

The lichen biota of Burdur province (Turkey)

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ABSTRACT — As a result of lichenological exploration in the Burdur province (Turkey), a total of 397 lichenized fungi, representing 126 genera in the *Ascomycota*, including 3 subspecies and 6 varieties, were determined from 185 different localities. *Aspicilia uxoris*, *Cladonia merochloraphaea*, *Cladonia pulvinella*, *Hypocenomyce caradensis*, *Lecidella pulveracea*, *Rinodina freyi*, and *R. griseosoralifera* are new to Turkey, and *R. freyi* and *R. griseosoralifera* are also new to Asia. Collection localities and substrata are also presented.

KEY WORDS — biodiversity, lichen flora, lichenized *Ascomycetes*

Introduction

In recent years knowledge of the lichen flora of Turkey has significantly increased and substantial new lichen records have been added (Aptroot & Yazici 2012, Aslan & Yazici 2013, Candan & Özdemir-Türk 2008, Kinalioğlu 2010a,b,c, Kinalioğlu & Aptroot 2010, Şenkardeşler & Sukatar 2006, Şenkardeşler 2009, 2010, Şenkardeşler & Lökös 2010, Yazici 2012, Yazici et al. 2010a,b,c, 2011, 2012, 2013a,b). Only 37 lichenized fungi have thus far been reported from Burdur while approximately 1650 lichen taxa have been recorded in Turkey (Aslan & Yazici 2013, Çobanoğlu 2005, Öztürk et al. 2005, Pisut & Guttavo 2008, Şenkardeşler 2009, Yazici et al. 2013). However, there are still many lichenologically unexplored parts of Turkey. Thus exploration of more regions of Turkey is urgently needed.

The present paper is a contribution to our knowledge of the lichen flora of Turkey and provides the first substantial checklist of lichens for the Burdur province.

Material and methods

The lichen samples were collected at 185 localities in Burdur between 25 June 2012 and 26 July 2014 (Table 1, Figure 1). Air dried samples were studied with a Nikon SMZ1500 stereomicroscope and a Nikon Eclipse 80i light microscope with standard identification methods for lichenized fungi (Brodo et al. 2001, Dobson 2005, Esslinger 1997, Giralt 2001, Goward et al. 1995, Poelt 1969, Poelt & Vezda 1981, Smith et al. 2009, Thomson 1984, 1997, Wasser & Nevo 2005, Wirth 1995). Thin Layer Chromatography (TLC) analyses were carried out when needed (Orange et al. 2001). Vouchers are deposited in the herbarium of the Biology Department, Faculty of Science, Karadeniz Technical University, Turkey (KTUB).

Study area

Burdur has a continental Mediterranean climate with cold, snowy winters and very hot, long and dry summers. The temperature ranges from -16 to 39°C, annual mean temperature is 15°C; the annual rainfall averages 468 mm, and the average humidity is 51.2% (Akman 1999).

The areas visited, Bucak and Altınyayla districts, are mountainous with forest dominated by *Abies*, *Cedrus*, *Ficus*, *Fraxinus*, *Juniperus*, *Nerium*, *Olea*, *Pinus*, *Pistacia*, *Prunus*, *Quercus* (especially Altınyayla district), *Rhus* species, and some streams, lakes and dams (e.g. Yapraklı Dam in Altınyayla district and Karacaören dam in Bucak district) (Baytop & Denizci 1963). The underforest flora is very abundant in these areas where the bedrock consists mainly of marble.

Results

The lichenological survey of Burdur province yielded a total of 392 taxa of lichenized fungi. This includes 3 subspecies and 6 varieties, representing 124 genera in the *Ascomycota*. Eight taxa, *Aspicilia uxoris*, *Cladonia merochlorophaea*, *Cladonia pulvinella*, *Hypocenomyce caradocensis*, *Lecidella pulveracea*, *Rinodina freyi*, *Rinodina griseosoralifera*, are new to Turkey.

Additionally, five facultatively lichenicolous lichenized fungi were found: *Acarospora impressula* var. *hospitans* (on the thallus of *Aspicilia cinerea*), *Catillaria mediterranea* (on the thallus of *Squamaria cartilaginea*), *Heteroplacodium fusculum* (on the thallus of *Ledidella* sp.), *Opegrapha rupestris* (on the thallus of *Verrucaria compacta*), *Toninia episema* (on the thallus of *Aspicilia* sp.) and *Toninia subfuscae* (on the thallus of *Lecanora* sp.). The taxa are listed alphabetically. "#" indicate new records for Turkey while "+" for Asia

- Acarospora cervina* (Ach.) A. Massal. - Loc. 1, 2, 4, 5, 6, 9, 10, 11, 15, 16, 17, 18, 19, 20, 22, 24, 25, 29, 30, 34, 36, 37, 38, 43, 45, 46, 47, 48, 50, 51, 52, 53, 54, 59, 65, 72, 73, 74, 76, 78, 79, 80, 83, 85, 86, 87, 88, 89, 90, 91, 92, 93, 98, 99, 100, 101, 103, 104, 105, 106, 107, 109, 112, 113, 114, 115, 116, 118, 119, 120, 123, 125, 127, 128, 129, 131, 132, 134, 135, 136, 138, 140, 141, 142, 143, 144, 148, 149, 151, 152, 153, 154, 155, 156, 157, 158, 159, 161, 164, 165, 168, 169, 171, 172, 173, 175, 177, 179, 181, 182, 183, 184, 185: on calcareous rock.
- Acarospora fuscata* (Nyl.) Th.Fr. - Loc. 7, 18, 19, 20, 22, 30, 47, 48, 49, 72, 74, 81, 85, 87, 101, 103, 104, 112, 114, 142, 143, 146, 151, 152, 154, 174, 179, 185: on siliceous rock.
- Acarospora glaucocarpa* (Ach.) Körb. - Loc. 58: on calcareous rock.
- Acarospora impressula* Th. Fr. var. *impressula* Th. Fr. - Loc. 104, 166, 167, 159: on siliceous rock.
- Acarospora impressula* var. *hospitans* (H.Magn.) Clauzade & Cl. Roux - Loc. 91: on *Aspicilia cinerea* (Nyl. ex Malbr.) Arnold, 150: on siliceous rock, 176: on siliceous rock.
- Acarospora macrospora* (Hepp.) A. Massal. ex Bagl. - Loc. 4, 8, 18, 52, 140, 174: on calcareous rock.
- Acarospora peliscypha* (Wahlenb.) Th. Fr.- Loc. 104: calcareous rock
- Acarospora scabra* (Pers.) Th. Fr. - Loc. 81, 90: on calcareous rock.
- Acarospora veronensis* A.Massal. - Loc. 9, 73, 103, 104, 146, 166, 168, 176: on siliceous rock.
- Agonimia tristicula* (Nyl.) Zahlbr. - Loc. 1, 3, 5, 7, 9, 16, 17, 19, 20, 22, 24, 26, 29, 31, 34, 37, 43, 47, 48, 56, 59, 60, 61, 62, 63, 67, 72, 76, 73, 81, 83, 85, 88, 92, 98, 99, 101, 102, 109, 120, 125, 127, 136, 138, 142, 143, 146, 151, 152, 154, 157, 175, 181: on mosses.
- Anaptychia ciliaris* (L.) Körb. - Loc. 5, 11, 15, 17: on *Quercus* sp., 6, 7, 13, 16, 18, 20, 22, 29, 34, 36, 37, 40, 52, 56, 59, 80, 103, 118, 119, 143, 148, 166 167, 170, 175: on *Pinus* sp., 19, 21, 24, 67, 79, 81, 98, 99, 120: on *Juniperus* sp., 83: on *Rhus* sp.
- Arthonia lapidicola* (Taylor) Branth & Rostr. - Loc. 36, 91, 101, 104, 154, 156, 166, 174: on calcareous rock.
- Aspicilia caesiocinerea* (Nyl. ex Malbr.) Arnold - Loc. 1, 4, 8, 11, 16, 17, 18, 19, 22, 24, 28, 29, 31, 33, 40, 41, 43, 47, 48, 50, 51, 52, 54, 55, 58, 59, 65, 70, 72, 74, 84, 88, 89, 90, 92, 93, 103, 105, 106, 107, 116, 120, 122, 125, 132, 134, 142, 143, 144, 149, 150, 155, 156, 157, 166, 176, 174: on calcareous rock.
- Aspicilia calcarea* (L.) Mudd - Loc. 3, 4, 5, 9, 11, 14, 15, 17, 23, 30, 32, 37, 38, 39, 40, 41, 42, 50, 51, 52, 53, 55, 56, 57, 58, 59, 61, 62, 65, 67, 70, 79, 80, 81, 83, 85, 87, 88, 89, 93, 94, 98, 99, 101, 105, 106, 109, 112, 114, 116, 118, 127, 129, 131, 134, 138, 139, 142, 146, 148, 149, 151, 152, 153, 154, 155, 156, 159, 164, 168, 169, 172, 173, 175, 177, 181, 183, 185: on calcareous rock.
- Aspicilia candida* (Anzi) Hue - Loc. 98, 153, 154: on calcareous rock.
- Aspicilia cheresina* (Müll. Arg.) Hue - Loc. 37, 79, 80, 101, 169, 175, 185: on calcareous rock.
- Aspicilia cinerea* (L.) Körb. - Loc. 1, 2, 3, 4, 6, 7, 8, 10, 11, 16, 17, 18, 19, 22, 24, 29, 30, 34, 35, 36, 37, 40, 41, 43, 47, 49, 51, 52, 53, 54, 59, 61, 62, 63, 65, 73, 74, 76, 78, 79, 80, 81, 83, 87, 88, 90, 91, 92, 93, 95, 98, 99, 101, 103, 104, 106, 107, 108, 112, 114, 115, 116, 122, 124, 128, 130, 132, 134, 135, 137, 140, 142, 144, 148, 149, 150, 153, 154, 155, 156, 160, 166, 169, 172, 173, 174, 175, 176, 179, 180, 185: on calcareous rock.
- Aspicilia contorta* (Hoffm.) Körb. subsp. *contorta* - Loc. 2, 4, 9, 13, 15, 17, 19, 24, 26, 29, 36, 47, 50, 51, 52, 58, 79, 80, 84, 88, 98, 99, 104, 118, 142, 143, 144, 153, 154, 166: on calcareous rock.
- Aspicilia contorta* subsp. *hoffmanniana* S.Ekman & Fröberg - Loc. 2, 4, 8, 11, 12, 17, 18, 31, 37, 47, 49, 52, 53, 64, 65, 67, 72, 77, 80, 81, 88, 92, 93, 98, 99, 109, 125, 127, 131, 135, 136, 142, 157, 159, 164, 166, 167, 168, 175: on calcareous rock.

- Aspicilia desertorum* (Kremp.) Mereschk. - Loc. 30, 47, 48, 50, 51, 52, 53, 54, 80, 88, 91, 92, 98, 99, 101, 104, 106, 107, 116, 114, 119, 142, 143, 144, 148, 149, 151, 152, 155, 168, 169, 171, 172, 174, 179, 183: on siliceous rock.
- Aspicilia epiglypta* (Norrl. ex Nyl.) Hue - Loc. 57: on calcareous rock.
- Aspicilia friticulosa* (Eversm.) Flagey - Loc. 98, 99, 151, 152: on soil.
- Aspicilia intermutans* (Nyl.) Arnold - Loc. 16: on siliceous rock.
- Aspicilia mastrucata* (Wahlenv.) Th.Fr. - Loc. 104: on siliceous rock.
- #*Aspicilia uxoris* (Werner) V.J. Rico, Aragón & Esnault - Loc. 19, 22, 24 40, 59: on *Juniperus* sp.
- Athallia cerinella* (Nyl.) Arup, Frödén & Söchting - Loc. 142: on *Salix* sp.
- Athallia holocarpa* (Hoffm.) Arup, Frödén & Söchting - Loc. 2, 4, 16, 25, 27, 28, 30, 33, 36, 41, 53, 57, 58, 70, 72, 81, 83, 85, 88, 90, 106, 107, 122, 125, 127, 135, 142, 157, 155, 162, 172, 176, 178, 181: on calcareous rock, 8, 15, 17, 18, 47, 52, 74, 80, 89, 98, 103, 118, 119: on *Quercus* sp., 11: on *Juniperus* sp., *Pinus* sp., 40: on *Pinus* sp., 43, 115: on *Salix* sp., 116: *Quercus* sp., *Pyrus elaeagnifolia*.
- Bacidia arceutina* (Ach.) Arnold - Loc. 68: on *Platanus orientalis*.
- Bacidia laurocerasi* (Delise ex Duby) Zahlbr. - Loc. 50, 51: on *Pistacia* sp.
- Bacidia rosella* (Pers.) De Not. - Loc. 18, 69, 70: on *Quercus* sp., 26: *Liquidambar orientalis*, 27: *Acer* sp., 68: *Pinus* sp.
- Bacidia rubella* (Hoffm.) A. Massal - Loc. 17, 18, 26, 34, 56, 69, 70, 84, 85: on *Quercus* sp.
- Bacidiina arnoldiana* (Körb.) V. Wirth & Vězda - Loc. 57: on calcareous rock.
- Bagliettoa parmigera* (J. Steiner) Vězda & Poelt - Loc. 33: on calcareous rock.
- Bagliettoa parmigerella* (Zahlbr.) Vězda & Poelt - Loc. 1, 3, 7, 9, 23, 25, 26, 33, 34, 58, 59, 79, 80, 81, 87, 101, 112, 128, 139: on calcareous rock.
- Bellemerea cupreoatra* (Nyl.) Clauzade & Cl. Roux - Loc. 6, 91, 103, 127, 150, 154, 166, 174: on siliceous rock.
- Bilimbia lobulata* (Sommerf.) Hafellner & Coppins - Loc. 80, 98, 143: on soil.
- Bilimbia sabuletorum* (Schreb.) Arnold - Loc. 17, 31, 59, 99: on mosses.
- Blastenia crenularia* (With.) Arup, Söchting & Frödén - Loc. 143: on siliceous rock.
- Blastenia ferruginea* (Huds.) A. Massal. - Loc. 4, 9, 15, 36: on *Quercus* sp., 22, 99: on *Juniperus* sp., 40, 59, 166, 167: on *Pinus* sp., 83: on *Rhus* sp.
- Blastenia herbidella* (Arnold) Servit - Loc. 98, 99: on *Juniperus* sp.
- Bryoria fuscescens* (Gyeln.) Brodo & D. Hawksw. - Loc. 19, 20, 81: on *Pinus* sp., 24: on *Juniperus* sp.
- Buellia aethalea* (Ach.) Th. Fr. - Loc. 91: on siliceous rock.
- Buellia badia* (Fr.) A. Massal. - Loc. 3, 85, 87, 91, 92, 103, 106, 107, 109, 129, 149, 150, 159: on siliceous rock.
- Buellia griseovirens* (Turner & Borrer ex Sm.) Almb. - Loc. 19, 38, 40: on *Juniperus* sp.
- Calicium glaucellum* Ach. - Loc. 11: on *Juniperus* sp.
- Calicium salicinum* Pers. - Loc. 59: on *Juniperus* sp.
- Calogaya biatorina* (A. Massal.) Arup, Frödén & Söchting - Loc. 18, 143: on calcareous rock.
- Calogaya decipiens* (Arnold) Arup, Frödén & Söchting - Loc. 1, 6, 7, 8, 29, 41, 48, 50, 51, 73, 85, 92, 93, 101, 105, 109, 111, 112, 114, 128, 129, 131, 132, 134, 135, 140, 142, 144, 181, 183, 185: on calcareous rock.
- Calogaya lobulata* (Flörke) Arup, Frödén & Söchting - Loc. 18, 135, 142, 143: on *Juniperus* sp.
- Calogaya persica* (J. Steiner) Arup, Frödén & Söchting - Loc. 2: on *Fraxinus* sp., 36, 117: on *Quercus* sp.
- Calogaya schistidii* (Anzi), Arup, Frödén & Söchting - Loc. 1, 6, 7, 15, 19, 20, 24, 30, 47, 48, 87, 88, 89, 93, 98, 99, 114, 130, 133, 138, 142, 145, 151, 152, 153, 154, 175: on mosses.
- Caloplaca cerina* (Hedw.) Th. Fr. - Loc. 1, 3, 5, 8, 11, 12, 14, 16, 71, 83, 84, 87, 93, 152: on *Quercus* sp., 2: on *Rhus* sp., 15, 17, 18, 37, 121, 135: on *Juniperus* sp., 19, 21, 22, 24, 27, 30, 33, 34, 59, 79, 80, 98, 99, 101, 117, 118, 119, 136, 138, 156, 159, 164, 166, 167, 174, 181: on *Pinus* sp., 40: on *Abies* sp., 81: on *Fraxinus* sp., 103, 123, 125, 142, 144, 175: on *Salix* sp., 104, 151: on *Pinus* sp., *Pyrus elaeagnifolia*, *Cotoneaster* sp. and *Berberis* sp., 105, 112, 127, 143, 179, 185: on *Populus* sp., 129: on *Pyrus elaeagnifolia*, 146: on mosses, 170, 184: on *Pyrus* sp.
- Caloplaca cerina* var. *chloroleuca* (Sm.) Th. Fr. - Loc. 9, 29, 31, 56, 72, 80, 84, 93, 164, 166, 169, 181: on mosses.
- Caloplaca chlorina* (Flot.) Sandst. - Loc. 2, 3, 7, 98, 90, 135, 170: on *Quercus* sp., 18, 59, 81: on *Juniperus*, 166: on *Salix* sp.
- Caloplaca demissa* (Körb.) Arup & Grube - Loc. 38, 55, 58: on calcareous rock.
- Caloplaca erythrocarpa* (Pers.) Zwackh - Loc. 47, 50, 59, 63, 65, 144, 185: on calcareous rock.
- Caloplaca haematites* (Chaub. ex St.-Amans) Zwackh. - Loc. 51: on *Populus* sp., 142: on *Juglans* sp.

- Caloplaca inconnexa* (Nyl.) Zahlbr. - Loc. 51, 59, 142: on siliceous rock.
- Caloplaca lecideina* (Müll. Arg.) Clauzade & Rondon - Loc. 6, 9, 11, 16, 34, 47, 52, 64, 73, 79, 80, 83, 87, 88, 98, 101, 109, 112, 114, 129, 134, 136, 138, 140, 143, 146, 149, 151, 153, 154, 155, 159, 161, 164, 168, 177, 179, 181, 185: on siliceous rock.
- Caloplaca pelodella* (Nyl.) Hasse - Loc. 52, 90, 91, 103, 104: on calcareous rock.
- Caloplaca pollini* (A. Massal.) Jatta - Loc. 27: on *Quercus* sp.
- Caloplaca saxicola* (Hoffm.) Nordin - Loc. 1, 3, 5, 7, 15, 19, 24, 29, 46, 47, 50, 51, 52, 53, 72, 73, 74, 77, 79, 80, 81, 84, 87, 88, 90, 92, 93, 98, 99, 101, 103, 105, 109, 111, 115, 116, 127, 128, 131, 133, 134, 135, 142, 144, 148, 149, 151, 152, 153, 154, 155, 164, 165, 166, 174, 176, 180, 183, 184: on calcareous rock.
- Caloplaca soralifera* Vondrák & Hrouzek - Loc. 98: on calcareous rock.
- Caloplaca teicholyta* (Ach.) J. Steiner - Loc. 9, 36, 59, 93, 104, 151: on calcareous rock.
- Caloplaca xantholyta* (Nyl.) Jatta - Loc. 1, 4, 5, 6, 8, 9, 17, 21, 25, 26, 29, 30, 31, 34, 36, 37, 38, 39, 40, 41, 42, 47, 53, 56, 58, 59, 61, 62, 70, 74, 81, 85, 87, 98, 99, 101, 105, 119, 123, 125, 129, 131, 132, 140, 142, 144, 146, 157, 158, 159, 160, 168, 181, 183, 184, 185: on calcareous rock.
- Caloplaca xerica* Poelt & Vězda - Loc. 59: on calcareous rock.
- Candelaria concolor* (Dicks.) Arnold - Loc. 116: on *Salix* sp.
- Candelariella aurella* (Hoffm.) Zahlbr. - Loc. 2, 3, 4, 9, 12, 13, 18, 21, 23, 32, 35, 37, 39, 47, 50, 51, 58, 59, 65, 71, 74, 81, 83, 88, 91, 92, 95, 98, 99, 103, 104, 106, 107, 111, 117, 118, 120, 128, 134, 135, 136, 139, 142, 143, 148, 150, 151, 152, 153, 154, 155, 157, 167, 168, 169, 172, 174: on calcareous rock, 11, 22, 116, 166, 170: on *Pinus* sp., 14, 15: on *Quercus* sp., 171: on *Pyrus* sp.
- Candelariella coralliza* (Nyl.) H. Magn. - Loc. 104: on calcareous rock.
- Candelariella medians* (Nyl.) A.L. Sm. - Loc. 53, 54, 59, 88, 89: on calcareous rock.
- Candelariella reflexa* (Nyl.) Lettau - Loc. 15, 26: on *Quercus* sp., 24, 42: on *Juniperus* sp., 59: on *Juniperus* sp. and *Quercus* sp., 60: on *Quercus* sp. and *Pinus* sp., 16, 18, 62, 65, 81, 92, 98, 99, 116, 125, 125: on *Pinus* sp.
- Candelariella vitellina* (Ehrh.) Müll. Arg. - Loc. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 16, 19, 29, 30, 33, 41, 47, 49, 51, 52, 53, 54, 56, 70, 72, 73, 74, 75, 78, 81, 84, 87, 88, 90, 91, 92, 93, 100, 103, 104, 113, 114, 115, 116, 117, 124, 126, 127, 130, 135, 137, 138, 140, 141, 142, 144, 145, 146, 149, 151, 152, 153, 154, 156, 157, 158, 160, 164, 166, 167, 168, 170, 174, 176, 179, 180, 181, 182, 183, 184: on siliceous rock.
- Candelariella xanthostigma* (Pers. ex Ach.) Lettau - Loc. 11, 20, 21, 37, 43, 60, 65, 166: on *Pinus* sp., 15, 84: on *Quercus* sp., 18, 19: on *Juniperus* sp., 59: on *Abies* sp.
- Catapyrenium daedaleum* (Kremp.) Clauzade & Cl. Roux - Loc. 26, 27, 67, 70: on soil.
- Catillaria lenticularis* (Ach.) Th. Fr. - Loc. 1, 4, 27, 36, 38, 46, 57, 58, 63, 81, 88: on calcareous rock.
- Catillaria mediterranea* Hafellner - Loc. 17: on *Squamaria cartilaginea*.
- Catinaria atropurpurea* (Schaer.) Vězda & Poelt - Loc. 59, 70: on *Pinus* sp.
- Cetraria aculeata* (Schreb.) Fr. - Loc. 29, 40, 78, 79, 80, 91, 148: on soil.
- Cetraria muricata* (Ach.) Eckfeldt - Loc. 40, 78, 91, 148: on soil.
- Chrysotrichia candelaris* (L.) J.R. Laundon - Loc. 17, 18: on *Quercus* sp.
- Chrysotrichia chlorina* (Flot.) Sandst. - Loc. 31: on calcareous rock.
- Cladonia caespiticia* (Pers.) Flörke - Loc. 33, 38: on mosses and *Pinus* sp., 40: on *Juniperus* sp., 61, 68, 70: on *Pinus* sp., 69: on mosses.
- Cladonia cariosa* (Ach.) Spreng. - Loc. 91: on mosses.
- Cladonia chlorophaea* (Flörke ex Sommerf.) Spreng. - Loc. 4: on *Juniperus* sp. and *Pinus* sp., 13: on *Juniperus* sp., 19, 21, 24: on mosses, 23: on mosses and *Pinus* sp., 25, 26, 27, 61, 62, 98: on *Pinus* sp., 99, 175: on *Juniperus* sp.
- Cladonia convoluta* (Lam.) Anders - Loc. 91: on mosses.
- Cladonia fimbriata* (L.) Fr. - Loc. 16: on mosses and *Pinus* sp., 19: on *Juniperus* sp., 20, 38, 39, 40, 98, 99, 118, 119, 139, 165, 184: on *Pinus* sp., 27: on mosses, 33: on *Pinus* sp., *Juniperus* sp. and mosses.
- Cladonia foliacea* (Huds.) Willd. - Loc. 5, 6, 9, 26, 29, 56, 61, 70, 81, 88, 89, 91, 109, 125, 131, 136, 138, 140, 141, 144, 145, 164, 168, 179, 181, 185: on mosses.
- Cladonia humilis* (With.) J.R. Laundon - Loc. 26: on *Pinus* sp., 28, 33, 39, 41, 59, 66, 144: on mosses.
- Cladonia magyarica* Vain. ex Gyeln. - Loc. 39, 40: on mosses, 70: on *Pinus* sp.
- #*Cladonia merochlorophaea* Asahina - Loc. 11, 23: on mosses.
- Cladonia pocillum* (Ach.) O.J. Rich - Loc. 25, 27, 33, 38, 80, 81: on *Pinus* sp., 88, 143: on mosses.

- Cladonia pyxidata* (L.) Hoffm. - Loc. 30, 34, 36: on soil, 3, 4, 7, 8, 17, 18, 22, 25, 33, 37, 40, 42, 48, 53, 56, 59, 62, 66, 70, 72, 73, 74, 78, 79, 80, 81, 86, 87, 88, 101, 108, 111, 114, 127, 118, 129, 136, 137, 138, 143, 146, 157, 158, 159, 168, 177, 180, 181, 183, 184, 185: on mosses.
- #*Cladonia pulvinella* S. Hammer - Loc. 39: on mosses.
- Cladonia ramulosa* (With.) J.R. Laundon - Loc. 33: on mosses and *Pinus* sp., 61: on mosses, 68: on *Pinus* sp.
- Cladonia rangiformis* Hoffm. - Loc. 5, 34, 38, 56, 59, 60, 70, 75, 81, 83, 105, 112, 124, 130, 140, 145, 182: on mosses.
- Cladonia squamosa* (Scop.) Hoffm. - Loc. 33, 40: on mosses and *Pinus* sp.
- Cladonia subulata* (L.) Weber ex F.H. Wigg - Loc. 20: on *Pinus* sp., 22, 59: on mosses, 99: on *Juniperus* sp. and *Pinus* sp.
- Clauzadea metzleri* (Körb.) Clauzade & Cl. Roux ex D. Hawksw. - Loc. 57, 63, 70, 128, 141, 142, 143, 158, 160: on calcareous rock.
- Clauzadea monticola* (Ach.) Hafellner & Bellem. - Loc. 4, 11, 15, 17, 23, 33, 36, 37, 38, 45, 46, 59, 61, 81, 88, 89, 98, 117, 118, 126, 136, 140, 141, 143, 145: on calcareous rock.
- Collema auriforme* (With.) Coppins & J.R. Laundon - Loc. 29, 31, 42, 50, 51, 61, 62, 63, 80, 83, 88, 113, 119, 141, 151, 152, 184: on mosses.
- Collema crispum* (Huds.) Weber ex F.H. Wigg - Loc. 184: on calcareous rock.
- Collema cristatum* (L.) Weber ex F.H. Wigg. - Loc. 1, 9, 10, 11, 118, 151: on calcareous rock, 15, 16: on calcareous rock and mosses, 17, 20, 24, 25, 26, 29, 34, 35, 39, 43, 58, 62, 68, 69, 70, 71, 72, 73, 76, 78, 84, 86, 88, 89, 91, 98, 110, 111, 120, 122, 123, 126, 127, 128, 130, 131, 133, 138, 139, 141, 142, 143, 144, 145, 146, 153, 154, 157, 158, 165, 169, 175, 182, 183, 184: on mosses.
- Collema flaccidum* (Ach.) Ach. - Loc. 9, 11: on *Quercus* sp., 15, 63: on *Pinus* sp., 38: on *Alnus* sp., 39: on *Vaccinium* sp., 70: on mosses, *Platanus orientalis* and *Pinus* sp., 87, 179: on *Quercus* sp.
- Collema furfuraceum* Du Rietz - Loc. 15, 17, 39, 42, 39: on *Quercus* sp., 25: on *Liquidambar orientalis*, 40, 59: on *Abies* sp., 62: on *Pinus* sp.
- Collema fuscovirens* (With.) J.R. Laundon - Loc. 12, 29: on mosses, 2, 16, 22, 64, 80, 98, 142, 143, 175: on calcareous rock.
- Collema nigrescens* (Huds.) DC. - Loc. 14, 15, 61, 62, 63, 67: on *Quercus*, 62: on *Sorbus* sp. and *Fraxinus* sp., 70: on *Alnus* sp.
- Collema occultatum* Bagl. - Loc. 175: on *Juniperus* sp.
- Collema subflaccidum* Degel. - Loc. 13: on *Quercus* sp., 15: on *Juniperus* sp., 16, 26, 39, 119: on *Pinus* sp., 23: on *Acer* sp., 25: on *Liquidambar orientalis*
- Collema tenax* (Sw.) Ach. - Loc. 2, 3, 4, 5: on mosses, 6, 7, 8, 11: on *Quercus* sp., 15, 16, 17, 18, 19, 20, 21, 22, 24, 114, 115, 116, 118, 122, 124, 126, 128, 135, 156, 159, 169, 171, 172, 174, 175, 177, 179, 180, 181, 182, 184, 185: on mosses, 25, 26, 27, 28, 29, 32, 33: on *Juniperus* sp., 36, 37, 38, 39, 40, 42, 45, 46, 47, 49, 51, 52, 53, 54, 55, 56, 59, 61, 62, 65: on *Vaccinium* sp. and mosses, 67: on *Ficus* sp., *Juniperus* sp., *Pinus* sp. and *Pistacia* sp., 1, 68, 69, 70, 71, 74, 75, 78, 80, 81, 82, 83, 84, 86, 87, 88, 91, 93, 94, 98, 99, 100, 101, 104, 106, 107, 108, 111, 137, 140, 142, 143, 144, 148, 149, 151, 152, 154, 155, 160, 164, 166, 167, 168: on calcareous rock
- Degelia atlantica* (Degel.) P.M.Jøerg. & P. James - Loc. 15, 21, 22, 60: on *Quercus* sp.
- Degelia plumbea* (Lightf.) P.M.Jøerg. & P. James - Loc. 15, 22, 25, 26, 33, 38, 39, 60, 61, 62, 70: on *Quercus* sp.
- Dermatocarpon intestiniforme* (Körb.) Hasse - Loc. 104: on calcareous rock.
- Dermatocarpon miniatum* (L.) W. Mann. - Loc. 2, 10, 24, 27, 29, 43, 49, 74, 80, 85, 98, 99, 118, 142, 143, 145, 151, 152, 154, 164, 169, 175, 182: on calcareous rock.
- Dimelaena oreina* (Ach.) Norman - Loc. 104, 160: on siliceous rock.
- Diploschistes caesioplumbeus* (Nyl.) Vain. - Loc. 50, 51, 134, 148: on calcareous rock.
- Diploschistes diacapsis* (Ach.) Lumbsch - Loc. 4, 99: on siliceous rock.
- Diploschistes muscorum* (Scop.) R. Sant. - Loc. 5, 7, 18, 26, 27, 29, 53, 70, 81, 88, 93, 101, 105, 127, 157: mosses, 17, 36, 37, 42, 50, 55, 59, 91, 111: on soil,
- Diploschistes ocellatus* (Fr.) Norman - Loc. 1, 4, 25, 27, 34, 36, 37, 41, 42, 45, 46, 47, 50, 51, 53, 54, 55, 61, 70, 74, 81, 84, 90, 109, 111, 115, 116, 131, 134, 136, 138, 140, 144, 169, 179, 181, 184: on calcareous rock.
- Diploschistes scruposus* (Schreb.) Norman - Loc. 37, 70: on siliceous rock.
- Diplotomma alboatrum* (Hoffm.) Flot. - Loc. 2: on calcareous rock and *Juniperus* sp., 18, 19, 90, 142, 143: on *Juniperus* sp.

- Diplotomma epipolium* (Ach.) Arnold - Loc. 14, 15, 17, 29, 37, 41, 45, 46, 47, 50, 51, 52, 53, 65, 74, 80, 83, 88, 90, 92, 93, 99, 103, 106, 107, 116, 119, 120, 135, 142, 143, 148, 149, 151, 152, 153, 154, 155, 166, 169, 172, 173, 174: on calcareous rock.
- Diplotomma venustum* (Körb.) Körb. - Loc. 4, 80, 88: on calcareous rock.
- Endocarpon adscendens* (Anzi) Müll. Arg. - Loc. 17, 77, 93: on mosses, 94: on soil.
- Evernia prunastri* (L.) Ach. - Loc. 4, 15, 17, 28, 33, 36, 38, 42, 81, 118, 142: on *Pinus* sp., 16, 27, 43: on *Quercus* sp., 18, 25: on *Juniperus* sp., 39: on *Alnus* sp., *Pinus* sp., *Quercus* sp. and *Vaccinium* sp., 40: on *Vaccinium* sp., *Platanus orientalis*, *Pinus* sp. and *Alnus* sp., 59: on *Acer* sp. and *Juniperus* sp., 60: on *Pinus* sp., *Lignum vitae*, *Liquidambar orientalis* and *Rhus* sp., 61: on *Quercus* sp. and *Pinus* sp., 70: on *Platanus orientalis* and *Pinus* sp., 120: on *Cotoneaster* sp. and *Quercus* sp.
- Evernia mesomorpha* Nyl. - Loc. 4: on *Pinus* sp.
- Farnoldia jurana* (Schaer.) Hertel - Loc. 37, 40, 70, 143: on calcareous rock.
- Flavoparmelia caperata* (L.) Hale - Loc. 26: on *Pinus* sp.
- Flavoplaca coronata* (Kremp. ex Körb.) Arup, Frödén & Søchting - Loc. 88, 154: on calcareous rock.
- Flavoplaca oasis* (A. Massal.) Arup, Frödén & Sochting - Loc. 135, 159: on calcareous rock.
- Fuscopannaria ignobilis* (Anzi) P.M. Jørg. - Loc. 27: on *Liquidambar orientalis*, 39, 42, 70: on *Pinus* sp., 59: on *Juniperus* sp., 62: on *Quercus* sp.
- Fuscopannaria mediterranea* (Tav.) P.M. Jørg. - Loc. 15, 22, 61, 68, 69: on *Quercus* sp.
- Gyalolechia flavorubescens* (Huds.) Søchting, Frödén & Arup - Loc. 34, 98, 40, 56, 59, 64, 157: on *Pinus* sp., 67, 118: on *Pyrus* sp., 143 *Quercus* sp.
- Gyalolechia flavovirescens* (Wulfen) Søchting, Frödén & Arup - Loc. 3, 30, 45, 46, 48, 78, 87, 118, 135, 136: on calcareous rock.
- Gyalolechia fulgens* (Sw.) Søchting, Frödén & Arup - Loc. 5, 7, 15, 18, 79, 80, 81, 83, 108, 109, 110, 88, 90, 93, 95, 98, 169, 180, 183, 185: on mosses, 25, 27, 34, 37, 39, 43, 62, 85, 86, 99, 100, 114, 123, 127, 129, 131, 137, 138, 144, 146, 151, 152, 158, 164, 168, 177, 182, 184: on soil.
- Gyalolechia fulgida* (Nyl.) Søchting, Frödén & Arup - Loc. 8, 22, 31, 36, 37, 45, 46, 53, 59, 76, 83, 88, 98, 99, 105, 112, 119, 140, 159, 181: on mosses, 29: on soil.
- Heteroplacidium fusculum* (Nyl.) Gueidan & Cl. Roux - Loc. 150: on *Lecidella* sp.
- Hymenelia prevostii* (Duby) Kremp. - Loc. 33, 58: on calcareous rock.
- #*Hypocenomyce caradocensis* (Leight. ex Nyl.) P. James & Gotth. Schneid. - Loc. 18: on *Juniperus* sp.
- Hypocenomyce scalaris* (Ach. ex Lilj.) M. Choisy - Loc. 4, 17, 18, 19, 22, 24, 33, 81, 98, 99, 175: on *Juniperus* sp.
- Hypogymnia farinacea* Zopf - Loc. 4, 26, 28, 33, 40, 42, 59, 70, 81: on *Pinus* sp.
- Hypogymnia physodes* (L.) Nyl. - Loc. 5, 25, 26, 28, 30, 33, 34, 40, 42, 56, 70, 81: on *Pinus* sp.
- Hypogymnia tubulosa* (Schaer.) Hav. - Loc. 4, 16, 26, 27, 28, 40, 42, 59, 61, 70, 81, 142: on *Pinus* sp.
- Immersaria athroocarpa* (Ach.) Rambold & Pietschm. - Loc. 5, 7, 11, 52, 53, 65, 72, 73, 78, 91, 100, 101, 103, 104, 109, 112, 114, 115, 116, 129, 131, 137, 138, 145, 146, 150, 157, 158, 166, 176, 177, 180, 182, 183, 184, 185: on siliceous rock.
- Ionaspis lacustris* (With.) Lutzoni - Loc. 33: on siliceous rock.
- Koerberia biformis* A. Massal. - Loc. 62: on *Quercus* sp.
- Lecania crytella* (Ach.) Th. Fr. - Loc. 35: on *Salix* sp.
- Lecania naegelii* (Hepp) Diederich & Van den Boom - Loc. 98, 166: on *Pinus* sp.
- Lecania rabenhorstii* (Hepp) Arnold - Loc. 41: on calcareous rock.
- Lecania sylvestris* (Arnold) Arnold - Loc. 36, 39, 57, 63, 67, 81, 143: on calcareous rock.
- Lecania turicensis* (Hepp) Müll.Arg. - Loc. 4, 39, 50, 51, 52, 65, 93, 104: on calcareous rock.
- Lecanora agardhiana* Ach. - Loc. 107: on calcareous rock.
- Lecanora albescens* (Hoffm.) Branth & Rostr. - Loc. 29, 31, 36, 41, 59, 172: on calcareous rock.
- Lecanora argentata* (Ach.) Malme - Loc. 2, 15: on *Quercus* sp., 11, 25: on *Acer* sp., 27: on *Liquidambar orientalis*, 31, 59, 64, 70, 81, 151, 152: on *Pinus* sp., 40, 118, 143: on *Juniperus* sp.
- Lecanora argopholis* (Ach.) Ach. - Loc. 174: on siliceous rock
- Lecanora bicincta* var. *sorediata* (Flot.) Leuckert & Poelt - Loc. 90, 104: on siliceous rock.
- Lecanora bolcana* (Pollich) Poelt - Loc. 1, 3, 6, 7, 8, 11, 16, 19, 22, 24, 26, 29, 30, 35, 36, 37, 47, 48, 59, 62, 74, 81, 84, 87, 88, 90, 91, 93, 98, 99, 103, 104, 108, 115, 116, 124, 129, 130, 131, 133, 142, 143, 148, 149, 150, 151, 152, 154, 159, 164, 166, 169, 171, 174, 176, 182: on siliceous rock.
- Lecanora caesiosora* Poelt - Loc. 53: on siliceous rock

- Lecanora carpinea* (L.) Vain. - Loc. 9, 15, 16, 17, 22, 27, 81, 88, 99, 168, 178, 179: on *Quercus* sp., 83: on *Fraxinus* sp., 89, 98, 142: on *Juniperus* sp., 33, 36, 84, 117, 118, 119, 125, 126, 134, 143, 157, 162: on *Pinus* sp.
- Lecanora cenisia* Ach. - Loc. 91, 104, 143, 159, 174: on siliceous rock.
- Lecanora chlorotera* Nyl. - Loc. 30, 34, 59, 70, 84, 98, 99, 162, 168, 175: on *Pinus* sp., 181: on *Pinus* sp. and *Juniperus* sp.
- Lecanora conizaeoides* Cromb. - Loc. 98: on *Juniperus* sp.
- Lecanora crenulata* Hook - Loc. 14, 15, 31: on mosses, 4, 7, 9, 11, 17, 18, 33, 41, 47, 50, 51, 53, 65, 67, 72, 84, 85, 88, 93, 104, 112, 114, 119, 135, 136, 138, 142, 145, 166, 172, 179, 180, 181, 183, 184, 185: on calcareous rock.
- Lecanora dispersa* (Pers.) Röhl. - Loc. 1, 2, 24, 29: on *Pinus* sp. and *Quercus* sp., 3, 4, 12, 15, 17, 18, 19, 83, 92: on *Juniperus* sp., 16: on *Pinus* sp., *Quercus* sp. and *Juniperus* sp., 11: on calcareous rock, 20, 23, 31, 32, 36, 41, 42, 43, 47, 48, 51, 52, 53, 59, 65, 67, 70, 74, 80, 81, 84, 88, 90, 93, 98, 99, 101, 103, 104, 106, 107, 109, 116, 117, 118, 120, 123, 127, 134, 135, 139, 142, 143, 146, 148, 149, 150, 151, 152, 153, 154, 155, 156, 158, 162, 165, 166, 167, 169, 172, 174, 175, 177, 111, 115: on *Quercus* sp., 33, 37: on *Pyrus* sp., 50, 54: on calcareous rock and *Quercus* sp., 56: on *Vaccinium* sp., *Juniperus* sp., *Pinus* sp., *Pistacia* sp. and *Ficus* sp., 91: on mosses, 176: on *Populus* sp., 178: *Populus* sp. and calcareous rock.
- Lecanora garovaglioi* (Körb.) Zahlbr. - Loc. 11: on calcareous rock.
- Lecanora hagenii* (Ach.) Ach. - Loc. 2, 11, 15, 27, 73, 84, 135, 142, 157, 184: on *Quercus* sp., 12, 19, 99: on *Juniperus* sp., 16, 18: on *Quercus* sp. and *Juniperus* sp., 43, 174: on *Pinus* sp., 29, 33, 36, 47, 50, 53, 65, 74, 81, 83, 88, 98, 105, 116, 122, 143, 150, 156, 162, 164, 166, 167, 170, 176, 178, 183: on calcareous rock, 103: on *Salix* sp. and *Platanus* sp., 104, 109, 115, 120: on *Salix* sp., 118, 134: on *Populus* sp.
- Lecanora horiza* (Ach.) Lindsay - Loc. 70: on *Pinus* sp.
- Lecanora hybocarpa* (Tuck.) Brodo - Loc. 11, 19, 20, 22, 61, 81, 83, 84: on *Quercus* sp., 15, 17, 18, 40, 63, 75, 98, 99, 125, 150: on *Juniperus* sp., 21: on *Juniperus* sp. and *Pinus* sp., 23: on *Liquidambar orientalis*, 24: on *Acer* sp., 26, 27, 31, 37, 57, 59, 70, 120, 148: on *Pinus* sp., 58: on *Abies* sp., 175: on *Juniperus* sp. and *Quercus* sp.
- Lecanora intumescens* (Rebent.) Rabenh. - Loc. 15: on *Quercus* sp.
- Lecanora pannonica* Szatala - Loc. 4, 29, 91, 103, 104, 128, 131, 150, 174, 176: on calcareous rock
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- Lecanora strobilina* (Spreng.) Kieff. - Loc. 26, 33, 38, 42, 60, 62: on *Pinus* sp.
- Lecanora sulphurea* (Hoffm.) Ach. - Loc. 91, 174, 176, 165: on calcareous rock
- Lecanora swartzii* (Ach.) Ach. - Loc. 91, 128, 146, 185: on siliceous rock.
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- Lecanora varia* (Hoffm.) Ach. - Loc. 11, 12, 17, 18, 19, 21, 24, 98, 99, 142, 143, 175: on *Juniperus* sp.
- Lecidea atrobrunnea* (DC.) Schaefer. - Loc. 29, 91, 103, 104, 150, 161, 172, 174: on siliceous rock.
- Lecidea fuscoatra* (L.) Ach. - Loc. 29, 168, 182: on siliceous rock.
- Lecidea grisella* Flörke - Loc. 26: on siliceous rock.
- Lecidea hypnorum* Lib. - Loc. 166, 167, 170: on mosses.
- Lecidea plana* (J. Lahm) Nyl. - Loc. 91, 104, 149, 151, 152, 153, 154, 175: on siliceous rock.
- Lecidella achristotera* (Nyl.) Hertel & Leuckert - Loc. 103: on *Salix* sp.
- Lecidella asema* (Nyl.) Knopf & Hertel - Loc. 143: on siliceous rock.
- Lecidella carpathica* Körb. - Loc. 1, 3, 4, 6, 7, 16, 29, 30, 32, 47, 48, 49, 52, 53, 71, 79, 80, 87, 88, 91, 92, 93, 100, 103, 104, 105, 106, 107, 108, 112, 114, 115, 116, 128, 129, 130, 131, 133, 134, 136, 138, 141, 142, 143, 148, 149, 150, 151, 152, 155, 156, 158, 159, 164, 166, 169, 174, 175, 179, 181, 182, 183: calcareous rock.
- Lecidella elaeochroma* (Ach.) M. Choisy - Loc. 1, 7, 78, 79, 84, 86, 119, 175, 177: on *Salix* sp., 3, 56: on *Pyrus* sp., 14: on *Quercus* sp. and *Pyrus* sp., 5, 6, 8, 11, 15, 16, 17, 21, 25, 36, 37, 39, 87, 90, 142: on *Quercus* sp., 18, 19, 20: on *Quercus* sp. and *Juniperus* sp., 22, 98, 99: on *Juniperus* sp., 27: on *Acer* sp., 28: on *Liquidambar orientalis*, 38: on *Vaccinium* sp., 30, 31, 40, 43, 58, 67, 76, 83, 117, 126, 127, 150, 184: on *Pinus* sp., 52: on *Pinus* sp. and *Quercus* sp., 59: on *Pinus* sp. and *Pistacia* sp., 61: on *Pinus* sp., *Acer* sp.

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- Lecidella patavina* (A. Massal.) Knopf & Leuckert - Loc. 153, 154: on calcareous rock.
- #*Lecidella pulveracea* (Flörke) Th. Fr. - Loc. 23: on *Juniperus* sp., 84: on *Quercus* sp.
- Lecidella stigmataea* (Ach.) Hertel & Leuckert - Loc. 11, 19, 23, 26, 35, 36, 38, 48, 49, 70, 72, 83, 85, 88, 90, 98, 106, 113, 120, 124, 128, 129, 130, 137, 140, 142, 143, 160, 165, 166, 184: on calcareous rock.
- Lemmopsis arnoldiana* (Hepp) Zahlbr.- Loc. 70: on calcareous rock
- Lepraria incana* (L.) Ach. - Loc. 70: on *Platanus orientalis* and *Pinus* sp., 138: on calcareous rock, 27, 39, 59, 133, 139: on *Quercus* sp., 25, 38, 158: on *Pinus* sp.
- Lepraria membranaceum* (Dicks.) Vain.- Loc. 19, 24, 74, 80, 83, 88, 89, 93, 94, 98, 99, 100, 118, 142, 143, 151, 152, 175: on mosses.
- Leptochidium albociliatum* (Desm.) M. Choisy - Loc. 16: on mosses.
- Leptogium cyanescens* (Pers.) Körb. - Loc. 1, 4, 26, 64, 68, 69, 70, 84, 137: on mosses.
- Leptogium diffractum* Kremp. – Loc. 61: on mosses and calcareous rock.
- Leptogium gelatinosum* (With.) J.R. Laundon - Loc. 1, 4, 10, 16, 17, 19, 20, 24, 27, 29, 33, 36, 37, 38, 39 41, 43, 47, 55, 57, 61, 62, 64, 70, 81, 83, 84, 98, 99, 111, 112, 139, 141, 146, 148, 151, 152, 166, 167, 176, 182: on mosses.
- Leptogium lichenoides* (L.) Zahlbr - Loc. 3, 4, 5, 8, 10, 11, 15, 16, 17, 18, 19, 23, 24, 26, 29, 30, 31, 33, 43, 48, 49, 55, 56, 59, 60, 61, 62, 67, 69, 70, 71, 74, 75, 78, 80, 81, 82, 83, 84, 86, 87, 88, 90, 93, 94, 95, 98, 99, 100, 101, 105, 108, 109, 110, 112, 113, 114, 118, 123, 124, 125, 126, 127, 128, 129, 130, 131, 133, 141, 142, 143, 144, 145, 148, 149, 151, 152, 153, 154, 158, 160, 165, 166, 167, 168, 169, 170, 171, 175, 177, 179, 180, 181, 183, 184, 185: on mosses.
- Leptogium plicatile* (Ach.) Leight. - Loc. 17, 88: on mosses
- Leptogium pulvinatum* (Hoffm.) Cromb.- Loc. 22: on mosses.
- Leptogium saturninum* (Dicks.) Nyl. - Loc. 15, 59, 60: on *Quercus* sp., 20: on mosses.
- Leptogium schraderi* (Bernh.) Nyl. - Loc. 39: on mosses and calcareous rock, 135: on calcareous rock.
- Leptogium subtile* (Schrad.) Tors. - Loc. 31, 38: on *Quercus* sp., 40: on *Fraxinus* sp.
- Leptogium teretiusculum* (Flörke) Arnold - Loc. 15, 70: on calcareous rock.
- Leptogium turgidum* (Ach.) Cromb. - Loc. 13, 17, 36, 53, 84, 88: on calcareous rock.
- Letharia vulpina* (L.) Hue - Loc. 17: on *Quercus* sp., 11, 16, 20, 21, 23, 98, 99: on *Pinus* sp., 22: on *Pinus* sp. and *Quercus* sp., 18, 19, 24: on *Juniperus* sp.
- Lichinella stipatula* Nyl. - Loc. 50, 51, 64: on siliceous rock.
- Lobaria scrobiculata* (Scop.) P. Gaertn. - Loc. 40: on *Pinus* sp.
- Lobothallia alphoplaca* (Wahlenb.) Hafellner - Loc. 67, 92, 159: on siliceous rock.
- Lobothallia praeradiosa* (Nyl.) Hafellner - Loc. 31, 67, 92: on siliceous rock.
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- Megaspora verrucosa* (Ach.) Hafellner & V. Wirth - Loc. 7, 11, 14, 17, 66, 88, 93, 99, 109, 110, 120, 136, 144, 146, 149, 160, 168, 175, 181, 183, 184: on mosses, 15, 84: on *Quercus* sp., 18, 29, 40, 59, 69, 80, 98: on *Juniperus* sp., 119: on mosses and *Quercus* sp., 125: on *Quercus* sp., *Acer* sp. and mosses, 157: on mosses and soil.
- Melanelia subargenteifera* (Nyl.) Essl. - Loc. 18: on *Quercus* sp. and *Juniperus*, 22: on *Pinus* sp.
- Melanelia subaurifera* (Nyl.) Essl. - Loc. 15: on *Quercus* sp.
- Melanelia fuliginosa* subsp. *glabratula* (Lamy) J.R. Laundon - Loc. 15: on *Quercus* sp., 17, 19, 22, 23, 70: on *Juniperus* sp., 5, 24, 28, 33, 34, 38, 39, 55, 58, 59, 61, 62, 91, 98, 125, 170: on *Pinus* sp.
- Melanelia glabra* (Schaer.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch - Loc. 21, 38, 39, 62, 63: on *Pinus* sp., 22, 33, 84: on *Quercus* sp.
- Melanohalea elegantula* (Zahlbr.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch - Loc. 18: on *Juniperus* sp., 20: on *Quercus* sp., 23, 91, 104: on *Pinus* sp.

- Melanohalea exasperata* (De Not.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch - Loc. 5, 11, 15, 16, 83, 98, 99, 117, 119, 124, 166, 167, 175: on *Pinus* sp., 17, 18, 24, 104: on *Quercus* sp., 19, 20: on *Juniperus* sp., 36: on *Fraxinus* sp.
- Melanohalea exasperatula* (Nyl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch - Loc. 15, 80, 83, 84: on *Quercus* sp., 16, 17, 22, 36, 59, 70, 81, 166, 167, 170: on *Pinus* sp., 19: on *Juniperus* sp., 24: on *Pinus* sp. and *Juniperus*, 119: on *Quercus* sp. and *Pinus* sp.
- Melanohalea infumata* (Nyl.) O. Blanco, A. Crespo, Divakar, Essl., D. Hawksw. & Lumbsch - Loc. 149: on calcareous rock, 17, 18, 23: on *Pinus* sp., *Juniperus* sp. and *Quercus* sp., 11, 19, 84: on *Quercus* sp., 20: on *Pinus* sp., 22, 81: on *Juniperus* sp., 16, 24, 29, 34, 55, 59, 71, 80, 103, 104, 118, 124, 119, 142, 151, 152, 167, 170, 174, 176: on *Pinus* sp., 79: on *Juniperus* sp. and *Quercus* sp., 91: on *Pinus* sp., 98, 99: on *Pinus* sp. and *Juniperus* sp., 143: on mosses, 159, 166: on *Populus* sp.
- Montanelia sorediata* (Ach.) Divakar, A. Crespo, Wedin & Essl. - Loc. 24: on siliceous rock.
- Mycocalicium subtile* (Pers.) Szatala - Loc. 18, 99: on *Juniperus* sp.
- Nephroma parile* (Ach.) Ach. - Loc. 33, 39, 43, 66: on *Pinus* sp., 25, 27, 42, 62, 70, 142: on mosses.
- Nephroma resupinatum* (L.) Ach. - Loc. 25: on *Acer* sp. and *Pinus* sp., 27, 60: on *Quercus* sp., 33, 39, 40, 42, 61: on *Pinus* sp., 38, 43, 59, 66, 70, 142: on mosses, 62: on *Pinus* sp. and mosses.
- Normandina pulchella* (Borrer) Nyl. - Loc. 60, 70: on *Pinus* sp.
- Obryzum corniculatum* (Hoffm.) Wallr. - Loc. 26, 37: on mosses
- Ochrolechia alboflavescens* (Wulfen) Zahlbr. - Loc. 17: on *Quercus* sp. *Juniperus* sp., 19, 24: on *Pinus* sp. and *Juniperus* sp., 15, 40: on *Quercus* sp., 98, 99: on *Pinus* sp.
- Ochrolechia androgyna* (Hoffm.) Arnold - Loc. 21, 22: on *Juniperus* sp. and *Quercus* sp., 23: on *Liquidambar orientalis* and *Acer* sp., 17, 20, 39, 59, 84: on *Quercus* sp., 18, 40, 42, 142: on *Juniperus* sp., 44: on *Abies* sp., 63: on *Quercus* sp. and *Platanus orientalis*, 26, 31, 70, 98, 119: on *Pinus* sp.
- Ochrolechia dalmatica* (Erichsen) Boqueras - Loc. 15, 17, 18, 25, 26, 27, 38, 70, 84: on *Quercus* sp., 19, 20, 22: on *Quercus* sp. and *Juniperus* sp., 23, 24, 39, 40, 42, 59, 175, 176: on *Juniperus* sp.
- Opegrapha calcarea* (Turner ex Sm.) Ertz & Diederich - Loc. 25: on calcareous rock.
- Opegrapha rupestris* Pers. - Loc. 25, 33, 55, 62, 65, 67: on calcareous rock, 62: on *Verrucaria compacta* and calcareous rock.
- Opegrapha varia* Pers. - Loc. 98: on *Juniperus* sp.
- Pannaria conoplea* (Ach.) Bory - Loc. 15, 60, 61: on mosses.
- Parmelia saxatilis* (L.) Ach.- Loc. 11: on mosses, 16: on *Quercus* sp. and mosses, 23: on *Pinus* sp. and *Quercus*, 26: on *Liquidambar orientalis*, 59: on *Pistacia* sp. and *Pinus* sp., 60: on *Juniperus* sp. and *Quercus* sp., 61: on *Fraxinus* sp., *Pinus* sp. and *Platanus orientalis*, 21, 22, 25, 27, 62, 65: on *Quercus* sp., 15, 17, 18, 19, 20, 68, 58, 69, 81, 28, 33, 35, 38, 39, 40, 115, 116: on *Pinus* sp., 18, 24, 42, 142: on *Juniperus* sp.
- Parmelia submontana* Hale - Loc. 16: on *Pinus* sp., 23, 42: on *Quercus* sp.
- Parmelia sulcata* Taylor - Loc. 17: on *Juniperus* sp., 5, 11, 25: on *Quercus* sp., 23, 26, 27: on *Pinus* sp. and *Quercus* sp., 16, 18, 24, 38, 39, 40: on *Pinus* sp., 59: on *Juniperus* sp. and *Quercus* sp.
- Parmeliella triptophylla* (Ach.) Müll. Arg.- Loc. 15,61: on *Quercus* sp., 25: on *Acer* sp., 26: on *Liquidambar orientalis*, 27: on *Pinus* sp. and *Acer* sp., 39: on *Quercus* sp. and *Pinus* sp., 59: on *Juniperus* sp. and *Quercus* sp., 38, 42, 62, 70: on *Pinus* sp.
- Parmelina carporrhizans* (Taylor) Hale - Loc. 26: on *Pinus* sp.
- Parmelina pastillifera* (Harm.) Hale - Loc. 25, 26, 40: on *Pinus* sp.
- Parmelina quercina* (Willd.) Vain.- Loc. 18: on *Pinus* sp.
- Parmelina tiliacea* (Hoffm.) Hale - Loc. 2, 5, 11, 17, 19, 25, 27, 28, 33, 34, 38, 42, 57, 58 59, 62, 67, 79, 80, 81, 99, 119, 125, 142, 174, 175: on *Pinus* sp., 4, 15, 16, 23, 84: on *Quercus* sp., 17, 24, 40, 98: on *Juniperus* sp., 18: on *Quercus* sp. and *Juniperus* sp., 20: on *Pinus* sp. and *Quercus* sp., 26: on *Liquidambar orientalis*, 39: on *Olea* sp., *Pinus* sp., *Quercus* sp. and *Vaccinium* sp., 60: on *Pinus* sp., *Lignum vitae* and *Rhus* sp., 61: on *Quercus* sp., *Rhus* sp., *Fraxinus* sp., *Pinus* sp. and *Platanus* sp., 63: on *Ficus* sp., *Juniperus* sp., *Pinus* sp. and *Pistacia* sp., 70: on *Pinus* sp. and *Juniperus* sp.
- Parmeliopsis ambigua* (Wulfen) Nyl. - Loc. 23: on *Quercus* sp.
- Parmeliopsis hyperopta* (Ach.) Vain. - Loc. 99: on *Pinus* sp.
- Parmotrema arnoldii* (Du Rietz) Hale - Loc. 28: on *Pinus* sp.
- Parmotrema perlatum* (Huds.) M. Choisy - Loc. 28: on *Pinus* sp.
- Parvoplaca tiroliensis* (Zahlbr.) Arup, Søchting & Frödén - Loc. 1, 56, 86, 131: on mosses.

- Peltigera canina* (L.) Willd. - Loc. 3, 56, 101, 130, 138, 160: on mosses.
- Peltigera ponojensis* Gyeln. - Loc. 36, 141: on mosses.
- Peltigera praetextata* (Flörke ex Sommerf.) Zopf. - Loc. 1, 36, 56, 110, 128, 129, 137, 144, 146, 165, 180: on mosses.
- Peltigera rufescens* (Weiss) Humb. - Loc. 5, 7, 8, 9, 20, 34, 36, 37, 47, 53, 56, 59, 61, 72, 73, 74, 75, 78, 79, 84, 85, 88, 91, 100, 105, 108, 110, 113, 114, 124, 125, 126, 127, 129, 142, 145, 157, 158, 160, 166, 167, 168, 174, 177, 179, 181, 184, 185: on mosses.
- Peltula euploca* (Ach.) Poelt ex Ozenda & Clauzade - Loc. 92: on siliceous rock.
- Pertusaria albescens* (Huds.) M. Choisy & Werner - Loc. 15, 62, 84: on *Quercus* sp., 17, 40: on *Pinus* sp., *Juniperus* sp. and *Quercus* sp., 22, 28, 33, 38, 39, 42, 56, 118: on *Pinus* sp., 25, 26, 27: on *Liquidambar orientalis*, *Acer* sp. and *Pinus* sp., 59: on *Juniperus* sp., *Acer* sp., *Quercus* sp., *Pinus* sp. and *Abies* sp., 61: on *Rhus* sp. and *Fraxinus* sp., 70: on *Pinus* sp. and *Juniperus* sp., 63, 89, 117, 124, 142: on *Juniperus* sp.
- Pertusaria amara* (Ach.) Nyl. - Loc. 26: on *Liquidambar orientalis*, *Acer* sp. and *Quercus* sp., 38: on *Cedrus* sp. and *Juniperus* sp.
- Pertusaria amarescens* Nyl. - Loc. 91, 104: on siliceous rock.
- Pertusaria coccodes* (Ach.) Nyl. - Loc. 17, 18: on *Quercus* sp. and *Juniperus* sp., 26: on *Acer* sp., *Quercus* sp. and *Liquidambar orientalis*, 33: on *Quercus* sp. and *Pinus* sp., 38, 61, 62: on *Quercus* sp., 39: on *Pinus* sp., 40, 44, 59: on *Juniperus* sp., 60: on *Abies* sp. and *Juniperus* sp., 70: on *Cedrus* sp.
- Pertusaria flava* (DC.) J.R. Laundon - Loc. 25, 26: on *Liquidambar orientalis*, *Acer* sp. and *Pinus* sp., 33, 39, 61: on *Quercus* sp. and *Pinus* sp., 38: on *Abies* sp. and *Quercus* sp., 55: on *Quercus* sp., *Pinus* sp., *Abies* sp. and *Juniperus* sp., 59: on *Quercus* sp., *Pinus* sp. and *Juniperus* sp., 70: on *Acer* sp., *Abies* sp. and *Quercus* sp.
- Pertusaria hemisphaerica* (Flörke) Erichsen - Loc. 26, 27: on *Quercus* sp., *Liquidambar orientalis* and *Acer* sp., 38: on *Juniperus* sp. and *Abies* sp., 40, 59: on *Juniperus* sp., 44: on *Juniperus* sp. and *Pinus* sp., 70: on *Acer* sp., *Abies* sp. and *Quercus* sp.
- Pertusaria hymenaea* (Ach.) Schaefer. - Loc. 38, 61: on *Quercus* sp., 40: on *Acer* sp., *Juniperus* sp., *Pistacia* sp. and *Acer* sp., 60: on *Acer* sp. and *Quercus* sp., 62, 63: on *Quercus* sp. and *Pinus* sp., 70: on *Quercus* sp. and *Alnus* sp., 149: on *Pinus* sp.
- Pertusaria ophthalmiza* (Nyl.) Nyl. - Loc. 43: on *Quercus* sp., 58: on *Pinus* sp.
- Pertusaria pertusa* (L.) Tuck. - Loc. 26, 27: on *Liquidambar orientalis*, *Acer* sp. and *Pinus* sp., 38: on *Pinus* sp. and *Quercus* sp., 40: on *Abies* sp., *Cedrus* sp. and *Quercus*, 55: on *Quercus* sp., *Fraxinus* sp., *Pinus* sp. and *Juniperus* sp., 59: on *Quercus* sp., *Pinus* sp. and *Juniperus* sp., 61: on *Fraxinus* sp., *Rhus* sp. and *Quercus* sp., 63: on *Pinus* sp., 70: on *Pinus* sp. and *Juniperus* sp.
- Phaeophyscia cernohorskyi* (Nádv.) Essl. - Loc. 1, 5, 6, 12, 29, 95, 102, 110, 126, 151, 158, 181: on mosses, 2, 10, 16, 47, 53, 62, 76, 80, 88, 89, 93, 103, 115, 116, 124, 135, 139, 141, 142, 149, 152, 153, 154, 155, 160, 176, 180, 182, 183, 185: on calcareous rock.
- Phaeophyscia ciliata* (Hoffm.) Moberg - Loc. 2, 15, 16, 63, 67, 116, 166: on *Pinus* sp., 18: on *Quercus* sp., 118: on *Salix* sp. and *Pyrus* sp.
- Phaeophyscia nigricans* (Flörke) Moberg - Loc. 8, 84: on *Populus* sp., 33, 152: on *Pinus* sp., 53: on *Vaccinium* sp., 96: on *Pyrus* sp., 97, 101, 102, 135: on calcareous rock, 15, 100, 116, 151: on *Quercus* sp.,
- Phaeophyscia orbicularis* (Neck.) Moberg - Loc. 1, 2, 6, 14, 88, 155, 166: on *Populus* sp., 12, 29, 42, 116, 117, 135, 154, 163, 171: on *Pinus* sp., 15, 20, 62, 63, 74, 81, 84, 97, 151: on *Quercus* sp., 47, 70, 99, 143: on *Juniperus* sp., 111, 115, 152: on *Salix* sp., 83: on *Fraxinus* sp., 170: on *Pyrus* sp., 17, 142: on *Quercus* sp. and *Pinus* sp., 33: on *Populus* sp., *Salix* sp. and *Pyrus* sp., 148: on *Populus* sp., *Pyrus* sp. and *Pinus* sp., 149: on *Populus* sp. and *Pyrus* sp., 119: on *Pyrus* sp. and *Salix* sp., 167: on *Populus* sp. and *Salix* sp., 103: on *Salix* sp. and *Platanus orientalis*, 25: on *Liquidambar orientalis* and *Pinus* sp., 26: on *Liquidambar orientalis*, *Pinus* sp. and *Alnus* sp., 180: on *Rhus* sp. and *Pyrus* sp., 50: on *Rhus* sp., *Populus* sp. and *Pinus* sp., 59: on *Acer* sp., *Juniperus* sp. and *Populus* sp., 92: on *Pyrus* sp. and *Juniperus* sp., 67: on *Ficus* sp. and *Juniperus* sp., 134: on *Juniperus* sp. and *Quercus* sp., 18: on *Juniperus* sp. and *Pinus* sp., 19, 22: on *Pinus* sp., *Quercus* sp. and *Juniperus* sp.
- Phlyctis agelaea* (Ach.) Flot. - Loc. 17, 25, 26, 27, 28, 70: on *Pinus* sp., 38, 62: on *Platanus* sp., *Acer* sp., *Alnus* sp., *Quercus* sp., *Rhus* sp. and *Pistacia* sp., 39, 40: on *Pinus* sp. and *Juniperus* sp., 60, 61: on *Pinus* sp. and *Quercus* sp.

- Phlyctis argena* (Ach.) Flot. - Loc. 5, 15, 17, 18, 40, 42: *Quercus* sp., 20, 59: on *Juniperus* sp., 21: on *Juniperus* sp. and *Quercus* sp., 22, 23: on *Juniperus* sp., *Pinus* sp. and *Quercus* sp., 24, 39: on *Juniperus* sp. and *Pinus* sp., 25: on *Liquidambar orientalis* and *Pinus* sp., 26, 26, 27, 33, 34, 35, 38, 60, 61, 62, 70, 88: on *Pinus* sp.
- Physcia adscendens* (Fr.) H. Olivier - Loc. 1, 59, 81, 95, 96, 103, 104, 117, 125, 130, 138, 151, 152, 163, 164, 166, 170, 175, 176, 177, 180, 181, 182: on *Populus* sp. 4, 9, 82, 87, 108, 109, 126, 178: on *Salix* sp., 6, 16, 37, 52, 76, 78, 143, 148, 149, 160, 162, 165: on *Pinus* sp., 10, 15, 36, 40, 62, 65, 83, 105, 110, 113, 141: on *Quercus* sp., 17, 18, 147: on *Juniperus* sp., 45, 46, 50, 122, 167, 171 on *Pyrus* sp., 25, 26: on *Liquidambar orientalis*, 97: on *Fraxinus* sp., 53: on *Melia azedarach*, 142: on *Berberis* sp., 123: on *Pinus* sp., *Salix* sp. and *Rhus* sp., 101: on *Salix* sp. and *Platanus orientalis*, 102: on *Salix* sp. and *Populus* sp., 19, 24, 42: on *Juniperus* sp., *Quercus* sp. and *Pinus* sp., 21, 51: on *Pinus* sp. and *Juniperus* sp., 11: on *Quercus* sp. and *Pinus* sp., 38: on *Alnus* sp. and *Platanus* sp., 39: on *Vaccinium* sp., *Platanus* sp. and *Alnus* sp., 70: on *Pyrus* sp., *Vaccinium* sp., *Platanus* sp., *Pinus* sp. and *Alnus* sp., 118: on *Quercus* sp. and *Pyrus* sp.
- Physcia aipolia* (Ehrh. ex Humb.) Fürnr. - Loc. 11, 15, 16, 20, 39, 43, 59, 61, 70, 81, 90, 96, 126, 183: on *Quercus* sp., 28, 40, 47, 83, 99, 115, 119, 149: on *Pinus* sp., 44, 62, 80, 103, 124, 166, 184: on *Populus* sp., 17, 18, 19, 42, 63, 142: on *Juniperus* sp., 36, 170: on *Pyrus* sp., 4: on *Rhus* sp., 74: on *Salix* sp., 84: on *Fraxinus* sp., 52: on *Melia azedarach*, 24: on *Quercus* sp. and *Juniperus* sp., 30: on *Pyrus* sp. and *Quercus* sp., 25: on *Juniperus* sp. and *Liquidambar orientalis*, 58: on *Juniperus* sp. and *Acer* sp., 26, 27: on *Pinus* sp., *Juniperus* sp. and *Liquidambar orientalis*, 37: on *Alnus* sp., *Platanus orientalis* and *Pinus* sp., 102: on *Salix* sp. and *Platanus orientalis*, 38: on *Alnus* sp. and *Pinus* sp., 53: on *Pistacia* sp. and *Pinus* sp., 116: on *Rhus* sp., *Salix* sp. and *Pinus* sp., 167: on *Pyrus* sp. and *Pinus* sp.
- Physcia biziana* (A. Massal.) Zahlbr. - Loc. 2, 9, 86: on *Fraxinus* sp., 6, 36, 47, 83, 84, 100, 103, 117, 119, 126, 127, 131, 147, 148, 165, 166, 167, 174, 175, 175, 176, 177: on *Populus* sp., 115, 35, 87, 89, 90: on *Quercus* sp., 17, 24, 50, 125, 137: on *Juniperus* sp., 33, 51, 56, 91, 95, 98, 124, 134, 142, 146, 170, 182: on *Pinus* sp., 80, 81, 109, 110, 143, 144, 163: on *Pyrus* sp., 111: on *Salix* sp., 18: on *Juniperus* sp. and *Quercus* sp., 20: on *Pinus* sp. and *Juniperus* sp., 85: on *Populus* sp. and *Pinus* sp., 99: on *Salix* sp. and *Platanus* sp., 19, 157: on *Pinus* sp., *Quercus* sp. and *Juniperus* sp.
- Physcia caesia* (Hoffm.) Hampe ex Fürnr. - Loc. 166, 167: on mosses.
- Physcia dimidiata* (Arnold) Nyl. - Loc. 7, 10, 48, 84, 90, 93, 149, 155, 180, 183, 184: on calcareous rock, 18: on *Juniperus* sp., 32, 53, 72, 73, 113, 131, 135: on mosses, 85, 110, 128: on *Quercus* sp., 140: on calcareous rock and mosses, 143: on *Pinus* sp..
- Physcia dubia* (Hoffm.) Lettau - Loc. 2, 112, 130, 172: on mosses, 19, 105, 175: on *Pinus* sp., *Quercus* sp. and *Juniperus* sp., 3, 18, 20, 24, 40, 49, 53, 59, 65, 84, 90, 91, 93, 99, 102, 104, 110, 117, 118, 124, 141, 142, 149, 151, 152, 154, 155, 163, 166, 167, 169, 174: on siliceous rock, 57: on *Acer* sp. and *Juniperus* sp., 143: on *Juniperus* sp. and siliceous rock.
- Physcia leptalea* (Ach.) DC. - Loc. 36: on mosses, 40, 43, 59: on *Juniperus* sp.
- Physcia stellaris* (L.) Nyl. - Loc. 2, 11, 18: on *Pinus* sp., 42, 59: on *Quercus* sp., 61: on *Pinus* sp. and *Platanus orientalis*, 98: on *Juniperus* sp., 166: on *Populus* sp.
- Physcia tenella* (Scop.) DC. - Loc. 18, 24, 70: on *Juniperus* sp., 19: on *Pinus* sp., *Juniperus* sp. and *Quercus* sp., 59, 61, 142: on *Quercus* sp., 117, 119: on *Pinus* sp., *Rhus* sp. and *Salix* sp.
- Physconia detersa* (Nyl.) Poelt - Loc. 16, 40, 150: on *Juniperus* sp., 18, 84: on *Quercus* sp., 25, 26: on *Pinus* sp. and *Liquidambar orientalis*, 27: on *Quercus* sp. and *Alnus* sp., 70, 120: on *Pinus* sp., 119: on *Pyrus* sp., 47, 166, 167: on *Populus* sp.
- Physconia distorta* (With.) J.R. Laundon - Loc. 2, 6, 15, 170, 171: on *Pyrus* sp., 4, 43, 61, 63, 78, 131, 144, 166: on *Populus* sp., 10, 11, 14, 19, 35, 59, 81, 87, 124, 142, 147: on *Quercus* sp., 16, 47, 84, 125, 163, 167: on *Salix* sp., 17, 18, 24, 52, 74, 136: on *Juniperus* sp., 22, 27, 39, 42, 85, 119: on *Pinus* sp., 36: on *Alnus* sp., 38: on *Platanus orientalis*, 8: on *Quercus* sp. and *Pyrus* sp., 26: on *Liquidambar orientalis* and *Pinus* sp., 118: on *Pinus* sp., *Rhus* sp. and *Salix* sp.
- Physconia enteroxantha* (Nyl.) Poelt - Loc. 16, 26, 27: on *Juniperus* sp., 27: on *Alnus* sp., *Ficus* sp. and *Pinus* sp., 47: on *Abies* sp. and *Juniperus* sp., 59: on *Pinus* sp., 70: on *Pyrus* sp., 40, 119, 166: on *Populus* sp., 174: on *Quercus* sp.
- Physconia muscigena* (Ach.) Poelt - Loc. 1, 3, 6, 7, 8, 11, 16, 19, 21, 22, 24, 29, 32, 35, 40, 41, 50, 53, 54, 71, 74, 77, 80, 82, 84, 86, 93, 96, 104, 108, 111, 113, 114, 126, 128, 130, 131, 135, 139, 142, 150, 159, 169, 171, 174, 184, 185: on mosses.

- Physconia perisidiosa* (Erichsen) Moberg - Loc. 8, 26, 27, 29, 47, 74, 81, 84, 93, 98, 104, 109, 111, 113, 115, 116, 119, 125, 166, 167, 169: on mosses, 15, 19: on *Quercus* sp., 17, 99, 148: on *Juniperus* sp., 18: on *Juniperus* sp., *Quercus* sp. and *Pinus* sp., 24: on *Quercus* sp. and *Alnus* sp., 38: on *Platanus orientalis*, *Pinus* sp. and *Alnus* sp., 39: on *Vaccinium* sp., *Platanus orientalis*, *Pinus* sp. and *Alnus* sp., 50, 170: on *Populus* sp., 70: on *Platanus orientalis* and *Pinus* sp., 59, 117, 150: on *Pinus* sp.
- Physconia venusta* (Ach.) Poelt - Loc. 11, 15, 17, 18, 21, 33, 61, 62, 63: on *Quercus* sp., 19: on *Pinus* sp., *Quercus* sp. and *Juniperus* sp., 20, 24, 42, 59, 63: on *Pinus* sp., 22, 39, 40, 45: on *Juniperus* sp., 38: on *Pinus* sp. and *Quercus* sp., 46: on *Juniperus* sp. and *Quercus* sp., 70: on *Pyrus* sp., 81: on *Salix* sp. and *Pyrus* sp., 118: on *Pinus* sp., *Rhus* sp. and *Salix* sp., 120, 142: on mosses.
- Placidium squamulosum* (Ach.) Breuss - Loc. 52, 111, 118: on calcareous rock.
- Placocarpus schaeereri* (Fr.) Breuss - Loc. 4, 6, 16, 17, 18, 32, 47, 48, 49, 53, 54, 59, 71, 74, 80, 82, 86, 88, 90, 92, 100, 105, 106, 107, 108, 112, 113, 114, 115, 116, 124, 128, 129, 133, 134, 138, 141, 142, 143, 148, 151, 152, 153, 154, 155, 156, 158, 160, 164, 169, 171, 180, 182, 183, 185: on calcareous rock.
- Placolecis opaca* (Dufour) Hafellner - Loc. 2, 57, 64, 67, 70: on calcareous rock.
- Placopyrenium iranicum* Breuss - Loc. 151, 152: on siliceous rock.
- Placynthiella icmalea* (Ach.) Coppins & P. James - Loc. 19: on mosses.
- Placynthium garovaglioi* (A. Massal.) Zahlbr. - Loc. 53, 83, 88: on calcareous rock.
- Placynthium nigrum* (Huds.) Gray - Loc. 4, 7, 10, 11, 14, 15, 16, 17, 18, 19, 20, 22, 24, 25, 26, 27, 28, 29, 32, 35, 36, 37, 38, 43, 44, 49, 51, 52, 53, 55, 59, 61, 62, 65, 70, 71, 74, 80, 81, 82, 83, 84, 88, 90, 92, 93, 98, 99, 106, 107, 108, 110, 113, 115, 116, 118, 127, 130, 133, 135, 137, 139, 142, 143, 145, 146, 148, 149, 151, 152, 153, 154, 165, 169, 172, 173, 175, 176, 179, 180, 182, 184: on calcareous rock.
- Placynthium subradiatum* (Nyl.) Arnold. - Loc. 142: on calcareous rock.
- Platismatia glauca* (L.) W.L. Culb. & C.F. Culb. - Loc. 19, 24, 40: on *Juniperus* sp., 20, 22, 58: on *Pinus* sp., 22, 59: on *Quercus* sp., 61: on *Rhus* sp. and *Fraxinus* sp.
- Pleurosticta acetabulum* (Neck.) Elix & Lumbsch - Loc. 4, 16, 20, 40: on *Juniperus* sp., 15, 17, 22, 36, 84: on *Quercus* sp., 18: on *Juniperus* sp. and *Quercus* sp., 26: on *Liquidambar orientalis*, 27: on *Acer* sp. and *Pinus* sp., 31, 42, 43, 52, 80, 81, 88, 117, 119: on *Pinus* sp., 59: on *Juniperus* sp., *Acer* sp. and *Quercus*, 83: on *Fraxinus* sp.
- Polycauliona polycarpa* (Hoffm.) Frödén, Arup & Søchting - Loc. 33, 116, 134, 135, 143, 149, 176: on *Pinus* sp., 29: on *Populus* sp., 47: on *Salix* sp., 74, 88, 142: on *Juniperus* sp., 119: *Populus* sp., 18, 19: on *Pinus* sp., *Quercus* sp. and *Juniperus* sp.
- Porpidia tuberculosa* (Sm.) Hertel & Knoph - Loc. 103, 150: on siliceous rock.
- Protoblastenia incrustans* (DC.) J. Steiner - Loc. 63, 81, 88, 98, 99: on calcareous rock.
- Protoblastenia rupestris* (Scop.) J. Steiner - Loc. 4, 9, 15, 36, 37, 38, 43, 54, 58, 59, 61, 63, 70, 100, 110, 142, 144: on calcareous rock.
- Protoparmelia badia* (Hoffm.) Hafellner - Loc. 91: on siliceous rock.
- Protoparmeliopsis muralis* (Schreb.) Rabenh. - Loc. 1, 4, 5, 6, 10, 11, 12, 15, 16, 18, 25, 29, 37, 39, 45, 46, 47, 48, 50, 51, 52, 53, 54, 59, 62, 65, 71, 74, 75, 76, 78, 79, 80, 81, 83, 84, 86, 87, 88, 90, 92, 93, 98, 99, 100, 106, 107, 109, 114, 115, 116, 118, 123, 125, 126, 128, 129, 131, 135, 137, 139, 142, 143, 148, 149, 151, 152, 153, 154, 155, 156, 158, 159, 160, 161, 166, 168, 169, 171, 172, 173, 174, 177, 181, 182, 183, 184: on calcareous rock.
- Pseudevernia furfuracea* (L.) Zopf var. *furfuracea* - Loc. 4, 11, 16, 18, 24, 28, 30, 34, 38, 39, 59, 60, 70, 80, 88, 99, 117, 119, 120, 126, 166, 167, 170: on *Pinus* sp., 17: on *Quercus* sp. and *Juniperus* sp., 19, 20, 33, 91, 98: on *Juniperus* sp., 21, 42: on *Quercus* sp., 22: on *Quercus* sp. and *Pinus* sp., 40: on *Juniperus* sp. and *Acer* sp., 43: on *Rhus* sp. and *Pinus* sp.
- Pseudevernia furfuracea* var. *ceratea* (Ach.) D. Hawksw. - Loc. 60: on *Quercus* sp., 80, 166, 167: on *Pinus* sp.
- Psora decipiens* (Hedw.) Hoffm. - Loc. 10, 22, 25, 27, 32, 37, 49, 61, 67, 91, 100, 104, 117, 120, 124, 126, 127, 139, 141, 160, 165: on soil.
- Psora testacea* Hoffm. - Loc. 2, 6, 9, 25, 26, 40, 43, 45, 46, 53, 55, 59, 61, 62, 67, 70, 72, 74, 80, 81, 86, 87, 88, 89, 108, 110, 113, 114, 117, 118, 120, 125, 126, 128, 130, 137, 141, 146, 153, 154, 158, 168, 175, 179, 180, 181, 182, 184, 185: on calcareous rock.
- Psora vallesiaca* (Schaer.) Timdal - Loc. 1, 4, 15, 17, 18, 19, 24, 26, 31, 32, 36, 37, 40, 43, 48, 49, 55, 58, 59, 60, 70, 71, 73, 75, 80, 82, 88, 118, 124, 129, 136, 151, 153, 154, 160, 165, 177, 183: on calcareous rock.
- Pyrenodesmia alociza* (A. Massal.) Arnold - Loc. 4, 19, 33, 61, 83, 88, 99, 143, 154, 169: on calcareous rock.

- Pyrenodesmia variabilis* (Pers.) A. Massal. - Loc. 4, 7, 11, 15, 18, 19, 31, 36, 42, 47, 50, 51, 52, 53, 55, 59, 65, 73, 80, 81, 83, 85, 88, 98, 99, 105, 106, 107, 110, 117, 120, 127, 132, 134, 135, 136, 140, 142, 143, 154, 159, 175, 181: on calcareous rock.
- Pyrrhospora quernea* (Dicks.) Körb. - Loc. 21, 22, 27, 33: on *Juniperus* sp., 40: on *Pinus* sp. and *Juniperus* sp.
- Ramalina capitata* (Ach.) Nyl. - Loc. 104, 174: on siliceous rock.
- Ramalina farinacea* Zopf - Loc. 11, 16, 25, 33, 34, 39, 40, 42, 43, 50, 51, 52, 70, 118, 122: on *Pinus* sp., 15, 17, 18, 21: on *Quercus* sp., 27: on *Acer* sp., 28: on *Liquidambar orientalis*, 35: on *Pinus* sp. and *Quercus* sp., 37: on *Platanus orientalis*, *Pinus* sp. and *Alnus* sp., 38: on *Juniperus* sp., 59: on *Juniperus* sp. and *Quercus* sp., 61: on *Quercus* sp. and *Fraxinus* sp., 120: on *Pinus* sp. and *Salix* sp.
- Ramalina fastigiata* (Pers.) Ach. - Loc. 18: on *Quercus* sp., 22, 38, 39, 42, 43, 70: on *Pinus* sp., 40, 59: on *Juniperus* sp.
- Ramalina fraxinea* (L.) Ach. - Loc. 13, 52, 119, 120: on *Pinus* sp., 17: on *Quercus* sp., 18, 19, 24: on *Juniperus* sp., 59: on *Pistacia* sp., 83: on *Fraxinus* sp., 118: on *Quercus* sp. and *Pinus* sp.
- Ramalina polymorpha* (Lilj.) Ach. - Loc. 22: on *Juniperus* sp.
- Rhizocarpon disporum* (Nägeli ex Hepp) Müll. Arg. - Loc. 166, 174, 176: on siliceous rock.
- Rhizocarpon geminatum* Körb. - Loc. 4, 29, 91, 103, 150, 166, 172: on siliceous rock.
- Rhizocarpon geographicum* (L.) DC. - Loc. 11, 15, 29, 91, 103, 104, 149, 150, 153, 154, 166, 167, 172, 174, 176: on siliceous rocks.
- Rhizocarpon lecanorinum* Anders - Loc. 11, 29, 91, 150, 151, 152, 154, 166, 172: on siliceous rock.
- Rhizoplaca chrysoleuca* (Sm.) Zopf - Loc. 104: on siliceous rock.
- Rhizoplaca melanophthalma* (DC.) Leuckert - Loc. 104, 148: on siliceous rock.
- Rhizoplaca peltata* (Ramond) Leuckert & Poelt - Loc. 104: on siliceous rock.
- Rinodina bischoffii* (Hepp) A. Massal. - Loc. 2, 4, 31, 38, 39, 40, 42, 44, 47, 50, 51, 65, 88, 106, 119, 120, 124, 135, 142, 143, 148, 165, 169, 175, 177, 181, 183: on calcareous rock.
- Rinodina calcarea* (Hepp ex Arnold) Arnold - Loc. 10, 19, 39, 42, 50, 51, 52, 54, 55, 70, 77, 81, 88, 90, 92, 106, 111, 116, 124, 159, 177, 180: on calcareous rock.
- Rinodina capensis* Hampe - Loc. 26, 37, 40, 44: on *Pinus* sp.
- Rinodina colobina* Ropin & H. Mayrhofer - Loc. 18: on *Juniperus* sp.
- Rinodina dubiana* (Hepp) J. Steiner - Loc. 4, 45, 46, 53, 63, 143, 175: on calcareous rock.
- #+*Rinodina freyi* H. Magn. - Loc. 40, 83: on *Pinus* sp.
- #+*Rinodina griseosoralifera* Coppins - Loc. 40, 65, 67: on *Pinus* sp.
- Rinodina guzzini* Jatta - Loc. 81: on calcareous rock.
- Rinodina immersa* (Körb.) J. Steiner - Loc. 4, 22, 45, 53, 54, 88, 91, 99, 124, 131, 139, 143, 146, 158, 177, 182, 184: on calcareous rock.
- Rinodina lecanorina* (A. Massal.) A. Massal. - Loc. 4, 38, 39, 47, 50, 83, 88, 90, 92, 93, 106, 111, 116, 134, 151, 152, 155, 160: on calcareous rock.
- Rinodina miltvina* (Wahlenb.) Th. Fr. - Loc. 2, 4, 19, 24, 28, 33, 42, 48, 50, 51, 59, 81, 84, 91, 92, 116, 120, 139, 148, 165, 180: on calcareous rock.
- Rinodina oleae* Bagl. - Loc. 40, 59, 142: on *Pinus* sp.
- Rinodina poeltii* H. Mayrhofer - Loc. 4, 14, 15, 25, 32, 50, 51, 83, 88, 92, 93, 100, 108, 111, 155, 182: on calcareous rock.
- Rinodina pyrina* (Ach.) Arnold - Loc. 3, 10, 15, 18, 22, 59, 70, 71, 74, 98, 115, 126, 133, 140, 167, 168, 180: on *Quercus* sp., 8, 163: on *Populus* sp., 11, 16, 19, 21, 38, 99, 100, 104, 145: on *Juniperus* sp., 12, 17, 20, 26, 28, 31, 32, 33, 35, 37, 47, 86, 90, 108, 110, 117, 119, 123, 135, 142, 143, 156, 157, 166, 175, 177, 182: on *Pinus* sp., 43: on *Pinus* sp. and *Juniperus* sp., 75, 83, 95: on *Fraxinus* sp., 82, 103, 116: on *Salix* sp., 165: on *Quercus* sp. and *Pinus* sp.
- Rinodina sophodes* (Ach.) A. Massal. - Loc. 83, 88: on *Pinus* sp.
- Romjularia lurida* (Ach.) Timdal - Loc. 1, 3, 10, 19, 22, 24, 25, 29, 37, 40, 49, 54, 60, 61, 62, 75, 79, 80, 83, 85, 88, 89, 90, 93, 94, 95, 98, 99, 100, 104, 108, 110, 113, 114, 124, 128, 130, 133, 138, 143, 145, 151, 152, 165, 166, 167, 168, 170, 175, 180, 182, 185: on soil.
- Rusavskia elegans* (Link) S.V. Kondr. & Kärnefelt - Loc. 32, 49, 75, 82, 86, 91, 98, 99, 104, 113, 124, 123, 126, 128, 130, 133, 135, 137, 142, 149, 151, 152, 154, 155, 158, 159, 160, 165, 166, 167, 170, 177, 176, 184, 185: on calcareous rock.
- Sarcogyne clavus* (DC.) Kremp. - Loc. 19, 50, 51, 67, 89, 92, 106, 107, 128, 130, 131, 142, 143, 158: on siliceous rock.

- Sarcogyne privigna* (Ach.) A. Massal. - Loc. 67, 92, 165: on siliceous rock.
- Sarcogyne regularis* Körb. - Loc. 6, 11, 18, 19, 24, 32, 33, 36, 43, 49, 57, 58, 62, 75, 81, 82, 86, 92, 98, 99, 110, 113, 115, 116, 117, 118, 119, 128, 135, 141, 142, 143, 145, 160, 180, 184: on siliceous rock.
- Scytinium palmatum* (Huds.) Gray - Loc. 61: on mosses.
- Seirophora contortuplicata* (Ach.) Frödén - Loc. 104, 142, 149: on calcareous rock.
- Solenopsora candidans* (Dicks.) J. Steiner - Loc. 31, 41: on calcareous rock.
- Solenopsora cesatii* (A. Massal.) Zahlbr. - Loc. 31, 32, 33, 38, 41, 55, 58, 65, 71, 113, 124, 165, 166, 182: on calcareous rock.
- Sporastatia testutinea* (Ach.) A. Massal. - Loc. 91: on siliceous rock.
- Squamaria cartilaginea* (With.) P. James - Loc. 2, 4, 29, 40, 57, 61, 63, 70, 80, 130, 133, 169: on mosses, 10, 20, 33, 37, 42, 55, 67, 71, 81, 119, 126, 141: on soil, 11, 17, 22, 25, 27, 32, 43, 45, 46, 47, 48, 50, 51, 53, 54, 58, 59, 62, 64, 74, 82, 83, 84, 88, 89, 92, 93, 98, 99, 111, 115, 116, 118, 142, 143, 151, 152, 175: on calcareous rock.
- Squamaria gypsacea* (Sm.) Poelt - Loc. 98, 169: on soil.
- Squamaria lentigera* (G. H. Weber) Poelt - Loc. 17, 36, 37, 47, 70, 71, 83, 88, 106, 107, 148: on mosses.
- Squamaria stella-petraea* Poelt - Loc. 143: on calcareous rock.
- Staurothele areolata* (Ach.) Lettau - Loc. 142, 143: on siliceous rock.
- Staurothele hymenogonia* (Nyl.) Th. Fr. - Loc. 28: on calcareous rock.
- Tephromela atra* (Huds.) Hafellner - Loc. 4, 19, 29, 41, 49, 50, 59, 63, 70, 75, 82, 91, 98, 111, 113, 150, 160, 166, 172, 174, 176, 181, 182, 183, 185: on siliceous rock.
- Tephromela grumosa* (Pers.) Hafellner & Cl. Roux - Loc. 91, 103, 104, 174: on calcareous rock.
- Thelenella muscorum* (Th. Fr.) Vain. - Loc. 22, 60: on mosses.
- Thelidium incavatum* Nyl. ex Mudd - Loc. 79: on calcareous rock.
- Toninia candida* (Weber) Th. Fr. - Loc. 2, 4, 9, 11, 37, 47, 50, 52, 63, 67, 80, 81, 98, 99, 111, 124, 134, 137, 138, 139, 143, 148, 151, 152, 159, 160, 169, 175, 184, 185: on calcareous rock.
- Toninia episema* (Nyl.) Timdal - Loc. on *Aspicilia* sp.
- Toninia opuntioides* (Vill.) Timdal - Loc. 2, 4, 29, 52, 83, 84, 88, 105, 106, 107, 137, 148, 149, 151, 167: on mosses, 17, 37, 40, 43, 48, 74, 80, 81, 93, 117, 133, 149, 152, 154, 166, 169, 170, 172, 179: on soil.
- Toninia sedifolia* (Scop.) Timdal - Loc. 1, 2, 6, 8, 15, 17, 19, 20, 23, 24, 25, 27, 32, 35, 47, 49, 53, 54, 59, 67, 71, 72, 73, 75, 76, 80, 81, 82, 86, 88, 98, 99, 100, 110, 119, 123, 124, 125, 126, 129, 133, 135, 142, 145, 165, 168, 172, 175: on soil, 4, 29, 44, 62, 86, 89, 93, 108, 120, 127, 128, 131, 177, 179, 180, 182, 183, 185: on mosses.
- Toninia squalida* (Ach.) A. Massal. - Loc. 35, 62, 90, 92, 104, 106, 107, 140, 148, 175, 184: on soil, 54, 74, 134: on mosses.
- Toninia subfuscæ* (Arnold) Timdal - Loc. 98: on *Lecanora* sp.
- Toninia toniniana* (A. Massal.) Zahlbr. - Loc. 2, 3, 10, 32, 49, 62, 80, 86, 100, 110, 113, 117, 118, 119, 120, 124, 128, 130, 137, 139, 141, 158, 165, 177, 180: on calcareous rock.
- Trapeliopsis flexuosa* (Fr.) Coppins & P. James - Loc. 39: on *Pinus* sp.
- Trapeliopsis granulosa* (Hoffm.) Lumbsch - Loc. 11, 27, 98: on *Juniperus* sp.
- Tuckermanopsis chlorophylla* (Willd.) Hale - Loc. 17, 21: on *Pinus* sp., 20: on *Juniperus* sp., 22: on *Quercus* sp. and *Pinus* sp.
- Usnea hirta* (L.) Weber ex F.H. Wigg. - Loc. 17: on *Quercus* sp.
- Usnea lapponica* Vain. - Loc. 17: on *Quercus* sp.
- Variospora aurantia* (Pers.) Arup, Frödén & Søchting - Loc. 7, 9, 36, 45, 46, 50, 51, 54, 183: on calcereous rock.
- Variospora dolomitica* (Hue) Arup, Søchting & Frödén - Loc. 31, 98, 90: on calcareous rock.
- Variospora flavescens* (Hudson) Arup, Frödén & Søchting - Loc. 7: on calcareous rock.
- Variospora velana* (A. Massal.) Arup, Søchting & Frödén - Loc. 22: on calcareous rock.
- Verrucaria baldensis* A. Massal - Loc. 49, 59, 180: on calcareous rock.
- Verrucaria calciseda* DC. - Loc. 18, 25, 47, 114, 168: on calcareous rock.
- Verrucaria compacta* (A. Massal.) Jatta - Loc. 47, 55, 62, 67, 75, 86, 141, 142, 143, 158, 175: on calcareous rock.
- Verrucaria dufourii* DC. - Loc. 67, 93: on calcareous rock.
- Verrucaria fuscella* (Turner) Winch - Loc. 2, 36, 39, 42, 67, 80, 84, 88, 89, 92, 93, 98, 99, 103, 135, 143, 151, 152, 154: on calcareous rock.
- Verrucaria latericola* Erichsen - Loc. 2, 53, 54, 59, 71, 74, 75, 88, 90, 92, 116, 119, 128, 148, 151, 152, 171: on calcareous rock.

- Verrucaria lecideoides* (A. Massal.) Trevis. - Loc. 2, 38, 50, 51, 59, 90, 93, 106, 116, 135, 148, 151, 152, 154, 155: on calcareous rock.
- Verrucaria macrostoma* Dufour ex DC. - Loc. 4, 19, 24, 27, 36, 63, 70, 86, 88, 92, 93, 139, 141, 142, 155, 169, 172: on calcareous rock.
- Verrucaria marmorea* (Scop.) Arnold - Loc. 4, 18, 22, 27, 41, 49, 58, 59, 62, 64, 71, 72, 75, 81, 82, 86, 89, 100, 112, 113, 137, 139, 145, 165: on calcareous rock.
- Verrucaria muralis* Ach. - Loc. 26, 31, 36, 43, 55, 62, 67, 175: on calcareous rock.
- Verrucaria nigrescens* Pers. - Loc. 1, 3, 4, 6, 7, 10, 11, 13, 15, 17, 18, 19, 21, 23, 24, 25, 27, 28, 29, 31, 32, 33, 35, 36, 37, 38, 39, 41, 42, 43, 45, 46, 47, 50, 52, 53, 54, 57, 58, 59, 62, 63, 64, 70, 71, 73, 74, 75, 80, 81, 82, 83, 88, 89, 90, 92, 93, 95, 96, 97, 98, 99, 100, 103, 108, 110, 111, 115, 116, 118, 120, 122, 123, 124, 126, 128, 130, 131, 134, 135, 137, 142, 143, 145, 146, 147, 149, 151, 152, 153, 154, 160, 164, 165, 168, 169, 171, 175, 177, 180, 181, 182, 185: on calcareous rock.
- Verrucaria nigrescens* f. *tecterum* (A. Massal.) Coppins & Aptroot - Loc. 90: calcareous rock.
- Verrucaria polysticta* Borrer - Loc. 31, 35, 55, 145: on calcareous rock.
- Verrucaria viridula* (Schrad.) Ach. - Loc. 61, 80, 135: on calcareous rock.
- Xanthocarpia crenulatella* (Nyl.) Frödén, Arup & Søchting - Loc. 2, 11, 90, 106, 107, 142, 143, 156, 175: on siliceous rock.
- Xanthocarpia interfulgens* (Nyl.) Frödén, Arup & Søchting - Loc. 98: on calcareous rock.
- Xanthocarpia lactea* (A. Massal.) A. Massal. - Loc. 38, 45, 46, 81: on calcareous rock.
- Xanthocarpia marmorata* (Bagl.) Frödén, Arup & Søchting - Loc. 55: on calcareous rock.
- Xanthomendoza fallax* (Arnold) Søchting, Kärnefelt & S.Y. Kondr. - Loc. 18, 19: on *Pinus* sp., *Quercus* sp. and *Juniperus* sp., 33, 116, 126, 139: on *Pinus* sp., 35, 71, 75, 110, 131, 147, 156, 166, 177, 182: on *Populus* sp., 82, 84, 112, 125: on *Pyrus* sp., 10, 83, 98, 105, 108, 123, 137, 145, 170, 180: on *Quercus* sp., 95, 134, 167: on *Fraxinus* sp., 100: on *Juniperus* sp., 115, 163, 183: on *Salix* sp., 165: on *Pinus* sp. and *Populus* sp.
- Xanthomendoza fulva* (Hoffm.) Søchting, Kärnefelt & S.Y. Kondr. - Loc. 16: on *Quercus* sp., 18, 99: on *Juniperus* sp., 32, 120, 167, 170: on *Pinus* sp., 33, 103, 116: on *Salix* sp., 137, 139, 143: on *Populus* sp., 166: on *Pinus* sp. and *Populus* sp.
- Xanthoparmelia conspersa* (Ehrh. ex Ach.) Hale - Loc. 167: on siliceous rock.
- Xanthoparmelia delisei* (Duby) O. Blanco, A. Crespo, Elix, D. Hawksw. & Lumbsch - Loc. 150, 174: on siliceous rock.
- Xanthoparmelia pokornyi* (Körb.) O. Blanco, A. Crespo, Elix, D. Hawksw. & Lumbsch - Loc. 80: on soil.
- Xanthoparmelia pulla* (Ach.) O. Blanco, A. Crespo, Elix, D. Hawksw. & Lumbsch - Loc. 11, 22, 25, 26, 27, 29, 70, 81, 91, 103, 104, 149, 151, 152, 166, 167, 172, 174, 176: on siliceous rock.
- Xanthoparmelia tinctina* (Maheu & A. Gillet) Hale - Loc. 36, 67, 74, 83, 103, 117, 139, 150, 167, 176: on siliceous rock.
- Xanthoparmelia verruculifera* (Nyl.) O. Blanco, A. Crespo, Elix, D. Hawksw. & Lumbsch - Loc. 91, 103, 104, 139, 150, 166, 170, 174: on siliceous rock.
- Xanthoria aphrodites* Kalb, Poelt & S.Y. Kondr. - Loc. 15: on *Quercus* sp., 40, 98: on *Juniperus* sp.
- Xanthoria aureola* (Ach.) Erichsen - Loc. 50, 51, 53, 54, 81, 84, 139, 141: on siliceous rock, 93: on *Juniperus* sp.
- Xanthoria candelaria* (L.) Th. Fr. - Loc. 18, 33, 126, 143, 163: on *Juniperus* sp.
- Xanthoria parietina* (L.) Th. Fr. - Loc. 42, 45, 47, 50, 174, 176, 177, 178, 180, 184: on calcareous rock, 29: on siliceous rock, 2, 86, 130: on *Pyrus* sp., 9, 15, 36, 37, 67, 70, 75, 82, 89, 90, 93, 95, 110, 170: on *Quercus* sp., 10, 16, 26, 27, 28, 35, 38, 40, 43, 52, 54, 135, 147, 166: on *Pinus* sp., 32, 41, 51, 81, 84, 126, 148, 167: on *Populus* sp., 33, 59, 83, 100, 111, 133, 134: on *Salix* sp., 88: on *Fraxinus* sp., 18, 25, 30, 31: on *Pinus* sp. and *Juniperus* sp., 117: on *Pyrus* sp. and *Pinus* sp., 119: on *Rhus* sp., *Salix* sp. and *Pinus* sp., 120: on *Pinus* sp. and *Alnus* sp., 19, 39, 46, 74, 98, 99, 103: on *Juniperus* sp., *Pinus* sp. and *Quercus* sp.

Discussion

All taxa are new to Burdur except *Aspicilia desertorum*, *Caloplaca cerina*, *Caloplaca saxicola*, *Catillaria lenticularis*, *Cetraria aculeata*, *Collema cristatum*, *C. tenax*, *Diplotomma venustum*, *Gyalolechia flavorubescens*, *G. fulgida*, *Lecidella elaeochroma*, *Leptogium lichenoides*, *Megaspora verrucosa*, *Physconia detersa*, *P. muscigena*, *Psora decipiens*, *Rusavskia elegans*, *Sarcogyne fallax*, *Squamaria cartilaginea*, *S. stellapetraea*, *Tephromela atra*, *Variospora aurantia*, *Xanthocarpia lactea* and *Xanthoparmelia pulla* (Çobanoğlu 2005, Şenkardeşler 2009, Öztürk et al. 2005, Pisut and Guttova 2008). *Anaptychia ulotrichoides*, *Diploschistes gypsaceus*, *Lecanora graeca*, *L. riparia*, *Lecidella scabra*, *Lepraria nivalis*, *Pertusaria leucosora* and *Rinodina mayrhoferi*, which have already noted from in Burdur before, were not collected in this study (Pisut & Guttova 2008).

We found 397 lichen taxa growing 32 different substrata, in which there were 267 crustose (five of them are parasitic), 97 foliose lichen, 29 fruticose lichen, and four leprose lichen.

A total of 204 taxa are epiphytic, where the 68 of them are musicolous; 194 taxa saxicolous; 16 taxa terricolous; 7 taxa epiphytic or saxicolous, 8 taxa terricolous or musicolous. In the study area 64 lichenized fungi were found on the bark of deciduous and coniferous trees while 35 on mosses only. The majority of lichen taxa growing on trees were founded on *Acer*, *Fraxinus*, *Juniperus*, *Liquidambar orientalis*, *Pinus*, *Platanus*, *Populus*, *Rhus*, *Quercus* and *Salix*. Additionally 21 taxa were present on deciduous trees only while 43 species on coniferous trees only (Table 2).

Genera *Aspicilia*, *Caloplaca*, *Cladonia*, *Lecanora*, *Leptogium* *Rinodina* and *Verrucaria* are the most common genera in the study area. Moreover the genus *Lecanora* has the greatest diversity among the genera (represented by 26 species, growing on mostly rocks and deciduous trees) and mainly occurring, in Altinyayla and Bucak districts. The second most common genus is *Cladonia* (represented by 16 species, mostly on mosses) occurring in Altinyayla and Bucak districts. Additionally genus *Caloplaca* has 15 species, growing on rocks and deciduous and coniferous trees mostly in Altinyayla, Bucak and Burdur (center) regions. The other common genera are *Rinodina* (15 species), *Verrucaria* (14 species), *Aspicilia* (13 species), and *Leptogium* (11 species) (Figure 1, Table 1).

Localities 3, 4, 6, 7, 10, 11, 13, 15, 17, 18, 19, 21, 23, 24, 25, 27, 28, 29, 31, 32, 33, 35, 36, 37, 38, 39, 41, 42, 43, 45, 46, 47, 48, 50, 52, 53, 54, 57, 58, 59, 60, 62, 63, 64, 70, 71, 73, 74, 75, 80, 81, 82, 83, 88, 89, 90, 92, 93, 95, 96, 97, 98, 99, 100, 103, 108, 110, 111, 114, 115, 116, 118, 120, 122, 123, 124, 126, 128, 130, 131, 134, 135, 137, 142, 143, 145, 146, 147, 149, 151, 152, 153, 154, 160, 164, 165, 168, 169, 171, 175, 177, 180, 181, 182 and 185 are situated near a lime pit where *Verrucaria baldensis*, *V. calciseda* and *V. nigrescens* we found, they were identified as indicator species of lime and calcareous substratum (Smith et al. 2009) (Figure 1, Table 1).

The substrata reported for these lichens reflect the general habitat features in the Burdur province and to some extent determine the species presence. *Evernia prunastri*, *Hypogymnia physodes*, *Melanohalea exasperatula*, *Parmelia sulcata*, *Parmeliopsis ambigua*, *Physcia aipolia*, *Pseudevernia furfuracea* var. *furfuracea*, *Ramalina farinacea*, *R. fraxinea*, *Rinodina pyrina*, *Usnea hirta*, *U. lapponica*, and *Xanthomendoza fallax* are the most common and the most representative phorophytes.

Lichen biodiversity is very rich especially in the *Pinus* and *Quercus* forests of Altinyayla (Ballık region), *Pinus*, *Quercus* and *Liquidambar* forests of Bucak: surrounding the Karacaören Dam. In general, the majority of the taxa were commonly found on coniferous and deciduous trees. These are *Anaptychia ciliaris*, *Athallia holocarpa*, *Caloplaca cerina*, *Candelariella aurella*, *Degelia plumbea*, *Evernia prunastri*, *Lecanora carpinea*, *L. dispersa*, *L. hagenii*, *L. hybocarpa*, *L. varia*, *Lecidella elaeochroma*, *L. euphoreia*, *Letharia vulpina*, *Megaspora verrucosa*, *Melanelia exasperata*, *Melanelia fuliginosa* subsp. *glabratula*, *Melanohalea infumata*, *Ochrolechia androgyna*, *O. dalmatica*, *Parmelia saxatilis*, *P. sulcata*, *Parmelina tiliacea*, *Pertusaria albescens*, *Phaeophyscia orbicularis*, *Phlyctis agelaea*, *P. argena*, *Physcia adscendens*, *P. aipolia*, *Physcia biziana*, *Physcia dubia*, *Physconia distorta*, *P. perisidiosa*, *P. venusta*, *Pleurosticta acetabulum*, *Pseudevernia furfuracea* var. *furfuracea*, *Ramalina farinacea*, *Rinodina pyrina*, *Xanthomendoza fallax* and *Xanthoria parietina*.

The majority of *Cladonia* spp., *Collema tenax*, *Diploschistes muscorum*, *Gyalolechia fulgens*, *G. fulgida*, *Calogaya schistidii*, *Lepraria membranaceum*, *Leptogium gelatinosum*, *L. lichenoides*, *Peltigera rufescens*, *Physconia muscigena* and *Squamaria cartilaginea* were abundantly seen growing on mosses in the *Pinus* and deciduous forests of Bucak, Burdur, Yeşilova and Altinyayla towns. In the same forests *Usnea* (only Ballık region), *Hypogymnia* and *Pseudevernia* have been mostly found on the branches and trunks of *Pinus* and deciduous trees. *Lecanora*, *Physcia*, *Phaeophyscia* and *Physconia* taxa have largely been found on deciduous trees such as *Populus*, *Quercus* and *Pyrus*.

The lichen diversity on tree bark was not very rich excluding Altinyayla, Bucak: Karacaören, south of Burdur (center) since there are only *Quercus coccifera* trees covering the larger area in the towns. Thus some epiphytic taxa such as *Caloplaca cerina*, *Collema tenax*, *Evernia prunastri*, *Lecidella elaeochroma*, *Lecanora dispersa*, *Ochrolechia androgyna*, *Parmelia saxatilis*, *Parmelina tiliacea*, *Pertusaria albescens*, *Pertusaria pertusa*, *Phaeophyscia orbicularis*, *Phlyctis agelaea*, *Physcia adscendens*, *Physcia aipolia*, *Physcia biziana*, *Physconia detersa*, *Physconia distorta*, *Physconia enteroxantha*, *Physconia perisidiosa*, *Physconia venusta*, *Ramalina farinacea* and *Xanthoria parietina* grow on these trees in the Bucak and Altinyayla regions. On the other hand *Acarospora cervina*, *Aspicilia caesiocinerea*, *Aspicilia calcarea*, *Aspicilia cinerea*, *Athallia holocarpa*, *Caloplaca saxicola*, *Caloplaca xantholyta*, *Candelariella aurella*, *Candelariella vitellina*, *Collema cristatum*, *Collema tenax*, *Lecanora bolcana*, *Lecanora dispersa*, *Lecanora hagenii*, *Lecidella carpathica*, *Lecidella stigmata*, *Lobothallia radiosa*, *Phaeophyscia cernohorskyi*, *Placocarpus schaeereri*, *Placynthium nigrum*, *Protoparmeliopsis muralis*, *Psora testacea*, *Psora vallesiaca*, *Rinodina milvina*, *Rusavskia elegans*, *Toninia toniniana* and *Verrucaria nigrescens* were seen to be plentiful on calcareous rocks since the study area is mostly covered by marble rocks.

Rhizoplaca chrysoleuca, *R. melanophthalma*, *R. peltata* and *Rhizocarpon geographicum* were not found plentifully as expected. *Rhizoplaca chrysoleuca*, *R. melanophthalma* and *R. peltata* were only collected in stations 104 and 148 on siliceous rocks while *Rhizocarpon geographicum* only in stations 11, 15, 29, 91, 103, 104, 149, 150, 153, 154, 166, 167, 172, 174, 176 on siliceous rocks.

The most tolerant lichen species that had substratum preferences were *Caloplaca cerina*, *Collema tenax*, *Evernia prunastri*, *Lecidella elaeochroma*, *Lecanora dispersa*, *Ochrolechia androgyna*, *Parmelia saxatilis*, *Parmelina tiliacea*, *Pertusaria albescens*, *Pertusaria pertusa*, *Phaeophyscia orbicularis*, *Phlyctis agelaea*, *Physcia adscendens*, *Physcia aipolia*, *Physcia biziana*, *Physconia detersa*, *Physconia distorta*, *Physconia enteroxantha*, *Physconia perisidiosa*, *Physconia venusta*, *Ramalina farinacea* and *Xanthoria parietina*.

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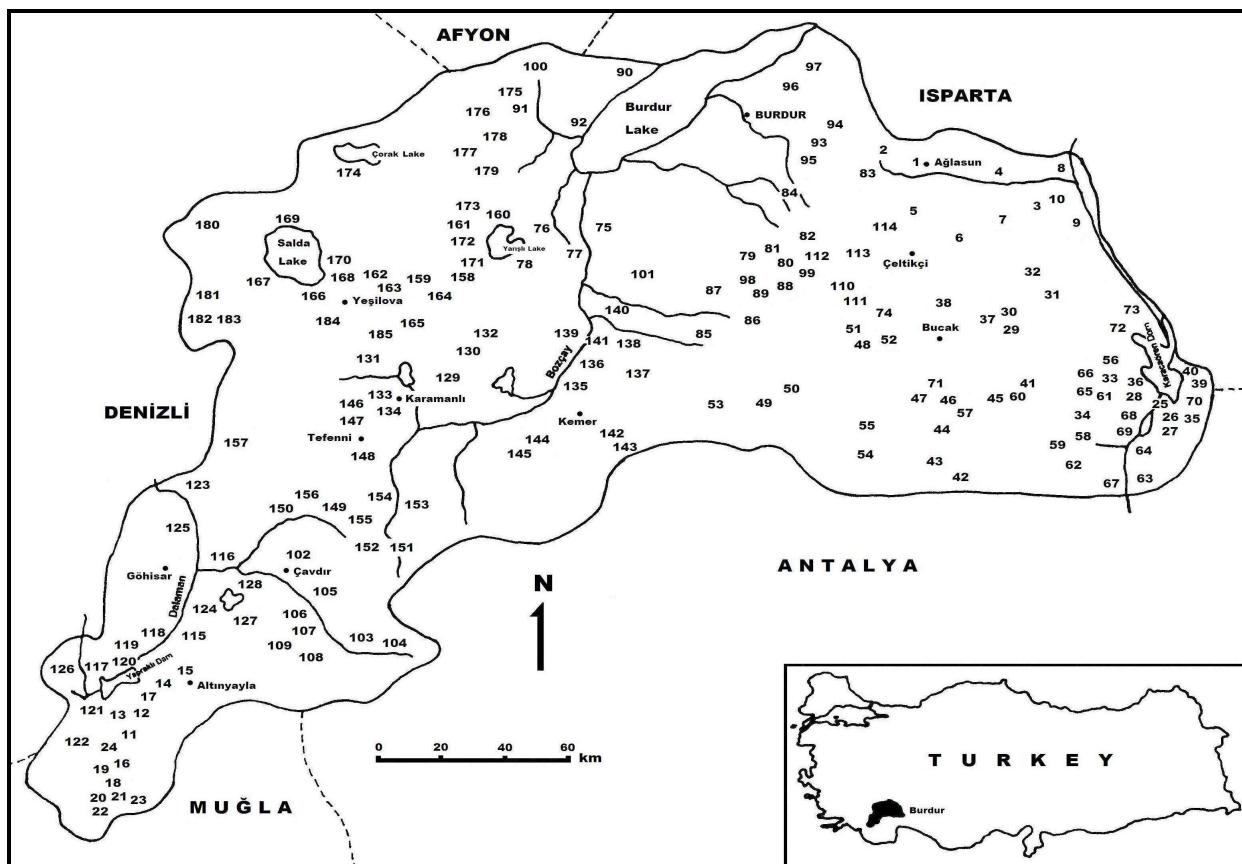


FIGURE 1. Map of Turkey showing Burdur province and the numbers of the collection localities
(see TABLE 1 for locality data)

TABLE 1. Collecting localities

No	Locality	Coordinates	Altitude (m)	Collecting date
1	Ağlasun: exit of Ağlasun	37°39'40.86"N/ 30°31'16.53"E	1236	17.07.2012
2	Ağlasun: exit of Yeşilbaşköy	37°38'51.70"K/ 30°27'23.57"D	1452	17.07.2012
3	Ağlasun: Yumrutaş	37°36'03.34"N/ 30°40'39.46"E	1220	17.07.2012
4	Ağlasun: between Ağlasun and Çamlıdereye	37°38'01.77"N/ 30°38'53.58"E	1010	17.07.2012
5	Ağlasun: Kiprit	37°35'53.16"N/ 30°30'06.06"E	1133	05.07.2014
6	Ağlasun: Çanaklı	37°34'09.85"N/ 30°34'05.09"E	1151	05.07.2014
7	Ağlasun: Hisar	37°35'07.49"N/ 30°37'50.42"E	1082	06.07.2014
8	Ağlasun: Gökbel	37°38'08.07"N/ 30°42'52.81"E/	911	06.07.2014
9	Ağlasun: Aşağı Yumrutaş	37°34'50.79"N/ 30°43'42.77"E	691	07.07.2014
10	Ağlasun: Karagöl	37°37'12.07"N/ 30°42'38.81"E	1098	07.07.2014
11	Altınyayla: between İbecikten and Altınyayla road-1	36°56'59.32"N/ 29°27'40.68"E	1373	29.06.2012
12	Altınyayla: between İbecik and Altınyayla road-2	36°56'09.14"N/ 29°27'00.31"E	1436, 1373	22.09.2013
13	Altınyayla: between Emalıyurt and Ballık turning	36°58'00.91"N/ 29°26'31.71"E	1222	08.04.2013
14	Altınyayla: Çörten	37°00'08.44"N/ 29°31'10.08"E	1175	08.04.2013
15	Altınyayla: Dirmilcik	37°01'09.66"N/ 29°32'08.00"E	1370	08.04.2013
16	Altınyayla: 5 km to Ballık	36°56'23.58"N/ 29°27'02.49"E	1418	08.04.2013
17	Altınyayla: exit of Çörten	36°59'06.50"N/ 29°29'06.33"E	1114	11.06.2013
18	Altınyayla: Ballık village	36°57'16.87"N/ 29°27'28.69"E 26°52'41.21"N/ 29°25'37.37"E	1337, 1432	11.06.2013

19	Altınyayla: opposite of Ballık village, the end of Boncuk mountain	36°53'20.88"N/ 29°25'25.20"E	1555	11.06.2013
20	Altınyayla: enter to Karanlıkdere valley	36°51'20.87"N/ 29°25'16.33"E	1349	23.08.2013
21	Altınyayla: exit of Ballık, Karanlıkdere valley, roadside	36°51'49.52"N/ 29°25'31.31"E	1357	23.08.2013
22	Altınyayla: Karanlıkdere canyon	36°49'32.89"N/ 29°24'31.07"E	1429	23.08.2013
23	Altınyayla: Karanlıkdere canyon, towards control tower, woodland area, roadside	36°50'01.31"N/ 29°24'56.59"E	1392	23.08.2013
24	Altınyayla: Boncuk Mountain	36°54'12.24"N/ 29°25'44.50"E	1613	21.09.2013
25	Bucak: Karacaören Dam Sığla, Mountain-1	37°21'35.14"N/ 30°50'05.80"E	300	25.06.2012
26	Bucak: Karacaören Dam Sığla, Mountain-2	37°21'35.14"N/ 30°50'05.80"E	300	09.04.2013
27	Bucak: Karacaören Dam Sığla, Mountain-3	37°20'45.55"N/ 30°50'01.31"E	299	23.09.2013
28	Bucak: Karacaören Dam turning	37°22'30.49"N/ 30°48'54.07"E	305	25.06.2012
29	Bucak: between Burdur and Bucak road, enter to Beşkonak	37°27'01.73"N/ 30°38'44.41"E	945	25.06.2012
30	Bucak: Kema	37°28'57.55"N/ 30°39'06.27"E	1180	28.06.2012
31	Bucak: Çamlık	37°29'18.21"N/ 30°41'40.79"E	1010	28.06.2012
32	Bucak: Taşyayla	37°30'28.27"N/ 30°38'48.56"E	820	28.06.2012
33	Bucak: between Isparta-Antalya road and Pamucak, Çobanpınar	37°23'39.42"N/ 30°46'50.60"E	600	17.07.2012
34	Bucak: between Beşkonak and Kocaaliler, 3 km to Kocaaliler	37°20'52.64"N/ 30°44'12.45"E	846	17.07.2012
35	Bucak: Hacıismailler	30°21'01.21"N/ 30°52'41.06"E	370	18.07.2012
36	Bucak: Karacaören village	37°23'17.60"N/ 30°49'58.76"E	455	18.07.2012
37	Bucak: enter to Bucak (from East)	37°26'39.33"N/ 30°39'19.98"E	874	18.07.2012
38	Bucak: Bucak çıkış (towards the West)	37°27'44.96"N/ 30°34'55.84"E	915	18.07.2012

39	Bucak: Kızılılı village-1	37°23'07.11"N/ 30°53'34.29"E	485	18.07.2012
40	Bucak: Kızılılı village-2	37°23'55.28"N/ 30° 52'54.25"E	304	22.08.2013
41	Bucak: exit of Yukarı kuyubası valley	37°21'51.07"N/ 30°42'15.03"E	975	24.08.2012
42	Bucak: Karaot	37°15'46.37"N/ 30°35'07.52"E	1015	24.08.2012
43	Bucak: Güllüalan	37°17'14.33"N/ 30°33'20.82"E	1125	24.08.2012
44	Bucak: Gündoğdu	37°19'13.86"N/ 30°33'26.46"E	960	24.08.2012
45	Bucak: Kuyubaşı	37°22'12.25"N/ 30°39'22.76"E	990	24.08.2012
46	Bucak: Avdancık	37°21'13.00"N/ 30°33'14.12"E	830	24.08.2012
47	Bucak: Karapınar	37°21'30.98"N/ 30°32'21.68"E	870	24.08.2012
48	Bucak: Kestel	37°24'05.02"N/ 30°24'41.59"E	830	25.08.2012
49	Bucak: Yüreğil	37°22'49.09"N/ 30°18'42.03"E	1235	25.08.2012
50	Bucak: Heybeli	37°23'34.36"N/ 30°21'36.60"E	1215	25.08.2012
51	Bucak: Kuşbabası	37°27'25.71"N/ 30°25'52.05"E	1140	25.08.2012
52	Bucak: Üzümlübel	37°26'21.78"N/ 30°27'54.50"E	940	25.08.2012
53	Bucak: Ürkütlü-Aziziye, roadside	37°22'05.73"N/ 30°14'41.04"E	1150	26.08.2012
54	Bucak: Kızılkaya	37°18'18.45"N/ 30°24'26.90"E	820	26.08.2012
55	Bucak: Kızılcaağac	37°19'32.62"N/ 30°27'04.60"E	834	26.08.2012
56	Bucak: between Beşkonak and Pamucak, 1 km to Dereağzı	37°23'43.42"N/ 30°46'28.81"E	620	09.04.2013
57	Bucak: exit of Gündoğdu	37°20'15.70"N/ 30°34'19.28"E	806	10.06.2013
58	Bucak: Kocaaliler	37°18'33.36"N/ 30°44'36.03"E	625	10.06.2013
59	Bucak: Demirli	37°18'16.29"N/ 30°42'32.08"E	690	10.06.2013

60	Bucak: exit of Kuyubaşı village	37°22'12.98"N/ 30°39'06.54"E	976	10.06.2013
61	Bucak: between Çobanpınar and Telciler arası, enter to Çobanpınar	37°21'00.28"N/ 30°47'35.89"E	240	26.06.2013
62	Bucak: Esirlik village	37°16'50.09"N/ 30°43'29.82"E	859	27.06.2013
63	Bucak: Çobanlar	37°14'47.86"N/ 30°47'47.46"E	122	26.06.2013
64	Bucak: Harmancık village	37°16'29.24"N/ 30°48'35.88"E	342	26.06.2013
65	Bucak: from Çobanpınar to Telciler, along Telciler village	37°21'04.53"N/ 30°46'11.09"E	357	26.06.2013
66	Bucak: along Telciler köyüne gitmeden, along valley	37°22'34.88"N/ 30°43'55.53"E	756	26.06.2013
67	Bucak: Kızılseki	37°15'28.64"N/ 30°45'32.28"E	439	27.06.2013
68	Bucak: 2 km to Kargı	37°17'37.97"N/ 30°48'38.16"E	271	26.06.2013
69	Bucak: Kargı	37°17'21.23"N/ 30°48'38.30"E	241	26.06.2013
70	Bucak: along Kızılı village, roadside, woodland	37°21'54.34"N/ 30°52'56.52"E	394	22.08.2013
71	Bucak: Susuz	37°22'31.44"N/ 30°32'37.98"E	860	11.06.2014
72	Bucak: Elsazı	37°27'09.44"N/ 30°49'03.47"E	330	12.06.2014
73	Bucak: Bozkaya	37°27'14.54"N/ 30°48'00.25"E	295	12.06.2014
74	Burdur: Hacılar	37°34'32.57"N/ 30°05'27.06"E	955	26.06.2012
75	Burdur: Düger	37°34'20.71"N/ 30°01'20.47"E	957	26.06.2012
76	Burdur: Karaçal	37°33'19.87"N/ 30°04'15.00"E	952	26.06.2012
77	Burdur: Kocapınar	37°32'00.53"N/ 29°59'09.91"E	1042	26.06.2012
78	Burdur: Bereket	37°32'50.54"N/ 30°17'41.61"E	146	27.06.2012
79	Burdur: Kayış	37°32'50.24"N/ 30°21'03.19"E	1370	27.06.2012
80	Burdur: between Bereket and Kayış	37°32'40.76"N/ 30°19'19.70"E	1472	27.06.2012

81	Burdur: enter to İncirdere (from West)	37°28'09.33"N/ 30°29'10.94"E	880	27.06.2012
82	Burdur: Beşkavak	37°34'36.69"N/ 30°22'47.85"E	1329	28.06.2012
83	Burdur: Çatakbeli	37°38'34.02"N/ 30°27'27.42"E	1520	17.07.2012
84	Burdur: Kayaaltı	37°37'06.72"N/ 30°20'37.41"E	1248	18.07.2012
85	Burdur: Erikli	37°26'57.59"N/ 30°14'04.63"E	1402	25.08.2012
86	Burdur: Kapaklı	37°27'35.43"N/ 30°17'51.28"E	1513	25.08.2012
87	Burdur: Yeşildağ	37°30'10.79"N/ 30°14'54.94"E	1412	25.08.2012
88	Burdur: Akyayla (Katrancık= Kestel mountain skirt)	37°30'05.84"N/ 30°20'06.83"E	1435	26.08.2012
89	Burdur: Aksu village	37°30'31.78"N/ 30°18'47.43"E	1435	26.08.2012
90	Burdur: Ilyas village (North of Burdur lake)	37°46'40.42"N/ 30°08'23.20"E	955	25.06.2013
91	Burdur: to Ulupınar village, roadside	37°44'39.99"N/ 30°00'01.80"E	1434	25.06.2013
92	Burdur: exit of Karakent (South-east of Burdur lake)	37°43'50.59"N/ 30°06'16.99"E	883	25.06.2013
93	Burdur: Çatağıl village	37°41'10.56"N/ 30°23'27.26"E	1345	24.08.2013
94	Burdur: Halıcılar village	37°42'11.01"N/ 30°23'10.65"E	1329	24.08.2013
95	Burdur: İnsuyu village	37°39'21.99"N/ 30°22'30.55"E	1230	24.08.2013
96	Burdur: Askeriye village	37°45'46.30"N/ 30°21'36.70"E	981	24.08.2013
97	Burdur: Gökçebağ village	37°46'38.03"N/ 30°22'48.43"E	956	24.08.2013
98	Burdur: center, Katrancı mountain-1	37°30'41.71"N/ 30°18'36.97"E	1505	10.04.2013
99	Burdur: center, Katrancı mountain-1	37°29'48.34"N/ 30°21'04.64"E	1529	25.09.2013
100	Burdur: Başmakçı	37°46'32.48"N/ 30°00'14.15"E	1548	24.07.2014
101	Burdur: İğdeli	37°31'12.74"N/ 30°09'14.48"E	1140	24.07.2014

102	Çavdır: center	37°09'44.61"N/ 29°40'07.88"E	1065	29.06.2012
103	Çavdır: Yazır (Göllük), roadside	37°02'22.45"N/ 29°45'14.28"E	1289	09.06.2013
104	Çavdır: from Çavdır to Söğüt, roadside	37°02'26.99"N/ 29°47'21.74"E	1432	09.06.2013
105	Çavdır: Towards BölmePINar (from north)	37°63'08.35"N/ 29 °43'35.97"E	1117	09.06.2013
106	Çavdır: Bayır village	37°06'09.99"N/ 29°41'20.33"E	1113	09.06.2013
107	Çavdır: Kızıllar village	37°04'21.21"N/ 29°42'11.75"E	1148	09.06.2013
108	Çavdır: Ambarcık village	37°02'32.39"N/ 29°41'39.03"E	1213	09.06.2013
109	Çavdır: Kozağaç	37°03'51.38"N/ 29°40'22.00"E	1358	10.04.2014
110	Çeltikçi: Bağsaray	37°30'30.38"N/ 30°26'39.90"E	895	27.06.2012
111	Çeltikçi: Cebiş	37°29'28.56"N/ 30°25'49.17"E	965	27.06.2012
112	Çeltikçi: Ovacık	37°32'44.86"N/ 30°22'43.95"E	1339	28.06.2012
113	Çeltikçi: Kuzköy	37°32'42.30"N/ 30°26'14.03"E	940	28.06.2012
114	Çeltikçi: Güvenli	37°34'57.57"N/ 30°28'39.37"E	1129	09.04.2014
115	Gölhısar: exit of Gölhısar, along Altınyayla road	37°02'55.52"N/ 29°32'14.28"E	1250	29.06.2012
116	Gölhısar: between Çavdır and Gölhısar, 5 km to Gölhısar	37°08'59.17"N/ 29°36'40.71"E	970	29.06.2012
117	Gölhısar: along Yapraklı dam side-1	37°00'49.29"N/ 29°24'53.62"E	1110	29.06.2012
118	Gölhısar: along Yapraklı dam side-2	37°02'55.76"N/ 29°27'37.77"E	1080	29.06.2012
119	Gölhısar: along Yapraklı dam side-3	37°02'43.42"N/ 29°27'49.94"E	1055	29.06.2012
120	Gölhısar: along Yapraklı dam side-4	37°01'18.29"N/ 29°26'01.64"E	1099	08.04.2013
121	Gölhısar: İbecik	36°58'30.72"N/ 29°26'01.31"E	1332	29.06.2012
122	Gölhısar: Elmaliyurt village	36°56'33.22"N/ 29°23'47.84"E	1239	08.04.2013

123	Gölhisar: Çamköy	37°15'36.65"N/ 29°32'37.13"E	987	10.06.2014
124	Gölhisar: Karapınar	37°05'57.02"N/ 29°33'26.39"E	1050	25.07.2014
125	Gölhisar: Yusufça	37°11'56.37"N/ 29°31'03.64"E	1067	25.07.2014
126	Gölhisar: Yeşildere	37°01'32.35"N/ 29°22'51.59"E	1175	26.07.2014
127	Gölhisar: Hisarardı	37°05'48.36"N/ 29°36'56.11"E	1020	26.07.2014
128	Gölhisar: Yamadı	37°08'30.67"N/ 29°36'08.65"E	1007	25.07.2014
129	Karamanlı: Kağılcık	37°23'41.36"N/ 29°53'06.46"E	1277	26.06.2012
130	Karamanlı: Bademli	37°25'24.14"N/ 29°54'48.98"E	1209	26.06.2012
131	Karamanlı: Dereköy	37°25'26.59"N/ 29°46'20.85"E	1303	26.06.2012
132	Karamanlı: Mürseller	37°26'36.93"N/ 29°55'53.86"E	1289	26.06.2012
133	Karamanlı: Kılcan	37°22'21.52"N/ 29°47'36.11"E	1228	26.06.2012
134	Karamanlı: exit of Karamanlı	37°21'01.19"N/ 29°48'43.97"E	1130	19.07.2012
135	Kemer: 3 km to Kemer	37°23'08.61"N/ 30°02'56.32"E	1065	07.04.2013
136	Kemer: Akören village	37°24'42.20"N/ 30°04'35.25"E	1041	07.04.2013
137	Kemer: Akçaören village	37°23'56.24"N/ 30°08'40.10"E	1124	07.04.2013
138	Kemer: Kayı village	37°26'00.57"N/ 30°07'07.27"E	1079	07.04.2013
139	Kemer: Pınarbaşı village	37°26'40.18"N/ 30°03'11.02"E	1034	07.04.2013
140	Kemer: Elmacık village	37°28'12.40"N/ 30°05'52.70"E	1018	07.04.2013
141	Kemer: Boğaziçi village	37°30'55.24"N/ 30°04'27.91"E	974	07.04.2013
142	Kemer: 3 km to Bozdağ, Bozdağ-Akpınar plateau	37°19'37.13"N/ 30°04'44.96"E	1425	07.04.2013
143	Kemer: Bozdağ	37°19'04.39"N/ 30°05'35.38"E	1580	24.09.2013

144	Kemer: Yakalar	37°18'40.50"N/ 30°01'13.96"E	1252	08.04.2014
145	Kemer: Belenli	37°18'06.42"N/ 29°59'34.25"E	1263	08.04.2014
146	Tefenni: Sazak village	37°21'33.04"N/ 29°45'26.14"E	1310	26.06.2012
147	Tefenni: Ece village	37°20'26.32"N/ 29°45'31.27"E	1259	26.06.2012
148	Tefenni: exit of Tefenni	37°18'56.25"N/ 29°45'35.66"E	1210	19.07.2012
149	Tefenni: between Tefenni and Çavdır	37°14'01.01"N/ 29°44'54.18"E	1285	19.07.2012
150	Tefenni: between Beyköy and Büyükalan	37°12'59.45"N/ 29°40'02.41"E	1122	21.08.2013
151	Tefenni: Yeşilköy	37°10'41.65"N/ 29°49'02.48"E	1483	21.08.2013
152	Tefenni: Başpınar village	37°10'43.40"N/ 29°46'06.85"E	1237	21.08.2013
153	Tefenni: Bayramlar village	37°13'58.94"N/ 29°50'14.40"E	1289	21.08.2013
154	Tefenni: Seydiler village	37°14'47.46"N/ 29°48'24.83"E	1191	21.08.2013
155	Tefenni: Yuva village	37°12'50.52"N/ 29°45'22.77"E	1243	21.08.2013
156	Tefenni: Beyköy	37°14'14.68"N/ 29°41'29.47"E	1239	11.06.2013/ 21.08.2013
157	Tefenni: Belkaya village	37°18'29.80"N/ 29°36'33.49"E	1435	10.04.2014
158	Yeşilova: Çeltek	37°31'32.56"N/ 29°54'16.79"E	1197	26.06.2012
159	Yeşilova: Cuvallı	37°31'05.96"N/ 29°51'12.41"E	1223	26.06.2012
160	Yeşilova: Yarışlı	37°36'04.65"N/ 29°56'54.91"E	990	26.06.2012
161	Yeşilova: Harmanlı	37°34'53.57"N/ 29°54'35.57"E	1053	26.06.2012
162	Yeşilova: Karaatlı	37°31'43.06"N/ 29°47'02.01"E	1155	26.06.2012
163	Yeşilova: Bayırbaşı	37°30'07.74"N/ 29°48'48.80"E	1251	26.06.2012
164	Yeşilova: Başkuyu	37°30'05.73"N/ 29°52'56.73"E	1318	26.06.2012

165	Yeşilova: Bedirli	37°27'33.23"N/ 29°50'20.62"E	1333	26.06.2012
166	Yeşilova: South of Salda lake	37°30'38.51"N/ 29°41'33.31"E	1180	19.07.2012
167	Yeşilova: Salda village	37°31'33.17"N/ 29°39' 32.30"E	1171	19.07.2012
168	Yeşilova: Kayadibi village	37°31'33.46"N/ 29°43'57.73"E	1227	19.07.2012
169	Yeşilova: Doğanbaba (side of Salda lake)	37°35'07.71"N/ 29°41'27.12"E	1172	19.07.2012
170	Yeşilova: east of Salda lake	37°32'22.24"N/ 29°43'08.59"E	1170	19.07.2012
171	Yeşilova: to Kocapınar, South of Yarışlı lake, side of Sazlık	37°32'40.12"N/ 29°56'38.20"E	943	12.06.2013
172	Yeşilova: exit of Harmanlı village (North-West of Yarışlı lake)	37°35'54.09"N/ 29°53'34.02"E	1179	12.06.2013
173	Yeşilova: between Karaköy and Tekkeköy (North of Yarışlı lake)	37°36'06.72"N/ 29°54'28.55"E	1108	12.06.2013
174	Yeşilova: South side of Çorakgöl, Bayındır village	37°40'03.41"N/ 29°44'29.55"E	1005	12.06.2013
175	Yeşilova: between Ulupınar and Elden villages	37°45'00.76"N/ 29°58'10.63"E	1563	25.06.2013
176	Yeşilova: between Elden and Akçaköy, along stream	37°43'48.11"N/ 29°56'15.86"E	1319	25.06.2013
177	Yeşilova: Gökçeyaka	37°40'58.36"N/ 29°55'06.57"E	1176	06.04.2014
178	Yeşilova: Çardak	37°41'47.38"N/ 29°56'44.95"E	1242	06.04.2014
179	Yeşilova: Onacak	37°39'04.45"N/ 29°55'44.23"E	1418	06.04.2014
180	Yeşilova: Düden	37°35'27.31"N/ 29°33'28.72"E	1475	07.04.2014
181	Yeşilova: Güney	37°29'29.40"N/ 29°35'50.40"E	1138	07.04.2014
182	Yeşilova: Karaköy	37°28'02.48"N/ 29°32'42.04"E	1048	07.04.2014
183	Yeşilova: Horuz	37°28'11.60"N/ 29°34'49.13"E	1117	07.04.2014
184	Yeşilova: Niyazlar	37°28'20.36"N/ 29°43'34.95"E	1378	07.04.2014
185	Yeşilova: Çaltepe	37°27'12.76"N/ 29°47'59.05"E	1283	07.04.2014

TABLE 2. The numbers of taxa based on the growth form and substrate in Burdur (excluding lichenicolous lichens)

Lichen growth forms and their substrata	Crustose	Foliose	Fruticose	Leprose	Total
Lichen	267	97	29	4	397
Epiphytic	95	72	26	3	204
on soil	12	1	3	-	16
on mosses	21	30	16	1	68
on rocks	166	23	1	2	194
on rocks only	160	13	1	1	177
epiphytic only	81	62	25	2	168
on mosses only	14	14	6	1	35
on soil only	6	1	2	-	9
on deciduous trees only	14	5	7	1	21
on coniferous trees only	27	13	3	-	43
on deciduous and coniferous trees only	29	31	5	-	64
on trees	70	61	18	2	149
on mosses and soil	7	-	1	-	8
on mosses and rocks	-	4	-	-	4
on mosses and trees	2	9	9	1	21
on trees, mosses and rocks	1	2	-	-	3
on soil, mosses and trees	1	-	-	-	1
on rocks and trees	3	3	-	1	7
on <i>Alnus</i>	2	10	2	-	14
on <i>Pinus</i>	43	52	16	1	111
on <i>Pyrus</i>	7	12	-	-	19
on <i>Juniperus</i>	48	38	11	-	97
on <i>Acer</i>	15	7	2	-	24
on <i>Populus</i>	7	14	-	-	21
on <i>Fraxinus</i>	7	12	2	-	21
on <i>Cedrus</i>	3	-	-	-	3
on <i>Quercus</i>	43	48	7	2	98
on <i>Pistacia</i>	5	4	1	-	10
on <i>Ficus</i>	2	4	-	-	6

on <i>Salix</i>	8	13	1	-	22
on <i>Rhus</i>	5	11	1	-	17
on <i>Berberis</i>	1	1	-	-	2
on <i>Cotoneaster</i>	1	-	1	-	2
on <i>Sorbus</i>	-	1	-	-	
on <i>Abies</i>	9	2	-	-	11
on <i>Platanus</i>	4	10	2	1	17
on <i>Juglans</i>	1	-	-	-	1
on <i>Olea</i>	-	1	-	-	1
on <i>Liquidambar orientalis</i>	14	10	2	-	26
on <i>Vaccinium</i>	2	4	1	-	7
on <i>Lignum vitae</i>	-	1	1	-	2
on <i>Melia azedarach</i>	-	2	-	-	2