Supporting Information

Table S1. Scientific articles included in the first author's personal archive (Lichenology database) used in the present review article.

1	Ardelean I.V., Keller C., Scheidegger C. 2013. Lichen flora of Rodnei Mountains National Park (Eastern Carpathians, Romania) including new records for the Romanian mycoflora. *Folia Cryptogamica Estonica*. **50**: 101-115.
2	Bäcklund S., Jönsson M., Strengbom J., Frisch A., Thor G. 2016. A pine is a pine and a spruce is a spruce – The effect of tree species and stand age on epiphytic lichen communities. *PLoS ONE*. **11** (1): e0147004.
3	Bartemucci P., Lilles E., Gauslaa Y. 2022. Silvicultural strategies for lichen conservation: smaller gaps and shorten distances to edges promote recolonization. *Ecosphere*. **13**: e3898.
4	Belinchón R., Martínez I., Otálora M.A.G., Aragón G., Dimas J., Escudero A. 2009. Fragment quality and matrix affect epiphytic performance in a Mediterranean forest landscape. *American Journal of Botany*. **96** (11): 1974–1982.
5	Bilovitz P.O., Batič F., Mayrhofer H. 2011. Epiphytic lichen mycota of the virgin forest reserve Rajhenavski Rog (Slovenia). *Herzogia*. **24** (2): 315–324.
6	Bouchard M., Boudreault C. 2016. Is metapopulation size important for the conservation of understory plants and epiphytic lichens? *Conservation Biology*. **195**: 187-195.
7	Brodeková L., Gilmer A., Dowding P., Fox H., Guttová A. 2006. An assessment of epiphytic lichen diversity and environmental quality in Knocksink Wood Nature Reserve, Ireland. *Biology and Environment*: *Proceedings of the Royal Irish Academy*. **106B** (3): 215-223.
8	Brunialti G., Frati L., Loppi S. 2012. Fragmentation of Mediterranean oak forests affects the diversity of epiphytic lichens. *Nova Hedwigia*. **96** (1-2): 265-278.
9	Carlsson R, Nilsson K. 2009. Status of the red-listed *Lobaria pulmonaria* on the Åland Islands, SW Finland. *Annales Botanici Fennici*. **46**: 549–554.
10	Çobanoğlu G., Yavuz M., Costache I., Radu I., Açikgöz B., Baloniu L. 2009. Epiphytic and terricolous lichens diversity in Cozia National Park (Romania). *Oltenia*. *Studii şi comunicări*. *Ştiinţele Naturii*. **25**: 17-22.
11	Çobanoğlu G., Yavuz M., Costache I., Radu I. 2011. Additional and new lichen records from Cozia National Park, Romania. *Mycotaxon*. **114**: 193-196.
12	Cordero S.R.A., Garrido A., Pérez-Molina J.P., Ramírez-Alán O., Chávez J.L. 2021. Lichen community structure and richness in three mid-elevation secondary forests in Costa Rica. *Revista de Biología Tropical*. **69** (2): 688-699.
13	Dingová Košuthová A., Svitková I., Pišút I., Senko D., Valachovič M. 2013. The impact of forest management on changes in composition of terricolous lichens in dry acidophilous Scots pine forests. *The Lichenologist*. **45** (3): 413-425
14	Dymytrova L., Nadyeina O., Hobi M.L., Scheidegger C. 2014. Topographic and forest-stand variables determining epiphytic lichen diversity in the primeval beech forest in the Ukrainian Carpathians. *Biodiversity and Conservation*. **23**: 1367–1394.
15	Friedel A., Oheimb G.V., Dengler J., Härdtle W. 2006. Species diversity and species composition of epiphytic bryophytes and lichens – a comparison of managed and unmanaged beech forests in NE Germany. *Feddes Repertorium*. **117** (1-2): 172–185.
16	Fritz O., Brunet J. 2010. Epiphytic bryophytes and lichens in Swedish beech forests – effects of forest history and habitat quality. *Ecological Bulletins*. **53**: 95–107.
17	Giordani P. 2006. Variables influencing the distribution of epiphytic lichens in heterogeneous areas: A case study for Liguria, NW Italy. *Journal of Vegetation Science*. **17**: 195-206.
18	Giordani P., Incerti G. 2008. The influence of climate on the distribution of lichens: a case study in a borderline area (Liguria, NW Italy). *Plant Ecology*. **195**: 257-272.

19	Hämäläinen A., Ranius T., Strengbom J. 2021. Increasing the amount of dead wood by creation of high stumps has limited value for lichen diversity. *Journal of Environmental Management*. **280**: 111646.
20	Hofmeister J., Hošek J., Malíček J., Palice Z., Syravátková L., Steinová J., Černajová I. 2016. Large beech (Fagus sylvatica) trees as 'lifeboats' for lichen diversity in central European forests. *Biodiversity and Conservation*. **25**: 1073-1090.
21	Hofmeister J., Vondrák J., Ellis C., Coppins B., Sanderson N., Malíček J., Palice Z., Acton A., Svoboda S., Gloor R. 2022. High and balanced contribution of regional biodiversity hotspots to epiphytic and epixylic lichen species diversity in Great Britain. *Biological Conservation*. **226**: 109443.
22	Johansson V., Ranius T., Snäll T. 2012. Epiphyte metapopulation dynamics are explained by species traits, connectivity, and patch dynamics. *Ecology*. **93** (2): 235-241.
23	Jüriado I, Liira J. 2009. Distribution and habitat ecology of the threatened forest lichen Lobaria pulmonaria in Estonia. *Folia Cryptogamica Estonica*. **46**: 55–65.
24	Khodosovtsev O., Dymytrova L., Nadyeina O., Naumovych A., Khodosovtseva Y., Scheidegger C. 2013. A contribution to beech forest-associated epiphytic lichen-forming and lichenicolous fungi in Crimean Mts (Ukraine). *Flora Mediterranea*. **23**: 57-68.
25	Malíček J., Palice Z., Vondrák J., Kostovčík M., Lenzová V., Hofmeister J. 2019. Lichens in old-growth and managed mountain spruce forests in the Czech Republic: assessment of biodiversity, functional traits and bioindicators. *Biodiversity and Conservation*. **28**: 3497-3528.
26	Marmor L., Tõrra T., Leppik E., Saag L., Randlane T. 2011. Epiphytic lichen diversity in Estonian and Fennoscandian old coniferous forests. *Folia Cryptogamica Estonica*. **48**: 31-43.
27	Motiejūnaitė J. 2015. Lichens and allied fungi from the Čepkeliai State Nature Reserve (southern Lithuania). *Botanica Lithuanica*. **21** (1): 3-12.
28	Nascimbene J., Marini L., Nimis P.L. 2007. Influence of forest management on epiphytic lichens in a temperate beech forest of northern Italy. *Forest Ecology and Management*. **247**: 43-47.
29	Nascimbene J., Marini L., Nimis P.L. 2009. Influence of tree species on epiphytic macrolichens in temperate mixed forests of northern Italy. *Canadian Journal of Forest Research*. **39**: 785-791.
30	Nascimbene J., Marini L., Nimis P.L. 2010. Epiphytic lichen diversity in old-growth and managed Picea abies stands in Alpine spruce forests. *Forest Ecology and Management*. **260** (5): 603-609.
31	Nascimbene J., Di Cecco V., Di Martino L., Frascaroli F., Giordani P., Lelli C., Vallese C., Zannini P., Chiarucci A. 2019. Epiphytic lichens of the sacred natural site "Bosco di Sant'Antonio" (Majella National Park – Abruzzo). *Italian Botanist*. **7**: 149–156.
32	Paltto H., Nordberg A., Nordén B., Snäll T. 2011. Development of secondary woodland in oak wood pastures reduces the richness of rare epiphytic lichens. *PLoS One*. **6**: e24675.
33	Paoli L., Benesperi R., Fačkovcová Z., Nascimbene J., Ravera S., Marchetti M., Anselmi B., Landi M., Landi S., Bianchi E., Di Nuzzo L., Lackovičová A., Vannini A., Loppi S., Guttová A. 2019. Impact of forest management on threatened epiphytic macrolichens: evidence from a Mediterranean mixed oak forest (Italy). *iForest - Biogeosciences and Forestry*. **12** (4): 383-388.
34	Ravera S., Genovesi V., Falasca A., Marchetti M., Chirici G. 2010. Lichen diversity of old-growth forests in Molise (Central-Southern Italy). *Italian Journal of Forest and Mountain Environments*. **65** (5): 505-517.
35	Rolstad J., Rolstad E. 1999. Does tree age predict the occurrence and abundance of Usnea longissima in multi-aged submontane Picea abies stands? *Lichenologist*. **31** (6): 613-625.
36	Rosenvald R., Lohmus A. 2008. For what, when, and where is green-tree retention better than clear-cutting? A review of the biodiversity aspects. *Forest Ecology and Management*. **255**: 1-15.
37	Sorrell A.R.J. 2006. A compartmental study of three Bolton Abbey woodlands using lichen-types: implications for current and future conservation management. *Earth & E-nvironment*. **2**: 253-307.
38	Svoboda D., Peksa O., Veselá J. 2011. Analysis of the species composition of epiphytic lichens in Central European oak forests. *Preslia*. **83**: 129-144.
39	Świerkosz K., Reczyńska K., Kuras I. 2017. Increasing area of deciduous forest communities (Querco-Fagatea Class) as an unintended effect of regular forestry management-a study from Central Europe. *Polish Journal of Environmental Studies*. **26** (1): 323-329.

40	Vicol I. 2010. Preliminary study on epiphytic lichens as an indicator of environmental quality in forests from around Bucharest Municipality (Romania). *Analele Universităţii din Oradea - Fascicula Biologie*. **17** (1): 200-207.
41	Vicol I. 2011. Preliminary study using lichen species diversity as an indicator of local environmental quality within two nature reserves from Romania. *Analele Universităţii din Oradea - Fascicula Biologie*. **18** (1): 53-58.
42	Vicol I. 2011. *Epiphytic lichens as indicators of environmental quality within forestry ecosystems from Bucharest Municipality metropolitan area*. International Symposium ''The Environment and Industry''. Held by National Research and Development Institute for Industrial Ecology, Crystal Palace Ballrooms, Bucharest, Romania, 16-18 November 2011. Publishing House EstFalia. 2: 303-309. ISSN 1843-5831.
43	Vicol I. 2012. The sinstructure of epiphytic lichens within forests from the eastern part of Bucharest Municipality (Romania). *Botanica Serbica*. **36** (2): 131-137.
44	Vicol I. 2015. Synecological structure of the lichen synusiae within forest natural reserves from the Moldavian Plateau (Romania). *Turkish Journal of Botany*. **39** (1): 189-197.
45	Vicol I. 2016. Ecological patterns of lichen species abundance in mixed forests of Eastern Romania. *Annals of Forest Research*. **59** (2): 237-248.
46	Vondrák J., Malíček J., Palice Z., Bouda F., Berger F., Sanderson N., Acton A., Pouska V., Kish R. 2018. Exploiting hot-spots; effective determination of lichen diversity in a Carpathian virgin forest. *PLoS ONE*. **13** (9): e0203540.
47	Vondrák J., Malíček J., Šoun J., Pouska V. 2015. Epiphytic lichens of Stužica (E Slovakia) in the context of Central European old-growth forests. *Herzogia*. **28** (1): 104–126.
48	Vondrák J., Urbanavichus G., Palice Z., Malíček J., Urbanavichene I., Kubásek J., Ellis C. 2019. The epiphytic lichen biota of Caucasian virgin forests: a comparator for European conservation. *Biodiversity and Conservation*. **28**: 3257–3276.
49	Werth S., Tømmervik H., Elvebakk A. 2005. Epiphytic macrolichen communities along regional gradients in northern Norway. *Journal of Vegetation Science*. **16**: 199-208.
50	Wolseley, A. P. 1995. A global perspective on the status of lichens and their conservation. *Mitteilungen der Eidgenössischen Forschungsanstalt für Wald, Schnee und Landschaft*. **70** (1): 11–27.

Table S2. Reference materials retrieved from the Web of Science platform according to the following topics: **forest**/**lichen species**/**Europe**.

1	Aragón G., Abuja L., Belinchón R., Martínez I. 2015. Edge type determines the intensity of forest edge effect on epiphytic communities. *European Journal of Forest Research*. **13**4 (3): 443-451.
2	Belinchón R., Ellis C.J., Yahr R. 2018. Climate-woodland effects on population genetics for two congeneric lichens with contrasting reproductive strategies. *FEMS Microbiology Ecology*. **94**: 159.
3	Belinchón R., Martínez I., Escudero A., Aragón G., Valladares F. 2007. Edge effects on epiphytic communities in a Mediterranean *Quercus pyrenaica* forest. *Journal of Vegetation Science*. **18**: 81-90.
4	Calviño-Cancela M., López de Silanes M.E., Rubido-Bará M., Uribarri J. 2013. The potential role of tree plantations in providing habitat for lichen epiphytes. *Forest Ecology and Management*. 291: 386-395.
5	Cardós J.L.H., Martínez I., Calvo V., Aragón G. 2016. Epiphyte communities in Mediterranean fragmented forests: importance of the fragment size and the surroundings. *Landscape Ecology*. **31**: 1975-1995.
6	Cardós J.L.H., Martínez I., Aragón G., Ellis C.J. 2018. Role of past and present lamdscape structure in determining epiphyte richness in fragmented Mediterranean forests. *Landscape Ecology*. **33**: 1757-1768.
7	Caruso A., Rudolphi J., Rydin H. 2011. Positive edge effects on forest-interior cryptogams in clear-cuts. *PLoS ONE*. **6** (11): e27936.
8	Dittrich S., Hauck M., Schweigatz D., Dörfler I., Hühne R., Bade C., Jacob M., Leuschner C. 2013. Separating forest continuity from tree age effects on plant diversity in the ground and epiphyte vegetation of a Central European mountain spruce forest. *Flora*. **208** (4): 238-246.

9	Dittrich S., Jacob M., Bade C., Leuschner C., Hauck M. 2014. The significance of deadwood for total bryophyte, lichen, and vascular plant diversity in an old-growth spruce forest. *Plant Ecology*. **215**: 1123-1137.
10	Ellis C.J., Coppins B.J. 2019. Five decades of decline for old-growth indicator lichens in Scotland. *Edinburgh Journal of Botany*. **76** (3): 319-331.
11	Esseen P.A., Renhorn K.E. 1998. Edge effects on an epiphytic lichen in fragmented forests. *Conservation biology*. **12** (6): 1307-1317.
12	Hilmo O., Holien H., Hytteborn H. 2005. Logging strategy influences colonization of common chlorolichens on branches of Picea abies. *Ecological Applications*. **15** (3): 983–996.
13	Hilmo O., Lundemo S., Holien H., Stengrundet K., Stenøien H.K. 2012. Genetic structure in a fragmented Northern Hemisphere rainforest: large effective sizes and high connectivity among populations of the epiphytic lichen Lobaria pulmonaria. *Molecular Ecology*. **21**: 3250–3265.
14	Johansson V., Ranius T., Snäll T. 2013. Epiphyte metapopulation persistence after drastic habitat decline and low tree regeneration: time-lags and effects of conservation actions. *Journal of Applied Ecology*. **50** (2): 414-422.
15	Johansson V., Snäll T., Ranius T. 2013. Estimates of connectivity reveal non-equilibrium epiphyte occurrence patterns almost 180 years after habitat decline. *Oecologia*. **172**: 607-615.
16	Kiebacher T., Keller C., Scheidegger C., Bergamini A. 2017. Epiphytes in wooded pastures: Isolation matters for lichen but not for bryophyte species richness. *PLoS ONE*. **12** (7): e0182065.
17	Liepa L., Rendenieks Z., Jansons Ā., Straupe I., Dubrovskis E., Miezīte O. 2020. The persisting influence of edge on vegetation in hemiboreal Alnus glutinosa (L.) Gaertn. swamp forest set-asides adjacent to recently disturbed stands. *Forests*. **11**: 1084.
18	Lelli C., Bruun H.H., Chiarucci A., Donati D., Frascaroli F., Fritz Ö., Goldberg I., Nascimbene J., Tøttrup A.P., Rahbek C., Heilmann-Clausen J. 2019. Biodiversity response to forest structure and management: comparing species richness, conservation relevant species and functional diversity as metrics in forest conservation. *Forest Ecology and Management*. **432**: 707-717.
19	Lommi S., Berglund H., Kuusinen M., Kuuluvainen T. 2010. Epiphytic lichen diversity in late-successional Pinus sylvestris forests along local and regional forest utilization gradients in eastern boreal Fennoscandia. *Forest Ecology and Management*. **259**: 883-892.
20	Maceda Veiga A., Gómez Bolea A. 2017. Small, fragmented native oak forests have better preserved epiphytic lichen communities than tre plantations in temperate sub-oceanic Mediterranean climate region. *The Bryologist*. **120** (2): 191-201.
21	Otálora M. G., Martínez I., Belinchón R., Widmer I., Aragón G., Escudero A., Scheidegger C. 2011. Remnants fragments preserve genetic diversity of the old forest lichen Lobaria pulmonaria in a fragmented Mediterranean mountain forest. *Biodiversity and Conservation*. **20**: 1239-1254.
22	Paltto H., Nordén B., Götmark F., Franc N. 2006. At which spatial and temporal scales does landscape context affect local density of Red Data Book and Indicator species? *Biological Conservation*. **133**: 442-454.
23	Vicol, I. 2015. Effect of old-growth forest attributes on lichen species abundances: a study performed within Ceahlău National Park (Romania. *Cryptogamie Mycologie*. **36**(4): 399-407.
24	Vicol I. 2020. The role of forest structure as a determinant of epiphytic lichens within managed temperate deciduous forests (southern Romania). *Environmental Engineering and Management Journal*. **19** (5): 797-807.
25	Vicol I. 2020. Multi-aged forest fragments in Atlantic France that are surrounded by meadows retain a richer epiphyte lichen flora. *Cryptogamie Mycologie*. **41** (15): 235-247.
26	Wolseley P., Sanderson N., Thüs H., Carpenter D., Eggleton P. 2017. Patterns and drivers of lichen species composition in a NW-European lowland deciduous woodland complex. *Biodiversity and Conservation*. **26** (2): 401-419.
27	Zoller S, Lutzoni F, Scheidegger C. 1999. Genetic variation within and among populations of the threatened lichen Lobaria pulmonaria in Switzerland and implications for its conservation. *Molecular Ecolology*. **8** (12): 2049–2059.

Table S3. Reference materials retrieved from on the Web of Science platform according to the following topics: **forest management/lichen species/Europe**.

1	Aragón G., Martínez I., García A. 2012. Loss of epiphytic diversity along a latitudinal gradient in southern Europe. *Science of the Total Environment*. **426**:188–195.
2	Czerepko J., Gawryś R., Mańk K., Janek M., Tabor J., Skalski L. 2021. The influence of the forest management in the Białowieża forest on the species structure of the forest community. *Forest Ecology and Management*. **496**: 119363.
3	Hofmeister J., Hošek J., Malíček J., Palice Z., Syravátková L., Steinová J., Černajová I. 2016. Large beech (*Fagus sylvatica*) trees as 'lifeboats' for lichen diversity in central European forests. *Biodiversity and Conservation*. **25**: 1073-1090.
4	Johansson V., Ranius T., Snäll T. 2013. Epiphyte metapopulation persistence after drastic habitat decline and low tree regeneration: time-lags and effects of conservation actions. Journal of Applied Ecology. 50 (2): 414-422.
5	Moning C., Werth S., Dziock F., Bässler C., Bradtka J., Hothorn T., Müller J. 2009. Lichen diversity in temperate montane forests is influenced by forest structure more than climate. *Forest Ecology and Management*. **258**: 745-751.
6	Nascimbene J., Marini L. 2010. Oak forest exploitation and black-locust invasion caused severe shifts in epiphytic lichen communities in Northern Italy. *Science of the Total Environment*. **408**: 5506-5512.
7	Nascimbene J., Lazzaro L., Benesperi R. 2015. Patterns of beta-diversity and similarity reveal biotic homogenization of epiphytic lichen communities associated with the spread of black locust forests. *Fungal Ecology*. **14**: 1-7.
8	Oksuz D.P., Aquiar C.A.S., Tápia S., Llop E., Serrano A.R.M., Leal A.I., Branquinho C., Correia O., Rainho A., Correia R.A., Palmeirim J.M. 2020. Increasing biodiversity in wood-pastures by protecting small shrubby patches. *Forest Ecology and Management*. **464**: 118041.
9	Paillet Y., Bergès L., Hjältén J., Ódor P., Avon C., Bernhardt-Römermann M., Bijlsma R.J., De Bruyn L., Fuhr M., Grandin U., Kanka R., Lundin L., Luque S., Magura T., Matesanz S., Mészáros I., Sebastià M.T., Schmidt W., Standovár T., Tóthmérész B., Uotila A., Valladares F., Vellak K., Virtanen R. 2010. Biodiversity differences between managed and unmanaged forests: meta-analysis of species richness in Europe. *Conservation Biology*. **24** (1): 101-112.
10	Runnel K., Rosenvald R., Lõhmus A. 2013. The dying legacy of green-tree retention: different habitat values for polypore and wood-inhabiting lichens. *Biological Conservation*. **159**: 187-196.
11	Vicol I. 2020. Multi-aged forest fragments in Atlantic France that are surrounded by meadows retain a richer epiphyte lichen flora. *Cryptogamie Mycologie*. **41** (15): 235-247.

Table S4. Scientific articles included in the first author's personal archive (Landscape Ecology database) used in the present review article.

1	Beier P., Noss R.F. 1998. Do habitat corridors provide connectivity? *Conservation Biology*. **12** (6): 1241-1252.
2	Blicharska M., Angelstam P., Giessen L., Hilszczański J., Hermanowicz E., Holeksa J., Jacobsen J.B., Jaroszewicz B., Konczal A., Konieczny A., Mikusiński G., Mirek Z., Mohren F., Muys B., Niedziałkowski K., Sotirov M., Stereńczak K., Szwagrzyk J., Winder G.M., Witkowski Z., Zaplata R., Winkel G. 2020. Between biodiversity conservation and sustainable forest management-A multidisciplinary assessment of the emblematic Białowieża Forest case. *Biological Conservation*. **248**: 108614.
3	Cervellini M., Zannini P., Di Musciano M., Fattorini S., Jiménez-Alfaro B., Rocchini D., Field R., Vetaas O.R., Irl S.D.H., Beierkuhnlein C., Hoffmann S., Fischer J.C., Casella L., Angelini P., Genovesi P., Nascimbene J., Chiarucci A. 2020. A grid-based map for the biogeographical regions of Europe. *Biodiversity Data Journal*. **8**: e53720.
4	Hanski I. 1999. Habitat connectivity, habitat continuity, and metapopulations in dynamic landscape. *Oikos*. **87**: 209-219.
5	Niculae M.I., Avram S., Vânău G.O., Pătroescu M. 2017. Effectiveness of Natura 2000 network in Romanian alpine biogeographical region: an assessment based on forest landscape cennectivity. *Annals of Forest Research*. **60** (1): 19-32.
6	Stănciou P.T., Niță M.D., Lazăr G.E. 2018. Forestland connectivity in Romania-Implications for policy and management. *Land Use Policy*. **76**: 487-499.
7	Palmero-Iniesta M., Espelta J.M., Gordillo J., Pino J. 2020. Changes in forest landscape patterns resulting from recent afforestation of pre-existing forest versus new patch proliferation. *Annals of Forest Science*. **77**: 43.
8	Marín A.I., Abdul Malak D., Bastrup-Birk A., Chirici G., Barbati A., Kleeschulte S. 2021. Mapping forest condition in Europe: methodological developments in support to forest biodiversity assessments. *Ecological Indicators*. **128**: 107839.
9	Han Q., Keeffe G., Cullen S. 2022. Climate connectivity of European forests for species range shifts. *Forests*. **12**: 940.

Table S5. Reference materials used in the statistical analyses based on selected variables such as lichen richness and management practices.

Aragón G., Martínez I., García A. 2012. Loss of epiphytic diversity along a latitudinal gradient in southern Europe. *Science of the Total Environment*. **426**:188–195.
Aragón G., Abuja L., Belinchón R., Martínez I. 2015. Edge type determines the intensity of forest edge effect on epiphytic communities. *European Journal of Forest Research*. **134** (3): 443-451.
Ardelean I.V., Keller C., Scheidegger C. 2013. Lichen flora of Rodnei Mountains National Park (Eastern Carpathians, Romania) including new records for the Romanian mycoflora. *Folia Cryptogamica Estonica*. **50**: 101-115.
Ardelean I.V., Keller C., Scheidegger C. 2015. Effect of management on lichen species richness, ecoogical traits and community structure in the Rodnei Mountains National Park (Romania). *PloS One*. **10** (12): e0145808.
Bäcklund S., Jönsson M., Strengbom J., Frisch A., Thor G. 2016. A pine is a pine and a spruce is a spruce – The effect of tree species and stand age on epiphytic lichen communities. *PLoS ONE*. **11** (1): e0147004.
Belinchón R., Martínez I., Escudero A., Aragón G., Valladares F. 2007. Edge effects on epiphytic communities in a Mediterranean Quercus pyrenaica forest. *Journal of Vegetation Science*. **18**: 81-90.
Bilovitz P.O., Batič F., Mayrhofer H. 2011. Epiphytic lichen mycota of the virgin forest reserve Rajhenavski Rog (Slovenia). *Herzogia*. **24** (2): 315–324.
Brodeková L., Gilmer A., Dowding P., Fox H., Guttová A. 2006. An assessment of epiphytic lichen diversity and environmental quality in Knocksink Wood Nature Reserve, Ireland. *Biology and Environment*: *Proceedings of the Royal Irish Academy*. **106B** (3): 215-223.

Brunialti G., Frati L., Loppi S. 2012. Fragmentation of Mediterranean oak forests affects the diversity of epiphytic lichens. *Nova Hedwigia*. **96** (1-2): 265-278.

Calviño-Cancela M., López de Silanes M.E., Rubido-Bará M., Uribarri J. 2013. The potential role of tree plantations in providing habitat for lichen epiphytes. *Forest Ecology and Management*. **291**: 386-395.

Cardós J.L.H., Martínez I., Calvo V., Aragón G. 2016. Epiphyte communities in Mediterranean fragmented forests: importance of the fragment size and the surroundings. *Landscape Ecology*. **31**: 1975-1995.

Çobanoğlu G., Yavuz M., Costache I., Radu I., Açikgöz B., Baloniu L. 2009. Epiphytic and terricolous lichens diversity in Cozia National Park (Romania). *Oltenia. Studii și comunicări. Științele Naturii*. **25**: 17-22.

Çobanoğlu G., Yavuz M., Costache I., Radu I. 2011. Additional and new lichen records from Cozia National Park, Romania. *Mycotaxon*. **114**: 193-196.

Dittrich S., Hauck M., Schweigatz D., Dörfler I., Hühne R., Bade C., Jacob M., Leuschner C. 2013. Separating forest continuity from tree age effects on plant diversity in the ground and epiphyte vegetation of a Central European mountain spruce forest. *Flora*. **208** (4): 238-246.

Dittrich S., Jacob M., Bade C., Leuschner C., Hauck M. 2014. The significance of deadwood for total bryophyte, lichen, and vascular plant diversity in an old-growth spruce forest. *Plant Ecology*. **215**: 1123-1137.

Dymytrova L., Nadyeina O., Hobi M.L., Scheidegger C. 2014. Topographic and forest-stand variables determining epiphytic lichen diversity in the primeval beech forest in the Ukrainian Carpathians. *Biodiversity and Conservation*. **23**: 1367–1394.

Friedel A., Oheimb G.V., Dengler J., Härdtle W. 2006. Species diversity and species composition of epiphytic bryophytes and lichens – a comparison of managed and unmanaged beech forests in NE Germany. *Feddes Repertorium*. **117** (1-2): 172–185.

Hofmeister J., Hošek J., Malíček J., Palice Z., Syravátková L., Steinová J., Černajová I. 2016. Large beech (Fagus sylvatica) trees as 'lifeboats' for lichen diversity in central European forests. *Biodiversity and Conservation*. **25**: 1073-1090.

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Table S6. Reference materials used in the statistical analyses based on management practices.

Management practices	References
clearcutting	Bäcklund S., Jönsson M., Strengbom J., Frisch A., Thor G. 2016. A pine is a pine and a spruce is a spruce – The effect of tree species and stand age on epiphytic lichen communities. *PLoS ONE*. **11** (1): e0147004. Nascimbene J., Marini L., Nimis P.L. 2010. Epiphytic lichen diversity in old-growth and managed Picea abies stands in Alpine spruce forests. *Forest Ecology and Management*. **260** (5): 603-609. Nascimbene J., Lazzaro L., Benesperi R. 2015. Patterns of beta-diversity and similarity reveal biotic homogenization of epiphytic lichen communities associated with the spread of black locust forests. *Fungal Ecology*. **14**: 1-7. Nascimbene J., Marini L., Nimis P.L. 2010. Epiphytic lichen diversity in old-growth and managed Picea abies stands in Alpine spruce forests. *Forest Ecology and Management*. **260** (5): 603-609. Werth S., Tømmervik H., Elvebakk A. 2005. Epiphytic macrolichen communities along regional gradients in northern Norway. *Journal of Vegetation Science*. **16**: 199-208.
coppicing	Brodeková L., Gilmer A., Dowding P., Fox H., Guttová A. 2006. An assessment of epiphytic lichen diversity and environmental quality in Knocksink Wood Nature Reserve, Ireland. *Biology and Environment*: *Proceedings of the Royal Irish Academy*. **106B** (3): 215-223. Brunialti G., Frati L., Loppi S. 2012. Fragmentation of Mediterranean oak forests affects the diversity of epiphytic lichens. *Nova Hedwigia*. **96** (1-2): 265-278. Nascimbene J., Lazzaro L., Benesperi R. 2015. Patterns of beta-diversity and similarity reveal biotic homogenization of epiphytic lichen communities associated with the spread of black locust forests. *Fungal Ecology*. **14**: 1-7.
crop production	Calviño-Cancela M., López de Silanes M.E., Rubido-Bará M., Uribarri J. 2013. The potential role of tree plantations in providing habitat for lichen epiphytes. *Forest Ecology and Management*. **291**: 386-395.
forest managed for its sustainable ecological and social functions	Sârbu A., Sârbu I., Oprea A., Negrean G., Cristea V., Gheorghe C., Cristurean I., Popescu Ghe., Oroian S., Tănase C., Bartók K., Gafta D., Anastasiu P., Crișan F., Costache I., Goia I., Maruşca T., Oţel V., Sămărghiţan M., Henţea S., Pascale G., Răduţoiu D., Baz A., Boruz V., Puşcaş M., Hiriţiu M., Stan I., Frink J. 2007. Arii speciale pentru protecţia şi conservarea plantelor în România. Victor B Victor, Bucharest. Vicol I. 2015. Synecological structure of the lichen synusiae within forest natural reserves from the Moldavian Plateau (Romania). *Turkish Journal of Botany*. **39** (1): 189-197. Vicol I. 2016. Ecological patterns of lichen species abundance in mixed forests of Eastern Romania. Annals of Forest Research. **59** (2): 237-248.
shelterwood system	Friedel A., Oheimb G.V., Dengler J., Härdtle W. 2006. Species diversity and species composition of epiphytic bryophytes and lichens – a comparison of managed and unmanaged beech forests in NE Germany. *Feddes Repertorium*. **117** (1-2): 172–185. Nascimbene J., Marini L., Nimis P.L. 2007. Influence of forest management on epiphytic lichens in a temperate beech forest of northern Italy. *Forest Ecology and Management*. **247**: 43-47.
thinning	Nascimbene J., Marini L., Nimis P.L. 2010. Epiphytic lichen diversity in old-growth and managed Picea abies stands in Alpine spruce forests. *Forest Ecology and Management*. **260** (5): 603-609.
wood pasture	Ardelean I.V., Keller C., Scheidegger C. 2013. Lichen flora of Rodnei Mountains National Park (Eastern Carpathians, Romania) including new records for the Romanian mycoflora. *Folia Cryptogamica Estonica* **50**: 101-115.

Table S7. Reference materials for unmanaged forests used in the statistical analyses.

unmanaged forests	Aragón G., Abuja L., Belinchón R., Martínez I. 2015. Edge type determines the intensity of forest edge effect on epiphytic communities. *European Journal of Forest Research*. **134** (3): 443-451. Aragón G., Martínez I., García A. 2012. Loss of epiphytic diversity along a latitudinal gradient in southern Europe. *Science of the Total Environment*. **426**:188–195. Ardelean I.V., Keller C., Scheidegger C. 2013. Lichen flora of Rodnei Mountains National Park (Eastern Carpathians, Romania) including new records for the Romanian mycoflora. *Folia Cryptogamica Estonica* **50**: 101-115. Belinchón R., Martínez I., Escudero A., Aragón G., Valladares F. 2007. Edge effects on epiphytic communities in a Mediterranean *Quercus pyrenaica* forest. *Journal of Vegetation Science*. **18**: 81-90. Bilovitz P.O., Batič F., Mayrhofer H. 2011. Epiphytic lichen mycota of the virgin forest reserve Rajhenavski Rog (Slovenia). *Herzogia*. **24** (2): 315–324. Brodeková L., Gilmer A., Dowding P., Fox H., Guttová A. 2006. An assessment of epiphytic lichen diversity and environmental quality in Knocksink Wood Nature Reserve, Ireland. *Biology and Environment*: *Proceedings of the Royal Irish Academy*. **106B** (3): 215-223. Calviño-Cancela M., López de Silanes M.E., Rubido-Bará M., Uribarri J. 2013. The potential role of tree plantations in providing habitat for lichen epiphytes. *Forest Ecology and Management*. **291**: 386-395. Cardós J.L.H., Martínez I., Calvo V., Aragón G. 2016. Epiphyte communities in Mediterranean fragmented forests: importance of the fragment size and the surroundings. *Landscape Ecology*. **31**: 1975-1995. Çobanoğlu G., Yavuz M., Costache I., Radu I., Açikgöz B., Baloniu L. 2009. Epiphytic and terricolous lichens diversity in Cozia National Park (Romania). *Oltenia*. *Studii şi comunicări*. *Ştiinţele Naturii*. **25**: 17-22. Çobanoğlu G., Yavuz M., Costache I., Radu I. 2011. Additional and new lichen records from Cozia National Park, Romania. *Mycotaxon*. **114**: 193-196. Dittrich S., Hauck M., Schweigatz D., Dörfler I., Hühne R., Bade C., Jacob M., Leuschner C. 2013. Separating forest continuity from tree age effects on plant diversity in the ground and epiphyte vegetation of a Central European mountain spruce forest. *Flora*. **208** (4): 238-246. Dittrich S., Jacob M., Bade C., Leuschner C., Hauck M. 2014. The significance of deadwood for total bryophyte, lichen, and vascular plant diversity in an old-growth spruce forest. *Plant Ecology*. **215**: 1123-1137. Dymytrova L., Nadyeina O., Hobi M.L., Scheidegger C. 2014. Topographic and forest-stand variables determining epiphytic lichen diversity in the primeval beech forest in the Ukrainian Carpathians. *Biodiversity and Conservation*. **23**: 1367–1394. Friedel A., Oheimb G.V., Dengler J., Härdtle W. 2006. Species diversity and species composition of epiphytic bryophytes and lichens – a comparison of managed and unmanaged beech forests in NE Germany. *Feddes Repertorium*. **117** (1-2): 172–185. Hofmeister J., Hošek J., Malíček J., Palice Z., Syravátková L., Steinová J., Černajová I. 2016. Large beech (*Fagus sylvatica*) trees as 'lifeboats' for lichen diversity in central European forests. *Biodiversity and Conservation*. **25**: 1073-1090. Hofmeister J., Vondrák J., Ellis C., Coppins B., Sanderson N., Malíček J., Palice Z., Acton A., Svoboda S., Gloor R. 2022. High and balanced contribution of regional biodiversity hotspots to epiphytic and epixylic lichen species diversity in Great Britain. *Biological Conservation*. **226**: 109443. Khodosovtsev O., Dymytrova L., Nadyeina O., Naumovych A., Khodosovtseva Y., Scheidegger C. 2013. A contribution to beech forest-associated epiphytic lichen-forming and lichenicolous fungi in Crimean Mts (Ukraine). *Flora Mediterranea*. **23**: 57-68. Malíček J., Palice Z., Vondrák J., Kostovčík M., Lenzová V., Hofmeister J. 2019. Lichens in old-growth and managed mountain spruce forests in the Czech Republic: assessment of biodiversity, functional traits and bioindicators. *Biodiversity and Conservation*. **28**: 3497-3528.

unmanaged forests	Moning C., Werth S., Dziock F., Bässler C., Bradtka J., Hothorn T., Müller J. 2009. Lichen diversity in temperate montane forests is influenced by forest structure more than climate. *Forest Ecology and Management*. **258**: 745-751. Motiejūnaitė J. 2015. Lichens and allied fungi from the Čepkeliai State Nature Reserve (southern Lithuania). *Botanica Lithuanica*. **21** (1): 3-12. Nascimbene J., Di Cecco V., Di Martino L., Frascaroli F., Giordani P., Lelli C., Vallese C., Zannini P., Chiarucci A. 2019. Epiphytic lichens of the sacred natural site "Bosco di Sant'Antonio" (Majella National Park – Abruzzo). *Italian Botanist*. **7**: 149–156. Nascimbene J., Marini L. 2010. Oak forest exploitation and black-locust invasion caused severe shifts in epiphytic lichen communities in Northern Italy. *Science of the Total Environment*. **408**: 5506-5512. Nascimbene J., Marini L., Nimis P.L. 2010. Epiphytic lichen diversity in old-growth and managed Picea abies stands in Alpine spruce forests. *Forest Ecology and Management*. **260** (5): 603-609. Ravera S., Genovesi V., Falasca A., Marchetti M., Chirici G. 2010. Lichen diversity of old-growth forests in Molise (Central-Southern Italy). *Italian Journal of Forest and Mountain Environments*. **65** (5): 505-517. Vicol I. 2011. Preliminary study using lichen species diversity as an indicator of local environmental quality within two nature reserves from Romania. *Analele Universităţii din Oradea - Fascicula Biologie*. **18** (1): 53-58. Vicol I. 2015b. Synecological structure of the lichen synusiae within forest natural reserves from the Moldavian Plateau (Romania). *Turkish Journal of Botany*. **39** (1): 189-197. Vicol I. 2016. Ecological patterns of lichen species abundance in mixed forests of Eastern Romania. Annals of Forest Research. **59** (2): 237-248. Vondrák J., Malíček J., Palice Z., Bouda F., Berger F., Sanderson N., Acton A., Pouska V., Kish R. 2018. Exploiting hot-spots; effective determination of lichen diversity in a Carpathian virgin forest. *PLoS ONE*. **13** (9): e0203540. Vondrák J., Malíček J., Šoun J., Pouska V. 2015. Epiphytic lichens of Stužica (E Slovakia) in the context of Central European old-growth forests. *Herzogia*. **28** (1): 104–126. Vondrák J., Urbanavichus G., Palice Z., Malíček J., Urbanavichene I., Kubásek J., Ellis C. 2019. The epiphytic lichen biota of Caucasian virgin forests: a comparator for European conservation. *Biodiversity and Conservation*. **28**: 3257–3276.

Table S8. Management practices observed during field activities used in the statistical analyses.

Management practices	References
selective cutting	Vicol I. 2010. Preliminary study on epiphytic lichens as an indicator of environmental quality in forests from around Bucharest Municipality (Romania). *Analele Universităţii din Oradea - Fascicula Biologie*. **17** (1): 200-207. Vicol I. 2011. Epiphytic lichens as indicators of environmental quality within forestry ecosystems from Bucharest Municipality metropolitan area. *International Symposium "The Environment and Industry"*. Held by National Research and Development Institute for Industrial Ecology, Crystal Palace Ballrooms, Bucharest, Romania, 16-18 November 2011. Publishing House EstFalia. **2**: 303-309. ISSN 1843-5831. Vicol I. 2012. The sinstructure of epiphytic lichens within forests from the eastern part of Bucharest Municipality (Romania). *Botanica Serbica*. **36** (2): 131-137. Vicol I. 2020. The role of forest structure as a determinant of epiphytic lichens within managed temperate deciduous forests (southern Romania). *Environmental Engineering and Management Journal*. **19** (5): 797-807.

Table S10. Variation in the number of epiphytic lichen species across biogeographical regions and corresponding references.

Biogeographical regions	Variation in epiphytic lichen number	References
Alpine	11-537	Ardelean I.V., Keller C., Scheidegger C. 2013. Lichen flora of Rodnei Mountains National Park (Eastern Carpathians, Romania) including new records for the Romanian mycoflora. *Folia Cryptogamica Estonica* **50**: 101-115. Bilovitz P.O., Batič F., Mayrhofer H. 2011. Epiphytic lichen mycota of the virgin forest reserve Rajhenavski Rog (Slovenia). *Herzogia*. **24** (2): 315–324. Çobanoğlu G., Yavuz M., Costache I., Radu I., Açikgöz B., Baloniu L. 2009. Epiphytic and terricolous lichens diversity in Cozia National Park (Romania). *Oltenia*. *Studii şi comunicări*. *Ştiinţele Naturii*. **25**: 17-22. Çobanoğlu G., Yavuz M., Costache I., Radu I. 2011. Additional and new lichen records from Cozia National Park, Romania. *Mycotaxon*. **114**: 193-196. Dymytrova L., Nadyeina O., Hobi M.L., Scheidegger C. 2014. Topographic and forest-stand variables determining epiphytic lichen diversity in the primeval beech forest in the Ukrainian Carpathians. *Biodiversity and Conservation*. **23**: 1367–1394. Nascimbene J., Di Cecco V., Di Martino L., Frascaroli F., Giordani P., Lelli C., Vallese C., Zannini P., Chiarucci A. 2019. Epiphytic lichens of the sacred natural site "Bosco di Sant'Antonio" (Majella National Park – Abruzzo). *Italian Botanist*. **7**: 149–156. Nascimbene J., Marini L., Nimis P.L. 2007. Influence of forest management on epiphytic lichens in a temperate beech forest of northern Italy. *Forest Ecology and Management*. **247**: 43-47. Nascimbene J., Marini L., Nimis P.L. 2009. Influence of tree species on epiphytic macrolichens in temperate mixed forests of northern Italy. *Canadian Journal of Forest Research*. **39**: 785-791. Nascimbene J., Marini L., Nimis P.L. 2010. Epiphytic lichen diversity in old-growth and managed Picea abies stands in Alpine spruce forests. *Forest Ecology and Management*. **260** (5): 603-609. Ravera S., Genovesi V., Falasca A., Marchetti M., Chirici G. 2010. Lichen diversity of old-growth forests in Molise (Central-Southern Italy). *Italian Journal of Forest and Mountain Environments*. **65** (5): 505-517. Vicol I. 2011. Preliminary study using lichen species diversity as an indicator of local environmental quality within two nature reserves from Romania. *Analele Universităţii din Oradea - Fascicula Biologie*. **18** (1): 53-58. Vicol, I. 2015a. Effect of old-growth forest attributes on lichen species abundances: a study performed within Ceahlău National Park (Romania), *Cryptogamie Mycologie*. **36**(4): 399-407. Vondrák J., Malíček J., Palice Z., Bouda F., Berger F., Sanderson N., Acton A., Pouska V., Kish R. 2018. Exploiting hot-spots; effective determination of lichen diversity in a Carpathian virgin forest. *PLoS ONE*. **13** (9): e0203540. Vondrák J., Malíček J., Šoun J., Pouska V. 2015. Epiphytic lichens of Stužica (E Slovakia) in the context of Central European old-growth forests. *Herzogia*. **28** (1): 104–126.

Alpine	11-537	Vondrák J., Urbanavichus G., Palice Z., Malíček J., Urbanavichene I., Kubásek J., Ellis C. 2019. The epiphytic lichen biota of Caucasian virgin forests: a comparator for European conservation. *Biodiversity and Conservation*. **28**: 3257–3276. Werth S., Tømmervik H., Elvebakk A. 2005. Epiphytic macrolichen communities along regional gradients in northern Norway. *Journal of Vegetation Science*. **16**: 199-208.
Atlantic	12-217	Aragón G., Martínez I., García A. 2012. Loss of epiphytic diversity along a latitudinal gradient in southern Europe. *Science of the Total Environment*. **426**:188–195. Brodeková L., Gilmer A., Dowding P., Fox H., Guttová A. 2006. An assessment of epiphytic lichen diversity and environmental quality in Knocksink Wood Nature Reserve, Ireland. *Biology and Environment*: *Proceedings of the Royal Irish Academy*. **106B** (3): 215-223. Calviño-Cancela M., López de Silanes M.E., Rubido-Bará M., Uribarri J. 2013. The potential role of tree plantations in providing habitat for lichen epiphytes. *Forest Ecology and Management*. **291**: 386-395. Dittrich S., Hauck M., Schweigatz D., Dörfler I., Hühne R., Bade C., Jacob M., Leuschner C. 2013. Separating forest continuity from tree age effects on plant diversity in the ground and epiphyte vegetation of a Central European mountain spruce forest. *Flora*. **208** (4): 238-246. Dittrich S., Jacob M., Bade C., Leuschner C., Hauck M. 2014. The significance of deadwood for total bryophyte, lichen, and vascular plant diversity in an old-growth spruce forest. *Plant Ecology*. **215**: 1123-1137. Hofmeister J., Vondrák J., Ellis C., Coppins B., Sanderson N., Malíček J., Palice Z., Acton A., Svoboda S., Gloor R. 2022. High and balanced contribution of regional biodiversity hotspots to epiphytic and epixylic lichen species diversity in Great Britain. *Biological Conservation*. **226**: 109443.
Boreal	57-132	Bäcklund S., Jönsson M., Strengbom J., Frisch A., Thor G. 2016. A pine is a pine and a spruce is a spruce – The effect of tree species and stand age on epiphytic lichen communities. *PLoS ONE*. **11** (1): e0147004. Motiejūnaitė J. 2015. Lichens and allied fungi from the Čepkeliai State Nature Reserve (southern Lithuania). *Botanica Lithuanica*. **21** (1): 3-12.
Continental	7-138	Friedel A., Oheimb G.V., Dengler J., Härdtle W. 2006. Species diversity and species composition of epiphytic bryophytes and lichens – a comparison of managed and unmanaged beech forests in NE Germany. *Feddes Repertorium*. **117** (1-2): 172–185. Hofmeister J., Hošek J., Malíček J., Palice Z., Syravátková L., Steinová J., Černajová I. 2016. Large beech (*Fagus sylvatica*) trees as 'lifeboats' for lichen diversity in central European forests. *Biodiversity and Conservation*. **25**: 1073-1090. Nascimbene J., Lazzaro L., Benesperi R. 2015. Patterns of beta-diversity and similarity reveal biotic homogenization of epiphytic lichen communities associated with the spread of black locust forests. *Fungal Ecology*. **14**: 1-7. Nascimbene J., Marini L. 2010. Oak forest exploitation and black-locust invasion caused severe shifts in epiphytic lichen communities in Northern Italy. *Science of the Total Environment*. **408**: 5506-5512.

Continental	7-138	Malíček J., Palice Z., Vondrák J., Kostovčík M., Lenzová V., Hofmeister J. 2019. Lichens in old-growth and managed mountain spruce forests in the Czech Republic: assessment of biodiversity, functional traits and bioindicators. *Biodiversity and Conservation*. **28**: 3497-3528. Moning C., Werth S., Dziock F., Bässler C., Bradtka J., Hothorn T., Müller J. 2009. Lichen diversity in temperate montane forests is influenced by forest structure more than climate. *Forest Ecology and Management*. **258**: 745-751. Vicol I. 2010. Preliminary study on epiphytic lichens as an indicator of environmental quality in forests from around Bucharest Municipality (Romania). *Analele Universităţii din Oradea - Fascicula Biologie*. **17** (1): 200-207. Vicol I. 2012. The sinstructure of epiphytic lichens within forests from the eastern part of Bucharest Municipality (Romania). *Botanica Serbica*. **36** (2): 131-137. Vicol I. 2016. Ecological patterns of lichen species abundance in mixed forests of Eastern Romania. Annals of Forest Research. **59** (2): 237-248. Vicol I. 2020. The role of forest structure as a determinant of epiphytic lichens within managed temperate deciduous forests (southern Romania). *Environmental Engineering and Management Journal*. **19** (5): 797-807.
Mediterranean	11-59	Aragón G., Abuja L., Belinchón R., Martínez I. 2015. Edge type determines the intensity of forest edge effect on epiphytic communities. *European Journal of Forest Research*. **134** (3): 443-451. Aragón G., Martínez I., García A. 2012. Loss of epiphytic diversity along a latitudinal gradient in southern Europe. *Science of the Total Environment*. **426**:188–195. Belinchón R., Martínez I., Escudero A., Aragón G., Valladares F. 2007. Edge effects on epiphytic communities in a Mediterranean *Quercus pyrenaica* forest. *Journal of Vegetation Science*. **18**: 81-90. Brunialti G., Frati L., Loppi S. 2012. Fragmentation of Mediterranean oak forests affects the diversity of epiphytic lichens. *Nova Hedwigia*. **96** (1-2): 265-278. Cardós J.L.H., Martínez I., Calvo V., Aragón G. 2016. Epiphyte communities in Mediterranean fragmented forests: importance of the fragment size and the surroundings. *Landscape Ecology*. **31**: 1975-1995. Nascimbene J., Lazzaro L., Benesperi R. 2015. Patterns of beta-diversity and similarity reveal biotic homogenization of epiphytic lichen communities associated with the spread of black locust forests. *Fungal Ecology*. **14**: 1-7.
Steppic	9-56	Khodosovtsev O., Dymytrova L., Nadyeina O., Naumovych A., Khodosovtseva Y., Scheidegger C. 2013. A contribution to beech forest-associated epiphytic lichen-forming and lichenicolous fungi in Crimean Mts (Ukraine). *Flora Mediterranea*. **23**: 57-68. Vicol I. 2011. Epiphytic lichens as indicators of environmental quality within forestry ecosystems from Bucharest Municipality metropolitan area. *International Symposium "The Environment and Industry"*. Held by National Research and Development Institute for Industrial Ecology, Crystal Palace Ballrooms, Bucharest, Romania, 16-18 November 2011. Publishing House EstFalia. **2**: 303-309. ISSN 1843-5831. Vicol I. 2015. Synecological structure of the lichen synusiae within forest natural reserves from the Moldavian Plateau (Romania). *Turkish Journal of Botany*. **39** (1): 189-197.

Steppic	9-56	Vicol I. 2016. Ecological patterns of lichen species abundance in mixed forests of Eastern Romania. Annals of Forest Research. **59** (2): 237-248. Vicol I. 2020. The role of forest structure as a determinant of epiphytic lichens within managed temperate deciduous forests (southern Romania). *Environmental Engineering and Management Journal*. **19** (5): 797-807.

Table S11. Variation in the number of epiphytic lichen species across European ecological regions corresponding references.

European ecological regions	Variation in epiphytic lichen number	References
Alps conifer and mixed forests	15-59	Nascimbene J., Lazzaro L., Benesperi R. 2015. Patterns of beta-diversity and similarity reveal biotic homogenization of epiphytic lichen communities associated with the spread of black locust forests. *Fungal Ecology*. 14: 1-7. Nascimbene J., Marini L. 2010. Oak forest exploitation and black-locust invasion caused severe shifts in epiphytic lichen communities in Northern Italy. *Science of the Total Environment*. 408: 5506-5512. Nascimbene J., Marini L., Nimis P.L. 2007. Influence of forest management on epiphytic lichens in a temperate beech forest of northern Italy. *Forest Ecology and Management*. 247: 43-47. Nascimbene J., Marini L., Nimis P.L. 2009. Influence of tree species on epiphytic macrolichens in temperate mixed forests of northern Italy. *Canadian Journal of Forest Research*. 39: 785-791. Nascimbene J., Marini L., Nimis P.L. 2010. Epiphytic lichen diversity in old-growth and managed *Picea abies* stands in Alpine spruce forests. *Forest Ecology and Management*. 260 (5): 603-609.
Appenine deciduous montane forests	21-56	Nascimbene J., Di Cecco V., Di Martino L., Frascaroli F., Giordani P., Lelli C., Vallese C., Zannini P., Chiarucci A. 2019. Epiphytic lichens of the sacred natural site "Bosco di Sant'Antonio" (Majella National Park – Abruzzo). *Italian Botanist*. 7: 149–156. Ravera S., Genovesi V., Falasca A., Marchetti M., Chirici G. 2010. Lichen diversity of old-growth forests in Molise (Central-Southern Italy). *Italian Journal of Forest and Mountain Environments*. **65** (5): 505-517.
Baltic mixed forests	17-22	Friedel A., Oheimb G.V., Dengler J., Härdtle W. 2006. Species diversity and species composition of epiphytic bryophytes and lichens – a comparison of managed and unmanaged beech forests in NE Germany. *Feddes Repertorium*. 117 (1-2): 172–185.
Caledon conifer forests	89-217	Hofmeister J., Vondrák J., Ellis C., Coppins B., Sanderson N., Malíček J., Palice Z., Acton A., Svoboda S., Gloor R. 2022. High and balanced contribution of regional biodiversity hotspots to epiphytic and epixylic lichen species diversity in Great Britain. *Biological Conservation*. 226: 109443.
Cantabrian mixed forests	15-50	Aragón G., Martínez I., García A. 2012. Loss of epiphytic diversity along a latitudinal gradient in southern Europe. *Science of the Total Environment*. 426:188–195. Calviño-Cancela M., López de Silanes M.E., Rubido-Bará M., Uribarri J. 2013. The potential role of tree plantations in providing habitat for lichen epiphytes. *Forest Ecology and Management*. 291: 386-395.

Carpathian montane forests	11-346	Ardelean I.V., Keller C., Scheidegger C. 2013. Lichen flora of Rodnei Mountains National Park (Eastern Carpathians, Romania) including new records for the Romanian mycoflora. *Folia Cryptogamica Estonica* 50: 101-115. Çobanoğlu G., Yavuz M., Costache I., Radu I., Açikgöz B., Baloniu L. 2009. Epiphytic and terricolous lichens diversity in Cozia National Park (Romania). *Oltenia*. *Studii şi comunicări*. *Ştiinţele Naturii*. 25: 17-22. Çobanoğlu G., Yavuz M., Costache I., Radu I. 2011. Additional and new lichen records from Cozia National Park, Romania. *Mycotaxon*. 114: 193-196. Dymytrova L., Nadyeina O., Hobi M.L., Scheidegger C. 2014. Topographic and forest-stand variables determining epiphytic lichen diversity in the primeval beech forest in the Ukrainian Carpathians. *Biodiversity and Conservation*. 23: 1367–1394. Malíček J., Palice Z., Vondrák J., Kostovčík M., Lenzová V., Hofmeister J. 2019. Lichens in old-growth and managed mountain spruce forests in the Czech Republic: assessment of biodiversity, functional traits and bioindicators. *Biodiversity and Conservation*. **28**: 3497-3528. Vicol I. 2011. Preliminary study using lichen species diversity as an indicator of local environmental quality within two nature reserves from Romania. *Analele Universităţii din Oradea - Fascicula Biologie*. 18 (1): 53-58. Vicol, I. 2015. Effect of old-growth forest attributes on lichen species abundances: a study performed within Ceahlău National Park (Romania), *Cryptogamie Mycologie*. 36(4): 399-407. Vondrák J., Malíček J., Palice Z., Bouda F., Berger F., Sanderson N., Acton A., Pouska V., Kish R. 2018. Exploiting hot-spots; effective determination of lichen diversity in a Carpathian virgin forest. *PLoS ONE*. 13 (9): e0203540. Vondrák J., Malíček J., Šoun J., Pouska V. 2015. Epiphytic lichens of Stužica (E Slovakia) in the context of Central European old-growth forests. *Herzogia*. 28 (1): 104–126.
Caucasus mixed forests	537	Vondrák J., Urbanavichus G., Palice Z., Malíček J., Urbanavichene I., Kubásek J., Ellis C. 2019. The epiphytic lichen biota of Caucasian virgin forests: a comparator for European conservation. *Biodiversity and Conservation*. **28**: 3257–3276.
Celtic broadleaf forests	14-216	Brodeková L., Gilmer A., Dowding P., Fox H., Guttová A. 2006. An assessment of epiphytic lichen diversity and environmental quality in Knocksink Wood Nature Reserve, Ireland. *Biology and Environment*: *Proceedings of the Royal Irish Academy*. 106B (3): 215-223. Hofmeister J., Vondrák J., Ellis C., Coppins B., Sanderson N., Malíček J., Palice Z., Acton A., Svoboda S., Gloor R. 2022. High and balanced contribution of regional biodiversity hotspots to epiphytic and epixylic lichen species diversity in Great Britain. *Biological Conservation*. 226: 109443.

Central European mixed forests	7-132	Motiejūnaitė J. 2015. Lichens and allied fungi from the Čepkeliai State Nature Reserve (southern Lithuania). *Botanica Lithuanica*. 21 (1): 3-12. Hofmeister J., Hošek J., Malíček J., Palice Z., Syravátková L., Steinová J., Černajová I. 2016. Large beech (*Fagus sylvatica*) trees as 'lifeboats' for lichen diversity in central European forests. *Biodiversity and Conservation*. **25**: 1073-1090. Vicol I. 2010. Preliminary study on epiphytic lichens as an indicator of environmental quality in forests from around Bucharest Municipality (Romania). *Analele Universităţii din Oradea - Fascicula Biologie*. **17** (1): 200-207. Vicol I. 2011. Epiphytic lichens as indicators of environmental quality within forestry ecosystems from Bucharest Municipality metropolitan area. *International Symposium "The Environment and Industry"*. Held by National Research and Development Institute for Industrial Ecology, Crystal Palace Ballrooms, Bucharest, Romania, 16-18 November 2011. Publishing House EstFalia. **2**: 303-309. ISSN 1843-5831. Vicol I. 2012. The sinstructure of epiphytic lichens within forests from the eastern part of Bucharest Municipality (Romania). *Botanica Serbica*. **36** (2): 131-137. Vicol I. 2016. Ecological patterns of lichen species abundance in mixed forests of Eastern Romania. Annals of Forest Research. **59** (2): 237-248. Vicol I. 2020. The role of forest structure as a determinant of epiphytic lichens within managed temperate deciduous forests (southern Romania). *Environmental Engineering and Management Journal*. **19** (5): 797-807.
Crimean Submediterranean forest complex	56	Khodosovtsev O., Dymytrova L., Nadyeina O., Naumovych A., Khodosovtseva Y., Scheidegger C. 2013. A contribution to beech forest-associated epiphytic lichen-forming and lichenicolous fungi in Crimean Mts (Ukraine). *Flora Mediterranea*. **23**: 57-68.
East European forest steppe	12-19	Vicol I. 2015. Synecological structure of the lichen synusiae within forest natural reserves from the Moldavian Plateau (Romania). *Turkish Journal of Botany*. **39** (1): 189-197. Vicol I. 2016. Ecological patterns of lichen species abundance in mixed forests of Eastern Romania. Annals of Forest Research. **59** (2): 237-248.
English lowlands beech forests	161-179	Hofmeister J., Vondrák J., Ellis C., Coppins B., Sanderson N., Malíček J., Palice Z., Acton A., Svoboda S., Gloor R. 2022. High and balanced contribution of regional biodiversity hotspots to epiphytic and epixylic lichen species diversity in Great Britain. *Biological Conservation*. **226**: 109443.
Iberian conifer forests	41	Aragón G., Martínez I., García A. 2012. Loss of epiphytic diversity along a latitudinal gradient in southern Europe. *Science of the Total Environment*. **426**:188–195.

Iberian sclerophyllous and semi-deciduous forests	11-59	Aragón G., Martínez I., García A. 2012. Loss of epiphytic diversity along a latitudinal gradient in southern Europe. *Science of the Total Environment*. **426**:188–195. Belinchón R., Martínez I., Escudero A., Aragón G., Valladares F. 2007. Edge effects on epiphytic communities in a Mediterranean *Quercus pyrenaica* forest. *Journal of Vegetation Science*. **18**: 81-90. Cardós J.L.H., Martínez I., Calvo V., Aragón G. 2016. Epiphyte communities in Mediterranean fragmented forests: importance of the fragment size and the surroundings. *Landscape Ecology*. **31**: 1975-1995.
Italian sclerophyllous and semi-deciduous forests	54	Brunialti G., Frati L., Loppi S. 2012. Fragmentation of Mediterranean oak forests affects the diversity of epiphytic lichens. *Nova Hedwigia*. **96** (1-2): 265-278.
Northwest Iberian montane forests	60	Aragón G., Martínez I., García A. 2012. Loss of epiphytic diversity along a latitudinal gradient in southern Europe. *Science of the Total Environment*. **426**:188–195.
Pannonian mixed forests	113	Bilovitz P.O., Batič F., Mayrhofer H. 2011. Epiphytic lichen mycota of the virgin forest reserve Rajhenavski Rog (Slovenia). *Herzogia*. **24** (2): 315–324.
Scandinavian montane birch forests and grasslands	56-60	Werth S., Tømmervik H., Elvebakk A. 2005. Epiphytic macrolichen communities along regional gradients in northern Norway. *Journal of Vegetation Science*. **16**: 199-208.
Scandinavian and Russian taiga	57	Bäcklund S., Jönsson M., Strengbom J., Frisch A., Thor G. 2016. A pine is a pine and a spruce is a spruce – The effect of tree species and stand age on epiphytic lichen communities. *PLoS ONE*. **11** (1): e0147004.
Western European broadleaf forests	12-138	Dittrich S., Hauck M., Schweigatz D., Dörfler I., Hühne R., Bade C., Jacob M., Leuschner C. 2013. Separating forest continuity from tree age effects on plant diversity in the ground and epiphyte vegetation of a Central European mountain spruce forest. *Flora*. **208** (4): 238-246. Dittrich S., Jacob M., Bade C., Leuschner C., Hauck M. 2014. The significance of deadwood for total bryophyte, lichen, and vascular plant diversity in an old-growth spruce forest. *Plant Ecology*. **215**: 1123-1137. Hofmeister J., Hošek J., Malíček J., Palice Z., Syravátková L., Steinová J., Černajová I. 2016. Large beech (*Fagus sylvatica*) trees as 'lifeboats' for lichen diversity in central European forests. *Biodiversity and Conservation*. **25**: 1073-1090. Malíček J., Palice Z., Vondrák J., Kostovčík M., Lenzová V., Hofmeister J. 2019. Lichens in old-growth and managed mountain spruce forests in the Czech Republic: assessment of biodiversity, functional traits and bioindicators. *Biodiversity and Conservation*. **28**: 3497-3528. Moning C., Werth S., Dziock F., Bässler C., Bradtka J., Hothorn T., Müller J. 2009. Lichen diversity in temperate montane forests is influenced by forest structure more than climate. *Forest Ecology and Management*. **258**: 745-751.

References of these data are given in Table S5 in Supplementary Informations
Table S9. Total epiphytic lichen richness recorded based on reviewed articles. Index fungorum update

Abrothallus parmeliarum (Sommerf.) Arnold 1874
Absconditella delutula (Nyl.) Coppins & H. Kilias
Absconditella lignicola Vězda & Pišút
Absconditella rubra van den Boom, M. Brand & Suija
Acarospora fuscata (Ach.) Arnold
Acolium inquinans (Sm.) A. Massal.
Acolium karelicum (Vain.) M. Prieto & Wedin
Acrocordia gemmata (Ach.) A. Massal.
Agonimia allobata (Stizenb.) P. James
Agonimia borysthenica Dymytrova, Breuss & S.Y. Kondr.
Agonimia flabelliformis J.P. Halda, Czarnota & Guzow-Krzem.
Agonimia octospora Coppins & P. James
Agonimia opuntiella (Buschardt & Poelt) Vězda
Agonimia repleta Czarnota & Coppins
Agonimia tristicula (Nyl.) Zahlbr.
Alectoria sarmentosa (Ach.) Ach.
Allographa ruiziana (Fée) Lücking & Kalb
Alyxoria culmigena (Lib.) Ertz
Alyxoria ochrocheila (Nyl.) Ertz & Tehler
Alyxoria varia (Pers.) Ertz & Tehler
Alyxoria viridipruinosa (Coppins & Yahr) Ertz
Amandinea punctata (Hoffm.) Coppins & Scheid.
Anaptychia ciliaris (L.) Körb. ex A. Massal.
Anisomeridium biforme (Schaer.) R.C. Harris
Anisomeridium polypori (Ellis & Everh.) M.E. Barr
Anisomeridium ranunculosporum (Coppins & P. James) Coppins
Anisomeridium robustum Orange, Coppins & Aptroot
Anisomeridium viridescens (Coppins) R.C. Harris
Anisomeridium macrocarpum (Körb.) V. Wirth
Aplotomma turgidum (A. Massal.) A. Massal. ex Beltr.
Aquacidia viridifarinosa (Coppins & P. James) Aptroot
Arctomia delicatula Th. Fr.
Arctomia fascicularis (L.) Otálora & Wedin
Arthonia anglica Coppins

Arthonia atra (Pers.) A. Schneid.
Arthonia didyma Körb.
Arthonia elegans (Ach.) Almq.
Arthonia excipienda (Nyl.) Leight.
Arthonia ilicina Taylor
Arthonia invadens Coppins
Arthonia mediella Nyl.
Arthonia punctiformis Ach.
Arthonia radiata (Pers.) Ach.
Arthonia stellaris Kremp.
Arthonia vinosa Leight.
Arthonia excipienda (Nyl.) Leight.
Arthonia glaucella Nyl.
Arthonia helvola (Nyl.) Nyl.
Arthonia incarnata Kullh. ex Almq.
Arthopyrenia analepta (Ach.) A. Massal.
Arthopyrenia carneobrunneola Coppins
Arthopyrenia cerasi (Schrad.) A. Massal.
Arthopyrenia cinereopruinosa (Schaer.) A. Massal.
Arthopyrenia salicis A. Massal.
Arthopyrenia subcerasi (Vain.) Zahlbr.
Arthothelium macounii (G. Merr.) W.J. Noble
Arthothelium orbilliferum (Almq.) Hasse
Arthothelium ruanum (A. Massal.) Körb.
Arthothelium spectabile A. Massal.
Arthrorhaphis grisea Th. Fr.
Athallia cerinella (Nyl.) Arup, Frödén & Søchting
Athallia cerinelloides (Erichsen) Arup, Frödén & Søchting
Athallia holocarpa (Hoffm.) Arup, Frödén & Søchting
Athallia pyracea (Ach.) Arup, Frödén & Søchting
Bacidia absistens (Nyl.) Arnold
Bacidia albogranulosa Malíček, Palice, Vondrák & Kukwa
Bacidia arceutina (Ach.) Th. Fr.
Bacidia beckhausii Körb.
Bacidia biatorina (Körb.) Vain.
Bacidia caesiovirens S. Ekman & Holien
Bacidia circumspecta (Norrl. & Nyl.) Malme

Bacidia laurocerasi (Delise ex Duby) Zahlbr.
Bacidia polychroa (Th. Fr.) Körb.
Bacidia pycnidiata Czarnota & Coppins
Bacidia rosella (Pers.) De Not.
Bacidia rubella (Hoffm.) A. Massal.
Bacidia squamellosa (S. Ekman) Coppins & Aptroot
Bacidia viridescens (A. Massal.) Hellb.
Bacidia fraxinea Lönnr.
Bacidina assulata (Körb.) S. Ekman
Bacidina brandii (Coppins & van den Boom) M. Hauck & V. Wirth
Bacidina caligans (Nyl.) Llop & Hladun
Bacidina chloroticula (Nyl.) Vězda & Poelt
Bacidina delicata (Larbal. ex Leight.) V. Wirth & Vězda
Bacidina egenula (Nyl.) Vězda
Bacidina neosquamulosa (Aptroot & Herk) S. Ekman
Bacidina phacodes (Körb.) Vězda
Bacidina sulphurella (Samp.) M. Hauck & V. Wirth
Bactrospora corticola (Fr. ex Nyl.) Almq.
Bactrospora dryina (Ach.) A. Massal.
Bactrospora homalotropa (Nyl.) Egea & Torrente
Baeomyces rufus (Huds.) Rebent.
Bellemerea cinereorufescens (Ach.) Clauzade & Cl. Roux
Bellicidia incompta (Borrer) Kistenich, Timdal, Bendiksby & S. Ekman
Biatora amylacea ined.
Biatora bacidioides Printzen & Tønsberg
Biatora britannica Printzen, Lumbsch & Orange
Biatora carneoalbida (Müll. Arg.) Coppins
Biatora chrysantha (Zahlbr.) Printzen
Biatora efflorescens (Hedl.) Räsänen
Biatora epixanthoides (Nyl.) Diederich
Biatora globulosa (Flörke) Fr.
Biatora longispora (Degel.) Lendemer & Printzen
Biatora meiocarpa (Nyl.) Arnold
Biatora pontica Printzen & Tønsberg
Biatora radicicola Printzen, Palice & J.P. Halda
Biatora troendelagica Holien & Printzen
Biatora vernalis (L.) Fr.

Biatora veteranorum Coppins & Sérus.
Biatora betulicola Kullh.
Biatora fallax Hepp
Biatora mendax Arnold
Biatoridium delitescens (Arnold) Hafellner
Biatoridium monasteriense J. Lahm ex Körb.
Biatoropsis usnearum Räsänen
Bibbya vermifera (Nyl.) Kistenich, Timdal, Bendiksby & S. Ekman
Bilimbia sabuletorum (Schreb.) Arnold
Bilimbia tetramera De Not.
Blastenia ferruginea (Huds.) A. Massal.
Brianaria sylvicola (Flot. ex Körb.) S. Ekman & M. Svenss. 2014
Bryobilimbia hypnorum (Lib.) Fryday, Printzen & S. Ekman
Bryobilimbia sanguineoatra (Wulfen) Fryday, Printzen & S. Ekman
Bryoria bicolor (Hoffm.) Brodo & D. Hawksw.
Bryoria capillaris (Ach.) Brodo & D. Hawksw.
Bryoria furcellata (Fr.) Brodo & D. Hawksw.
Bryoria fuscescens (Gyeln.) Brodo & D. Hawksw.
Bryoria implexa (Hoffm.) Brodo & D. Hawksw.
Bryoria lanestris (Ach.) Brodo & D. Hawksw.
Bryoria nadvornikiana (Gyeln.) Brodo & D. Hawksw.
Bryoria subcana (Nyl. ex Stizenb.) Brodo & D. Hawksw.
Bryoria fremontii (Tuck.) Brodo & D. Hawksw.
Bryoria fuscescens var. fuscescens (Gyeln.) Brodo & D. Hawksw.
Bryoria glabra (Motyka) Brodo & D. Hawksw.
Bryoria simplicior (Vain.) Brodo & D. Hawksw.
Bryostigma apateticum (A.Massal.) ined.
Bryostigma biatoricola (Ihlen & Owe-Larss.) S.Y. Kondr. & Hur
Bryostigma lapidicola (Taylor) S.Y. Kondr. & Hur
Bryostigma muscigenum (Th. Fr.) Frisch & G. Thor
Buellia arborea Coppins & Tønsberg
Buellia disciformis (Fr.) Mudd
Buellia erubescens Arnold
Buellia griseovirens (Turner & Borrer ex Sm.) Almb.
Buellia hyperbolica Bagl.
Buellia schaereri De Not.
Bunodophoron melanocarpum (Sw.) Wedin

Byssoloma marginatum (Arnold) Sérus.
Calicium abietinum Pers.
Calicium adspersum Pers.
Calicium diploellum Nyl.
Calicium glaucellum Ach.
Calicium hyperelloides Nyl.
Calicium lenticulare Ach.
Calicium parvum Tibell
Calicium salicinum Pers.
Calicium tigillare (Ach.) Pers.
Calicium trabinellum (Ach.) Ach.
Calicium viride Pers.
Calicium pinastri Tibell
Caloplaca cerina (Hedw.) Th. Fr.
Caloplaca herbidella (Hue) H. Magn.
Caloplaca obscurella (J. Lahm ex Körb.) Th. Fr.
Caloplaca virescens (Sm.) Coppins
Caloplaca alstrupii Søchting
Caloplaca cerina var. cerina (Hedw.) Th. Fr.
Caloplaca monacensis (Leder.) Lettau
Caloplaca turkuensis (Vain.) Zahlbr.
Candelaria concolor (Dicks.) Arnold
Candelariella efflorescens R.C. Harris & W.R. Buck
Candelariella reflexa (Nyl.) Lettau
Candelariella vitellina (Hoffm.) Müll. Arg.
Candelariella xanthostigma (Pers. ex Ach.) Lettau
Candelariella faginea Nimis, Poelt & Puntillo
Carbonicola anthracophila (Nyl.) Bendiksby & Timdal
Catapyrenium psoromoides (Borrer) R. Sant.
Catillaria nigroclavata (Nyl.) J. Steiner
Catinaria atropurpurea (Schaer.) Vězda & Poelt
Catinaria isidioides
Catinaria neuschildii (Körb.) P. James
Celothelium ischnobelum (Nyl.) M.B. Aguirre
Cetraria sepincola (Ehrh.) Ach.
Cetraria islandica subsp. islandica (L.) Ach.
Cetrelia cetrarioides (Delise) W.L. Culb. & C.F. Culb.

Cetrelia chicitae (W.L. Culb.) W.L. Culb. & C.F. Culb.
Cetrelia monachorum (Zahlbr.) W.L. Culb. & C.F. Culb.
Cetrelia olivetorum (Nyl.) W.L. Culb. & C.F. Culb.
Chaenotheca brachypoda (Ach.) Tibell
Chaenotheca brunneola (Ach.) Müll. Arg.
Chaenotheca chrysocephala (Ach.) Th. Fr.
Chaenotheca confusa Tibell
Chaenotheca ferruginea (Turner) Mig.
Chaenotheca furfuracea (L.) Tibell
Chaenotheca gracilenta (Ach.) Mattsson & Middelb.
Chaenotheca gracillima (Vain.) Tibell
Chaenotheca hispidula (Ach.) Zahlbr.
Chaenotheca laevigata Nádv.
Chaenotheca phaeocephala (Turner) Th. Fr.
Chaenotheca stemonea (Ach.) Müll. Arg.
Chaenotheca trichialis (Ach.) Hellb.
Chaenotheca xyloxena Nádv.
Chaenotheca sphaerocephala Nádv.
Chaenotheca subroscida (Eitner) Zahlbr.
Chaenothecopsis debilis (Sm.) Tibell
Chaenothecopsis epithallina Tibell
Chaenothecopsis nana Tibell
Chaenothecopsis nigra Tibell
Chaenothecopsis pusilla (Ach.) A.F.W. Schmidt
Chaenothecopsis pusiola (Ach.) Vain.
Chaenothecopsis savonica (Räsänen) Tibell
Chaenothecopsis vainioana (Nádv.) Tibell
Chaenothecopsis viridialba (Kremp.) A.F.W. Schmidt
Chaenothecopsis viridireagens (Nádv.) A.F.W. Schmidt
Chaenothecopsis amurensis Titov
Cheiromycina petri D. Hawksw. & Poelt
Chrysothrix caesia (Flot.) Ertz & Tehler
Chrysothrix candelaris (L.) J.R. Laundon
Chrysothrix flavovirens Tønsberg
Circinaria caesiocinerea (Nyl. ex Malbr.) A. Nordin, Savić & Tibell
Cladonia bellidiflora (Ach.) Schaer.
Cladonia botrytes (K.G. Hagen) Willd.

Cladonia caespiticia (Pers.) P. Gaertn., B. Mey & Scherb.
Cladonia carneola (Fr.) Fr.
Cladonia cenotea (Ach.) Schaer.
Cladonia cervicornis (Ach.) Flot.
Cladonia chlorophaea (Flörke ex Sommerf.) Spreng.
Cladonia coccifera (L.) Willd.
Cladonia coniocraea (Flörke) Spreng.
Cladonia cornuta (L.) Baumg.
Cladonia cyathomorpha Stirt. ex Walt. Watson
Cladonia deformis (L.) Hoffm.
Cladonia digitata (L.) Baumg.
Cladonia fimbriata (L.) Fr.
Cladonia floerkeana (Fr.) Flörke
Cladonia furcata (Huds.) Baumg.
Cladonia glauca Flörke
Cladonia gracilis (L.) Willd.
Cladonia grayi G. Merr. ex Sandst.
Cladonia incrassata Flörke
Cladonia macilenta Hoffm.
Cladonia merochlorophaea Asahina
Cladonia norvegica Tønsberg & Holien
Cladonia ochrochlora Flörke
Cladonia parasitica (Hoffm.) Hoffm.
Cladonia pleurota (Flörke) Schaer.
Cladonia polydactyla (Flörke) Spreng.
Cladonia portentosa (Dufour) Coem.
Cladonia pyxidata (L.) Hoffm.
Cladonia ramulosa (With.) J.R. Laundon
Cladonia squamosa Hoffm.
Cladonia subulata (L.) Weber ex F.H. Wigg.
Cladonia sulphurina (Michx.) Fr.
Cladonia uncialis (L.) Weber ex F.H. Wigg.
Cladonia furcata subsp. furcata (Huds.) Schrad.
Cladonia macilenta subsp. macilenta Hoffm.
Cladonia pyxidata subsp. pyxidata (L.) Hoffm.
Cladonia squamosa var. squamosa Hoffm.
Cladonia uncialis subsp. uncialis (L.) Weber ex F.H. Wigg.

Cliostomum corrugatum (Ach.) Fr.
Cliostomum flavidulum Hafellner & Kalb
Cliostomum griffithii (Sm.) Coppins
Coenogonium luteum (Dicks.) Kalb & Lücking
Coenogonium pineti (Ach.) Lücking & Lumbsch
Coenogonium tavaresianum (Vězda) Lücking, Aptroot & Sipman
Collema flaccidum (Ach.) Ach.
Collema furfuraceum (Schaer.) Du Rietz
Collema nigrescens (Huds.) DC.
Collema subflaccidum Degel.
Collema subnigrescens Degel.
Coniocarpon cinnabarinum DC., in Lamarck & de Candolle
Coppinsiella substerilis (Vondrák, Palice & van den Boom) S.Y. Kondr. & Lőkös
Cresponea premnea (Ach.) Egea & Torrente
Crutarndina petractoides (P.M. Jørg. & Brodo) Parnmen, Lücking & Lumbsch
Cryptodiscus foveolaris (Rehm) Rehm
Cryptodiscus gloeocapsa (Nitschke ex Arnold) Baloch, Gilenstam & Wedin
Cryptolechia carneolutea (Turner) A. Massal.
Cyrtidula quercus (A. Massal.) Minks
Dendrographa decolorans (Turner & Borrer) Ertz & Tehler
Diarthonis spadicea (Leight.) Frisch, Ertz, Coppins & P.F. Cannon
Dichoporis phaea (Ach.) S.H. Jiang, Lücking & Sérus.
Dichoporis taylorii (Carroll ex Nyl.) S.H. Jiang, Lücking & Sérus.
Dictyocatenulata alba Finley & E.F. Morris
Diderma radiatum (L.) Morgan
Diploschistes muscorum (Scop.) R. Sant.
Diplotomma alboatrum (Hoffm.) Flot.
Dolichousnea longissima (Ach.) Articus
Elixia flexella (Ach.) Lumbsch
Enterographa brezhonega Sparrius & Aptroot
Enterographa crassa (DC.) Fée
Enterographa hutchinsiae (Leight.) A. Massal.
Enterographa sorediata Coppins & P. James
Eopyrenula grandicula Coppins
Eopyrenula leucoplaca (Wallr.) R.C. Harris
Evernia prunastri (L.) Ach.
Evernia divaricata (L.) Ach.

Evernia mesomorpha Nyl.
Felipes leucopellaeus (Ach.) Frisch & G. Thor
Fellhanera bouteillei (Desm.) Vězda
Fellhanera gyrophorica Sérus., Coppins, Diederich & Scheid.
Fellhanera subtilis (Vězda) Diederich & Sérus.
Fellhanera viridisorediata Aptroot, M. Brand & Spier
Fellhaneropsis myrtillicola (Erichsen) Sérus. & Coppins
Fellhaneropsis vezdae (Coppins & P. James) Sérus. & Coppins
Flavoparmelia caperata (L.) Hale
Flavoparmelia soredians (Nyl.) Hale
Flavoplaca flavocitrina (Nyl.) Arup, Frödén & Søchting
Flavopunctelia flaventior (Stirt.) Hale
Frutidella furfuracea (Anzi) M. Westb. & M. Svenss.
Frutidella pullata (Norman) Schmull
Fuscidea arboricola Coppins & Tønsberg
Fuscidea cyathoides (Ach.) V. Wirth & Vězda
Fuscidea lightfootii (Sm.) Coppins & P. James
Fuscidea praeruptorum (Du Rietz & H. Magn.) V. Wirth & Vězda
Fuscidea pusilla Tønsberg
Fuscopannaria ignobilis (Anzi) P.M. Jørg.
Fuscopannaria mediterranea (Tav.) P.M. Jørg.
Fuscopannaria olivacea (P.M. Jørg.) P.M. Jørg.
Gallowayella fulva (Hoffm.) S.Y. Kondr., Fedorenko, S. Stenroos, Kärnefelt, Elix, Hur & A. Thell
Glaucomaria carpinea (L.) S.Y. Kondr., Lőkös & Farkas
Glaucomaria leptyrodes (G.B.F. Nilsson) S.Y. Kondr., Lőkös & Farkas
Glaucomaria subcarpinea (Szatala) S.Y. Kondr., Lőkös & Farkas
Gomphillus calycioides (Delise ex Duby) Nyl.
Graphina anguina (Mont.) Müll. Arg.
Graphis elegans (Borrer ex Sm.) Ach.
Graphis inustuloides Lücking
Graphis scripta (L.) Ach.
Graphis macrospora Kremp.
Gyalecta derivata (Nyl.) Vain.
Gyalecta flotovii Körb.
Gyalecta herculina (Rehm) Baloch, Lumbsch & Wedin
Gyalecta ophiospora (Lettau) Baloch & Lücking

Gyalecta truncigena (Ach.) Hepp
Gyalecta ulmi (Sw.) Zahlbr.
Gyalecta croatica Zahlbr.
Gyalideopsis helvetica van den Boom & Vězda
Gyalideopsis muscicola P. James & Vězda
Gyrographa gyrocarpa (Flot.) Ertz & Tehler
Haematomma ochroleucum (Neck.) J.R. Laundon
Halecania viridescens Coppins & P. James
Hazslinszkya gibberulosa (Ach.) Körb.
Heterodermia obscurata (Nyl.) Trevis.
Heterodermia speciosa (Wulfen) Trevis.
Hyperphyscia adglutinata (Flörke) H. Mayrhofer & Poelt
Hypocenomyce scalaris (Ach.) M. Choisy
Hypocenomyce stoechadiana Abbassi Maaf & Cl. Roux
Hypogymnia farinacea Zopf
Hypogymnia hultenii (Degel.) Krog
Hypogymnia physodes (L.) Nyl.
Hypogymnia tubulosa (Schaer.) Hav.
Hypogymnia vittata (Ach.) Parrique
Hypogymnia austerodes (Nyl.) Räsänen
Hypogymnia bitteri (Lynge) Ahti
Hypotrachyna afrorevoluta (Krog & Swinscow) Krog & Swinscow
Hypotrachyna horrescens (Taylor) Krog & Swinscow
Hypotrachyna laevigata (Sm.) Hale
Hypotrachyna minarum (Vain.) Krog & Swinscow
Hypotrachyna revoluta (Flörke) Hale
Hypotrachyna sinuosa (Sm.) Hale
Hypotrachyna taylorensis (M.E. Mitch.) Hale
Hysteropatella prostii (Duby) Rehm
Icmadophila ericetorum (L.) Zahlbr.
Imshaugia aleurites (Ach.) S.L.F. Mey.
Inoderma byssaceum (Weigel) Gray
Inoderma subabietinum (Coppins & P. James) Ertz & Frisch
Ivanpisutia ocelliformis (Nyl.) S.Y. Kondr.
Jamesiella anastomosans (P. James & Vězda) Lücking, Sérus. & Vězda
Japewia dasaea ined.
Japewia subaurifera Muhr & Tønsberg

Japewia tornoensis (Nyl.) Tønsberg
Karstenia rhopaloides (Sacc.) Baral
Kirschsteiniothelia atra (Corda) D. Hawksw.
Kirschsteiniothelia recessa (Cooke & Peck) D. Hawksw.
Koerberia biformis A. Massal.
Lambiella furvella (Nyl. ex Mudd) M. Westb. & Resl
Lasallia pustulata (L.) Mérat
Lathagrium auriforme (With.) Otálora, P.M. Jørg. & Wedin
Lecanactis abietina (Ach.) Körb.
Lecania croatica (Zahlbr.) Kotlov
Lecania cyrtella (Ach.) Th. Fr.
Lecania cyrtellina (Nyl.) Zahlbr.
Lecania naegelii (Hepp) Diederich & van den Boom
Lecanographa lyncea (Sm.) Egea & Torrente
Lecanora aitema (Ach.) Hepp
Lecanora albella (Pers.) Ach.
Lecanora albellula (Nyl.) Th. Fr.
Lecanora alboflavida Taylor
Lecanora argentata (Ach.) Röhl.
Lecanora barkmaniana Aptroot & Herk
Lecanora cadubriae (A. Massal.) Hedl.
Lecanora campestris (Schaer.) Hue
Lecanora chlarotera Nyl.
Lecanora cinereofusca H. Magn.
Lecanora compallens Herk & Aptroot
Lecanora confusa Almb.
Lecanora expallens Ach.
Lecanora farinacea Fée
Lecanora farinaria Borrer
Lecanora gangaleoides Nyl.
Lecanora glabrata (Ach.) Malme
Lecanora horiza (Ach.) Röhl.
Lecanora hybocarpa (Tuck.) Brodo
Lecanora hypoptella (Nyl.) Grummann
Lecanora intricata (Ach.) Ach.
Lecanora intumescens (Rebent.) Rabenh.
Lecanora jamesii J.R. Laundon

Lecanora polytropa (Hoffm.) Rabenh.
Lecanora pulicaris (Pers.) Ach.
Lecanora rugosella Zahlbr.
Lecanora saligna (Schrad.) Zahlbr.
Lecanora sarcopidoides (A. Massal.) Hedl.
Lecanora stanislai Guzow-Krzem., Łubek, Malíček & Kukwa
Lecanora strobilina (Spreng.) Kieff.
Lecanora subfusca (L.) Ach.
Lecanora subintricata (Nyl.) Th. Fr.
Lecanora subrugosa Nyl.
Lecanora subsaligna M. Brand & van den Boom
Lecanora substerilis Malíček & Vondrák
Lecanora symmicta (Ach.) Ach.
Lecanora umbrina (Ach.) A. Massal.
Lecanora campestris subsp. campestris (Schaer.) Hue
Lecanora circumborealis Brodo & Vitik.
Lecanora exspersa Nyl.
Lecanora impudens Degel.
Lecanora norvegica Tønsberg
Lecanora phaeostigma (Körb.) Almb.
Lecanora symmicta var. symmicta (Ach.) Ach.
Lecidea albofuscescens Nyl.
Lecidea albohyalina (Nyl.) Th. Fr.
Lecidea berengeriana (A. Massal.) Nyl.
Lecidea erythrophaea Flörke ex Sommerf.
Lecidea helvola (Körb. ex Hellb.) Th. Fr.
Lecidea leprarioides Tønsberg
Lecidea nylanderi (Anzi) Th. Fr.
Lecidea turgidula Fr.
Lecidea turficola (Hellb.) Th. Fr.
Lecidella albida Hafellner
Lecidella carpathica Körb.
Lecidella elaeochroma (Ach.) M. Choisy
Lecidella euphorea (Flörke) Kremp.
Lecidella flavosorediata (Vězda) Hertel & Leuckert
Lecidella pulveracea (Flot. ex Schaer.) P. Syd.
Lecidella subviridis Tønsberg

Lecidella achristotera (Nyl.) Hertel & Leuckert
Lecidella elaeochroma f. elaeochroma (Ach.) M. Choisy
Lendemeriella lucifuga (G. Thor) S.Y. Kondr.
Lendemeriella sorocarpa (Vain.) S.Y. Kondr.
Lepra albescens (Huds.) Hafellner
Lepra amara (Ach.) Hafellner
Lepra multipuncta (Turner) Hafellner
Lepra ophthalmiza (Nyl.) Hafellner
Lepra pulvinata (Erichsen) Hafellner
Lepra trachythallina (Erichsen) Lendemer & R.C. Harris
Lepra waghornei (Hulting) Lendemer & R.C. Harris
Lepraria eburnea J.R. Laundon
Lepraria elobata Tønsberg
Lepraria incana (L.) Ach.
Lepraria jackii Tønsberg
Lepraria lobificans Nyl.
Lepraria membranacea (Dicks.) Vain.
Lepraria rigidula (B. de Lesd.) Tønsberg
Lepraria sylvicola Orange
Lepraria umbricola Tønsberg
Lepraria vouauxii (Hue) R.C. Harris
Leproplaca chrysodeta (Vain.) J.R. Laundon ex Ahti
Leptogidium dendriscum (Nyl.) Nyl.
Leptogium brebissonii Mont.
Leptogium burgessii (L.) Mont.
Leptogium cochleatum (Dicks.) P.M. Jørg. & P. James
Leptogium coralloideum (Meyen & Flot.) Vain.
Leptogium cyanescens (Ach.) Körb.
Leptogium furfuraceum (Harm.) Sierk
Leptogium hibernicum M.E. Mitch. ex P.M. Jørg.
Leptogium quercicola Otálora, Aragón, I. Martínez & M.C. Molina
Leptogium saturninum (Dicks.) Nyl.
Leptogium teretiusculum Wallr. ex Arnold
Leptorhaphis epidermidis (Ach.) Th. Fr.
Leptorhaphis maggiana (A. Massal.) Körb.
Leptosillia wienkampii (J. Lahm ex Hazsl.) Voglmayr & Jaklitsch
Letharia vulpina (L.) Hue

Leucodermia leucomelos (L.) Kalb
Lichenoconium erodens M.S. Christ. & D. Hawksw.
Lichenomphalia umbellifera (L.) Redhead, Lutzoni, Moncalvo & Vilgalys
Lichenostigma maureri Hafellner
Lithocalla ecorticata (J.R. Laundon) Orange
Lithothelium hyalosporum (Nyl.) Aptroot
Lobaria hallii (Tuck.) Zahlbr.
Lobaria pulmonaria (L.) Hoffm.
Lobarina scrobiculata (Scop.) Nyl. ex Cromb.
Lopadium disciforme (Flot.) Kullh.
Lophiostoma corticola (Fuckel) E.C.Y. Liew, Aptroot & K.D. Hyde
Loxospora cismonica (Beltr.) Hafellner
Loxospora confusa Lendemer
Loxospora cristinae Guzow-Krzem., Łubek, Kubiak & Kukwa
Loxospora elatina (Ach.) A. Massal.
Marchantiana asserigena (Stizenb. ex J. Lahm) Søchting & Arup
Maronea constans (Nyl.) Hepp
Megalaria grossa (Pers. ex Nyl.) Hafellner
Megalaria laureri (Hepp ex Th. Fr.) Hafellner
Megalaria pulverea (Borrer) Hafellner & E. Schreiner
Megalospora tuberculosa (Fée) Sipman
Megaspora verrucosa (Ach.) Arcadia & A. Nordin
Melanelia glabratula subsp. glabratula (Lamy) Essl.
Melanelixia fuliginosa (Fr. ex Duby) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch
Melanelixia glabra (Schaer.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch
Melanelixia glabratula (Lamy) Sandler & Arup
Melanelixia subargentifera (Nyl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch
Melanelixia subaurifera (Nyl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch
Melanohalea elegantula (Zahlbr.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch
Melanohalea exasperata (De Not.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch
Melanohalea exasperatula (Nyl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch
Melanohalea laciniatula (Flagey ex H. Olivier) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch

Melanohalea olivacea (L.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch
Melanohalea septentrionalis (Lynge) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch
Melaspilea amota Nyl.
Melaspilea gibberulosa (Ach.) Zwackh
Melaspilea ochrothalamia Nyl.
Melaspileella proximella (Nyl.) Boud.
Menegazzia subsimilis (H. Magn.) R. Sant.
Menegazzia terebrata (Hoffm.) A. Massal.
Micarea adnata Coppins
Micarea alabastrites (Nyl.) Coppins
Micarea botryoides (Nyl.) Coppins
Micarea byssacea (Th. Fr.) Czarnota, Guzow-Krzem. & Coppins
Micarea cinerea (Schaer.) Hedl.
Micarea coppinsii Tønsberg
Micarea denigrata (Fr.) Hedl.
Micarea doliiformis (Coppins & P. James) Coppins & Sérus.
Micarea globulosella (Nyl.) Coppins
Micarea hedlundii Coppins
Micarea lignaria (Ach.) Hedl.
Micarea lithinella (Nyl.) Hedl.
Micarea melaena (Nyl.) Hedl.
Micarea micrococca (Körb.) Gams ex Coppins
Micarea misella (Nyl.) Hedl.
Micarea myriocarpa V. Wirth & Vězda ex Coppins
Micarea nigella Coppins
Micarea nitschkeana (J. Lahm ex Rabenh.) Harm.
Micarea oleoprasina ined.
Micarea peliocarpa (Anzi) Coppins & R. Sant.
Micarea prasina Fr.
Micarea pycnidiophora Coppins & P. James
Micarea soralifera Guzow-Krzem., Czarnota, Łubek & Kukwa
Micarea stipitata Coppins & P. James
Micarea substipitata ined.
Micarea synotheoides (Nyl.) Coppins
Micarea viridileprosa Coppins & van den Boom
Micarea xanthonica Coppins & Tønsberg

Microcalicium arenarium (Hampe ex A. Massal.) Tibell
Microcalicium disseminatum (Ach.) Vain.
Montanelia sorediata (Ach.) Divakar, A. Crespo, Wedin & Essl.
Muellerella hospitans Stizenb.
Multiclavula mucida (Pers.) R.H. Petersen
Mycobilimbia parvilobulosa Sarrión, Aragón & Hafellner
Mycobilimbia sphaeroides (Dicks.) S. Ekman & Printzen
Mycoblastus affinis (Schaer.) T. Schauer
Mycoblastus alpinus (Fr.) Th. Fr. ex Hellb.
Mycoblastus caesius (Coppins & P. James) Tønsberg
Mycoblastus sanguinarius (L.) Norman
Mycocalicium subtile (Pers.) Szatala
Mycomicrothelia atlantica D. Hawksw. & Coppins
Mycomicrothelia confusa D. Hawksw.
Mycomicrothelia wallrothii (Hepp) D. Hawksw.
Mycoporum antecellens (Nyl.) R.C. Harris
Mycoporum lacteum (Ach.) R.C. Harris
Naetrocymbe fraxini (A. Massal.) R.C. Harris
Naetrocymbe nitescens (Salwey ex Mudd) M.B. Aguirre, P.F. Cannon & Minter
Naetrocymbe punctiformis (Pers.) R.C. Harris
Naetrocymbe rhyponta (Ach.) R.C. Harris
Naevia dispersa (Schrad.) Thiyagaraja, Lücking & K.D. Hyde
Nephroma bellum (Spreng.) Tuck.
Nephroma expallidum (Nyl.) Nyl.
Nephroma laevigatum Ach.
Nephroma parile (Ach.) Ach.
Nephroma resupinatum (L.) Ach.
Nephromopsis chlorophylla (Willd.) Divakar, A. Crespo & Lumbsch
Nevesia sampaiana (Tav.) P.M. Jørg., L. Lindblom, Wedin & S. Ekman
Normandina acroglypta (Norman) Aptroot
Normandina pulchella (Borrer) Nyl.
Obryzum corniculatum (Hoffm.) Wallr.
Ochrolechia alboflavescens (Wulfen) Zahlbr.
Ochrolechia androgyna (Hoffm.) Arnold
Ochrolechia arborea (Kreyer) Almb.
Ochrolechia balcanica Verseghy
Ochrolechia brodoi Kukwa

Ochrolechia frigida (Sw.) Lynge
Ochrolechia inaequatula (Nyl.) Zahlbr.
Ochrolechia mahluensis Räsänen
Ochrolechia microstictoides Räsänen
Ochrolechia pallescens (L.) A. Massal.
Ochrolechia subviridis (Høeg) Erichsen
Ochrolechia szatalaensis Verseghy
Ochrolechia tartarea (L.) A. Massal.
Ochrolechia trochophora (Vain.) Oshio
Ochrolechia turneri (Sm.) Zopf
Opegrapha arthoniicola Coppins & S.Y. Kondr.
Opegrapha fumosa Coppins & P. James
Opegrapha niveoatra (Borrer) J.R. Laundon
Opegrapha thelotrematis Coppins
Opegrapha trochodes Coppins, F. Berger & Ertz
Opegrapha varia var. varia Pers.
Opegrapha vermicellifera (J. Kunze) J.R. Laundon
Opegrapha vulgata (Ach.) Ach.
Opeltia flavorubescens (Huds.) S.Y. Kondr. & Hur
Oxneria fallax (Arnold) S.Y. Kondr. & Kärnefelt
Pachyphiale carneola (Ach.) Arnold
Pachyphiale fagicola (Arnold) Zwackh
Palicella filamentosa (Stirt.) Rodr. Flakus & Printzen
Pannaria conoplea (Ach.) Bory
Pannaria rubiginosa (Ach.) Delise
Parmelia ernstiae Feuerer & A. Thell
Parmelia omphalodes (L.) Ach.
Parmelia saxatilis (L.) Ach.
Parmelia serrana A. Crespo, M.C. Molina & D. Hawksw.
Parmelia submontana Hale
Parmelia sulcata Taylor
Parmeliella parvula P.M. Jørg.
Parmeliella testacea P.M. Jørg.
Parmeliella thriptophylla (Ach.) Müll. Arg.
Parmelina carporrhizans (Taylor) Hale
Parmelina pastillifera (Harm.) Hale
Parmelina quercina (Willd.) Hale

Parmelina tiliacea (Hoffm.) Hale
Parmeliopsis ambigua (Hoffm.) Nyl.
Parmeliopsis hyperopta (Ach.) Vain.
Parmotrema arnoldii (Du Rietz) Hale
Parmotrema crinitum (Ach.) M. Choisy
Parmotrema perlatum (Huds.) M. Choisy
Parmotrema reticulatum (Taylor) M. Choisy
Parmotrema tinctorum (Despr. ex Nyl.) Hale
Pectenia atlantica (Degel.) P.M. Jørg., L. Lindblom, Wedin & S. Ekman
Pectenia plumbea (Lightf.) P.M. Jørg., L. Lindblom, Wedin & S. Ekman
Peltigera aphthosa (L.) Willd.
Peltigera canina (L.) Willd.
Peltigera collina (Ach.) Schrad.
Peltigera degenii Gyeln.
Peltigera elisabethae Gyeln.
Peltigera horizontalis (Huds.) Baumg.
Peltigera hymenina (Ach.) Delise
Peltigera leucophlebia (Nyl.) Gyeln.
Peltigera malacea (Ach.) Funck
Peltigera membranacea (Ach.) Nyl.
Peltigera neckeri Hepp ex Müll. Arg.
Peltigera polydactylon (Neck.) Hoffm.
Peltigera ponojensis Gyeln.
Peltigera praetextata (Flörke ex Sommerf.) Zopf
Peltigera retifoveata Vitik.
Peltigera rufescens (Weiss) Humb.
Peltigera neopolydactyla (Gyeln.) Gyeln.
Peridiothelia fuliguncta (Norman) D. Hawksw.
Pertusaria amara f. amara (Ach.) Nyl.
Pertusaria borealis Erichsen
Pertusaria coccodes (Ach.) Nyl.
Pertusaria constricta Erichsen
Pertusaria coronata (Ach.) Th. Fr.
Pertusaria dacica Erichsen
Pertusaria flavida (DC.) J.R. Laundon
Pertusaria hymenea (Ach.) Schaer.
Pertusaria leioplaca (Ach.) DC.

Pertusaria macounii (I.M. Lamb) Dibben
Pertusaria pertusa (L.) Tuck.
Pertusaria pupillaris (Nyl.) Th. Fr.
Pertusaria pustulata (Ach.) Duby
Pertusaria albescens var. albescens (Huds.) M. Choisy & Werner
Pertusaria pertusa var. pertusa (L.) Tuck.
Phacographa zwackhii (A. Massal. ex Zwackh) Hafellner
Phaeographis dendritica (Ach.) Müll. Arg.
Phaeographis inusta (Ach.) Müll. Arg.
Phaeographis lyellii (Sm.) Zahlbr.
Phaeographis smithii (Leight.) B. de Lesd.
Phaeophyscia ciliata (Hoffm.) Moberg
Phaeophyscia endococcina (Körb.) Moberg
Phaeophyscia endophoenicea (Harm.) Moberg
Phaeophyscia hirsuta (Mereschk.) Essl.
Phaeophyscia insignis (Mereschk.) Moberg
Phaeophyscia nigricans (Flörke) Moberg
Phaeophyscia orbicularis (Neck.) Moberg
Phaeophyscia pusilloides (Zahlbr.) Essl.
Phaeophyscia sciastra (Ach.) Moberg
Phaeophyscia rubropulchra (Degel.) Moberg
Phlyctis agelaea (Ach.) Flot.
Phlyctis argena (Ach.) Flot.
Phyllospora rosei ined.
Physcia adscendens H. Olivier
Physcia aipolia (Ehrh. ex Humb.) Fürnr.
Physcia biziana (A. Massal.) Zahlbr.
Physcia caesia (Hoffm.) Fürnr.
Physcia dubia (Hoffm.) Lettau
Physcia leptalea (Ach.) DC.
Physcia stellaris (L.) Nyl.
Physcia tenella (Scop.) DC.
Physcia tribacia (Ach.) Nyl.
Physcia tribacioides Nyl.
Physciella chloantha (Ach.) Essl.
Physconia detersa (Nyl.) Poelt
Physconia distorta (With.) J.R. Laundon

Physconia enteroxantha (Nyl.) Poelt
Physconia grisea (Lam.) Poelt
Physconia perisidiosa (Erichsen) Moberg
Physconia servitii (Nádv.) Poelt
Physconia subpulverulenta (Szatala) Poelt
Physconia venusta (Ach.) Poelt
Piccolia ochrophora (Nyl.) Hafellner
Placynthiella dasaea (Stirt.) Tønsberg
Placynthiella icmalea (Ach.) Coppins & P. James
Placynthiella oligotropha (J.R. Laundon) Coppins & P. James
Placynthiella uliginosa (Schrad.) Coppins & P. James
Platismatia glauca (L.) W.L. Culb. & C.F. Culb.
Plectocarpon lichenum (Sommerf.) D. Hawksw.
Pleurosticta acetabulum (Neck.) Elix & Lumbsch
Polyblastidium japonicum (M. Satô) Kalb
Polycauliona candelaria (L.) Frödén, Arup & Søchting
Polycauliona polycarpa (Hoffm.) Frödén, Arup & Søchting
Polyozosia dispersa (Pers.) S.Y. Kondr., Lőkös & Farkas
Polyozosia hagenii (Ach.) S.Y. Kondr., Lőkös & Farkas
Polyozosia persimilis (Th. Fr.) S.Y. Kondr., Lőkös & Farkas
Polyozosia populicola (DC.) S.Y. Kondr., Lőkös & Farkas
Polyozosia sambuci (Pers.) S.Y. Kondr., Lőkös & Farkas
Porina coralloidea P. James
Porina hibernica P. James & Swinscow
Porina lectissima (Fr.) Zahlbr.
Porina leptosperma Müll. Arg.
Porina multipuncta (Coppins & P. James) Ertz, Coppins & Frisch
Porina rosei Sérus.
Porpidia macrocarpa (DC.) Hertel & A.J. Schwab
Protopannaria pezizoides (Weber) P.M. Jørg. & S. Ekman
Protoparmelia ochrococca (Nyl.) P.M. Jørg., Rambold & Hertel
Protoparmeliopsis muralis (Schreb.) M. Choisy
Pseudevernia furfuracea var. furfuracea (L.) Zopf
Pseudevernia furfuracea (L.) Zopf
Pseudocyphellaria crocata (L.) Vain.
Pseudocyphellaria norvegica (Gyeln.) P. James
Pseudographis pinicola (Nyl.) Rehm

Pseudosagedia aenea (Körb.) Hafellner & Kalb
Pseudosagedia borreri (Trevis.) Hafellner & Kalb
Pseudosagedia linearis (Leight.) Hafellner & Kalb
Pseudoschismatomma rufescens (Pers.) Ertz & Tehler
Psilolechia clavulifera (Nyl.) Coppins
Psoroglaena abscondita (Coppins & Vězda) Hafellner & Türk
Psoroglaena dictyospora (Orange) H. Harada
Psoroglaena stigonemoides (Orange) Henssen
Psoroma hypnorum (Vahl) Gray
Punctelia borreri (Turner ex Sm.) Krog
Punctelia jeckeri (Roum.) Kalb
Punctelia reddenda (Stirt.) Krog
Punctelia subrudecta (Nyl.) Krog
Pycnora sorophora (Vain.) Hafellner
Pyrenula chlorospila Arnold
Pyrenula coryli A. Massal.
Pyrenula dermatodes (Borrer) Schaer.
Pyrenula laevigata (Pers.) Arnold
Pyrenula macrospora (Degel.) Coppins & P. James
Pyrenula nitida (Weigel) Ach.
Pyrenula nitidella (Flörke ex Schaer.) Müll. Arg.
Pyrenula occidentalis (R.C. Harris) R.C. Harris
Pyrrhospora quernea (Dicks.) Körb.
Pyxine sorediata (Ach.) Mont.
Ramalina calicaris (L.) Röhl.
Ramalina canariensis J. Steiner
Ramalina farinacea (L.) Ach.
Ramalina fastigiata (Pers.) Ach.
Ramalina fraxinea (L.) Ach.
Ramalina obtusata (Arnold) Bitter
Ramalina pollinaria (Westr.) Ach.
Ramalina roesleri Hochst. ex Schaer.
Ramalina thrausta (Ach.) Nyl.
Ramboldia cinnabarina (Sommerf.) Kalb, Lumbsch & Elix
Ramonia chrysophaea (Pers.) Vězda
Ramonia luteola Vězda
Rebentischia pomiformis P. Karst.

Reichlingia anombrophila (Coppins & P. James) Frisch
Reichlingia leopoldii Diederich & Scheid.
Reichlingia zwackhii (Sandst.) Frisch & G. Thor
Rhaphidicyrtis trichosporella (Nyl.) Vain.
Rhizocarpon polycarpum (Hepp) Th. Fr.
Ricasolia amplissima (Scop.) De Not.
Ricasolia virens (With.) H.H. Blom & Tønsberg
Rinodina albana (A. Massal.) A. Massal.
Rinodina capensis Hampe
Rinodina colobina (Ach.) Th. Fr.
Rinodina conradii Körb.
Rinodina degeliana Coppins
Rinodina efflorescens Malme
Rinodina exigua (Ach.) Gray
Rinodina freyi H. Magn.
Rinodina griseosoralifera Coppins
Rinodina isidioides (Borrer) H. Olivier
Rinodina malangica (Norman) Arnold
Rinodina orculata Poelt & M. Steiner
Rinodina pyrina (Ach.) Arnold
Rinodina roboris (Dufour ex Nyl.) Arnold
Rinodina septentrionalis Malme
Rinodina sophodes (Ach.) A. Massal.
Rinodina subpariata (Nyl.) Zahlbr.
Rinodina trevisanii (Hepp) Körb.
Ropalospora viridis (Tønsberg) Tønsberg
Rostania occultata (Bagl.) Otálora, P.M. Jørg. & Wedin
Sarea difformis (Fr.) Fr.
Sarea resinae (Fr.) Kuntze
Schaereria corticola Muhr & Tønsberg
Schismatomma graphidioides (Leight. ex Lettau) Zahlbr.
Schizotrema quercicola (Coppins & P. James) Ertz, Frisch & Sanderson
Sclerococcum parasiticum (Flörke) Ertz & Diederich
Sclerophora amabilis (Tibell) Tibell
Sclerophora farinacea (Chevall.) Chevall.
Sclerophora pallida (Pers.) Y.J. Yao & Spooner
Sclerophora peronella (Ach.) Tibell

Scoliciosporum chlorococcum (Graewe ex Stenh.) Vězda
Scoliciosporum curvatum Sérus.
Scoliciosporum gallurae Vězda & Poelt
Scoliciosporum pruinosum (P. James) Vězda
Scoliciosporum sarothamni (Vain.) Vězda
Scoliciosporum schadeanum (Erichsen) Vězda
Scoliciosporum umbrinum (Ach.) Lojka
Scutula igniarii (Nyl.) S. Ekman
Scytinium aragonii (Otálora) Otálora, P.M. Jørg. & Wedin
Scytinium fragrans (Sm.) Otálora, P.M. Jørg. & Wedin
Scytinium gelatinosum (With.) Otálora, P.M. Jørg. & Wedin
Scytinium intermedium (Arnold) Otálora, P.M. Jørg. & Wedin
Scytinium lichenoides (L.) Otálora, P.M. Jørg. & Wedin
Scytinium magnussonii (Degel. & P.M. Jørg.) Otálora, P.M. Jørg. & Wedin
Scytinium pulvinatum (Hoffm.) Otálora, P.M. Jørg. & Wedin
Scytinium subtile (Schrad.) Otálora, P.M. Jørg. & Wedin
Scytinium teretiusculum (Wallr.) Otálora, P.M. Jørg. & Wedin
Segestria byssophila (Körb. ex Hepp) Zahlbr.
Segestria leptalea (Durieu & Mont.) R.C. Harris
Snippocia nivea (D. Hawksw. & P. James) Ertz & Sanderson
Solitaria chrysophthalma (Degel.) Arup, Søchting & Frödén
Solorina saccata (L.) Ach.
Sphaerophorus globosus (Huds.) Vain.
Sphinctrina anglica Nyl.
Sphinctrina turbinata Fr.
Sphinctrina tubaeformis A. Massal.
Sporodictyon hegetschweileri (Nägeli) Hepp ex Hazsl.
Sporodophoron cretaceum (Hue) Ertz & Frisch
Stenocybe nitida (Mont.) R. Heim
Stenocybe pullatula (Ach.) Stein
Stenocybe septata (Leight.) A. Massal.
Sticta canariensis (Bory) Bory ex Delise
Sticta fuliginosa (With.) Ach.
Sticta limbata (Sm.) Ach.
Sticta sylvatica (Huds.) Ach.
Stigmidium congestum (Körb.) Triebel
Stigmidium microspilum (Körb.) D. Hawksw.

Straminella conizaeoides (Nyl. ex Cromb.) S.Y. Kondr., Lőkös & Farkas
Straminella varia (Hoffm.) S.Y. Kondr., Lőkös & Farkas
Strangospora microhaema (Norman) R.A. Anderson
Strangospora moriformis (Ach.) Stein
Strangospora pinicola (A. Massal.) Körb.
Strigula inconspicua ined.
Swinscowia glabra (A. Massal.) S.H. Jiang, Lücking & Sérus.
Swinscowia jamesii (Swinscow) S.H. Jiang, Lücking & Sérus.
Swinscowia stigmatella (Ach.) S.H. Jiang, Lücking & Sérus.
Swinscowia thelopsidoides (Coppins, Cl. Roux & Sérus.) S.H. Jiang, Lücking & Sérus.
Synarthonia astroidestera (Nyl.) Ertz & Van den Broeck
Synarthonia ochracea (Dufour) Van den Broeck & Ertz
Tephromela atra (Huds.) Hafellner
Tetramelas chloroleucus (Körb.) A. Nordin
Tetramelas insignis (Körb.) Kalb
Thelenella muscorum var. muscorum (Th. Fr.) Vain.
Thelenella muscorum (Th. Fr.) Vain.
Thelidium zwackhii (Hepp) A. Massal.
Thelocarpon laureri (Flot.) Nyl.
Thelopsis corticola (Coppins & P. James) Sanderson & Ertz
Thelopsis flaveola Arnold
Thelopsis rubella Nyl.
Thelotrema lepadinum (Ach.) Ach.
Thelotrema macrosporum P.M. Jørg. & P. James
Thelotrema suecicum (H. Magn.) P. James
Toensbergia leucococca (R. Sant.) Bendiksby & Timdal
Tomasellia gelatinosa (Chevall.) Zahlbr.
Tomasellia arthonioides (A. Massal.) A. Massal.
Toniniopsis bagliettoana (A. Massal. & De Not.) Kistenich & Timdal
Toniniopsis subincompta (Nyl.) Kistenich, Timdal, Bendiksby & S. Ekman
Trapelia corticola Coppins & P. James
Trapeliopsis flexuosa (Fr.) Coppins & P. James
Trapeliopsis gelatinosa (Flörke) Coppins & P. James
Trapeliopsis glaucolepidea (Nyl.) Gotth. Schneid.
Trapeliopsis granulosa (Hoffm.) Lumbsch
Trapeliopsis pseudogranulosa Coppins & P. James
Trapeliopsis viridescens (J.F. Gmel.) Coppins & P. James

Tremella hypogymniae Diederich & M.S. Christ.
Tuckneraria laureri (Kremp.) Randlane & A. Thell
Usnea barbata (L.) F.H. Wigg.
Usnea cavernosa Tuck.
Usnea ceratina Ach.
Usnea chaetophora Stirt.
Usnea cornuta Körb.
Usnea dasopoga (Ach.) Nyl.
Usnea diplotypus Vain.
Usnea filipendula Stirt.
Usnea flammea Stirt.
Usnea florida (L.) F.H. Wigg.
Usnea fragilescens Hav. ex Lynge
Usnea fulvoreagens (Räsänen) Räsänen
Usnea glabrescens (Nyl. ex Vain.) Vain.
Usnea hirta (L.) F.H. Wigg.
Usnea intermedia (A. Massal.) Jatta
Usnea lapponica Vain.
Usnea perplexans Stirt.
Usnea rubicunda Stirt.
Usnea scabrata Nyl.
Usnea silesiaca Motyka
Usnea subfloridana Stirt.
Usnea subscabrosa Nyl. ex Motyka
Usnea substerilis Motyka
Usnea wasmuthii Räsänen
Usnocetraria oakesiana (Tuck.) M.J. Lai & J.C. Wei
Vandenboomia chlorotiza (Nyl.) S.Y. Kondr.
Varicellaria hemisphaerica (Flörke) I. Schmitt & Lumbsch
Varicellaria lactea (L.) I. Schmitt & Lumbsch
Varicellaria velata (Turner) I. Schmitt & Lumbsch
Verrucaria breussii Diederich & van den Boom
Verrucaria bryoctona (Th. Fr.) Orange
Verrucaria corticola (Arnold) Servít
Verrucaria hidrophila ined.
Verrucaria viridigrana Breuss
Verseghya thysanophora (R.C. Harris) S.Y. Kondr., Lőkös, Farkas & Hur

Vezdaea aestivalis (Ohlert) Tscherm.-Woess & Poelt
Vezdaea cobria Giralt, Poelt & Suanjak
Vezdaea retigera Poelt & Döbbeler
Vezdaea stipitata Poelt & Döbbeler
Violella fucata (Stirt.) T. Sprib.
Vouauxiella lichenicola (Linds.) Petr. & Syd.
Vulpicida pinastri (Scop.) J.-E. Mattsson & M.J. Lai
Wadeana dendrographa (Nyl.) Coppins & P. James
Wadeana minuta Coppins & P. James
Waynea adscendens V.J. Rico
Xanthoparmelia conspersa (Ehrh. ex Ach.) Hale
Xanthoparmelia stenophylla (Ach.) Ahti & D. Hawksw.
Xanthoria elegans (Link) Th. Fr.
Xanthoria parietina (L.) Th. Fr.
Xanthoria ulophyllodes Räsänen
Xylographa parallela (Ach.) Fr.
Xylopsora caradocensis (Leight. ex Nyl.) Bendiksby & Timdal
Zamenhofia pseudohibernica (M. Tretiach) Cl. Roux & Tretiach
Zwackhia prosodea (Afzel.) Ertz
Zwackhia sorediifera (P. James) Ertz
Zwackhia viridis (Ach.) Poetsch & Schied.