New or interesting lichens and lichenicolous fungi from Belgium, Luxembourg and northern France. X

Emmanuël Sérusiaux¹, Paul Diedrich², Damien Ertz³, Maarten Brand⁴ & Pieter van den Boom⁵

¹ Plant Taxonomy and Conservation Biology Unit, University of Liège, Sart Tilman B22, B-4000 Liège, Belgique (E.Serusiaux@ulg.ac.be)
² Musée national d’histoire naturelle, 25 rue Munster, L-2160 Luxembourg, Luxembourg (paul.diedrich@education.lu)
³ Jardin Botanique National de Belgique, Domaine de Bouchout, B-1860 Meise, Belgium (damien.ertz@brfgov.be)
⁴ Klipperwerf 5, NL-2317 DX Leiden, the Netherlands (A.M.Brand@wanadoo.nl)
⁵ Arafura 16, NL-5691 JA Son, the Netherlands (pvdboom@zonnet.nl)


Abstract. Review of recent literature and studies on large and mainly recent collections of lichens and lichenicolous fungi led to the addition of 35 taxa to the flora of Belgium, Luxembourg and northern France: Abrothallus buellianus, Abssendidiella delitulula, Acaeospora glaucocarpa var. conspersa, Anema mammulare, Antisomerdium ramunculosporum, Artho-nia epiphyllus, A. punctillla, Bacidiad adstra, Brodoa atrofuscua, Caloplaqua britannica, Cer-cidospora macrospora, Chaenotheca laevigata, Collenopsisium foveolatum, C. subitorale, Coppiana mimattisima, Cyphellium inquinans, Involutoprenium squamulosum, Lecania frugitena, Lecanora conferta, L. pannonica, L. xanthosoma, Lecidea variegatula, Micarea micrococc, Micarea subviridescens, M. vulpinaris, Opegrapha prosodea, Parmotrema stuppeum, Placynthium stenophyllum var. isidiatum, Porpidia striata, Pyrenidium actinellium, Thelopsis rubella, Tonia phylaxoides, Tremella coppsinii, Tubufia heterodermitae, Verrucaria acrotelata and Vezdnea sipitetata. Three species are to be deleted from that flora: Brodoa intestiniformis, Fuscopannaria saubinetii and Squamarina oleosa.

1. Introduction

This paper continues the series of notes on the flora of lichens and lichenicolous fungi in Belgium, Luxembourg and northern France (incl. the Boulogne and Picardy districts in NW France). The former contribution appeared in 2003 (Sérusiaux et al. 2003) and it is thus appropriate to publish the recent additions and changes to the checklist of species present in that area (Diedrich & Sérusiaux 2000). This paper further includes the most recent data regarding the nomenclature and taxonomy of the species present.

2. Survey of other publications on the lichen flora and vegetation of the study area

Since the previous paper published in this series (Sérusiaux et al. 2003), the following contributions to the lichen and lichenicolous flora and vegetation of the study area have been detected or published:

- Killmann & Fischer (2001) report the discovery of Arthonia cinobarina (DC.) Wallr. near Berdorf (Luxembourg) in 2001; the species has not been seen in that country since the 19th century.
- Vanhonen (2003) has produced a detailed survey of the epiphytic macrolichens in the “Région de Bruxelles-Capitale” through 470 relevés. A total of 32 species have been detected and a correlation with atmospheric pollution data shows an increasing eutrophication of tree bark in this large urban area.
- van den Boom & Brand (2003) describe the new Verrucaria squamulosa Brand & van den Boom on the basis of material collected in Belgium, Luxembourg and the
Netherlands. It is closely related to *V. macrostoma* and was mentioned in the checklist as “*Verrucaria* sp. (as *Verrucaria squamulosa* ined. in Ertz 1999)” (Diederich & Sérusiaux 2000: 174). It has been transferred to the genus *Involucropyrenium* by Breuss & Türk (2004: 214) as *I. squamulosum* (Brand & van den Boom) Breuss.

- van den Boom (2003) reports *Micarea subviridescens* (Nyl.) Hedl. as new for Belgium. This species was previously included in *Micarea prasina*.

- Sparrius & Aptroot (2003) describe the new and most probably widespread *Bacidia adasta* Sparrius & Aptroot, with material from Belgium, Germany, Great Britain and the Netherlands.

- In a series of papers starting in 2003, Van den Broeck and co-workers have published several interesting species, including first reports for the area covered by the checklist, from a poorly studied part of Belgium, the Flemish and Campine districts (B Fl. and Camp.) (Van den Broeck & Aptroot, 2003; Van den Broeck, 2003; Van den Broeck et al., 2004a, b; Slembrouck et al., 2004; Van den Broeck et al., 2004; Van den Broeck, 2005). After examination of the corresponding specimens, we accept the following species to be added to the checklist: *Lecanora conferta* (Fr.) Grognot, *L. pannonica* Szatala, *Lecidea variegatula* Nyl., *Micarea micrococca* (Körb.) Coppins, *Parmotrema stuppeum* (Taylor) Hale, *Verrucaria acrostella* Nyl., and *Vezdaea stipitata* Poelt & Döbbeler. For three others, we wish to postpone such a decision until more evidence is available: *Bacidia viridescens* (A. Massal.) Norman, *Cladonia incrassata* Flörke, and *Verrucaria tectorum* (Massal.) Körber. Those papers are also important for the keys of the macrolichens in the area of study (Sérusiaux et al. 2004) as two species not included in those keys are involved (*Cladonia incrassata* and *Parmotrema stuppeum*).

- Ertz & Duvivier (2004) have published a detailed analysis of the lichen flora and vegetation in the “vallée de l’Eau d’Heure” (B Mosan). They report many interesting data, amongst which *Paranectria oropensis* is new for Belgium.

- Diederich et al. (2004) report the results of two field trips in 2002 and 2003 in southern Belgium (Lorraine district). Two species are reported as new for the area of study: *Micarea vulpinaris* (Nyl.) Muhr (= *Micarea muhrii* Coppins) and *Pyrenidium actinellum* Nyl., while *Lichenopeltella hydrophila* is mentioned for the first time in Belgium. A healthy population of the rare *Cladonia zopphi* was rediscovered near Arlon (B Lorr).

- Aptroot & Van Herk (2004) mention the occurrence of *Caloplaca britannica* R. Sant. from Belgium (“Vlaams Brabant”; report formerly published by Van den Broeck & Aptroot 2003), a mostly saxicolous species growing in ruderal conditions and producing a microsquamulose thallus and granular soredia. It should be looked for in the area covered by the checklist, as it is most likely a widespread taxon.

- Sérusiaux, Diederich & Lambinon (2004) have published identification keys for all macrolichens present in the study area: 327 species are included, 125 are illustrated in colour and 241 distribution maps are produced. An important taxonomical change with the checklist (Diederich & Sérusiaux 2000) is the inclusion of all species of *Cladina* in *Cladonia*. The following species are new for the area covered: *Anema mammularia* (Durieu & Mont.) Nyl. and *Placynthium stenophyllum* (Tuck.) Fink var. *isidiatum* Henssen; *Baeomyces callianthus* is treated as a variety of *B. rufus*; and *Squamaria oleosa* (Zahlbr.) Poelt is deleted from the checklist.

- Van den Boom & Brand (2005) document the presence of *Lecania fructigena* Zahlbr. on rocks in coastal areas of Europe; they report its occurrence in the area of study, at the “Cap Gris-Nez” in F Mar. The species must thus be added to the checklist.

- Diederich et al. (2006) provide a further contribution to the lichen flora of northern France (Lorr.). A total of 264 species of lichens and lichenicolous fungi are recorded in eight localities, incl. the “forêt du Mont-Dieu” S of Sedan, a site of high biological interest with *Cetraria olivetorum*, *Cladonia cyathomorpha* and *Lobaria pulmonaria* well-developed on old boles of several
Fraxinus trees. Acarospora glaucocarpa (Ach.) Körb. var. conspersa (Fr.) Th. Fr. and Thelopsis rubella Nyl. are reported as new for the area covered by the checklist; Lecanora xanthostoma Fröberg is confirmed for the same area and a second world report of Pronectria terrestris is documented.

- van den Boom & van den Boom (2006) provide a detailed inventory of lichens and lichenicolous fungi in several nature reserves in northern Belgium. 159 taxa are reported, incl. the following species which are new for Belgium: Caloplaca phlogina, Cercidiospora macrospora, Lecanora persimilis, Lichenocanium xanthoriae, Trichonectria rubefaciens and Tubeufia heterodermiae. The lichenicolous fungi Cercidiospora macrospora (Uloth) Hafellner & Nav.-Ros. and Tubeufia heterodermiae Etayo are to be added to the checklist. They also report the occurrence of Physcia clementei, a species not seen in the study area since 1954 and which was considered as extinct (Sérusiaux et al. 2004: 136).

- Diederich, Erzt, Ries & Sérusiaux have opened a web site dedicated to the lichens and lichenicolous fungi of the study area (www.lichenology.info). It presents updated data on all species found, together with distribution maps and colour photographs for many species. This site has been produced with the help of the Société des naturalistes luxembourgeois.

3. Taxonomical and nomenclatural changes

The main changes of epithets of accepted species in the area of study, and of generic position or of genera delimitation following new taxonomic studies are given in Tables 1 and 2.

Fryday (2005: 5) has reduced Porpidia musiva (Körb.) Hertel & Knoph into synonymy with P. cinereoastra (Ach.) Hertel & Knoph, an option which was already suggested in the checklist (Diederich & Sérusiaux 2000: 147). The same author (Fryday 2005: 16) gives the forma taxonomical level to P. nigrocruenta (Anzi) Diederich & Sérus., which was reduced into synonymy with P. macrocarpa (DC.) Hertel & A. J. Schwab in the checklist (Diederich & Sérusiaux 2000: 147); P. macrocarpa f. nigrocruenta (Anzi) Fryday.

Halda (2003) revised the species of Bagliettoa and concluded that these species should be included in Verrucaria. The four species of Bagliettoa recognized in our study area are reduced to two species: Verrucaria baldensis A. Massal. (incl. B. parmigera and B. steineri) and Verrucaria parmigerella Zahlbr.

Several recent papers have reorganized the delimitations of important genera, based on new morphological and anatomical data and/or phylogenetic analysis of DNA sequences. Genera concerned are Acarospora, the parmeliod genera and Xanthoria.

In Acarospora, Harris (2004) has adopted the name Myriospora heppii (Hepp) R. C. Harris for the quite isolated A. heppii, while Vězda (2002) has introduced the new genus Polysporinopsis Vězda for two well-known species, A. sinopica and A. smaragdula. Further evidence is needed before a new generic delimitation can be adopted for the Acarosporaceae (see Reeb et al. 2004).

Several parmeliod genera (mainly Melanelia, Neofuscelia, Parmotrema and Xanthonpalmelia) have been reorganized on the basis of revisited morphological and anatomical characters and on phylogenetic analysis of newly produced DNA sequences. The results include: (a) the synonymy of Neofuscelia with Xanthonpalmelia, (b) the synonymy of Rimelia with Parmotrema, and (c) the description of the new genera Melanelixia and Melanobalea, respectively for the Parmelia glabra aggr. and the Parmelia exasperata aggr., the genus Melanelia being reduced to the Parmelia stygia aggr. (Blanco et al. 2004a, b; Blanco et al. 2005). We suggest postponing the use of those numerous nomenclature changes until all parmeliod genera are reassessed with the appropriate data sets, especially for the genera Flavoparmelia, Flavopunctelia, Hypotrachyna, Parmelina and Punctelia.

The complete reorganization of the genus Xanthoria as recently proposed by Sochting et al. (2002) and Kondratyuk & Kärnefelt (2003) must be serenely evaluated before being adopted for the checklist.
Table 1. Changes of epithets of accepted species in the area of study.

<table>
<thead>
<tr>
<th>Epithet used in the checklist (Diederich &amp; Sérusiaux 2000) and subsequent papers</th>
<th>New epithet</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Lecania globulosa</em> (Flörke) van den Boom &amp; Sérus.</td>
<td><em>Lecania hyalina</em> (Fr.) R. Sant.</td>
<td>Santesson et al. (2004: 145)</td>
</tr>
<tr>
<td><em>Lepraria flavescens</em> Clauzade &amp; Cl. Roux</td>
<td><em>Lepraria rouxi</em> S. Ekman &amp; Tonsberg</td>
<td>Grube et al. (2004: 512)</td>
</tr>
<tr>
<td><em>Porpidia glaucophaea</em> (Körb.) Hertel &amp; Knoph</td>
<td><em>Porpidia rugosa</em> (Taylor) Coppins &amp; Fryday</td>
<td>Fryday (2005: 29)</td>
</tr>
<tr>
<td><em>Tragopogon involuta</em> (Taylor) Hertel</td>
<td><em>Tragopogon glebuleosa</em> (Sm.) J. R. Laundon</td>
<td>Laundon (2005: 492)</td>
</tr>
</tbody>
</table>

Table 2. Changes of generic position or of genera delimitation following new taxonomical studies.

<table>
<thead>
<tr>
<th>Generic position adopted in the checklist (Diederich &amp; Sérusiaux 2000) and subsequent papers</th>
<th>New generic position</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Dimerella pineti</em> (Ach.) Vêzda</td>
<td><em>Coenogonium pineti</em> (Ach.) Lücking &amp; Lumbsch</td>
<td>Lücking et al. (2004: 290)</td>
</tr>
<tr>
<td><em>Gyaldesopsis Anastomosans</em> P. James &amp; Vêzda</td>
<td><em>Jamesiella anastomosans</em> (P. James &amp; Vêzda) Lücking, Sérus. &amp; Vêzda</td>
<td>Lücking et al. (2005: 165)</td>
</tr>
<tr>
<td><em>Lecidea pycnocarpa</em> (Körb.) Ohlert</td>
<td><em>Mirtiquidica pycnocarpa</em> (Körb.) Andreev</td>
<td>Andreev (2004: 34)</td>
</tr>
<tr>
<td><em>Myxobilimbia lobulata</em> (Sommerf.) Hafellner</td>
<td><em>Bilimbia lobulata</em> (Sommerf.) Hafellner &amp; Coppins</td>
<td>Veldkamp (2004: 195)</td>
</tr>
<tr>
<td><em>Myxobilimbia sabuletorum</em> (Schreb.) Hafellner</td>
<td><em>Bilimbia sabuletorum</em> (Schreb.) Arnold</td>
<td>Veldkamp (2004: 195)</td>
</tr>
<tr>
<td><em>Pyrenocollema halophytes</em> (Nyl.) R. C. Harris</td>
<td><em>Collemopsidium halophytes</em> (Nyl.) Grube &amp; B. D. Ryan</td>
<td>Grube &amp; Ryan (2002: 163)</td>
</tr>
<tr>
<td><em>Strangospora ochrophora</em> (Nyl.) R. A. Anderson</td>
<td><em>Piccolia ochrophora</em> (Nyl.) Hafellner</td>
<td>Hafellner (2004)</td>
</tr>
</tbody>
</table>
4. New or interesting reports

**Abrothallus buellianus** De Not.


U.S.A.: California, San Luis Obispo Co., Santa Margarita Lake Recreation Area, E of San Luis Obispo, from Santa Margarita (town), take State Rt. 58, right on Pozo Rd., c. 8 mi. from Santa Margarita to entrance rd. to Park, on *P. quercina*, 12.1996, S. Tucker 35126 (SBBG).

The lichenicolous genus *Abrothallus* is in an urgent need of a modern revision, and many specimens, especially from unusual hosts, cannot be identified with certainty. Owing to an obviously high host-specificity within the genus, many lichenologists tend to name *Abrothallus* specimens following their host. Specimens growing over *Parmelia* species were difficult to name, as no epithet based on that host genus was used in recent works. However, there is an old name based on such material, *Abrothallus buellianus* De Not., described from Italy on *P. tiliacea* (De Notaris 1846: 193-195).

The material that we have examined on *Parmelia* is morphologically distinguished from most other known *Abrothallus* species by an ephymenium that does not turn green in K. This missing reaction is also known from *Abrothallus acetabuli* Diedrich, a species apparently confined to *Pleuroticta acetabulum*. In one locality (Schrondweiler), *Abrothallus* apothecia were collected on both *Pleuroticta acetabulum* and *Parmelia tiliacea*, suggesting that we might have a single species, confined to both host genera. In that case, *A. acetabuli* would become a synonym of *A. buellianus*. However, as many *Abrothallus* species seem to be confined to one host genus, it is possible that two distinct, possibly cryptic species are involved, one confined to *Parmelia* and one to *Pleuroticta*. Such a hypothesis would be supported by the observation that both host genera, *Parmelia* and *Pleuroticta*, belong to distinct lineages in the phylogenetic tree obtained by Blanco et al. (2004a: fig. 1). For the time being, as long as no morphological revision and no molecular phylogenetic studies are available, and as the type of *A. buellianus* has not been revised, we propose to use the name *A. buellianus* for the *Abrothallus* material growing on *Parmelia*, and to continue using *A. acetabuli* for the material on *Pleuroticta*.

This lichenicolous fungus is new for our study area, for Germany, Greece and the U.S.A.

**Absconditella delutula** (Nyl.) Coppins & H. Kilias

Belgium, Lorr.: Musson, réserve du crassier de Musson (M7.36), old disused quarry, vertical facing sand, 4.2003, *P. van den Boom 30664* (h).

Lichen species new for the area of study.

**Anisomeridium ranunculosporum** (Coppins & P. James) Coppins

France, Boul.: Pas-de-Calais, forêt de Boulogne (F22.17), futiace de chênes et de frênes, 8.1984, *E. Sérauxia* 6852 (LG).

This lichen species was not detected in the recent study of lichen flora of the Boulonnais (Sparrer et al. 2002) and is new for the area of study.

**Arthobia epiphyscia** Nyl.

Luxembourg, Lorr.: SW of Differdange, near crossing along road N176 and N176a to Lasauve (M7.48), on *Acer* roadside trees, on *Physcia caesia*, 4.2003, *P. van den Boom 30735* (h).

The lichenicolous *Arthobia* material on *Physcia caesia* orbiculair, published by Diedrich (1986: 7; 1989: 38-39) as *A. epiphyscia*, has eventually been assigned to *A. phaeophysciae*.
Grube & Matzer, and the genuine *A. epiphytica* was thus unknown from our region. The species is therefore new for the study area.

Bouly de Lesdain (1914: 156) reported the species from northern France (Mar.) on *Physcionia perisidiosa*. As *Arthronia epiphytica* is hitherto known only from *Physicia s. str.* (Grube & Matzer 1997), the identity of Bouly de Lesdain's material remains doubtful in the absence of any herbarium specimen.

**Arthronia punctella** Nyl.

France, Mar.: Pas-de-Calais, Cap Gris-Nez, S part (E22.14), rocky seashore cliffs with sandstone rock and grassy places, on *Diplotomma alboatrund*, 2004, *P. van den Boom* 33689 (h, hb Diederich).

Lichenicolous fungus new for the study area.

**Brodoa atrofuscusca** (Schaer.) Goward

Belgium, Ard.: Bihain, anciennes exploitations de coticie sur la côte au NE du village (H7.47), déblais de phyllades, 6.1964, *J. Lambinon* 64/750 et *R. Schumacker* 64/19 (LG).

This single collection (which has been split into two herbarium specimens) has been known as *Brodoa intestiniformis* (Vill.) Goward [= *Hyphogymnia intestiniformis* (Vill.) Ach.] since its discovery (Diederich & Séruiaux 2000: 75). It has been re-examined carefully, incl. by TLC analysis. The thallus is rather thick, lacks any flattened secondary lobes and produces physodic and protocetraric acids: there is thus no doubt that it belongs to *Brodoa atrofuscusca* (Schaer.) Goward (Krog 1974; Goward 1986). No other collection exists from the area of study and the species is now considered extinct in it. *Brodoa intestiniformis* must be deleted from the checklist of Belgium and Luxembourg, and *B. atrofuscusca* must be added.

**Caloplastra cerinelloideus** (Erichsen) Poelt

Belgium, Ard.: Witry, 10 km W of Martelange, on roadside *Fraxinus* trees (K7.54), 4.2003, *P. van den Boom* 30676 (h).

A most probably overlooked species, formerly known only from northern France (Mar.: Sparrius et al. 2002: 60; Lorr.: Diederich et al. 2005).

**Cercidospora macrospora** (Uloth) Hafellner & Nav.-Ros.

Belgium, Lorr.: SE of Arlon, SE of Hondelange, churchyard (M8.18), on tombstone, on *Lecanora muralis*, 4.2003, *P. van den Boom* 30659 (h).

Luxembourg, Lorr.: Ansembourg, garden of castle along main road (L8.44), 9.2005, on walls in garden and on wall of castle, on *L. muralis*, *P. Diederich* 16181 (h); NE of Kehlen, cemetery of Schéimerech (L8.54), 9.2005, on an old wall, on *L. muralis*, *P. Diederich* 16196 (h).

Netherlands: Limburg, Maastricht, city wall near the corner of the "Nieuwenhofstraat", wall of former fortification (E7.25), 5.1998, on a brick wall, on *L. muralis*, *P. Diederich* 13652 (h).

This lichenicolous species has just been reported from Belgium (Camp.) by van den Boom & van den Boom (2006), and is probably widespread on its very common host *Lecanora muralis*.

**Chaeotheca brunneola** (Ach.) Müller. Arg.

Belgium, Ard.: Willerzie, Vallée de la Hulle, Prés à l’Eau (K5.16), 300 m, on *Quercus*, 5.2005, *D. Ertz* 8793 (BR).


A lichen species formerly known from a single collection in B Ard. and here reported from two other localities.

**Chaeotheca laevigata** Nádv.


Lichen species new for the study area.

**Chaeotheca xyloxena** Nádv.

Belgium, Ard.: 9 km au SE du centre d’Eupen, versant gauche de la Helle, en aval du lieu-dit Brandehaag (F8.55), 500 m, bois mort décoratif d’un tronc mort dressé d’un *Fagus* dans une vieille hêtraie de pente, dans une cavité abritée d’un tronc, 4.2003, *D. Ertz* 3259 (BR).

This lichen is a characteristic species of well preserved and old forests with a high amount of dead wood. The species is new to Belgium where it occurs on the sheltered parts of a trunk. In the area of the checklist, it was
known only from two localities in Luxembourg, of which only one is recent and the other from 1892.

Chaenotheccopsis pusilla (Ach.) A. F. W. Schmidt

France, Ard.: SE of Revin, S of Anchamps, left side of the Meuse, "rocher des Dames" (K5.33), overhang of schistose outcrop, on Psirolechia clavulifera, 5.2000, P. van den Boom 24456 (h).

Very rare and inconspicuous species, lichenicolous or not lichenized, previously known from a single report from L. Ard., and for which Psirolechia clavulifera is a newly reported host.

Cladonia phylophora Hoffm.

Luxembourg, Ard.: Lellingen, à 200 m au nord du village (K8.13), terricole, dans une lande siliceuse, 9.2005, P. Diederich 16224 (h) & E. Séruisiaux s. n. (LG).

Cladonia phylophora is a very rare species in the area covered by the checklist, being known only from two collections made during the 19th century (B Brab and L. Lorr) and from a further recent collection near Lellingen (L. Ard). A small population of this species has recently been studied in the same area, e.g. the most interesting heathland and open grasslands N of Lellingen, where it grows in an interesting community together with species such as C. cervicornis, C. foliacea, C. ramulosa, C. strepsilis, C. uncialis, Leptogium palmatum (= L. corniculatum), Peltigera malacea, etc.

Clauzadeana macula (Taylor) Coppens & Rambold

Belgium, Ard.: Willerzie, ruisseau des Rousseries, en aval du lieu-dit Marotelle (K5.16), affleurement naturel de quartzophyllades cambriennes dans une chênaie acidophile, c. 400 m, 6.2005, E. Séruisiaux s. n. (LG, hb Diederich).

A very rare lichen species, previously only known from B. Ard., near Vielsalm, and now recorded in small quantities on the western side of the Ardenne district.

Collemopsisidium foveolatum (A. L. Sm.) F. Mohr


Collemopsisidium halodytes was the only species of the genus included in the checklist of Belgium, Luxembourg and northern France (Diederich & Séruisiaux 2000). The remarkable paper by Mohr et al. (2004) allowed reviewing the entire available material, resulting in the recognition of three species in our checklist area. Collemopsisidium foveolatum is new for this area.

Collemopsisidium halodytes (Nyl.) Grube & B. D. Ryan

Syn.: Pyrenocollema halodytes (Nyl.) R. C. Harris

Belgium, Mar.: Blankenberge (B1.48), sur les pierres calcaires du brise-lames en bordure E du petit port, 6.1967, J. Lambinon 67/397 & 398 (LG); Nieport, crique de Lombardsjide (rive droite de l'Yser) (C1.41), dans le bas du mur incliné à env. 45° de la digue en briques, 6.1968, J. Lambinon 68/460 (LG).

France, Mar.: Pas-de-Calais, Ambleteuse, rochers dans la mer près de l'Ancien Fort Mahon, (E22.35), blocs en grès émergés en permanence, 8.2000, P. Diederich 14432 p.p. (h, sub Caloplaca thallincola) & J. Signoret; Cap Gris-Nez, à partir de la plage au N de Framzelle vers l'W, sur une distance de 300 m (E22.15), sur des rochers en grès en bord de mer inondés lors des marées hautes, 8.2000, P. Diederich 14378 (h) & J. Signoret; S de Cap Gris Nez, Cran aux Oeufs (E22.14), rocky seashore cliff with sandstone rock, 7.1999, L. Sparrius 3080 (h); Wimereux, pointe aux Oies (E22.35), 7.1999, sandstone blocks on beach, L. Sparrius 3106 (h); Somme, Ault, base de la falaise au SW de la localité (J22.21), sur silex parfois submergé lors de hautes marées, 7.2001, P. Diederich 15043 (h).

See comments under Collemopsisidium foveolatum.
**Collemopsis sublitorale** (Leight.) Grube & B. D. Ryan
Lichen species new for the checklist area.

**Coppinsia minutissima** Lumbsch & Heibell
Belgium, Ard.: NE of St Vith, NW of Manderfeld, N of road to Holzheim, path to Buchholz (G8.18), W exposed slope with big *Picea* stumps in damp mossy ground, on sand of root system of fallen *Picea*, 500 m, 4.2002, *P. van den Boom* 28410 (h, LG).
Lichen species new for the area of study.

**Cyphelium inquinans** (Sm.) Trev.
Belgium, Ard.: Hautes-Fagnes, vallée de la Helle (F8.44), 400 m, Talboden mit Buchen-Eichenwald, Borke von *Quercus*, 12.2003, *N. Stapper* s. n. (h, LG).
This lichen species has been reported from Belgium by Duvgineaud & Giltay (1938: 16) but the corresponding material has never been located. It does occur in area of study, as demonstrated by this collection.

**Eopyrena grandicula** Coppins
France, Boul.: Pas-de-Calais, forêt de Boulogne, N of road D 341 (E22.57), mixed forest with *Alnus*, *Corylus*, *Fraxinus* and *Quercus*, on *Corylus*, 9.2004, *P. van den Boom* 33723 (h).
This lichen species was not detected in the recent study of lichen flora of the Boulonnais (Sparrius et al. 2002). It was formerly known from the Semois valley in B Ard.

**Fuscoannaria saubinetii** (Mont.) P. M. Jørg.
Luxembourg, Lorr.: without locality, terricolous over sand, < 1850, F.-A. Tinant 1024 (LUX).
The identification of this scanty collection has always been doubtful (Sérisiaux 1984: 81; Sérisiaux et al. 1999: 33); it has been recently examined by P. M. Jørgensen who concludes it represents a poorly developed *F. leucophaea*. As it represents the only collection referred to *F. saubinetii* from the area of study, this species must now be deleted from the checklist.

**Imshaugia aleurites** (Ach.) S. L. F. Meyer
Belgium, Ard.: Bévercé, rochers de Falize (G8.42), sur *Pinus sylvestris*, 7.1957, T. Müller (BR); ibid., 11.1960, *J. Lambinon* 60/2414 & R. Schumacker 60/843 (LG); Logbiemé (H8.21), on *Pinus*, c. 1968, unknown collector (LG); Chevrion, near crossing with road along the Lienne (G7.56), sloping schistose outcrops along the road, at rim of forest, on *Pinus*, 5.2001, *P. van den Boom* 26607 (h).
This easily recognized species of macrolichens is very rare in the area of study and was known from two localities in B Ard. (Bévercé, rochers de Falize and Logbiemé). Otherwise it is very local but quite widespread near Berdorf in L Lor. where it is suspected to be restricted to indigenous populations of *Pinus sylvestris* (Diederich & Schwenniger 1990). It is thus interesting to report the new and unexpected locality at Chevrion.

**Lecanactis dilheniana** (Ach.) Körb.
Belgium, Ard.: Willerzée, ruisseau des Rousseries, en aval du lieu-dit Marotelle (K5.16), affleurement naturel de quartzophyllades cambriennes dans une chénia acidophile, c. 400 m, 6.2005, E. Sérisiaux s. n. (LG).
A very rare species, previously known only from B Ard., near Malmedy in the most famous Warche valley, and now recorded on the western side of the Ardennes district.

**Lecanora sambuci** (Pers.) Nyl.
Belgium, Ard.: S of Burg-Reuland, road to Ouren, N of Stubach (H8.55), small *Populus* wood with *Sambucus*, on *Sambucus*, 4.2004, *P. van den Boom* 32257 (h).
A very rare but easily identified lichen species, previously known from a single collection from L Lor. but most probably overlooked.

**Leptogium subtile** (Schrad.) Torss.
Belgium, Mosan: Rodeméne, argile à 1 km au SW du village, rive droite du ruisseau “La Chinelle” (J5.13), talus terreux, 10.2004, *D. Ertz*
7278 (BR). Lorr.: Musson, réserve du “crassier de Musson” (M7.36), old abandoned quarry, vertical facing sand, 4.2004, P. van den Boom 30665 (h, LG).

Lichen species formerly reported only from L Lorr. and thus new for Belgium.

Melaspilia ochrothalamia Nyl.
Belgium, Ard.: E of Nassogne, SW Bostbeuhois, N of Croix Jadot (J6.27), edge of mixed forest, on Quercus, 4.2001, P. van den Boom 36482 (h).

A most probably overlooked lichen species, previously only reported from a single locality in B Lorr.

Opegrapha gyrocarpa Flot.

The species is new to Luxembourg. This is the first fertile specimen from the study area where the lichen was known only from two sterile specimens (Sérusiaux et al. 2003). Other localities have since been found elsewhere in B Ard., but are not further detailed here.

Opegrapha prosodea Ach.

The presence of this lichen in the checklist area is confirmed by two specimens collected in northern Belgium by Coemans more than a century ago. The species is very likely to be now extinct in the area of study.

Porpidia striata Fryday
Belgium, Ard.: 5.5 km ENE of Malmedy, valley of Warche, 0.4 km E of confluence (G8.35), 460 m, quartzite blocks of scree in narrow valley, exp N, 4.1990, M. Brand 23019b (h); Ovifat, cascade de Bayecon (G8.24), 540 m, on acid rock, 7.1975, M. Brand 5314 (h); 2.5 km WNW of Spa, E shore of Hoegne (G8.22), 250 m, on schistose rocks on wooded W slope, 5.1998, M. Brand 37692 (h).

France, Ard.: c. 18 km NNE of Charleville-Mézières, 1 km W of Linchamps, valley of river Ours (K5.36), c. 220 m, on conglomerate rock outcrop in narrow valley, wet slope with much Sphagnum, 10.1982, M. Brand 27892 (h).

This species has just been described by Fryday (2005: 16-19) from Great Britain, mainly Scotland and Wales. It is new for the area of study where it seems to be restricted to natural outcrops of Cambrian rocks.

Toninia physaroides (Opiz) Zahlbr.
Luxembourg, Lorr.: N de Niederanven, Aarnescht (L8.58), dans une pelouse calcaire, 8.1985, P. Diedrich 6797 (h); Graulinster, bord de route (L8.38), dans une pelouse calcaire, 7.1986, P. Diedrich 7139 (h); E de Ernster, Warschent (L8.57), sur la terre dans une pelouse, 11.1990, P. Diedrich 9146 (h).

This species is distinguished from the widespread Toninia sedifolia by pseudocypselate, strongly bullate to columnar squamules. It is new to the area of study.

Tremella coppinsii Diederich & Marson
Belgium, Ard.: Achouffe, ruisseau de Martin Moulin, rive gauche, en aval de la route Dinez-Wibrin, juste en amont de la confluence avec le ruisseau du Pont du Moulin (J7.16), futura claire de Quercus sur pente rocheuse, sur branche de Quercus, sur Platismatia glauca, 4.2000, E. Sérusiaux s. n. (LG); forêt d’Anlier, berge droite de La Rulle (L7.25), 420 m, sur un gros tronc d’Alnus glutinosa sur une berge de rivière, sur P. glauca, 5.2004, D. Ertz 6897 (BR); Herbeumont, versant droit de l’Antrogne (L6.26), 380 m, sur une branche morte horizontale d’un Quercus sur pied, sur P. glauca, 8.2004, D. Ertz 7034 (BR). Lorr.: SE of Buzenol, WSW of Saint-Léger, Bois d’Etalle, path along La Rouge Eau (M7.14), mixed forest, on fallen branch of Quercus, on P. glauca, 4.2003, P. van den Boom 30700 (h).

Lichenicolous heterobasidiomycete, new for the study area. This species seems to be restricted to well preserved and old forests.

Acknowledgments
We thank very warmly N. Stapper and L. Sparrius for making their collections of Cyphelium inquinans and Collemopsidium available for this study, B. J. Coppins (Coppinsia), P. M. Jørgensen (Fuscopannaria) and L. Tibell (Chaenothecopsis) for their precious help with identifications of difficult specimens and preparation of this manuscript, and H. Sipman for valuable comments on the manuscript. We
also warmly thank the curators of the herbaria B and SBBG for making valuable specimens available to us.

**Literature**


Hald, J., 2003. A taxonomic study of the calcicolous endolithic species of the genus *Verrucaria* (Ascomycotina, Verrucariales) with the


