>	Cladoniaceae	Lecanorales
HMAS-L 122801, Jilin, China (2 photos)	<i>Cl. furcata</i>	Cladoniaceae	Lecanorales
CNALH Image Library (2 photos)	<i>Cl. furcata</i>	Cladoniaceae	Lecanorales
HMAS-L 120346, Shaanxi, China	<i>Cl. rangiferina</i>	Cladoniaceae	Lecanorales
HMAS-L 9403, Heilongjiang, China	<i>Evernia esorediosa</i>	Parmeliaceae	Lecanorales
HMAS-L 9405, Inner Mongolia, China	<i>E. esorediosa</i>	Parmeliaceae	Lecanorales
CNALH Image Library (2 photos)	<i>Hypotrachyna alectorialiorum</i>	Parmeliaceae	Lecanorales
CNALH Image Library (1 photos)	<i>H. britannica</i>	Parmeliaceae	Lecanorales
CNALH Image Library (3 photos)	<i>H. catawbiense</i>	Parmeliaceae	Lecanorales
HMAS-L 8322, Yunnan, China	<i>H. cirrhatum</i>	Parmeliaceae	Lecanorales
HMAS-L 8295, Guizhou, China	<i>H. cirrhatum</i>	Parmeliaceae	Lecanorales
HMAS-L 8319, Tibet, China	<i>H. cirrhatum</i>	Parmeliaceae	Lecanorales
HMAS-L 8339, Yunnan, China	<i>H. cirrhatum</i>	Parmeliaceae	Lecanorales
HMAS-L 22474, Yunnan, China	<i>H. cirrhatum</i>	Parmeliaceae	Lecanorales
HMAS-L 113576, Yunnan, China(2 photos)	<i>H. cirrhatum</i>	Parmeliaceae	Lecanorales
CNALH Image Library (2 photos)	<i>H. croceopustulata</i>	Parmeliaceae	Lecanorales
CNALH Image Library (3 photos)	<i>H. goiasii</i>	Parmeliaceae	Lecanorales
HMAS-L 8085, Yunnan, China	<i>H. nepalense</i>	Parmeliaceae	Lecanorales
HMAS-L 8269, Tibet, China	<i>H. rhizodendroideum</i>	Parmeliaceae	Lecanorales
HMAS-L 80658, Yunnan, China	<i>H. rhizodendroideum</i>	Parmeliaceae	Lecanorales
CNALH Image Library (2 photos)	<i>H. sinuosa</i>	Parmeliaceae	Lecanorales
CNALH Image Library (1 photos)	<i>H. vexans</i>	Parmeliaceae	Lecanorales
24855, <i>Hypogymnia</i> Media Gallery	<i>Hypogymnia arcuata</i>	Parmeliaceae	Lecanorales
31157, <i>Hypogymnia</i> Media Gallery	<i>H. fragillima</i>	Parmeliaceae	Lecanorales
dor-l24_1, <i>Hypogymnia</i> Media Gallery	<i>H. fragillima</i>	Parmeliaceae	Lecanorales
31296, <i>Hypogymnia</i> Media Gallery	<i>H. physodes</i>	Parmeliaceae	Lecanorales
HMAS-L 81529, Xinjiang, China	<i>H. physodes</i>	Parmeliaceae	Lecanorales
HMAS-L 81350, Inner Mongolia, China	<i>H. vittata</i>	Parmeliaceae	Lecanorales
25623, <i>Hypogymnia</i> Media Gallery	<i>H. vittata</i>	Parmeliaceae	Lecanorales
GZG_BST_21949 (fossil)	-	Parmeliaceae	Lecanorales
BitterfeldJörg Wunderlich Amber Collection F781 (fossil)	-	Parmeliaceae	Lecanorales

CNALH Image Library (2 photos)	<i>Lobaria anomala</i>	Lobariaceae	Peltigerales
CNALH Image Library (1 photos)	<i>L. hallii</i>	Lobariaceae	Peltigerales
CNALH Image Library (2 photos)	<i>L. kurokawae</i>	Lobariaceae	Peltigerales
CNALH Image Library (1 photos)	<i>L. linita</i>	Lobariaceae	Peltigerales
CNALH Image Library (1 photos)	<i>L. oregana</i>	Lobariaceae	Peltigerales
CNALH Image Library (1 photos)	<i>L. tenuis</i>	Lobariaceae	Peltigerales
CNALH Image Library (1 photos)	<i>Peltigera aphthosa</i>	Peltigeraceae	Peltigerales
CNALH Image Library (1 photos)	<i>P. castanea</i>	Peltigeraceae	Peltigerales
CNALH Image Library (3 photos)	<i>P. collina</i>	Peltigeraceae	Peltigerales
HMAS-L 13030, Inner Mongolia, China	<i>P. praetextata</i>	Peltigeraceae	Peltigerales
CNALH Image Library (1 photo)	<i>P. praetextata</i>	Peltigeraceae	Peltigerales
CNALH Image Library (1 photo)	<i>P. rufescens</i>	Peltigeraceae	Peltigerales
Colombia, Lucking sn_2766 (1 photo)	<i>Pannaria rubiginosa</i>	Pannariaceae	Peltigerales
Colombia, Lucking sn_2355 (1 photo)	<i>P. rubiginosa</i>	Pannariaceae	Peltigerales
Colombia, Lucking sn_2719 (1 photo)	<i>P. rubiginosa</i>	Pannariaceae	Peltigerales
Colombia, Lucking 41024a_4802 (1 photo)	<i>P. rubiginosa</i>	Pannariaceae	Peltigerales
Colombia, Marin1648_6790 (1 photo)	<i>Coccocarpia stellata</i>	Coccocarpiaceae	Peltigerales
Costa Rica, Lucking (1 photo)	<i>C. stellata</i>	Coccocarpiaceae	Peltigerales
HMAS-L 129385, Inner Mongolia, China	<i>Physcia adscendens</i>	Physciaceae	Caliciales
CNALH Image Library (2 photos)	<i>P. adscendens</i>	Physciaceae	Caliciales
CNALH Image Library (1 photos)	<i>P. aipolia</i>	Physciaceae	Caliciales
CNALH Image Library (2 photos)	<i>P. americana</i>	Physciaceae	Caliciales
CNALH Image Library (1 photos)	<i>P. biziana</i>	Physciaceae	Caliciales
CNALH Image Library (3 photos)	<i>P. caesia</i>	Physciaceae	Caliciales
CNALH Image Library (1 photos)	<i>P. halei</i>	Physciaceae	Caliciales
CNALH Image Library (2 photos)	<i>P. magnussonii</i>	Physciaceae	Caliciales
CNALH Image Library (4 photos)	<i>P. phaea</i>	Physciaceae	Caliciales
CNALH Image Library (1 photos)	<i>P. rolfii</i>	Physciaceae	Caliciales
CNALH Image Library (2 photos)	<i>P. stellaris</i>	Physciaceae	Caliciales
CNALH Image Library (1 photos)	<i>P. subalbinea</i>	Physciaceae	Caliciales
HMAS-L 110982, Xinjiang, China	<i>P. tenella</i>	Physciaceae	Caliciales
HMAS-L 110984, Xinjiang, China	<i>P. tenella</i>	Physciaceae	Caliciales
CNALH Image Library (1 photos)	<i>P. thomsoniana</i>	Physciaceae	Caliciales
CNALH Image Library (1 photos)	<i>Ramalina bajacalifornica</i>	Ramalinaceae	Lecanorales
CNALH Image Library (1 photos)	<i>R. calicaris</i> var. <i>fastigiata</i>	Ramalinaceae	Lecanorales
CNALH Image Library (1 photos)	<i>R. camptospora</i>	Ramalinaceae	Lecanorales
CNALH Image Library (1 photos)	<i>R. culbersoniorum</i>	Ramalinaceae	Lecanorales

CNALH Image Library (1 photos)	<i>R. darwiniana</i> var. <i>darwiniana</i>	Ramalinaceae	Lecanorales
CNALH Image Library (1 photos)	<i>R. dilacerata</i>	Ramalinaceae	Lecanorales
CNALH Image Library (2 photos)	<i>R. pacifica</i>	Ramalinaceae	Lecanorales
CNALH Image Library (1 photo)	<i>Sphaerophorus globosus</i>	Sphaerophoraceae	Lecanorales
CNALH Image Library (2 photos)	<i>Sticta beauvoisii</i>	Lobariaceae	Peltigerales
CNALH Image Library (1 photos)	<i>S. limbata</i>	Lobariaceae	Peltigerales
CNALH Image Library (1 photos)	<i>S. plumbicolor</i>	Lobariaceae	Peltigerales
CNALH Image Library (1 photos)	<i>S. xanthotropa</i>	Lobariaceae	Peltigerales
CNALH Image Library (1 photos)	<i>Siphula ceratites</i>	Icmadophilaceae	Pertusariales
Colombia, Lucking sn_9412 (1 photo)	<i>S. pteruloides</i>	Icmadophilaceae	Pertusariales
HMAS-L 504, Heilongjiang, China	<i>Teloschistes flavicans</i>	Teloschistaceae	Teloschistales
HMAS-L 104547, Hubei, China	<i>T. flavicans</i>	Teloschistaceae	Teloschistales
HMAS-L 104536, Sichuan, China	<i>T. flavicans</i>	Teloschistaceae	Teloschistales
Colombia, Lucking 41014_4736 (1 photo)	<i>Umbilicaria polyphylla</i>	Umbilicariaceae	Umbilicariales
Colombia, Lucking 41014_4737 (1 photo)	<i>U. polyphylla</i>	Umbilicariaceae	Umbilicariales
Colombia, Lucking 41014_4738 (1 photo)	<i>U. polyphylla</i>	Umbilicariaceae	Umbilicariales
Colombia, Lucking 41014_4739 (1 photo)	<i>U. polyphylla</i>	Umbilicariaceae	Umbilicariales
Colombia, Lucking 41014_4743 (1 photo)	<i>U. polyphylla</i>	Umbilicariaceae	Umbilicariales

Table S4. The data set of five groups divided according to thallus growth types used in the geometric morphometrics analysis

ID	Photo name	Group
0	FO-C-Phy- <i>Physcia adscendens</i> HMAS129385	1
1	FO-C-Phy- <i>Physcia adscendens</i>	1
2	FO-C-Phy- <i>Physcia adscendens</i> -1	1
3	FO-C-Phy- <i>Physcia aipolia</i> _9	1
4	FO-C-Phy- <i>Physcia americana</i> _1	1
5	FO-C-Phy- <i>Physcia americana</i> _2	1
6	FO-C-Phy- <i>Physcia biziana</i> _9	1
7	FO-C-Phy- <i>Physcia caesia</i> -1	1
8	FO-C-Phy- <i>Physcia caesia</i> -2 - 1	1
9	FO-C-Phy- <i>Physcia caesia</i> -2	1
10	FO-C-Phy- <i>Physcia halei</i> _3	1
11	FO-C-Phy- <i>Physcia magnussonii</i>	1
12	FO-C-Phy- <i>Physcia magnussonii</i> -1	1
13	FO-C-Phy- <i>Physcia phaea</i> _poss	1
14	FO-C-Phy- <i>Physcia phaea</i> _poss-1	1
15	FO-C-Phy- <i>Physcia phaea</i> _poss-2	1
16	FO-C-Phy- <i>Physcia phaea</i> _poss-3	1
17	FO-C-Phy- <i>Physcia rolfii</i>	1
18	FO-C-Phy- <i>Physcia stellaris</i>	1
19	FO-C-Phy- <i>Physcia stellaris</i> -1	1
20	FO-C-Phy- <i>Physcia subalbinea</i> -1	1
21	FO-C-Phy- <i>Physcia tenella</i> HMAS110982	1
22	FO-C-Phy- <i>Physcia tenella</i> HMAS110984	1
23	FO-C-Phy- <i>Physcia thomsoniana</i>	1
24	FO-P-Coc- <i>Coccocarpia stellata</i> 1648_6790	1
25	FO-P-Coc- <i>Coccocarpia stellata</i>	1
26	FO-P-Pan- <i>Pannaria rubiginosa</i> 2766	1
27	FO-P-Pan- <i>Pannaria rubiginosa</i> 2355	1
28	FO-P-Pan- <i>Pannaria rubiginosa</i> 2719	1
29	FO-P-Pan- <i>Pannaria rubiginosa</i> 41024a_4802	1
30	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -1	2
31	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -2	2
32	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -3	2
33	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -4	2
34	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -5	2
35	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -B0476P -1	2
36	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -B0476P	2

37	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -NN2019001-1	2
38	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -NN2019001-2	2
39	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -NN2019001-3	2
40	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -NN2019001-4	2
41	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -NN2019001-5	2
42	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -NN2019001-6	2
43	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -NN2019001-7	2
44	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -NN2019001-8	2
45	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -new1-1	2
46	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -new1-2	2
47	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -new1-3	2
48	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -new1-4	2
49	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -new1-5	2
50	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -new1-6	2
51	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -new1-7	2
52	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -new1-8	2
53	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -new1-9	2
54	FO-L-Dao- <i>Daohugouthallus ciliiferus</i> -new1-10	2
55	FO-L-P-GZG BST 21949	3
56	FO-L-Par- <i>Hypogymnia arcuata</i> -24855	3
57	FO-L-Par- <i>Hypogymnia fragillima</i> -31157	3
58	FO-L-Par- <i>Hypogymnia fragillima</i> -dor124_1	3
59	FO-L-Par- <i>Hypogymnia physodes</i> HMAS81529	3
60	FO-L-Par- <i>Hypogymnia physodes</i> -31296	3
61	FO-L-Par- <i>Hypogymnia vittata</i> HMAS81350	3
62	FO-L-Par- <i>Hypogymnia vittata</i> -25623	3
63	FO-L-Par- <i>Hypotrachyna alectorialiorum</i> -1	3
64	FO-L-Par- <i>Hypotrachyna alectorialiorum</i> -2	3
65	FO-L-Par- <i>Hypotrachyna britannica</i>	3
66	FO-L-Par- <i>Hypotrachyna catawbiense</i> _1-1	3
67	FO-L-Par- <i>Hypotrachyna catawbiense</i> _1-2	3
68	FO-L-Par- <i>Hypotrachyna catawbiense</i> _1-3	3
69	FO-L-Par- <i>Hypotrachyna cirrhatum</i> HMAS8295	3
70	FO-L-Par- <i>Hypotrachyna cirrhatum</i> HMAS8319	3
71	FO-L-Par- <i>Hypotrachyna cirrhatum</i> HMAS8322	3
72	FO-L-Par- <i>Hypotrachyna cirrhatum</i> HMAS8339	3
73	FO-L-Par- <i>Hypotrachyna cirrhatum</i> HMAS22474	3
74	FO-L-Par- <i>Hypotrachyna cirrhatum</i> HMAS113576	3
75	FO-L-Par- <i>Hypotrachyna cirrhatum</i> HMAS113576-1	3
76	FO-L-Par- <i>Hypotrachyna croceopustulata</i>	3
77	FO-L-Par- <i>Hypotrachyna croceopustulata</i> -1	3

78	FO-L-Par- <i>Hypotrachyna goiasii</i> -1	3
79	FO-L-Par- <i>Hypotrachyna goiasii</i> -2	3
80	FO-L-Par- <i>Hypotrachyna goiasii</i> -3	3
81	FO-L-Par- <i>Hypotrachyna nepalense</i> HMAS8085	3
82	FO-L-Par- <i>Hypotrachyna rhizodendroideum</i> HMAS8269	3
83	FO-L-Par- <i>Hypotrachyna rhizodendroideum</i> HMAS80658	3
84	FO-L-Par- <i>Hypotrachyna sinuosa</i>	3
85	FO-L-Par- <i>Hypotrachyna sinuosa</i> -1	3
86	FO-L-Par- <i>Hypotrachyna vexans</i> -1	3
87	FO-P-Lob- <i>Lobaria anomala</i>	4
88	FO-P-Lob- <i>Lobaria anomala</i> _7	4
89	FO-P-Lob- <i>Lobaria hallii</i> _8	4
90	FO-P-Lob- <i>Lobaria kurokawae</i> -van-herk_web	4
91	FO-P-Lob- <i>Lobaria kurokawae</i> -van-herk-1	4
92	FO-P-Lob- <i>Lobaria linita</i> _4	4
93	FO-P-Lob- <i>Lobaria oregana</i> _9	4
94	FO-P-Lob- <i>Lobaria tenuis</i>	4
95	FO-P-Lob- <i>Sticta beauvoisii</i>	4
96	FO-P-Lob- <i>Sticta beauvoisii</i> _3_	4
97	FO-P-Lob- <i>Sticta limbata</i>	4
98	FO-P-Lob- <i>Sticta plumbicolor</i> -hawaii-3108279	4
99	FO-P-Lob- <i>Sticta xanthotropa</i> -french-guiana-5914774	4
100	FO-P-Pel- <i>Peltigera aphthosa</i> _3	4
101	FO-P-Pel- <i>Peltigera castanea</i>	4
102	FO-P-Pel- <i>Peltigera collina</i>	4
103	FO-P-Pel- <i>Peltigera collina</i> -1	4
104	FO-P-Pel- <i>Peltigera collina</i> -2	4
105	FO-P-Pel- <i>Peltigera praetextata</i> HMAS13030	4
106	FO-P-Pel- <i>Peltigera praetextata</i>	4
107	FO-P-Pel- <i>Peltigera rufescens</i> _cfr	4
108	FO-U-Umb- <i>Umbilicaria polyphylla</i> 41014_4736	4
109	FO-U-Umb- <i>Umbilicaria polyphylla</i> 41014_4737	4
110	FO-U-Umb- <i>Umbilicaria polyphylla</i> 41014_4738	4
111	FO-U-Umb- <i>Umbilicaria polyphylla</i> 41014_4739	4
112	FO-U-Umb- <i>Umbilicaria polyphylla</i> 41014_4743	4
113	FR-L-Cla- <i>Cladonia amaurocraea</i> -1	5
114	FR-L-Cla- <i>Cladonia amaurocraea</i> -1-1	5
115	FR-L-Cla- <i>Cladonia arbuscula</i>	5
116	FR-L-Cla- <i>Cladonia furcata</i> HMAS7879	5
117	FR-L-Cla- <i>Cladonia furcata</i> HMAS7879-1	5
118	FR-L-Cla- <i>Cladonia furcata</i> HMAS122801	5
119	FR-L-Cla- <i>Cladonia furcata</i> HMAS122801-1	5

120	FR-L-Cla- <i>Cladonia furcata</i> -1	5
121	FR-L-Cla- <i>Cladonia furcata</i> -1-1	5
122	FR-L-Cla- <i>Cladonia rangiferina</i> HMAS120346	5
123	FR-L-P-BitterfeldJörg Wunderlich Amber Collection F781	5
124	FR-L-Par- <i>Evernia esorediosa</i> HMAS9403	5
125	FR-L-Par- <i>Evernia esorediosa</i> HMAS9405	5
126	FR-L-Ram- <i>Ramalina bajacalifornica</i> _Sharn_1557251388	5
127	FR-L-Ram- <i>Ramalina calicaris</i> var. <i>fastigiata</i> FH00511819	5
128	FR-L-Ram- <i>Ramalina camptospora</i> Nyl.	5
129	FR-L-Ram- <i>Ramalina culbersoniorum</i> _1550624964	5
130	FR-L-Ram- <i>Ramalina darwiniana</i> var. <i>darwiniana</i>	5
131	FR-L-Ram- <i>Ramalina dilacerata</i> _2	5
132	FR-L-Ram- <i>Ramalina pacifica</i> Asahina	5
133	FR-L-Ram- <i>Ramalina pacifica</i> Asahina-1	5
134	FR-L-Sph- <i>Sphaerophorus globosus</i> -1	5
135	FR-P-Icm- <i>Siphula ceratites</i> _3	5
136	FR-P-Icm- <i>Siphula pteruloides</i> 9412	5
137	FR-T-Tel- <i>Teloschistes flavicans</i> HMAS504	5
138	FR-T-Tel- <i>Teloschistes flavicans</i> HMAS547	5
139	FR-T-Tel- <i>Teloschistes flavicans</i> HMAS104536	5

Notes: The photo name is listed as 'thallus growth type-the first letter of Order name-the first three letters of Family name-species name-specimen No. FO=Foliose, FR=fruticose.