Report of a lichenological field meeting in Luxembourg

by

Pieter van den BOOM 1), Maarten BRAND 2), Paul DIEDERICH 3),

André APTROOT 4) and Emmanuël SÉRUSIAUX 5)

Abstract: The Dutch Bryological and Lichenological Society spring field meeting of 1992 was held in the Grand Duchy of Luxembourg, based at Berdorf. 336 taxa of lichens and 12 of lichenicolous fungi have been recorded. The following new combination is proposed: Lecania naegeli (Hepp) Diederich & v. d. Boom. Lepraria crassissima (Hue) Lettau is shown to represent a distinct species, not a synonym of L. incana. Enterographa crassa, Lecanora leptyrdes and Roselliniopsis tropica, previously published from Luxembourg, do not seem to occur in this country, the corresponding specimens belonging to E. hutchiniae, L. subcarpinea and R. tartaricola. The name Lecanora subcarpinea Szatala should be used in the future for L. nemoralis auct.


1) Aziëlaan 12, 5691 LC Son, Netherlands.
2) Klipperwerf 5, 2317 DX Leiden, Netherlands.
3) Musée national d'histoire naturelle, Marché-aux-Poissons, L-2345 Luxembourg.
4) Centraalbureau voor Schimmelcultures, P. O. Box 273, 3740 AG Baarn, Netherlands.
5) Research Associate (F.N.R.S.), Université de Liège, Département de Botanique, Sart Tilman, B-4000 Liège, Belgium.
Introduction

From 30 April to 3 May 1992 the Dutch Bryological and Lichenological Society organized a field meeting in Luxembourg, based in Berdorf (Gutland). Among the participants were seven lichen enthusiasts from the Netherlands and one, Paul Diederich, from Luxembourg.

The country has rarely had such a large accumulation of lichenological experience on its territory, and a considerable increase in knowledge of the Luxembourg lichen flora was to be expected. As the epiphytic lichens are well known in Luxembourg (Wagner-Schäfer 1987, Diederich 1989, 1990), the party concentrated on other habitats. Several excursions were made to the sandstone area near Berdorf and to schistose rocks in the Oesling (Luxembourg part of the Ardennes).

The excursions

30 April 1992

The first day we visited several interesting sites near Berdorf.

The Aesbech valley, a wooded valley with mainly Carpinus, Fagus and Quercus trees, is an excellent site for epiphytic lichens like Bacidia viridifarinosa, Lecanactis abietina, Mycobimbia sabuletorum, Opegrapha vermicellifera and Schismatotomma decolorans on Quercus, and Mycoblastus sterilis, Perusariia hemisphaerica, P. hymenia and Pyrenula nitida on Fagus. Steep shaded acid sandstone rocks (they contain small amounts of calcium!) are mainly covered with leprose lichens: Caloplaca chrysorexa, Lepraria crassissima, L. incana, L. lesdainii (a much overlooked species that has recently been recognized from the Benelux by Kümmerling 1993) and Leptoloma membranaceum. Shaded rocks are often covered with Cystocoleus ebeneus and Racodium rupestre. Vezdeca aestivalis occurred on mosses over concrete on a boulder.

The first locality visited in the afternoon was a small parking-lot with Tilia near the road in the Black Ernz valley. The most important finds were Arthoniellum ruanum (only one Luxembourg record mentioned by Diederich 1989), Caloplaca obscurella with apothecia and Lecidella elaeochroma f. soralfera.

On a wall near the camping site at Berdorf we found Leproloma vouauxii and Lephostemma polyanthes. Many collections were made on trees and wood in an orchard near the camping, the most interesting of which are Lecanora albenscens, L. hagenii, L. umbriana and L. varia and Strangospora moriformis, all on decorticated wood.

Late in the afternoon Paul Diederich arrived and we visited the sites 'Binzelschloeff' and 'Predigstull' with large sandstone rocks. On Fagus some interesting lichens were found like Tephromela grumosa with apothecia, Buellia disciformis, Enterographa hutchinsiae, Lecania naegelli and Phlyctis agelaea (first record of this species from Luxembourg). On the sandstone rocks we discovered Sphaerophorus melanocarpus, Micarea botryoides and M. hedlundii, on slightly sloping well-lit rocks Lepraria caesioalba, Melanelia disjuncta and on shaded parts Lecanora swartzi.
1 May 1992

Calcareous sandstone outcrops and boulders are locally present in the south-east of Luxembourg, mainly near the Mosel river. We visited two such localities, near Manternach and near Grevenmacher.

The examination of a sloping wood with sandstone outcrops near Manternach did not show a great diversity of species. We found, however, a well developed colony of Leptogium teretisculum on a shaded vertical calcareous rock face, without associated species. In the same locality, we collected Lecania cuprea, already known from another locality in the area of Echternach (v. d. Boom 1992). The most interesting epiphytic lichen of this locality is Anisomeridium nyssaeum, previously unknown in Luxembourg.

The afternoon was spent near Berdorf, in the wooded valley of the Haupeschbaach. The dominating steep sandstone outcrops which are nearly always shaded, proved unexpectedly rich. An interesting community was found with Dirina massiliensis f. sorediata, Haematomma ochroleucum var. ochroleucum (fertile), Lecanora gangaleoides, Microcalicium arenarium on Psilolechia lucida and Opegrapha mougeotii. The trunks of Acer, Fagus and Quercus were colonized by very interesting lichens like Enterographa hutchinsiae, Halecana viridescens, Micarea pycniophora, Opegrapha viridis, Porina leptalea and Scoliciosporum pruinoseum.

In the early evening, we investigated the wall along the Berdorf churchyard, and a range of characteristic acidic and calcilocous lichens were found, including a. o. Caloplaca variabilis, Collema crispum, Lasallia pustulata, Lecania inundata, Leptogium schraderi, Micarea denigrata (usually collected on wood and bark), Neofuscelia loxodes, N. verruculifera (the latter two were growing close together in extensive patches on horizontal sandstone), Toinia aromatica, Trapelia involuta and T. obtegens.

2 May 1992

This day we visited several localities in the Oesling (the Luxembourg part of the Ardennes), where numerous siliceous lichens have been observed, mainly on schists.

Our first excursion of this day brought us to the crossing of road N15 and the road to Esch-sur-Sûre, where we studied shaded schistose rock-faces and old stairs of concrete near the tunnel. Underhangs and sheltered faces not directly wetted by the rain supported a distinctive community with a number of species known from similar ecological sites in Luxembourg and Belgium, e. g. Caloplaca subpallida, Lecanora orosthea, Micarea lathinella, Opegrapha lathyrga, Pertusaria lactea and Rinodina oxydata. Species on mosses overgrowing concrete were Agonimia tristica, Leptogium gelatinosum and L. lichenoides. Another interesting site was the hill above the tunnel. Quercus trees, shaded rock-faces and exposed sloping rocks presented well developed lichen communities and moss carpets with luxuriant specimens of Cladonia, subgen. Cladina, such as C. arbuscula, C. ciliata, C. portentosa and C. rangiferina. On small Quercus trees we recorded a. o. Halecana viridescens, Scoliciosporum pruinoseum and Sphaerophorus globosus, on exposed sloping schist Rhizocarpon badioatrum and Xanthoparmelia mougeotii.
In the afternoon we investigated the lichens of the area around the Moulin de Bignonville. Big trees of Quercus, Fagus, Carpinus and Fraxinus, but also Sambucus showed a varied epiphytic cover of mainly crustose lichens, including Anisomeridium nyssaegenum, Bacidia rubella, Ochrolechia subviridis, Pertusaria pupillaris and Rinodina griseosoralifera. Roadside trees such as Betula and Populus near a stream yielded a. o. Arthonia didyma, Fusciaea lightfootii, Lecanora cysrella, Macentina stigonemoides, Pachyphiale fagicolata and Scoliciosporum gallurale. Terricolous lichens over schists included Cladonia coccifera, C. gracilis, C. grayi, C. mitis, C. strepsilis, C. ramulosa and C. squamosa. The aquatic vegetation of the river Sûre near the hotel offered us spectacular discoveries after an elaborate examination. Lecanora achariana was growing on the horizontal surface of a boulder in the stream, associated with Aspicilia aquatilis, Caloplaca subpallida, Candelariella vitellina, Catillaria atomarioides, Lecanora muralis and Rinodina oxydata. L. achariana is a suboceanic species, ranging from southern Sweden and Finland to the north of Portugal and is rare in SW Germany. Much less obvious than L. achariana was Endocarpon pallidum, on the horizontal surface of another boulder but without associated species. Sheltered shaded rock-faces of shale or schist near the road offered us a wide range of lichen species with e. g. Aspicilia caesiocinerata, Lasallia pustulata, Lecidea fuscoatra, Lepraria caesioalba, Melanelia disjuncta, Micarea peliocarpa, Rhizocarpon div. spp. and Spinctrina leucopoda on Diploschistes scroopus (once mentioned before by Diederich 1986).

While returning to The Netherlands, the first author investigated some walls of churches and churchyards in the north of Luxembourg and collected Lecania suavis which was growing in abundance on mortar on the N wall of the church of Wilwerdange. L. suavis has been recorded previously only once in the Benelux, on limestone outcrop near Durbuy (v. d. Boom 1992). Other interesting discoveries were Diplotomma dispersum, Staurotheca frustulenta and Verrucaria viridula.

3 May 1992

Most of the members had left the meeting this fourth and last day of the excursion, and the observations of this day were made exclusively by the second author. He went back to the wooded gorge of the Aesbaech near Berdorf and to the Weerschrumschloeff (close to the Predigstuhl), two places visited already the first day. Several important discoveries were made: Gyalecta flotowii, a corticolous lichen with Trentephoria algae and submuriform spores (first record of this species for Luxembourg), Parmeliella triptophylla, previously known from two Belgian records (one recent, Sérusiaux & al. 1985), but unknown in Luxembourg before, Cresponea premnea var. saxicola, Schismatoma umbrinum, Strigula jameisi. Other records of interest are Bacidia biatorina, with a thallus very similar to B. rubella, but differing in the chemistry (the thallus of B. rubella contains atranorin which is lacking in B. biatorina), from acid rock, Micarea botryoides and Porina leptalea.

In the late afternoon, on the way back to The Netherlands, the ruins of the castle of Brandenbourg were visited. Caloplaca viellinula found on rocks is probably an overlooked species: it is common in The Netherlands (Brand & al. 1988) were it is also found on trees.
New or interesting lichens and lichenicolous fungi for Luxembourg

Notes: Numbers following the collector’s names refer to specimens kept in their private herbaria, unless otherwise indicated. For each specimen we give the geographical coordinates in the IFBL grid (squares of 4 x 4 km²) and in the UTM grid (squares of 5 x 5 km²). For some species we add specimens not collected during the excursion, and kept in the private herbaria of the authors or in LG or LUX.

**Anisomeridium nyssaegenum (Ellis & Everh.) R. C. Harris**

Gutland: 1 km E of Manternach, N of road C.R. 134, S exp. slope (L9.43/LA.15.10), 1.5.1992, on *Acer campestre*, A. 28732 & Diederich 4786.

Oesling: 2 km N of Bigonville, Moulin de Bigonville, NW of Hotel, N and S slope (K7.47/GR.00.25), 2.5.1992, on *Sambucus*, van den Boom 12408; 5 km N of Diekirch, 1 km W of Brandenburg, valley of Blees, marsh near brook (K8.35/KA.90.30), 3.5.1992, field observation.

New for Luxembourg.

**Arthonia punctiformis Ach.**

Oesling: 2 km N of Bigonville, Moulin de Bigonville, at shore of Sûre (K7.47/GR.00.25), on *Alnus* twigs, 2.5.1992, Brand 27222.

Belgium: Prov. Luxembourg. 12 km SSW of La Roche, 2 km S of Tenneville, St. Ode (J7.42/FR.75.45), on twigs of *Acer* and *Fagus*, 29.4.1990, Brand 23157.

New for Luxembourg.

**Arthopyrenia punctiformis (Pers.) Massal.**

Gutland: 2 km SW of Grevenmacher, SE slope (L9.53/LA.10.00), 1.5.1992, on *Corylus*, A. 28743 & Diederich 4785.

This species has been mentioned by Koltz (1897: 313) as being common in Luxembourg, but this observation should be regarded as questionable.

New for Luxembourg.

**Aspicilia aquatica Körb.**

Oesling: 2 km N of Bigonville, Moulin de Bigonville, E of Hotel, on horizontal boulders in the stream (K7.47/GR.00.25), 2.5.1992, van den Boom 12443 & Brand 27219.

This species is very similar to *A. caesiocinerea*. It is distinguished by the thallus consisting of more flattened areolae, by the apothecia which are erumpent and have a distinctly constricted base at maturity, and by its aquatic habitat.

New for Luxembourg.

**Aspicilia caesiocinerea (Nyl. ex Malbr.) Arnold**

Oesling: 1 km E of Esch-sur-Sûre, near tunnel and road N15 (K8.32/GR.10.30), 2.5.1992, A. 28882, 29804; 2 km N of Bigonville, Moulin de Bigonville, NW of Hotel, N and S slope (K7.47/GR.00.25), 2.5.1992, Spier 3272; ibid., 1.1.1994, Diederich 7036; Bockholz-lès-Hosingen, vallon du Lelligerbaach (K8.14/KA.85.40), on schists, 11.10.1986, Diederich 7720;

New for Luxembourg.

**Bacidia fuscoviridis (Anzi) Lettau**

Gutland: 0.5-1 km SE of Beaufort, valley along Haupeschbaach (K8.58/LA.05.20), vertical sandstone rock in wooded gorge, 1.5.1992, Brand 27157 (sterile); Larochette, rocks at NE side of castle (L8.27/KA.95.15), sandstone rock, 27.3.1989, Brand 20036 (fertile).

Belgium: Prov. Namur, 6 km SSE of Dinant, 1.2 km S of Furfooz, Parc National (H5.58/FR.35.60), steep outcrops and boulders along stairs, vertical surface, 16.4.1993, van den Boom 13948.

New for Luxembourg.

**Buellia aethalea (Ach.) Th. Fr.**

Gutland: 1.5 km SW of Berdorf, Binzeltschloeff, W of road (L9.11/LA.05.20), 30.4.1992, Apteoot 28715; Lorentzweiler, opposite of the railway station, on the roof of a house, on schists, 24.2.1988, Diederich 8891.

Oesling: 9 km WSW of Clervaux, Hamiville, E of village, wall along churchyard and gravestone (J8.41/GR.05.45), 2.5.1992, van den Boom 12460.

New for Luxembourg.

**Caloplaaca chlorina (Flot.) H. Olivier**

Synonym: *C. isidiigera* Vezda

Gutland: Berdorf, 0.5 km SW of centre, along road to Consdorf (L9.11/LA.05.20), 30.4.1992, field observation; Hollenfels, dans le parc près du château (L8.44/KA.45.40), on an old wall, 21.3.1985, Diederich 5921 & Seaward (herb. Diederich).

Oesling: Clervaux, wall of museum (schists) (J8.44/KA.85.45), 19.4.1990, van den Boom 9374.

New for Luxembourg.

**Caloplaaca decipiens (Arnold) Blombl. & Forssell**

Gutland: Berdorf, 0.5 km SW of centre, along road to Consdorf (L9.11/LA.05.20), 30.4.1992, field observation; Lorentzweiler, opposite of the railway station, on a wall along the road, 6.3.1982, Diederich 3726; Esch-sur-Alzette, Huseegrond (M8.53/KV.80.85), on rocks, 29.7.1986, Diederich 7151.

Oesling: 9 km WSW of Clervaux, Hamiville, E of village, wall along churchyard and gravestone (J8.41/GR.05.45), 2.5.1992, field observation; Consthum (K8.14/KA.8535), sur un mur de ferme du village, sur mousse, 10.1982, Sérusiaux 4427 & Malaise (LG); Weiler, entre Hoscheid et Stolzembaul (K8.25/KA.9035), mur d'une maison en ruine, 10.1982, Sérusiaux 4426 & Malaise (LG).

New for Luxembourg.
Caloplaça flavovirescens (Wulfen) Dalla Torre & Sar nth.

Gutland: Berdorf, 0.5 km SW of centre, along road to Consdorf (L.9.11/LA.05.20), 30.4.1992, field observation; Rosport, boucle de la Sûre (L.9.14/LA.2015), muret calcaire triasique, 10.1982, Séru siaux 4473, 4484 & Malaise (LG).

New for Luxembourg.

Caloplaça subpallida H. Magn.

Synonym: C. arenaria auct. belg., non (Pers.) Müll. Arg.

Oesling: 1 km E of Esch-sur-Sûre, near tunnel and road N15 (K8.32/GR.10.30), 2.5.1992, Aptroot 28852, 28888, 28995 & van den Boom 12377; 2 km N of Bigonville, Moulin de Bigonville, NW of Hotel, N and S slope (K7.47/GR.00.25), 2.5.1992, Aptroot 28933; 2 km N of Bigonville, Moulin de Bigonville, E of Hotel, rocks near stream (K7.47/GR.00.25), 2.5.1992, van den Boom 12438; 5 km N of Diekirch, Brandenbourg, ruins of castle (K8.35/KA.90.30), 3.5.1992, Brand 27262; Bockholz-lès-Hosingen, vallon du Lellgerbaach (K8.14/KA.85.40), on schists, 11.10.1986, Diederich 7718; ibid., 10.1982, Malaise & Séru siaux 4437 (LG); E of Bourscheid, Moulin de Bourscheid (K8.35/KA.90.30), paroi schisto-gréseuse de l’Emsien, 10.1982, Malaise & Séru siaux 4377 (LG).

New for Luxembourg.

Caloplaça teicholyta (Ach.) Steiner

Gutland: Berdorf, 0.5 km SW of centre, along road to Consdorf (L.9.11/LA.05.20), 30.4.1992, field observation; W of Hunsdorf, on an old wall, 1985, Diederich 3988 (fertile!).

New for Luxembourg.

Caloplaça vitellinula auct., non (Nyl.) H. Olivier

Oesling: 5 km N of Diekirch, Brandenbourg, ruins of castle (K8.35/KA.90.30), on schistose stones of wall, exp. W, 3.5.1992, Brand 27254.

New for Luxembourg.

Candelariella aurella (Hoffm.) Zahlbr.

Gutland: Berdorf, 0.5 km SW of centre, along road to Consdorf (L.9.11/LA.05.20), 30.4.1992, field observation; N of Folkendange, Bruederbur, grès dolomitique, 18.7.1981, Diederich 3411.


New for Luxembourg.

Candelariella medians (Nyl.) A. L. Sm.

Gutland: Walferdange, churchyard, on a gravestone (L.8.55/KA.90.00), 8.2.1980, Diederich 3172.

Oesling: 9 km WSW of Clervaux, Hamville, E of village, wall along churchyard and gravestone (J8.41/GR.05.45), 2.5.1992, van den Boom 12459.

New for Luxembourg.
Catillaria atomarioides (Müll. Arg.) H. Kilius

Oesling: 2 km N of Bigonville, Moulin de Bigonville, E of Hotel, W slope with schists (K7.47/GR.00.25), 2.5.1992, van den Boom s.n. & Brand 27209.; ibid., 1.1.1994, Diederich 5149.

New for Luxembourg.

Catillaria chalybea (Borrer) Massal.

Gutland: Berdorf, 0.5 km SW of centre, along road to Consdorf (L9.11/LA.05.20), 30.4.1992, field observation; 0.6 km NW of Berdorf, near the churchyard (K9.51/LA.05.20), 1.5.1992, van den Boom 12369.

Oesling: 1 km E of Esch-sur-Sûre, near tunnel and road N15 (K8.32/GR.10.30), 2.5.1992, Aprotot 28891; 2 km N of Bigonville, Moulin de Bigonville, NW of Hotel, N and S slope (K7.47/GR.00.25), 2.5.1992, Aprotot 28936; 9 km WSW of Clervaux, Hamiville, E of village, wall along churchyard and gravestone (J8.41/GR.05.45), 2.5.1992, field observation; 5 km N of Diekirch, Brandenbourg, ruins of castle (K8.35/KA.90.30), 3.5.1992, field observation.

New for Luxembourg.

Cladonia borealis S. Stenroos

Oesling: 5 km N of Diekirch, Brandenbourg, ruins of castle (K8.35/KA.90.30), 3.5.1992, Brand 27267.

This terricolous lichen is a member of the C. coccifera group. Important distinctive characters are the areolate corticate podetial surface and the chemistry (usnic and barbatic acids). It is most closely related to C. coccifera s.s., which contains usnic acid and zeorin, and in which the podetial surface has a scaly, plated structure.

New for Luxembourg.

Cladonia grayi G. Merr. ex Sandst. s.l.

Several taxa belonging to the C. chlorophaea group have been collected during the excursion (C. cryptochlorophaea Asahina, C. grayi, C. merochlorophaea Asahina s.s. and C. merochlorophaea var. novochlorophaea Sipman). As no correlation seems to exist between the chemistry and the morphology of the corresponding specimens (see for example De Priest 1993), we prefer to consider all these taxa just as chemotypes of one single species, C. grayi.

Cladonia strepsilis (Ach.) Grognot

Oesling: 2 km N of Bigonville, Moulin de Bigonville, NW of Hotel, N and S slope (K7.47/GR.00.25), 2.5.1992, van den Boom 12403, Brand 27194 & Diederich 4819; Hoscheid, Molberlay (K8.24/KA.90.35), 2.5.1987, Diederich 7923 & Daniëls; Bockholz-lès-Hosingen, vallon du Lellgerbaach (K8.14/KA.85.40), 11.10.1986, Diederich 7723.

New for Luxembourg.
Cresponea premnea (Ach.) Egea & Torrente var. saxicola (Leigh.) Egea & Torrente

Synonym: Lecanactis plocina auct.

Gutland: SW of Berdorf, Weerschrumschloeff (L9.11/LA.05.20), 3.5.1992, vertical sandstone rocks, exp. SW, edge of parking place in wooded NW slope, with Dirina massiliensis, Brand 27246.

New for Luxembourg.

Diplotomma ambiguum (Ach.) Flagey

Oesling: 5 km N of Diekirch, Brandenbourg, ruins of castle (K8.35/KA.90.30), 3.5.1992, Brand 27256.

New for Luxembourg.

Diplotomma dispersum (Krempelh.) Arnold

Oesling: 9 km WSW of Clervaux, Hamiville, E of village, wall along churchyard (J8.41/GR.05.45), 2.5.1992, van den Boom 12457.

New for Luxembourg.

Dirina massiliensis Durieu & Mont. f. sorediata (Müll. Arg.) Tehler

Gutland: SW of Berdorf, Weerschrumschloeff, flattened top of sandstone rocks, with Calluna in wooded NW slope (L9.11/LA.05.20), 3.5.1992, Brand 27246; 0.5-1 km SE of Beaufort, valley along Haupeschbaach (K8.58/LA.05.20), 1.5.1992, Aptroot 28810, van den Boom 12350 & Diederich 4795; E Rollingen (near Mersch), Dreiburen (L8.35/KA.90.10), on sandstone, 16.7.1983, 26.9.1986 and 15.3.1987, Diederich 5819, 7677, 7845.

The specimens Aptroot 28810 and Diederich 4794, 7677 and 7845 contain lecanoric acid and erythrin (TLC!). The similar Arthonia endlicheri (Garov.) Oxner, which lacks erythrin, does not seem to occur in Luxembourg.

New for Luxembourg.

Endocarpon pallidum Ach.

Oesling: 2 km N of Bigonville, Moulin de Bigonville, E of Hotel, rocks in the stream (K7.47/GR.00.25), 2.5.1992, van den Boom 12435, Brand 27221 & Diederich 4805 (det. Breuss).

New for Luxembourg.

Enterographa hutchinsiae (Leight.) Massal.

Gutland: 1.5 km SW of Berdorf, Binzettschloeff, W of road (L9.11/LA.05.20), 30.4.1992, on rock, Aptroot 28786; ibid., on Quercus, Aptroot 28759; ibid., 11.6.1984, on Acer, Diederich 5736 & Sérusiaux; 0.5-1 km SE of Beaufort, valley along Haupeschbaach (K8.58/LA.05.20), 1.5.1992, on Fagus, van den Boom 12351 & Brand 27165; 1 km SE of Berdorf, Aesbech (L9.12/LA.10.20), 3.5.1992, field observation; ibid., 12.6.1984, on Fagus, Diederich 5634; NEE of Haller, valley along Hallerbach (L8.18/LA.05.20), 22.9.1986, on Fagus and Quercus, Diederich 7580, 7589; E Rollingen (L8.35/KA.90.10), 11.7.1983, on Fagus and Carpinus, Diederich 5762, 5797; Larochette, Manzebaach (L8.27/KA.95.15), 11.5.1985, on Fagus,
Diedrich 6025; S Nommern, Nommelayen (L8.26/KA.95.15), 21.4.1990, on Fagus, Diedrich 9098.

*E. hutchinsiae* is a common and widespread saxicolous lichen, which is considered to occur only occasionally on bark. In Luxembourg it is not rare on smooth bark in the forests of the Luxembourg sandstone area, but it has been mistaken for *E. crassa* (DC) Fée by Diedrich (1989) and Sérusiaux & al. (1985).

*E. hutchinsiae* has a thin thallus, 150 μm thick when saxicolous and 60-85 μm when epiphytic, cracked without areoles, olive green to greenish brown, with *Trentepohlia* and with confluent acid; apothecia numerous, curved and comma-like, 0.2-0.7 x 0.05-0.07(0.1) mm; spores (4-)-5(-6)-septate, 20-31 x 4.2-4.8 μm.

*E. crassa* has a thicker thallus (in the center 150-200(-300) μm), with distinct areolae; apothecia punctiform or short lirelliform, 0.03-0.4 x 0.03-0.05 mm; spores narrower, only 3.0-3.8 μm large.

*E. crassa* does not seem to occur in Luxembourg, whilst *E. hutchinsiae* is new for Luxembourg.

**Fuscidea lightfootii (Sm.) Coppins & P. James**

Oesling: 2 km N of Bigonville, Moulin de Bigonville, SW side of Sûre (K7.47/GR.00.25), 2.5.1992, on *Sarothamnus*, Brand 27192; 15 km W of Ettelbruck, 2.5 km NE of Rambrouch, *Tilia* along road on plateau (K8.51/GR.05.25), 3.5.1992, Brand 27223.

Both specimens contain divaricatic acid. This species has previously been collected twice in Luxembourg (Diedrich, 1989).

**Gyalecta flotowii Körb.**

Gutland: 1 km SE of Berdorf, Aesbech (L9.12/LA.10.20), old *Fagus*, nearly dead, with much *Opegrapha varia*, in wooded gorge, 3.5.1992, Brand 27234.

New for Luxembourg.

**Lecania naegeli (Hepp) Diedrich & v. d. Boom comb. nov.**


Synonym: *Bacidia naegeli* (Hepp) Zahlbr.

Gutland: 1.5 km SW of Berdorf, Binzelschloeff, W of road (L9.11/LA.05.20), 30.4.1992, on *Fagus*, van den Boom 12307 & Diedrich 4799.

Oesling: 2 km N of Bigonville, Moulin de Bigonville, NW of Hotel, N and S slope (K7.47/GR.00.25), 2.5.1992, Aptroot 28915, Brand 27188 & Spier 3188.

Thallus continuous to weakly rimose or minutely granular, grey; apothecia whitish grey to brown, 0.2-0.6 mm in diam., plane to convex; excipulum biatorine, colourless, at the underside sometimes with algae; epithecium colourless to greenish; paraphyses sometimes branched, 1.5-2(-2.5) μm wide (in KOH), conglutinated, cells in the epithecium sometimes with a greenish to brownish pigment, apical cells 3-5 μm wide; asci of the *Bacidia*-type; ascospores thin-walled, 13-18 x 3-5 μm, (0-3)(-4)-septate, oblong to fusiform, sometimes curved.
As the biatorine apothecia in this species strongly resemble apothecia of several species of *Lecania*, and as the ascospores are similar to those of most species of *Lecania* with 3-septate spores, it seems justified to place this taxon in *Lecania*.

**Lecania suavis** (Müll. Arg.) Mig.

Oesling: 10 km N of Clervaux, Wilwerdange, shaded wall of church, on mortar (J8.23/KA.85.55), 2.5.1992, van den Boom 12467.

New for Luxembourg.

**Lecanora achariana** A. L. Sm.

Oesling: 2 km N of Bigonville, Moulin de Bigonville, E of Hotel, horizontal boulder in the stream (Sûre) (K7.47/GR.00.25), 2.5.1992, van den Boom 12448 & Brand 27216 (herb. van den Boom, herb. Brand, herb. Diederich).

New for Luxembourg.

**Lecanora crenulata** Hook.

Oesling: 6 km NW of Clervaux, Asselborn, wall of church and wall along churchyard (J8.32/GR.10.50), 2.5.1992, van den Boom 12463.

New for Luxembourg.

**Lecanora gangaleoides** Nyl.

Gutland: 0.5-1 km SE of Beaufort, valley along Haupeschbaach (K8.58/LA.05.20), 1.5.1992, on a vertical sandstone rock, Aptroot 28813 & van den Boom 12362.

Oesling: 1 km E of Esch-sur-Sûre, near tunnel and road N15 (K8.32/GR.10.30), 2.5.1992, vertical rock, van den Boom 12398.

New for Luxembourg.

**Lecanora orosthea** (Ach.) Ach.

Gutland: SW of Berdorf, Weerschrumschloeff, flattened top of sandstone rocks, with *Calluna* in wooded NW slope (L9.11/LA.05.20), 3.5.1992, field observation.

Oesling: 1 km E of Esch-sur-Sûre, near tunnel and road N15 (K8.32/GR.10.30), 2.5.1992, van den Boom 12389; 2 km N of Bigonville, Moulin de Bigonville, E of Hotel, W slope with schists (K7.47/GR.00.25), 2.5.1992, van den Boom 12432, 12455.

New for Luxembourg.

**Lecanora subcarpinea** Szatala

Synonym: *Lecanora nemoralis* auct.

Gutland: 2 km W of Berdorf, Vugelsmillen (L9.11/LA.05.20), 30.4.1992, on *Tilia*, Spier 3087; Between Vichten and Bissen (L8.13/KA.82), on *Fagus*, 6.4.1891, Feltgen 111a (LUX); Dommeldange, Schlaed (M8.16/KA.90), on *Fagus*, 6.1963, Van Wersch s.n. (LUX); N Pratz (L8.12/GR.12), on *Quercus*, 14.9.1979, Diederich 1885; Blaschette, Böddelboesch (L8.46/KA.90), on *Carpinus*, 24.4.1983, Diederich 3643b; ibid., on wood of *Populus tremula*, 17.5.1984, Diederich 5465; Kockelscheuer, Kecherboesch (M8.35/KV.99), on *Populus*,
4.9.1986, Diederich 7432; W Bastendorf, Hooldaer (K8.46/KA.92), on Fraxinus, 11.9.1986, Diederich 7515; SW Ettelbruck (K8.54/KA.82), on Fraxinus, 1.3.1987, Diederich 7803.


Diederich (1989) reported a Luxembourg species of the Lecanora carpinea group with a PD+ orange thallus, which he called Lecanora leptyrodes (Nyl.) Degel. We realized that this determination was wrong, and sent selected material to Dr Irwin Brodo (Ottawa) who kindly communicated us the following informations. The Luxembourg specimens Diederich 7244 and 7515 contain roccelic acid, psoromic acid and atranorin, and agree very well with the type of L. subcarpinea. European material of apparently the same taxon has often been called L. nemoralis Makar. As the type of L. nemoralis has not been studied by Dr Brodo, and as Makarevich (1971) says that the thallus in L. nemoralis is PD-, some doubt remains about the identity of this taxon. If both taxa are really conspecific, there is a problem of priority, as both have been described in the second half of 1954. In the meantime it is safe to call the Luxembourg material L. subcarpinea Szatala (= L. nemoralis auct.).

Lecanora subcarpinea is new for Luxembourg, whilst L. leptyrodes does not seem to exist in this country.

Lecanora swartzii (Ach.) Ach.

Synonym: L. subradiosa Nyl.


New for Luxembourg.

Lecidea pycnocarpa (Körb.) Ohlert

Oesling: 2 km N of Bigonville, Moulin de Bigonville, NE side of Sûre (K7.47/GR.00.25), open rocky ridge of schist, N-face, 2.5.1992, Brand 27213.

Belgium: Prov. Luxembourg, 7 km W of St. Hubert, 1.6 km N of Poix, valley of Lomme (J6.56/FR.65.40), schistose rock in open Quercus wood, 5.3.1993, Brand 29441.

New for Luxembourg and Belgium.

Lecidella scabra (Taylor) Hertel & Leuckert

Gutland: Berdorf, 0.5 km SW of centre, along road to Consdorf (L9.11/LA.05.20), 30.4.1992, field observation; 0.6 km NW of Berdorf, near the churchyard (K9.51/LA.05.20), 1.5.1992, van den Boom 12372.

Oesling: 1 km E of Esch-sur-Sûre, near tunnel and road N15 (K8.32/GR.10.30), 2.5.1992, Aptroot 28867.

New for Luxembourg.
Lecidella stigmatæa (Ach.) Hertel & Leuckert

Gutland: 1.5 km SW of Berdorf, Binzeltschloeff, W of road (L9.11/LA.05.20), 30.4.1992, Aprotto 28722; 0.6 km NW of Berdorf, near the churchyard (K9.51/LA.05.20), 1.5.1992, van den Boom 12382 & Spier 3153; Dudelange, Gaalgebierg, on sandstone, 22.8.1981, Diederich 3312b; Grevenmacher, Kelsbach, on calcareous rocks, 7.11.1981, Diederich 3746.

Oesling: 9 km WSW of Clervaux, Hamville, E of village, wall along churchyard and grave-stone (J8.41/GR.05.45), 2.5.1992, field observation; 6 km NW of Clervaux, Asselborn, wall of church and wall along churchyard (J8.32/GR.10.50), 2.5.1992, field observation; 10 km N of Clervaux, Wilwerdange, shaded wall of church (J8.23/KA.85.55), 2.5.1992, field observation.

New for Luxembourg.

Lempholemma polyanthæs (Bernh.) Malme

Synonyms: L. myriococcus (Ach.) Th. Fr., L. chalazanodes (Nyl.) Zahlbr.

Gutland: Berdorf, 0.5 km SW of centre, along road to Consdorf (L9.11/LA.05.20), 30.4.1992, vertical surface of wall, Aprotto 28652 & van den Boom 12302 (herb. Aprotto, herb. van den Boom, herb. Diederich).

The spores in our specimen measure 14-19 x 7.5-11 µm.

This species has been mentioned in the Luxembourg literature by Feltgen (1902) and Koltz (1897) under the name Physma compactum, referring to collections made by Feltgen in Mersch, Angelsberg and Ansembourg. We have seen the specimen from Mersch in LUX, and it belongs to Collema tenax. The species is therefore considered as new for Luxembourg.

Lepraria crassissima (Hue) Lettau

Gutland: S. loc., on sandstone, 1840, Tinant 522, 526 (LUX). Fischbach (L8.36/KA.91), on sandstone, 11.9.1890, Feltgen 125 (LUX); E Meysembourg (L8.26.42/KA.91), on sandstone, 18.8.1979, Diederich 1579; NEE Haller, Halerbach (L8.18.22/LA.02), on Quercus, 22.9.1986, Diederich 7606b, 7607; E Rollingen (Mersch), Dréiburen (L8.35.24/KA.91), on sandstone, 15.3.1987, Diederich 7843; 1 km SE of Berdorf, Aesbech (L9.12/LA.10.20), on Quercus, 3.5.1991, Diederich 9795; ibid., on sandstone, 6.8.1991, Diederich 9783; ibid., 30.4.1992, Aprotto 28620, 28629, 28631 & van den Boom 12279, 12280; 1.5 km SW of Berdorf, Binzeltschloeff, W of road (L9.11/LA.05.20), 30.4.1992, Aprotto 28713; 0.5-1 km SE of Beaufort, valley along Haugeoisaginaa (K8.58/LA.05.20), 23.9.1986, Diederich 7633; ibid., 1.5.1992, Aprotto 28797, 28798, 28817 & van den Boom 12349; ibid., on Fagus, Aprotto 28774; Beaufort, Vogelsmühle, Halerbach (L9.11/LA.05.20), on sandstone, 6.8.1991, Diederich 9784; N Sandweiler, Schaarschier (M8.17/KA.95.00), on Fagus, 18.7.1986, Diederich 7117.

Belgium, prov. Namur: 16 km WNW of Bouillon, Bohan, Roche la Dame path (K5.57/FR.35.25), on rock, 15.4.1993, van den Boom 13883; 10 km SW of Dinant, 1.3 km WNW of Hermeton-sur-Meuse, valley of Hermeton (H5.55/FR.25.60), on rock, 14.4.1993, van den Boom 13867.

Madeira: Between Ponta do Sol and Porto Moniz, Rabat, alt. 1000 m, au bord d'une levada, 8.4.1992, Diederich 4928 (herb. Diederich, LG).

The identity of Lepraria crassissima (Hue) Lettau was a mystery for many years, and recent monographers published little about it. Laundon (1992: 335) and Tønsberg (1992) briefly mentioned the species, and Laundon (1992) described an
additional species of the *L. crassissima* group, *L. nivalis* Laundon. Küümmerling & al. (1991) studied the type of *L. crassissima* and concluded that it is conspecific with *L. incana* (L.) Ach.

We reexamined the type collection of *L. crassissima* (B - isotypus, references: see Küümmerling & al., 1991), and we conclude that *L. crassissima* (Hue) Lettau is a distinct species, morphologically and ecologically different from *L. incana*, which has already been studied and described by Diederich (1989) under the name *L. crassissima* auct.

*L. crassissima* has a thick, uneven, often folded, mostly delimited and sometimes a little lobed thallus with a diameter of several cm and with a very thick white medulla; the upper surface is covered with bluish, greyish or greenish soredia, which are often eroded in older herbarium specimens, giving them a whitish appearance (e.g. the type specimen); if well developed (e.g. the material from Madeira cited above), the upper surface is partly brownish and granular, the granules becoming soon sorediate, and the soredia tend to cover the whole surface; dying parts of the thallus present a typical brownish colour. The thallus has a distinct lower surface, which is often cerebriform (if the thallus is folded!), more or less smooth or tomentose, white to brownish.

Chemistry: Küümmerling & al. (1991) detected divaricatic acid, nordivaricatic acid and zeorin in the type specimen, which reacts C+ red, due to the high amount of nordivaricatic acid. The numerous specimens we studied all contain divaricatic acid and zeorin, and most of them contain sufficient quantities of nordivaricatic acid to give the typical C+ red reaction of the thallus. Diederich (1989) mentioned a number of specimens with atranorin, zeorin, and stictic, constictic and cryptostictic acids; these specimens may belong to the same species, representing a second chemical strain, but we prefer to await the discovery of additional specimens before taking a final decision on them.

In Luxembourg, *L. crassissima* is very common on sandstone rocks which contain small amounts of calcium. It occasionally grows on trees. We believe that the species is growing mainly on non-calcareous rocks, but this affirmation has to be confirmed by the study of more material from other countries.

*L. crassissima* could be confused with *Lepraria incana*, which contains also divaricatic acid and zeorin, but in that species the thallus is always C- (nordivaricatic acid absent or present in small quantities). *L. incana* is morphologically different: the medulla is poorly developed or absent, the lower surface is not distinct and the thallus is never folded and rarely well delimited. *L. incana* has also a different ecology, being very frequent on trees, and occurring on all kinds of rocks.

*L. nivalis* is morphologically similar, but differs by a much whiter colour, a different chemistry (atranorin and protocetraric or fumarprotocetraric acid), and a preference for calcareous rocks.

*L. lobificans* Nyl. has a different colour (greenish), a lower surface that is not distinct, a different chemistry (atranorin, zeorin, stictic and constictic acid), and a different ecology, being most common on trees.
Leptogium teretiusculum (Wallr.) Arnold

Gutland: 1 km E of Manternach, N of road C.R. 134, S exp. slope (L9.43/LA.15.10), 1.5.1992, on calcareous rock, Aptroot 28740, van den Boom 12331, Brand 27143 & Diederich 4788 (conf. P. M. Jørgensen).

New for Luxembourg.

Lichenostigma elongata Nav.-Ros. & Hafellner

Oesling: 2 km N of Bigonville, Moulin de Bigonville (K7.47/GR.00.25), on schistose rocks near the road, on Aspicilia caesiocinerea, 2.5.1992, field observation; ibid., 1.1.1994, Diederich 3977; E Bascheleiden, Hellekessel (K7.38/GR.03), on schists, on A. caesiocinerea, 26.8.1981, Diederich 3441; NE Oberfeulen, vallée de la Wark (K8.44/KA.82), on schists, on Aspicilia sp., 14.8.1984, Diederich 5846.

A lichenicolous ascomycete, new for Luxembourg.

Macentina stigonemoides Orange

Oesling: 2 km N of Bigonville, Moulin de Bigonville, along stream (K7.47/GR.00.25), on Sambucus, 2.5.1992, Brand 27204.

New for Luxembourg.

Melania disjuncta (Erichsen) Essl.

Gutland: 1.5 km SW of Berdorf, Binzelschloeff, W of road C. R. 364 (L9.11/LA.05.20), sandstone rock, E slope, 2.5.1992, van den Boom 12473.

Oesling: 2 km N of Bigonville, Moulin de Bigonville, E of Hotel, W slope with schists (K7.47/GR.00.25), 2.5.1992, van den Boom 12440 & Brand 27210 (herb. van den Boom, herb. Brand, herb. Diederich); Hoscheid, Molberlay (K8.24/KA.90.35), 28.9.1966, Lambinon 66/1594 (LG, LUX).

New for Luxembourg.

Micarea curvata Coppins

Oesling: 2 km N of Bigonville, Moulin de Bigonville, NE side of Sûre (K7.47/GR.00.25), 2.5.1992, open rocky ridge of schist, N-face, Brand 27214.

Belgium: S of Vielsalm, NE of Salm Château, alt. 400 m (H8.31/GR.05.75), 4.5.1992, W facing outcrop, Brand 27287.

Micarea curvata is characterised by the distinctly curved, 1-septate spores, the fuscous brown pigment in the apothecia which is unchanged in KOH or HNO₃ and the C+ red apothecia and thallus (section). It is similar in appearance to some forms of Scoliciosporum umbrinum. The Luxembourg specimen is very small, whilst the Belgian collection is richer. The species was only known from the type collection in Germany.

New for Luxembourg and Belgium.
Micarea hedlundii Coppins

Gutland: 1.5 km SW of Berdorf, Predigstuhl, E of road (L9.11/LA.05.20), 30.4.1992, on sandstone, van den Boom 12402 (herb. van den Boom, herb. Diederich).

The specimen is sterile, but presents numerous, conspicuous stalked pycnidia, up to 1 mm tall and ca. 0.1 mm diam. It is characterized by a dark green thallus of goniocysts and pycnidia covered with a thin whitish tomentum. The pycnidial wall is violet or violet-brown in KOH and reddish in HNO₃.

New for Luxembourg.

Micarea pycnidioaphora Coppins & P. James

Gutland: 0.5-1 km SE of Beaufort, valley along Haupeschbaach (K8.58/LA.05.20), 1.5.1992, on Acer, Aptroot 28770, van den Boom 12346, Brand 27164 & Diederich 4790.

This species has previously been known from one single Luxembourg locality in the valley of the Aesbaach (Diederich & al. 1988).

Neofuscelia loxodes (Nyl.) Essl.

Gutland: 0.6 km NW of Berdorf, near the churchyard (K9.51/LA.05.20), 1.5.1992, van den Boom 12371, Brand 27172 & Spier 3220 (herb. van den Boom, herb. Diederich, herb. Spier).

The species was growing together with N. verruculifera. Both species have been studied by TLC: N. loxodes contains glomelliferic acid and perlatalic acid, whilst N. verruculifera contains divaricatic acid.

New for Luxembourg.

Ochrolechia parella (L.) Massal.

Gutland: SW of Berdorf, Weerschrumshloeff, flattened top of sandstone rocks, with Calluna in wooded NW slope (L9.11/LA.05.20), 3.5.1992, Brand 27248.

This species has already been mentioned from Luxembourg in the last century (Diederich, 1989: 170), but no herbarium specimen has been found in LUX. The presence of the species in Luxembourg is herewith confirmed.

Omphalina hudsoniana (H. S. Jenn.) H. E. Bigelow

Gutland: SW of Berdorf, Weerschrumshloeff, flattened top of sandstone rocks, with Calluna in wooded NW slope (L9.11/LA.05.20), 3.5.1992, Brand 27244 (fertile!).

New for Luxembourg.

Opegapha litterga Ach.

Oesling: 1 km E of Esch-sur-Sûre, near tunnel and road N15 (K8.32/GR.10.30), 2.5.1992, on schists, Aptroot 28855 & van den Boom 12393.

This species has been mentioned by Koltz (1897: 274) from Luxembourg without giving a locality. As no specimen is present in LUX, this indication must be regarded as dubious. The presence of the species in Luxembourg is herewith confirmed.

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Pachyphiale fagicola (Hepp) Zwackh


This rare species was known from one single Luxembourg collection (Sérusiaux et al., 1985).

Parmeliella triptophylla (Ach.) Müll. Arg.

Gutland: 1 km SE of Berdorf, Aesbech (L9.12/LA.10.20), dead Quercus, rather thin, on steep slope in wooded gorge, 3.5.1992, Brand 27237.

New for Luxembourg.

Pharcidia coniodes Nyl.

Gutland: 1.5 km SW of Berdorf, Predigtstuhl, E of road (L9.11/LA.05.20), 30.4.1992, on Baeomycetes rufus, Diederich 4802.

This lichenicolous ascomycete does not belong to Stigmidiom (= Pharcidia) (fide C. Roux, pers. comm.).

New for Luxembourg.

Phlyctis agelaea (Ach.) Flot.

Gutland: 1.5 km SW of Berdorf, Binzelschloeff, W of road (L9.11/LA.05.20), 30.4.1992, on Fagus, van den Boorn 12311 & Diederich 4798.

New for Luxembourg.

Polysporina simplex (Davies) Vezda

Oesling: 1 km E of Esch-sur-Sûre, near tunnel and road N15 (K8.32/GR.10.30), 2.5.1992, Spier 3198; 2 km N of Bigonville, Moulin de Bigonville, NW of Hotel, N and S slope (K7.47/GR.00.25), 2.5.1992, Brand 27202; 2 km N of Bigonville, Moulin de Bigonville, E of Hotel, W slope with schists (K7.47/GR.00.25), 2.5.1992, field observation; 5 km N of Diekirch, Brandenbourg, ruins of castle (K8.35/KA.90.30), 3.5.1992, Brand 27256.

Koltz (1897: 268) mentioned this species from the Ardennes, but no exact locality is given, and no specimen is present in LUX. The presence in Luxembourg of this species is herewith confirmed.

Porina chlorotica (Ach.) Müll. Arg.

Gutland: 0.5-1 km SE of Beaufort, valley along Haupeschbaach (K8.58/LA.05.20), 1.5.1992, Aptroot 28792. 1 km SE of Berdorf, Aesbech (L9.12/LA.10.20), 3.5.1992, field observation. Oesling: 1 km E of Esch-sur-Sûre, near tunnel and road N15 (K8.32/GR.10.30), 2.5.1992, field observation.

Koltz (1897: 310) mentioned this species from Luxembourg, but no exact locality is given, and no specimen is present in LUX. The presence in Luxembourg of this species is herewith confirmed.
Protoparmelia badia (Hoffm.) Hafellner

Oesling: 2 km N of Bigonville, Moulin de Bigonville, E of Hotel, W slope with schists (K7.47/GR.00.25), 2.5.1992, Brand: field observation; ibid., 1.1.1994, Diederich 5132.

New for Luxembourg.

Psilolechia clavulifera (Nyl.) Coppins

Gutland: 0.5-1 km SE of Beaufort, valley along Haupeschbaach (K8.58/LA.05.20), 1.5.1992, on sandstone rocks, van den Boom 12343, 12347.

New for Luxembourg.

Rhizocarpon badiostratum (Flörke ex Sprengel) Th. Fr.

Oesling: 1 km E of Esch-sur-Sûre, near tunnel and road N15 (K8.32/GR.10.30), 2.5.1992, Aptroot 28841 & Brand 27186.

New for Luxembourg.

Rhizocarpon distinctum Th. Fr.

Oesling: 2 km N of Bigonville, Moulin de Bigonville, S of Hotel, horizontal surface of bridge (K7.47/GR.00.25), 2.5.1992, van den Boom 12423 & Brand 27202; ibid., E of Hotel, W slope with schists, Brand 27209.

Koltz (1897: 256, sub R. atroalbum) mentioned this species from the Ardennes, but no exact locality is given, and no specimen is present in LUX. The presence in Luxembourg of this species is herewith confirmed.

Rhizocarpon geminatum Körb.

Gutland: Lorentzweiler, sur le toit d'une maison en face de la gare (L8.46/KA.90.05), sur ardoises, 24.2.1988, Diederich 8889.

Oesling: 2 km N of Bigonville, Moulin de Bigonville, S of Hotel (K7.47/GR.00.25), on horizontal surface of bridge, 2.5.1992, van den Boom 12487.

New for Luxembourg.

Rinodina gennarii Bagl.

Gutland: Berdorf, 0.5 km SW of centre, along road to Consdorf (L9.11/LA.05.20), 30.4.1992, field observation; Beaufort, near castle (K8.58/LA.00.20), 4.1988, van den Boom 6711 (herb. v. d. Boom, herb. Diederich).

Oesling: 10 km N of Clervaux, Wilwerdange, shaded wall of church (J8.23/KA.85.55), 2.5.1992, van den Boom 12469; 7 km N of Clervaux, Binsfeld, wall along church (J8.24/KA.85.55), 9.5.1991, van den Boom 11211 (conf. H. Mayrhofer).

New for Luxembourg.

Rinodina interpolata (Stirton) Sheard

Gutland: 1.5 km SW of Berdorf, Binzelschloeff (L9.11/LA.05.20), 30.4.1992, Aptroot 28721.

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New for Luxembourg.

Rinodina oxydata (Massal.) Massal.

Oesling: 1 km E of Esch-sur-Sûre, near tunnel and road N15 (K8.32/GR.10.30), 2.5.1992, Aptroot 28839 & van den Boom s.n.; 2 km N of Bigonville, Moulin de Bigonville, E of Hotel, horizontal boulder in the stream (K7.47/GR.00.25), 2.5.1992, van den Boom 12453 & Brand 27227.

New for Luxembourg.

Roselliniopsis tartaricola (Nyl.) Matzer

Gutland: 0.5-1 km SE of Beaufort, valley along Haupeschbaach (K8.58/LA.05.20), on Fagus, on Pertusaria hemisphaerica, 1.5.1992, van den Boom & Diederich, field observation.

This lichenicolous ascomycete is very common in Europe, and numerous specimens, mainly from Luxembourg and Belgium, have been published by Diederich & al. (1992) under the name R. tropica Matzer & R. Sant. R. tropica has recently been shown to be a distinct species (Matzer 1993) not occurring in Luxembourg. R. tartaricola is new for Luxembourg.

Sarcogyne regularis Körb.

Gutland: 2 km SW of Grevenmacher, SE slope (L9.53/LA.10.00), 1.5.1992, Aptroot 28744 & Spier 3170.

Oesling: 9 km WSW of Clervaux, Hamiville, E of village, wall along churchyard and gravestone (J8.41/GR.05.45), 2.5.1992, field observation.

New for Luxembourg.

Schismatoma umbrinum (Coppins & P. James) P. M. Jørg. & Tønsberg


New for Luxembourg.

Scoliciosporum gallurae Vezda & Poelt

Oesling: 2 km N of Bigonville, Moulin de Bigonville, NW of Hotel (K7.47/GR.00.25), S-exposed rocky ridge, on Sarothamnus, 2.5.1992, van den Boom 12406 & Brand 27191.

Following the treatment of Tønsberg (1992: 299-300), the Luxembourg collections belong to S. gallurae, a species originally described from Sardinia and eventually mentioned from S France (Bricaud & al. 1991: 150). Its thallus is soredioid and does not form regular soralia, and its spores are more or less straight and measure 16-25 x 3-3.5 μm. This taxon may represent a juvenile or badly developed form of the most common S. chlorococcum and requires further study.

S. sarothamni (Vainio) Vezda is closely related: following Tønsberg (1992), it has discrete soralia and its spores are distinctly curved to sigmoid and measure 20-30 x 2(-2.5) μm. It has been mentioned from Belgium (Sérasiaux 1990: 143): the first specimen (Lierneux, Colahan, 1988, Sérasiaux 10334, LG) has more or less discrete soralia at early stages of development and only immature apothecia (no spores seen); the other (Habay-la-Neuve, Fond du Gris Bofet, 1988, Sérasiaux s.n.,
LG) has discrete soralia, but mature thalli are diffuse and almost completely sorediate, and its spores are distinctly curved-sigmoid and reach 25 x 3 μm. It therefore seems reasonable to identify them as S. sarothamni.

New for Luxembourg.

Staurothele frustulenta Vain.

Oesling: 6 km NW of Clervaux, Asselborn, wall of church and wall along churchyard (J8.32/GR.10.50), 2.5.1992, van den Boom 12464.

Our material agrees well with the description that Poelt (1969: 627) gave for S. catalepta (Ach.) Blomb. & Forss. Santesson (1993) states, however, that the type of S. catalepta is a species of Verrucaria and that S. catalepta auct. belongs to S. frustulenta.

New for Luxembourg.

Strangospora moriformis (Ach.) B. Stein


New for Luxembourg.

Strigula jamesii (Swinscow) R. C. Harris

Gutland: 1 km SE of Berdorf, Aesbech (L9.12/LA.10.20), 3.5.1992, old Fagus, nearly dead, with much Opegrapha varia, in wooded gorge, Brand 27232.

This specimen is refered to Strigula jamesii as it has small perithecia (less than 0.2 mm in diam.) and 3-septate spores: no other European species of Strigula has these characteristics. The specimen mentioned by Sérusiaux & al. (1985: 33) from Belgium, Etalle, 1984, leg. Sérusiaux 6454 (LG) under Strigula affinis (Massal.) R. C. Harris also belongs to this species: it has small perithecia whilst S. affinis has larger perithecia, usually 0.2-0.3(-0.4) mm in diam.

New for Luxembourg.

Toninia aromatica (Sm.) Massal.

Gutland: 0.6 km NW of Berdorf, near the churchyard (K9.51/LA.05.20), 1.5.1992, van den Boom 12374.

This species has already been mentioned from Luxembourg (Consdorf, Goldfralay, leg. Reinhardt) by Koltz (1897: 231), but no specimen has been found in LUX. The presence of the species in Luxembourg is herewith confirmed.

Trapelia obtegens (Th. Fr.) Hertel

Gutland: 0.6 km NW of Berdorf, near the churchyard (K9.51/LA.05.20), 1.5.1992, Brand 27171.

New for Luxembourg.
Trapeliopsis gelatinosa (Flörke) Coppins & P. James

Gutland, 2 km W of Berdorf, Vugelsmillen (L9.11/LA.05.20), on Tilia at margin of parking-lot, 30.4.1992, van den Boom 12291 (det. B. Coppins).

This is the first known record from bark of this quite common species.

Usnea hirta (L.) Weber ex F. H. Wigg.

Oesling: 2 km N of Bigonville, Moulin de Bigonville, NW of Hotel, N and S slope (K7.47/GR.00.25), 2.5.1992, on Quercus, Aptroot 28927; Bockholz-lès-Hosingen, vallen du Lellgerbaach (K8.14/KA.85.40), on Quercus, 11.10.1986, Diederich 7683, 7694; Hoscheid, Molberlay, (K8.24/KA.90.35), on Quercus, 2.5.1987, Diederich 7939.

Koltz (1897: 103) states that this species is common in the mountains, but this results most probably from the confusion with other Usnea species. No specimen has been found in LUX. The species should be considered as new for Luxembourg.

Verrucaria margacea (Wahlenb.) Wahlenb.

Oesling: 1 km E of Esch-sur-Sûre, near tunnel and road N15 (K8.32/GR.10.30), 2.5.1992, Brand 27173.

New for Luxembourg.

Verrucaria muralis Ach.

Gutland: Berdorf, camping on road to Consdorf (L9.11/LA.05.20), on wood, 30.4.1992, Aptroot 28653.

This common saxicolous lichen has been collected once on wood.

Verrucaria viridula (Schrad.) Ach.

Oesling: 9 km WSW of Clervaux, Hamiville, E of village, wall along churchyard and gravestone (J8.41/GR.05.45), 2.5.1992, van den Boom 12458.

This species has been mentioned by Koltz (1897: 306, sub Lithoicca viridula) from Luxembourg, but, in the absence of herbarium specimens, this record must be regarded as most doubtful.

New for Luxembourg.

List of all taxa collected or observed

Explanation of locality numbers

1: Gutland, 1 km SE of Berdorf, Aesbech (L9.12/LA.10.20), alt. 280 m, valley with N and S sandstone rock-faces, with Carpinus, Fagus and Quercus, 30.4.1992.

2: Gutland, 2 km W of Berdorf, Vugelsmillen (L9.11/LA.05.20), Tilia along parking, trees along stream, alt. 190 m, 30.4.1992.
3: Gutland, Berdorf, 0.5 km SW of centre, along road to Consdorf (L.9.11/L.A.05.20), *Pyrus* in meadow, wall, camping with *Malus* and wood, alt. 370 m, 30.4.1992.

4: Gutland, 1.5 km SW of Berdorf, Binzeltschloeff, W of road (L.9.11/L.A.05.20), sandstone rocks, *Fagus, Pinus* and *Quercus*, alt. 340 m, 30.4.1992.

5: Gutland, 1.5 km SW of Berdorf, Predigtstuhl, E of road (L.9.11/L.A.05.20), sandstone rocks, *Fagus, Pinus* and *Quercus*, alt. 350 m, 30.4.1992.

6: Gutland, 1.5 km SW of Berdorf, Binzeltschloeff, near the road (L.9.11/L.A.05.20), sandstone rocks, alt. 340 m, 30.4.1992.

7: Gutland, 1 km E of Manternach, N of road C. R. 134, S exp. slope (L.9.43/L.A.15.10), calcareous sandstone and trees, alt. 200 m, 1.5.1992.

8: Gutland, 2 km SW of Grevenmacher, SE slope (L.9.53/L.A.10.00), calcareous sandstone and wall along a field, alt. 190 m, 1.5.1992.

9: Gutland, 0.5-1 km SE of Beaufort, valley along Haupeschbaach (K8.58/L.A.05.20), sandstone rockfases with *Fagus, Quercus*, etc., alt. 290 m, 1.5.1992.

10: Gutland, 0.2 km S of Beaufort, S of the castle, along pond and path from Haupeschbaach (K8.58/L.A.05.20), big boulder and *Sambucus*, alt. 310 m, 1.5.1992.

11: Gutland, 0.6 km NW of Berdorf, near the churchyard (K9.51/L.A.05.20), low and high wall along churchyard and *Salix*, alt. 360 m, 1.5.1992.

12: Oesling, 1 km E of Esch-sur-Sûre, near tunnel and road N15 (K8.32/GR.10.30), E exp. rock-face, wall along stairs and top of the hill above tunnel, alt. 300 m, 2.5.1992.

13: Oesling, 2 km N of Bigonville, Moulin de Bigonville, NW of Hotel (K7.47/GR.00.25), N and S slope with *Fagus, Quercus, Sambucus*, etc., alt. 340 m, 2.5.1992.

14: Oesling, 2 km N of Bigonville, Moulin de Bigonville, S of Hotel, roadside (K7.47/GR.00.25), *Betula, Populus, Quercus, Sambucus*, etc., alt. 330 m, 2.5.1992.

15: Oesling, 2 km N of Bigonville, Moulin de Bigonville, E of Hotel (K7.47/GR.00.25), W slope with schist rocks in stream, alt. 330 m, 2.5.1992.

16: Oesling, 9 km WSW of Clervaux, Hamiville, E of village (J8.41/GR.05.45), wall along churchyard and gravestone, alt. 500 m, 2.5.1992.

17: Oesling, 6 km NW of Clervaux, Asselborn (J8.32/GR.10.50), wall of church and wall along churchyard, alt. 460 m, 2.5.1992.

18: Oesling, 10 km N of Clervaux, Wilwerdange (J8.23/KA.85.55), shaded wall of church, alt. 510 m, 2.5.1992.

19: Oesling, 15 km W of Ettelbruck, 2.5 km NE of Rambrouch (K8.51/GR.05.25), *Tilia* along road on plateau, alt. 540 m, 3.5.1992.

20: Oesling, 8 km W of Ettelbruck, 1 km E of Grosbous (K8.53/GR.10.20), old *Fraxinus* in arable fields, alt. 340 m, 3.5.1992.

21: Gutland, 1 km SE of Berdorf, Aesbech (L.9.12/L.A.10.20), shaded sandstone rock with *Fagus* and *Quercus* trees in wooded gorge, alt. 300 m, 3.5.1992.

22: Gutland, SW of Berdorf, Weerschrumshloeff (L.9.11/L.A.05.20), flattened top of sandstone rocks, with *Calluna* in wooded NW slope, alt. 325 m, 3.5.1992.
23: Oesling, 5 km N of Diekirch, Brandenbourg, ruins of castle (K8.35/KA.90.30), schistose stones (native rock) of ruins, top of wall and W or S exposed wall, alt. 300 m, 3.5.1992.

24: Oesling, 5 km N of Diekirch, 1 km W of Brandenbourg, valley of Blees (K8.35/KA.90.30), Populus and Salix in marsh near brook, alt. 300 m, 3.5.1992.

25: Oesling, 7 km N of Diekirch, 2 km NW of Brandenbourg, road fork to Gralingen and Nachtmanderscheid (K8.35/KA.90.30), rocky ridge in open Quercus wood with small trees, alt. 300 m, 3.5.1992.

Abbreviations

Ac = Acer, Al = Alnus, B = Betula, Car = Carpinus, Co = Corylus, F = Fagus, Fr = Fraxinus, M = Malus, P = Populus, Pyr = Pyrus, Q = Quercus, T = Tilia
c = calcareous rock, s = siliceous rock (sandstone or schist)
t = terricolous, m = moss, w = wood

* = lichenicolous fungus

(f) = fertile

Indications of herbaria where material is deposited:
(A) = herb. A. Aptroot,
(B) = herb. P. P. G. v. d. Boom,
(Br) = herb. A. M. Brand,
(D) = herb. P. Diederich,
(S) = herb. L. Spier.

Data without a collector name are field observations.

Species list

Acarospora fuscata (Schrad.) Th. Fr. 12s(D) 15s(A,B)
Acrocradia gemmata (Ach.) Massal. 2T(A) 21(Br)
Agonimia tristica (Nyl.) Zahrbr. 12c,m(B,Br)
Anisomeridium nyssaegenum (Ellis & Everh.) R. C. Harris see above
Arthonia didyma Körb. 2T(B) 7Fr(A,D) 14(Br)
Arthonia punctiformis Ach. see above
Arthonia radiata (Pers.) Ach. 1Q 2T(S) 12Fr(B) 12Sorbus 13Car(B)
Arthonia spadicea Leight. 1F 7F
Arthonia vinosa Leight. 1Q 9Q(A,S)
Arthopyrenia lapponina Anzi 12Q(B,D),Sorbus(A,B)
Arthopyrenia punctiformis (Pers.) Massal. see above
Arthothelium ruanum (Massal.) Körb. 2T(A)
Aspicilia aquatica Körb. see above
Aspicilia caesiocinerina (Nyl. ex Malbr.) Arnold see above
Aspicilia calcarea (L.) Mudd 8c(B) 16c
Aspicilia contorta (Hoffm.) Kremp. 3c 11c
Bacida arceutina (Ach.) Arnold 2P(A,B) 24(Br)
Bacidia arnoldiana Körb.
Bacidia biatorina (Körb.) Vain.
Bacidia caligans (Nyl.) A. L. Sm.
Bacidia delicata (Larbal. ex Leight.) Coppins
Bacidia fuscoviridis (Anzi) Lettau
Bacidia hemipollia (Nyl.) Malme
Bacidia rubella (Hoffm.) Massal.
Bacidia vezdae Coppins & P. James
Bacidia viridifarinosa Coppins & P. James
Bacidia caligans (Nyl.) Sérusiaux & Diederich
Baeomyces rufus (Huds.) Rebent.
Biacloria sphaeroides (Dicks.) Körb.
*Bispora christiansenii D. Hawksw.
Buellia aethalea (Ach.) Th. Fr.
Buellia disciformis (Fr.) Mudd
Buellia griseovirens (Turner & Borrer ex Sm.) Almbl.

Buellia punctata (Hoffm.) Massal.
Calicium adspersum Pers.
Calicium glaucellum Ach.
Calicium lichenoides (L.) Schum. (= C. salicina Pers.)
Caloplaeca cerina (Ehrh. ex Hedwig) Th. Fr.
Caloplaeca chlorina (Flot.) H. Olivier
Caloplaeca chrysoidea (Vainio ex Räs.) Dombr.
Caloplaeca citrina (Hoffm.) Th. Fr.
Caloplaeca decipiens (Arnold) Blomb. & Forssell
Caloplaeca flavescens (Huds.) Laundon
Caloplaeca flavovirens (Wulfen) Dalla Torre & Sarnth.
Caloplaeca lithophila H. Magn.
Caloplaeca obscurella (Körb.) Th. Fr.
Caloplaeca saxicola (Hoffm.) Nordin
Caloplaeca subpallida H. Magn.
Caloplaeca teicholyta (Ach.) Steiner
Caloplaeca variabilis (Pers.) Müll. Arg.
Caloplaeca vitellina auct., non (Nyl.) H. Olivier
Canellaria concolor (Dicks.) Stein
Canellariella aurella (Hoffm.) Zalbr.
Canellariella coralliza (Nyl.) H. Magn.
Canellariella medians (Nyl.) A. L. Sm.
Canellariella reflexa (Nyl.) Lettau
Canellariella vitellina (Hoffm.) Müll. Arg.
Canellariella xanthostigma (Ach.) Lettau
Catillaria atomarioides (Müll. Arg.) H. Kilias
Catillaria chatypeba (Borrer) Massal.
Catillaria globulosa (Flörke) Th. Fr.
Chaenotheca chrysocephala (Turner ex Ach.) Th. Fr.
Chaenotheca ferruginea (Turner & Borrer) Mig.
Chaenotheca furfuracea (L.) Tibell
Chaenotheca trichialis (Ach.) Th. Fr.
Chrysothrix candelaris (L.) Laundon
Chrysothrix chlorina (Ach.) Laundon

7Cornus(A)
21(Br)
10Sambucus(B,D)
9Q(A)
see above
12Q(B,D)
13Q(A,B)
9Q(A) 21(Br)
1Q(A)
see above
1s 5t
21
3w(A) (on Strangopora moriformis)
see above
4F(A)
1F(B,S) 2Co(A),T 3w(A) 7Fr 19T 24
2T 3Py 13Q 16s(B) 20Fr 23s
1Q(A,B)
5w(A,B,D,S) 12w(S)
2T(A,S) 5Q(A)
2P(A)
see above
1s,m(B,S) 6s(B) 9s(A,B)
3c 7c,Fr(A) 8c(B) 9s 11c 12c(B)
see above
3c 11c
see above
16
2P,T(f)(A,B,S) 7Fr(B)
16c 17c 23s(Br)
see above
see above
11c(B,S)
see above
20Fr(Br)
see above
4s(A) 12s(A,S)
see above
1F 2P,T(A) 3M(A) 7Fr 13
3w(A) 11s 13 15s 16s
2T(S) 3M(A)
see above
see above
14Crateagus(B)
2T 7Q(S) 13Q
9s,Q(A,B,S) 12s(S) 14s(B)
5Q(A) 9Q
2T(S) 5Q 13Q
4s(S) 9s 12s(A) 15s
Cladina arbuscula (Wallr.) Hale & Culb. 12s(A) 13s(A)
Cladonia arbuscula (Wallr.) Flot. ssp. mitis (Sandst.) Ruoss 12t(Br) 13(Br) 25(Br)
Cladonia borealis S. Stenroos see above
Cladonia caespiticia (Pers.) Flörko 9s(A) 25(Br)
Cladonia cervicornis (Ach.) Flot. ssp. verticillata (Hoffm.) Ahti 15s(B) 22
Cladonia ciliata Sturton var. ciliata 12s(A,Br)
Cladonia coccifera (L.) Willd. 4s(A) 12t 13t(B) 15t 23
Cladonia coniocraea (Flörke) Spreng. 25(Br)
Cladonia digitata (L.) Hoffm. 4s, Q 9s(A)
Cladonia fimbriata (L.) Fr. 25(Br)
Cladonia floerkeana (Fr.) Flörke 11c, m 13t 15t
Cladonia foliacea (Huds.) Willd. 15t(D)
Cladonia fuscata (Huds.) Schrad. ssp. fuscata 5t 13t(Br) 23(Br) 25(Br)
Cladonia glauca Flörke 4t 12t
Cladonia gracilis (L.) Willd. 5t 13t(D) 15t
Cladonia grayi G. Merr. ex Sandst. s.l. 9(Br) 12(Br) 13(Br) 22(Br) 25(Br) see above
Cladonia macilenta Hoffm. 3s(A)
Cladonia ochrochiora Flörke 9Q(A)
Cladonia polcillum (Ach.) Grognot 12s(A)
Cladonia polydactyla (Flörke) Spreng. 4Q
Cladonia portentosa (Dufour) Coem. 12s(A)
Cladonia pyxidata (L.) Hoffm. 12s(Br) 23(Br)
Cladonia ramulosa (With.) Laundon 13t 22t 16t
Cladonia rangiferina (L.) Weber ex F. H. Wigg. 12s(A,Br,D)
Cladonia rangiformis Hoffm. 4t 12t
Cladonia squamosa Hoffm. 12t 13t
Cladonia strepsilis (Ach.) Grognot see above
Cladonia subulata (L.) Weber ex F. H. Wigg. 4t 12t 13t
Cladonia uncialis (L.) Weber ex F. H. Wigg. 4t 12t(A,D) 13t(A,D)
Coelocalon aculeatum (Schreb.) Link 13t
Coelocalon muricatum (Ach.) J. R. Laundon 13s(D)
Collema auriforme (With.) Coppins & Laundon 23(Br)
Collema crispum (Huds.) Weber ex F. H. Wigg. 3t 11c(B,S) 14m(S)
Collema flaccidum (Ach.) Ach. 15s
Collema tenax (Sw.) Ach. em. Degel. 3t
*Cornutispora lichenicola D. Hawksw. & B. Sutton

9Q(B,D) (on Pertusaria pertusa)

Crespeona premnea (Ach.) Egea & Torrente var. saxicola (Leigh.) Egea & Torrente see above
Cystocoleus ebeneus (Dillwyn) Thwaites 1s(A) 10s
Dermatocarpon luridum (With.) Laundon 15s(Br)
Dermatocarpon minimatum (L.) W. Mann 7c(A,S)
Dibaeis baeomyces (L. fil.) Rambold & Hertel (= Baeomyces roseus Pers.) 5s,m(S)
Dimerella pinnata (Ach.) Veza 1stump 2Car 4Q(B) 7Cornus mas 12Q(D) 13F(A)
Dipsilochistes muscorum (Scop.) R. Sant. 13t,m
Dipsilochistes scruposus (Schreb.) Norman 4s(A,S) 11s(S) 12s(A,S) 13s 15s(Br)
Diplotomma ambiguum (Ach.) Flagey see above
Diplotomma dispersum (Krempehl.) Arnold see above
Dirina massiliensis Durieu & Mont. f. sorediata (Müll. Arg.) Tehler see above
Endocarpon pallidum Ach. see above
Enterographa hutchinsiae (Leigh.) Massal. see above
Enterographa zonata (Körb.) Källsten
Evernia prunastri (L.) Ach. 1Ac 3M(A) 4F 12Q 13Q 20Fr
Flavoparmelia caperata (L.) Hale 2Al 4F 11s 12s(A,S)
Fusciaea cyathoides (Ach.) V. Wirth & Vezda 4F
Fusciaea lightfootii (Sm.) Coppins & P. James
Graphis scripta (L.) Ach. 1Car 2T 9Ac(A,B,D) 21
Gylecta flotowii Körb.
Gylecta jenensis (Batsch) Zahlbr.
Gyalideopsis anastomosans P. James & Vezda 2Al 9s
Haematoma ochroleucum (Neck.) Laundon var. ochroleucum 1s(A) 9s(f)(A) 11s 12s(B) 22s
Haematoma ochroleucum var. porphyrion (Pers.) Laundon 2T(S) 22s
Halecania viridescens Copins & P. James 1w(A) 2Car(B) 9(Q(A,B,D) 10 12(Br) 14 24(Br)
Hymenelia lacustris (With.) M. Choisy 12s(Br)
Hypocenomyce scalaris (Ach.) M. Choisy 4Pinus
Hypogymnia physodes (L.) Nyl. 1Ac 3M(A) 10s 12Q(D)(f) 13Q(f) 19T 20Fr
Hypogymnia tubulosa (Sch.er.) Hav. 2Fr 13Q
Hypotrachyna revoluta (Flörke) Hale 4F
Imshaugia aleurites (Ach.) S. L. F. Meyer 4Pinus
Lasallia pustulata (L.) Mérat 4s 11s 12s(A) 13s(D)
Lecanactis abietina (Ach.) Körb. 4Q 9Picea(f)(A,S) 21
Lecanactis latebrarum (Ach.) Arnold 4s(B) 5Q(A) 12s(A,B,D) 22s
Lecania cuprea (Massal.) v. d. Boom & Coppins 7c(B)
Lecania cyrtella (Ach.) Th. Fr. 2T(S) 13P(S) 14Sambucus(B,Br)
Lecania erysibe (Ach.) Mudd 17c 18c(B) 23c
Lecania inundata (Körb.) M. Mayrhofer 11c(B,Br)
Lecania naegelii (Hepp) Diederich & v. d. Boom see above
Lecania rabenhorsitii (Hepp) Arnold 3c
Lecania suavis (Müll. Arg.) Mig. see above
Lecanora achariana A. L. Sm. see above
Lecanora albellina (Pers.) Ach. (= L. pallida (Schreb.) Rabenh.) 9F(A)
Lecanora albescens (Hoffm.) Branth & Rostr. 3c,w(A) 7c(A) 11c 12s(A) 16c 17c 18c
Lecanora argentata (Ach.) Malme 1Car 12T(A) 21
Lecanora campestris (Sch.er.) Hue 3s 11s(Br,S) 15s(B)
Lecanora carpinea (L.) Vainio 1Car(S) 2P,T(S) 3M(A) 7Fr(A)
Lecanora chlorotera Nyl. 1Car(S) 13Car 20Fr
Lecanora conizaeoides Nyl. ex Crombie 1F 3M(A) 4Pinus(A) 13Q
Lecanora crenulata Hook. see above
Lecanora dispersa (Pers.) Sommerf. 3c(A) 11c 16c 18c 23c
Lecanora expallens Ach. 1Car,Q(A) 2T(A,B) 3M,Pyr(A) 13Q(B)
Lecanora gangaleoides Nyl. see above
Lecanora hagenii (Ach.) Ach. 3w(A)
Lecanora intumescens (Rebent.) Rabenh. 9F(A)
Lecanora muralis (Schreb.) Rabenh. 3c 15s(B) 16c 17c
Lecanora orosthea (Ach.) Ach. see above
Lecanora piniperda Körb. 13Sarothamnus(B)
Lecanora polypopra (Ehrh. ex Hoffm.) Rabenh. 3s(A) 12s(A) 13s(A) 14s 16s(A)
Lecanora pulcaris (Pers.) Ach. 3M(A) 12Q(B) 15Al 19T
Lecanora rupicola (L.) Zahlbr. ssp. rupicola 4s(A) 12s(B) 15s(B)
Lecanora saligna (Schad.) Zahlbr. 2P 3Pyr 13P(S) 14P(B,Br) 20Fr
Lecanora subcarnea (Lilj.) Ach. 12s(A)
Lecanora subcarpinea Szat. see above
Lecanora sulphurea (Hoffm.) Ach. 12s(A) 15s
Lecanora swartzii (Ach.) Ach. see above
Lecanora symmica (Ach.) Ach. 13Saroanthmus
Lecanora umbrina (Ehrh.) Massal. 3w(A)
Lecanora varia (Hoffm.) Ach. 3w(A)
Lecidea fuscoatra (L.) Ach. var. fuscoatra 11s 12s(A,D,S) 13s(A) 15s(D,S) 16s
Lecidea fuscoatra var. grisella (Flörke) Nyl. 11s
Lecidea pycnocarpa (Körb.) Ohlert see above
Lecidella elaeochroma (Ach.) M. Choisy 2T(S) 7Car(S) 13Fr(A) 20Fr
Lecidella elaeochroma f. soralifera (Erichsen) D.Hawksw. 2T(A)
Lecidella scabra (Taylor) Hertel & Leuckert see above
Lecidella stigmatea (Ach.) Hertel & Leuckert see above
Lempholemma polyanthes (Bermb.) Malme see above
Lepraria caesioalba (B. de Lesd.) Laundon 4s(A,B,S) 11m(S) 12s(A) 13m(Br,D) 15s(B,Br) 23s(Br)
Lepraria crassissima (Hue.) Lettau see above
Lepraria incana (L.) Ach. 1Car 2T 3Pyr 4s(A) 6s 7Fr 9Picea(A,Br,S) 10s(A) 11s(A) 13Q 21(Br)
Lepraria lesdainii (Hue.) R. C. Harris 1s,t(A,B) 9s(A,B)
Lepraria lobificans Nyl. 2T(A) 9s(A,B,Br) 12s(A) 13Q(Br,B) 14Sambucus(B) 21(Br)
Lepraria rigidula (B. de Lesd.) Tønsberg 2T(A) 12(A,Br) 14P(B) 24(Br)
Leprocaulon microscopicum (Vill.) Gams 12s(A,D,S)
Leproloma membranaceum (Dicks.) Vain. 4s,Pinus(A) 10s 12s,Q(A,Br) 13F(Br) 15s(Br) 23(Br)
Leprula vauauxii (Hue.) Laundon 3m(B) 12s 23s(Br)
Leptogium cyanescens (Rabenh.) Körb. 12(Br)
Leptogium gelatinosum (With.) Laundon 12c(A,B,S) 23c
Leptogium lichenoides (L.) Zahlbr. 4m(S) 12c(A) 21(Br)
Leptogium plicatil (Ach.) Leight. 23c(Br)
Leptogium schraderi (Bermb.) Nyl. 11c(B,S)
Leptogium teretiusculum (Wallr.) Arnold see above
*Lichenostigma elongata Nav.-Ros. & Hafellner see above
*Lichenostigma rugosa Thor 11(Br) 12s(A) 13s(D) (on Diploschistes scruposus)
Lobothallia radios (Hoffm.) Hafellner 11c
Macentina stigonemoides Orange see above
Melanea disjuncta (Erichsen) Essl. see above
Melanella exasperata (Nyl.) Essl. 2Car 3M(A) 11 20
Melanella glabratula (Lamy) Essl. ssp. fuliginosa (Fr. ex Duby) Laundon 4s 12s(A)
Melanella glabratula ssp. glabratula 1Car 2T 7Fr 9s 12Q 21
Micarea bortyoides (Nyl.) Coppins 1s(B) 4s 9s(A,B) 21(Br)
Micarea curvata Coppins see above
Micarea denigrata (Fr.) Hedl. 3w(A) 11(Br) 14(B)
Micarea hedlundii Coppins see above
Micarea leprosula (Th.Fr.) Coppins & A. Fletcher 13m(D,S) 15s(B)
Micarea lignaria (Ach.) Hedl. s.s. 1s(A,S) 4s,Pinus(A,B,S) 9s(A) 10s,m 11 14(Br) 15s(B)
Micarea litchinella (Nyl.) Hedl. 12s(B)
Micarea niischkeana (J. Lahn ex Rabenh.) Harm.  15AI(Br)
Micarea peliocarpa (Anzi) Coppins & R. Sant.
  1s(A,S) 4s(A) 5Q(B) 6s(B) 9s(A,B,S) 11 12s(A) 13Q(A) 15s(D) 21 23s(Br)
Micarea prastina Fr.
  1stump 4F(A) 9F(Q,A,Br) 12m(A) 13F 14P(A) 21 24
Micarea pynclidophora Coppins & P. James  see above
*Microcalicium arenarium (Hampe ex Massal.) Tibell
  9s(B) 14s (on Psiloclechia lucida)
*Muellerella pygmaea (Körb.) D. Hawksw.
  12s(A,D) (on Lecidea fuscoatra)
Myccobilimbia sabuletorum (Schreb.) Haefl. 1Q(A) 4s(A) 8m(S) 9c(A) 12m(A) 21
Mycoblastus fucatus (Stirt.) Zahlbr. (= M. sterilitis Coppins & P. James)
  1F(A) 2Al(A,S) 4F 13Car(A) 19T
Neofuscelia loxodes (Nyl.) Essl.  see above
Neofuscelia pulla (Ach.) Essl.  15s(Br)
Neofuscelia verruculifera (Nyl.) Essl.  11s(B,Br,S) 12s(A,S) 15s(Br)
Ochrolechia androgyna (Hoffm.) Arnold
  9s,Q,F(A) 12s(A) 13Q(A) 23s
Ochrolechia parella (L.) Massal.  see above
Ochrolechia subviridis (Høeg) Erichsen
  13Q(A,B)
Omphalina hudsoniana (H. S. Jenn.) H. E. Bigelow  see above
Omphalina umbellifera (L.) Quél (= O. ericitorum (Fr.) M.Lange)
  4t(A,D) 9s(B)
Opegrapha atra Pers.  2T(S) 7Fr
Opegrapha lithyrga Ach.  see above
Opegrapha mougeotii Massal.
  9s(A,B,Br)
Opegrapha varia Pers. (= O. lichenoides Pers.)
  2T(B,S) 4Q(B) 13Q(B)
Opegrapha vermicellifera (Kunze) Laundon
  1F(B,S) 9s(A) 21
Opegrapha viridis (Pers. ex Ach.) Behlen & Desberger
  9F,T(A,B,Br) 12F(A) 21
Opegrapha vulgata Ach. var. subsiderella Nyl. (= O. niveoatra (Borr.) Laundon)
  1F(B)
Pachyphiale fagicola (Hepp) Zwackh  see above
Parmelia saxatilis (L.) Ach.
  1F 3M(A) 4t 11s(S) 12s 15s 19T
Parmelia sulcata Taylor
  1F 2T 3M(A) 12Q 13Car 14P(f)
Parmeliella trilophylla (Ach.) Müll. Arg.  see above
Parmelina postillifera (Harm.) Hale
  20Fr
Parmelina tiliae (Hoffm.) Hale  3M(A) 20Fr
Parmeliopsis ambigu (Wulfen) Nyl.
  1F 2Al 4F 13Car 19T
Peltigera horizontalis (Huds.) Baumg.
  9Q(A) 12s(A,S)
Peltigera praetextata (Flörke ex Sommerf.) Zopf
  1s(A,S) 2Fr 7F 12s(A) 21
Pertusaria albescens (Huds.) M. Choisy & Werner
  2F,T(S) 3M(A) 13Q(A) 20
Pertusaria amara (Ach.) Nyl.
  1F 2T 9s(A) 12Q 13F 21
Pertusaria coccodes (Ach.) Nyl.
  13F(A,D) 20
Pertusaria corallina (L.) Arnold
  4s(A) 9s(A) 10s(Br) 11s 12s(A) 14s 15s
Pertusaria flavidca (DC.) Laundon
  4F(A,S) 9Q(A) 21
Pertusaria hemisphaerica (Flörke) Erichsen
  1F(A,S) 9(Br) 21
Pertusaria hymenea (Ach.) Schaerer
  1Ac,F(A,B) 2T(S) 9F(S)
Pertusaria lactea (L.) Arnold
  12s(B,S) 15s(Br)
Pertusaria leioplaca DC.
  1Car(S) 2T 13Car
Pertusaria pertusa (Weigel) Tuck
  1F(S) 6s(B) 9(A,Br) 21
Pertusaria pupillaris (Nyl.) Th. Fr.
  13Car(D) F(A,B)
Phaeophyscia nigricans (Flörke) Moberg
  3c 11c
Phaeophyscia orbicularis (Neck.) Moberg
  2P,T(S) 3M(A) 11c 17c
*Phacridia conoides Nyl.
Phlyctis agelaea (Ach.) Flot.  see above
Phlyctis argena (Spreng.) Flot. 1Car, F(S) 2Al(S) 3M(A) 7Fr 13Car 21(Br) 24
Physcia adscendens (Fr.) H. Olivier 3M(A) 4F
Physcia caesia (Hoffm.) Fürnir. 3c 11c 17c
Physcia dubia (Hoffm.) Lettau 3s 13s(A,B)
Physcia tenella (Scop.) DC. 3M(A)
Physcia tribacia (Ach.) Nyl. 23s(Br)
Physcionia distorta (With.) Laudon 13Fr(A) 14P
Physcionia enteroxantha (Nyl.) Poelt 11 Salix(B) 20Fr
Physcionia grisea (Lam.) Poelt 3M, Pyr, s(A)
Physcionia perisidiosa (Erichsen) Moberg 2Al(A) 3M(A) 13Q(A)
Placynthiella icmalea (Ach.) Coppins & P. James 2Al 3w(A) 4t 9m(A) 10s 12m(A) 131 24
Placynthium nigrum (Huds.) Gray 11c(S) 12c
Platismata glauca (L.) W. L. Culb. & C. F. Culb. 2Fr 4Pinus 13Car, Q(S) 19T
Pleurosticta acetabulum (Neck.) Elix & Lumbsch 3M(A) 20Fr
Polysporina simplex (Davies) Vezda see above
Porina aenea (Wallr.) Zahlfbr. 1Car 2Car, T(B, S) 7Cornus mas(B, D)
Porina chlorotica (Ach.) Müll. Arg. see above
Porina leptalea (Durieu & Mont.) A. L. Sm. 7Cornus mas(A) 9Ac(A, B) 21
Porpidia macrocarpa (DC.) Hertel & A. J. Schwab 4s(A)
Porpidia tuberculosa (Sm.) Hertel & Knoph 4s(A) 9s(A) 11 12s(B) 13s(B, D) 15s
Protoblastenia rupestris (Scop.) J. Steiner 8c(A, S) 9c 12c
Prototermelina badia (Hoffm.) Hafellner see above
Pseudemernia furfuracea (L.) Zopf 3M(A) 4Pinus 13Q 19T 20Fr
Psileolechia clavulifera (Nyl.) Coppins see above
Psileolechia lucida (Ach.) M. Choisy 1s 12s 14s
Punctelia subrubracta (Nyl.) Krog 2P
Pyrenula nitida (Weigel) Ach. 1s 12s 14s
Pyrrhospora quernea (Dicks.) Körb. 1F(A, S) 9F(S) 21
Rancodium rupestr Pers. 4Q(B) 13Q
Ramalina farinacea (L.) Ach. 9s(A) 21s
Ramalina fastigiata (Pers.) Ach. 20Fr
Ramalina fraxinea (L.) Ach. 20Fr
Ramalina pollinaria (Westr.) Ach. 22s
Rhizocarpon badeoattum (Flörke ex Sprengel) Th. Fr. see above
Rhizocarpon distinctum Th. Fr. see above
Rhizocarpon gerninatum Körb. see above
Rhizocarpon geographicum (L.) DC. s.l. 12s(A, D, S) 15s(D, S)
Rhizocarpon lecanorinum Anders 12s(A) 13s(D)
Rhizocarpon obscurentum (Ach.) Massal. 12s(A, S) 13s(A, D) 23s(Br)
Rhizocarpon viridiatrum (Wulfen) Körb. 12( Br) 15s(B, Br)
Rinodina gennarrii Bagl. see above
Rinodina griseosoraliformis Coppins see above
Rinodina interpolata (Stirton) Sheard see above
Rinodina oxydata (Massall.) Massal. see above
Ropalospora viridis (Tønsberg) Tønsberg see above
*S. Roselliniopsis tartaricola (Nyl.) Matzer 2Co(A) 4(F) 13Car
Sarcogyne regularis Körb. see above
Schismatoma decolorans (Turner & Borrer ex Sm.) Clauzade & Vezda see above
Schismatoma umbrinum (Coppins & P. James) P. M Jørg. & Tønsberg see above
*Sclerococcus sphaerale* (Ach.) Fr. 13s 14s 15s (B,Br,D) (on *Pertussaria corallina*)
*Scoliciosporum chlorococcum* (Graewe ex Stenh.) Vezda 5F (B) 12Car (A) 13Q
*Scoliciosporum gallureae* Vezda & Poelt see above
*Scoliciosporum pruniolusum* (P. James) Vezda 9F (A,B,Br) 12(Br) 13Q (D)
*Scoliciosporum umbrinum* (Ach.) Arnold 3s,M (A) 4s 5w (B) 12s (A) 13s (D)
*Sphaerophorus globosus* (Huds.) Vain. 12Qs (D)
*Sphaerophorus melanocarpus* (Sw.) DC. 5s (A,B,D,S)
*Sphinctrina leucopoda* Nyl. 15s (B,Br,D) (on *Diploschistes scrupulosus*)
*Staurothele frustulenta* Vain. see above
*Stenocybe pullulata* (Ach.) Stein 13Al (A)
*Strangospora moriformis* (Ach.) B. Stein see above
*Strigula jamesii* (Swinscow) R.C. Harris see above
*Taeniolella punctata* M. S. Christ. & D. Hawkses. 7Car,F (A,B) (on *Graphis scripta*)
*Tephromela aria* (Huds.) Hafellner 4s 9s (A) 12s 15s
*Tephromela grumosa* (Pers.) Hafellner & Roux 4s,F (f)
*Thelotrema lepadinum* (Ach.) Ach. 1Q (A) 4F 9F 3Q (A,S) 21
*Tomonia aromatica* (Sm.) Massal. see above
*Trapelia coarctata* (Sm.) M. Choisy 1c 9s (A) 12s (A) 13s
*Trapelia involuta* (Taylor) Hertel 4s (B) 6s 11s (B) 12s (S) 13s (B,S)
*Trapelia obtiens* (Th. Fr.) Hertel see above
*Trapelia placodioides* Coppins & P. James 3s
*Trapeliopsis flexuosa* (Fr.) Coppins & P. James 1s (A) 3w (A)
*Trapeliopsis gelatinosa* (Flörke) Coppins & P. James 9m (A) see above
*Trapeliopsis granulosa* (Hoffm.) Lumbsch 4s 5s (B) 13m,t (D)
*Trapeliopsis pseudogranulosa* Coppins & P. James 4t (A,S) 10s 12t 13t
*Tremella lichenicola* Diederich 4F (A) (on *Mycoblastus fucatus*)
*Umbilicaria polyphylla* (L.) Baumg. 4s
*Usnea floridana* (L.) Weber ex F. H. Wigg. 13Q (A,B,S)
*Usnea fulvoreagens* (Räsänen) Räsänen 13Q (D)
*Usnea hirta* (L.) Weber ex F. H. Wigg. see above
*Usnea subfloridana* Stirr. 1Q (A) 2Al 13Q
*Verrucaria margacea* (Wahlenb.) Wahlenb. see above
*Verrucaria muralis* Ach.
*Verrucaria nigrescens* Pers. 3c 11c (S) 12c (B) 16c 17c
*Verrucaria viridula* (Schrad.) Ach. see above
*Vezdaea aestivalis* (Ohlert) Tscherm.-Woess & Poelt 1s (A,B)
*Xanthoparmelia conspersa* (Ach.) Hale 11s (S) 12s (A,S) 15s
*Xanthoparmelia mougeotii* (Schaer. ex D. Dietr.) Hale 4s (S) 11s 12s (A,S)
*Xanthoria candelaria* (L.) Th. Fr. 3M,Pyr (A) 14 18c (B,S) 20Fr
*Xanthoria elegans* (Link) Th. Fr. 3s 11s (S) 16c 17c
*Xanthoria fallax* (Hepp) Arnold 23s (Br)
*Xanthoria parietina* (L.) Th. Fr. 2w 3M (A) 20Fr
*Xanthoria polycarpa* (Hoffm.) Th. Fr. ex Rieber 3Pyr 13Sarothamnus

**Acknowledgements**

The authors would like to thank the following lichenologists for checking critical specimens: Dr O. Breuss (*Endocarpon pallidum*), Dr I. Brodo (*Lecanora subcarnina*), Dr B. J. Coppins (*Trapeliopsis gelatinosa*), Prof. P. M. Jørgensen (*Leptogium teretiusculum*), Prof. C. Leuckert (*Lepraria caesioalba* and *L. rigidula*),
Dr. H. Mayrhofer (Rinodina gennarii) and Dr. L. Tibell (Calicium glaucellum), Mr Leo Spier for communicating his collections of the excursion, the curators of B, LG and LUX for the loan of specimens in their care, and Dr. H. Sipman for reading and commenting on the manuscript.

References


