The Lichens and Lichenicolous Fungi of Belgium and Luxembourg. An Annotated Checklist

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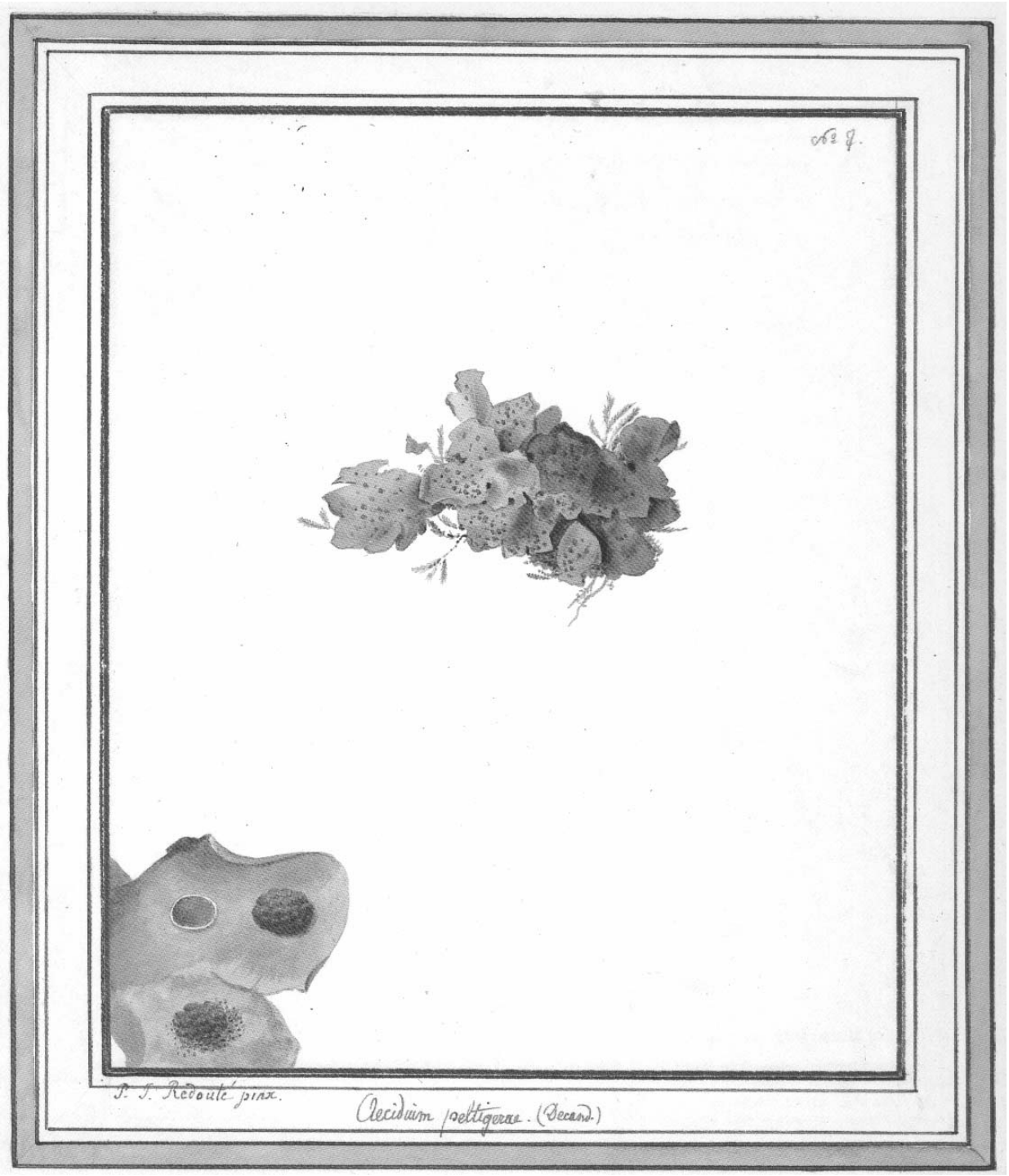

The lichenicolous hyphomycete *Illosporium carneum* Fr. (syn. *Aecidium peltigerae* DC.), developing on a thallus of *Peltigera*. Painted before 1825 by the famous artist Pierre-Joseph Redouté (1759-1840), born in Saint-Hubert (Belgium, province of Luxembourg), to illustrate the 'Fascicule de Cryptogames du Grand Duché de Luxembourg' by the Luxembourg botanist Louis Marchand (1807-43). The manuscript was never published but has recently been reproduced in facsimile (Mangen 1989).

The Lichens and Lichenicolous Fungi of Belgium and Luxembourg. An Annotated Checklist

Paul DIEDERICH and Emmanuël SÉRUSIAUX

with the collaboration of

Pieter P. G. VAN DEN BOOM and A. Maarten BRAND

MUSÉE NATIONAL D'HISTOIRE NATURELLE

Luxembourg – 2000

Dedication (dédicace – opdracht)

This checklist is respectfully dedicated to Prof. Jacques Lambinon (University of Liège, Belgium). Jacques Lambinon has made outstanding contributions to the knowledge of the lichen flora of our study area, but, more importantly, each of us owes him an immense debt of gratitude. He has considerably enriched our professional lives and has always provided crucial support, advocacy and guidance. To call him the work's godfather would be only half true: he has indeed been its impulsive force.

Cette checklist est respectueusement dédiée au Prof. Jacques Lambinon (Université de Liège, Belgique). Jacques Lambinon a très brillamment contribué à la connaissance de la flore lichénique de notre zone d'étude, mais ce n'est pas le plus important. Chacun de nous lui est immensément redevable. Il a fortement enrichi notre vie professionnelle et a toujours été une source irremplaçable d'encouragements, de conseils et de guidance. Dire qu'il est le parrain de ce travail ne serait qu'à moitié suffisant; il en a aussi été la force d'impulsion.

Deze checklist is opgedragen aan prof. Jacques Lambinon (Universiteit van Luik, België). Jacques Lambinon heeft een onmisbare bijdrage geleverd aan de kennis over de korstmosflora in ons onderzoeksgebied, maar dat is niet het belangrijkste: wij beiden zijn hem zeer veel dank verschuldigd. Hij heeft ons werk aanzienlijk verrijkt en ons steeds voorzien van waardevolle ondersteuning, raad en begeleiding. Hij is niet alleen de grondlegger van dit werk; hij is ook de stuwende kracht erachter geweest.

Limited edition (édition de tête – beperkte oplage)

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Contents

Diederich, P. & E. Sérusiaux (coll. P. P. G. van den Boom & A. M. Brand), 2000. - The lichens and lichenicolous fungi of Belgium and Luxembourg. An annotated checklist. - Musée nat. hist. nat., Luxembourg, 207 pp.

This is the first annotated checklist of the lichens and lichenicolous fungi of Belgium, Luxembourg and northern France. A total of 1151 taxa are accepted, including 930 lichens (21 of which grow on other lichens), 201 lichenicolous fungi, and 20 doubtfully lichenized or related fungi. For each species, the name, synonymy, ecology, distribution in the study area, and pertinent literature reports for that area are provided. A further 252 species have been reported from the study area, but are considered here as doubtfully present, either because the corresponding material does not belong to this taxon, or because no material has been examined by the authors of this checklist.

Les lichens et champignons lichénicoles de Belgique et du Luxembourg. Un catalogue annoté. - Ceci est le premier catalogue annoté des lichens et champignons lichénicoles de Belgique, du Grand-Duché de Luxembourg et du nord de la France. Un total de 1151 taxa sont acceptés, dont 930 lichens (y compris 21 parasitant d'autres lichens), 201 champignons lichénicoles et 20 champignons peut-être lichénisés ou espèces apparentées. Pour chaque espèce, le nom, la synonymie, l'écologie, la répartition dans le territoire étudié et la littérature concernant ce territoire sont donnés. De plus, 252 espèces ont été mentionnées du territoire étudié, mais leur présence y est considérée comme douteuse, soit parce que le matériel correspondant n'appartient pas à ce taxon, soit parce que ce matériel n'a pu être examiné par les auteurs de ce catalogue.

De korstmossen en lichenicole schimmels van België en Luxemburg. Een geannoteerde checklist. - Dit is de eerste geannoteerde checklist van korstmossen en lichenicole schimmels met betrekking tot heel België, Luxemburg en Noord-Frankrijk. In totaal zijn 1151 taxa geaccepteerd, waaronder 930 korstmossen (waarvan er 21 op andere korstmossen groeien), 201 lichenicole schimmels, en 20 onduidelijk gelicheniseerde of op korstmossen gelijkende schimmels. Voor elke soort zijn naam, synoniemen, ecologie en verspreiding in het onderzochte gebied vermeld, evenals literatuurverwijzingen over dit gebied. Van 252 andere in deze checklist genoemde soorten is het voorkomen in het gebied onzeker, omdat de collecties mogelijk niet juist geïdentificeerd zijn of omdat ze niet door de auteurs zijn gecontroleerd.

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Cover photographs: Prof. Volkmar Wirth, Stuttgart (*Gyalecta ulmi*; *Peltigera hymenina*) and Prof. Maurice Hoffmann, Gent (*Caloplaca ruderum* and *Diploicia canescens*).

Dutch text: Laurens Sparrius, Gouda.

Introduction

Lichenology in Belgium and Luxembourg started in the early XIXth century, but it was especially towards the end of that century that national floras and checklists became available. In 1898, De Wildeman published a checklist of the Belgian lichens, with indications on localities and references for each species. One year before, Koltz (1897) did the same for Luxembourg. In 1938, Duvigneaud & Giltay presented a revised Belgian checklist, but this time without chorological data. The number of species recognized by these authors was rather low, with 586 species reported from Belgium, and only 404 from Luxembourg.

After 1900, the lichenological exploration dramatically declined in these two countries, and it is only since the beginning of the sixties that, through the work of Prof. Jacques Lambinon, a new era of lichenology started. It is also during that time that Belgian lichenologists started exploring the neighbouring areas of northern France, which are therefore included within the scope of the present checklist.

Since the early eighties, we have attempted to fill the gap by preparing a detailed inventory of crustose lichens, as well as of lichenicolous fungi which, although not lichenized, have traditionally been studied by lichenologists. The rapid development in lichen taxonomy, the new techniques to study them (e. g. by thin layer chromatography), the availability of modern illustrated floras, the continuous discovery of previously unknown taxa in Europe, and also the meticulous search in the field for minuscule, inconspicuous crusts in previously neglected habitats rapidly led us to discover or recognize over 700 additional species, which had never been recorded in Belgium or Luxembourg before. The precious help of several colleagues and friends, mainly from the Benelux countries, was invaluable to achieve these results.

Nowadays, the total number of accepted species reaches 1151, more than twice the number of previously published taxa. Nevertheless, no doubt this number will continue to increase in the forthcoming years for several reasons: we know of many, often sterile crusts, that still require identification; several genera are poorly known in the area of study (e. g. *Acarospora*, *Thelidium*, *Verrucaria*); many lichenicolous fungi and some small, inconspicuous crustose lichens are only found by chance, and despite very careful sampling during these past years, many have certainly been missed; comparison with modern European floras or checklists suggests that a relatively large number of additional species might occur in the study area.

Therefore the aim of the present checklist is to update our current knowledge of lichens and lichenicolous fungi in Belgium, Luxembourg and northern France, and to encourage students and botanists to pay attention to this fascinating world of organisms. Even if the exploration of our lichen flora might be considered as finished, students should not forget that many species are still very poorly recorded, and that much additional work, like the preparation of a distribution atlas or even the production of a modern flora, with complete identification keys, still have to be realized. Furthermore, we should not forget that lichens, which are excellent indicators of biodiversity, are vanishing rapidly, and that their conservation should be treated with priority.

Introduction

En Belgique et au Grand-Duché de Luxembourg, l'exploration des lichens a commencé au début du XIX^e^ siècle, et, surtout à la fin de ce siècle, des flores et des catalogues concernant ces deux pays ont vu le jour. En 1898, De Wildeman publia un catalogue des lichens belges, avec des indications sur les localités et des références pour toutes les espèces. L'année précédente, Koltz (1897) publia un travail semblable pour le Luxembourg. En 1938, Duvigneaud & Giltay présentaient un catalogue belge actualisé, mais cette fois-ci sans données chorologiques. Le nombre d'espèces connues par ces auteurs est relativement faible, avec 586 espèces signalées de Belgique et 404 seulement du Luxembourg.

Après 1900, l'exploration lichénologique dans ces deux pays a diminué de façon dramatique, et ce n'est que depuis le début des années 60 que, grâce au travail du Prof. Jacques Lambinon, une nouvelle ère en lichénologie commença. C'est également à cette époque que les lichénologues belges commencent à explorer les régions limitrophes du nord de la France, qui sont dès lors également incluses dans le cadre de ce catalogue.

Depuis le début des années 80, nous avons essayé de combler ces lacunes en préparant un inventaire détaillé des lichens crustacés, mais également des champignons lichénicoles qui, bien que non lichénisés, sont traditionellement étudiés par des lichénologues. Les développements rapides en taxonomie lichénique, l'apparition de nouvelles techniques d'étude (p. ex. la chromatographie sur couche mince), la disponibilité de flores modernes illustrées, la découverte incessante de nouveaux taxa en Europe, et également la recherche méticuleuse sur le terrain de minuscules croûtes peu apparentes dans des habitats souvent négligés, nous a permis rapidement de découvrir plus de 700 espèces supplémentaires, qui n'avaient jamais été trouvées en Belgique ou au Luxembourg précédemment. L'aide précieuse de plusieurs collègues et amis, surtout des pays du Benelux, a été un apport inestimable pour arriver à ces résultats.

Aujourd'hui, le nombre total d'espèces acceptées atteint les 1151, plus que le double des taxa publiés auparavant. Cependant, ce nombre continuera de croître pendant les années à venir, et celà pour plusieurs raisons: nous avons pu examiner de nombreuses croûtes, souvent stériles, pour lesquelles nous n'avons pas trouvé de nom; plusieurs genres sont insuffisamment connus dans le territoire étudié (p. ex. Acarospora, Thelidium, Verrucaria*); de nombreux champignons lichénicoles et certains lichens minuscules et peu apparents sont uniquement récoltés par hasard, et, malgré le travail de terrain très intensif durant ces dernières années, il est sûr que de nombreuses espèces ont dû passer inaperçues; la comparaison avec des flores ou catalogues modernes européens suggère qu'un nombre relativement grand d'espèces supplémentaires pourrait bien exister dans nos pays.*

Le but de ce catalogue est donc de mettre à jour nos connaissances actuelles sur les lichens et les champignons lichénicoles de Belgique, du Luxembourg et du nord de la France, et d'encourager des étudiants et des botanistes à s'intéresser à ce monde fascinant d'organismes. Même si l'exploration de notre flore lichénique pourrait être considérée par certains comme étant achevée, les étudiants ne devront pas oublier que de nombreuses espèces sont toujours mal connues dans le territoire étudié, et que des travaux supplémentaires, comme

la préparation d'un atlas de répartition ou la production d'une flore moderne, comprenant des clés complètes d'identification, restent à réaliser. Par ailleurs, nous ne devons pas oublier que les lichens, qui sont d'excellents indicateurs de la biodiversité, sont en train de disparaître rapidement, et que leur protection devrait être traitée de façon tout à fait prioritaire.

Inleiding

De lichenologie (studie van korstmossen) in België en Luxemburg begon in het begin van de XIX^{de} eeuw. Vooral aan het einde van die eeuw verschenen er nationale flora's en checklists. In 1898 publiceerde De Wildeman een checklist van de Belgische korstmossen met voor elke soort aantekeningen over de vindplaatsen en literatuurverwijzingen. Een jaar eerder publiceerde Koltz (1897) een soortgelijk werk voor Luxemburg. In 1938 brachten Duvigneaud & Giltay een herziene checklist uit, maar ditmaal zonder verspreidingsgegevens. Het aantal vermelde soorten was vrij laag: 506 soorten voor België en slechts 404 voor Luxemburg.

Na 1900 nam het korstmossenonderzoek in beide landen sterk af. Pas vanaf het begin van de jaren zestig begon door het werk van J. Lambinon een nieuw lichenologisch tijdperk. In die tijd begon men ook aangrenzend Noord-Frankrijk te onderzoeken, vandaar dat ook dit gebied bij deze checklist is betrokken.

Vanaf het begin van de jaren tachtig hebben wij het korstmossenwerk voortgezet door een gedetailleerde inventarisatie van korstvormige soorten te maken, en van lichenicole schimmels, die traditioneel ook door lichenologen worden bestudeerd. Snelle ontwikkelingen in de korstmostaxonomie, nieuwe technieken (zoals dunne-laag chromatografie), beschikbaarheid van moderne geïllustreerde flora's, het onophoudelijk ontdekken van nieuwe en onbekende soorten in Europa, als ook het nauwgezet zoeken naar minuscule, onopvallende soorten op plaatsen die vroeger altijd gemeden werden, leverde meer dan 700 extra soorten op die nooit eerder in België of Luxemburg waren gevonden.

De hulp van diverse collega's en vrienden, voornamelijk uit de Benelux, was onmisbaar om dit alles te bereiken.

Het aantal geaccepteerde soorten is nu 1151, een verdubbeling vergeleken met alle eerder gepubliceerde gegevens. Hoe dan ook, dit aantal zal de komende jaren blijven stijgen door een aantal oorzaken: er zijn veel steriele korstvormige soorten (zoals *Acarospora, Thelidium* en *Verrucaria*) die nog geïdentificeerd moeten worden; van veel genera is maar weinig bekend uit het onderzoeksgebied; veel lichenicole schimmels en onopvallende, korstvormige soorten worden alleen bij toeval gevonden, zodat er zeker een flink aantal over het hoofd gezien zijn, ondanks het nauwkeurige verzamelwerk. Ook checklists van aangrenzende landen laten zien dat er nog veel aanvullende soorten in het gebied kunnen voorkomen.

Het doel van deze checklist is dan ook om de actuele kennis van korstmossen en lichenicole schimmels voor België, Luxemburg en Noord-Frankrijk te presenteren, en om

studenten en botanici te wijzen op deze fascinerende groep organismen. Zelfs al zouden alle soorten gevonden zijn, dan blijft er nog steeds veel aanvullend werk over, zoals het maken van een verspreidingsatlas of een flora met determinatiesleutels.

Daarnaast moeten we niet vergeten dat korstmossen, die immers goede indicatoren voor biodiversiteit zijn, snel verdwijnen en dat hun bescherming voorrang zou moeten krijgen.

The area covered by the checklist

The territory dealt with in the present work includes Belgium, the Grand Duchy of Luxembourg and the neighbouring areas of northern France (Fig. 1). These include the following departments (numbers used for administrative purposes): Nord (59), Ardennes (08), Meuse (55, northern part only), Meurthe-et-Moselle (54, northern part only) and Moselle (57). The Netherlands and Germany are not included, although the occurrence of the rarest or the most interesting species is mentioned for those localities very close to the borders.

Below, we briefly describe the phytogeographical districts of our area of study, focusing on the habitats they can provide for the lichen flora. The districts are those of the 'Nouvelle Flore de la Belgique, du Grand-Duché de Luxembourg, du Nord de la France et des Régions voisines' (Lambinon et al. 1993: XXI-XXIV) (Fig. 2). Our synthesis is drawn from the work of Lambinon (1969: 81-90) and Tanghe (1975).

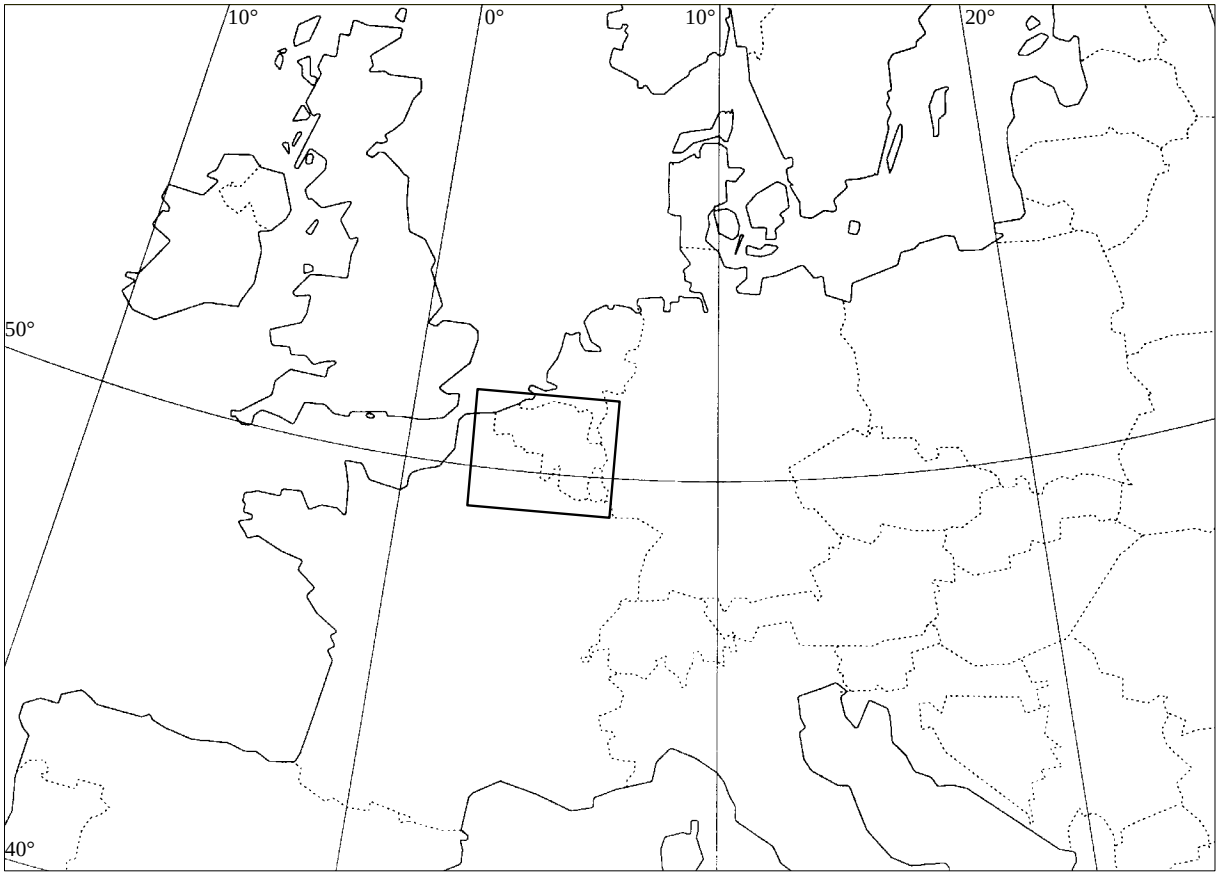


Fig. 1. Localisation of the area of study.
Localisation du territoire étudié.
Ligging van het onderzoeksgebied.

Fig. 2. The area of study and the phytogeographical districts.
Le territoire étudié et les districts phytogéographiques.
Het onderzoeksgebied en de fytogeografische districten.

The **Maritime district** (here after **Mar.**) is a coastal plain, very strongly urbanized and industrialized. The relative mildness of the climate, occurrence of sea sprays and relatively strong winds are decisive factors for the lichen flora. A few sandy dunes still remain; when they are not trampled too much, depressions of more or less stabilized sand (the so-called 'pannes sèches') are colonized by carpets of mosses and lichens, dominated by calcicolous or siliceous species, depending on sand acidity (Fig. 3). Bushes that eventually colonize these depressions provide a suitable habitat for several epiphytic species. Although often impoverished, the epiphytic flora is mostly present on isolated trees along canals and roads, as well as around farms (Fig. 4). Indeed, air pollution is still strong and clearly affects the lichen flora. The district has no natural rock but buildings and especially sea walls provide a substrate for several saxicolous species.

Fig. 3. Dunes with *Pinus sylvestris* and a rich terricolous cryptogamic vegetation in the Maritime district (Ghyvelde, dept. Nord, France). Reproduced from Bouly de Lesdain (1910a).

Dunes avec Pinus sylvestris *et une riche végétation cryptogamique terricole dans le district maritime (Ghyvelde, dépt. Nord, France). Reproduit de Bouly de Lesdain (1910a).*

Duinen met *Pinus sylvestris* en een rijke terrestrische vegetatie met cryptogamen in het Maritiem district (Ghyvelde, dept. Nord, France). Overgenomen van Bouly de Lesdain (1910a).

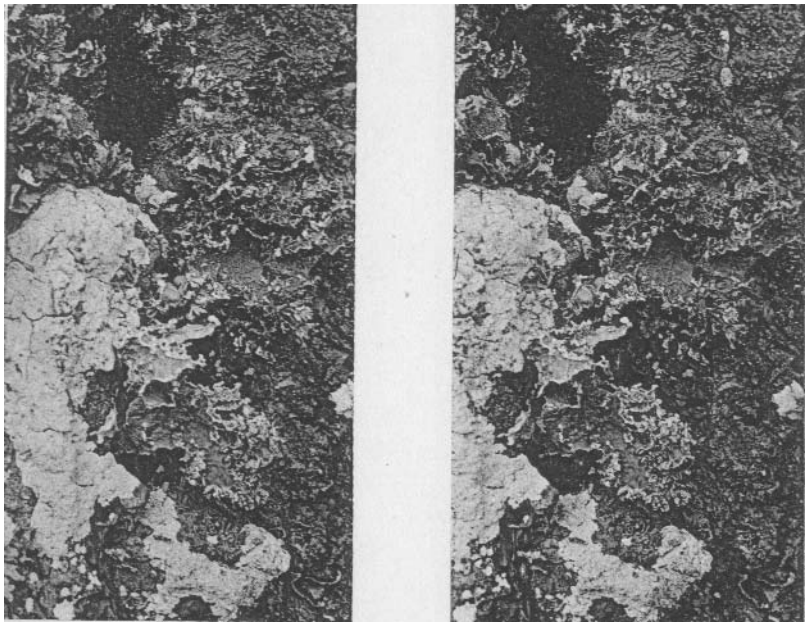


Fig. 4. Stereophoto of *Ramalina lacera*, a species now extinct in the study area, and *Diploicia canescens* on *Populus* near Koksijde in 1909. Reproduced from Massart (1910, phot. 281).

Stéréophoto de Ramalina lacera, *une espèce disparue du territoire étudié, et* Diploicia canescens *sur* Populus *près de Koksijde en 1909. Reproduit de Massart (1910, phot. 281).*

Stereofoto van *Ramalina lacera*, een soort die inmiddels is verdwenen uit het onderzoeksgebied. Samen met *Diploicia canescens* op een *Populus* bij Koksijde in 1909. Overgenomen van Massart (1910, foto 281).

The **Flemish district** (here after **Fl.**) is also a fairly flat region; it corresponds to the plains of Quaternary sand deposited over sand and clays of the Eocene or of more recent origin. It is strongly urbanized and industrialized, even in terms of agricultural practices. Almost all ericaceous heaths have indeed disappeared. There is no natural rock outcrop, and woodland areas are now very reduced and strongly altered. The lichen flora is confined to isolated trees, old walls, especially on churches and in cemeteries (Fig. 5), but has lost any outstanding feature; atlantic species characteristic of old forests found in the district until the end of last century have now all disappeared.

The **Campine district** (here after **Camp.**) also corresponds to large deposits of Quaternary sand and is similarly strongly urbanized and industrialized. The gravel terraces of Pleistocene origin in the eastern part reach 100 m elevation and, until World War II were locally covered by large dunes and ericaceous heaths. Almost all those semi-natural habitats have disappeared together with their highly characteristic lichen flora. As in the Flemish district, there is no natural rock outcrop and woodlands are artificial.

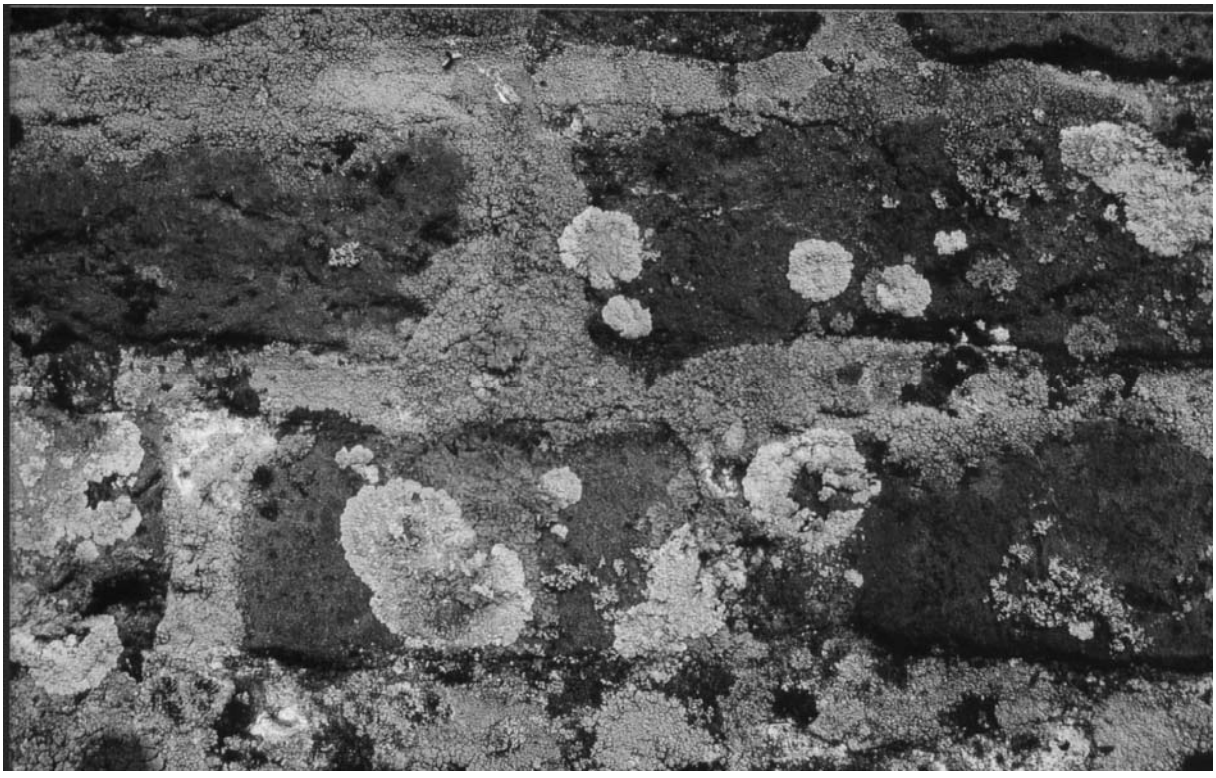


Fig. 5. *Caloplaca ruderum* and *Diploicia canescens* are characteristic species on man-made substrates in the western part of Belgium, especially in the Flemish district. Photograph: M. Hoffmann (Brugge, 1999).

Caloplaca ruderum *et* Diploicia canescens *sont des espèces caractéristiques sur les substrats artificiels dans l'ouest de la Belgique, surtout dans le district flandrien. Photographie: M. Hoffmann (Brugge, 1999).*

Caloplaca ruderum en *Diploicia canescens* zijn karakteristische soorten op antropogene substraten in het westen van België, met name in het Vlaams district. Foto: M. Hoffmann (Brugge, 1999).

Fig. 6. The death of elms has very seriously damaged the epiphytic lichen flora, especially in the western parts of the study area. Photograph: E. Sérusiaux (1982).
La disparition des ormes a très sérieusement endommagé la flore des lichens épiphytes, en particulier dans l'ouest du territoire étudié. Photographie: E. Sérusiaux (1982).
De sterfte van iepen heeft de epifytenflora veel schade toegebracht, vooral in het westelijk deel van het onderzoeksgebied. Foto: E. Sérusiaux (1982).

The **Brabant district** (here after **Brab.**) is a large, gently undulating plateau, rarely over 200 m elevation, which is mostly covered by loess deposits from the Pleistocene. Except for several forested sites that usually correspond to sandy and less fertile emergences, the area is mostly used for intensive agriculture. The lichen flora is thus very reduced, and much so that the Haine-Sambre-Meuse depression that borders the district on its southern parts is very industrialized and polluted. The strong atlantic traits that are so characteristic of the forest ground flora, especially in the western part, are no longer expressed in the lichen flora, which is now reduced to ubiquitous and toxitolerant species. Several small rock outcrops exist in the valleys but their lichen flora is very poor.

The **Meuse district** (here after **Mosan**) has an altitude fluctuating between 200 and 300 m and enjoys a better air quality than the previous districts. It shelters an exceptional lichen flora owing to the numerous natural rock outcrops that are to be found in the main valleys, especially along the Meuse, Viroin, Lesse and Ourthe (Fig. 7). Those calcareous rocks are usually very compact and date back to the Devonian or Carboniferous. The lichen flora associated with the Xerobromion communities show strong submediterranean affinities, and many species are at the northern limit of their distribution area. Other outcrops, covering a smaller surface, are markedly siliceous and also of high interest. The lichen forest flora is rather trivial, with a few exceptions linked to the best preserved fragments with old trees. Trees along roads are locally very interesting, although air pollution and especially the removal of *Ulmus* have strongly altered the lichen flora (Fig. 6). Semi-naturals habitats like the Mesobromion communities and heathlands are now very reduced but nevertheless still shelter an interesting lichen flora.

Fig. 7. Natural outcrops in the Meuse valley between Namur and Givet represent one of the most valuable habitats for lichens in the area of study. The Xerobromion communities in the Leffe valley near Dinant (upper photo), here photographed in spring when *Hippocrepis comosa* and *Helianthemum apenninum* are flowering, colonize the compact limestones of the Carboniferous (Visean); the lichen flora is very spectacular, with among others terricolous and muscicolous communities with *Fulgensia fulgens* and *Psora decipiens* and very rare species like *Placolecis opaca* and *Squamarina gypsacea*. The rocks at Petit-Chooz near Givet (lower photo) are calcareous clayey schists belonging to the Upper Emsian ('Grauwacke de Hierges') and also are colonized by Xerobromion communities, here well characterized by the abundance of *Artemisia alba*, *Potentilla rupestris*, and *Sempervivum tectorum*. However, the lichen flora clearly marks the rapid decalcification of the rock surface, with the occurrence, within a phanerogamic vegetation dominated by calcicolous species, of *Lecanora orosthea*, *Lecidea fuscoatra*, *Rhizocarpon lecanorinum*, etc. and small cushions of *Cladonia uncialis* subsp. *biuncialis*. Photographs: E. Sérusiaux (1999).

*Les affleurements de rochers naturels dans la vallée de la Meuse entre Namur et Givet constituent un des habitats les plus précieux pour les lichens dans le territoire étudié. Les pelouses du Xerobromion dans la vallée de la Leffe près de Dinant (photo du haut), ici photographiées au printemps au moment de la floraison d'*Hippocrepis comosa *et d'*Helianthemum apenninum*, colonisent les calcaires compacts du Carbonifère (Viséen); la flore lichénique est très spectaculaire, avec notamment des groupements terricoles et muscicoles à* Fulgensia fulgens *et* Psora decipiens*, et des espèces très rares comme* Placolecis opaca *et* Squamarina gypsacea. *Les rochers de Petit-Chooz près de Givet (photo du bas) sont des schistes argileux calcarifères appartenant à l'Emsien supérieur ('Grauwacke de Hierges') et sont eux aussi colonisés par des pelouses du Xerobromion ici bien caractérisé par l'abondance d'*Artemisia alba, Potentilla rupestris *et* Sempervivum tectorum. *La flore lichénique marque cependant très bien la décalcification rapide de la roche, avec la présence, au sein d'une végétation phanérogamique dominée par les espèces calcicoles, de* Lecanora orosthea, Lecidea fuscoatra, Rhizocarpon lecanorinum*, etc. et des coussinets de* Cladonia uncialis *subsp.* biuncialis. *Photographies: E. Sérusiaux (1999).*

Natuurlijke rotsen in de Maasvallei tussen Namen en Givet zijn een van de meest waardevolle biotopen voor korstmossen in het onderzoeksgebied. In het dal van de Leffe bij Dinant (bovenste foto) wordt de harde kalksteen uit het Carboon (Viséen) bedekt door Xerobromion-vegetaties, hier in het voorjaar gefotografeerd met bloeiende *Hippocrepis comosa* en *Helianthemum apenninum*. De grond- en mosbewonende korstmosvegetaties zijn zeer spectaculair met onder andere *Fulgensia fulgens* en *Psora decipiens* en zeer zeldzame soorten als *Placolecis opaca* en *Squamarina gypsacea*. De rotsen bij Petit-Chooz bij Givet (onderste foto) bestaan uit kalkhoudende, kleiachtige schisten en behoren tot het Boven-Emsien ('Grauwacke de Hierges') en zijn ook gekoloniseerd door Xerobromion-vegetaties, hier gekarakteriseerd door het veelvuldig voorkomen van *Artemisia alba*, *Potentilla rupestris* en *Sempervivum tectorum*. Hoewel de hogere planten hier hoofdzakelijk kalkminnende soorten zijn, geeft de korstmosflora duidelijk een snelle ontkalking van het rotsoppervlak aan, met soorten als *Lecanora orosthea*, *Lecidea fuscoatra*, *Rhizocarpon lecanorinum* en kleine kussentjes van *Cladonia uncialis* subsp. *biuncialis*. Foto's: E. Sérusiaux (1999).

The **Ardenne district** (here after **Ard.**) is mainly characterized by several narrow or broadly widened valleys, which cut through a massif of markedly siliceous rocks, dating back to the Cambrian, Ordovician and lower Devonian, and whose altitude fluctuates between 250 and 694 m (highest point, in the most oriental part) (Fig. 8). The general landscape of those valleys is composed primarily of forests and the southern part (from Bouillon to the Anlier forest, together with the neighbouring areas of Chiny and Herbeumont) still hosts habitats that can be considered well-preserved (Fig. 9). Poor air quality and modern techniques of forestry management admittedly jeopardize the future of the most fragile species but, at the scale of NW Europe, the lichen flora of the Ardenne district can be considered of prime importance, for both epiphytic and saxicolous species. Semi-natural habitats, especially ericaceous heathlands, are now almost all disappeared but their lichen flora has found refuge in habitats of substitution such as disused quarries, particularly near Vielsalm. The flora of the most occidental parts of the massif shows strong atlantic traits while the oriental parts, higher in elevation, seem to shelter more montane species. Finally, the flora in the valleys of the SE parts, especially in the Oesling in Luxembourg, is more continental.

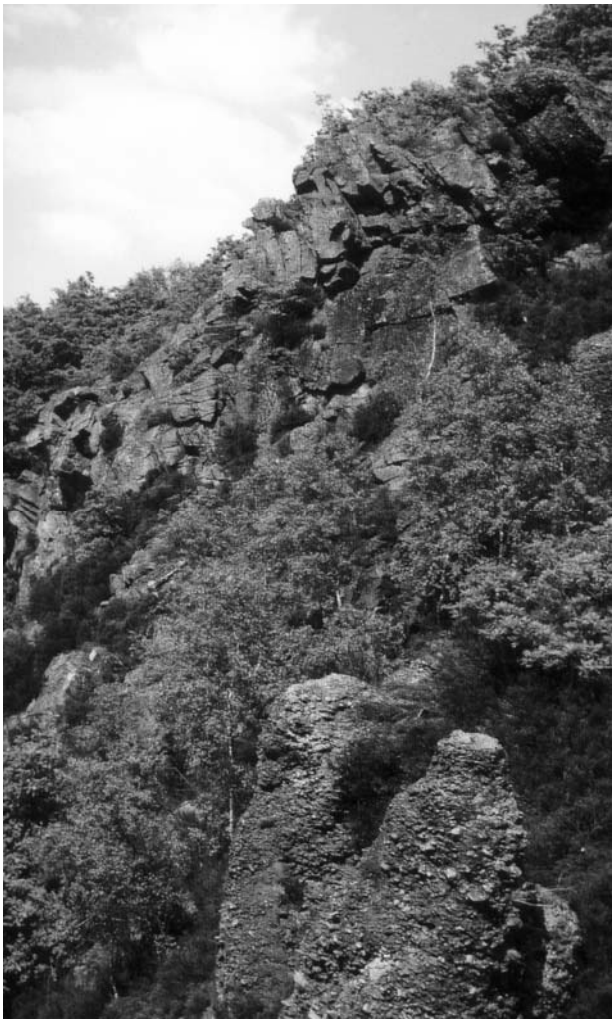


Fig. 8. The rocky cliffs of the 'Rochers de Fépin' along the French part of the Meuse form the base of the Devonian in this part of the Ardenne, and are made of Cambrian pebbles of quartzites embedded in a schistose cement. Although located at 330 m elevation, the saxicolous lichen flora is definitely montane with *Miriquidica intrudens*, several species of *Umbilicaria* (with the only locality of *U. polyrrhiza* in the area of study) and especially *Pleopsidium chlorophanum*. Photograph: E. Sérusiaux (1999).

Le poudingue des Rochers de Fépin dans la Meuse française forme la base du Dévonien dans cette partie de l'Ardenne. Il s'agit de galets de quartzites du Cambrien enrobés dans un ciment schisteux. Bien que situés à 330 m d'altitude, la flore lichénique saxicole est franchement montagnarde avec Miriquidica intrudens, *plusieurs espèces d'*Umbilicaria *(dont la seule station d'*U. polyrrhiza *dans le territoire étudié) et surtout* Pleopsidium chlorophanum. *Photographie: E. Sérusiaux (1999).*

De rotspartijen van de 'Rocher de Fépin' langs het Franse deel van de Maas vormen de basis van het Devoon in dit deel van de Ardennen. Ze zijn opgebouwd uit in een schistcement ingebloten Cambrische kwartsietbrokken. Hoewel gelegen op 330 m hoogte, is de vegetatie zeker montaan te noemen met soorten als *Miriquidica intrudens*, verschillende *Umbilicaria*'s (met de enige locatie van *U. polyrrhiza* in het onderzoeksgebied) en vooral ook *Pleopsidium chlorophanum*. Foto: E. Sérusiaux (1999).

Fig. 9. The Semois valley in the Ardenne is mainly a forested landscape and still hosts several well-preserved forest fragments, with old boles of *Fagus* and *Quercus*, occasionally *Acer platanoides*, *Fraxinus*, etc. Humidity is rather high and stable inside the forests, and air quality is relatively good. Near Herbeumont (left), Lobarion communities are still present and the *Fagus* trunk shown here (right) supports a very healthy population of *Menegazzia terebrata*, a very vulnerable and now very local species. Photographs: E. Sérusiaux (1992).

Dans sa partie ardennaise, la vallée de la Semois est essentiellement forestière et comporte encore des fragments de forêt bien préservée, avec la présence de vieux fûts de Fagus *et de* Quercus, *occasionnellement de* Acer platanoides, Fraxinus, *etc. L'humidité du sous-bois y est élevée et assez stable, et la qualité de l'air relativement bonne. Dans la région d'Herbeumont (à gauche), des peuplements du Lobarion sont encore observés et le tronc de* Fagus *ici représenté (à droite) supporte une population en très bonne santé de* Menegazzia terebrata, *une espèce très fragile et aujourd'hui très confinée. Photographies: E. Sérusiaux (1992).*

Het dal van de Semois in de Ardennen bestaat vooral uit bos en herbergt nog steeds diverse goed bewaarde bosfragmenten met oude *Quercus* en *Fagus* en gewoonlijk ook *Acer platanoides*, *Fraxinus*, etc. In het bos is de vochtigheid tamelijk hoog en stabiel en de luchtkwaliteit vrij goed. Bij Herbeumont (links) zijn nog steeds Lobarion-vegetaties aanwezig. Op de basis van de hier getoonde Beuk (rechts) groeit een vitale populatie *Menegazzia tenebrata*, een zeer gevoelige en zeer locaal voorkomende soort. Foto's: E. Sérusiaux (1992).

The **Lorraine district** (here after **Lorr.**) is a part of the large sedimentary basin of Paris and corresponds to geological rocks of the Mesozoic, in particular sandstone, sand and clay of the Triassic and Lower Jurassic periods. Its relief in cuesta is highly characteristic and has permitted the conservation of forest blocks, which are well preserved and of prime importance for the lichen flora. The gorges near Berdorf in Luxembourg (Fig. 11) are also a Mecca for lichenology in the area of study. Semi-natural habitats rich in lichens are now rather rare in the district (Fig. 12), but roadside trees have so far been able to maintain locally quite interesting epiphytic communities (Fig. 10). The 'Moselle' subdistrict corresponds to the calcareous outcrops of the Muschelkalk (Trias).

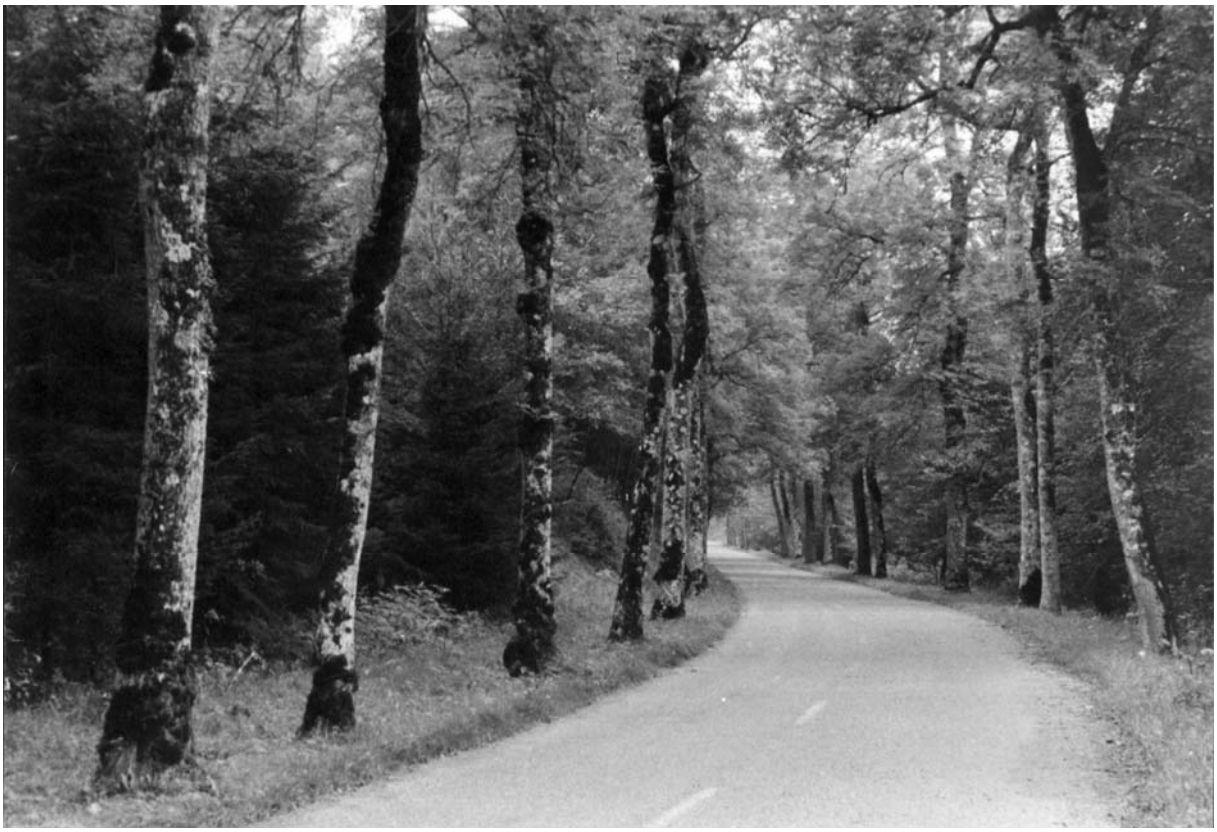


Fig. 10. In a forest environment, this alignment of *Fraxinus* in the Lorraine district at St-Vincent harboured an exceptional lichen flora, with abundant *Lobaria pulmonaria*, *Nephroma resupinatum*, *Pannaria mediterranea*, and, on a single tree but very abundant, *Usnea articulata*. The road was upgraded in 1986 and all the trees were cut down. Photograph: J. Lambinon (1963).

Dans un contexte forestier, cet alignement de Fraxinus *dans le district lorrain, à St-Vincent, abritait une flore lichénique exceptionnelle, avec* Lobaria pulmonaria *en abondance,* Nephroma resupinatum, Pannaria mediterranea, *et, sur un seul arbre mais très abondant* Usnea articulata. *La route a été élargie en 1986 et tous les arbres abattus. Photographie: J. Lambinon (1963).*

Deze rij met *Fraxinus* in een bosgebied in het Lotharings district bij St-Vincent, herbergde een uitzonderlijke korstmosflora, met veel *Lobaria pulmonaria*, *Nephroma resupinatum*, *Pannaria mediterranea* en op één enkele boom zeer veel *Usnea articulata*. De weg werd in 1986 verbreed en alle bomen werden gekapt. Foto: J. Lambinon (1963).

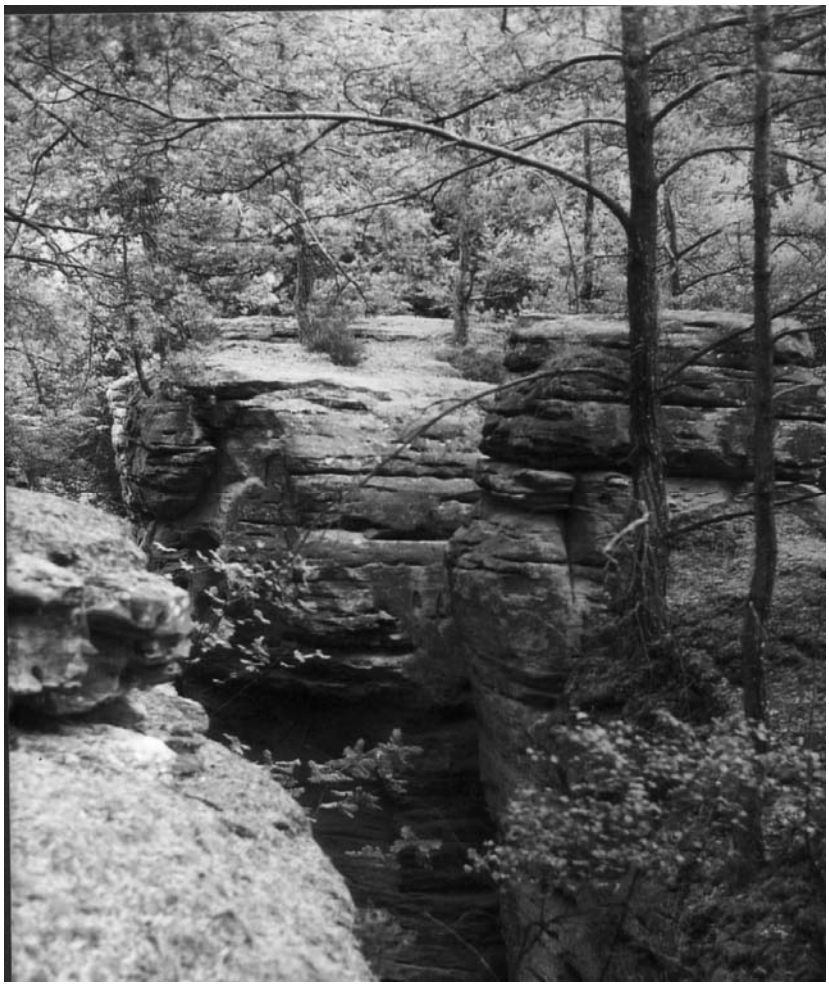


Fig. 11. The vicinity of Berdorf in the Grand Duchy of Luxembourg in the Lorraine district is characterized by narrow gorges cut through the so-called Grès de Luxembourg (Lower Lias). The surrounding forests are well preserved and the populations of *Pinus sylvestris* found on top of these rocks may well be natural. Two Atlantic ferns can be found: *Hymenophyllum tunbrigense* and *Trichomanes speciosum* (the latter discovered recently). Several very interesting saxicolous lichens grow here: *Bunodophoron melanocarpum*, *Cresponea premnea* var. *saxicola* and *Micarea hedlundii*. In the most humid gorges, the lichen flora on the boles comprises three *Enterographa* (*E. crassa*, *E. hutchinsiae* and *E. zonata*) and species as rare as *Lecanographa lyncea* and *Micarea pycnidiophora*. Photograph: P. Diederich (1999).

Les environs de Berdorf au Grand-Duché de Luxembourg dans le district lorrain sont caractérisés par des gorges étroites dans les grès dits de Luxembourg (Lias inférieur). Les forêts qui les entourent sont bien préservées, et les peuplements de Pinus sylvestris *que l'on observe au sommet des parois semblent bien être indigènes. Deux fougères atlantiques y sont notées:* Hymenophyllum tunbrigense *et Trichomanes* speciosum *(cette dernière découverte récemment). Plusieurs lichens saxicoles fort intéressants y sont encore observés:* Bunodophoron melanocarpum, Cresponea premnea *var.* saxicola *et* Micarea hedlundii. *Dans les gorges les plus humides, la flore des troncs comporte trois* Enterographa *(*E. crassa, E. hutchinsiae *et* E. zonata*) et des espèces aussi rares que* Lecanographa lyncea *et* Micarea pycnidiophora. *Photographie: P. Diederich (1999).*

Het dorp Berdorf in het Groothertogdom Luxemburg in het Lotharings district wordt gekenmerkt door nauwe bergpassen uitgehakt in het zogenaamde 'Grès de Luxembourg' (gesteente uit het Onder-Lias). De omliggende bossen zijn goed bewaard gebleven en de populaties *Pinus sylvestris* zijn mogelijk natuurlijk. Hier komen twee atlantische varens voor: *Hymenophyllum tunbrigense* en de recent ontdekte *Trichomanes speciosum*. Er groeien verschillende interessante steenbewonende korstmossen: *Bunodophoron melanocarpum*, *Cresponea premnea* var. *saxicola* en *Micarea hedlundii*. In de meest vochtige passen groeien op de bomen drie soorten *Enterographa* (*E. crassa*, *E. hutchinsiae* en *E. zonata*) en zeldzame soorten zoals *Lecanographa lyncea* en *Micarea pycnidiophora*. Foto: P. Diederich (1999).

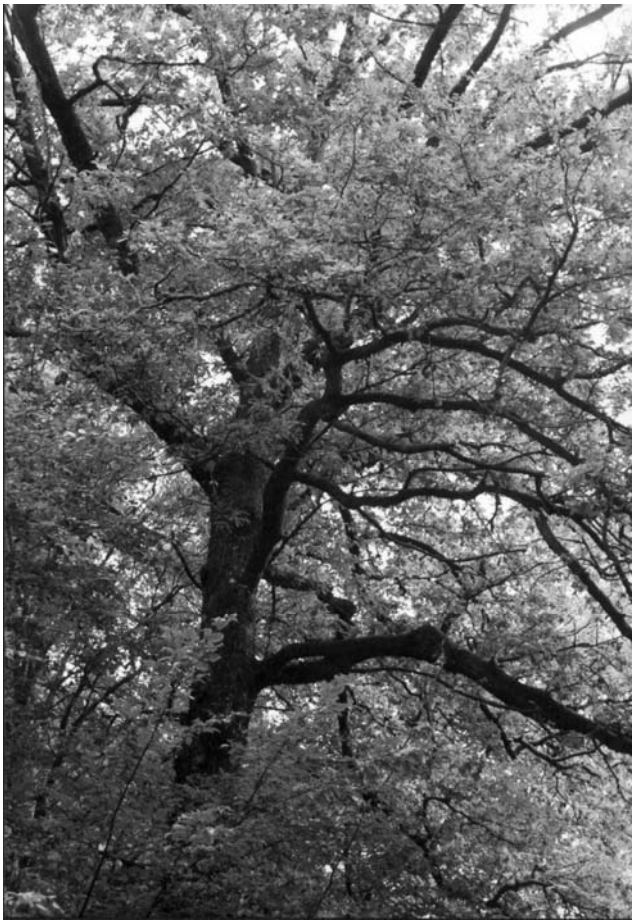


Fig. 12. In the Lorraine district, especially near Buzenol, very old *Quercus* boles in mixed woods at the bottom of the valleys are extremely rich. The individual tree photographed here is colonized by *Lobaria pulmonaria* up to its canopy, and its base has a luxuriant population of *Parmeliella triptophylla*. Photograph: E. Sérusiaux (1994).

Dans le district lorrain, et en particulier aux environs de Buzenol, de très vieux Quercus *dans des chênaies mélangées de fond de vallée, sont exceptionnellement riches. L'individu photographié ici est colonisé jusque dans sa canopée par* Lobaria pulmonaria *et la base de son tronc comporte une population luxuriante de* Parmeliella triptophylla. *Photographie: E. Sérusiaux (1994).*

In het Lotharings district, met name bij Buzenol, zijn de stammen van oude *Quercus* in gemengd bos diep in het dal bijzonder rijk aan korstmossen. De boom op de foto is tot de kroon bedekt met *Lobaria pulmonaria*, en op de basis groeit een rijke populatie *Parmeliella tryptophylla*. Foto: E. Sérusiaux (1994).

Le territoire de la checklist

Le territoire couvert par le présent travail comprend la Belgique, le Grand-Duché de Luxembourg et les parties avoisinantes du nord de la France (Fig. 1). Celles-ci concernent les départements du Nord (59), des Ardennes (08), de la Meuse (55, partie nord seulement), Meurthe-et-Moselle (54, partie nord seulement) et Moselle (57). Les Pays-Bas et l'Allemagne ne sont pas pris en considération, quoique, pour les espèces les plus rares ou les plus intéressantes, leur présence dans des localités très proches des frontières soit mentionnée.

Nous décrivons ci-après très brièvement les districts phytogéographiques de ce territoire, dans le contexte bien entendu des habitats qu'ils peuvent procurer à la flore lichénique. Ces districts sont ceux de la 'Nouvelle Flore de la Belgique, du Grand-Duché de Luxembourg, du Nord de la France et des Régions voisines' (Lambinon et al. 1993: XXI-XXIV) (Fig. 2). Notre synthèse s'appuie essentiellement sur les travaux de Lambinon (1969: 81-90) et Tanghe (1975).

*Le **district maritime** (en abrégé: **Mar.**) est une plaine côtière, très fortement urbanisée et industrialisée, essentiellement formée de polders. La douceur relative du climat, la présence d'embruns et la force relative des vents sont les facteurs déterminants de la flore lichénique. Quelques dunes sableuses subsistent encore; les dépressions de sable plus ou moins fixé (les 'pannes' sèches), lorsqu'elles ne sont pas trop surpiétinées, sont colonisées par des tapis bryo-lichéniques dominés par des espèces calcicoles ou silicicoles selon le degré d'acidification du sable (Fig. 3). Les fourrés de buissons qui les envahissent ensuite fournissent un habitat apprécié par plusieurs espèces épiphytiques. Cette flore épiphytique, souvent appauvrie, est cependant surtout présente sur les arbres isolés, le long des canaux ou aux alentours des fermes, mais une importante pollution atmosphérique l'affecte encore fortement aujourd'hui (Fig. 4). Il n'y a pratiquement aucun espace forestier. Le district ne comporte aucun rocher naturel, mais les constructions et surtout les digues de mer fournissent un substrat pour quelques espèces saxicoles.*

*Le **district flandrien** (abr.: **Fl.**) n'offre, lui aussi, que très peu de relief; il correspond aux plaines de sable quaternaire déposé sur des sables et argiles éocènes ou plus récents. Il est très fortement urbanisé et industrialisé, y compris dans les espaces agricoles. Ainsi les landes à Ericaceae ont-elles pratiquement disparu. De même, il n'y a aucun affleurement rocheux naturel et les espaces forestiers sont très réduits et profondément altérés. La flore lichénique est localisée sur les arbres isolés, sur les vieux murs, notamment ceux des églises et des cimetières (Fig. 5), mais ne présente plus aujourd'hui aucune caractéristique saillante, toutes les espèces atlantiques de vieilles forêts observées dans ce district jusqu'à la fin du XIX^{e} siècle ayant totalement disparu.*

*Le **district campinien** (abr.: **Camp.**) correspond également à de vastes dépôts sablonneux d'origine quaternaire et est aussi très urbanisé et industrialisé. Les terrasses de graviers pléistocènes de la partie orientale atteignent 100 m d'altitude et portaient localement jusqu'à la dernière guerre mondiale de vastes dunes et landes à bruyères. Tous ces espaces semi-naturels ont aujourd'hui quasiment disparu avec leur flore lichénique caractéristique. Comme pour le district flandrien, il n'y a pas d'affleurement naturel de rochers et les espaces forestiers sont artificiels.*

*Le **district brabançon** (abr.: **Brab.**) est un vaste plateau mollement ondulé, très largement couvert de limons pléistocènes et ne dépassant guère 200 m d'altitude. Mis à part quelques massifs forestiers, correspondant le plus souvent à des affleurements sableux moins fertiles, et très abîmés, ces espaces sont voués à l'agriculture intensive. La flore lichénique est donc très réduite, d'autant que le sillon Haine-Sambre-Meuse qui borde ce district sur son flanc sud est très industrialisé et pollué. Les fortes nuances atlantiques qui se manifestent dans la flore forestière du district, surtout vers l'ouest, ne s'expriment plus dans sa flore lichénique, réduite maintenant à des espèces banales et toxitolérantes. Quelques affleurements rocheux de petite taille existent dans les vallées, mais leur flore lichénique est très pauvre.*

*Le **district mosan** (abr.: **Mosan**) a une altitude qui oscille entre 200 et 300 m et bénéficie d'une qualité de l'air supérieure à celle des districts précédents. Il abrite une flore lichénique exceptionnelle de par les nombreux affleurements rocheux naturels qu'il*

présente dans les principales vallées, essentiellement les vallées de la Meuse, du Viroin, de la Lesse et de l'Ourthe (Fig. 7). Ces affleurements de calcaires souvent très compacts datent du Dévonien et du Carbonifère. La flore lichénique associée aux groupements du Xerobromion montre des affinités subméditerranéennes marquées et de nombreuses espèces atteignent ici la limite septentrionale de leur aire de répartition. D'autres affleurements, plus limités, sont plus franchement silicicoles et ne manquent également pas d'intérêt. La flore forestière du district est assez banale, avec quelques exceptions liées aux massifs forestiers les mieux préservés et comportant de vieux arbres. Les arbres de bords de routes sont localement fort intéressants, mais la pollution atmosphérique et surtout la disparition des Ulmus *a fortement affecté la flore lichénique (Fig. 6). Les milieux semi-naturels de pelouses (Mesobromion) et de landes à bruyères sont aujourd'hui fort réduits mais abritent toujours une flore lichénique intéressante.*

Le ***district ardennais*** *(abr.:* ***Ard.****) est d'abord caractérisé par un ensemble de vallées, étroites ou largement évasées, qui entaillent un massif de roches franchement siliceuses datant du Cambrien, de l'Ordovicien et du Dévonien inférieur, et dont l'altitude oscille entre 250 et 694 m (point culminant dans la partie la plus orientale) (Fig. 8). Le contexte de ces vallées est essentiellement forestier, et le flanc sud (de Bouillon à la forêt d'Anlier, en comptant les environs de Chiny et d'Herbeumont) comporte encore des milieux que l'on peut qualifier de bien préservés (Fig. 9). Certes la qualité de l'air et les techniques modernes de gestion forestière compromettent l'avenir de beaucoup des espèces les plus fragiles, mais, à l'échelle du NW de l'Europe, la flore lichénique du district ardennais, tant pour ce qui concerne les espèces épiphytes que saxicoles peut être considéré comme de première importance. Ce sont cependant des prairies d'élevage de plus en plus intensif et des plantations de résineux exotiques qui dominent largement les plateaux; leur intérêt lichénique est très faible. Les milieux semi-naturels, en particulier les landes à Ericaceae, ont aujourd'hui quasiment disparu, mais la flore lichénique trouve un habitat de substitution très important dans les carrières abandonnées, notamment dans la région de Vielsalm. La flore de la partie la plus occidentale du massif montre de nombreuses nuances atlantiques tandis que la partie orientale, plus haute en altitude, semble comporter davantage d'espèces montagnardes. Enfin, la flore des vallées du SE, en particulier dans l'Oesling luxembourgeois, est plus continentale. La Haute Ardenne correspond à la partie du district ardennais dont l'altitude est supérieure à 550 m.*

Le ***district lorrain*** *(abr.:* ***Lorr.****) est une partie du vaste bassin sédimentaire de Paris et correspond à des formations géologiques du Secondaire, en particulier les grès, sables et argiles du Trias et du Jurassique inférieur. Son relief en cuesta est très caractéristique et a permis le maintien de massifs forestiers, encore bien préservés et de première importance pour la flore lichénique. Les gorges des environs de Berdorf au Grand-Duché de Luxembourg (Fig. 11) sont également un haut-lieu de la lichénologie du territoire étudié. Si les milieux semi-naturels riches en lichens sont devenus fort rares (Fig. 12), par contre, la végétation des arbres de bords de routes a pu localement garder des groupements très intéressants (Fig. 10). Le sous-district 'Moselle' correspond aux affleurements calcaires du Muschelkalk (Trias).*

Het gebied dat in deze checklist wordt behandeld

Het gebied waarop deze publicatie betrekking heeft, omvat België en het Groothertogdom Luxemburg, en aangrenzende gebieden in Noord-Frankrijk (Fig. 1), waarvan de volgende departementen (met nummers van de bestuurlijke indeling): Nord (59), Ardennes (08), Meuse (55, alleen het noordelijke deel), Meurthe-et-Moselle (54, alleen het noordelijke deel) en Moselle (57). Nederland en Duitsland worden niet behandeld, maar als zeer zeldzame of interessante soorten dicht bij de grens voorkomen, dan worden ze wel genoemd.

Hieronder worden de fytogeografische districten van het onderzochte gebied in het kort beschreven, met nadruk op de biotopen die ze voor korstmossen te bieden hebben. De districten zijn dezelfde als in de 'Flora van België, het Groothertogdom Luxemburg, Noord-Frankrijk en de aangrenzende gebieden' (Lambinon et al. 1995: XXI-XXIV) (Fig. 2). De beschrijving is voornamelijk gebaseerd op het werk van Lambinon (1969: 81-90) en Tanghe (1975).

Het **Maritiem district** (afgekort: **Mar.**) is een sterk geürbaniseerde en geïndustrialiseerde aan de kust gelegen vlakte, die voor het grootste deel uit polders bestaat. Het milde klimaat, de zoute en vrij sterke wind zijn belangrijke factoren voor de korstmosflora. Er zijn nog enkele duingebieden aanwezig. Mits niet te veel betreden, worden droge duinvalleien gekoloniseerd door tapijten van mossen en korstmossen: kalkminnende of kalkmijdende soorten, afhankelijk van de zuurgraad van het zand (Fig. 3). Oprukkend struweel bieden een geschikte groeiplaats voor diverse epifyten. Vrijstaande bomen langs sloten en bij boerderijen zijn een belangrijke groeiplaats voor de overigens verarmde epifytenflora (Fig. 4). De luchtvervuiling is nog steeds groot en beïnvloed de korstmosflora duidelijk. In het Maritiem district komt geen natuurlijk gesteente voor, maar gebouwen en ook zeedijken vormen een substraat voor verschillende steenbewonende soorten.

Het **Vlaams district** (afgekort: **Fl.**) is ook een tamelijk vlak gebied; het omvat afzettingen van zand uit het Kwartair over zand en klei uit het Eoceen of van meer recentere tijd. Het is sterk geürbaniseerd en geïndustrialiseerd, ook met agrarische bedrijven. Er is nog maar weinig over van de heidegebieden. Ook komt er geen natuurlijk gesteente aan de oppervlakte en bosgebieden zijn sterk afgenomen en door de mens veranderd. Groeiplaatsen van korstmossen zijn beperkt tot vrijstaande bomen en oude muren, zoals van kerken en begraafplaatsen (Fig. 5). Het belangrijkste verlies is het volledig verdwijnen van atlantische soorten uit oude bossen, die tot het einde van de negentiende eeuw voorkwamen.

Het **Kempens district** (afgekort: **Camp.**) omvat ook zand-afzettingen uit het Kwartair en is ook sterk bebouwd en geïndustrialiseerd. De grindterrassen uit het Pleistoceen in het oosten bereiken een hoogte van 100 m. Tot aan de tweede wereldoorlog werden ze hier en daar bedekt met hoge zandduinen en droge heides. Al dit soort halfnatuurlijke biotopen zijn samen met hun karakteristieke korstmosflora grotendeels verdwenen. Net als in het Vlaams district is er geen natuurlijk gesteente en zijn de meeste bossen aangeplant.

Het **Brabants district** (afgekort: **Brab.**) is een groot, zacht glooiend plateau dat voor het grootste deel bedekt wordt met löss-afzettingen uit het Pleistoceen, die soms tot meer dan 200 m boven zeeniveau liggen. Het meeste land wordt voor intensieve landbouw gebruikt. Ook zijn er diverse afgetakelde bosgebieden, die meestal in de minder vruchtbare gebieden en op zandgronden gelegen zijn. Niet alleen hierdoor is de korstmosflora sterk gereduceerd, maar ook omdat het dal van Haine, Sambre en Maas - aan de zuidrand van het district - sterk door de industrie verontreinigd is. De atlantische elementen die vooral in het westen karakteristiek zijn voor de bosflora, ontbreken in de korstmosflora die beperkt is tot gewone en toxitolerante soorten. Er zijn kleine rotsontsluitingen in de valleien, maar de korstmosflora is daar zeer arm.

Het **Maas-district** (afgekort: **Mosan**) ligt op een hoogte variërend van 200 tot 300 m en heeft een betere luchtkwaliteit dan de hiervoor genoemde districten. Het herbergt een buitengewone korstmosflora, wat te danken is aan de vele rotsen in de grote valleien, vooral langs de Maas, de Viroin, de Lesse en de Ourthe (Fig. 7). Deze kalkrotsen bestaan gewoonlijk uit compact gesteente uit het Devoon of Carboon. De korstmosflora toont samen met de Xerobromion-gemeenschappen sub-mediterrane elementen, en veel soorten bereiken hier de noordgrens van hun areaal. Ook zijn er enkele silicaatrotsen met een zeer interessante flora. In de bossen is de korstmosflora weinig bijzonder, met uitzondering van een aantal goed bewaarde bosfragmenten met oude bomen. Laanbomen zijn plaatselijk zeer interessant, hoewel luchtverontreiniging en vooral ook het kappen van iepen de flora sterk heeft verarmd (Fig. 6). Halfnatuurlijke biotopen, zoals de Mesobromion-gemeenschappen en heiden, zijn sterk afgenomen, maar herbergen nog steeds een interessante korstmosflora.

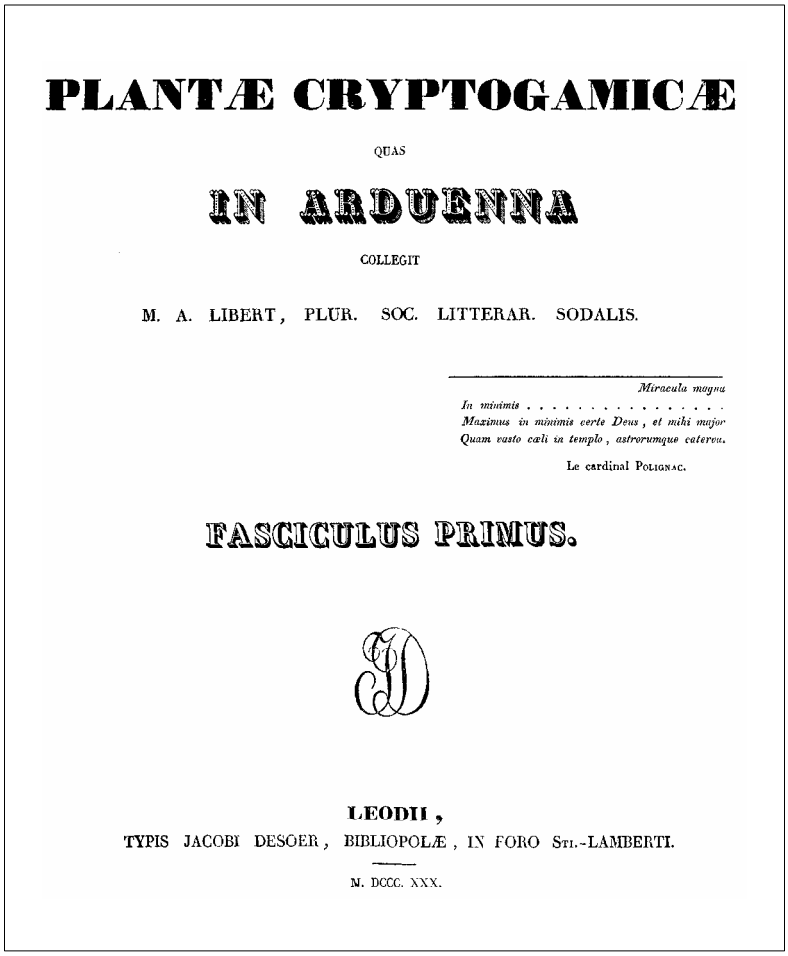
Het **Ardens district** (afgekort: **Ard.**) wordt voornamelijk gekarakteriseerd door valleien, smal of vrij breed, die snijden door een massief van silicaatrots, daterend uit het Cambrium, Ordovicium of Onder-Devoon (Fig. 8). De hoogte varieert van 250 tot 694 m (het hoogste punt gelegen in het meest oostelijke deel). Het landschap bestaat in de valleien vooral uit bos, en het zuidelijke deel (van Bouillon tot het Forêt d'Anlier, samen met het aangrenzende deel van Chiny en Herbeumont) herbergt nog goed bewaarde biotopen (Fig. 9). Luchtverontreiniging en moderne bosbouw bedreigen de toekomst van de meest gevoelige soorten. Voor Noordwest Europa is de korstmosflora van het Ardens district van groot belang, voor zowel epifyten als steenbewonende soorten. Halfnatuurlijke biotopen, vooral droge heiden, zijn nu vrijwel verdwenen, maar verlaten groeves, vooral bij Vielsalm, bieden hiervoor een vervangend biotoop. De flora van de meest westelijk gelegen delen van het massief vertoont een vrijsterk atlantisch karakter, terwijl de meest oostelijke, vaak hoger gelegen delen meer montane soorten herbergen. De flora in het zuidoosten, vooral in de Oesling in Luxemburg, is meer continentaal.

Het **Lotharings district** (afgekort: **Lorr.**) is een deel van het sedimentair bassin van Parijs en bestaat uit gesteente uit het Mesozoïcum, voornamelijk zandsteen, zand en klei uit Trias en Onder-Jura. Het reliëf met de zo karakteristieke cuesta's heeft ertoe geleid dat veel bosgebieden goed bewaard zijn gebleven en van grote betekenis zijn voor de korstmosflora. De passen bij Berdorf in Luxemburg (Fig. 11) zijn - in het onderzochte gebied - een Mekka voor lichenologen. Halfnatuurlijke gebieden met veel korstmossen zijn zeldzaam in het district (Fig. 12). Op bomen langs wegen zijn plaatselijk interessante epifytenvegetaties te vinden (Fig. 10). In het subdistrict 'Moezel' komen kalkrotsen voor die uit Muschelkalk (Trias) bestaan.

The lichenological exploration of the study area - a short historical overview

The lichens of Belgium and Luxembourg have been little studied, and most relevant works are merely short notes or even just anecdotes included in excursion reports. Several important landmarks can nevertheless be recognized, with several famous names involved. The aim of this chapter is therefore to provide a short historical overview of the lichenological exploration of the study area; it is mainly based on the synthesis of J. Lambinon (1966, 1969).

Two undisputed personalities dominate the lichenological world in Belgium around the mid XIXth century: M.-A. Libert and J. Kickx. M.-A. Libert (1782-1865) worked in the Malmédy region, which at that time belonged to Germany and was later incorporated into Belgium by the Versailles treaty (1919); this explains why her results were not mentioned in the 'Prodrome de la Flore de Belgique' published beforehand (De Wildeman 1898). Whilst the four magnificent exsiccata fascicles she dedicated to the



PLANTÆ CRYPTOGAMICÆ

QUAS

IN ARDUENNA

COLLEGIT

M. A. LIBERT, PLUR. SOC. LITTERAR. SODALIS.

Miracula magna
In minimis . . . . . .
Maximus in minimis certè Deus, et mihi major
Quam vasto cœli in templo, astrorumque catervis.

Le cardinal POLIGNAC.

FASCICULUS PRIMUS.

LEODII,
TYPIS JACOBI DESOER, BIBLIOPOLÆ, IN FORO STI.-LAMBERTI.

M. DCCC. XXX.

Fig. 13. Title page of Libert's 'Plantae Cryptogamicae quas in Arduenna collegit' (1830).

Page de couverture des 'Plantae Cryptogamicae quas in Arduenna collegit' (1830) de Libert.

Titelpagina van Libert's 'Plantae Cryptogamicae quas in Arduenna collegit' (1830).

cryptogams found near Malmédy (Fig. 13) contain very few lichens, her herbarium, now housed at BR, has many, most of them collected and processed with great care and demonstrating how astonishing the lichen biodiversity of the area was at that time. Except for a few specimens, her herbarium remains to be studied. No doubt such a study would result in several changes to the current checklist: species new for the study area are expected to be found, but most should unfortunately appear as extinct since then.

Although his herbarium (now preserved in GENT) is also of tremendous interest, the work of J. Kickx (1803-64) is mainly composed of two most remarkable publications: a monograph of the 'Graphidées' found in Belgium (1865), and especially his 'Flore Cryptogamique des Flandres' (1867) (Fig. 14), a posthumous work which still is the only complete lichen flora to have ever been published for a part of the territory dealt with in this checklist.

GEN. XLVIII. — **BACTROSPORA** MASS.

Thalle crustacé, épiphléode. Apothèces arrondis, difformes, sub-marginés. Spores cylindriques, très-fines, à plusieurs loges qui se séparent à la maturité et forment alors autant de spores simples, linéaires-elliptiques. Stérigmates non rameux. Spermaties sub-aciculaires, droites.

1. **B. dryina** Mass.; *Lecidea dryina* Ach. (non Rchb. exs.); Kx. *Rech.* cent. II, p. 18; *Patellaria dryina* Dub. — Koerb. *Syst. Lich.* p. 433, tab. 1, fig. 4.

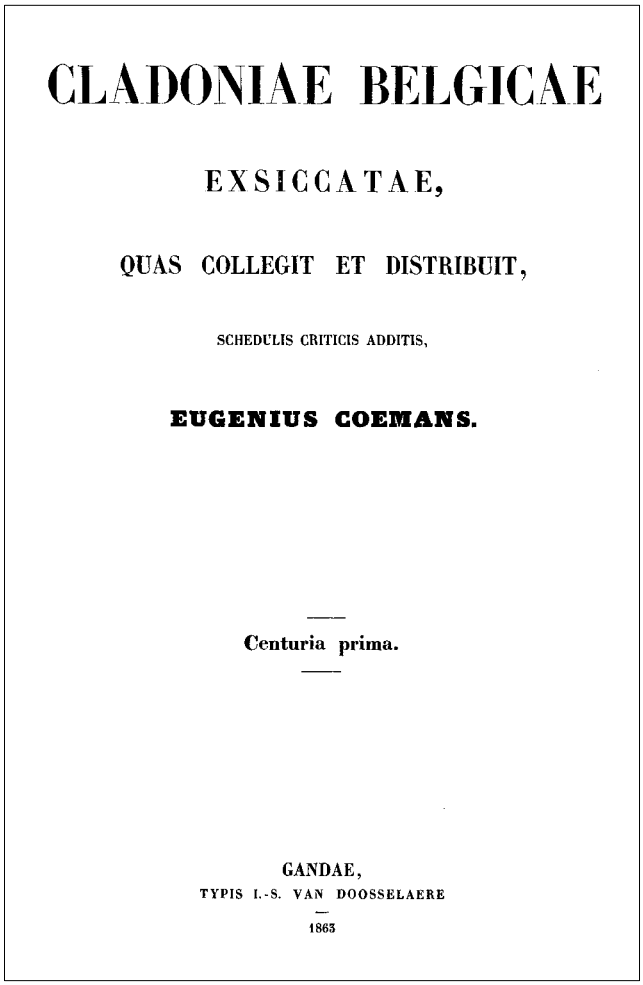
Thalle étalé, mince, pulvérulent-lépreux, d'un blanc sale, se confondant avec un protothalle blanc. Apothèces épars, arrondis, sub-arrondis ou un peu allongés, intérieurement noirâtres, à disque très-noir, d'abord sub-globuleux et lisse, puis aplati, ridé et comme marginé. Thèques claviformes, longues, atténuées en pédicelle et octospores. Spores sub-aciculaires-baculiformes, à plusieurs loges chacune, se séparant à la fin et formant une spore de second ordre, uniloculaire, un peu elliptique, obtuse, hyaline et 2 fois aussi longue que large.

Sur l'écorce fendillée d'un vieux chêne, dans le parc de M. Ricourt à Ecrneghem. Très-rare.

Fig. 14. Excerpt from the 'Flore cryptogamique des Flandres' by Kickx (1867: 279).
Extrait de la 'Flore cryptogamique des Flandres' par Kickx (1867: 279).
Passage uit de 'Flore cryptogamique des Flandres' van Kickx (1867: 279).

It would be unfair not to mention two other Belgian botanists of that period. Firstly, Father F. J. Germain (1818-60) who collected near Bastogne and, in 1855, published romantic sentences like the following, speaking about *Lobaria pulmonaria* and *Lobarina scrobiculata*: 'The Ardenne forests which have rather old trees allow the botanist to harvest plentifully those nice lichens, near which it is impossible to pass along without at least an admiring glimpse'. For the whole of Belgium and Luxembourg, there are now at best 40 trees on which the first species can be observed, sometimes in quite low quantities. Near Bastogne, all forests are now spruce plantations with almost only the ubiquitous *Hypogymnia physodes*.

Secondly, Father E. Coemans (1825-71), who issued an all the more interesting set of exsiccata of Belgian *Cladonia* ('Cladoniae Belgicae Exsiccatae') (Fig. 15) as the material was mainly collected in the lower parts of Belgium ('Basse-Belgique' and 'Moyenne-Belgique') which are now very poor in lichens.



CLADONIAE BELGICAE

EXSICCATAE,

QUAS COLLEGIT ET DISTRIBUIT,

SCHEDULIS CRITICIS ADDITIS,

EUGENIUS COEMANS.

Centuria prima.

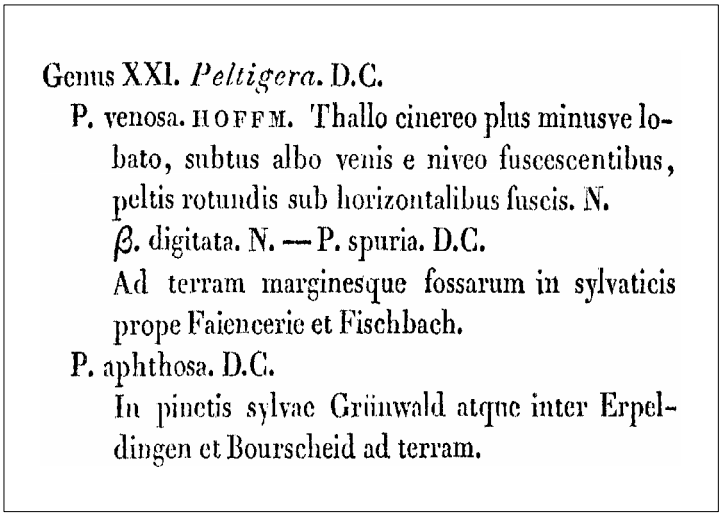
GANDAE,
TYPIS I.-S. VAN DOOSSELAERE
1863

Fig. 15. Title page of Coemans' 'Cladoniae Belgicae Exsiccatae' (1863).
Page de couverture des 'Cladoniae Belgicae Exsiccatae' de Coemans (1863).
Titelpagina van Coemans' 'Cladoniae Belgicae Exsiccatae' (1863).

In Luxembourg, three lichenologists honoured the beginning of the XIXth century: L. Marchand, F.-A. Tinant and J.-B. Reinhard. In 1829-30, L. Marchand (1807-43) published a Flora of the cryptogams found in Luxembourg, comprising about 200 lichen species (Fig. 16). His herbarium, apparently rather rich, unfortunately disappeared during a fire at the University of Liège in the middle of the XIXth century, and there is now no specimen left.

On the other hand, F.-A. Tinant (1803-53) and Dr J.-B. Reinhard (1810-89) never published on lichens, except for a short paper by Tinant (1826) on the Grengewald forest near Luxembourg city in which he mentions three lichen species. Their herbaria are

quite rich and now housed in LUX. Unfortunately, the collections bear no indications on their localities of origin. However, one can be quite confident that the Tinant collections originate from Luxembourg, especially from the 'Gutland', while those of Reinhard come from the Echternach area (either from Luxembourg or from nearby Germany). Another non-professional lichenologist, school-teacher M. G. Z. Werner from Mersch (1796-1862), gathered lichens around 1830-1835, and about 130 collections of his have recently been discovered in LUX.



Genus XXI. *Peltigera*. D.C.

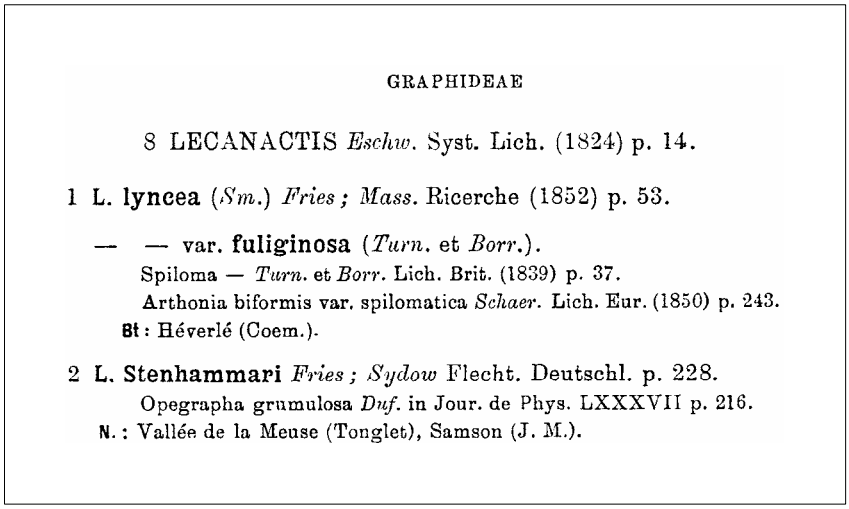
P. venosa. HOFFM. Thallo cinereo plus minusve lobato, subtus albo venis e niveo fuscescentibus, peltis rotundis sub horizontalibus fuscis. N.
β. digitata. N. — P. spuria. D.C.
Ad terram marginesque fossarum in sylvaticis prope Faiencerie et Fischbach.

P. aphthosa. D.C.
In pinetis sylvae Grünwald atque inter Erpeldingen et Bourscheid ad terram.

Fig. 16. Excerpt from 'Derde verhandeling over de cryptogamische planten van het Groothertogdom Luxemburg' by Marchand (1830: 198).
Extrait de 'Derde verhandeling over de cryptogamische planten van het Groothertogdom Luxemburg' par Marchand (1830: 198).
Passage uit de 'Derde verhandeling over de cryptogamische planten van het Groothertogdom Luxemburg' van Marchand (1830: 198).

Also of interest is an excursion by V. Bronn (1796-1834) and R. J. Courtois (1806-35) in the Meuse valley, in the Ardenne and in Luxembourg in July 1826. Their report (Bronn & Courtois 1827) mentions many lichen species.

During the last decades of the XIXth century, railway construction, especially in the Meuse valley and through the Ardenne, opened up the exploration of those areas to leading botanists. In spite of the considerable losses they had suffered, those areas offer today the best localities for the rarest and most vulnerable lichen species. Those botanists published their results in scattered floristical notes, and most of their collections are now in BR. They are C. Aigret, C.-H. Delogne, C. Dens, A. Douret, G. Lochenies, E. Pâque, F. Pietquin and A. Tonglet (the latter asked for support to Father A.-M. Hue in Paris who published several species new to science on the basis of material he had collected near Dinant). This remarkable period came to an end with the publication of two major works: the monograph of Belgian *Cladonia* by Aigret (1901) and the chapter 'Lichens' in the 'Prodrome de la Flore de Belgique' published by De Wildeman (1898) (Fig. 17). The latter work is the first methodical inventory of all lichens known in Belgium and still is an indispensable reference for any floristic work on those organisms in the country.



GRAPHIDEAE

8 LECANACTIS *Eschw.* Syst. Lich. (1824) p. 14.

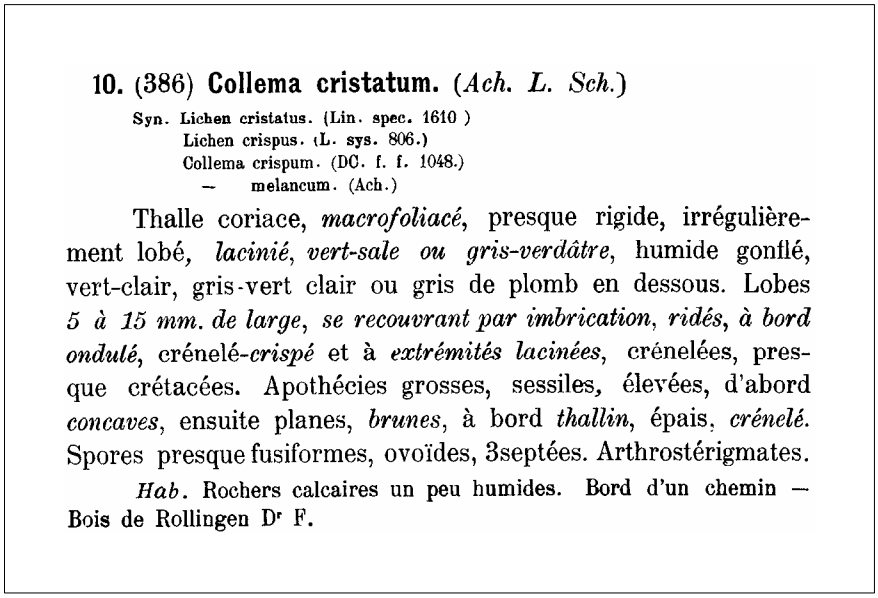
1 **L. lyncea** (*Sm.*) *Fries ; Mass.* Ricerche (1852) p. 53.

— — var. **fuliginosa** (*Turn.* et *Borr.*).
Spiloma — *Turn.* et *Borr.* Lich. Brit. (1839) p. 37.
Arthonia biformis var. spilomatica *Schaer.* Lich. Eur. (1850) p. 243.
Bt : Héverlé (Coem.).

2 **L. Stenhammari** *Fries ; Sydow* Flecht. Deutschl. p. 228.
Opegrapha grumulosa *Duf.* in Jour. de Phys. LXXXVII p. 216.
N. : Vallée de la Meuse (Tonglet), Samson (J. M.).

Fig. 17. Excerpt from the 'Prodrome de la Flore Belge' by De Wildeman (1898: 463).
Extrait du 'Prodrome de la Flore Belge' par De Wildeman (1898: 463).
Passage uit de 'Prodrome de la Flore Belge' van De Wildeman (1898: 463).

In Luxembourg, botanist J.-P.-J. Koltz (1827-1907) hardly knew lichen taxonomy but nevertheless wanted to publish a complete 'Prodrome' of the flora of his country. He can claim credit for having gathered all available lichen collections and having submitted them to foreign colleagues for identification. Unfortunately, the results were published in a very uncritical way. The work was first published in 1885 for the macrolichens only, and eventually in 1897 for all lichens (Fig. 18). The work of mycologist J. Feltgen from Mersch (1833-1904) should also be pointed out, as he collected and published more than 150 lichen species, mostly gathered near Mersch (Feltgen 1902, a work published by his son E. Feltgen).



10. (386) **Collema cristatum.** (*Ach. L. Sch.*)

Syn. Lichen cristatus. (Lin. spec. 1610)
Lichen crispus. (L. sys. 806.)
Collema crispum. (DC. f. f. 1048.)
— melancum. (Ach.)

Thalle coriace, *macrofoliacé*, presque rigide, irrégulièrement lobé, *lacinié*, *vert-sale ou gris-verdâtre*, humide gonflé, vert-clair, gris-vert clair ou gris de plomb en dessous. Lobes *5 à 15 mm. de large*, *se recouvrant par imbrication*, *ridés*, *à bord ondulé*, crénelé-*crispé* et à *extrémités lacinées*, crénelées, presque crétacées. Apothécies grosses, sessiles, élevées, d'abord *concaves*, ensuite planes, *brunes*, à bord *thallin*, épais, *crénelé*. Spores presque fusiformes, ovoïdes, 3septées. Arthrostérigmates.

Hab. Rochers calcaires un peu humides. Bord d'un chemin — Bois de Rollingen Dr F.

Fig. 18. Excerpt from the 'Prodrome de la flore du Grand-Duché de Luxembourg' by Koltz (1897: 325).
Extrait du 'Prodrome de la flore du Grand-Duché de Luxembourg' par Koltz (1897: 325).
Passage uit de 'Prodrome de la flore du Grand-Duché de Luxembourg' van Koltz (1897: 325).

The beginning of the XXth century can claim acquaintance only with the French lichenologist M. Bouly de Lesdain (1869-1965), most of whose collections were unfortunately destroyed during the bombing of Dunkerque in 1940. As far as our study area is concerned, Bouly de Lesdain mainly worked near Dunkerque (France, dept. Nord) from where he described many taxa new to science (lichens and lichenicolous fungi). In Belgium, he notably collected near Spa. In northern France, another prominent lichenologist, Father J. Harmand (1844-1915) published a 'Catalogue descriptif des lichens observés dans la Lorraine' (Harmand 1894). This flora mainly concerns the southern part of the Lorraine, an area not studied in the present checklist.

Towards the end of the thirties, P. Duvigneaud (1913-91) started his studies, particularly with the publication of his 'Catalogue des Lichens de Belgique', written in collaboration with L. Giltay (Duvigneaud & Giltay 1938) (Fig. 19). Just like the 'Prodrome' of De Wildeman, this catalogue is an invaluable reference, though it is a mere uncritical compilation of data extracted from literature and devoid of any chorological or ecological information. Between 1937 and 1952, P. Duvigneaud published many notes on Belgian lichens, especially a fascinating review of epiphytic cryptogamic communities (Duvigneaud 1942).

EPHEBACEAE.

Ephebe E. Fr.

E. lanata (L.) Vain. — Pr. I p. 371 : 2-1.

Polychidium (Mass.) A. Zahlbr.

P. muscicola (Sw). S. Gray. — Pr. I, p. 461 : 6-1.

Spilonema Born.

S. paradoxum Born. — Pr. I p. 371.

Fig. 19. Excerpt from the 'Catalogue des Lichens de Belgique' by Duvigneaud & Giltay (1938: 19).
Extrait du 'Catalogue des Lichens de Belgique' par Duvigneaud & Giltay (1938: 19).
Passage uit de 'Catalogue des Lichens de Belgique' van Duvigneaud & Giltay (1938: 19).

Early in the sixties, several botanists at the University of Liège started research on Belgian lichens, particularly with detailed studies on the use of lichen acids in taxonomy. The publications of J. Lambinon clearly dominate that period; they are to culminate with his brilliant synthesis 'Les Lichens' (Lambinon 1969). This work includes thorough identification keys to the macrolichens of Belgium and Luxembourg. They still represent a key reference on that matter nowadays, and no doubt they stimulated many botanists to study those cryptogams, kept away from the main stream of interests of botanists in Belgium and Luxembourg for such a long time.

During the fifties and the sixties, German lichenologist T. Müller (1894-1969) was mainly interested in the 'Eifel' but extended his area of research into Belgium, especially into an area near Malmédy about which he published a short but very interesting note (Müller 1958). He eventually published a synthesis of his work (Müller 1965) which is also an

invaluable reference. His herbarium had been inaccessible for a long time; it is not the case anymore and therefore it is now possible to examine the species he mentioned from the area studied in the present checklist. This should be done in the near future.

As far as we are concerned, we assumed to carry on the lichenological exploration of Belgium and Luxembourg early in the eighties, starting with the epiphytic communities, and then the saxicolous ones, and trying to identify all species encountered, focusing especially on crustose species and lichenicolous fungi. We could rely on the experience of J. Lambinon, who shared with us his experience and collections, on the help of many colleagues and friends from abroad who helped us in the identification of critical taxa, and on several Dutch colleagues who are very interested in the lichen flora of our countries. The collaboration of two of them (P. P. G. van den Boom and A. M. Brand) is acknowledged by their association to the publication of this work. We must not forget to mention the diligent mapping of the distribution of macrolichens in Luxembourg by E. Wagner-Schaber (1987), and especially the recent studies conducted by students of the University of Gent (especially the PhD thesis of M. Hoffmann on epiphytic lichens and communities in western parts of Flanders, presented in 1993).

The paradox of the past fifteen years of research is obvious: on one hand, we have been able to highlight an unsuspected lichen biodiversity in the study area, including rare or poorly known species and even several which turned out to be new to science; and on the other hand, we have witnessed a major decrease and impoverishment because of the very strong impact of human activities on the environment and natural and semi-natural habitats. During that period, air pollution has dramatically changed: acid pollution has strongly decreased, but high levels of nitrates and summer-time ozone are now common, especially north of the line Sambre-Meuse-Vesdre. Almost complete obliteration of many sites of high interest has occurred; forestry management is now much more intensive and is a major threat to the lichen diversity within the study area. For dozens of species first discovered during this work, population level is so low (sometimes reduced to a few individuals only) that any stochastic event can jeopardize their future. May this checklist attract attention upon the little-known organisms that lichens and their lichenicolous fungi are: they are amongst the best indicators of our environmental quality.

Bref historique de la recherche lichénique en Belgique, au Luxembourg et dans le nord de la France

Les lichens de Belgique, du Luxembourg et des parties limitrophes du nord de la France ont été peu étudiés, et les travaux qui s'y rapportent sont trop souvent des mentions brèves, voire anecdotiques, dans des compte-rendus d'excursions. Quelques étapes importantes peuvent cependant être distinguées et quelques grands noms s'y rattachent clairement. Le but de ce paragraphe est ainsi de brosser un bref historique de la recherche lichénique dans le territoire couvert par notre checklist, historique d'ailleurs essentiellement basé sur la synthèse de Lambinon (1966 et 1969).

Incontestablement, deux personnalités belges dominent le milieu du XIX^e siècle: M.-A. Libert et J. Kickx. M.-A. Libert (1782-1865) a travaillé dans la région de Malmédy, laquelle ne sera rattachée à la Belgique qu'au Traité de Versailles (1919), ce qui explique pourquoi ses résultats ne sont pas cités dans le Prodrome de la Flore de Belgique paru avant cette date (De Wildeman 1898). Si ses quatre fascicules d'exsiccata de cryptogames (Fig. 13), une oeuvre de qualité exceptionnelle, ne comprennent que peu de lichens, son herbier, maintenant conservé à BR, en comporte de remarquables échantillons, démontrant l'étonnante biodiversité de cette région à cette époque. Pour l'essentiel, et mis à part quelques exceptions, cet herbier doit encore être réétudié. Il ne fait aucun doute qu'il permettra de modifier sensiblement le présent catalogue (espèces supplémentaires en particulier), même s'il est à craindre que ce soit essentiellement à titre historique.

Bien que son herbier (conservé à GENT) soit d'un intérêt incontestable, l'oeuvre de J. Kickx (1803-64) est, quant à elle, davantage centrée sur deux publications remarquables: une monographie des 'Graphidées' de Belgique (1865), et surtout une Flore Cryptogamique des Flandres (1867) (Fig. 14), oeuvre posthume et qui, à ce jour, est la seule flore lichénique complète à avoir jamais été publiée sur une portion du territoire belge.

Il serait dommage de ne pas citer pour cette époque deux autres botanistes. D'une part, l'abbé F. J. Germain (1818-60) récolta dans les environs de Bastogne et publia en 1855 des phrases telles que celle-ci, en parlant de Lobaria pulmonaria *et* Lobarina scrobiculata*: 'Les forêts des Ardennes qui possèdent des arbres un peu vieux permettent au botaniste de faire une ample moisson de ces beaux lichens, près desquels il est impossible de passer sans y jeter au moins un coup d'oeil d'admiration'. Pour toute la Belgique et le Luxembourg, il reste aujourd'hui moins de 40 arbres sur lesquels la première espèce peut encore être observée, parfois en très petites quantités ! Et d'autre part, l'abbé E. Coemans (1825-71) publia un exsiccata des* Cladonia *de Belgique ('Cladoniae Belgicae exsiccatae') (Fig. 15) tout à fait intéressant, et d'autant plus qu'ils ont été pour l'essentiel récoltés en Basse et Moyenne-Belgique, des régions aujourd'hui très pauvres en lichens.*

Au Grand-Duché de Luxembourg, trois lichénologues ont marqué le début du XIX^e siècle: L. Marchand, F.-A. Tinant et J.-B. Reinhard. En 1829-30, L. Marchand (1807-43) publia une flore des cryptogames luxembourgeois, comprenant environ deux cents espèces de lichens (Fig. 16). Son herbier, apparemment très riche, fut malheureusement la victime d'un incendie à l'Université de Liège au milieu du XIX^e siècle, et il n'en reste plus aucun spécimen.

F.-A. Tinant (1803-53) et le Dr J.-B. Reinhard (1810-89), par contre, n'ont rien publié sur les lichens (si on néglige un article de Tinant (1826) sur la forêt du Grengewald près de Luxembourg dans lequel il signale trois espèces de lichens), mais leurs herbiers assez riches ont été conservés à LUX. Ces herbiers sont malheureusement dépourvus d'indications sur la provenance des spécimens. On peut cependant admettre que les collections de Tinant proviennent bien du Luxembourg (surtout du Gutland), tandis que celles de Reinhard proviennent de la région d'Echternach (Luxembourg ou région allemande avoisinante). Un autre lichénologue amateur, l'instituteur M. G. Z. Werner de Mersch, a récolté des lichens vers 1830-35, et environ 130 de ses spécimens ont été retrouvés récemment à LUX.

Il est également intéressant de signaler une excursion botanique par V. Bronn (1796-1834) et R. J. Courtois (1806-35) dans la vallée de la Meuse, dans l'Ardenne, et dans le Grand-Duché de Luxembourg en juillet 1826, dans le rapport de laquelle de nombreux lichens sont signalés (Bronn & Courtois 1827).

L'avènement du chemin de fer, en particulier la construction des lignes dans la vallée de la Meuse et au travers de l'Ardenne, va amener plusieurs botanistes belges, surtout à la fin du siècle, à se déplacer vers ces terroirs, qui, malgré les pertes considérables qu'ils ont subies, restent encore aujourd'hui des lieux privilégiés pour les lichens. Ils publieront leurs résultats dans des notes floristiques assez éparses, et leurs collections sont aujourd'hui essentiellement conservées à BR. Ce sont en particulier C. Aigret, C.-H. Delogne, C. Dens, A. Douret, G. Lochenies, E. Pâque, F. Pietquin et A. Tonglet (lequel fera d'ailleurs appel à l'abbé A.-M. Hue à Paris, qui décrira plusieurs espèces nouvelles sur base du matériel qu'il avait récolté dans la région de Dinant). Cette période remarquable se termina par la parution de deux ouvrages marquants: d'une part, la monographie des Cladonia *de Belgique par Aigret (1901) et la partie 'Lichens' du Prodrome de la Flore de Belgique (De Wildeman 1898) (Fig. 17). Ce dernier travail comprend le premier relevé systématique des lichens de Belgique et reste une référence incontournable pour l'étude floristique des lichens dans ce pays.*

Au Luxembourg, le botaniste J.-P.-J. Koltz (1827-1907), qui ne s'intéressait guère à la taxonomie des lichens, voulait également publier un prodrome complet de la flore de son pays. Il a le mérite d'avoir rassemblé les anciens herbiers disponibles, et d'avoir soumis toutes les collections de lichens à des lichénologues étrangers pour identification. Les résultats ont été publiés, malheureusement sous forme très peu critique, dans le volume Lichens de son Prodrome de la flore du Grand-Duché de Luxembourg, paru d'abord en 1885 (uniquement les macrolichens), puis en 1897 (tous les lichens) (Fig. 18). Citons encore le mycologue J. Feltgen (1833-1904), qui a récolté et publié plus de 150 espèces de lichens, surtout dans les environs de Mersch (voir Feltgen 1902, oeuvre publiée par son fils E. Feltgen).

Le début du XX^{e} siècle ne connait guère que les contributions du lichénologue français M. Bouly de Lesdain (1869-1965), dont l'essentiel de l'herbier a malheureusement été détruit lors des bombardements de Dunkerque en 1940. En ce qui concerne le territoire étudié par ce catalogue, Bouly de Lesdain a surtout travaillé dans la région de Dunkerque (France, dépt. Nord), région de laquelle il décrivit un grand nombre de taxa nouveaux pour la science (lichens et champignons lichénicoles). En Belgique, il récolta notamment dans les environs de Spa. Dans le nord de la France, un autre lichénologue éminent, l'abbé J. Harmand (1844-1915), a publié un Catalogue descriptif des lichens observés dans la Lorraine (Harmand 1894). Cette flore concerne en majeure partie le sud de la Lorraine, région non considérée par la présente checklist.

A la fin des années 30 démarrent les travaux de P. Duvigneaud (1913-91), avec notamment la parution du Catalogue des Lichens de Belgique, publié avec L. Giltay (Duvigneaud & Giltay 1938) (Fig. 19). A l'instar du Prodrome de De Wildeman, ce catalogue est une référence très précieuse, bien qu'il ne soit qu'une compilation, non critique, des données de la littérature, et qu'il ne comprenne aucune indication écologique

ou chorologique. De 1937 à 1952, P. Duvigneaud publie de nombreuses notes sur les lichens belges, avec notamment une synthèse intéressante des groupements de cryptogames épiphytes (Duvigneaud 1942).

Dès les années 60, plusieurs botanistes de l'Université de Liège entament des recherches sur les lichens belges, et démarrent notamment des travaux plus pointus sur l'utilisation des acides lichéniques en taxonomie. Ce sont bien évidemment les publications de J. Lambinon qui dominent cette période; elles culmineront avec son travail de synthèse 'Les Lichens' (Lambinon 1969), comprenant tout spécialement des clés très fouillées d'identification des macrolichens de Belgique et des régions voisines. Elles font toujours autorité aujourd'hui et ont incontestablement amené de nombreux botanistes à s'intéresser à ces cryptogames, trop longtemps tenus à l'écart des préoccupations des naturalistes belges.

Pendant les années 50 et 60, le lichénologue allemand T. Müller (1894-1969) s'est intéressé à l'Eifel, mais a largement débordé dans notre territoire, en particulier dans la région de Malmédy, à propos de laquelle il publiera une note fort intéressante (Müller 1958). En 1965, il publie une synthèse de ses travaux (Müller 1965), et celle-ci constitue également une référence essentielle. Son herbier a longtemps été inaccessible: ce n'est heureusement plus le cas depuis quelques mois, et il sera donc possible d'examiner le matériel qu'il a cité de notre territoire.

Pour notre part, dès le début des années 1980, nous avons entrepris de poursuivre l'exploration lichénique du territoire, d'abord pour les communautés épiphytiques puis pour les communautés saxicoles, et d'identifier toutes les espèces présentes, et tout particulièrement les lichens crustacés et les champignons lichénicoles. Cette démarche a pu compter sur l'appui de J. Lambinon, lequel a très largement partagé son expérience avec nous, sur de nombreux collègues étrangers qui ont aidé à l'identification de matériaux critiques, et sur plusieurs collègues néerlandais très intéressés par la flore lichénique de notre territoire. La collaboration de deux d'entre eux (P. P. G. van den Boom et A. M. Brand) est d'ailleurs bien mise en évidence par leur association à la publication de ce travail. Il ne faudra pas oublier de citer ici la cartographie fastidieuse des macrolichens épiphytiques luxembourgeois réalisée par E. Wagner-Schaber (1987), et surtout les travaux récents réalisés par des étudiants de l'Université de Gand, dont surtout la thèse sur les lichens épiphytiques de la partie occidentale de la Flandre par M. Hoffmann (1993).

Le paradoxe de ces quelques quinze années de travail est évident: d'une part, nous avons découvert une richesse floristique insoupçonnée, le territoire comportant des espèces rares, peu connues, voire nouvelles pour la science, et d'autre part, nous avons assisté et assistons encore à son appauvrissement très marqué, du fait des pressions énormes que les activités humaines font peser sur l'environnement. Si la pollution atmosphérique a radicalement changé de nature au cours de cette période (les pollutions acides ont inconstablement diminué, remplacées aujourd'hui par des excès d'azote et des pics estivaux d'ozone atmosphérique), elle reste très importante, surtout au nord du sillon Sambre-Meuse-Vesdre. La destruction mécanique de nombreux sites et les techniques contemporaines d'aménagement forestier sont par ailleurs responsables de dégâts énormes à la flore lichénique de notre territoire. Pour des dizaines d'espèces découvertes à l'occasion de

ce travail, la seule ou les quelques populations existantes ne comportent souvent que quelques individus, et sont dès lors à la merci de la moindre perturbation de leurs habitats. Puisse cette checklist attirer l'attention sur ces organismes que sont les lichens et leurs champignons lichénicoles, méconnus mais exceptionnels indicateurs de la qualité d'un territoire.

De geschiedenis van het lichenologisch onderzoek in België, Luxemburg en Noord-Frankrijk in kort bestek

Van de korstmossen van België en Luxemburg en Noord-Frankrijk is maar weinig bekend en de meest relevante werken op dit gebied zijn slechts aantekeningen of anekdotes in excursieverslagen. Toch zijn er belangrijke mijlpalen te onderscheiden en daarmee zijn beroemde namen verbonden. Het doel van dit hoofdstuk is dan ook om een kort historisch overzicht te geven van het korstmossenonderzoek in het gebied waarop deze checklist betrekking heeft. Het is voornamelijk gebaseerd op werken van J. Lambinon (1966, 1969).

Halverwege de XIX^{de} eeuw domineerden twee onbetwiste persoonlijkheden de lichenologische wereld in België: M.-A. Libert en J. Kickx. M.-A. Libert (1782-1865) werkte rond Malmédy, dat in die tijd tot Duitsland behoorde. Pas na het Verdrag van Versailles (1919) werd het bij België ingelijfd, wat ook verklaart waarom haar werk niet wordt genoemd in de 'Prodrome de la Flore de Belgique' die veel eerder werd gepubliceerd (De Wildeman 1898). Hoewel de vier schitterende bundels exsiccaten die ze aan cryptogamen wijdde (Fig. 13) maar weinig korstmossen bevatten, laat haar zorgvuldig samengesteld en bewerkt herbarium, nu geplaatst in BR, zien hoe verbazend rijk de diversiteit aan korstmossen in het gebied rond Malmédy moet zijn geweest. Het grootste deel van haar herbarium moet nog bestudeerd worden, wat een aanzienlijke wijziging in de huidige checklist tot gevolg zal hebben: van veel aanvullende soorten die in haar collectie opduiken, zal komen vast te staan dat ze inmiddels alweer zijn verdwenen.

Ook het herbarium van J. Kickx (1803-1864), nu aanwezig in GENT, is zeer interessant. Hij schreef twee opmerkelijke publicaties: een monografie van de Belgische 'Graphidées' (1865), en de 'Flore Cryptogamique des Flandres' (1867) (Fig. 14) die pas na zijn dood werd gepubliceerd. Het is de enige volledige korstmossenflora die betrekking heeft op een deel van het onderzoeksgebied van deze checklist.

Er zijn nog twee andere Belgische botanici uit die tijd. Ten eerste abt F. J. Germain (1818-1860) die rond Bastenaken verzamelde en in 1855 romantische beelden schetste - we hebben het over *Lobaria pulmonaria* en *Lobarina scrobiculata*: 'De bossen van de Ardennen, met hun vrij oude bomen, laten het botanici toe om overvloedig te verzamelen, en het is haast onmogelijk om ze voorbij te lopen zonder ze een bewonderende blik toe te werpen.' In België en Luxemburg zijn nog hooguit 40 bomen waar de eerstgenoemde soort aanschouwd kan worden, maar vaak in kleine aantallen; bij Bastenaken is het oude bos nu weg en vervangen door aanplant van fijnspar.

De tweede, abt E. Coemans (1825-1871) bracht een indrukwekkende rij exsiccaten van Belgische *Cladonia*'s uit ('Cladoniae Belgicae Exsiccatae') (Fig. 15), waarvan het materiaal vooral uit de laaggelegen delen van België afkomstig is. Die zijn nu tamelijk soortenarm.

In Luxemburg waren in het begin van de vorige eeuw drie lichenologen actief: L. Marchand, F.-A. Tinant en J.-B. Reinhard. In 1829-1830 publiceerde L. Marchand (1807-1843) een flora van de cryptogamen van Luxemburg met in totaal 200 soorten korstmossen (Fig. 16). Zijn herbarium, dat blijkbaar tamelijk uitgebreid geweest moet zijn, is halverwege de vorige eeuw bij een brand in de Universiteit van Luik geheel verloren gegaan. F.-A. Tinant (1803-1853) en dr. J.-B. Reinhard (1810-1889) publiceerden niet over korstmossen, behalve een kort artikel van Tinant (1826) over het bos Grengewald bij Luxemburg waarin hij drie soorten noemt. Hun herbaria zijn tamelijk groot en worden nu in LUX bewaard, maar helaas is niet aangegeven waar de collecties zijn verzameld. De collecties van Tinant zijn zeer waarschijnlijk in Gutland verzameld, terwijl die van Reinhard uit de streek rond Echternach afkomstig zijn, deels ook net over de grens in Duitsland. Schoolmeester en amateur-lichenoloog M. G. Z. Werner (1796-1862) uit Mersch verzamelde korstmossen in de jaren 1830-1835. Recentelijk zijn ongeveer 130 van zijn collecties naar herbarium LUX overgebracht.

Interessant is ook een excursie van V. Bronn (1796-1834) en R. J. Courtois (1806-35) naar het Maasdal, de Ardennen en Luxemburg in juli 1826. In het verslag (Bronn & Courtois 1827) noemen ze vele soorten korstmossen.

Tegen het einde van de vorige eeuw maakte de aanleg van spoorlijnen in het Maasdal en de Ardennen het vooraanstaande botanici mogelijk om ook deze gebieden te onderzoeken. Het zijn gebieden die veel te lijden hebben gehad onder de ontginningen, maar die tot op de dag van vandaag nog veel zeldzame en bedreigde soorten herbergen. Deze botanici publiceerden hun vondsten in allerlei korte artikels; hun collecties worden nu in BR bewaard. Het zijn C. Aigret, C.-H. Delogne, C. Dens, A. Douret, G. Lochenies, E. Pâque, F. Pietquin en A. Tonglet. Van de laatste is bekend dat hij eens hulp vroeg aan abt A.-M. Hue in Parijs die diverse soorten afkomstig uit het gebied rond Dinant nieuw voor de wetenschap had beschreven. Het einde van deze opmerkelijke periode wordt gemarkeerd door het verschijnen van twee grote werken: een monografie van de Belgische *Cladonia*'s van C. Aigret (1901) en het hoofdstuk 'Lichens' in de 'Prodrome de la Flore de Belgique' van De Wildeman (1898) (Fig. 17). Dit laatste werk is de eerste systematische inventarisatie van alle toen bekende korstmossen in België; nog steeds is het een onmisbaar naslagwerk voor al het floristisch onderzoek dat aan deze organismen wordt gedaan.

In Luxemburg wilde J.-P.-J. Koltz (1827-1907) een volledige prodromus maken van de flora van zijn land, hoewel hij nauwelijks iets wist van korstmostaxonomie. Inderdaad heeft hij alle beschikbare korstmossencollecties bijeengebracht en laten bekijken door buitenlandse collega's. Helaas werden de resultaten op een weinig kritische manier gepubliceerd. In 1885 verscheen een deel met alleen de macrolichenen, en uiteindelijk in 1897 een deel met alle soorten (Fig. 18). Mycoloog J. Feltgen (1833-1904) verzamelde en publiceerde meer dan 150 soorten korstmossen, waarvan hij de meeste bij zijn woon-

plaats Mersch heeft verzameld (Feltgen 1902); het werk is door zijn zoon E. Feltgen gepubliceerd.

Het begin van de XX^{ste} eeuw wordt gemarkeerd door het werk van de Franse lichenoloog M. Bouly de Lesdain. Zijn collecties zijn voor het grootste deel verloren gegaan in 1940 bij het bombardement op Duinkerken. Wat betreft het gebied waar deze checklist betrekking op heeft, werkte Bouly de Lesdain vooral bij Duinkerken (Frankrijk, Dept. Nord) waar hij vele taxa, zowel korstmossen als lichenicole schimmels, nieuw voor de wetenschap beschreef. In België verzamelde hij vooral rond Spa. In Noord-Frankrijk was nog een andere vooraanstaande lichenoloog actief: abt J. Harmand (1844-1915) publiceerde een 'Catalogue descriptif des lichens observés dans la Lorraine' (Harmand 1894), die vooral betrekking heeft op het zuiden van Lotharingen, een gebied dat buiten het bestek van deze checklist valt.

Aan het eind van de jaren dertig begon het onderzoek van P. Duvigneaud (1913-1991) met als belangrijkste publicatie zijn 'Catalogue des Lichens de Belgique', geschreven in samenwerking met L. Giltay (Duvigneaud & Giltay 1938) (Fig. 19). Net als de prodromus van De Wildeman, is het naslagwerk van onschatbare waarde, hoewel het een weinig kritisch samenraapsel van literatuurgegevens is, zonder informatie over ecologie en verspreiding van de soorten. Tussen 1937 en 1952 publiceerde P. Duvigneaud veel korte artikelen over Belgische lichenen, waaronder een fascinerend artikel over epifytische cryptogamengemeenschappen (Duvigneaud 1942).

In het begin van de jaren zestig begonnen verschillende botanici van de Universiteit van Luik met het onderzoek naar de korstmossen in België. Met name het belang van korstmossenstoffen voor de taxonomie kreeg hierbij de aandacht. Veruit de belangrijkste publicaties uit die tijd zijn afkomstig van J. Lambinon, met als hoogtepunt het brilliante werk 'Les Lichens' (Lambinon 1969). Het bevat onder meer degelijke determinatiesleutels voor de macrolichenen van België en Luxemburg. Nog steeds is dit een gezaghebbend werk dat lange tijd veel botanici heeft aangezet tot het bestuderen van cryptogamen, een terrein dat toen niet bepaald erg populair was in België en Luxemburg.

In de jaren vijftig en zestig breidde de Duitse lichenoloog T. Müller (1894-1969) zijn werkterrein, de Eifel, nog wel eens uit naar België, met name de streek rond Malmédy, waarover hij een kort maar uiterst interessant verslag schrijft (Müller 1958). Uiteindelijk publiceerde hij een compilatie van al zijn werk (Müller 1965), nu een onmisbaar naslagwerk. Zijn herbarium is lange tijd ontoegankelijk geweest, maar het is nu weer mogelijk om de soorten te bekijken die hij voor het gebied opgeeft. Dit zal in de nabije toekomst worden gedaan.

Voor wat ons betreft, hebben wij vanaf het begin van de jaren tachtig het korstmossenonderzoek in België en Luxemburg voortgezet; eerst met onderzoek naar epifytengemeenschappen, daarna met saxicole gemeenschappen, en met het trachten alle gevonden soorten te determineren met speciale aandacht voor korstvormige soorten en lichenicole schimmels. Hierbij konden we vertrouwen op J. Lambinon, die zijn ervaring en verzameling met ons deelde. Vele collega's en vrienden uit het buitenland hielpen ons met de identificatie van kritische taxa, met name onze Nederlandse collega's die erg

geïnteresseerd bleken te zijn in ons onderzoeksgebied. De medewerking van twee van hen, P. P. G. van den Boom en A. M. Brand, is overigens duidelijk gebleken door hun nauwe betrokkenheid bij de publicatie van dit werk. Ook moet het ijverige karteerwerk van macrolichenen in Luxemburg door E. Wagner-Schaber (1987) genoemd worden, en ook de studies opgezet door studenten van de Universiteit van Gent; zie hiervoor het proefschrift van M. Hoffmann over epifytische korstmossen en epifytengemeenschappen in Vlaanderen dat in 1993 verscheen.

In de laaste vijftien jaar onderzoek zien we de paradox steeds duidelijker: aan de ene kant is een onverwacht grote diversiteit aan korstmossen gevonden. Hierbij zijn zeldzame en slecht bekende soorten en zelfs onbeschreven soorten. Aan de andere kant zagen én zien we een afname en verslechtering door de enorme invloed die het menselijk handelen op het milieu heeft, zowel in natuurgebieden als in half-natuurlijke gebieden. Ook de luchtverontreiniging veranderde sterk: de zure regen nam af, maar hoge concentraties ammoniak - en 's zomers ook ozon - zijn daarvoor in de plaats gekomen, vooral benoorden de lijn Samber-Maas-Vesder. Veel voor korstmossen belangrijke gebieden zijn bijna volledig vernietigd; de bosbouw is veel intensiever geworden en is nu een van de grootste bedreigingen voor de korstmosflora. Van tientallen soorten die tijdens dit werk aan het licht zijn gekomen, zijn de populaties zo klein - soms maar een paar individuen - dat elke willekeurige verandering in hun omgeving ze in gevaar brengt.

We hopen dat door deze checklist de kleine en onbekende organismen die deze korstmossen en hun lichenicole schimmels zijn, meer aandacht zullen krijgen: het zijn tenslotte één van de beste milieu-indicatoren die we hebben.

Organisation of the checklist

Species included

The present checklist includes all taxa of lichenized and lichenicolous fungi which have been recorded in the study area. Non-lichenized and non-lichenicolous fungi are only included if

- they are loosely or doubtfully associated with algae or cyanobacteria (e. g. *Naetrocymbe fraxini*);
- they have often been considered as lichens in the past (e. g. *Naetrocymbe saxicola*);
- they have traditionally been studied by lichenologists (e. g. some species of Caliciales);
- they are fungicolous on species occasionally considered as lichens (e. g. *Nectriopsis indigens* on *Naetrocymbe saxicola*);
- they are genuinely non-lichenized fungi that look like lichens and have never been collected and studied by other mycologists (e. g. species of *Lichenothelia* and *Peridiothelia*).

We also include some lichenicolous species which are likely to be just saprotrophic and not truly (i. e. obligatory) lichenicolous. The non-lichenized genera *Mniacea* Boud. and *Sarea* Fr. have not been included.

As a rule, we only accept taxa (written in **boldface**) for which we have studied the corresponding specimens, and published relevant data in one of our recent papers. Thus, species which have never been published from the study area are never included: there is thus no new report of the occurrence of any species in the study area. For some poorly known genera, like *Verrucaria*, we also accept a limited number of species which have been published rather recently by other lichenologists, but for which we have not examined any material. Older published records for which we were unable to examine any corresponding specimens have not been accepted, unless otherwise stated; such species which are doubtfully present in the study area are listed after the accepted taxa, and are printed in *italics*.

Data provided for each species

For each accepted taxon, listed in alphabetic order, the following data are provided (some being optional):

- the name, possibly preceded by the symbol (*) if it is a lichenicolous lichen, * if it is a lichenicolous fungus, (+) if it is a doubtfully lichenized fungus, and + if it is a non-lichenized fungus;
- common synonyms, and synonyms found in the literature of the study area [for Belgium, the literature published after Duvigneaud & Giltay (1938), and for Luxembourg, that published after Koltz (1897) has been screened for synonyms];
- known or presumed teleomorph or anamorph connections;

- ecology in the study area;
- distribution in the study area; the current knowledge is given by country (Belgium, Luxembourg, France, and occasionally Germany and the Netherlands) and within each country by phytogeographical districts;
- useful comments;
- literature pertinent to the study area.

Taxonomy

The taxonomic concept is that accepted in modern floras, checklists or monographs. As a rule, we do not accept species defined on chemistry alone and thus not sustained by morphological differences, even if they can easily be recognized in the field by their distinctive colour (e. g. strains with or without usnic acid, known in some species of *Cladina*, *Evernia* and *Haematomma*).

In *Cladonia*, we adopt a rather strict morphological species concept, although some of the numerous chemotaxa recognized in this genus are also distinguished by subtle morphological, ecological or chorological characters. In such cases, we assemble all 'taxa' under one name, but give distribution details for all of them. For example, *Cladonia coccifera* s. lat. includes *C. coccifera* s. s. (with zeorin), *C. borealis* (with barbatic acid) and *C. diversa* (with zeorin); *C. diversa* is common in the Campinien district where the two others are missing, whilst in the Ardenne district the three taxa occur.

Presumed species pairs, like *Usnea florida* and *U. subfloridana*, are treated as distinct species, with the exception of *Lecidella elaeochroma* for which the taxonomic status of the rather rare sorediate thalli requires further studies.

Some species belong to genera into which they have never been transferred, either because they are poorly known (e. g. *Mycoporellum sacromontanum*) or due to unsolved nomenclatural problems (e. g. *Bacidina* versus *Woessia*). Such species are cited under the genus where they belong, but the corresponding new combination is never proposed.

Nomenclature

The nomenclature follows the International Code of Botanical Nomenclature of 1994 (the so-called Tokyo Code).

Author abbreviations follow Kirk & Ansell (1992), except Dutch names beginning with 'van', like 'van den Boom' and 'van Herk', which are not abbreviated, and 'Bouly de Lesdain' which is abbreviated as 'B. de Lesd.', and not 'de Lesd.'. The use of 'ex', 'in' and 'em.' has been avoided, making the author citations as short as possible (e. g. *Lecanora conizaeoides* Cromb., instead of 'Nyl. ex Cromb.'; *Lecania inundata* (Körb.) M. Mayrhofer, instead of '(Körb.) M. Mayrhofer in Nimis & Poelt'; *Lecanora gisleriana* Müll. Arg., instead of 'Müll. Arg. em. J. Steiner').

Nomina nuda and 'ad int.' names, i. e. not validly published names, are avoided as much as possible, unless they have already been published elsewhere, or if they are in press

and likely to be printed only a few months after this checklist. No taxonomic changes are proposed.

Anamorph - teleomorph connections

Anamorphic lichenicolous fungi are treated like ordinary species if the corresponding teleomorph is unknown. Otherwise, even if their teleomorph has not been encountered in the study area, they are included under the teleomorphic name.

Some anamorphic taxa, for which the connection to a teleomorphic species is still unknown, are nevertheless listed under the teleomorphic genus where they most probably belong (e. g. *Illosporium carneum* is listed under *Pronectria*, although it is not clear to which *Pronectria* species the *I. carneum* of the study area belongs).

Distribution

For the estimation of distribution, we also use data which we did not check as well as unpublished data given by reliable colleagues, providing that we have seen at least some specimens of the species mentioned in those publications or reports. Any use of published or unpublished data for the estimation of distribution is thus supported by carefully testing whether our concept of the species is identical with that of authors of the chorological information considered for our checklist.

The distribution data provided are based on the number of localities where the corresponding taxon has been observed or collected. It is not an estimation of its abundance. A species occurring in a single locality is thus given as RRR whatever the number of thalli observed or its population levels or trends. However, the usual situation is that local and very restricted species have low population levels, whereas widespread species have healthy and abundant populations. Obvious exceptions are mentioned in the text, e. g. *Lecanora silvae-nigrae* is known from a single locality near Vielsalm (a natural scree of siliceous rocks), where it develops a healthy and abundant population.

The distribution data are based on reliable publications and reports, but may not correspond to the actual situation. Species like *Lecanora conizaeoides* or *L. muralis* are rarely published or mentioned in reports, but there is little doubt that they are widespread in most districts. Such a situation is addressed by an estimated distribution given in italics (e. g. '*AC*').

The exploration of the northern parts of France included in this checklist is still unsatisfactory (except to a certain extent for the Ardennes dept.). We have thus omitted any estimation of their distribution in France, especially for species which are known to be common in Belgium and Luxembourg, but have been recorded only once or twice in northern France.

Distribution data provided for the Netherlands or Germany refer only to rare or interesting species found very close to the Belgian or Luxembourg borders, as such species are likely to be found in the study area.

Organisation du catalogue

Espèces inclues

Le présent catalogue inclut tous les taxa de champignons lichénisés et lichénicoles signalés dans le territoire étudié. Des champignons non lichénisés et non lichénicoles sont inclus uniquement

- *si leur association à des algues ou des cyanobactéries est lâche ou douteuse (p. ex.* Naetrocymbe fraxini*);*
- *s'ils ont souvent été considérés comme des lichens dans le passé (p. ex.* Naetrocymbe saxicola*);*
- *s'ils ont été traditionnellement étudiés par des lichénologues (p. ex. certaines espèces de Caliciales);*
- *s'ils sont fongicoles sur des espèces parfois considérées comme des lichens (p. ex.* Nectriopsis indigens *sur* Naetrocymbe saxicola*);*
- *s'ils sont des espèces clairement non lichénisées ressemblant à des lichens, qui n'ont jamais été récoltées et étudiées par d'autres mycologues (p. ex. les espèces de* Lichenothelia *et* Peridiothelia*).*

Nous acceptons également des espèces lichénicoles qui ne sont vraisemblablement que des saprotrophes et non pas de vrais (c.-à-d. obligatoires) champignons lichénicoles. Les genres non lichénisés Mniacea *Boud. et* Sarea *Fr. ne sont pas inclus.*

La règle suivante est adoptée: nous n'acceptons que des taxons (imprimés en caractères ***gras****) dont nous avons examiné les spécimens correspondants, et publié des données dans une de nos publications récentes. Ainsi, les taxons qui n'ont jamais été signalés du territoire étudié ne sont pas inclus: il n'y a donc aucune mention nouvelle pour le territoire étudié. Pour quelques genres mal connus, comme* Verrucaria*, nous acceptons également un nombre limité d'espèces publiées récemment par d'autres lichénologues, dont nous n'avons pas examiné de matériel. Des mentions dans la littérature ancienne, pour lesquelles nous n'avons pas pu examiner de spécimen, n'ont pas été acceptées, sauf mention contraire; de telles espèces, dont la présence dans le territoire étudié est douteuse, sont énumérées après les taxa acceptés, et sont imprimés en italiques.*

Informations données pour chaque espèce

Pour chacun des taxa acceptés, énumérés par ordre alphabétique, les données suivantes sont présentées (quelques-unes étant facultatives):

- *le nom, éventuellement précédé par le symbole (*) en cas d'un lichen lichénicole, * en cas d'un champignon lichénicole, (+) en cas d'un champignon dont la lichénisation est douteuse et + en cas d'un champignon non lichénisé;*
- *des synonymes communément usités, et des synonymes trouvés dans la litérature du territoire étudié [pour la Belgique, la littérature publiée après Duvigneaud & Giltay*

(1938), et pour le Luxembourg, celle parue après Koltz (1897) a été examinée pour le relevé des synonymes];

- *des connections connues ou présumées entre téléomorphes et anamorphes;*
- *l'écologie dans le territoire étudié;*
- *la répartition dans le territoire étudié; les données sont présentées par pays (Belgique, Luxembourg, France, et parfois l'Allemagne et les Pays-Bas), et par districts phytogéographiques au sein de chacun d'eux;*
- *des commentaires jugés utiles;*
- *la littérature concernant le territoire étudié.*

Taxonomie

Le concept taxonomique adopté est celui accepté par les flores, catalogues ou monographies récents. Nous n'acceptons pas les espèces basées uniquement sur des caractères chimiques qui ne sont pas corrélés avec des différences morphologiques, même si elles peuvent facilement être reconnues sur le terrain par leur couleur distincte (p. ex. des 'races chimiques' avec ou sans acide usnique, connues dans certaines espèces de Cladina, Evernia *et* Haemotomma*).*

Dans le genre Cladonia*, nous adoptons un concept spécifique morphologique assez strict, même si certains des nombreux chemotaxa reconnus dans ce genre se distinguent également par des caractères morphologiques, écologiques ou chorologiques subtils. Dans de telles situations, nous regroupons tous les 'taxa' sous un seul nom, mais nous donnons des détails sur la répartition de tous ces taxa. Exemple:* Cladonia coccifera *s. lat. comprend* C. coccifera *s. s. (avec de la zéorine),* C. borealis *(avec de l'acide barbatique) et* C. diversa *(avec de la zéorine);* C. diversa *est commun dans le district campinien, où les deux autres taxa sont absents, tandis que dans le district ardennais, les trois taxa sont présents.*

Les paires présumées d'espèces, comme Usnea florida *et* U. subfloridana*, sont traitées comme des espèces distinctes, avec l'exception de* Lecidella elaeochroma*, pour laquelle le statut taxonomique des thalles sorédiés, relativement rares, nécessite des études supplémentaires.*

Certaines espèces appartiennent à des genres dans lesquels elles n'ont jamais été transférées, soit parce qu'elles sont mal connues (p. ex. Mycoporellum sacromontanum*) ou à cause de problèmes nomenclaturaux non résolus (p. ex.* Bacidina *versus* Woessia*). De telles espèces sont traitées sous les genres auxquels elles appartiennent, mais la nouvelle combinaison correspondante n'est jamais proposée.*

Nomenclature

La nomenclature suit le Code International de Nomenclature Botanique de 1994 (le Code dit de Tokyo).

Les abréviations d'auteurs suivent Kirk & Ansell (1992), à l'exception des noms néerlandais commençant par 'van', comme 'van den Boom' et 'van Herk', qui ne sont pas abrégés, et Bouly de Lesdain, qui est abrégé comme 'B. de Lesd.' et non pas 'de Lesd.'. L'utilisation de 'ex', 'in' et 'em.' a été évitée, pour rendre les citations d'auteurs les plus courtes possible (p. ex. Lecanora conizaeoides *Cromb., au lieu de 'Nyl. ex Cromb.';* Lecania inundata *(Körb.) M. Mayrhofer, au lieu de '(Körb.) M. Mayrhofer in Nimis & Poelt';* Lecanora gisleriana *Müll. Arg., au lieu de 'Müll. Arg. em. J. Steiner').*

L'utilisation de 'nomina nuda' ou de noms publiés 'ad int.', c.-à-d. de noms non validement publiés, a été évitée dans la mesure du possible, sauf si ces noms ont déjà été publiés ailleurs, ou s'ils sont 'sous presse' et seront vraisemblablement publiés quelques mois seulement après la parution de ce catalogue. Aucun changement taxonomique n'a été proposé.

Connections entre anamorphes et téléomorphes

Les anamorphes de champignons lichénicoles sont traités comme des espèces ordinaires, si le téléomorphe correspondant est inconnu. Sinon, même si leur téléomorphe n'a pas été rencontré dans le territoire étudié, ils sont inclus sous leur nom de téléomorphe.

Certains anamorphes, pour lesquels la connection avec un téléomorphe n'est pas établie, sont néanmoins classés sous le genre de téléomorphes auquel ils appartiennent vraisemblablement (p. ex. Illosporium carneum *est classé parmi les* Pronectria*, même s'il n'est pas clair à quelle espèce de* Pronectria *le matériel d'*I. carneum *du territoire étudié appartient).*

Répartition

Pour évaluer la répartition, nous avons également utilisé des données que nous n'avons pas vérifiées, ou des données inédites de collègues fiables, sous la condition que nous ayons vu au moins quelques spécimens de cette espèce mentionnés dans ces publications ou rapports. Toute utilisation de données publiées ou non publiées pour l'estimation de la répartition est toujours assurée par le contrôle attentif que notre concept spécifique est identique à celui des auteurs des informations chorologiques utilisées pour notre catalogue.

Les informations sur la répartition sont basées sur le nombre de localités où le taxon correspondant a été observé ou récolté. Il ne s'agit pas d'une estimation de son abondance. *Une espèce connue d'une seule localité est ainsi indiquée comme RRR, quel que soit le nombre de thalles observés ou l'état de la population. Cependant, les espèces à répartition locale et très limitée ont normalement des populations très restreintes, tandis que les espèces répandues ont des populations saines et abondantes. Des exceptions manifestes sont mentionnées dans le texte, comme p. ex.* Lecanora silvae-nigrae*, qui est connu d'une seule localité près de Vielsalm (un pierrier naturel de blocs siliceux), mais qui y développe une population saine et abondante.*

Les données de répartition sont basées sur des publications et des rapports fiables, mais ne correspondent pas nécessairement à la situation réelle sur le terrain. Des espèces comme Lecanora conizaeoides *ou* L. muralis *sont rarement publiées ou mentionnées dans*

les rapports, mais il n'y aucun doute qu'elles sont largement distribuées dans la plupart des districts. Dans de tels cas, nous donnons une répartition estimée, imprimée en italiques (p. ex. 'AC').

L'exploration des parties du nord de la France inclues dans ce catalogue est toujours peu satisfaisante (à l'exception du dépt. des Ardennes). Pour cette raison, nous avons omis toute estimation de leur répartition en France, et cela notamment pour des espèces communes en Belgique et au Luxembourg, mais qui n'ont été notées qu'une ou deux fois dans le nord de la France.

Des informations sur la répartition en Allemagne ou aux Pays-Bas sont uniquement données pour des espèces rares ou intéressantes, trouvées à proximité des frontières belge ou luxembourgeoise; de telles espèces pourraient en effet être trouvées dans le territoire étudié.

Opzet van deze checklist

Opgenomen soorten

De huidige checklist bevat alle taxa van gelicheniseerde en lichenicole schimmels die in het onderzoeksgebied zijn gevonden. Niet-gelicheniseerde en niet-lichenicole schimmels zijn alleen opgenomen indien:

- ze zwak of onduidelijk geassocieerd zijn met algen of cyanobacteriën (zoals *Naetrocymbe fraxini*);
- ze vroeger vaak als korstmos beschouwd werden (zoals *Naetrocymbe saxicola*);
- ze traditioneel door lichenologen werden bestudeerd (zoals enkele Caliciales);
- ze fungicool zijn op soorten die gewoonlijk als korstmos beschouwd worden (zoals *Nectriopsis indigens* op *Naetrocymbe saxicola*);
- ze echte niet-gelicheniseerde schimmels zijn die op korstmossen lijken en niet door andere mycologen worden verzameld en bestudeerd (zoals de soorten uit *Lichenothelia* en *Peridiothelia*).

Verder zijn ook lichenicole soorten vermeld als ze saprotroof zijn en niet obligaat lichenicool. De niet-gelicheniseerde genera *Mniacea* Boud. en *Sarea* Fr. zijn niet opgenomen.

Bij wijze van regel accepteren we alleen taxa (deze zijn dan **vetgedrukt**) waarvan we de betreffende collecties hebben gezien, en waarvan relevante gegevens zijn gepubliceerd in één van onze recente artikelen. Er worden in deze checklist dus geen opgaven van nieuwe soorten gedaan voor het bestudeerde gebied. Van enkele slecht bekende genera, zoals *Verrucaria*, is een beperkt aantal soorten opgenomen, die vrij recent door andere lichenologen zijn gepubliceerd, maar waarvan geen materiaal is gecontroleerd. Oude, gepubliceerde vondsten waarvan het onmogelijk was het betreffende materiaal te controleren, zijn niet opgenomen, tenzij anders vermeld staat. Zulke soorten waarvan het voorkomen in het onderzoeksgebied niet zeker is, zijn in de checklist cursief gedrukt, en staan pas na de opsomming van de geaccepteerde taxa in een genus.

Gegevens per soort

Voor elk geaccepteerd taxon, weergegeven in alfabetisch volgorde, zijn de volgende gegevens opgenomen (sommige ervan zijn optioneel):

- de naam, mogelijk voorafgegaan door het symbool (*) als het een lichenicool korstmos is, * voor een lichenicole schimmel, (+) voor een twijfelachtig gelicheniseerde schimmel en + voor een niet-gelicheniseerde schimmel;
- veelgebruikte synoniemen en synoniemen die in literatuur uit het onderzoeksgebied voorkomen [voor België is naar synoniemen gezocht in literatuur verschenen na Duvigneaud & Giltay (1938), en voor Luxemburg in literatuur verschenen na Koltz (1897)];
- bekende of veronderstelde teleomorf- of anamorfrelaties;
- ecologie binnen het onderzoeksgebied;
- verspreiding binnen het onderzoeksgebied; de huidige kennis hiervan is gegeven per land (België, Luxemburg, Frankrijk en soms ook Duitsland en Nederland) en voor elk land per fytogeografisch district;
- eventueel commentaar;
- literatuurverwijzing, uitsluitend met betrekking tot het onderzoeksgebied.

Taxonomie

De gevolgde taxonomie is die van recente flora's, checklists en monografieën. Soorten die alleen verschillen in chemisch opzicht en niet in morfologie worden niet geaccepteerd, zelfs niet als ze in het veld een karakteristieke kleur hebben, zoals 'rassen' met en zonder usninezuur van bepaalde soorten *Cladina*, *Evernia* en *Haematomma*.

In het genus *Cladonia* worden alleen soorten genoemd die morfologisch goed te onderscheiden zijn. Van de vele chemische taxa in dit genus, verschilt een klein deel ook in geringe mate in morfologie, ecologie en verspreiding. Die taxa zijn samengevoegd onder één naam, waarbij de verspreiding voor elk taxon apart is aangegeven. Zo bevat *Cladonia coccifera* s. l. ook *Cladonia coccifera* s. s. (met zeorine), *C. borealis* (met barbatinezuur) en *C. diversa* (met zeorine), waarbij in het Kempens district alleen *C. diversa* voorkomt, terwijl in de Ardennen alle drie de soorten aanwezig zijn.

Zogenaamde species pairs, soortparen zoals *Usnea subfloridana* en *U. florida*, worden als verschillende soorten behandeld; een uitzondering vormt *Lecidella elaeochroma*, waarvan de zeldzaam optredende sorediеuze vorm nog nadere studie behoeft.

Sommige soorten behoren tot genera waarin ze nooit zijn geplaatst, deels omdat ze slecht bekend zijn (b. v. *Mycoporellum sacromontanum*) of omdat problemen met de nomenclatuur nog niet opgelost zijn (b. v. *Bacidia* versus *Woessia*). Zulke soorten worden in deze checklist genoemd onder het genus waarin ze eigenlijk thuishoren, overigens zonder dat er een nieuwe combinatie wordt voorgesteld.

Nomenclatuur

De nomenclatuur volgt de International Code of Botanical Nomenclature (1994), de zogenaamde Tokyo-code.

Afkortingen van auteursnamen volgen Kirk & Ansell (1992). Een uitzondering vormen Nederlandse namen beginnend met 'van', zoals 'van den Boom' of 'van Herk', die niet worden afgekort. Bouly de Lesdain wordt afgekort als 'B. de Lesd.' in plaats van 'de Lesd.' Het gebruik van 'ex', 'in' en 'em.' is vermeden om zodoende de auteursvermelding zo kort mogelijk te houden: *Lecanora conizaeoides* Cromb. in plaats van 'Nyl. ex Cromb.', *Lecania inundata* (Körb.) M. Mayrhofer in plaats van '(Körb.) M. Mayrhofer in Nimis & Poelt', en *Lecanora gisleriana* Müll. Arg. in plaats van 'Müll. Arg. em. J. Steiner'.

Nomina nuda en namen met 'ad int.' zijn ongeldig en worden zoveel mogelijk vermeden, tenzij ze al elders gepubliceerd zijn of kort na het verschijnen van deze checklist worden gepubliceerd.

Anamorf-teleomorfrelaties

Anamorfe lichenicole schimmels worden alleen als gewone soorten behandeld als de teleomorf ervan onbekend is. In alle andere gevallen zijn ze opgenomen onder de naam van de teleomorf, ook als deze vorm niet bekend is uit het onderzoeksgebied.

Sommige anamorfe taxa waarvan de bijbehorende teleomorf onbekend is, worden behandeld in het teleomorfe genus waartoe ze het meest waarschijnlijk horen; *Illosporium carneum* staat bijvoorbeeld onder *Protonectria*, hoewel niet duidelijk is tot welke soort *Protonectria* deze *Illosporium* behoort.

Verspreiding

Voor het bepalen van de verspreiding zijn ook bronnen en ongepubliceerde gegevens gebruikt die niet volledig zijn gecontroleerd, maar waarbij wel steeds van elke hierin genoemde soort één of meer collecties van de betreffende auteur bekeken is. Op die manier is te controleren of de soortopvatting van de auteurs van de desbetreffende bronnen dezelfde is als die in deze checklist.

De verspreidingsgegevens zijn gebaseerd op het aantal locaties waar het bijbehorende taxon is waargenomen of verzameld. Het is dus geen maat voor de abundantie. Een soort die maar op één plaats voorkomt, is RRR, ongeacht het aantal thalli of de trend en vitaliteit van de populatie. Gewoonlijk is het zo dat bij zeldzame soorten de populaties klein zijn en dat algemene soorten grote en vitale populaties hebben. Uitzonderingen hierop worden in de tekst vermeld. Zo is *Lecanora silvae-nigrae* bekend van één enkele locatie bij Vielsalm (een natuurlijke puinhelling van silicaatgesteente) waar het een grote en vitale populatie vormt.

Verspreidingsgegevens zijn weliswaar gebaseerd op betrouwbare publicaties en rapporten, maar ze komen mogelijk niet overeen met de huidige situatie. Soorten als *Lecanora conizaeoides* en *L. muralis* komen nauwelijks in rapporten voor, maar zijn ongetwijfeld zeer algemeen in de meeste districten.

Het verspreidingsonderzoek naar korstmossen in Noord-Frankrijk is nog altijd onvoldoende met uitzondering voor bepaalde delen van het departement Ardennes. Er worden daarom geen Franse verspreidingsgegevens opgegeven voor soorten die een enkele keer in Frankrijk zijn gevonden, maar algemeen zijn in België en Luxemburg. Verspreidingsgegevens voor Nederland en Duitsland worden alleen genoemd voor zeldzame en interessante soorten die dicht bij de Belgische of Luxemburgse grens zijn gevonden en mogelijk ook in het onderzoeksgebied voorkomen.

Abbreviations and symbols
(abréviations et symboles – afkortingen en symbolen)

Abbreviations of literature (abréviations de la littérature – literatuurafkortingen)

Ba	Barkman (1963)	Epifyten-flora Midden-Limburg (België)
BDL1	Bouly de Lesdain (1910a)	Lichens des environs de Dunkerque
BDL2	Bouly de Lesdain (1910b)	Lichens belges rares ou nouveaux
BDL3	Bouly de Lesdain (1905)	Lichens des environs de Spa
Ca	Caekebeke (1986)	Vergelijkende studie epifytische Lichenen Denderstreek
DG	Duvigneaud & Giltay (1938)	Catalogue des Lichens de Belgique
Di	Diederich (1989)	Les lichens épiphytiques du Luxembourg
DSL	De Sloover & Lambinon (1965)	Lichens corticoles de la Dendre
Ertz	Ertz (1999)	Lichens saxicoles de la région de Dinant
Ho	Hoffmann (1993)	Epifyten in Oost- en West-Vlaanderen
Ko	Koltz (1897)	Prodrome des lichens du Luxembourg
L1	Sérusiaux et al. (1983)	Lichens nouveaux de Belgique. I
L2	Sérusiaux & Rose (1984)	Id. II
L3	Sérusiaux et al. (1985)	Id. III
L4	Diederich et al. (1988)	Id. IV
L5	Diederich et al. (1991)	Id. V
L6	Diederich et al. (1992)	Id. VI
L7	van den Boom et al. (1996)	Id. VII
L8	Sérusiaux et al. (1999)	Id. VIII
La66	Lambinon (1966)	Macrolichens de Belgique
La68	Lambinon (1968a)	Cryptogames du Luxembourg
La69	Lambinon (1969)	Les lichens [de Belgique et du Luxembourg]
LF0	Diederich (1986b)	Lichenicolous fungi from Luxembourg
LF1	Diederich (1990)	Interesting lichenicolous fungi. 1. Luxembourg
Ma	Malaise (1983)	Les *Caloplaca* de Belgique et du Luxembourg
Mü1	Müller (1958)	Flechtenflora von Malmedy
Mü2	Müller (1959)	Flechten der Eifel. Nachtrag 1958
Mü3	Müller (1961)	Flechten der Eifel. Nachtrag 1960
Mü4	Müller (1962)	Flechtenflora von Malmedy. Nachtrag 1962
Mü5	Müller (1965)	Flechten der Eifel
NL77	van Dobben & Sipman (1980)	Excursie 1977 naar Aywaille
NL84	van den Boom (1996)	Excursie 1984 naar prov. Namur
NL87	Aptroot (1988)	Excursie 1987 naar Zuid-Limburg
NL92	van den Boom et al. (1994)	Excursion 1992 to Luxembourg
NL93	van den Boom (1994)	Excursie 1993 naar Noord-Brabant
NL97	van den Boom et al. (1999)	Excursion 1997 to Han-sur-Lesse and St-Hubert
NL99	(in prep.)	Excursion 1999 Vallée de la Meuse (Givet à Fumay)
Qu	Quanten (1986)	Vergelijkende studie epifytenflora Midden-Limburg
Schl	Schlechter (1994)	Verbreitungsatlas Makrolichenen Eifel
Sé	Sérusiaux (1990)	Lichens des affleurements du Salmien
VGH	Van der Gucht & Hoffmann (1990)	Lichens van Ghent
WS	Wagner-Schaber (1987)	Macrolichens épiphytiques du Luxembourg

Distribution (répartition – verspreiding)

B	Belgium	Belgique	België
L	Luxembourg (Grand Duchy)	Luxembourg (Grand-Duché)	Luxemburg (Groothertogdom)
F	northern France	nord de la France	Noord-Frankrijk
D	Germany	Allemagne	Duitsland
NL	The Netherlands	Pays-Bas	Nederland

Mar.	Maritime district	district maritime	Maritiem district
Fl.	Flemish district	district flandrien	Vlaams district
Camp.	Campine district	district campinien	Kempens district
Brab.	Brabant district	district brabançon	Brabants district
Mosan	Meuse district	district mosan	Maasdistrict
Ard.	Ardenne district	district ardennais	Ardens district
Ard. (Haute Ard.)	the Haute Ardenne sub-district of the Ard. district	le sous-district Haute Ardenne du district ard.	het subdistrict Hoge Ardennen in Ard.
Lorr.	Lorraine district	district lorrain	Lotharings district
Lorr. (Moselle)	the Moselle subdistrict of the Lorraine district	le sous-district Moselle dans le district lorrain	het subdistrict Moezel in het Lotharings district

RRR	extremely rare extrêmement rare uiterst zeldzaam	known from 1 locality	connu d'une seule localité	bekend van 1 locatie
RR	very rare très rare zeer zeldzaam	known from 2-4 localities (Mar.: 2-3 localities)	connu de 2-4 localités (Mar.: 2-3 localités)	bekend van 2-4 locaties (Mar.: 2-3 locaties)
R	rare rare zeldzaam	known from 5-9 localities (Mar.: 4-6 localities)	connu de 5-9 localités (Mar.: 4-6 localités)	bekend van 5-9 locaties (Mar.: 4-6 locaties)
AR	rather rare assez rare vrij zeldzaam	known from < 25 % of the 4×4 km² IFBL squares (≥ 10 loc.; Mar.: ≥ 7 loc.)	connu de < 25 % des carrés IFBL de 4×4 km² (≥ 10 loc.; Mar.: ≥ 7 loc.)	bekend uit < 25 % van de IFBL-hokken van 4x4 km² (≥ 10 loc.; Mar.: ≥ 7 loc.)
AC	rather common assez commun vrij algemeen	known from 25-50 % of the IFBL squares	connu de 25-50 % des carrés IFBL	bekend uit 25-50 % van de IFBL-hokken
C	common commun algemeen	known from 50-75 % of the IFBL squares	connu de 50-75 % des carrés IFBL	bekend uit 50-75 % van de IFBL-hokken
CC	very common très commun zeer algemeen	known from 75-100 % of the IFBL squares	connu de 75-100 % des carrés IFBL	bekend uit 75-100 % van de IFBL-hokken

The IFBL squares refer to the scheme adopted by the 'Institut Floristique Belgo-Luxembourgeois' to map the distribution of Pteridophytes and Spermatophytes in Belgium, Luxembourg and surrounding areas. Its grid of 4×4 km² squares is based on the mostly used geographical maps in Belgium (the so-called IGN maps).

If a species has rarely been recorded, but is known to be more widespread, an estimation is expressed by the same abbreviation, written in *italics*. For example, *Lecanora muralis* can be considered as '*CC*' in many districts.

Les carrés IFBL correspondent au système de cartographie des Ptéridophytes et des Spermatophytes adopté par l''Institut Floristique Belgo-Luxembourgeois' pour le territoire de la Belgique, du Grand-Duché de Luxembourg et des régions limitrophes. Les carrés de 4×4 km² sont basés sur les cartes géographiques d'usage habituel en Belgique (les cartes dites IGN).

Si une espèce a été rarement inventoriée, mais est connue d'être plus répandue, une estimation est exprimée par les mêmes abréviations, mais écrite en italiques. P. ex. Lecanora muralis *peut être considéré comme étant 'CC' dans beaucoup de districts.*

De IFBL-hokken verwijzen naar het karteersysteem van het Instituut voor Floristiek van België en Luxemburg om de verspreiding van Pteridofyten en Spermatofyten weer te geven in België, Luxemburg en aangrenzende gebieden. Het raster van 4×4 km² is gebaseerd op de in België veel in gebruik zijnde topografische kaarten (zogenaamde NGI-kaarten).

Als een soort weinig is waargenomen, maar verondersteld wordt algemener te zijn, dan wordt voor een schatting dezelfde afkorting gebruikt, maar dan cursief gedrukt. Zo wordt *Lecanora muralis* verondersteld '*CC*' te zijn in veel districten.

Biology (biologie – biologie)

Lecanora muralis	a lichen	un lichen	een korstmos
(*)Buellia badia	a lichenicolous lichen	un lichen lichénicole	een lichenicool korstmos
*Arthonia varia	a lichenicolous fungus	un champignon lichénicole	een lichenicole schimmel
(+)Epigloea filifera	a doubtfully lichenized fungus	un champignon peut-être lichénisé	een twijfelachtig gelicheniseerde schimmel
+Stenocybe pullatula	a non-lichenized fungus	un champignon non lichénisé	een niet-gelicheniseerde schimmel

Status (statut – status)

Lecanora muralis	an accepted taxon	un taxon accepté	een geaccepteerd taxon
Allocetraria nivalis	taxon not accepted, or a synonym	un taxon non accepté, ou un synonyme	een niet-geaccepteerd taxon, of een synoniem

Taxa are **accepted** (printed in bold face) if they occur in **B**, **L** or **F**. Those known only from **D** or **NL** are *not accepted* (written in italics).

Des taxons sont **acceptés** *(imprimé en caractères gras), s'ils existent en* ***B***, ***L*** *ou* ***F***. *Ceux connus exclusivement en* ***D*** *ou* ***NL*** *ne sont pas acceptés (imprimé en italiques).*

Taxa zijn **geaccepteerd** (vetgedrukt), als ze in **B**, **L** of **F** voorkomen. Soorten die alleen bekend zijn uit **D** of **NL** zijn *niet geaccepteerd* (cursief gedrukt).

Species which nowadays are rarer or extinct, or have not been recorded recently (espèces en voie de raréfaction ou éteintes, ou n'ayant pas été observées récemment – soorten die zeldzamer zijn geworden, verdwenen zijn, of recent niet meer zijn gevonden)

Lorr.: AR→RR	formerly AR, now RR	autrefois AR, maintenant RR	vroeger AR, nu RR
Lorr.: RRR (1968)	last record in the Lorraine district in 1968	dernière observation dans le district lorrain en 1968	laatste vondst in het Lotharings district in 1968
Lorr.: RRR (†1968)	last record in 1968, considered to be extinct	dernière observation en 1968, considéré comme éteint	laatste vondst in 1968 en beschouwd als verdwenen
Lorr.: RRR (†<1900)	last record before 1900, considered to be extinct	dernière observation avant 1900, considéré comme éteint	laatste vondst voor 1900 en beschouwd als verdwenen
B - .	unknown from Belgium	inconnu de Belgique	niet uit België bekend

Results and discussion
(résultats et discussion – resultaten en discussie)

Number of taxa (nombre de taxons – aantal taxa)

Lichens (non-lichenicolous)	Lichens (non lichénicoles)	Korstmossen (niet lichenicool)	909
(*)Lichenicolous lichens	(*)Lichens lichénicoles	(*)Lichenicole korstmossen	21
*Lichenicolous fungi	*Champignons lichénicoles	*Lichenicole schimmels	201
(+)Doubtfully lichenized fungi	(+)Champignons peut-être lichénisés	(+)Twijfelachtig gelicheni-seerde schimmels	5
+Non-lichenized fungi	+Champignons non lichénisés	+Niet-gelicheniseerde schimmels	15
Accepted taxa	**Taxons acceptés**	**Geaccepteerde taxa**	**1,151**
Dubious taxa	*Taxons douteux*	*Dubieuze taxa*	*252*

Comparison with other European countries
(comparaison avec d'autres pays européens – vergelijking met andere Europese landen)

Country(ies)	Surface (km²)	Lichens	Lichenicolous fungi	Related fungi	Total number
Belgium, Luxembourg and N France	c. 40,000	930	201	20	1,151
The Netherlands (Aptroot et al. 1999)	41,500	706	70	11	787
Denmark (Alstrup & Søchting 1989)	43,000	915	-	-	915
British Isles (Purvis et al. 1993; Hawksworth 1983)	328,000	1,566	218	42	1,826
Finland (Vitikainen et al. 1997)	337,000	1,458	122	44	1,624
Germany (Wirth 1994)	357,000	1,674	161	-	1,835
Ukraine (Kondratyuk et al. 1998)	603,000	1,235	65	31	1,331
Sweden and Norway (Santesson 1993)	774,000	2,271	314	17	2,602

Taxa described from the study area
(taxons ayant été décrits du territoire étudié – taxa beschreven uit het onderzoeksgebied)

The following taxa have been described from the study area. As in the checklist, accepted names are printed in boldface, whilst dubious ones are printed in italics. Taxonomic synonyms are omitted.

Les taxons suivants ont été décrits du territoire étudié. Comme dans la checklist, les noms acceptés sont imprimés en caractères gras, tandis que les noms douteux sont en italiques. Les synonymes taxonomiques ont été omis.

De volgende taxa zijn beschreven uit het onderzoeksgebied. Net als in de checklist zijn geaccepteerde soorten vetgedrukt en dubieuze cursief gedrukt. Taxonomische synoniemen zijn niet opgenomen.

Taxa	Type locality
*__Abrothallus acetabuli__ Diederich	L Lorr.
__Acarospora tongletii__ (Hue) H. Olivier	B Mosan
__Agonimia vouauxii__ (B. de Lesd.) Brand & Diederich	F Mar.
__Bispora lichenum__ Diederich	L Ard.
__Byssoloma diederichii__ Sérus.	F Lorr.
__Catapyrenium subtrachyticum__ B. de Lesd.	F Mar.
__Cladonia berghsonii__ Asperges	B Ard.
__Cladonia diversa__ Asperges	B Camp.
*__Dacampia rufescentis__ (Vouaux) D. Hawksw.	F Mar.
*__Echinodiscus lesdainii__ (Vouaux) Etayo & Diederich	F Mar.
*__Endococcus protoblasteniae__ Diederich	L Lorr.
*__Feltgeniomyces luxemburgensis__ Diederich	L Lorr.
*__Fusarium peltigerae__ Westend.	B Fl.
*__Lawalreea lecanorae__ Diederich	L Ard.
Lecanora endoleuca Hue	B Mosan
Lecanora flandrica B. de Lesd.	F Mar.
Lecidea leptocline Flot. f. *tongletii* Hue	B Mosan
Lecidea spadana B. de Lesd.	B Ard.
*__Libertiella malmedyensis__ Speg. & Roum.	B Ard.
*__Lichenoconium reichlingii__ Diederich	L Lorr.
*__Lichenopeltella thelidii__ Diederich	L Lorr.
__Micarea confusa__ Coppins & van den Boom	B Camp.
*__Milospium deslooveri__ Diederich & Sérus.	B Ard.

*__Muellerella triseptata__ Diederich	L Lorr.
__Mycobilimbia hypnorum__ (Lib.) Kalb & Hafellner	B Ard.
__Opegrapha culmigena__ Lib.	B Ard.
*__Pharcidia maritima__ B. de Lesd.	F Mar.
*__Phoma lecanorina__ Diederich	L Lorr.
*__Polycoccum tinantii__ Diederich	L (distr. unknown)
*__Pronectria tenacis__ (Vouaux) Lowen	F Mar.
*__Pronectria terrestris__ Lowen & Diederich	L Lorr.
*__Pronectria verrucariae__ (Vouaux) Lowen	F Mar.
*__Pseudorobillarda peltigerae__ Diederich	B Mosan
Psorotichia tongletii B. de Lesd.	B Mosan
*__Pyrenochaeta xanthoriae__ Diederich	L Lorr.
(*)__Rhizocarpon trapeliicola__ Brand	L Ard.
__Rinodina brandii__ Giralt & van den Boom	B Ard.
*__Sclerococcum epiphytorum__ Diederich	L Ard.
*__Skyttea hawksworthii__ Diederich	L Lorr.
*__Sphaerulina intermedia__ Vouaux	F Mar.
*__Syzygospora bachmannii__ Diederich & M. S. Christ.	L Lorr.
*__Taeniolella beschiana__ Diederich	L Lorr.
*__Taeniolella chrysothricis__ Diederich	L Lorr.
*__Taeniolella trapeliopseos__ Diederich	L Lorr.
Thelidium calcareum var. *belgicum* (Hue) Zahlbr.	B Mosan
__Thelidium dionantense__ (Hue) Zschacke	B Mosan
Thelidium dionantense var. *lecideiforme* (Hue) Zahlbr.	B Mosan
Thelidium flandricum B. de Lesd.	B Fl.
Thelidium spadanum B. de Lesd.	B Ard.
Thelidium tongletii (Hue) Zahlbr.	B Mosan
*__Tremella candelariellae__ Diederich & Etayo	L Ard.
*__Tremella lichenicola__ Diederich	L Lorr.
__Trimmatothele maritima__ (B. de Lesd.) Zahlbr.	F Mar.
*__Unguiculariopsis acrocordiae__ (Diederich) Diederich & Etayo	B Lorr.
*__Unguiculariopsis lesdainii__ (Vouaux) Etayo & Diederich	F Mar.
__Verrucaria arduennica__ Zschacke	B Mosan
__Verrucaria elodes__ (Hue) Zschacke	B Mosan
__Verrucaria lignicola__ (B. de Lesd.) Zschacke	B Ard.
__Verrucaria sorbinea__ Breuss	L Lorr.
__Verrucaria subtruncatula__ B. de Lesd.	F Mar.

Species considered as extinct throughout the study area
(espèces considérées comme éteintes dans le territoire étudié – soorten die beschouwd worden als verdwenen uit het onderzoeksgebied)

The species listed here are rather conspicuous and well-known, so that we consider them as extinct throughout the study area: either no recent material has been seen or collected, or the only localities where they were found were recently sampled in vain. The dates in parentheses represent the last record for the area of study.

Les espèces énumérées ci-dessous, assez voyantes et bien connues, sont celles que nous considérons comme éteintes dans le territoire étudié: soit nous n'avons pas vu de matériel récent, soit les seules localités où elles étaient connues ont été prospectées en vain. Les dates entre parenthèses représentent la dernière mention dans le territoire étudié.

De soorten die hieronder worden genoemd, zijn tamelijk opvallend en goed bekend. Ze worden beschouwd als verdwenen uit het onderzoeksgebied: er is recent geen materiaal gezien of verzameld, of er is recent op de locaties waar ze voorkwamen tevergeefs naar gezocht. Tussen haakjes staat de datum vermeld waarop ze voor het laatst zijn gevonden.

Acrocordia cavata (Ach.) R. C. Harris (1868)
Arthonia apatetica (A. Massal.) Th. Fr. (1868)
Arthonia galactites (DC.) Dufour (1954)
Arthonia graphidicola Coppins (1850)
Arthonia fuscopurpurea (Tul.) R. Sant. (1868)
Arthonia nephromaria Nyl. (1986)
Arthonia pruinata (Pers.) A. L. Sm. (1898)
Bactrospora dryina (Ach.) A. Massal. (< 1864)
Brodoa intestiniformis (Vill.) Goward (1964)
Caloplaca ferruginea (Huds.) Th. Fr. (1962)
Caloplaca luteoalba (Turner) Th. Fr. (< 1900)
Cladina stygia (Fr.) Ruoss (1936)
Collema fragrans (Sm.) Ach. (1904)
Degelia plumbea (Lightf.) P.M. Jørg. & P. James (< 1900)
Fuscopannaria saubinetii (Mont.) P. M. Jørg. (< 1850)
Leptogium saturninum (Dicks.) Nyl. (< 1850)
Massalongia carnosa (Dicks.) Körb. (1962)
Megalaria grossa (Nyl.) Hafellner (< 1864)
Moelleropsis nebulosa (Hoffm.) Gyeln. (1902)
Ochrolechia pallescens (L.) A. Massal. (1891)
Pannaria pezizoides (Weber) Trevis. (1947)
Parmelina quercina (Willd.) Hale (< 1865)
Parmotrema crinitum (Ach.) Hale (1969)
Peltigera degenii Gyeln. (1979)
Peltigera neopolydactyla (Gyeln.) Gyeln. (1962)

Peltigera venosa (L.) Hoffm. (1977)
Phaeographis dendritica (Ach.) Müll. Arg. (< 1900)
Phaeographis smithii (Leight.) B. de Lesd. (1910)
Phaeophyscia chloantha (Ach.) Moberg (1868)
Phaeophyscia ciliata (Hoffm.) Moberg (< 1850)
Physcia clementei (Turner) Maas Geest. (1954)
Physcia semipinnata (J. F. Gmel.) Moberg (1962)
Psoroma hypnorum (Vahl) Gray (1947)
Pyrenula chlorospila Arnold (< 1868)
Pyrenula laevigata (Pers.) Arnold (< 1850)
Pyrenula macrospora (Degel.) Coppins & P. James (<1868)
Ramalina lacera (With.) J. R. Laundon (1954)
Ramalina thrausta (Ach.) Nyl. (< 1850)
Rimelia reticulata (Taylor) Hale & A. Fletcher (1961)
Sphinctrina tubiformis A. Massal. (< 1867)
Stereocaulon saxatile H. Magn. (1964)
Stereocaulon tomentosum Fr. (1962)
Sticta limbata (Sm.) Ach. (< 1896)
Sticta sylvatica (Huds.) Ach. (1923)
Teloschistes chrysophthalmus (L.) Th. Fr. (< 1900)
Usnea articulata (L.) Hoffm. (1963)
Usnea flammea Stirt. (< 1850)
Usnea madeirensis Motyka (1959)
Usnea rubicunda Stirt. (< 1900)

Distribution maps (cartes de répartition – verspreidingskaarten)

During the preparation of the present checklist, a large number of data have been accumulated, which could allow the publication of a distribution atlas of the lichens and lichenicolous fungi in Belgium, Luxembourg and northern France in the near future. Fig. 20 shows distribution maps of a selection of interesting or well-known species.

Au cours de la préparation de cette checklist, un grand nombre de données ont été accumulées, qui pourraient permettre la publication d'un atlas de répartition des lichens et champignons lichénicoles en Belgique, au Luxembourg et dans le nord de la France endéans un laps de temps raisonnable. La Fig. 20 présente des cartes de répartition d'une sélection d'espèces intéressantes ou bien connues.

Tijdens de voorbereiding van deze checklist, is een grote hoeveelheid gegevens beschikbaar gekomen. Dat maakt het in de toekomst mogelijk om een verspreidingsatlas van de korstmossen en lichenicole schimmels van België, Luxemburg en Noord-Frankrijk te maken. Fig. 20 laat de verspreiding zien van een aantal interessante of goed bekende soorten.

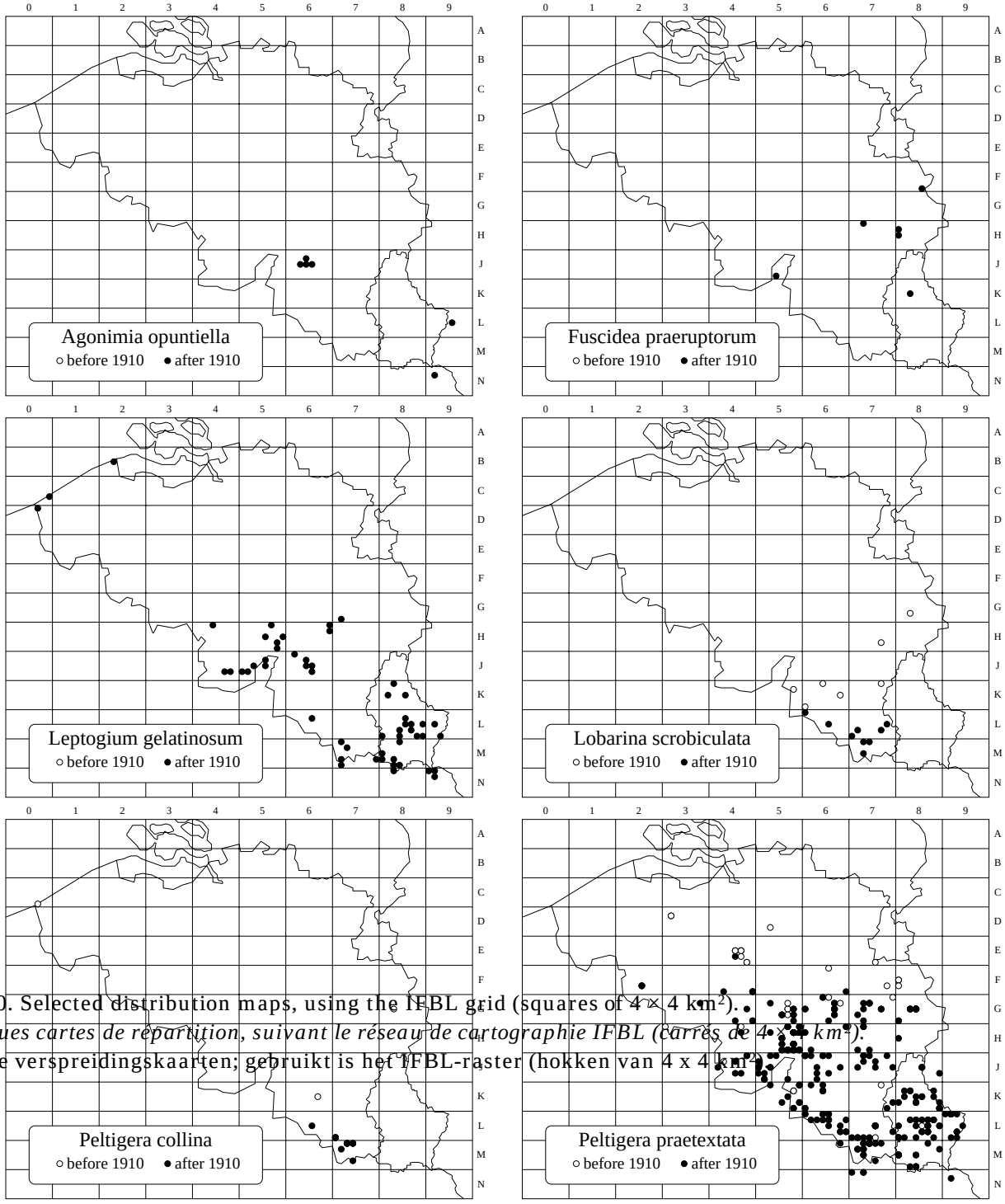


Fig. 20. Selected distribution maps, using the IFBL grid (squares of 4 × 4 km²).
Quelques cartes de répartition, suivant le réseau de cartographie IFBL (carrés de 4 × 4 km²).
Enkele verspreidingskaarten; gebruikt is het IFBL-raster (hokken van 4 x 4 km²).

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Special thanks are due to Prof. J. Lambinon for generously providing us with data and ideas; he also accepted to check the whole manuscript carefully and made many interesting suggestions.

L. Sparrius provided the Dutch translation of the introductory texts. These have been checked linguistically by Prof. B. Goffinet and L. Schley (English text) and by Prof. M. Hoffmann (Dutch text). Of course any mistake or shortcoming is our own responsibility. Prof. V. Wirth, Prof. M. Hoffmann and Prof. J. Lambinon provided excellent photographs to illustrate this volume. Prof. N. Stomp, Director of the National Museum of Natural History, Luxembourg, kindly offered to publish this work: we owe him a great debt. We also convey our thanks to S. Backes for the great artistic value of the cover of this work.

Finally we very warmly thank our wives Doris and Michèle for their continuous moral support during the preparation of this volume.

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'Koninklijke Nederlandse Natuurhistorische Vereniging' a organisé sept excursions en Belgique et au Luxembourg entre 1977 et 1999, à l'occasion desquelles la flore lichénique des localités visitées a été soigneusement compilée et par la suite publiée, procurant ainsi une importante quantité de données. Comme nos prospections de terrain se sont surtout concentrées dans les districts du SE du territoire étudié, nous apprécions beaucoup que le Prof. M. Hoffmann nous ait aimablement autorisés à utiliser les cartes très détaillées de la répartition des lichens corticoles en Flandre, disponibles dans sa thèse non publiée, et dans celles de ses étudiants.

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L. Sparrius a traduit les textes introductifs en néerlandais. Ceux-ci ont également été vérifiés par le Prof. B. Goffinet et L. Schley (textes en anglais) et par le Prof. M. Hoffmann (textes en néerlandais). Bien entendu, toute erreur ou tout manquement relève de notre seule responsabilité. Les Prof. V. Wirth, M. Hoffmann et J. Lambinon nous ont procuré d'excellentes photographies pour illustrer ce livre. Le Prof. N. Stomp, Directeur du Musée national d'histoire naturelle de Luxembourg, a aimablement offert de publier ce travail: nous lui devons beaucoup. Nous adressons également nos remerciements à S. Backes pour la grande qualité artistique de la couverture de ce travail.

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L. B. Sparrius verzorgde de Nederlandse vertaling van de inleidende tekst. De tekst is op spel- en taalfouten gecontroleerd door prof. B. Goffinet en L. Schley (Engelse tekst) en prof. M. Hoffmann (Nederlandse tekst). Natuurlijk is elke fout of tekortkoming voor onze eigen rekening. Prof. V. Wirth, prof. M. Hoffmann en prof. J. Lambinon leverden uitstekende foto's ter illustratie van deze publicatie. De directeur van het Nationaal Natuurhistorisch Museum te Luxemburg, prof. N. Stomp, bood aan dit werk te publiceren, waarvoor we hem zeer erkentelijk zijn. Ook gaat onze dank uit naar S. Backes voor het omslag-ontwerp van deze publicatie.

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The checklist

ABROTHALLUS De Not.

Anamorph: *Vouauxiomyces* Dyko & D. Hawksw.

***acetabuli** Diederich
On the thallus of *Pleurosticta acetabulum*, teleomorphic stage always present, anamorphic stage rare.
B - . **L** Lorr.: AR (type locality). **F** Lorr.: RRR.
Lit.: Di: 28, LF0: 6 (sub *A. parmeliarum*), LF1: 298-300.

***bertianus** De Not.
On *Melanelia glabratula*, teleomorphic and anamorphic stage present.
B Lorr.: RRR. **L** Ard.: RRR, Lorr.: RRR.
Lit.: Di: 29-30, L5: 4.

***microspermus** Tul.
Anamorph: *V. truncatus* (B. de Lesd.) Dyko & D. Hawksw., syn. *Phoma truncata* B. de Lesd.
On *Flavoparmelia caperata*, usually in anamorphic stage.
B Mosan: RR, Ard.: RRR. **L** Lorr.: RR. **F** Brab.: RRR (<1910, type locality of *P. truncata*). **D** Lorr.: RRR.
Lit.: BDL1: 277, Di: 30-31, LF0: 6, NL97: 44.

***parmeliarum** (Sommerf.) Arnold
On *Parmelia saxatilis*, only in teleomorphic stage.
B Ard.: RRR (1891). **L** - .
Lit.: L5: 4.

***prodiens** (Harm.) Diederich & Hafellner
On *Hypogymnia physodes*, only in teleomorphic stage.
B - . **L** Ard.: RRR.
Lit.: Di: 31, LF0: 6 (sub *A. parmeliarum*), LF1: 300-302.

***suecicus** (Kirschst.) Nordin
Anamorph: *V. ramalinae* (Nordin) D. Hawksw.
On *Ramalina farinacea*, only in anamorphic stage.
B Brab.: RRR (1964) . **L** - .
Lit.: L5: 4.

ABSCONDITELLA Vězda

fossarum Vězda & Pišút
On acidic and strongly mineralized soil, over siliceous rocks.
B - . **L** - . **F** Ard.: RRR.
Lit.: L4: 20.

ACAROSPORA A. Massal.

The genus is poorly known in the study area and requires further material and studies.

cervina A. Massal.
On calcareous rocks, in dry and sunny conditions, in natural habitats.
B - . **L** - . **F** Mosan: RRR.
Lit.: L6: 138.

fuscata (Nyl.) Arnold
Syn.: *A. squamulosa* (Schrad.) Trevis.
On siliceous and sandstone rocks, in natural and artificial (walls, slates) habitats, most abundant in exposed and nitrophilous conditions.
B Mosan: RR, Ard.: *AC*, Lorr.: RRR. **L** Ard.: *AC*, Lorr.: RR.
Lit.: Mü1: 150, Sé: 136, Magnusson (1929: 298).

glaucocarpa (Ach.) Körb.
On hard calcareous rocks in natural habitats.
B Mosan: RR, probably overlooked. **L** - .
Lit.: DG: 31, La69: 104, NL84: 11, Lambinon (1963: 227).

heppii (Hepp) Körb.
Saxicolous, on siliceous or calcareous stones, only known from artificial habitats.
B Mosan: RRR (1896), Ard.: RRR. **L** Ard.: RRR, Lorr.: RRR. **F** Mar.: RR (<1920).
Lit.: DG: 31, L7: 83, Magnusson (1929: 131).

macrospora (Hepp) Bagl.
Incl. subsp. *murorum* (A. Massal.) Clauzade & Cl. Roux
On hard calcareous rocks in sunny situations, in natural and artificial habitats.
B Mosan: R, most probably overlooked. **L** - .
Lit.: Ertz: 18, La69: 104, NL84: 11, Magnusson (1929: 335).

nitrophila H. Magn.
Syn.: *A. nitrophila* var. *praeruptorum* (H. Magn.) Clauzade & Cl. Roux, *A. praeruptorum* H. Magn.
On siliceous rocks rich in heavy metals, along a road.
B - . **L** - . **F** Ard.: RRR.
Lit.: L8, Mü1: 150.

sinopica (Wahlenb.) Körb.
On siliceous rocks rich in heavy metals, on natural outcrops and on slate debris.
B Ard.: RR. **L** - . **F** Ard.: RRR.
Lit.: L5: 4-5.

smaragdula (Wahlenb.) A. Massal.
Incl. *A. amphibola* Wedd., *A. smaragdula* var. *lesdainii* (A. L. Sm.) H. Magn. and f. *fusca* (B. de Lesd.) Clauzade & Cl. Roux, syn. *A. fusca* B. de Lesd.
On sunny, siliceous rocks in natural habitats, and on brick walls.
B Camp.: RRR, Ard.: RRR. **L** - . **F** Mar.: RR (1925, type locality of *A. fusca*), Ard.: RRR. Probably overlooked.
Lit.: DG: 31, NL93: 41, Magnusson (1929: 135-137, 145).

tongletii (Hue) H. Olivier
Syn.: *Lecanora tongletii* Hue (‘*tongleti*’)
On hard calcareous rocks in dry and sunny places.
B Mosan RRR (1894, type locality), most probably overlooked. **L** - .
This species is usually mentioned as *A. tongleti* Hue, but, to our knowledge, Hue described it in *Lecanora* and has never transferred it to *Acarospora*. Olivier (1909) seems to be the first author to have done it. The status of this species requires further studies.
Lit.: Clauzade et al. (1981: 73), Hue (1898), Magnusson (1929: 285-286).

veronensis A. Massal.
On sunny, siliceous rocks in natural habitats.
B Ard.: RR. **L** - . **F** Mar.: RR (<1920), Ard.: RRR (<1900).
Lit.: L8, Mü1: 150, Magnusson (1929: 194).

amphibola Wedd., see *A. smaragdula*

chlorophana (Wahlenb.) A. Massal., see *Pleopsidium chlorophanum*

discreta Bagl. & Carestia, see *A. freyi*

freyi H. Magn., syn. *A. discreta* Bagl. & Carestia. Reported from **L** by Ko: 193, but no specimen has been seen.

fusca B. de Lesd., see *A. smaragdula*

intricata H. Magn. Reported from **B** Ard.: RRR by De Zuttere et al. (1975), but relevant material not checked.

nitrophila H. Magn. var. *praeruptorum* (H. Magn.) Clauzade & Cl. Roux, see *A. nitrophila*

praeruptorum H. Magn., see *A. nitrophila*

rufescens (Ach.) Kremp. Reported from **B** (district unknown) by Purvis et al. (1992: 61-62), but material not available.

squamulosa (Schrad.) Trevis., see *A. fuscata*

umbilicata Bagl. Reported from **B** (Mosan and Ard.) by La69: 104 and Lambinon (1963: 230, 231), but the corresponding specimens are pruinose morphs of *A. fuscata*. Also reported from **B** Mosan by Magnusson (1929: 316-317), but relevant material not seen.

ACOLIUM (Ach.) Gray

**stigonellum* (Ach.) De Not., see *Sphinctrina turbinata*

ACREMONIUM Link

One species recorded in the study area, viz. *A. rhabdosporum*, is known to be the anamorph of a species of *Trichonectria*.

***antarcticum** (Speg.) D. Hawksw.
Isolated from *Hypogymnia physodes* and *Parmelina tiliacea*.
B - . **L** Lorr.: RR.
Lit.: Di: 236, L5: 5.

***lichenicola** W. Gams
On *Parmelia saxatilis* in humid forests.
B Brab.: RRR. **L** Lorr.: RR.
Lit.: Di: 236, Gams (1971: 135).

***persicinum** (Nicot) W. Gams
Species fortuitously lichenicolous, isolated once from *Hypogymnia physodes*.
B - . **L** Lorr.: RRR.
Lit.: Di: 236-237.

**rhabdosporum* W. Gams, see *Trichonectria rubefaciens*

ACROCORDIA A. Massal.

cavata (Ach.) R. C. Harris
Corticolous (ecology of the only collection unknown).
B Brab.: RRR (†<1868). **L** - .
Now extinct throughout the area of study.
Lit.: L5: 6.

conoidea (Fr.) Körb.
Syn.: *Arthopyrenia conoidea* (Fr.) Zahlbr.
On hard calcareous or sandstone rocks, usually in shaded and humid niches, only seen in natural habitats.
B Mosan: AR, common in suitable localities. **L** Lorr.: RRR.
Lit.: Di: 32, Ertz: 18, NL84: 11, NL87: 20.

gemmata (Ach.) A. Massal.
Syn.: *Arthopyrenia alba* (Schrad.) Zahlbr., *A. sphaeroides* (Wallr.) Zahlbr.

Corticolous, on old trunks of *Acer*, *Fraxinus*, *Populus*, *Quercus* and *Tilia*, rarely on *Fagus*, usually in stable and rather humid forests.
B Mosan: *R*, Ard.: *AR* (especially in the south), Lorr.: *AR*. **L** Lorr.: R.
Lit.: Di: 32 (sub *A. cavata*), 33, La69: 98.

salweyi (Nyl.) A. L. Sm.
Saxicolous, on a shaded sandstone rock in a forest and on an old brick wall in a city.
B Fl.: RRR. **L** Lorr.: RRR.
Lit.: L8.

macrospora A. Massal. The report of this species from **B** Fl. by Durwael (1996) is a misidentification for *A. salweyi* (L8).

ACTINOPELTIS Höhn.

**peltigericola* D. Hawksw., see *Lichenopeltella peltigericola*

ADELOCOCCUS Theiss. & Syd.

***alpestris** (Zopf) Theiss. & Syd.
On *Acarospora fuscata*.
B Mosan: RRR (1889). **L** - .
Lit.: L8.

AECIDIUM Pers.

**peltigerae* DC., see *Illosporium carneum* under *Pronectria*

AGONIMIA Zahlbr.

allobata (Stizenb.) P. James
Syn.: *Polyblastia allobata* (Stizenb.) Zschacke
Epiphytic, on *Acer*, *Aesculus* and *Quercus* in humid and well-preserved forests or along streams.
B Mosan: RR, Lorr.: RR. **L** Lorr.: RR.
Lit.: Di: 195-196, L5: 37, L7: 83, NL84: 11, NL97: 44, Tholl et al. (1999).

globulifera Brand & Diederich
On calcareous soil, over lichens, mosses or detritus, often in Mesobromion or Xerobromion communities, also in crevices of hard calcareous rocks.
B Mosan: AR, Ard.: RRR, Lorr.: RRR. **L** Lorr.: RR. **F** Lorr.: RR. Probably overlooked.
Lit.: Ertz: 18, L8.

opuntiella (Buschardt & Poelt) Vězda
Syn.: *Physcia opuntiella* Buschardt & Poelt
On mosses and soil over calcareous rocks in Xerobromion communities, often with *A. tristicula*.
B Mosan: R. **L** Lorr. (Moselle): RRR. **F** Lorr. (Moselle): RRR.
The specimen from **F** Lorr. is fertile.
Lit.: NL97: 14-15.

tristicula (Nyl.) Zahlbr.
On calcareous rocks or on soil, often over mosses, in natural and artificial (walls) habitats, exceptionally epiphytic (on *Alnus*, *Sorbus*).
B Mar.: RRR, Mosan: *AR-AC*, Ard.: RR, Lorr.: RRR. **L** Ard.: RR, Lorr.: RR. **F** Lorr.: RRR.
Lit.: Ertz: 32, L4: 20, L7: 84, NL84: 11, NL87: 20, NL92: 167.

vouauxii (B. de Lesd.) Brand & Diederich
Syn.: *Polyblastia vouauxii* B. de Lesd., incl. var. *charticola* B. de Lesd.
Terricolous, over mosses and plant debris, also on leather and paper, in dunes and over calcareous rocks.
B Mar.: RRR, Mosan: RRR. **L** - . **F** Mar.: RRR (1910, type locality). Probably overlooked.
Lit.: BDL1: 259, L8, Zschacke (1934: 503).

ALECTORIA Ach.

bicolor (Ehrh.) Nyl., see *Bryoria bicolor*

chalybeiformis (L.) Gray, see *Bryoria chalybeiformis*

fuscescens Gyeln., see *Bryoria fuscescens*

implexa (Hoffm.) Nyl., see *Bryoria implexa*

jubata auct., non (L.) Ach., nom. conf., see *Bryoria fuscescens*

prolixa auct., non (Hoffm.) Brodo & D. Hawksw., see *Bryoria fuscescens*

sarmentosa (Ach.) Ach. The report of this species from **L** by Ko: 106 is not supported by any herbarium material, and is therefore most doubtful.

AMANDINEA Scheid. & H. Mayrhofer

punctata (Hoffm.) Coppins & Scheid., see *Buellia punctata*

AMPHILOMA Nyl.

lanuginosum (Ach.) Nyl., see *Leproloma membranaceum*

ANAPTYCHIA Körb.

ciliaris (L.) A. Massal.
Syn.: *Physcia ciliaris* (L.) DC.

On old roadside trees with a bark rich in dust, often on *Fraxinus*, decreasing.
B Fl.: RR, Camp.: RR (1956), Brab.: AR (†<1900), Mosan: AR→RR, Ard.: AR→RR, Lorr.: AC→AR. **L** Ard.: RR, Lorr.: AC.
Lit.: Ho: 101, 563, L4: 20, La66: 484, WS: 29-31, 64.

crinalis (Schleich.) Vězda. Reported from **B** by DG: 39 and from **L** by Ko: 160, but no material seen; most probably a misidentification.

fusca (Huds.) Vain., see *A. runcinata*

runcinata (With.) J. R. Laundon, syn. *A. fusca* (Huds.) Vain. Reported from **B** by DG: 39, but no material seen.

ANEMA Forssell

decipiens (A. Massal.) Forssell
On exposed limestone outcrops, submitted to periodic flushing.
B Mosan: RR. **L** - . **F** Mosan: RRR.
Lit.: L8.

tumidulum Henssen ined.
Syn.: *A. moedlingense* auct., non Zahlbr., *A. nummularium* auct. p. p., non (Durieu & Mont.) Nyl.
On dry and sunny calcareous rocks, submitted to periodic flushing.
B Mosan: RR. **L** - . **F** Mosan: RRR.
Lit.: DG: 19, Ertz: 18, 26, L8, NL84: 11.

moedlingense auct., non Zahlbr., see *A. tumidulum*

nummularium auct. p. p., non (Durieu & Mont.) Nyl., see *A. tumidulum*

ANISOMERIDIUM (Müll. Arg.) M. Choisy

biforme (Borrer) R. C. Harris
Syn.: *Arthopyrenia biformis* (Borrer) A. Massal.
Corticolous, mostly on *Fraxinus* and *Salix*, in humid forests.
B Mar.: RR, Fl.: R (†<1868), Mosan: RR, Ard.: RRR (†<1865). **L** - .
Lit.: L5: 6-7.

+**macrocarpum** (Körb.) V. Wirth
Corticolous, mainly on *Acer*, in forests.
B Mosan: RR, Ard.: RR, Lorr.: RRR. **L** - .
Lit.: L7: 83, NL84: 11, NL97: 44.

polypori (Ellis & Everh.) M. E. Barr
Syn.: *A. juistense* (Ellis & Everh.) R. C. Harris, *A. nyssaegenum* (Ellis & Everh.) R. C. Harris
Corticolous or lignicolous, most frequent on *Sambucus*, often in rather humid localities, including ruderal ones.
B Mar.: RR, Brab.: RR, Mosan: AR, Ard.: RR, Lorr.: *AR*. **L** Ard.: R, Lorr.: R.
Lit.: Ho: 101, 102, 563, L4: 21, NL84: 11, NL92: 149, Hoffmann & Van Rompu (1995).

juistense (Ellis & Everh.) R. C. Harris, see *A. polypori*

nyssaegenum (Ellis & Everh.) R. C. Harris, see *A. polypori*

ARCTOPARMELIA Hale

incurva (Pers.) Hale
Syn.: *Parmelia incurva* (Pers.) Fr., *Xanthoparmelia incurva* (Pers.) Hale
On siliceous rocks in natural (scree) and artificial (slate rubbles) habitats.
B Ard.: RR (known only near Vielsalm). **L** - .
Lit.: La66: 434, Lambinon & Sérusiaux (1985b: 208).

ARTHONIA Ach.

apatetica (A. Massal.) Th. Fr.
Corticolous (ecology of the only collection unknown).
B Fl.: RRR (†<1868). **L** - .
Now extinct throughout the area of study.
Lit.: L5: 7-8.

arthonioides (Ach.) A. L. Sm.
Syn.: *Trachylia arthonioides* (Ach.) Fr., *A. aspersa* Leight.
Saxicolous, on natural sandstone outcrops, or corticolous, on *Fagus* or *Quercus* in forests, always in rather sheltered conditions.
B - . **L** Lorr.: RR.
Lit.: Di: 35-36, L3: 26.

byssacea (Weigel) Almq.
On bark of old *Quercus* in well-preserved forests.
B - . **L** Lorr.: R.
All specimens from the study area are sterile, only producing pycnidia.
Lit.: Di: 36-37, L5: 8, Tholl et al. (1999).

cinnabarina (DC.) Wallr.
Syn.: *A. gregaria* (Weigel) Körb., incl. var. *anerythraea* Nyl. and var. *pruinata* Delise
Corticolous, mainly on smooth bark (*Carpinus*, *Corylus*, *Fraxinus*) in shaded and humid forests.
B Mosan: RRR, Ard.: RR (mainly in the south), Lorr.: RR. **L** Distr. unknown: RR (†<1850). **F** Mar.: RR (†1910), Brab.: RRR (†1910).
Lit.: BDL1: 226-227, DG: 17, Di: 37-38, NL84: 11.

didyma Körb.
On smooth bark of *Carpinus*, *Fagus* and *Fraxinus* in forests.
B Mosan: R, Ard.: RR. **L** Ard.: RR, Lorr.: R. Probably overlooked.
Lit.: Di: 38, L5: 8, NL84: 11, NL92: 167.

elegans (Ach.) Almq.
On *Buxus* twigs in a shaded small valley.
B Mosan: RRR. **L** - .
Also reported from **B** Fl. (<1900), but relevant material not found.
Lit.: van den Boom & Sérusiaux (1996: 22).

endlicheri (Garov.) Oxner
On sheltered outcrops, mainly in dry underhangs of siliceous and sandstone rocks, exceptionally on the protected base of trees.
B Mosan: RRR, Ard.: AR (Semois valley). **L** Lorr.: R.
Lit.: L8.

***excentrica** Th. Fr.
On *Leproloma vouauxii* on *Malus* in an orchard.
B - . **L** Lorr: RRR.
Lit.: L6: 138.

***fuscopurpurea** (Tul.) R. Sant.
On *Peltigera*.
B Ard.: RRR (†1868). **L** - .
Now extinct throughout the area of study.
Lit.: Goffinet et al. (1995: 200).

galactites (DC.) Dufour
Corticolous, mainly on the smooth bark of *Populus* in Xanthorion communities.
B Fl.: R (†1895), Mosan: RRR (†1848), Ard.: RRR (†<1865). **L** Distr. unknown: RRR (†<1850). **D** Lorr.: RRR (†1954).
Now extinct throughout the area of study.
Lit.: Di: 39-40, L5: 8-9, Mü5: 23.

***graphidicola** Coppins
On *Graphis scripta*.
B - . **L** Distr. unknown: RRR (†<1850).
Now extinct throughout the area of study.
Lit.: Di: 40, L5: 9.

lapidicola (Taylor) Branth & Rostr.
Syn.: *Coniangium fuscum* (A. Massal.) A. Massal., *C. rupestre* Körb.
On mortar in ruderal conditions, on vertical stones of a bridge, on gravestones, etc.
B Camp.: RR, Mosan: RR. **L** Ard.: RRR, Lorr.: RRR, most probably widespread.
Lit.: L6: 138-139, NL93: 41, Coppins & van den Boom (1995: 89).

***molendoi** (Frauenf.) R. Sant.
On *Caloplaca aurantia*, *C.* cf. *decipiens* and *C. saxicola*.
B - . **L** Ard.: RRR, Lorr. (Moselle): RRR. **F** Lorr. (Moselle): RRR.
Lit.: L8.

muscigena Th. Fr.
Syn.: *A. leucodontis* (Poelt & Döbbeler) Coppins, *Catillaria melanobola* f. *frullaniae* B. de Lesd.
On bark of *Malus*, *Salix* and *Ulmus* in ± ruderal conditions, often over corticolous mosses, also overgrowing the thalli of *Woessia chloroticula* on living leaves of *Buxus*.
B Mosan: RR, Ard.: RR. **L** Lorr.: RRR. **F** Mar.: RRR (type locality of *C. melanobola* f. *frullaniae*).
Lit.: Di: 41, L5: 9-10, NL84: 11, NL97: 44, Coppins (1989: 203), Sérusiaux (1996: 220), van den Boom & Sérusiaux (1996: 21).

***nephromaria** Nyl.
On *Nephroma laevigatum*.
B Ard.: RRR (†1986). **L** - .
Now extinct throughout the area of study.
Lit.: L7: 84.

***phaeophysciae** Grube & Matzer
Syn.: *A. epiphyscia* auct. p. p., non Nyl.
On *Phaeophyscia orbicularis*.
B Brab.: RRR. **L** Lorr.: RR. **F** Mar.: RRR (<1912).
Lit.: Di: 38-39, L8, LF0: 7, Vouaux (1912-14: 159).

pruinata (Pers.) A. L. Sm.
Syn.: *A. impolita* (Hoffm.) Borrer
Corticolous, mainly on old trees of *Quercus*.
B Fl.: RRR (†1850), Mosan: RRR (†1898). **L** - .
Now extinct throughout the area of study.
Lit.: L5: 9.

punctiformis Ach.
Syn.: *A. populina* A. Massal.
On twigs of *Acer*, *Alnus*, *Carpinus* and *Fagus*, in rather open habitats.
B Mosan: RR, Ard.: R, Lorr.: RRR. **L** Ard.: RR, most probably widespread.
Lit.: Mü1: 141, NL84: 11, NL92: 149, NL97: 44.

radiata (Pers.) Ach.
Syn.: *A. astroidea* Ach., *A. vulgaris* (Schaer.) Körb.
Corticolous, on smooth bark, mainly on *Carpinus* and *Corylus*, rarely on *Fagus*, *Fraxinus* or other trees, generally in shaded forests (incl. coppices).

B Mar.: RR, Fl.: RRR, Camp.: RR, Brab.: RRR, Mosan: AR, Ard.: R. **L** Ard.: AR-AC, Lorr.: AR-AC, most probably widespread.
Lit.: Ba: 8, Di: 41-42, Ho: 101, 103, 563, NL84: 11.

spadicea Leight.
Corticolous, mostly on the smooth bark at the base of old *Quercus* in shaded forests, rarely on the bark of *Corylus* and other trees.
B Mar.: RRR, Fl.: RR, Mosan: R, Ard.: AR (locally common), Lorr.: R. **L** Ard.: R, Lorr.: AC.
Lit.: Di: 42, Ho:101, 104, 564, NL84: 11.

***vagans** Almq. var. **lecanorina** Almq.
On *Lecanora albescens* and *L. dispersa* on a concrete fence post.
B - . **L** Lorr.: RRR.
Lit.: L8.

***varia** (Tul.) Jatta
Syn.: *Celidium varium* (Tul.) A. Massal.
On *Xanthoria parietina*.
B - . **L** - . **F** Mar.: RRR (<1912).
Lit.: Vouaux (1912-14: 171-172).

vinosa Leight.
Syn.: *A. lurida* auct., non Ach., *Coniangium luridum* auct., non (Ach.) Fr.
Corticolous, on old and rough bark of *Quercus*, in shaded forests.
B Mosan: R, Ard.: AR-AC (locally common), Lorr.: *AR* (locally common). **L** Ard.: AC, Lorr.: AC (but absent in the SW part).
Lit.: Di: 43, La68: 72, NL84: 11.

aspersa Leight., see *A. arthonioides*

astroidea Ach., see *A. radiata*

clemens* (Tul.) Th. Fr., syn. *Coniangium clemens* (Tul.) Körb., *Conida clemens* (Tul.) A. Massal. This species was reported from **L by Ko: 292, but no specimen has been seen.

dispersa (Schrad.) Nyl., syn. *A. minutula* (Nyl.) Arnold. Reported from **B** by DG: 17, but material not checked.

epiphyscia* Nyl., syn. *Conida epiphyscia* (Nyl.) Arnold. Reported from **F Mar. on *Physconia perisidiosa* by Bouly de Lesdain (1914: 156), but no specimen seen.

**epiphyscia* auct. p. p., non Nyl., see *A. phaeophysciae*

fuliginosa (Turner & Borrer) Flot. The ancient report of this rare species from **L** Lorr. by Ko: 287 is not sustained by any specimen, and is therefore most doubtful.

glaucomaria* Nyl., syn. *Celidium varians* ('Nyl.') Arnold. This species was reported from **L by Ko: 291 and from **F** Mar. by Bouly de Lesdain (1914: 156), but no specimen has been seen.

gregaria (Weigel) Körb., see *A. cinnabarina*

impolita (Hoffm.) Borrer, see *A. pruinata*

leucodontis (Poelt & Döbbeler) Coppins, see *A. muscigena*

leucopellaea (Ach.) Almq. Reported from **B** by DG: 17, but relevant material not seen.

lurida auct., non Ach., see *A. vinosa*

macularis Chevall., incl. var. *conglomerata* Mörat. Reported from **B** by DG: 17, but no material seen. A name of uncertain application; perhaps *Arthonia macularis* (Ach.) H. Olivier, a synonym of the non-lichenized *Ascodichaena rugosa* Butin, fide Santesson (1993: 18).

minutula (Nyl.) Arnold, see *A. dispersa*

populina Ach., see *A. punctiformis*

vulgaris (Schaer.) Körb., see *A. radiata*

ARTHOPYRENIA A. Massal.

+**analepta** (Ach.) A. Massal.
Syn.: *A. lapponina* Anzi, *A. fallax* (Nyl.) Arnold, incl. var. *punctata* Mong.
Corticolous, on the smooth bark of young trees, mainly *Carpinus*, *Corylus*, *Quercus* and *Sorbus* in forests.
B Fl.: RRR (†<1868), Mosan: RR, Ard.: R, Lorr.: RR. **L** Ard.: RR, Lorr.: RRR. Most probably overlooked.
Lit.: DG: 15, Di: 44-45, L5: 11, Mü1: 140, NL84: 12, NL92: 167, NL97: 44.

+**cinereopruinosa** (Schaer.) A. Massal.
Corticolous, on *Buxus* and *Populus* in rather open situations.
B Mosan: RR. **L** - .
Lit.: L5: 10.

salicis A. Massal.
Corticolous, on smooth bark; the recent collection on *Carpinus* along a stream.
B Mosan: RRR (†1899). **L** Ard.: RRR. Most probably overlooked.
Lit.: L5: 13, L8.

alba (Schrad.) Zahlbr., see *Acrocordia gemmata*

+*analepta* auct., non (Ach.) A. Massal., see *Naetrocymbe punctiformis*

antecellans (Nyl.) Arnold, see *Mycoporum antecellans*

biformis (Borrer) A. Massal., see *Anisomeridium biforme*

cerasi (Schrad.) A. Massal. Reported from **B** by DG: 15 and **L** by Ko: 315, but no material seen.

conoidea (Fr.) Körb., see *Acrocordia conoidea*

epidermidis (Ach.) A. Massal., see *Leptorhaphis epidermidis*

fallax (Nyl.) Arnold, see *A. analepta*

+*fraxini* A. Massal., see *Naetrocymbe fraxini*

+*fumago* (Wallr.) Mudd, see *Naetrocymbe rhyponta*

halodytes (Nyl.) Arnold, see *Pyrenocollema halodytes*

kelpii Körb., see *Pyrenocollema halodytes*

lapponina Anzi, see *A. analepta*

**microspila* Körb., see *Stigmidium microspilum*

+*punctiformis* auct., non A. Massal., see *Naetrocymbe punctiformis*

+*rhyponta* (Ach.) A. Massal., see *Naetrocymbe rhyponta*

+*saxicola* A. Massal., see *Naetrocymbe saxicola*

sphaeroides (Wallr.) Zahlbr., see *Acrocordia gemmata*

stenospora Körb. The report of this species from **L** Lorr. by Ko: 314 is not sustained by any herbarium material, and is therefore doubtful.

ARTHOTHELIUM A. Massal.

ruanum (A. Massal.) Körb.
Syn.: *A. dispersum* auct., non (DC.) Mudd
Corticolous, usually on smooth bark (*Carpinus*, *Corylus*, young *Fraxinus*, etc.) in shaded and humid forests.
B Mosan: R, Ard.: R, Lorr.: RR. **L** Lorr.: RR.
Lit.: Di: 46, L4: 21, NL84: 12, NL92: 167, NL97: 44.

dispersum auct., non (DC.) Mudd, see *A. ruanum*

spectabile A. Massal. Reported from **B** by DG: 17 and from **L** Lorr by Ko: 286 and Feltgen (1899: 100-101), but no material seen.

ARTHRORHAPHIS Th. Fr.

citrinella (Ach.) Poelt
Syn.: *A. flavovirescens* (Dicks.) Th. Fr., *Bacidia flavovirescens* (Dicks.) Anzi var. *citrinella* (Ach.) Vain.
On rocks, mosses or soil, never lichenicolous in the study area.
B Ard.: R, Lorr.: RRR. **L** Ard.: RRR, Lorr.: RRR. **F** Ard.: RRR.
Lit.: L6: 139, NL87: 20, Vanek (1976: 143).

(*)**grisea** Th. Fr.
Initially lichenicolous on *Baeomyces rufus*, rarely *B. placophyllus*, later forming an independent thallus.
B Ard.: AR. **L** Lorr.: RR.
Lit.: L6: 139.

***olivaceae** R. Sant. & Tønsberg
On *Melanelia disjuncta* (thallus).
B Ard.: RRR. **L** - .
Lit.: L8.

flavovirescens (Dicks.) Th. Fr., see *A. citrinella*

ARTHROSPORUM A. Massal.

accline (Flot.) A. Massal., see *A. populorum*

populorum A. Massal., syn. *A. accline* (Flot.) A. Massal. The report from **L** by Ko: 269-270 is most doubtful, as no specimen has been seen.

ASPICILIA A. Massal.

The genus is poorly known in the study area and requires further material and studies. The taxonomy of the genus is still poorly understood at world level.

aquatica Körb.
On siliceous rocks, submerged in rivers.
B Ard.: R. **L** Ard.: RRR.
Lit.: Mü1: 150, NL92: 149.

caesiocinerea (Malbr.) Arnold
Syn.: *Lecanora caesiocinerea* Malbr.
On siliceous rocks, especially common in nitrophilous conditions, in natural and artificial habitats.
B Mosan: R, Ard.: *C* (locally common), Lorr.: RRR. **L** Ard.: *C*.
Lit.: La69: 105, Mü1: 151, NL84: 12, NL92: 149-150.

calcarea (L.) Mudd
Syn.: *Lecanora calcarea* (L.) Sommerf.
On hard calcareous rocks in natural habitats, rarely on sandstone rocks, and on artificial substrata (walls, stonework in cemeteries, etc.).
B Fl.: RR, Brab.: RR, Mosan: *CC*, Ard.: RRR. **L** Lorr.: R.
Lit.: Ertz: 18, La69: 105, Mü1: 151, NL84: 12, NL92: 167, VGH: 114, Hoffmann & Van Rompu (1995), Zwaenepoel et al. (1994: 37).

cinerea (L.) Körb.
Syn.: *Lecanora cinerea* (L.) Sommerf.
On siliceous rocks, in exposed conditions, in natural and artificial habitats.
B Mosan: RR, Ard.: *AC*. **L** - .
Lit.: DG: 32, La69: 105, Mü1: 151.

contorta (Hoffm.) Kremp. subsp. **contorta**
Incl. *A. viridescens* (A. Massal.) Kremp.
On hard calcareous rocks and in artificial habitats (concrete, walls, etc.).
B Fl.: RR, Camp.: RR, Brab.: RR, Mosan: *AC* (locally common), Ard.: RRR. **L** Lorr.: *AR*.
Lit.: Ertz: 18, La69: 105, NL84: 12, NL92: 167, NL93: 42, Hoffmann & Van Rompu (1995).

contorta subsp. **hoffmanniana** S. Ekman & Fröberg
Syn.: *A. hoffmannii* auct., non (Ach.) Flagey
On hard calcareous rocks and in artificial habitats (concrete, walls, etc.).
B Fl.: RRR, Brab.: RR, Mosan: *AC* (locally common). **L** Lorr.: *AR*.
Lit.: DG: 32, Ertz: 18, La69: 105, NL84: 12, NL87: 20.

gibbosa (Ach.) Körb.
Syn.: *Lecanora gibbosula* H. Magn.
On siliceous rocks in exposed, natural habitats.
B - . **L** - . **F** Ard.: RRR.
Lit.: L5: 13 (as *A. gibbosula*), Mü1: 151 (**B** Ard., not checked).

moenium (Vain.) G. Thor & Timdal
Syn.: *A. excavata* G. Thor & Timdal
On concrete in ruderal conditions.
B - . **L** Ard.: RRR. Probably overlooked.
Lit.: L7: 84.

recedens (Taylor) Arnold
On siliceous rocks in natural and artificial habitats.
B Ard.: RRR. **L** Ard.: RR.
Lit.: L7: 84, Remy (1979).

cupreogrisea (Th. Fr.) Hue, syn. *Lecanora cupreogrisea* Th. Fr. Mentioned from **B** Ard. by Mü1: 151 and Mü2: 196 ('det. H. Magnusson'), but no specimen seen.

Lecanora endoleuca Hue. A name of uncertain application. The type originating from **B** Mosan (near Dinant) (Hue 1898, Tonglet 1898) has not been examined recently.

excavata G. Thor & Timdal, see *A. moenium*

grisea Arnold. Reported from **B** Ard: RRR by Remy (1979), but in need of confirmation. Relevant specimen not seen.

hoffmannii auct., non (Ach.) Flagey, see *A. contorta* subsp. *hoffmanniana*

lacustris (With.) Th. Fr., see *Ionaspis lacustris*

laevata (Ach.) Arnold, syn. *Lecanora laevata* (Ach.) Nyl. Published as *L.* cf. *laevata* from **B** Ard. by Mü1: 151, but no specimen seen.

morioides Arnold, see *Clauzadeana macula*

radiosa (Hoffm.) Poelt & Leuckert, see *Lobothallia radiosa*

subdepressa (Nyl.) Arnold, syn. *Lecanora subdepressa* Nyl. Reported from **B** by DG: 32, but no material seen.

viridescens (A. Massal.) Kremp., see under *A. contorta* subsp. *contorta*

ASTROPLACA Bagl.

opaca (Fr.) Bagl., see *Placolecis opaca*

ATHELIA Pers.

***arachnoidea** (Berk.) Jülich
Corticolous, mainly in polluted areas, normally parasitic on epiphytic algae and ubiquitous lichens like *Lecanora conizaeoides*.
B Fl.: RRR, Mosan, Ard., Lorr.: *CC*. **L** Ard.: CC, Lorr.: CC.
Lit.: Di: 230-231, LF0: 2.

BACIDIA De Not.

absistens (Nyl.) Arnold
Corticolous, on *Fagus* in old humid forest.
B Ard.: RRR. **L** - .
Lit.: L2: 91.

arceutina (Ach.) Arnold
Corticolous, mainly on *Acer campestre*, *Fraxinus* and *Populus* in forests in sheltered conditions, or on roadside trees in ± exposed conditions.
B Mosan: R, Ard.: R, Lorr.: *AR*. **L** Ard.: RR, Lorr.: RRR. **F** Ard.: RRR, Lorr.: RR, probably widespread and more common.
Lit.: Di: 48-49, L2: 92, NL84: 12, NL92: 167, NL97: 44, van den Boom & Sérusiaux (1996: 22).

bagliettoana (A. Massal. & De Not.) Jatta
Syn.: *B. muscorum* (Ach.) Mudd
Over mosses and plant debris on calcareous rocks.
B Mosan: AR. **L** Lorr.: AR.
Lit.: Di: 47, Ertz: 18, NL84: 12.

beckhausii Körb.
Corticolous, always on *Fraxinus*, in well-preserved forests.
B Lorr.: *R*. **L** - .
Lit.: L2: 92.

biatorina (Körb.) Vain.
Corticolous, mainly on old *Quercus*, usually in well-preserved forests, rarely along roads.
B Mosan: RRR, Ard.: *AR*, Lorr.: *AR*. **L** Lorr.: RR. **F** Lorr.: RR.
Lit.: Di: 50-51, L2: 92, NL92: 168.

carneoglauca (Nyl.) A. L. Sm.
On calcareous and siliceous rocks and on roots of *Acer*, *Alnus* and *Populus*, always at water level by rivers and thus completely immersed during winter floods.
B Mosan: RRR, Ard.: RRR. **L** - .
Lit.: NL97: 15-16.

circumspecta (Vain.) Malme
Corticolous, on *Fagus* and *Quercus* in well-preserved old forests.
B Ard.: RRR, Lorr.: RRR. **L** - .
Lit.: NL97: 16.

fuscoviridis (Anzi) Lettau
On sandstone and calcareous rocks in sheltered and shaded habitats.
B Mosan: AR. **L** Lorr.: RR. **F** Lorr. (Moselle): RRR. Probably overlooked.
Most collections are sterile.
Lit.: Ertz: 18, NL84: 12, NL92: 150, NL97: 44.

hemipolia (Nyl.) Malme
Corticolous, on *Quercus*, often in forests.
B Mosan: RR, Ard.: RR. **L** Ard.: RR. Probably overlooked.
Lit.: L6: 139-140, NL84: 12, NL92: 168, NL97: 44.

herbarum (Stizenb.) Arnold
On soil, mosses and plant detritus over calcareous rocks.
B Mosan: RRR. **L** - . **F** Lorr. (Moselle): RRR.
Lit.: NL97: 16.

rosella (Pers.) De Not.
Corticolous, on an old trunk of *Quercus* in a well-preserved old forest, and on *Acer platanoides* in a ravine-forest in a deep valley.
B Ard.: RRR. **L** Lorr.: RRR.
Lit.: Di: 54, L3: 26, L8.

rubella (Hoffm.) A. Massal.
Syn.: *B. luteola* (Ach.) Mudd
Corticolous, mainly on *Acer*, *Fraxinus*, *Malus*, *Quercus* and *Salix* in ± sheltered conditions.
B Mar.: RRR, Fl.: RR, Mosan: R, Ard.: AR, Lorr.: R. **L** Ard.: R, Lorr.: AC.
Lit.: Di: 55, Ho: 101, 104, 564, La68: 74, NL84: 12.

subincompta (Nyl.) Arnold
Corticolous, on *Fagus* or *Quercus*, mainly in well-preserved old forests.
B Mosan: RR, Ard.: R, Lorr.: RR. **L** Lorr.: RR.
Lit.: L3: 26, NL84: 12, NL97: 45.

trachona (Ach.) Lettau
In shaded and sheltered underhangs of calcareous or siliceous rock, also in deep crevices at the base of trunks and on exposed roots of trees, often by rivers at water level.
B Mosan: RR, Ard.: R. **L** - .
Lit.: NL97: 17.

viridifarinosa Coppins & P. James
Corticolous, generally on the smooth bark of very old *Quercus* trees in ancient woodlands, also on *Ulmus*, rarely saxicolous, on siliceous rocks along streams.
B Mosan: RR. **L** Lorr.: RR.
Lit.: Di: 56-56, NL92: 168, NL97: 45, Coppins et al. (1992: 355), Giralt & van den Boom (1996).

accedens (Arnold) Lettau, see *Mycobilimbia sabuletorum*

albescens (Stizenb.) Bausch, see *Bacidia phacodes* under *Woessia*

antricola Hulting. Reported from **B** Mosan by BDL2: 40-41, but relevant material not seen. A name of uncertain application.

arnoldiana Körb., see *Woessia arnoldiana*

assulata (Körb.) Vězda, syn. *B. intermedia* (Stizenb.) Arnold. Reported from **B** Mosan by NL77: 19, but no relevant specimen seen.

caligans (Nyl.) A. L. Sm., see *Woessia caligans*

chlorococca (Stenh.) Lettau, see *Scoliciosporum chlorococcum*

chloroticula (Nyl.) A. L. Sm., see under *Woessia*

cuprea (A. Massal.) Lettau, see *Lecania cuprea*

delicata (Leight.) Coppins, see *Woessia delicata*

egenula (Nyl.) Arnold, see under *Woessia*

endoleuca auct., non (Nyl.) Kickx, see *Bacidia laurocerasi*

epixanthoides (Nyl.) Lettau, see *Biatora epixanthoides* under *Mycobilimbia*

flavovirescens (Dicks.) Anzi var. *citrinella* (Ach.) Vain., see *Arthrorhaphis citrinella*

fraxinea Lönnr. Reported from **L** Lorr. by Feltgen (1902: 180), but no specimen seen.

friesiana (Hepp) Körb. Reported from **B** Mosan (Weillen near Dinant) on *Sambucus* by BDL2: 40, but relevant material not seen.

globulosa (Flörke) Hafellner & V. Wirth, see *Lecania globulosa*

gorgonea Vězda & Poelt, see *Fellhaneropsis myrtillicola*

incompta (Borrer) Anzi. Reported from **B** by DG: 23 and from **L** by Ko: 235, but relevant material not seen.

intermedia (Stizenb.) Arnold, see *B. assulata*

inundata (Fr.) Körb., see *Woessia inundata*

laurocerasi (Duby) Zahlbr., syn. *Bacidia endoleuca* auct., non (Nyl.) Kickx. Reported from **B** by DG: 22, but no material seen.

lignaria (Ach.) Lettau, see *Micarea lignaria* var. *lignaria*

luteola (Ach.) Mudd, see *B. rubella*

mitescens (Nyl.) Sandst. This taxon was reported by Mü3: 43 (as *B.* cf. *m.*) from **B** Ard., but no specimen has been seen. A name of uncertain application.

muscorum (Ach.) Mudd, see *B. bagliettoana*

naegelii (Hepp) Zahlbr., see *Lecania naegelii*

neglecta Vězda, see *Bacidia chloroticula* under *Woessia*

neosquamulosa Aptroot & van Herk, see under *Woessia*

phacodes Körb., see under *Woessia*

propinqua (Stizenb.) Arnold. The report from **L** by Ko: 235 as a parasitic saxicolous lichen is most dubious as the species is said to be epiphytic (Nimis 1993: 112). Relevant specimen not seen.

sabuletorum (Schreb.) Lettau, see *Mycobilimbia sabuletorum*

saxenii Erichsen, see under *Woessia*

subfuscula (Nyl.) Th. Fr. Reported from **B** by DG: 23, but relevant material not seen.

subtilis (Vězda) Diederich & Sérus., see *Fellhanera subtilis*

ternaria (Nyl.) Lettau, see *Micarea ternaria*

triseptata (Hellb.) Zahlbr., see *Micarea peliocarpa*

umbrina (Ach.) Bausch, see *Scoliciosporum umbrinum*

vezdae Coppins & P. James, see *Fellhaneropsis vezdae*

viridescens (A. Massal.) Hellb. This species was incorrectly reported from **B** Mosan by NL84: 12 (the relevant specimen requires further investigations), but is known from **NL** Camp. (L6: 140).

BACIDINA Vězda, see *Woessia*

BACTROSPORA A. Massal.

dryina (Ach.) A. Massal.
On the bark of an old *Quercus*.
B Fl.: RRR (†<1864). **L** - .
Now extinct throughout the area of study.
Lit.: L5: 15.

BAEOMYCES Pers.

callianthus Lettau
On peaty soil in heathland.
B Ard.: RRR (1965). **L** - .
Lit.: L6: 140, La66: 305-307.

placophyllus Ach.
On peaty soil and humus-rich gravel, sometimes over mosses on slate rubbles.
B Ard.: RR (AR in Haute Ard.). **L** - .
Lit.: La66: 297-299, NL77: 19, Sé: 137.

rufus (Huds.) Rebent.
Syn.: *B. byssoides* (L.) Gaertn.
On peaty or humus-rich soil, or directly on soil or siliceous stones or rocks, usually in recently disturbed places.
B Camp.: R, Brab.: RR, Mosan: R, Ard.: AC, Lorr.: R. **L** Ard.: R, Lorr.: AR. **F** Ard.: RR.
Lit.: La66: 300-305.

byssoides (L.) Gaertn., see *Baeomyces rufus*

roseus Pers., see *Dibaeis baeomyces*

BAGLIETTOA A. Massal.

baldensis (A. Massal.) Vězda
On hard and exposed, calcareous, natural outcrops.
B Mosan: AR, Ard.: RRR. **L** - .
Lit.: Ertz: 33, NL97: 17.

parmigera (J. Steiner) Vězda & Poelt
On hard and exposed, calcareous, natural outcrops.
B Mosan: R. **L** - .
Lit.: Ertz: 33-34, NL97: 18, Zschacke (1933: 105).

steineri (Kušan) Vězda
On hard calcareous, natural outcrops, also on tufa.
B Mosan: AR, Ard.: RRR. **L** Lorr.: RRR.
Lit.: Ertz: 34, NL87: 20.

BIATORA Fr.

chrysantha (Zahlbr.) Printzen
Syn.: *B. epixanthoidiza* auct., non (Nyl.) Räsänen, *Lecidea epizanthoidiza* auct. belg., non Nyl., *B. gyrophorica* (Tønsberg) Coppins
Corticolous, usually over mosses, on acidic bark of *Fagus* and *Quercus* in forests, or lignicolous.
B Ard.: R, Lorr.: RR. **L** Ard.: RRR, Lorr.: RR.
Lit.: Di: 58-59, L2: 93-94, NL97: 45, Printzen (1995: 75).

meiocarpa (Nyl.) Arnold
Corticolous, on old *Acer*, *Quercus* and *Tilia* in well-preserved forests close to rivers.
B Ard.: RRR, Lorr.: RR. **L** - .
Lit.: NL97: 18.

epixanthoides (Nyl.) Diederich, see under *Mycobilimbia*

epixanthoidiza auct., non (Nyl.) Räsänen, see *B. chrysantha*

erythrophaea (Flörke) Fr., see *Lecidea erythrophaea*

flexuosa Fr., see *Trapeliopsis flexuosa*

gyrophorica (Tønsberg) Coppins, see *B. chrysantha*

lightfootii (Sm.) Hepp, see *Fuscidea lightfootii*

lucida (Ach.) Fr., see *Psilolechia lucida*

pilularis (Körb.) Hepp, see *B. sphaeroides* under *Mycobilimbia*

quernea (Dicks.) Fr., see *Pyrrhospora quernea*

rivulosa (Ach.) Fr., see *Fuscidea cyathoides*

rupestris (Scop.) Fr., see *Protoblastenia rupestris*

sphaeroides (Dicks.) Körb., see under *Mycobilimbia*

vernalis (L.) Fr. Reported from **L** Lorr. by Ko: 247, but no specimen seen. Most probably a misidentification.

viridescens (Schrad.) Körb., see *Trapeliopsis viridescens*

wallrothii (Spreng.) Körb., see *Trapeliopsis wallrothii*

BIATORELLA De Not.

deplanata Almq., see *Strangospora deplanata*

monasteriensis (J. Lahm) J. Lahm, see *Biatoridium monasteriense*

ochrophora (Nyl.) Arnold, see *Strangospora ochrophora*

pinicola (A. Massal.) Anzi, see *Strangospora pinicola*

pruinosa auct., non (Ach.) Mudd, see *Sarcogyne regularis*

simplex (Davies) Branth & Rostr., see *Polysporina simplex*

BIATORIDIUM J. Lahm

monasteriense J. Lahm
Syn.: *Biatorella monasteriensis* (J. Lahm) J. Lahm
Corticolous, on *Acer campestre*, *Fraxinus* and *Sambucus* in humid forests, usually near streams.
B Mosan: RR, Ard.: RR. **L** - .
Lit.: L4: 21, NL97: 45.

BIATORINA A. Massal.

atropurpurea (Schaer.) A. Massal., see *Catinaria atropurpurea*

ehrhartiana (Ach.) Th. Fr., see *Cliostomum corrugatum*

globulosa (Flörke) Körb., see *Lecania globulosa*

lenticularis (Ach.) Körb., see *Catillaria lenticularis*

lightfootii (Sm.) Körb., see *Fuscidea lightfootii*

luteoalba (Turner) Körb., see *Caloplaca luteoalba*

pineti (Ach.) A. Massal., see *Dimerella pineti*

prasina (Fr.) Syd., see *Micarea prasina*

tricolor auct., see *Cliostomum griffithii*

BIATOROPSIS Räsänen

***usnearum** Räsänen
On *Usnea* species, especially *U. ceratina* and *U. subfloridana*.
B Mosan: RRR, Ard.: RR. **L** Ard.: RR, Lorr.: RRR (1966).
Lit.: L6: 140, NL84: 12, Diederich (1996: 13-14), Diederich & Christiansen (1994).

BILIMBIA De Not.

hypnophila (Ach.) Th. Fr., see *Mycobilimbia sabuletorum*

naegelii (Hepp) Anzi, see *Lecania naegelii*

sphaeroides (Dicks.) Th. Fr., see *Biatora sphaeroides* under *Mycobilimbia*

trisepta (Hellb.) Zahlbr., see *Micarea peliocarpa*

BISPORA Corda

***christiansenii** D. Hawksw.
On *Lecanora soralifera*, *Lecidella elaeochroma*, *Micarea lignaria*, *Scoliciosporum chlorococcum*, *S. pruinosum* and an unidentified lichen, often in the hymenium.
B Ard.: RRR. **L** Ard.: RR, Lorr.: RR.
Lit.: Di: 237-238, LF0: 17-18, NL92: 168.

***lichenum** Diederich
In the hymenium of *Arthonia excentrica*, *Candelariella xanthostigma*, *Opegrapha atra* and *Strangospora pinicola*.
B - . **L** Ard.: RRR (type locality), Lorr.: RR.
Lit.: Di: 238, LF1: 302-304, NL92: 168.

BLASTENIA A. Massal.

ochracea (Schaer.) Trevis., see *Caloplaca ochracea*

BOTRYDINA Bréb.

vulgaris Bréb. p. p., see *Omphalina umbellifera*

BOTRYOLEPRARIA Canals, Hern.-Mariné, Gómez-Bolea & Llimona

lesdainii (Hue) Canals, Hern.-Mariné, Gómez-Bolea & Llimona
Syn.: *Lepraria lesdainii* (Hue) R. C. Harris
On sandstone and calcareous rocks, in very shaded, damp, natural and artificial habitats, often in crevices, very rarely on trees (along rivers in shaded forests).
B Fl.: RRR, Camp.: RRR, Mosan: *AC*, Ard.: R, Lorr.: RRR. **L** Lorr.: R.
Lit.: Ertz: 18, NL84: 15, NL92: 171, NL93: 45, NL97: 45, van den Boom & Sérusiaux (1996: 22), Zwaenepoel et al. (1994: 37).

BRODOA Goward

intestiniformis (Vill.) Goward
Syn.: *Hypogymnia intestiniformis* (Vill.) Räsänen
On slate rubbles in an old quarry.
B Ard.: RRR (†1964). **L** - .
Now extinct throughout the area of study.
Lit.: La66: 380-382, Sé: 140.

BRYOPHAGUS Arnold

gloeocapsa Arnold
On soil or siliceous rocks, always over bryophytes, usually in natural habitats, sometimes in disturbed places like road banks.
B Ard.: R, most probably overlooked. **L** - .
Lit.: L4: 21.

BRYORIA Brodo & D. Hawksw.

bicolor (Ehrh.) Brodo & D. Hawksw.
Syn.: *Alectoria bicolor* (Ehrh.) Nyl.
Saxicolous, on siliceous rocks.
B Ard.: RR (1977). **L** - .
Lit.: La66: 447-448, NL77: 19, Goffinet (1992: 20).

chalybeiformis (L.) Brodo & D. Hawksw.
Syn.: *Alectoria chalybeiformis* (L.) Gray
On sheltered and mossy, siliceous outcrops.
B Ard.: RR (1960). **L** - .
The identity of the relevant material requires confirmation.
Lit.: La66: 448-449.

fuscescens (Gyeln.) Brodo & D. Hawksw.
Syn.: *Alectoria fuscescens* Gyeln., *A. jubata* auct., non (L.) Ach., nom. conf., *A. prolixa* auct., non (Hoffm.) Brodo & D. Hawksw.
On trees, mainly *Fagus* and *Quercus*, in forests, also on isolated trees, e. g. along roads, once on a fence post, rarely on sheltered, siliceous outcrops.
B Brab.: RRR (†<1900), Mosan: RRR (1959), Ard.: AR-AC, Lorr.: AR. **L** Ard.: AR, Lorr.: R. **F** Ard.: RRR, decreasing everywhere.
Lit.: L4: 19, La66: 449-450, WS: 31, 65.

implexa (Hoffm.) Brodo & D. Hawksw.
Syn.: *Alectoria implexa* (Hoffm.) Nyl.
On *Betula* and *Quercus*, in rather open, but humid forests.
B Ard.: RR (1960). **L** - .
The identity of the relevant material requires confirmation.
Lit.: La66: 448.

subcana (Stizenb.) Brodo & D. Hawksw.
On *Fagus* and *Quercus* in well-preserved forests, rarely on *Pinus*.
B Ard.: AR. **L** - .
Lit.: Goffinet (1992: 19-20).

capillaris (Ach.) Brodo & D. Hawksw. This species was incorrectly reported from **L** (Diederich 1986a: 118, as *B.* cf. *capillaris*). The specimen belongs to *Ramalina thrausta*.

BUELLIA De Not.

aethalea (Ach.) Th. Fr.
Syn.: *B. aethaleoides* (Nyl.) H. Olivier, incl. *B. sororia* Th. Fr.
Saxicolous, on siliceous rocks, usually in dry, sunny and nitrophilous conditions.
B Brab.: RRR, Mosan: RR, Ard.: AR, Lorr.: RRR. **L** Ard.: RRR, Lorr.: RR. **F** Ard.: RRR. Most probably overlooked and more common.
Lit.: Mü1: 157, NL77: 19, NL92: 150, Sé: 137.

alboatra (Hoffm.) Th. Fr.
Syn.: *Diplotomma alboatrum* (Hoffm.) Flot., *D. ambiguum* (Ach.) Flagey, *B. epipolia* var. *ambigua* (Ach.) Mong., incl. *B. epipolia* (Ach.) Mong.
On calcareous and sandstone rocks, and on walls, once corticolous on a very old *Tilia*.

B Mar.: RRR, Fl.: RR, Camp.: RR, Brab.: RR, Mosan: AR, Lorr.: RR. **L** Ard.: RR, Lorr.: RR.
Lit.: DG: 39, Ertz: 18, NL92: 153, NL93: 43, NL97: 45, Hoffmann & Van Rompu (1995), Zwaenepoel et al. (1994: 37).

(*)**badia** (Fr.) A. Massal.
At first parasitic on *Neofuscelia loxodes* and *N. pulla*, sometimes overgrowing other lichens (e. g. *Aspicilia caesiocinerea*), soon forming an independent thallus, on siliceous rocks in dry and sunny conditions.
B Mosan: RRR, Ard.: AR. **L** Ard.: R. **F** Mosan: RRR. Probably overlooked.
Lit.: DG: 39, Ertz: 18, Mü1: 157.

disciformis (Fr.) Mudd
Syn.: *B. parasema* (Th. Fr.) Ach., nom. illeg.
Corticolous, on *Fagus* and *Quercus*, usually in forests.
B Ard.: RR, Lorr.: RRR (1962). **L** Lorr.: RR. **F** Lorr.: RRR.
Lit.: Di: 60-61, L4: 21-22, NL92: 168.

griseovirens (Sm.) Almb.
Corticolous, on smooth or rough bark in forests and on isolated trees, sometimes lignicolous, on wooden posts.
B Mosan: R, Ard.: AR, Lorr.: AR. **L** Ard.: AC, Lorr.: C.
Lit.: Di: 61-62, NL84: 12.

ocellata (Flot.) Körb.
Syn.: *B. verruculosa* (Sm.) Mudd
On natural, siliceous rock outcrops, in exposed conditions.
B - . **L** - . **F** Mosan: RRR.
Lit.: DG: 39, L8.

pulverea Coppins & P. James
Lignicolous, on wooden posts, or corticolous, on *Betula* in a forest.
B Ard.: RRR. **L** Lorr.: RRR.
Lit.: Di: 62, L5: 15.

punctata (Hoffm.) A. Massal.
Syn.: *Amandinea punctata* (Hoffm.) Coppins & Scheid., *B. punctiformis* (Hoffm.) A. Massal.
Corticolous, on all kinds of trees, always in nitrophilous conditions, often in polluted areas, occasionally saxicolous.
B *CC*. **L** Ard.: AR, Lorr.: C.
Lit.: Ca: 83-84, Di: 62-63, Ho: 105, NL84: 12, Qu: 79, VGH: 114.

schaereri De Not.
On bark and wood of *Prunus avium* in an orchard, and on bark of *Salix* ad the edge of a forest.
B - . **L** Lorr.: RR.
Lit.: Di: 63-64, L5: 15.

subdispersa Mig.
Syn.: *Diplotomma dispersum* (Kremp.) Arnold
On walls of siliceous stones.
B Mar.: RRR, Mosan: RR. **L** Ard.: RRR.
Lit.: NL84: 14, NL92: 153.

venusta (Körb.) Lettau
Syn.: *Buellia epipolia* auct., non (Ach.) Mong., *Diplotomma epipolium* auct., non (Ach.) Arnold
On calcareous and sandstone outcrops in ± sunny conditions.
B Mosan: R. **L** Lorr.: RR.
Following Nimis & John (1998: 45), the epithet *venusta* refers to a constant parasite of *Lecanora muralis*, whilst the non-lichenicolous taxon, which is present in **B** and **L**, should be called *B. epipolia* auct.
Lit.: NL97: 19.

violaceofusca Thor & Muhr
In deep crevices of an old *Quercus* in a rather dry wood in a deep valley.
B Ard.: RRR. **L** - .
Lit.: L8.

aethaleoides (Nyl.) H. Olivier, see *B. aethalea*

canescens (Dicks.) De Not., see *Diploicia canescens*

dubyanoides (Hepp) Müll. Arg., see *Rinodinella dubyanoides*

epigaea (Pers.) Tuck. Reported from **B** by DG: 39, but relevant material not seen.

epipolia (Ach.) Mong., see *B. alboatra*

epipolia auct., non (Ach.) Mong., see *B. venusta*

epipolia var. *ambigua* (Ach.) Mong., see *B. alboatra*

leptocline (Flot.) Körb. Reported by Scheidegger (1993: 352) from **B**. The corresponding specimen (which is the type of *Lecidea leptocline* f. *tongletii* Hue, collected in **B** Mosan, on calcareous outcrops in Fonds de Leffe, cf. Hue 1898) has been re-examined later and proved to be a different, yet unidentified taxon (L8).

Lecidea leptocline Flot. f. *tongletii* Hue, see *B. leptocline*

myriocarpa (DC.) de Not., see *Buellia punctata*

parasema (Th. Fr.) Ach., nom. illeg., see *B. disciformis*

premnea (Fr.) Kickx, see *Megalaria grossa*

punctiformis (Hoffm.) A. Massal., see *B. punctata*

scabrosa (Ach.) A. Massal., see *Epilichen scabrosus*

sororia Th. Fr., see *B. aethalea*

spuria (Schaer.) Anzi. Reported from **B** Ard. by NL77: 19, but no relevant specimen seen.

verruculosa (Sm.) Mudd, see *B. ocellata*

BUELLIELLA Hafellner

***physciicola** Poelt & Hafellner
On *Phaeophyscia orbicularis* on an old roof in an orchard.
B - . **L** Lorr.: RRR.
Lit.: L6: 140.

BUNODOPHORON A. Massal.

melanocarpum (Sw.) Wedin
Syn.: *Sphaerophorus melanocarpus* (Sw.) DC., *S. compressus* Ach.
Saxicolous, mainly on sandstone rocks in sheltered conditions.
B Ard.: RR. **L** Lorr.: R, decreasing.
The occurrence of this species in **B** Ard. is based on literature; unfortunately no specimen is available.
Lit.: La66: 210-212, Mü5: 22, NL92: 174, Diederich (1985a: 25-26), Duvigneaud (1952).

BYSSOLOMA Trevis.

diederichii Sérus.
On leaves of *Buxus* in a humid valley in shaded and sheltered conditions.
B - . **L** - . **F** Lorr. (Moselle): RRR (type locality).
Lit.: Sérusiaux (1998).

CALICIUM Pers.

adspersum Pers.
Corticolous, usually on the rough bark of old *Quercus* trees in forests.
B Mosan: RR, Ard.: R, Lorr.: RRR. **L** Ard.: R, Lorr.: AR.
Lit.: Di: 65, La68: 71, NL84: 12.

glaucellum Ach.
Syn.: *C. abietinum* auct. p. p., non Pers.
Corticolous, mainly on well-lit *Quercus* trees.
B Mosan: RRR, Ard.: AR, Lorr.: RR. **L** Ard.: AR, Lorr.: RR.
Lit.: Di: 65-66, L3: 27, NL84: 12.

lichenoides (L.) Schumach.
Syn.: *C. salicinum* Pers.
Corticolous, generally on the bark of old *Quercus* trees, exceptionally on *Betula*, *Salix* and *Tilia*.
B Mosan: RR, Ard.: *AR*, Lorr.: *R*. **L** Ard.: AR, Lorr.: AR.
Lit.: Di: 67, La68: 71, NL84: 12.

viride Pers.
Syn.: *C. hyperellum* (Ach.) Ach.
On bark, in rather well-lit conditions, mostly on *Quercus*, but also on *Populus* and *Salix*.
B Brab.: RR, Camp.: RRR (†<1960), Mosan: AR, Ard.: RR, Lorr.: RRR. **L** Ard.: RRR, possibly widespread as a sterile crust (especially in polluted areas).
Lit.: Ba: 8, Ho: 118, La69: 82, NL84: 12, Sé: 137, Hoffmann & Van Landuyt (1997: 28-29), Van Landuyt & Hoffmann (1996).

abietinum Pers., syn. *C. curtum* Turner & Borrer, *C. nigrum* Schaer. All published reports from the study area are misidentifications for *C. glaucellum* Ach.

chlorinum (Ach.) Schaer., see *Chrysothrix chlorina*

**citrinum* auct., see *Microcalicium arenarium*

curtum Turner & Borrer, see *C. abietinum*

+*floerkei* Zahlbr., see *Chaenothecopsis pusilla*

hyperellum (Ach.) Ach., see *C. viride*

lenticulare Ach. Reported from **B** by DG: 16, but relevant material not seen.

nigrum Schaer., see *C. abietinum*

+*populneum* Duby, see *Phaeocalicium populneum*

+*pusillum* Flörke, see *Chaenothecopsis pusilla*

quercinum Pers. The report of this species from **L** by Ko: 299 is most doubtful, as no specimen has been seen.

salicinum Pers., see *C. lichenoides*

sphaerocephalum (L.) Ach. Reported from **B** by DG: 16, but relevant material not seen; a name of uncertain application.

subtile Pers. var. *minutellum* (Ach.) Zahlbr., see *Mycocalicium subtile*

CALLOPISMA De Not., nom. rej., see *Caloplaca*

vitellinum (Hoffm.) Bagl., see *Candelariella vitellina*

CALOPLACA Th. Fr.

Syn.: *Callopisma* De Not., nom. rej.

albolutescens (Nyl.) H. Olivier
On walls (concrete, mortar and sandstone) and on exposed, natural sandstone rocks.
B - . **L** Lorr.: R. Overlooked.
Lit.: L7: 84.

alociza (A. Massal.) Mig.
On hard calcareous, sunny outcrops.
B Mosan: RRR, probably overlooked. **L** - .
Lit.: NL97: 19.

arenaria (Pers.) Müll. Arg.
On slightly calcareous siliceous rocks, usually in dry, sunny and slightly nitrophilous conditions.
B Mosan: RR, Ard.: AR. **L** Ard.: RR. **F** Ard.: RR.
Some of the collections referred to this species may belong to *C. subpallida*.
Lit.: Ma: 126-128.

atroflava (Turner) Mong. s. l.
On siliceous rocks, in ± shaded conditions.
B Mosan: RRR, Ard.: RR. **L** Ard.: RRR.
The identity of the specimens referred to this species requires further studies.
Lit.: Ma: 255-256.

aurantia (Pers.) J. Steiner
Syn.: *C. callopisma* (Ach.) Th. Fr.
On hard calcareous rocks, walls, gravestones, etc., in dry, sunny and nitrophilous conditions, abundant in natural and artificial habitats.
B Fl.: RRR, Camp.: RR, Brab.: RR, Mosan: AC, Ard.: RRR. **L** Lorr.: RR. **F** Mosan: RR, Lorr.: RR. Most probably overlooked.
Lit.: Ertz: 19, Ma: 129-134, Mü1: 156, NL93: 42, Zwaenepoel et al. (1994: 37).

biatorina (A. Massal.) J. Steiner
Syn.: *C. murorum* auct. p. p., non (Ach.) Fr.
On hard calcareous rocks, usually in dry, sunny and non-nitrophilous conditions, rare in artificial habitats.
B Mar.: RRR, Mosan: R, Ard.: RRR. **L** Lorr.: RRR. **F** Mosan: RRR.
Lit.: Ma: 141-145.

brevilobata (Nyl.) Zahlbr.
Syn.: *C. heppiana* (Müll. Arg.) Zahlbr. var. *brevilobata* (Nyl.) A. E. Wade
On exposed, siliceous rocks, in large valleys.
B Ard.: RR. **L** - .
This epithet is used for a typical species growing on siliceous rocks in the Ardenne, but the nomenclature still requires further studies.
Lit.: Ma: 139-141.

cerina (Hedw.) Th. Fr. var. **cerina**
Corticolous, on deciduous trees in well-lit conditions, recently mainly on *Populus*.
B Fl: RRR (†<1898), Camp.: RR, Ard.: RR (†1832), Lorr.: RR (1968). **L** Lorr.: AR. **F** Ard.: RR (1983).
Lit.: Ba: 8, Di: 69, Ma: 145-150, NL77: 19, NL92: 168.

cerina var. **chloroleuca** (Sm.) Th. Fr.
Syn.: *C. stillicidiorum* (Vahl) Lynge
Over plant detritus in Mesobromion communities.
B - . **L** Lorr.: RRR. **D** Ard.: RRR, Lorr.: RRR.
Lit.: L8, Mü5: 58.

cerinella (Nyl.) Flagey
Lignicolous, on decorticated *Abies* and on a fence post.
B Camp.: RRR. **L** Lorr.: RR (†1891).
Lit.: Ba: 8, Di: 69-70, L5: 15.

chalybaea (Fr.) Müll. Arg.
On hard calcareous rocks in dry and sunny conditions, only in natural habitats.
B Mosan: AC. **L** - . **F** Mosan: RR.
Lit.: Ma: 150-153.

chlorina (Flot.) H. Olivier
Syn.: *C. isidiigera* Vězda, ?*C. chlorina* var. *cyanolepra* (Nyl.) Kickx
Corticolous, mainly at the base of old *Tilia* and *Ulmus*, and saxicolous, on walls of calcareous or siliceous stones, usually in nitrophilous conditions.
B Mosan: R, Ard.: RR, Lorr.: RR. **L** Lorr.: RRR.
The material referred to this species is homogeneous and includes those specimens previously published from the study area as *C. virescens*.
Lit.: Ma: 241-244 (sub *C.* cf. *virescens*), NL92: 150, NL97: 45, Purvis et al. (1992: 159, sub *C. virescens*).

chrysodeta (Räsänen) Dombr.
Syn.: *Leproplaca chrysodeta* (Räsänen) J. R. Laundon
On calcareous and sandstone rocks and on walls, always in dry and shaded conditions, often on vertical or overhanging surfaces.
B Fl.: RRR, Mosan: AR, Ard.: R, Lorr.: RR. **L** Lorr.: R.
Lit.: Ertz: 19, Ma: 250-252, NL84: 15, NL87: 21, NL92: 168, Zwaenepoel et al. (1994: 37).

chrysophthalma Degel.
Corticolous, on *Sorbus*, in parkland conditions.
B - . **L** Lorr.: RRR.
Lit.: L7: 84.

cirrochroa (Ach.) Th. Fr.
On hard calcareous rocks, usually in dry, non-nitrophilous and non-exposed conditions, always in natural habitats.
B Mosan: AC. **L** - . **F** Mosan: RRR, Lorr.: RRR.
Lit.: Ertz: 19, Ma: 153-156.

citrina (Hoffm.) Th. Fr.
Incl. *C. citrina* var. *maritima* B. de Lesd.
Saxicolous, on calcareous and siliceous rocks, very common on artificial substrata (concrete, walls, etc.), nitrophilous and tolerant to air pollution, rarely lignicolous or corticolous, at the base of trees.
B *C-CC*. **L** *C-CC*.
Lit.: Ca: 85-86, Di: 70-71, Ho: 107, Ma: 156-161, NL93: 42, NL97: 20, 46, Qu: 79, VGH: 114.

(*)**coronata** (Körb.) J. Steiner
On hard calcareous rocks, in dry, sunny and nitrophilous conditions, sometimes parasitic on *Verrucaria*, also on sandstone rocks and on concrete of gravestones.
B Mar.: RRR, Fl.: RR, Camp.: RR, Mosan: AC, Ard.: RRR, Lorr.: RRR. **L** Lorr.: RRR. **F** Mosan: RRR, Lorr.: RR.
Lit.: Ertz: 19, Ma: 163-166, NL93: 42, Zwaenepoel et al. (1994: 37).

crenularia (With.) J. R. Laundon
Syn.: *C. festiva* (Ach.) Zwackh
On exposed, siliceous rocks.
B Mosan: RRR (†1890). **L** - . **F** Mosan: RRR (only known from one locality where it is rather abundant).
Lit.: Ma: 177-179.

(*)**crenulatella** (Nyl.) H. Olivier
Syn.: *C. lactea* auct. p. p., non (A. Massal.) Zahlbr.
On hard calcareous, tufa and sandstone rocks, also common in artificial habitats, in dry and sunny places, often parasitic, at least when young, on black crustose lichens (*Verrucaria nigrescens*, cyanobacterial crusts), usually in nitrophilous conditions.
B Mosan: R. **L** Lorr.: *AC*. **F** Lorr.: RR. Most probably overlooked.
Lit.: Navarro-Rosinés & Hladun (1996: 148).

decipiens (Arnold) Blomb. & Forssell
On hard calcareous rocks in highly nitrophilous conditions, common on artificial substrata like concrete, mortar, etc.
B Mar.: RR, Fl.: AR, Camp.: R, Brab.: AR, Mosan: *C*, Ard.: *AC* (only on walls and asbestos in nitrophilous situations, especially in farms), Lorr.: *AC*. **L** Ard.: RR, Lorr.: RR. **F** Lorr.: RRR.
Lit.: Ertz: 19, Ma: 167-170, NL92: 150, NL93: 42, VGH: 114, Zwaenepoel et al. (1994: 37).

demissa (Körb.) Arup & Grube
Syn.: *Lecanora demissa* (Körb.) Zahlbr.
On exposed and sunny, siliceous rocks, often around old castles.
B Ard.: RRR. **L** Ard.: RR. **F** Ard.: RRR.
Lit.: La68: 77, La69: 89, 105.

dolomiticola (Hue) Zahlbr.
Syn.: *C. dalmatica* (A. Massal.) H. Olivier, *C. velana* auct., non (A. Massal.) Du Rietz
On hard calcareous rocks in dry, sunny and usually nitrophilous conditions, or on sandstone, mostly in natural habitats, also on concrete in ruderal conditions.
B Mosan: AR, Ard.: RRR. **L** Lorr.: *AR*. **F** Mosan: RRR, Lorr.: RR.
Lit.: Ertz: 19, Ma: 238-241, NL97: 46.

erythrocarpa (Pers.) Zwackh
On hard calcareous rocks.
B Brab.: RR (†<1900), Mosan: RR. **L** - . **F** Lorr. (Moselle): RRR.
Lit.: Ma: 170-172, John (1986: 109).

ferruginea (Huds.) Th. Fr.
Corticolous, on *Fagus*, *Fraxinus* and *Sorbus*, in forests or on roadside trees.
B Brab.: RRR (†<1900), Mosan: RR (†1962), Ard.: RR (†1883). **L** Lorr.: R (†1890). **D** Ard.: RRR (†<1900).
Now extinct throughout the area of study.
Lit.: Di: 71-72, Ma: 172-176.

flavescens (Huds.) J. R. Laundon
Syn.: *C. heppiana* (Müll. Arg.) Zahlbr., *C. aurantia* auct., non (Pers.) Hellb.
On calcareous and sandstone rocks, in dry, sunny and nitrophilous conditions, in natural and artificial habitats.
B Mar.: RRR, Fl.: R, Camp.: RR, Brab.: AR, Mosan: AC, Ard.: RRR (1869), Lorr.: RR. **L** Ard.: RRR, Lorr.: R.
Lit.: Ertz: 19, La68: 79, Ma: 134-139, NL92: 168, NL93: 42, Zwaenepoel et al. (1994: 37).

flavocitrina (Nyl.) H. Olivier
Syn.: *C. citrina* var. *flavocitrina* (Nyl.) W. R. Watson

Saxicolous, on calcareous and siliceous rocks, very common on artificial substrata (mortar, concrete, walls, etc.), nitrophilous and tolerant to air pollution, rarely lignicolous or corticolous.
B *CC*. **L** *CC*.
This species has been confused with *C. citrina* for a long time. They frequently grow together, *C. flavocitrina* normally being less nitrophilous and more frequent.
Lit.: NL97: 20.

flavorubescens (Huds.) J. R. Laundon
Syn.: *C. aurantiaca* (Lightf.) Th. Fr.
Corticolous on *Fraxinus*, *Populus* and *Ulmus* in well-lit conditions, recently collected on *Quercus* in a forest.
B Mosan: RRR (1964), Ard.: RR (†<1900). **L** Lorr.: RR (1986).
Lit.: Di: 72-73, L4: 22, Ma: 180-182.

flavovirescens (Wulfen) Dalla Torre & Sarnth.
On hard calcareous or calcareous schistose rocks in well-lit conditions, or on calcareous sandstone.
B Mar.: RRR, Camp.: *R*, Brab.: RRR, Mosan: R, Ard.: RRR. **L** Lorr.: RR. **F** Mosan: RR, Lorr.: RR.
Lit.: Ertz: 19, Ma: 182-185, NL92: 151, NL97: 46, Coppins & van den Boom (1995: 89).

granulosa (Müll. Arg.) Jatta
On hard calcareous rocks in dry, sunny and non-nitrophilous conditions.
B - . **L** - . **F** Mosan: RRR.
Lit.: Ma: 185-187.

(*)**grimmiae** (Nyl.) H. Olivier
Syn.: *C. congrediens* (Nyl.) Zahlbr.
Always on *Candelariella vitellina*, on exposed siliceous rocks.
B - . **L** - . **F** Mosan: RRR.
Lit.: Ma: 161-162, Poelt & Kalb (1985: 135).

haematites (St.-Amans) Zwackh
Corticolous, on *Fraxinus*, *Populus*, etc., in well-lit conditions.
B Fl.: RR (†<1867), Mosan: RRR (†<1835), Ard.: RRR (†<1865). **L** Distr. unknown: RRR (†<1850). **F** Lorr.: RRR (1980).
Lit.: Di: 73-74, L5: 16, Ma: 188-190.

herbidella (Hue) H. Magn.
Incl. *C. herbidella* f. *rufa* (B. de Lesd.) H. Magn.
Corticolous, typically on the dry bark of *Quercus* in old forests, also on *Acer*, *Carpinus*, *Fraxinus*, *Juglans* and *Ulmus* in well-lit conditions.
B Mosan: RR, Ard.: R, Lorr.: RR. **L** Lorr.: R. **D** Lorr.: RRR.
Lit.: Di: 74-75, Ma: 190-195, NL84: 12.

holocarpa (Hoffm.) A. E. Wade
Syn.: *C. pyracea* (Ach.) Th. Fr.
On calcareous rocks and stones, usually in dry, sunny and very nitrophilous conditions, rarely corticolous, mainly at the dusty base of trees, present in polluted areas (incl. in cities).
B *AC-C*. **L** *AC-C*. **F** *AC-C*.
See comments under *Caloplaca lithophila*.
Lit.: Di: 75-76, Ma: 195-198, 204-207 (p. p.), VGH: 114, Zwaenepoel et al. (1994: 37).

(*)**inconnexa** (Nyl.) Zahlbr.
On hard calcareous rocks in dry, sunny and nitrophilous conditions, only in natural habitats, usually starting as a parasite on *Acarospora*, *Caloplaca chalybaea*, etc.
B Mosan: R.
Lit.: Ertz: 19, Ma: 198-200.

irrubescens (Arnold) Zahlbr.
On siliceous rocks.
B Mosan: RRR. **L** - .
The identity of the only collection reported under this name requires further study.
Lit.: Ma: 257-258.

lithophila H. Magn.
Saxicolous, mainly on calcareous walls, usually in very nitrophilous conditions, most common in polluted areas (incl. in cities), never corticolous, often growing together with *C. holocarpa*.
B *AC-C*. **L** *AC-C*. **F** *AC-C*.
We are here following Aptroot (1991: 17) and Ozenda & Clauzade (1970: 690) who distinguish between the corticolous or saxicolous *C. holocarpa* (syn. *C. pyracea*) with larger apothecia (over 0.5 mm in diam.), and the exclusively saxicolous *C. lithophila* with distinctly smaller apothecia (under 0.5 mm). As both taxa have often been confused, their exact distribution and ecology in the study area require further field work.
Lit.: Ma: 204-207 (p. p.), Zwaenepoel et al. (1994: 37).

lucifuga G. Thor
Corticolous, on dry and smooth bark of *Quercus* in well-preserved forests.
B Ard.: RR. **L** Lorr.: RRR.
Lit.: Di: 76, L5: 16, NL97: 20-21.

luteoalba (Turner) Th. Fr.
Syn.: *Biatorina luteoalba* (Turner) Körb.
Corticolous, mainly and typically on *Ulmus* along roads.
B Fl: RR (†<1900). **L** - .
Now extinct throughout the area of study.
Lit.: Ma: 208-210.

maritima B. de Lesd.
Syn.: *C. interfulgens* auct. belg., non (Nyl.) J. Steiner
On walls and mortar, rarely on lignum, also on asbestos, by the sea-shore.
B Mar.: AC. **L** - .
Lit.: La69: 82, 107, Arup (1997).

marmorata (Bagl.) Jatta
Syn.: *C. lactea* auct. p. p., non (A. Massal.) Zahlbr.
On small blocks of hard calcareous rocks in a Xerobrometum.
B Mosan: RRR, perhaps overlooked. **L** - .
Lit.: Navarro-Rosinés & Hladun (1996: 162).

obscurella (J. Lahm) Th. Fr.
Incl. *C. sarcopisioides* (Körb.) Zahlbr.
Corticolous, mainly at the base of isolated trunks of *Malus*, *Populus* or *Salix* in well-lit conditions, rarely on the bark of other trees.
B Brab.: RR, Mosan: R, Ard.: RR, Lorr.: RR. **L** Ard.: RRR, Lorr.: AR. Overlooked.
Lit.: Di: 76-78, Ma: 210-212, 218-220, NL84: 12, NL87: 20.

ochracea (Schaer.) Flagey
Syn.: *Blastenia ochracea* (Schaer.) Trevis., *C. tetrasticha* (Nyl.) H. Olivier
On hard calcareous rocks in dry and sunny conditions, in natural habitats.
B Mosan: AC. **L** - . **F** Mosan: RR.
Lit.: Ertz: 19, Ma: 213-216, NL77: 19.

phlogina (Ach.) Flagey
Corticolous or lignicolous.
B - . **L** - . **F** Lorr.: RRR.
Lit.: L8.

(*)**polycarpa** (A. Massal.) Zahlbr.
Syn.: *C. tenuatula* (Nyl.) Zahlbr., *C. tenuata* auct., non (Nyl.) Zahlbr.
On hard calcareous rocks in dry and sunny conditions, in natural habitats, always as a parasite on *Verrucaria calciseda*.
B Mosan: AR. **L** - . **F** Mosan: RRR, Lorr.: RRR.
Lit.: Ma: 232-235.

ruderum (Malbr.) J. R. Laundon
On cement of calcareous walls in highly nitrophilous conditions (e. g. around farms), rarely at the base of natural sandstone rocks in forest.
B Fl.: R, Camp.: RR, Brab.: *AR*, Mosan: *AC*, Ard.: *R*. **L** Lorr.: RR.
Lit.: Ma: 216-218, NL84: 12, NL93: 42, VGH: 114, Hoffmann & Van Rompu (1995), Zwaenepoel et al. (1994: 37).

saxicola (Hoffm.) Nordin
Syn.: *C. murorum* (Ach.) Th. Fr.
On hard calcareous rocks, usually in dry, sunny and nitrophilous conditions, mainly in natural habitats, occasionally on walls, mortar or concrete.
B Mar.: RR, Fl.: *AC*, Camp.: RR, Brab.: RR, Mosan: AR, Ard.: RR. **L** Ard.: R, Lorr.: RRR.
Lit.: Ertz: 19, Ma: 221-225, NL92: 168, NL93: 42, VGH: 114, Hoffmann & Van Rompu (1995), Zwaenepoel et al. (1994: 37).

subpallida H. Magn.
Syn.: *C. arenaria* auct. p. p., non (Pers.) Müll. Arg.
On exposed, siliceous rocks.
B Mosan: RR, Ard.: AR. **L** Ard.: AR.
The distinction of this species from the genuine *C. arenaria* has been made recently and the exact distribution and ecology of both species in the area of study require further studies.
Lit.: Ma: 126-128, NL84: 12, NL92: 151.

tegularis auct., non (Ehrh.) Sandst.
On exposed, siliceous rocks, and on shaded vertical bricks of old walls, in natural and artificial habitats.
B Fl.: RRR, Mosan: RRR, Ard.: RR. **L** Ard.: RR. **F** Mosan: RRR.
The material referred to this species is probably heterogeneous and requires further study.
Lit.: Ma: 225-229, Zwaenepoel et al. (1994: 37, as *C. saxicola* var. '*teicholaris*' [sic]).

teicholyta (Ach.) J. Steiner
On sandstone or calcareous walls, often on horizontal surfaces of gravestones or on concrete, usually in nitrophilous conditions, rarely on natural calcareous outcrops.
B Mar.: R, Fl.: R, Camp.: RR, Brab.: R, Mosan: *AC*, Ard.: RR. **L** Lorr.: *AC*.
Lit.: Ma: 229-231, NL77: 19, NL84: 12, NL87: 20, NL92: 151, NL93: 42, VGH: 114.

vacillans (Th. Fr.) H. Magn.
Over mosses on hard calcareous rocks.
B Mosan: RRR (†1883). **L** - .
The identity of the only collection referred to this name requires further studies.
Lit.: Ma: 260.

variabilis (Pers.) Müll. Arg.
On natural, calcareous outcrops, and on old walls (e. g. in churchyards).
B Mosan: AR, Lorr.: RRR. **L** Lorr.: RR. **F** Mosan: RRR, Lorr.: RR. **D** Lorr.: RR.
Lit.: Ertz: 19, Ma: 235-238, NL92: 168, John (1986: 110).

vitellinula auct., non (Nyl.) H. Olivier
On siliceous rocks, in natural or artificial habitats.
B Fl.: RRR, Mosan: RR, Ard.: RRR. **L** Ard.: RR.
Lit.: Ma: 244-246, NL92: 151.

xantholyta (Nyl.) Jatta
Syn.: *Leproplaca xantholyta* (Nyl.) Harm.
On calcareous and sandstone rocks, always in shaded, natural habitats, usually on vertical surfaces.
B Mosan: AR. **L** Lorr.: RR.
Lit.: Ertz: 19, Ma: 252-254.

aractina (Fr.) Häyrén, syn. *C. viridirufa* auct., non (Ach.) Zahlbr. This species was reported from **B** Mosan on the basis of a single collection which could not be located (Ma: 244). Its presence in the area of study is very doubtful.

arenaria auct., p. p., non (Pers.) Müll. Arg., see *C. subpallida*

aurantia auct., non (Pers.) J. Steiner, see *C. flavescens*

aurantiaca (Lightf.) Th. Fr., see *C. flavorubescens*

caesiorufa '(Wibel) Flagey'. Reported from **B** by DG: 37, but no material seen (Ma: 145).

callopisma (Ach.) Th. Fr., see *C. aurantia*

chlorina var. *cyanolepra* (Nyl.) Kickx, see *C. chlorina*

citrina var. *flavocitrina* (Nyl.) A. E. Wade, see *C. flavocitrina*

(*)*congrediens* (Nyl.) Zahlbr., see *C. grimmiae*

dalmatica (A. Massal.) H. Olivier, see *C. dolomiticola*

elegans (Link) Th. Fr., see *Xanthoria elegans*

festiva (Ach.) Zwackh, see *C. crenularia*

fulgens (Sw.) Körb., see *Fulgensia fulgens*

heppiana (Müll. Arg.) Zahlbr., see *C. flavescens*

heppiana var. *brevilobata* (Nyl.) A. E. Wade, see *C. brevilobata*

interfulgens auct. belg., non (Nyl.) J. Steiner, see *C. maritima*

isidiigera Vězda, see *C. chlorina*

lactea (A. Massal.) Zahlbr. The reports of this species from the study area refer either to *C. crenulatella* or to *C. marmorata*. See under these names. *C. lactea* does not occur in the study area.

lobulata (Flörke) Hellb., syn. *Xanthoria lobulata* (Flörke) B. de Lesd. The only collection reported under this name from the study area is *C. vitellinula* (Ma: 207-208).

murorum (Ach.) Th. Fr., see *C. saxicola*

murorum auct. p. p., non (Ach.) Fr., see *C. biatorina*

pyracea (Ach.) Th. Fr., see *C. holocarpa*

sarcopisioides (Körb.) Zahlbr., see under *C. obscurella*

stillicidiorum (Vahl) Lynge, see *C. cerina* var. *chloroleuca*

(*)*tenuata* auct., non (Nyl.) Zahlbr., see *C. polycarpa*

(*)*tenuatula* (Nyl.) Zahlbr., see *C. polycarpa*

tetrasticha (Nyl.) H. Olivier, see *C. ochracea*

ulcerosa Coppins & P. James. The collection from **B** Mar. referred to this species by Ma: 259 is a shade form of *C. citrina*.

velana auct., non (A. Massal.) Du Rietz, see *C. dolomiticola*

virescens (Sm.) Coppins. This species was mentioned from **B** by Ma: 241-244 and Purvis et al. (1992: 159), but the corresponding material is now included in *C. chlorina*.

viridirufa, auct., non (Ach.) Zahlbr., see *C. aractina*

CANDELARIA A. Massal.

concolor (Dicks.) Stein
Corticolous, mainly on isolated trees along roads, in villages or in orchards, usually in nitrophilous conditions.
B Mar.: RR, Fl.: AR, Camp.: RRR, Brab.: AC, Mosan: AR, Ard.: AR, Lorr.: RR. **L** Ard.: R, Lorr.: AR.
Lit.: DSL: 242-243, Ho: 109, 567, La66: 359-363, WS: 32, 66.

CANDELARIELLA Müll. Arg.

aurella (Hoffm.) Zahlbr.
On calcareous or sandstone rocks, walls, mortar, concrete, asbestos, etc., especially common in urban areas, exceptionally corticolous.
B *AC-CC*. **L** *AC-CC*.
Lit.: Ho: 101, 110, Mü1: 152, NL84: 12, NL92: 151, NL93: 42, VGH: 114.

coralliza (Nyl.) H. Magn.
On siliceous and rarely sandstone rocks, in exposed and nitrophilous conditions, only in natural habitats.
B Mosan: R, Ard.: AR. **L** Ard.: *AR*, Lorr.: RR.
Lit.: Di: 78, La68: 77-78, Mü1: 152, NL92: 168, Sé: 137.

medians (Nyl.) A. L. Sm.
On man-made calcareous substrates, always in nitrophilous conditions.
B Mar.: *AR*, Fl.: *AR*, Brab.: RR, Mosan: RRR. **L** Ard.: RRR, Lorr.: RRR. Probably overlooked.
Lit.: La69: 106, NL92: 151, VGH: 114, Zwaenepoel et al. (1994: 37).

reflexa (Nyl.) Lettau
Corticolous, mainly in orchards on *Malus* and *Pyrus* or on roadside trees, rarely in forests, exceptionally on corticolous mosses, always in nitrophilous conditions.
B *AR-C*. **L** Ard.: AR, Lorr.: C.
Lit.: Di: 79-80.

vitellina (Hoffm.) Müll. Arg.
Syn.: *Callopisma vitellinum* (Hoffm.) Bagl.
Saxicolous, on siliceous and sandstone rocks, exceptionally terricolous, rarely corticolous, especially at the base of isolated trees, often in polluted areas or close to farms.
B *AC-CC*. **L** *AC-CC*.
Lit.: Ca: 87-88, Di: 80-81, DSL: 242, Ho: 111, NL93: 42-43.

xanthostigma (Ach.) Lettau
Corticolous, in orchards (e. g. on *Malus*), but also on trees in forests or along roads (e. g. *Fraxinus*, *Populus*, *Tilia*, *Ulmus*).
B Mar.: AC, Fl.: C, Camp.: C, Brab.: AC, Mosan, Ard., Lorr.: *AR*. **L** Ard.: R, Lorr.: AC.
Lit.: Ca: 90-91, Di: 81-82, DSL: 241-242, Ho: 113, NL84: 13, Qu: 82-83, VGH: 114.

CAPRONIA Sacc.

***peltigerae** (Fuckel) D. Hawksw.
Syn.: *Enchnosphaeria peltigerae* (Fuckel) Sacc.
On *Peltigera didactyla* and *P. rufescens*.
B Mosan: RRR. **L** Lorr.: R (AC in the south-western part). **F** Mar.: RRR (<1910).
Lit.: BDL1: 276, L5: 16-17, NL97: 46.

**triseptata* (Diederich) Etayo, see *Muellerella triseptata*

CARBONEA (Hertel) Hertel

***vitellinaria** (Nyl.) Hertel
Syn.: *Lecidea vitellinaria* Nyl., *Lecidella vitellinaria* (Nyl.) Kremp., *Nesolechia vitellinaria* (Nyl.) Rehm
On *Candelariella coralliza* and *C. vitellina*, not causing any damage to its hosts, mainly on natural outcrops, also on schistose walls or roofs in exposed conditions.
B Ard.: RR. **L** Lorr.: RRR. **F** Ard.: RRR.
Lit.: L1: 6-7.

CATAPYRENIUM Flot.

lachneum (Ach.) B. de Lesd., see *Placidium lachneum*

pilosellum Breuss, see *Placidium pilosellum*

rufescens (Ach.) Breuss, see *Placidium rufescens*

squamulosum (Ach.) Breuss, see *Placidium squamulosum*

subtrachyticum B. de Lesd., see under *Placopyrenium*

CATILLARIA A. Massal.

atomarioides (Müll. Arg.) H. Kilias
On natural, siliceous rocks, usually in exposed conditions, also on walls, bricks, etc.
B Mosan: RR. **L** Ard.: R. Most probably overlooked.
Lit.: NL84: 13, NL92: 152.

chalybeia (Borrer) A. Massal.
On siliceous to slightly calcareous rocks, also on walls, bricks, mortar, etc.
B Mar.: RRR, Fl.: R, Camp.: RR, Brab.: RRR, Mosan: AR, Ard.: *AR*. **L** Ard.: R, Lorr.: RR.
Lit.:NL84: 13, NL87: 20, NL92: 152, NL93: 43, VGH: 114, Hoffmann & Van Rompu (1995), Zwaenepoel et al. (1994: 37).

lenticularis (Ach.) Th. Fr.
Syn.: *Biatorina lenticularis* (Ach.) Körb.
On calcareous outcrops, also on artificial substrates (walls, mortar, concrete).
B Camp.: RRR, Brab.: RR, Mosan: *AC*, Ard.: RR, Lorr.: *R*. **L** Lorr.: R. Overlooked.
Lit.:Di: 83, Ertz: 19, NL84: 13, NL87: 20, NL93: 43, Hoffmann & Van Rompu (1995), Kilias (1981: 341).

minuta (A. Massal.) Lettau
On hard calcareous rocks in shaded and sheltered conditions, only in natural habitats.
B Mosan: R, probably overlooked. **L** - .
This species does not belong to *Catillaria* s. s., but its exact generic position is still problematic.
Lit.: Ertz: 19, L6: 140-141, NL84: 13, NL97: 46.

nigroclavata (Nyl.) Schuler
Corticolous, often on branches of *Salix*, also on rough bark.
B Mosan: R, Ard.: RR, Lorr.: RR. **L** Ard.: RRR, Lorr.: R. **F** Lorr.: RRR. Most probably quite common, but overlooked.
Lit.: Di: 84-85, L3: 28, NL84: 13.

atropurpurea (Schaer.) Th. Fr., see *Catinaria atropurpurea*

**episema* (Nyl.) H. Olivier, see *Toninia episema*

erysiboides (Nyl.) Th. Fr. Reported from **B** by DG: 23 and Mü2: 195, but relevant material not seen.

globulosa (Flörke) Th. Fr., see *Lecania globulosa*

griffithii (Sm.) Malme, see *Cliostomum griffithii*

grossa (Nyl.) Körb., see *Megalaria grossa*

incana '(Sm.)'. The lichen referred to this name by Ko: 259 is most probably *Lepraria incana*.

lightfootii (Sm.) H. Olivier, see *Fuscidea lightfootii*

melanobola f. *frullaniae* B. de Lesd., see *Arthonia muscigena*

micrococca (Körb.) Th. Fr., see *Micarea prasina*

prasina (Fr.) Th. Fr., see *Micarea prasina*

pulverea (Borrer) Lettau, see *Megalaria pulverea*

sphaeroides (A. Massal.) Schuler, see *Biatora sphaeroides* under *Mycobilimbia*

synothea auct., non Ach., see *Micarea denigrata*

tricolor auct., non (With.) Th. Fr., see *Cliostomum griffithii*

CATINARIA Vain.

atropurpurea (Schaer.) Poelt & Vězda
Syn.: *Biatorina atropurpurea* (Schaer.) A. Massal., *Catillaria atropurpurea* (Schaer.) Th. Fr.
Corticolous, on *Acer platanoides*, *Fagus*, *Populus*, *Pyrus* and *Quercus*, mostly in well-preserved forests, rarely along roads.
B Ard.: RR, Lorr.: RR. **L** Ard.: RR.
The related, undescribed species with 3-septate ascospores, mentioned in Purvis et al. (1992: 170), occurs in the study area (**B** Mosan: RRR, Ard.: RRR).
Lit.: Di: 83, L3: 28.

grossa (Nyl.) Vain., see *Megalaria grossa*

laureri (Th. Fr.) Degel., see *Megalaria laureri*

leucoplaca (DC.) Zahlbr., see *Megalaria grossa*

CATOLECHIA Flot.

canescens (Dicks.) Anzi, see *Diploicia canescens*

CELIDIUM Tul.

**stictarum* Tul., see *Plectocarpon lichenum*

**varians* ('Nyl.') Arnold, see *Arthonia glaucomaria*

**varium* (Tul.) A. Massal., see *Arthonia varia*

CERCIDOSPORA Körb.

***epipolytropa** (Mudd) Arnold
On *Lecanora gisleriana*, *L. intricata* and *L. polytropa.*
B Ard.: RR. **L** - .
Lit.: NL97: 21.

***xanthoriae** (Wedd.) R. Sant.
Syn.: *C. caudata* Kernst.
In the apothecia of *Caloplaca crenulatella*.
B - . **L** Lorr.: RRR.
Lit.: L8.

CETRARIA Ach.

aculeata (Schreb.) Fr.
Syn.: *Coelocaulon aculeatum* (Schreb.) Link, *Cornicularia aculeata* (Schreb.) Ach., *C. tenuissima* (L.) Zahlbr.
On soil in heaths, on slate debris in abandoned quarries, on sandstone rocks, also present in slightly acidified Mesobromion communities.
B Mar.: RR, Camp.: AR-AC, decreasing rapidly, Brab.: RR, Mosan: AR, Ard.: AR, Lorr.: R. **L** Ard.: AR, Lorr.: R.
Lit.: La66: 445, Mü1: 154.

islandica (L.) Ach.
On soil in heaths, formerly also present in slightly acidified Mesobromion communities (still present in such habitats in **F** Lorr.).
B Camp.: AR, decreasing rapidly, Brab.: RR (†<1944), Mosan: RR (†1967), Ard.: R, decreasing, Lorr.: RRR (1976). **L** Lorr.: R (†<1880). **F** Lorr.: RR.
Lit.: La66: 407-410, Mü1: 154, Asperges (1986), Diederich (1986a: 118), Duvigneaud (1944), Schumacker (1965), Vanek (1976).

muricata (Ach.) Eckfeldt
Syn.: *Coelocaulon muricatum* (Ach.) J. R. Laundon, *Cornicularia muricata* (Ach.) Ach., *C. tenuissima* (L.) Zahlbr. var. *muricata* (Ach.) Dalla Torre & Sarnth.
On soil in heaths, on slate debris in abandoned quarries and on sandstone rocks.
B Camp.: AR, decreasing rapidly, Brab.: RR (†1969), Mosan: RR, Ard.: AR, Lorr.: RR. **L** Ard.: R, Lorr.: RR.
Lit.: La66: 446, Mü3: 44.

aleurites (Ach.) Th. Fr., see *Imshaugia aleurites*

chlorophylla (Willd.) Vain., see *Tuckermannopsis chlorophylla*

glauca (L.) Ach., see *Platismatia glauca*

hepatizon (Ach.) Vain., see *Tuckermannopsis hepatizon*

juniperina (L.) Ach., see *Vulpicida juniperinus*

nivalis (L.) Ach., see *Flavocetraria nivalis*

odontella (Ach.) Ach., syn. *Cornicularia odontella* (Ach.) Westend. Reported from **B** by DG: 34, but relevant material not seen. Most probably a misidentification.

pinastri (Scop.) Gray, see *Vulpicida pinastri*

sepincola (Ehrh.) Ach., see *Tuckermannopsis sepincola*

CETRELIA W. L. Culb. & C. F. Culb.

olivetorum (Nyl.) W. L. Culb. & C. F. Culb.
Syn.: *C. cetrarioides* (Duby) W. L. Culb. & C. F. Culb., *Parmelia cetrarioides* (Duby) Nyl.
Corticolous, mainly on *Fagus* in well-preserved and humid forests, or saxicolous on sandstone rocks.
B Ard.: R, Lorr.: AR. **L** Ard.: RRR (1985), Lorr.: RR (1981).
Two chemotypes have been detected in the study area: one containing imbricaric acid, which corresponds to *C. cetrarioides*, and one with olivetoric acid, which corresponds to *C. olivetorum* s. s.
Lit.: L4: 19, Diederich (1985a: 22), Diederich (1986a: 118).

cetrarioides (Duby) W. L. Culb. & C. F. Culb., see *C. olivetorum*

CHAENOTHECA (Th. Fr.) Th. Fr.

brachypoda (Ach.) Tibell
Syn.: *Coniocybe sulphurea* (Retz.) Nyl.
Corticolous, on old *Salix*, mainly in crevices.
B Fl.: RRR, Brab.: RRR, Mosan: RRR. **L** - .
Lit.: L3: 30, Hoffmann & Van Landuyt (1997: 29-30), Van Landuyt & Hoffmann (1996).

brunneola (Ach.) Müll. Arg.
Corticolous, on standing decorticated wood.
B Ard.: RRR. **L** - .
Lit.: Di: 86, L3: 29, L5: 17.

chlorella (Ach.) Müll. Arg.
Syn.: *C. carthusiae* (Harm.) Lettau
Corticolous, on old *Quercus*.
B Brab.: RR, Ard.: RR. **L** - .
Lit.: L3: 29, Ho: 118, Hoffmann & Van Landuyt (1997: 30), Van Landuyt & Hoffmann (1996).

chrysocephala (Ach.) Th. Fr.
Syn.: *Cyphelium chrysocephalum* (Ach.) Chevall.
Corticolous or lignicolous, mainly on old *Quercus*, rarely on *Alnus*, *Carpinus*, *Crataegus*, *Populus* or *Prunus avium*, often accompanied by other species of Caliciales.
B Brab.: RRR (†<1900), Mosan: RRR, Ard.: AR, Lorr.: RRR. **L** Ard.: AR-AC, Lorr.: AR.
Lit.: Di: 86-87, L3: 29, NL84: 13.

ferruginea (Turner & Borrer) Mig.
Syn.: *C. melanophaea* (Ach.) Zwackh, *Cyphelium melanophaeum* (Ach.) A. Massal.
Corticolous or lignicolous, often on *Quercus* or *Pinus*, or at the base of *Picea* stems, toxitolerant.
B Fl.: AR, Brab.: AR, Camp.: AR, Mosan: AR, Ard.: *AC*, Lorr.: *AC*. **L** Ard.: AC, Lorr.: C. **F** Ard.: RR.
Lit.: Ba: 9, Di: 87-88, Ho: 117, 571, La68: 72, NL84: 13, Hoffmann & Van Landuyt (1997: 30-32), Van Landuyt & Hoffmann (1996).

furfuracea (L.) Tibell
Syn.: *Coniocybe furfuracea* (L.) Ach.
Corticolous at the excavated base of trees, mainly on *Fagus* and *Quercus*, on roots of trees (e. g. of *Picea*), on sand or detritus, rarely in fissures of siliceous rocks, generally in places with a high humidity and a low luminosity.
B Mosan: RRR, Ard.: R, Lorr.: RRR. **L** Ard.: AR-AC, Lorr.: AR.
Lit.: Di: 88-90, La68: 72, NL84: 13.

hispidula (Ach.) Zahlbr.
Corticolous on *Populus* along a stream.
B Mosan: RRR. **L** - .
Lit.: NL84: 13.

phaeocephala (Turner) Fr.
Syn.: *C. chlorella* auct., non (Ach.) Müll. Arg., *C. hispidula* auct. belg., non (Ach.) Zahlbr., *C. trabinella* (A. L. Sm.) A. L. Sm.
Corticolous in deep crevices of old *Quercus*, once on *Malus* in an orchard.
B Mosan: RR (1965), Ard.: RR. **L** Lorr.: RRR.
Lit.: Di: 90, L3: 29.

stemonea (Ach.) Müll. Arg.
Syn.: *C. aeruginosa* auct. p. p., non (A. L. Sm.) A. L. Sm., *Cyphelium stemoneum* (Ach.) De Not.
Corticolous, in deep crevices of old trees (e. g. *Populus*, *Quercus*) in humid habitats.
B Brab.: RRR (†<1900), Mosan: RR, Ard.: RR. **L** Ard.: RRR, Lorr.: RR.
Lit.: Di: 91, L3: 29, La68: 72, NL87: 20.

trichialis (Ach.) Th. Fr.
Syn.: *C. aeruginosa* (A. L. Sm.) A. L. Sm., *Cyphelium trichiale* (Ach.) De Not.

Corticolous, mainly in deep crevices of old *Quercus* trees.
B Fl.: RR, Brab.: AR, Mosan: R, Ard.: R. **L** Ard.: RR, Lorr.: AR.
Lit.: Di: 91-92, Ho: 118, L3: 30, NL84: 13, NL92: 168, Hoffmann & Van Landuyt (1997: 32-33).

xyloxena Nádv.
Corticolous and lignicolous on *Quercus* and *Salix*.
B - . **L** Ard.: RRR, Lorr.: RRR (†1892).
Lit.: Di: 92, L5: 17.

aeruginosa (A. L. Sm.) A. L. Sm., see *C. trichialis*

aeruginosa auct. p. p., non (A. L. Sm.) A. L. Sm., see *C. stemonea*

carthusiae (Harm.) Lettau, see *C. chlorella*

chlorella auct., non (Ach.) Müll. Arg., see *C. phaeocephala*

hispidula auct. belg., non (Ach.) Zahlbr., see *C. phaeocephala*

melanophaea (Ach.) Zwackh, see *C. ferruginea*

trabinella (A. L. Sm.) A. L. Sm., see *C. phaeocephala*

CHAENOTHECOPSIS Vain.

+**pusilla** (Flörke) A. F. W. Schmidt
Syn.: *Calicium pusillum* Flörke, *Chaenothecopsis subpusilla* (Vain.) Tibell, *Calicium floerkei* Zahlbr.
Lignicolous, on a young, dead *Quercus* close to a stream.
B - . **L** Ard.: RRR.
Lit.: Di: 93-94, L5: 17.

***vainioana** (Nádv.) Tibell
On *Calicium lichenoides*, on old *Quercus* trees, in well-preserved forests.
B Mosan: RRR. **L** Ard.: RRR, Lorr.: R.
Lit.: Di: 94-95, L5: 17-18, NL84: 13, Tholl et al. (1999).

+*subpusilla* (Vain.) Tibell, see *C. pusilla*

CHROMATOCHLAMYS Trevis.

muscorum (Fr.) H. Mayrhofer & Poelt var. **muscorum**
On terricolous mosses in Xerobromion communities.
B Mosan: RR. **L** - . **F** Mar.: RRR (<1910).
Lit.: Ertz: 19, 26, NL97: 21, Mayrhofer (1987: 69-72).

CHRYSOPSORA (Vain.) Choisy

testacea (Hoffm.) Choisy, see *Psora testacea*

CHRYSOTHRIX Mont.

candelaris (L.) J. R. Laundon
Syn.: *Lepraria candelaris* (L.) Fr.
Corticolous, most common on old *Quercus* trees, but also on *Acer*, *Fagus* and *Pinus*, normally in dry shaded parts.
B Mosan: RR, Ard.: *AC*, Lorr.: *AC*. **L** Ard.: AC, Lorr.: AC.
Lit.: Di: 95-96, NL84: 13, Laundon (1981: 117).

chlorina (Ach.) J. R. Laundon
Syn.: *Calicium chlorinum* (Ach.) Schaer.
On dry and shaded outcrops of siliceous or sandstone rocks, usually in underhangs, also present on artificial substrates.
B Mosan: RR, Ard.: AR-AC. **L** Ard.: *AR*, Lorr.: RR.
Lit.: Di: 95, NL84: 13, NL92: 168, Sé: 137.

CLADINA Nyl.

Syn.: *Cladonia* subgen. *Cladina* (Nyl.) Leight.

arbuscula (Wallr.) Hale & W. L. Culb. subsp. **squarrosa** (Wallr.) Burgaz
Syn.: *Cladonia arbuscula* (Wallr.) Flot. subsp. *squarrosa* (Wallr.) Ruoss, *C. arbuscula* subsp. *arbuscula* auct. p. p., non (Wallr.) Flot.
On acidic soil and humus, often in heathlands or over siliceous outcrops.
B Brab.: RRR (1888), Mosan: RR, Ard.: *AR*, Lorr.: *R*. **L** Ard.: *AR*. **F**: Lorr.: RRR.
Lit.: La69: 132, NL84: 13, Schl: 49-50, 200.

ciliata (Stirt.) Trass
Syn.: *Cladonia ciliata* Stirt.
On acidic soil, between mosses, often over siliceous rocks.
Two chemotypes are known from the study area:
C. ciliata s. s., syn. *Cladonia leucophaea* Abbayes: **B** Camp.: RRR, Mosan: RRR, Ard.: *AR*. **L** Ard.: *AR*.
C. ciliata f. *tenuis* (Flörke) Ahti, syn. *Cladonia tenuis* (Flörke) Harm., *C. ciliata* var. *tenuis* (Flörke) Ahti: **B** Camp.: RR, Mosan: R, Ard.: *AR*, Lorr.: RRR. **L** Ard.: *AR*.
Lit.: La69: 132, Mü1: 149, Diederich (1985b: 30), Ramaut et al. (1966).

mitis (Sandst.) Hustich
Syn.: *Cladonia mitis* Sandst., *C. arbuscula* (Wallr.) Flot. subsp. *mitis* (Sandst.) Ruoss
On acidic soil and humus, often over siliceous rocks or in heathlands.
B Camp.: R, Ard.: *R*, Lorr.: RRR. **L** Ard.: RR.
Lit.: La68: 75, La69: 132, NL92: 169, Duvigneaud (1937a).

portentosa (Dufour) Follmann
Syn.: *Cladonia portentosa* (Dufour) Coem., C. *impexa* Harm., *C. sylvatica* α *sylvestris* a. *tenuis* subf. *condensata* Aigret, *C. subimpexa* P. A. Duvign., *C. portentosa* f. *subimpexa* (P. A. Duvign.) Ahti
On humus and acidic soil in heathlands, among rocks, also in open woodlands.
B Mar.: RR, Camp.: AC, Brab.: RRR, Mosan: R, Ard.: *AC*, Lorr.: RRR. **L** Ard.: AR, Lorr.: R. **F** Ard.: R.
C. subimpexa is a very rare chemotype with a conspicuous grey colour and lacking usnic acid; it was described from La Roche (**B** Ard.).
Lit.: La69: 132, Mü1: 149, NL84: 13, NL92: 169, Ramaut et al. (1966), Van Landuyt & Hoffmann (1996).

rangiferina (L.) Nyl.
Syn.: *Cladonia rangiferina* (L.) F. H. Wigg.
Over siliceous and sandstone rocks, generally between mosses.
B Ard.: AR-R→RR, on the verge of extinction. **L** Ard.: R, Lorr.: RR. **F** Ard.: RRR.
Lit.: La68: 75, La69: 132, NL92: 169, Sé: 137, Duvigneaud (1938), Lambinon & Schumacker (1962).

stygia (Fr.) Ruoss
Syn.: *Cladonia stygia* (Fr.) Ahti
Ecology of the only reported collection unknown, probably on soil in heathland.
B Ard.: RRR (†1936). **L** - .
Now extinct throughout the area of study.
Lit.: Sé: 141.

arbuscula (Wallr.) Hale & W. L. Culb. subsp. *arbuscula*, syn. *Cladonia arbuscula* (Wallr.) Flot., *C. sylvatica* auct., non (Ach.) Rabenh. All the records of this taxon from the area of study are likely to belong to *C. arbuscula* subsp. *squarrosa*, but a chemical study of the whole material still has to be done. The subsp. *arbuscula* is an alpine taxon, which is unlikely to occur in the study area.

stellaris (Opiz) Brodo, syn. *Cladonia stellaris* (Opiz) Pouzar & Vězda, *C. alpestris* auct., non (L.) Rabenh. Reported from **B** by DG: 25, but relevant material not seen. Most probably a misidentification.

CLADONIA P. Browne

caespiticia (Pers.) Flörke
On sandy or mossy soil, at the base of trees, or more frequently over sandstone or siliceous rocks, usually in shaded places.
B Brab.: RRR (1968), Mosan: RR, Ard.: R, Lorr.: RRR. **L** Ard.: RR, Lorr.: RR. **F** Ard.: RRR.
Lit.: La69: 142, Mü1: 148, NL77: 19, NL92: 169, Diederich (1985b: 30).

callosa Harm.
Syn.: *C. fragilissima* Østh. & P. James
On shale debris by a road.
B - . **L** - . **F** Ard.: RRR. Most probably overlooked throughout the Ard. district.
Lit.: L8.

cariosa (Ach.) Spreng.
On sandy, ± calcareous soil, also found on industrial soil slightly contaminated with heavy metals (Pb and Zn).
B Mosan: RR, Ard.: RR. **L** Lorr.: RRR.
Lit.: La69: 142, L8, Mü1: 146, NL87: 20, Diederich (1985b: 30).

cenotea (Ach.) Schaer.
Syn.: *C. uncinata* Hoffm.
On mosses and plant debris over siliceous rocks in a *Quercus* wood.
B Ard.: RRR. **L** - . Overlooked ?
Lit.: DG: 27, L8, Aigret (1901: 138).

cervicornis (Ach.) Flot. subsp. **cervicornis**
Syn.: *C. verticillata* (Hoffm.) Schaer. var. *cervicornis* (Ach.) Flörke
On sandy soil, often in heathlands.
B Camp.: RRR, Mosan: RRR, Ard.: R. **L** Ard.: RR, Lorr.: RRR.
Lit.: DG: 30, Mü1: 147.

cervicornis subsp. **pulvinata** (Sandst.) Ahti
Syn.: *C. rappii* auct., non A. Evans
On sandy soil, over siliceous, natural outcrops and over slate debris in disused quarries.
B Camp.: RRR, Ard.: R. **L** Ard.: RRR.
Lit.: La69: 139, Schl: 56-57, 204, Sé: 137.

cervicornis subsp. **verticillata** (Hoffm.) Ahti
Syn.: *C. verticillata* (Hoffm.) Schaer.
Over sandy or humus-rich soil, in heathlands, bogs or over siliceous, natural outcrops, also found in disused quarries and on industrial soil contaminated with heavy metals (Pb and Zn).
B Mosan: RR, Ard.: *AR*, Lorr.: RRR. **L** Ard.: RR, Lorr.: RR. **F** Mosan: RRR.
Lit.: Mü1: 147, NL92: 169, Vanek (1976).

chlorophaea (Sommerf.) Spreng.
On recently disturbed soil, peat, humus and rotting logs, in open places, rarely on trees inside forests.
B Camp., Mosan: *AR*, Ard., Lorr.: *AC*. **L** *AC*. **F** Mosan: RRR, Ard.: *AC*.
Lit.: La69: 139.

coccifera (L.) Willd.
On acidic soil, on humus, on sandstone or siliceous rocks, often in *Calluna* heathlands.
The following taxa, based on chemical and minor morphological differences, have been recognized in the study area:
C. coccifera s. s., syn. *C. cornucopioides* (L.) Körb.: **B** Ard.: R. **L** Ard.: R, Lorr.: RRR.
C. borealis S. Stenroos: **B** Ard.: RRR. **L** Ard.: RRR.
C. diversa Asperges: **B** Mar.: RRR, Camp.: C (type locality), Brab.: AR, Mosan: R, Ard.: AR-AC, Lorr.: RRR. **L** - . **D** Ard.: AR, Lorr.: RRR.
Lit.: NL92: 152, 169, Schl: 73, 212, Asperges (1983: 358-404), Asperges (1985b), Asperges (1987: 98-100).

coniocraea (Flörke) Spreng.
On soil amongst siliceous and calcareous outcrops, frequently on trees with a mossy acid bark or wood.
B Mar.: AR, Fl.: AR, Camp.: C, Brab.: AC, Mosan: R, Ard., Lorr.: *C*. **L** *C*. **F** Mosan, Ard.: *C*.
Lit.: Ba: 9, Ca: 175-176, DSL: 235-236, Ho: 119, La69: 141, NL84: 13, Qu: 130-131, VGH: 114.

convoluta (Lam.) Anders
Syn.: *C. foliacea* var. *convoluta* (Lam.) Vain., *C. endiviifolia* (Dicks.) Fr.
Terricolous, in Mesobromion and Xerobromion communities, also in disused quarries of calcareous rocks.
B Mosan: AR. **L** - . **F** Mosan: RRR, Lorr.: RR.
Lit.: La69: 143, NL84: 13.

cornuta (L.) Hoffm.
On calcareous or sandy soil, in open places or inside forests.
B Mosan: RR, Ard.: RRR. **L** Lorr.: RR.
Lit.: DG: 29, L5: 18, Mü1: 147, NL84: 13, Aigret (1901: 157), Diederich (1986a: 118-119).

crispata (Ach.) Flot.
Incl. C. *crispata* var. *cetrariiformis* (Delise) Vain.
In heathlands, in open woodlands, over soil or amongst mosses, also ± directly over exposed sandstone and siliceous rocks.
B Brab.: RRR, Camp.: RR, Ard.: R, Lorr.: RRR. **L** Ard.: RR, Lorr.: RR.
Lit.: DG: 27, La68: 74, La69: 135, Mü1: 148, Mü2: 196, Schl: 79, 214, Asperges (1990: 130), Smets (1997), Vanek (1976).

deformis (L.) Hoffm.
On acidic soil and humus in heathlands, in open forests or over siliceous, natural outcrops.
B Camp.: RR, Brab.: RRR, Mosan: RRR, Ard.: R. **L** - .
Lit.: Mü1: 146, Asperges (1983: 420-429), Asperges (1987: 98).

digitata (L.) Hoffm.
On living trees or dead logs (*Betula*, *Fagus*, *Picea*, *Pinus*, *Quercus*, etc.), rarely on peaty soil, inside forests.
B Camp.: RR, Brab.: RR, Mosan: R, Ard.: AC, Lorr.: R. **L** Ard.: *AR*, Lorr.: R. **F** Ard.: R.
Lit.: Ba: 9, Ca: 178, Mü1: 146, NL84: 13, Asperges (1983: 316-333), Asperges (1987: 98).

fimbriata (L.) Fr.
Syn.: *C. major* (K. G. Hagen) Sandst.
On acidic soil and rotting wood, more rarely on trees, rocks and old walls, also on industrial soil contaminated with heavy metals (Pb and Zn).
B Mar.: R, Fl.: RR, Camp.: AR, Brab.: AC, Mosan, Ard., Lorr.: *AC*. **L** *AC*. **F** Mosan, Ard.: *AC*.
Lit.: Ca: 177, Ho: 122, La69: 141, NL84: 13, Qu:130, 132.

floerkeana (Fr.) Flörke
Syn.: *C. macilenta* subsp. *floerkeana* (Fr.) V. Wirth
On acidic soil, humus, peat and rotting wood and stumps in heathlands, and over siliceous and sandstone rocks.
The following taxa, separated by chemical and minor morphological characters, are known from the study area:
C. floerkeana s. s.: **B** Camp.: AC-C, Brab.: AR, Mosan: RR, Ard.: AC, Lorr.: RR. **L** Ard.: RR, Lorr.: RR.
C. berghsonii Asperges: **B** Camp.: R, Brab.: RRR, Ard.: RR (type locality). **L** - .
Lit.: Mü1: 145, Asperges (1981), Asperges (1983: 285-315), Asperges (1987: 96, 100).

foliacea (Huds.) Willd.
Syn.: *C. alcicornis* (Lightf.) Fr.
Terricolous in Mesobromion communities, incl. those with a slightly acidic soil, sometimes over siliceous, natural outcrops, rarely in dunes.
B Mar.: RR, Mosan: R, Ard.: RRR. **L** Ard.: RR, Lorr.: RR. **F** Mosan: RRR.
Lit.: La69: 143, Mü1: 146, NL84: 13, NL92: 169, Diederich (1985b: 30).

furcata (Huds.) Schrad. subsp. **furcata**
On moderately acidic soil, in open, mossy or grassy places, also found on industrial soil contaminated with heavy metals (Pb and Zn).
B Mar.: R, Camp.: RRR, Brab.: RRR (<1937), Mosan: AC-AR, Ard.: AR, Lorr.: *AR*. **L** Ard.: AR, Lorr.: AR. **F** Mosan: RR.
Lit.: La69: 134, NL84: 13.

furcata subsp. **subrangiformis** (Sandst.) Abbayes
Syn.: *C. subrangiformis* Sandst.

In Mesobromion and Xerobromion communities, usually in very dry and exposed facies.

B Mar.: RR, Mosan: R. **L** Lorr.: R. **F** Lorr.: R.

Lit.: Ertz: 19, La68: 74-75, NL84: 13.

glauca Flörke

Terricolous on acidic soil, over natural, siliceous and sandstone outcrops, also on rotting trees and stumps, frequent in disused quarries.

B Camp: RR, Brab.: RRR (1969), Mosan: RR, Ard.: R. **L** Ard.: RR, Lorr.: RR. **F** Ard.: RRR.

Lit.: La69: 141, Mü1: 148, NL84: 13, NL87: 21, NL92: 169, Schl: 214, Diederich (1985b: 30).

gracilis (L.) Willd.

On sandy soil and on humus in heathlands and over natural, siliceous or sandstone outcrops, usually in open places and frequent in disused quarries.

B Camp.: RRR, Mosan: RRR, Ard.: *AR*, Lorr.: RRR. **L** Ard.: *AR*, Lorr.: R. **F** Ard.: RR.

Lit.: La69: 136, Mü1: 146, Smets (1997).

grayi Sandst.

Terricolous on acidic soil, on humus and on rotting wood, often over sandstone and siliceous rocks.

The following chemotypes are known from the study area:

C. cryptochlorophaea Asahina: **B** Camp.: RR, Mosan: RR, Ard.: AR, Lorr.: RRR. **L** Ard.: RR, Lorr.: RRR.

C. grayi: **B** Mosan: RRR, Ard.: AR, Lorr.: R. **L** Ard.: RR, Lorr.: RRR.

C. merochlorophaea Asahina s. s.: **B** Camp.: RRR, Mosan: RRR, Ard.: AC, Lorr.: RR. **L** Ard.: RR, Lorr.: RRR.

C. novochlorophaea (Sipman) Brodo & Ahti, syn. *C. merochlorophaea* var. *novochlorophaea* Sipman: **B** Camp.: RR, Mosan: RRR, Ard.: AR, Lorr.: RRR. **L** Ard.: RR.

Lit.: NL92: 152, 169, Diederich (1985b: 31), Duvigneaud (1937b).

humilis (With.) J. R. Laundon

Syn.: *C. conoidea* Ahti, *C. conistea* auct., non (Delise) Asahina

Terricolous, in open places in *Calluna* heathlands, over sandstone rocks, along roads, etc.

B Camp.: RR, Brab.: RRR, Mosan: RR, Ard.: R. **L** Ard.: *R*, Lorr.: RRR. **D** Ard.: AR.

Lit.: NL77: 19, NL84: 13, Schl: 207, Sé: 141, Asperges (1990: 131), Diederich (1985b: 30).

macilenta Hoffm.

Terricolous on acidic soil, on humus and stumps in heathlands and over siliceous rocks, also found on industrial soil contaminated with heavy metals (Pb and Zn).

The following taxa, mainly distinguished by chemical characters, are known from the study area:

C. macilenta s. s.: **B** Mar.: RRR, Fl.: RR, Camp.: AC, Brab.: RR, Mosan: AR, Ard.: AC, Lorr.: AC. **L** Ard.: *AC*, Lorr.: R.

C. bacillaris (Leight.) Arnold: **B** Fl.: RR, Camp.: C, Brab.: R, Mosan: R, Ard.: AR, Lorr.: RRR. **L** - . Probably overlooked.

Lit.: Ca: 178, Mü1: 145, Asperges (1983: 239-260), Asperges (1987: 96, 100).

macrophylla (Schaer.) Stenh.

Syn.: *C. alpicola* (Flot.) Vain.

On humus over a natural, siliceous outcrop.

B Ard.: RRR (1984). **L** - .

Lit.: Sé: 140, Daniëls (1985).

ochrochlora Flörke

Over mosses on trees and rotting wood, often on tree stumps.

B Mosan: RRR, Ard.: *R*, Lorr.: RRR. **L** Ard.: *R*, Lorr.: RR. Overlooked because of earlier confusion with *C. coniocraea*.

Lit.: DG: 29, Mü1: 147, NL84: 13, NL92: 169, Sé: 141, Diederich (1985b: 31).

parasitica (Hoffm.) Hoffm.

Syn.: *C. delicata* auct., non (Ach.) Flörke

On rotting trunks or stumps, mainly in woodlands.

B Ard.: RR, Lorr.: RRR. **L** Ard.: RRR, ?Lorr.: RR (†<1850).

Lit.: La68: 75, La69: 143, NL77: 20, NL84: 13.

peziziformis (With.) J. R. Laundon

Syn.: *C. leptophylla* (Ach.) Flörke

On sandy or mineral soil, in disturbed places.

B Mosan: RRR (†1862). **L** - . **NL** Brab.: RRR.

Lit.: L8.

phyllophora Hoffm.

Syn.: *C. degenerans* (Flörke) Spreng.

Amongst mosses, over natural, siliceous and sandstone outcrops.

B Camp.: RRR. **L** Ard.: RRR, Lorr.: RRR (†1891).

Lit.: DG: 29, La69: 136, Aigret (1901: 158), Asperges (1990: 131), Diederich (1986a: 119).

pleurota (Flörke) Schaer.

Syn.: *C. coccifera* var. *pleurota* (Flörke) Schaer.

On peat and humus-rich soil in heathlands or bogs, or over natural, siliceous outcrops, rare in artificial habitats.

B Brab.: RRR, Camp. RRR, Mosan: RR, Ard.: AR, Lorr.: RR. **L** Ard.: RRR, Lorr.: RRR.

Lit.: Schl: 213, Asperges (1983: 404-419), Asperges (1987: 101).

polycarpoides Nyl.

Syn.: *C. subcariosa* auct., non (Nyl.) Vain.

On sand or mossy soil, over siliceous outcrops, in exposed conditions.

B Mosan: RR, Ard.: RRR. **L** Ard.: RRR, Lorr.: RRR (†<1850).

Lit.: DG: 28, L5: 18.

polydactyla (Flörke) Spreng.

Syn.: *C. bouillennei* P. A. Duvign., *C. flabelliformis* Vain.

On acidic bark of trees, rotting trunks and stumps, rare on mossy soil of siliceous outcrops.

B Mosan: RRR, Ard.: AC (type locality of *C. bouillennei*), Lorr.: RR. **L** Ard.: *AR*, Lorr.: R.

Lit.: Asperges (1983: 92, 334-348), Asperges (1987: 101), Mü1: 146.

pyxidata (L.) Hoffm. subsp. **pyxidata**

On soil over natural, calcareous and siliceous outcrops, also found in artificial habitats like old walls, very rare on trunks.

B Mar.: RR, Camp.: RRR, Brab.: RR, Mosan: AC, Ard.: AR, Lorr.: RR. **L** Ard.: R, Lorr.: R.

Lit.: Ca: 178, DSL: 235, La69: 139, NL84: 13.

pyxidata subsp. **pocillum** (Ach.) Å. E. Dahl

Syn.: *C. pocillum* (Ach.) O. J. Rich.

On sandy or mineral soil, or overgrowing mosses in dry and exposed, open calcareous habitats; a taxon typical of Mesobromion and Xerobromion communities.

B Mosan: AR. **L** Lorr.: R. **F** Mosan: RR, Lorr.: R.

Lit.: La69: 139, NL97: 47.

ramulosa (With.) J. R. Laundon

Syn.: *C. pityrea* (Flörke) Fr.

On sandy soil, on humus in ± open or shaded situation, often in heathlands, rare on rotting wood.

B Camp.: RRR, Mosan: R, Ard.: R, Lorr.: RR. **L** Ard.: R, Lorr.: R. **F** Mosan: RRR.

Lit.: La69: 141, Mü1: 147, NL84: 13, NL92: 169, Diederich (1985b: 29-30).

rangiformis Hoffm.

Syn.: *C. pungens* (Ach.) Flörke

On sandy or mineral soil, in neutral or basic grassland, abundant in Mesobromion and Xerobromion communities, also found on industrial soil contaminated with heavy metals (Pb and Zn).

B Mar.: R, Mosan: AR, Ard.: RR, Lorr.: *R*. **L** Ard.: R, Lorr.: AR.

Lit.: La69: 134, Mü1: 148, NL84: 13.

rei Schaer.

Syn.: *C. nemoxyna* (Ach.) Arnold

On recently disturbed soil, on old walls, etc., often in exposed and ruderal conditions.

B Mosan: RR. **L** Ard.: RRR, Lorr.: RR.

Lit.: DG: 29, NL84: 13, NL87: 21, Sé: 141, Diederich (1985b: 31).

scabriuscula (Delise) Leight.

Terricolous on sandy or mineral soil over siliceous, natural outcrops, also in disused quarries.

B Mosan: RR, Ard.: RRR. **L** Lorr.: R. **D** Ard.: AR.

Lit.: DG: 28, La69: 135, NL84: 13, NL97: 47, Schl: 210, Diederich (1985b: 31).

squamosa (Scop.) Hoffm.

On peat and humus-rich soil, at the base of living trees with a mossy acidic bark, on rotting logs, and over natural, siliceous and sandstone outcrops, also common in disused quarries.

Two chemotypes with minor morphological differences have been recognized in the study area:

C. squamosa s. s.: **B** Camp.: R, Mosan: R, Ard.: AC, Lorr.: RR. **L** Ard.: *AR*, Lorr.: R. **F** Ard.: R.

C. subsquamosa (Leight.) Cromb., syn. *C. squamosa* var. *subsquamosa* (Nyl.) Th. Fr.: **B** Ard.: RR. **L** Lorr.: RR.

Lit.: La68: 76, La69: 135, Mü1: 148, Mü2: 195, Diederich (1985b: 31).

strepsilis (Ach.) Grognot

On acidic soil rich in humus, in open situations.

B Camp.: R, Ard.: R, Lorr.: RRR. **L** Ard.: R.

Lit.: DG: 30, La69: 142, Mü1: 146, Mü2: 196, NL92: 152, Vanek (1976).

subulata (L.) F. H. Wigg.

Syn.: *C. cornutoradiata* (Vain.) Zopf

On sandy or mineral soil, mainly in open and ruderal situations, abundant in disused quarries, also found on industrial soil contaminated with heavy metals (Pb and Zn).

B Camp.: *AC*, Mosan: RR, Ard.: *AR*, Lorr.: RR. **L** Ard.: R, Lorr.: RR.

Lit.: La69: 141, NL84: 13, Mü1: 147.

sulphurina (Michx.) Fr.
On mossy boulders in a natural scree in a deep valley.
B Ard.: RR (1962). **L** - .
Lit.: Sé: 141, Asperges (1983: 349-357), Asperges (1987: 101).

symphycarpa (Flörke) Fr.
Syn.: *C.* '*symphycarpia*' auct.
On sandy or mineral soil, or overgrowing mosses in dry and exposed, open, calcareous habitats; a species typical of Xerobromion communities, also found in similar artificial habitats, like old railway ballast and on industrial soil contaminated with heavy metals (Pb and Zn).
B Mosan: AR, Lorr.: RRR. **L** Lorr.: RR. **F** Mosan: RR, Lorr.: RR.
Lit.: DG: 28, Ertz: 19, La69: 142, NL84: 13, NL97: 47, Diederich (1985b: 32).

uncialis (L.) F. H. Wigg. subsp. **biuncialis** (Hoffm.) Choisy
Syn.: *C. uncialis* auct. belgo-luxemb.
On soil in heathlands and on natural, siliceous or sandstone outcrops, often in exposed conditions, also found in disused quarries (especially of slate debris) and on industrial soil contaminated with heavy metals (Pb and Zn).
B Camp.: RR, Brab.: RRR (†1891), Mosan: RR, Ard.: AR, Lorr.: RR. **L** Ard.: R, Lorr.: R. **F** Mosan: RRR, Ard.: RR.
Lit.: La69: 130, Mü1: 149, NL92: 169.

zopfii Vain.
Syn.: *C. destricta* auct., non (Nyl.) Zopf
On sandy or gravel soil in heathlands.
B Camp.: AR→ R, Lorr.: RRR. **L** - .
Lit.: La69: 130, Vanek (1976).

acuminata (Ach.) Norrl. Reported from **B** by DG: 28 and from **L** by Ko: 124, but relevant material not seen.

agariciformis Wulfen. This name, of uncertain application, was used by Ko: 133-134 and Feltgen (1902: 176) for several *Cladonia* species in which the primary thallus is predominant.

alcicornis (Lightf.) Fr., see *C. foliacea*

alpestris auct., non (L.) Rabenh., see *Cladina stellaris*

alpicola (Flot.) Vain., see *C. macrophylla*

arbuscula (Wallr.) Flot. subsp. *arbuscula*, see *Cladina arbuscula* subsp. *arbuscula*

arbuscula subsp. *arbuscula* auct. p. p., non (Wallr.) Flot., see *Cladina arbuscula* subsp. *squarrosa*

arbuscula subsp. *mitis* (Sandst.) Ruoss, see *Cladina mitis*

arbuscula subsp. *squarrosa* (Wallr.) Ruoss, see *Cladina arbuscula* subsp. *squarrosa*

bacillaris (Leight.) Arnold, see *C. macilenta*

bellidiflora (Ach.) Schaer. This species has not been correctly reported from the study area (fide Asperges, 1983: 429-430).

berghsonii Asperges, see *C. floerkeana*

borealis S. Stenroos, see *C. coccifera*

botrytes (K. G. Hagen) Willd. The report of this species from **L** Lorr. by Ko: 128-129 is not supported by any herbarium material, and is therefore doubtful.

bouillennei P. A. Duvign., see *C. polydactyla*

carneola (Fr.) Fr. Reported from **B** by DG: 30 and Aigret (1901: 205), and from **L** by Ko: 128 (see also Schl: 211) and Feltgen (1902: 176), but relevant material not seen. Most probably a misidentification.

ciliata Stirt., see *Cladina ciliata*

ciliata var. *tenuis* (Flörke) Ahti, see *Cladina ciliata*

coccifera var. *pleurota* (Flörke) Schaer., see *C. pleurota*

conistea auct., non (Delise) Asahina, see *C. humilis*

conoidea Ahti, see *C. humilis*

cornucopioides (L.) Körb., see *C. coccifera*

cornutoradiata (Vain.) Zopf, see *C. subulata*

crispata var. *cetrariiformis* (Delise) Vain., see *C. crispata*

cryptochlorophaea Asahina, see *C. grayi*

decorticata (Flörke) Spreng. Reported from **B** by DG: 29 and Aigret (1901: 149), and from **L** Ard. by Ko: 123, but relevant material not seen.

degenerans (Flörke) Spreng., see *C. phyllophora*

delicata auct., non (Ach.) Flörke, see *C. parasitica*

destricta auct., non (Nyl.) Zopf, see *C. zopfii*

diversa Asperges, see *C. coccifera*

endiviifolia (Dicks.) Fr., see *C. convoluta*

flabelliformis Vain., see *C. polydactyla*

foliacea var. *convoluta* (Lam.) Vain., see *C. convoluta*

gracilis subsp. *elongata* (Wulfen) Vain. Reported from **B** by DG: 29, but relevant material not seen. Most probably a misidentification.

gracilis var. *macroceras* (Delise) Flot., see *C. macroceras*

impexa Harm., see *Cladina portentosa*

incrassata Flörke. Old reports of this species from **B** are erroneous (Asperges 1983: 431), and the collection mentioned by Sé: 140 from **B** Ard. could not be checked, the relevant specimen being absent in LGHF.

leptophylla (Ach.) Flörke, see *C. peziziformis*

leucophaea Abbayes, see *Cladina ciliata*

macilenta subsp. *floerkeana* (Fr.) V. Wirth, see *C. floerkeana*

macroceras (Delise) Hav. The report of this species from **L** Ard. by Ko: 121 (sub *C. gracilis* var. *macroceras*) is not supported by any herbarium material, and is therefore doubtful.

major (K. G. Hagen) Sandst., see *C. fimbriata*

merochlorophaea Asahina, see *C. grayi*

merochlorophaea var. *novochlorophaea* Sipman, see *C. grayi*

mitis Sandst., see *Cladina mitis*

nemoxyna (Ach.) Arnold, see *C. rei*

novochlorophaea (Sipman) Brodo & Ahti, see *C. grayi*

papillaria (Ehrh.) Hoffm., see *Pycnothelia papillaria*

pityrea (Flörke) Fr., see *C. ramulosa*

pocillum (Ach.) O. J. Rich., see *C. pyxidata* subsp. *pocillum*

portentosa (Dufour) Coem., see *Cladina portentosa*

pungens (Ach.) Flörke, see *C. rangiformis*

rangiferina (L.) F. H. Wigg., see *Cladina rangiferina*

rappii auct., non A. Evans, see *C. cervicornis* subsp. *pulvinata*

squamosa var. *subsquamosa* (Nyl.) Th. Fr., see *C. squamosa*

stellaris (Opiz) Pouzar & Vězda, see *Cladina stellaris*

stygia (Fr.) Ahti, see *Cladina stygia*

subcariosa auct., non (Nyl.) Vain., see *C. polycarpoides*

subcervicornis (Vain.) Kernst. Once reported from **B** Camp. by Asperges (1990: 131), but no material seen.

subimpexa P. A. Duvign., see *Cladina portentosa*

subrangiformis Abbayes, see *C. furcata* subsp. *subrangiformis*

subsquamosa (Leight.) Cromb., see *C. squamosa*

sylvatica auct., non (Ach.) Rabenh., see *Cladina arbuscula* subsp. *arbuscula*

sylvatica α *sylvestris* a. *tenuis* subf. *condensata* Aigret, see *Cladina portentosa*

tenuis (Flörke) Harm., see *Cladina ciliata*

turgida Hoffm. The report of this species from **L** Ard. by Ko: 120 and Lorr. by Feltgen (1902: 173) is not supported by any herbarium material, and is therefore doubtful.

uncinata Hoffm., see *C. cenotea*

verticillata (Hoffm.) Schaer., see *C. cervicornis* subsp. *verticillata*

verticillata var. *cervicornis* (Ach.) Flörke, see *C. cervicornis* subsp. *cervicornis*

CLADOSPORIUM Link

***arthoniae** M. S. Christ. & D. Hawksw.
On *Lecanographa lyncea* and *Schismatomma decolorans*.
B - . **L** Lorr.: R.
Lit.: Di: 239, L5: 18.

CLAUZADEA Hafellner & Bellem.

immersa (Hoffm.) Hafellner & Bellem.
Syn.: *Lecidella immersa* (Hoffm.) Körb., *Protoblastenia immersa* (Hoffm.) J. Steiner
On hard calcareous rocks, in sunny and ± sheltered situations.
B Mosan: AR, Ard.: RRR. **L** - .
Lit.: NL77: 22, NL84: 13, NL97: 47.

metzleri (Körb.) D. Hawksw.
Syn.: *Protoblastenia metzleri* (Körb.) J. Steiner
On hard calcareous rocks, in rather sheltered conditions, once on sandstone in a Mesobromion community.
B Mosan: AR, Lorr.: RR. **L** Lorr.: RRR. **F** Lorr.: RRR.
Lit.: Ertz: 19, NL77: 22, NL87: 21, NL97: 47.

monticola (Schaer.) Hafellner & Bellem.
Syn.: *Lecidea monticola* Schaer., *Protoblastenia monticola* (Schaer.) J. Steiner, *Lecidea fuscorubens* (Nyl.) Nyl., *Lecidella fuscorubens* (Nyl.) Stein
On calcareous rocks in ± exposed conditions, also on pebbles in Xerobromion communities and on shaded sandstone overhangs in forests.
B Mosan: AR, Ard.: RR, Lorr.: RR. **L** Lorr.: RR. **F** Lorr. (Moselle): RRR.
Lit.: DG: 38, La69: 107, Mü1: 156, NL84: 13, NL87: 21, NL97: 47.

chondrodes (A. Massal.) Clauzade & Cl. Roux, syn. *Protoblastenia chondrodes* (A. Massal.) Zahlbr. Reported from **B** by DG: 38, but no material seen.

cyclisca (A. Massal.) V. Wirth, syn. *Lecidea cyclisca* (A. Massal.) Malbr. Reported from **B** Mosan by BDL2: 41-42, but no material seen.

CLAUZADEANA Cl. Roux

macula (Taylor) Coppins & Rambold
Syn.: *C. instratula* (Nyl.) Cl. Roux, *Aspicilia morioides* Arnold
On exposed, hard siliceous rocks.
B Ard.: RRR. **L** - .
Lit.: Sé: 142.

instratula (Nyl.) Cl. Roux, see *C. macula*

CLAUZADEOMYCES Diederich

***verrucosus** Diederich
On *Placopsis lambii*.
B Ard.: RR. **L** - .
Lit.: Diederich (1994).

CLIOSTOMUM Fr.

griffithii (Sm.) Coppins
Syn.: *Catillaria griffithii* (Sm.) Malme, *C. tricolor* auct., non (With.) Th. Fr., *Biatorina tricolor* auct.
On *Populus* and *Ulmus* near the coast, in rather open situations, and on *Quercus* in forests elsewhere.
B Mar.: AC, Fl.: RRR, Mosan: RRR, Ard.: RRR, Lorr.: RRR. **L** Lorr.: RRR. **F** Ard.: RRR.
Lit.: DG: 23, Ho: 123, La69: 82, 103, Mü4: 108, NL84: 13, Barkman (1990: 14), Zwaenepoel et al. (1994: 37).

corrugatum (Ach.) Fr., syn. *C. graniforme* (K. G. Hagen) Coppins, *Biatorina ehrhartiana* (Ach.) Th. Fr. This species was reported from **L** by Ko: 240, but no specimen has been seen. Like *C. griffithii*, it is common in N France, along the coast (S of the study area).

graniforme (K. G. Hagen) Coppins, see *C. corrugatum*

CLYPEOCOCCUM D. Hawksw.

***epicrassum** (H. Oliv.) Nav.-Ros. & Cl. Roux
On *Squamarina cartilaginea*.
B Mosan: RRR. **L** - .
Lit.: NL97: 22.

***hypocenomycis** D. Hawksw. (‘*hypocenomyceae*’)
On *Hypocenomyce scalaris*, always on *Pinus*.
B Mosan: RRR, Ard.: RRR. **L** Lorr.: R.
Lit.: Di: 97, LF0: 7, NL97: 48.

COELOCAULON LINK

aculeatum (Schreb.) Link, see *Cetraria aculeata*

muricatum (Ach.) J. R. Laundon, see *Cetraria muricata*

COENOGONIUM Ehrenb.

sp.
At the entrance of caves, on calcareous rocks, in sheltered conditions.
B Mosan: RR. **L** - .
The identity of the relevant material requires further investigations.
Lit.: Garbacki et al. (1999: 67-69).

nigrum auct., non (Huds.) Zahlbr., see *Cystocoleus ebeneus*

COLLEMA F. H. Wigg.

auriforme (With.) Coppins & J. R. Laundon
Syn.: *C. auriculatum* Hoffm.
On calcareous rocks, usually in moist and shaded conditions, in natural or artificial (walls) habitats.
B Fl.: RRR, Mosan: AR, Ard.: RR, Lorr.: RRR. **L** Ard.: RRR, Lorr.: RRR (1890). **F** Lorr. (Moselle): RRR. Probably overlooked.
Lit.: Ertz: 19, NL77: 20, NL84: 13, NL92: 169, Degelius (1954: 346-358), Zwaenepoel et al. (1994: 37).

crispum (Huds.) F. H. Wigg.
Syn.: *C. cheilum* (Ach.) Ach., incl. *C. crispum* var. *metzleri* (Arnold) Degel.
On calcareous rocks, usually in moist and shaded conditions, in natural or artificial (walls, stones) habitats.
B Fl.: RRR, Brab.: RR, Mosan: R, Ard.: RRR, Lorr.: RRR. **L** Ard.: RRR, Lorr.: AR. **F** Ard.: RRR, Lorr.: RR.
Lit.: NL84: 13, NL92: 169, Degelius (1954: 280-298), Zwaenepoel et al. (1994: 37).

cristatum (L.) F. H. Wigg.
Syn.: *C. granuliferum* Nyl.
On calcareous rocks, usually in exposed conditions, in natural or artificial (walls) habitats.
B Mosan: AR, Ard.: RRR, Lorr.: RRR. **L** Lorr. (Moselle): RR. **F** Mosan: RRR.
Lit.: Ertz: 19, Mü2: 196, NL84: 13, NL97: 48, Degelius (1954: 308-329).

dichotomum (With.) Coppins & J. R. Laundon
Syn.: *C. fluviatile* (Huds.) Steud.
On siliceous rocks, immersed in rivers.
B Ard.: RR (1967). **L** - .
Lit.: La69: 101.

flaccidum (Ach.) Ach.
Syn.: *C. rupestre* (Sw.) Rabenh.
On siliceous rocks, often near rivers, rarely corticolous, on *Acer*, *Fraxinus* and *Populus*.
B Mosan: RR, Ard.: AR. **L** Ard.: R, Lorr.: R→ RRR. **F** Ard.: RRR, Lorr.: RRR.
Lit.: DG: 20, La68: 73, NL92: 169, Degelius (1954: 384-400).

fragrans (Sm.) Ach.
Syn.: *C. microphyllum* Ach., *Leptogium microphyllum* (Ach.) Leight.
On *Ulmus*.
B Ard.: RRR (†1904). **L** - .
Now extinct throughout the area of study.
Lit.: DG: 20, Degelius (1954: 298-307).

furfuraceum (Arnold) Du Rietz
Corticolous on *Fraxinus* or *Pyrus* on roadside trees.
B Lorr.: RR (1963). **L** - . **F** Lorr.: RRR (1989).
Lit.: La69: 101.

fuscovirens (With.) J. R. Laundon
Syn.: *C. tuniforme* (Ach.) Ach., *C. furvum* (Ach.) DC.
On exposed and rather dry, calcareous rocks, mainly in natural habitats, rarely on walls, roofs, gravestones, etc.
B Fl.: RRR. Mosan: AR, Ard.: RRR, Lorr.: RRR. **L** Ard.: RRR, Lorr.: R. Overlooked.
Lit.: DG: 20, Ertz: 19, Mü5: 26, NL84: 13, NL97: 48, Zwaenepoel et al. (1994: 37).

limosum (Ach.) Ach.
Syn.: *C. glaucescens* Hoffm.
On clayey soil, sand, brick, calcareous stones and marl rock.
B Mar.: RRR, Brab.: RRR, Mosan: RR. **L** - . **F** Mar.: RR (<1910).
Lit.: BDL1: 263, L8, Degelius (1954: 198-207).

multipartitum Sm.
On shaded, calcareous rocks in natural habitats.
B Mosan: R. **L** - .
Lit.: DG: 20, L7: 85, NL84: 13, Degelius (1954: 376-384).

occultatum Bagl.
Syn.: *C. quadratum* Körb.
At the base of a *Malus* tree in a sheltered valley.
B Mosan: RRR. **L** - .
Lit.: NL97: 21.

polycarpon Hoffm.
Syn.: *C. orbiculare* (Schaer.) Tonglet
On exposed and rather dry calcareous rocks, in natural habitats.
B Mosan RR. **L** - . **F** Mosan: RRR.
Lit.: DG: 20, Ertz: 19, NL84: 13, Degelius (1954: 220-238).

tenax (Sw.) Ach.
Syn.: *C. pulposum* (Bernh.) Ach., *C. palmatum* auct.
Usually on soil, also along fissures on calcareous or slightly calcareous, siliceous rocks, normally in exposed, either natural or artificial, habitats, often abundant in ruderal conditions.
B Mosan: AR, Ard.: RRR, Lorr.: RRR. **L** Lorr.: AC. **F** Mosan: RRR, Lorr.: AR.
Lit.: DG: 20, Ertz: 19, NL84: 13, Degelius (1954: 150-183).

auriculatum Hoffm., see *C. auriforme*

auriculatum var. *ceranoides* (Schaer.) Nyl., see *C. tenax* var. *ceranoides*

byssinum Hoffm., see *Leptogium byssinum*

cheilum (Ach.) Ach., see *C. crispum*

conglomeratum Hoffm., syn. *Synechoblastus conglomeratus* (Hoffm.) Körb. This species was reported from **L** Ard. on *Juglans* by Ko: 319, but no specimen seen.

cristatum var. *marginale* (Huds.) Degel., syn. *C. multifidum* (Scop.) Rabenh., *C. jacobaeifolium* (Schrank) P. Gaertn., G. Mey. & Scherb. Reported from **B** by DG: 20, but no material seen.

fasciculare (L.) F. H. Wigg. Reported from **B** by DG: 20, but no material seen.

fluviatile (Huds.) Steud., see *C. dichotomum*

fragile Taylor. This species was reported from **B** by Lambinon (1963: 227), but no specimen has been seen by us.

furvum (Ach.) DC., see *C. fuscovirens*

glaucescens Hoffm., see *C. limosum*

granulatum (Huds.) Hook. Reported from **B** by DG: 20, but no material seen. A name of uncertain application.

granuliferum Nyl., see *C. cristatum*

jacobaeifolium (Schrank) P. Gaertn., G. Mey. & Scherb., see *C. cristatum* var. *marginale*

microphyllum Ach., see *C. fragrans*

multifidum (Scop.) Rabenh., see *C. cristatum* var. *marginale*

nigrescens (Huds.) DC., syn. *C. vespertilio* (Lightf.) Hoffm., incl. var. *purpuraceum* (Schaer.) H. Olivier. Reported from **B** by DG: 20 and from **L** by Ko: 320, but no material seen.

orbiculare (Schaer.) Tonglet, see *C. polycarpon*

palmatum auct., see *C. tenax*

pulposum (Bernh.) Ach., see *C. tenax*

quadratum Körb., see *C. occultatum*

rupestre (Sw.) Rabenh., see *C. flaccidum*

tenax var. *ceranoides* (Borrer) Degel., syn. *C. auriculatum* var. *ceranoides* (Schaer.) Nyl. Reported from **B** by DG: 20, but no material seen.

tuniforme (Ach.) Ach., see *C. fuscovirens*

CONIANGIUM Fr.

**clemens* (Tul.) Körb., see *Arthonia clemens*

fuscum (A. Massal.) A. Massal., see *Arthonia lapidicola*

luridum auct., non (Ach.) Fr., see *Arthonia vinosa*

rupestre Körb., see *Arthonia lapidicola*

CONIDA A. Massal.

**clemens* (Tul.) A. Massal., see *Arthonia clemens*

**epiphyscia* (Nyl.) Arnold, see *Arthonia epiphyscia*

**inundata* (Vain.) Sacc., see *Neocoleroa inundata*

CONIOCYBE Ach.

furfuracea (L.) Ach., see *Chaenotheca furfuracea*

gracilenta Ach., see *Cybebe gracilenta*

pallida (Pers.) Fr., see *Sclerophora nivea*

sulphurea (Retz.) Nyl., see *Chaenotheca brachypoda*

CONIOSPORIUM Link

**physciae* (Kalchbr.) Sacc., see *Xanthoriicola physciae*

CORISCIUM Vain.

viride (Ach.) Vain., see *Omphalina hudsoniana*

CORNICULARIA (Schreb.) Hoffm.

aculeata (Schreb.) Ach., see *Cetraria aculeata*

muricata (Ach.) Ach., see *Cetraria muricata*

odontella (Ach.) Westend., see *Cetraria odontella*

tenuissima (L.) Zahlbr., see *Cetraria aculeata*

tenuissima var. *muricata* (Ach.) Dalla Torre & Sarnth., see *Cetraria muricata*

CORNUTISPORA Piroz.

***ciliata** Kalb
On *Cladonia pyxidata* and *Hypogymnia physodes*.
B - . **L** Ard.: RRR, Lorr.: RRR.
Lit.: L7: 85.

***lichenicola** D. Hawksw. & B. Sutton
On *Flavoparmelia caperata*, *Hypogymnia physodes* and *Neofuscelia loxodes*.
B Lorr.: RRR, Ard.: RR. **L** Ard.: RRR, Lorr.: RRR.
Lit.: Di: 239-240, L7: 85.

***triangularis** Diederich & Etayo
On *Pertusaria pertusa*.
B - . **L** Lorr.: RR.
Lit.: L7: 85, Tholl et al. (1999).

CORTICIFRAGA D. Hawksw. & R. Sant.

***fuckelii** (Rehm) D. Hawksw. & R. Sant.
Syn.: *Phragmonaevia fuckelii* Rehm
On *Peltigera rufescens* and rarely on *P. hymenina*.
B - . **L** Lorr.: R.
Lit.: L5: 36.

***peltigerae** (Nyl.) D. Hawksw. & R. Sant.
Syn.: *Phragmonaevia peltigerae* (Nyl.) Rehm, *Peziza circinans* Lib., nom. inval.
On *Peltigera* sp.
B Ard.: RR (<1880) (type locality of *P. circinans*). **L** - .
Lit.: Hawksworth & Santesson (1990: 129-136).

COURTOISIA L. Marchand, see *Rinodina*

CRESPONEA Egea & Torrente

premnea (Ach.) Egea & Torrente var. **saxicola** (Leigth.) Egea & Torrente
Syn.: *Lecanactis plocina* auct., non (Ach.) A. Massal.
On a vertical overhang of a sandstone outcrop in forest.
B - . **L** Lorr.: RRR.
Lit.: NL92: 153.

CROCYNIA (Ach.) A. Massal.

membranacea (Dicks.) Zahlbr., see *Leproloma membranaceum*

CYANOMYCES Nik. Hoffm. & Hafellner ined.

***leptogiophila** (G. Winter) Nik. Hoffm. & Hafellner, comb. ined.
Syn.: *Physalospora leptogiophila* (G. Winter) Vouaux
On *Collema flaccidum*.
B - . **L** ?Lorr.: RRR (†<1880).
Exact locality unknown, probably near Echternach in Luxembourg (or Germany ?).
Lit.: L6: 145, Hoffmann (1999: 61).

CYBEBE Tibell

gracilenta (Ach.) Tibell, syn. *Coniocybe gracilenta* Ach. The ancient report from **L** Lorr. by Feltgen (1902: 182) is most doubtful, as no specimen has been seen.

CYLINDROCARPON Wollenw., see *Trichonectria*

CYPHELIUM Ach.

*__sessile__ (Pers.) Trevis.
On *Pertusaria coccodes* (on isolated *Fraxinus* and *Tilia*).
B - . **L** Ard.: RRR. **F** Lorr.: RRR.
Lit.: DG: 16, Di: 98-99, L4: 23, L8.

chrysocephalum (Ach.) Chevall., see *Chaenotheca chysocephala*

inquinans (Sm.) Trevis. Reported from **B** by DG: 16, but no material seen.

melanophaeum (Ach.) A. Massal., see *Chaenotheca ferruginea*

stemoneum (Ach.) De Not., see *Chaenotheca stemonea*

trichiale (Ach.) De Not., see *Chaenotheca trichialis*

CYRTIDULA Minks

+__hippocastani__ (DC.) R. C. Harris
Syn.: *Mycoporum hippocastani* (DC.) Coppins
On twigs of *Sorbus* at the edge of a *Picea* wood.
B Ard.: RR. **L** - .
Lit.: L8.

+__quercus__ (A. Massal.) Minks
Syn.: *Mycoporum quercus* (A. Massal.) Müll. Arg.
On *Corylus*.
B Ard.: RR, Lorr.: RRR. **L** - .
Lit.: L5: 31.

CYSTOCOLEUS Thwaites

__ebeneus__ (Dillwyn) Thwaites
Syn.: *C. niger* auct., non (Huds.) Har., *Coenogonium nigrum* auct., non (Huds.) Zahlbr.
Saxicolous on shaded, siliceous and sandstone rocks, exceptionally corticolous, always in very humid localities.
B Mosan: RR, Ard.: AR, Lorr.: RRR. **L** Ard.: RR, Lorr.: AR. **F** Ard.: RR.
Lit.: Di: 240-241, La68: 79-80, Mü4: 109, Mü5: 25, NL84: 13, Lambinon (1963: 232), Lambinon (1968b: 405).

niger auct., non (Huds.) Har., see *C. ebeneus*

rupestris (Pers.) Rabenh., see *Racodium rupestre*

DACAMPIA A. Massal.

*__rufescentis__ (Vouaux) D. Hawksw.
Syn.: *Pleospora rufescentis* Vouaux
On *Peltigera rufescens*.
B - . **L** - . **F** Mar.: RRR (<1912) (type locality).
Lit.: Vouaux (1912-14: 124).

DACTYLOBLASTUS Trevis.

wallrothianus (Körb.) A. Massal., see *Thelenella modesta*

DACTYLOSPORA Körb.

*__parasitica__ (Flörke) Zopf
On *Pertusaria albescens*.
B Ard.: RR. **L** Lorr.: RRR.
Lit.: NL97: 22.

*__pertusaricola__ (Tuck.) Hafellner
On *Pertusaria excludens*.
B Ard.: RRR. **L** - .
Lit.: L5: 19.

*__saxatilis__ (Schaer.) Hafellner
Syn.: *Karschia saxatilis* (Schaer.) Rehm
On *Pertusaria* cf. *flavicans*.
B - . **L** - . **F** Mosan: RR.
Lit.: L5: 19.

DEGELIA Arv. & D. J. Galloway

__plumbea__ (Lightf.) P. M. Jørg. & P. James
Syn.: *Pannaria plumbea* (Lightf.) Bory, *Parmeliella plumbea* (Lightf.) Vain.
Ecology of the reported collections unknown, probably over epiphytic mosses in old forests.
B Brab.: RRR (†<1900). **L** - .
Now extinct throughout the area of study.
Lit.: Sérusiaux (1984: 86).

DERMATOCARPON Eschw.

__luridum__ (With.) J. R. Laundon
Syn.: *D. aquaticum* (Weiss) Zahlbr., *D. fluviatile* (Weber) Th. Fr., *D. weberi* (Ach.) W. Mann, incl. *D. luridum* var. *decipiens* (A. Massal.) Riedl, syn. *D. weberi* var. *decipiens* (A. Massal.) Lambinon

Subaquatic, on siliceous rocks, rarely on exposed roots of trees, mainly near streams and submerged for most of the year.
B Mosan: RRR, Ard.: AC. **L** Ard.: R. **F** Ard.: RR.
Lit.: La66: 197-203, La69: 119, Mü1: 140, Diederich (1985a: 22), Diederich (1986a: 119), Molitor & Diederich (1997: 72).

meiophyllizum Vain.
Subaquatic, on siliceous rocks near streams, submerged for most of the year.
B Ard.: R. **L** - . **F** Ard.: RRR. **D** Ard.: RRR.
Lit.: La66: 195-197, Mü1: 140.

miniatum (L.) W. Mann
Syn.: *Endocarpon miniatum* (L.) Gaertn., incl. *D. miniatum* var. *complicatum* (Lightf.) Th. Fr.
On hard calcareous, rarely on slightly calcareous, siliceous rocks, usually on ± vertical surfaces, submitted to periodic flushing.
B Mosan: AC, Ard.: R (mainly in the Semois valley). **L** Ard.: RR, Lorr. (Moselle): RR. **F** (Moselle): RRR.
Lit.: Ertz: 34-35, La66: 203-205, Mü1: 140, NL77: 20; NL92: 169, NL97: 48, Diederich (1985a: 22).

aquaticum (Weiss) Zahlbr., see *D. luridum*

fluviatile (Weber) Th. Fr., see *D. luridum*

(*)*insulare* (A. Massal.) Mig., see *Verrucaria fuscula*

(*)*monstrosum* (Schaer.) Vain., see *Placocarpus schaereri*

rivulorum (Arnold) Dalla Torre & Sarnth. This species was erroneously mentioned from **B** Ard. by Mü1: 140 and Müller (1962: 109), the corresponding specimens belonging to *D. luridum* (fide La66: 201).

rufescens (Ach.) Th. Fr., see *Placidium rufescens*

rufescens auct., non (Ach.) Th. Fr., see *Placidium pilosellum* and *P. squamulosum*

trachyticum (Hazsl.) Vain., see *Placopyrenium trachyticum*

trapeziforme auct., non (J. König) Trevis., see *Placidium pilosellum* and *P. squamulosum*

weberi (Ach.) W. Mann, see *D. luridum*

DIBAEIS Clem.

baeomyces (L. f.) Rambold & Hertel
Syn.: *Baeomyces roseus* Pers.
On peaty or mineral soil, usually in recently disturbed places.
B Camp.: RR (1922), Mosan: R, Ard.: AR-AC, Lorr.: R. **L** Ard.: R, Lorr.: RR.
Lit.: La66: 295-297, NL92: 169.

'*DICTYOBLASTUS*'
This is a spelling error of Ko: 226 for *Dactyloblastus* Trevis.

DIDYMELLOPSIS (Sacc.) Clem. & Shear

*__pulposi__ (Zopf) Grube & Hafellner
On *Collema tenax*.
B - . **L** - . **F** Mar.: RRR (<1912).
Lit.: Bouly de Lesdain (1914: 161-162), Grube & Hafellner (1990: 304), Vouaux (1912-14: 96).

DIDYMOSPHAERIA Fuckel

**peltigerae* Fuckel, see *Polycoccum peltigerae*

DIMERELLA Trevis.

pineti (Ach.) Vězda
Syn.: *Biatorina pineti* (Ach.) A. Massal., *D. diluta* (Pers.) Trevis., *Microphiale diluta* (Pers.) Zahlbr.
Corticolous, more rarely lignicolous, most common on trees with a rough bark, but also on smooth bark (e. g. at the base of *Populus* in plantations).
B Mar.: RR, Camp.: RR, Brab.: RR, Mosan: AR, Ard.: AR, Lorr.: AR. **L** Ard.: AR, Lorr.: AR.
Lit.: Di: 99-100, NL84: 13, NL93: 43, NL97: 48.

diluta (Pers.) Trevis., see *D. pineti*

DIMEROSPORA Th. Fr., see *Lecania*

DIPLOICIA A. Massal.

canescens (Dicks.) A. Massal.
Syn.: *Buellia canescens* (Dicks.) De Not., *Catolechia canescens* (Dicks.) Anzi
In coastal areas corticolous, most common on old trunks of *Salix* in nitrophilous conditions, or saxicolous, on walls; in the eastern part of the study area only saxicolous, on calcareous and sandstone rocks, usually in nitrophilous conditions.
B Mar.: CC, Fl.: AC, Camp.: RR, Brab.: AR, Mosan: AR, Ard.: R. **L** Ard.: RR, Lorr.: RR. **F** Mosan: RR.
Lit.: Ba: 8, Ca: 92-93, Di: 100, DSL: 262-263, Ertz: 19, Ho: 125, La69: 106, NL84: 14, NL97: 48, Qu: 82, Barkman (1990: 14).

DIPLOLAEVIOPSIS Giralt & D. Hawksw.

***ranula** Giralt & D. Hawksw.
On *Lecanora* cf. *expallens* and *L. strobilina*.
B Lorr.: RRR. **L** Lorr.: RRR (†<1880).
Lit.: L6: 141.

DIPLOSCHISTES Norman

euganeus (A. Massal.) J. Steiner
On exposed, siliceous rocks in dry and sunny conditions.
B - . **L** - . **F** Mosan: RRR.
Lit.: L8.

gypsaceus (Ach.) Zahlbr.
Incl. *D. cretaceus* (Ach.) Lettau, *D. ochrophanes* Lettau
On exposed, vertical, calcareous rocks.
B Mosan: RRR, probably overlooked. **L** - .
Lit.: L8.

(*)**muscorum** (Scop.) R. Sant.
Syn.: *D. bryophilus* (Ach.) Zahlbr., *D. scruposus* var. *bryophilus* (Ach.) Müll. Arg., var. *arenarius* (Ach.) Müll. Arg., var. *parasiticus* (Sommerf.) Zahlbr., f. *dealbatus* (Ach.) Zahlbr., f. *plumbeus* (Ach.) Zahlbr.
Initially parasitic on *Cladonia* squamules (especially *C. pyxidata* subsp. *pocillum* and *C. symphycarpa*), later forming an independent thallus and spreading over mosses and soil, on calcareous soil and sand in open, dry and sunny habitats.
B Mar.: RR, Mosan: AR-AC, Ard.: RRR, Lorr.: RR. **L** Ard.: RR, Lorr.: R. **F** Mosan: RR, Lorr.: RR.
Lit.: Ertz: 19, NL92: 169, NL84: 14, Lumbsch (1989: 176-181).

scruposus (Schreb.) Norman
Syn.: *D. ptychochrous* Lettau
On siliceous or slightly calcareous rocks, in natural and artificial habitats (such as slate debris in old quarries).
B Mosan: RR, Ard.: AC, Lorr.: RRR. **L** Ard.: AR, Lorr.: R.
Lit.: Ertz: 19, NL92: 169, Lumbsch (1989: 184-187).

actinostomus (Pers.) Zahlbr. According to Lumbsch (1989: 157), this species does not occur in the study area, but the material mentioned under that name from **B** by DG: 18 still awaits study.

(*)*bryophilus* (Ach.) Zahlbr., see *D. muscorum*

cretaceus (Ach.) Lettau, see *D. gypsaceus*

ocellatus (Vill.) Norman. According to Lumbsch (1989: 182-183), this species does not occur in the study area, but the material mentioned under that name from **B** by DG: 19 still awaits study.

ochrophanes Lettau, see *D. gypsaceus*

ptychochrous Lettau, see *D. scruposus*

(*)*scruposus* var. *arenarius* (Ach.) Müll. Arg., see *D. muscorum*

(*)*scruposus* var. *bryophilus* (Ach.) Müll. Arg., see *D. muscorum*

(*)*scruposus* f. *dealbatus* (Ach.) Zahlbr., see *D. muscorum*

(*)*scruposus* var. *parasiticus* (Sommerf.) Zahlbr., see *D. muscorum*

(*)*scruposus* f. *plumbeus* (Ach.) Zahlbr., see *D. muscorum*

DIPLOTOMMA Flot.

alboatrum (Hoffm.) Flot., see *Buellia alboatra*

ambiguum (Ach.) Flagey, see *Buellia alboatra*

dispersum (Kremp.) Arnold, see *Buellia subdispersa*

epipolium (Ach.) Arnold, see *Buellia venusta*

DIRINA Fr.

stenhammarii (Stenh.) Poelt & Follmann
Syn.: *D. repanda* auct., non Fr. f. *stenhammarii* (Stenh.) Clauzade & Cl. Roux, *Lecanactis stenhammarii* (Stenh.) Arnold, *D. massiliensis* Durieu & Mont. f. *sorediata* (Müll. Arg.) Tehler
On shaded, vertical, calcareous and sandstone rocks.
B Fl.: RRR, Mosan: *AC*. **L** Lorr.: RR.
Reduced into synonymy with *D. massiliensis* f. *sorediata* by Tehler (1983: 33), but questioned by Nimis (1993: 286).
Lit.: Ertz: 19, NL84: 14, Tehler (1983: 33).

massiliensis Durieu & Mont. Reported from **B** Ard. by Tehler (1983: 33), but no material seen by us. All sterile whitish thalli with *Trentepohlia* and reacting C+ red (lecanoric acid) from **B** Ard. and most from **L** Lorr. proved to be *Arthonia endlicheri*.

repanda auct., non Fr. f. *stenhammarii* (Stenh.) Clauzade & Cl. Roux, see *D. stenhammarii*

ECHINODISCUS Etayo & Diederich

***lesdainii** (Vouaux) Etayo & Diederich
Syn.: *Phacopsis lesdainii* Vouaux
On *Lecania erysibe*.
B - . **L** - . **F** Mar.: RRR (<1912) (type locality).
Lit.: Etayo & Diederich (2000), Vouaux (1912-14: 145-146).

ENCHNOSPHAERIA Fuckel

**peltigerae* (Fuckel) Sacc., see *Capronia peltigerae*

ENDOCARPON Hedw.

adscendens (Anzi) Müll. Arg.
Syn.: *Endocarpon pallidum* auct., non Ach.
On soil over calcareous rocks in Xerobromion communities.
B Mosan: RRR. **L** - . **F** Mosan: RRR.
Lit.: La69: 184-186.

pallidum Ach.
On soil, mosses or calcareous rocks in Xerobromion communities.
B Mosan: R. **L** - .
Lit.: NL97: 22.

pusillum Hedw.
On soil in Xerobromion communities, and over siliceous rocks in a stream, near water level.
B Brab.: RRR, Mosan: R. **L** Ard.: RRR.
It is not entirely certain if the aquatic material (from **L** Ard.) is conspecific with the collections from Xerobromion communities.
Lit.: Ertz: 35, La66: 182-184, NL87: 21, NL92: 153 (sub *E. pallidum*), Molitor & Diederich (1997: 72).

miniatum (L.) Gaertn., see *Dermatocarpon miniatum*

pallidum auct., non Ach., see *E. adscendens*

ENDOCOCCUS Nyl.

***brachysporus** (Zopf) Brand & Diederich
On the thallus of *Porpidia* species, especially *P. glaucophaea* and *P. tuberculosa*.
B Ard.: R. **L** Ard.: RR.
Lit.: L8.

***exerrans** Nyl.
On the thallus of *Rhizocarpon* species, especially *R. distinctum*, *R. geographicum* subsp. *lindsayanum*, *R. lecanorinum* and *R. viridiatrum*.
B Ard.: RR. **L** Ard.: RRR.
Lit.: L8.

***fusiger** Th. Fr. & Almq.
On the thallus of *Rhizocarpon lavatum*.
B Ard.: RR. **L** - .
Lit.: L8.

***macrosporus** (Arnold) Nyl.
On the thallus of *Rhizocarpon geographicum* subsp. *lindsayanum*.
B - . **L** Ard.: RRR.
Lit.: L8.

***parietinarius** (Linds.) Clauzade & Cl. Roux
On *Xanthoria calcicola*.
B - . **L** Ard.: RRR.
Lit.: L7: 86.

***propinquus** (Körb.) D. Hawksw.
Syn.: *Tichothecium gemmiferum* auct.
On *Porpidia* species, especially *P. tuberculosa*.
B Ard.: RR. **L** - .
Lit.: L8, NL97: 48 (refers to an undescribed taxon), Sé: 137 (refers to *E. brachysporus*).

***protoblasteniae** Diederich
On the thallus of *Protoblastenia rupestris* over stones in a pasture.
B - . **L** Lorr.: RRR (type locality).
Lit.: L8.

***rugulosus** Nyl.
On the thallus of *Verrucaria* species, especially *V. macrostoma*, *V. nigrescens* and *V. viridula*.
B Mosan: R, Ard.: RR, Lorr.: RRR. **L** - .
Lit.: Ertz: 19, 26, L8.

***verrucisporus** Alstrup ('*verrucuspora*')
On *Ionaspis lacustris*.
B Ard.: RRR. **L** - .
Lit.: L8.

***sp.** (see L8, under *E. brachysporus*)
On the thallus of *Porpidia macrocarpa* and *P. platycarpoides*.
B Ard.: RR. **L** - .
This species is still undescribed.
Lit.: L8.

stigma* (Körb.) Stizenb., syn. *Microthelia scabrida* J. Lahm. Reported from **B by DG: 15, but no material seen.

Endopyrenium Flot.

trapeziforme auct., see *Placidium pilosellum* and *P. squamulosum*

ENTEROGRAPHA Fée

crassa (DC.) Fée

On bark of deciduous trees in forests (e. g. *Acer*, *Fraxinus*, *Quercus*), or on isolated trees (e. g. *Populus*, *Ulmus*), also on *Crataegus* and *Hedera*, in **L** Lorr. always with *E. hutchinsiae*.

B Fl.: RRR, Brab.: RRR (†1896), Mosan: RR, Ard.: RRR. **L** Lorr.: RR. **F** Brab.: RR (1910).

This species is common in forests of NW France, especially near the coast.

Lit.: BDL1: 219-220, L3: 30-31, L8, NL84: 14.

hutchinsiae (Leight.) A. Massal.

Syn.: *E. crassa* auct. belgo-luxemb. p. p., non (DC.) Fée

Corticolous, mainly on the smooth bark of *Acer*, *Carpinus* or *Fagus*, exceptionally on *Quercus*, in shaded and humid forests, also saxicolous, on underhangs of siliceous rocks in similar conditions.

B Mosan: RRR, Ard.: R. **L** Lorr.: AR.

Lit.: Di: 100-101, L3: 30-31, L6: 141, NL84: 14, NL92: 153-154.

zonata (Körb.) Källsten

Syn.: *Opegrapha zonata* Körb., *O. horistica* (Leight.) Stein

On deeply shaded, siliceous and sandstone rocks in humid conditions, also corticolous on smooth bark (*Acer*, *Carpinus* and *Fagus*) in similar conditions, and then often together with *E. hutchinsiae*.

B Mosan: R, Ard.: AC. **L** Ard.: R, Lorr.: R. **F** Ard.: RRR.

Lit.: Di: 182, NL84: 14, NL92: 170.

crassa auct. belgo-luxemb. p. p., non (DC.) Fée, see *E. hutchinsiae*

EOPYRENULA R. C. Harris

grandicula Coppins

On *Corylus* in shaded and humid forests.

B Ard.: RR. **L** - .

Lit.: L8.

leucoplaca (Wallr.) R. C. Harris, syn. *Pyrenula leucoplaca* (Wallr.) Körb., *P. farrea* auct., non (Ach.) Branth & Rostr. Reported from **B** by DG: 15, but no material seen. The report in L6: 141 is a misidentification for *E. grandicula* (L8).

EPHEBE Fr.

lanata (L.) Vain.

Syn.: *E. pubescens* auct. p. p.

On inundated, siliceous rocks in rivers.

B Ard.: RRR (1962). **L** Ard.: RRR (†<1900).

Lit.: DG: 19, La69: 101.

pubescens auct. p. p., see *E. lanata*

EPIBRYON Döbbeler

***parvipunctum** (Stein) Diederich

Syn.: *Pharcidia parvipuncta* (Stein) G. Winter

On the thallus of *Thelidium minutulum* on periodically submerged, siliceous stones in a river.

B Mosan: RRR. **L** - .

Lit.: L8, NL97: 27.

***solorinae** (Vain.) Nik. Hoffm. & Hafellner, comb. ined.

Syn.: *Laestadia solorinae* Vain.

On the thallus of *Solorina saccata*.

B Lorr.: RRR. **L** - .

Lit.: L8.

EPICLADONIA D. Hawksw.

***sandstedei** (Zopf) D. Hawksw.

On terricolous *Cladonia coniocraea*.

B Mosan: RRR. **L** - .

Lit.: L5: 19.

***stenospora** (Harm.) D. Hawksw.

On *Cladonia coniocraea* and *C. rangiformis*.

B Mosan: RRR (<1835), Lorr.: RRR. **L** - .

Lit.: L5: 19, L8.

EPIGLOEA Zukal

(+)**bactrospora** Zukal

In algal films over rotting wood in a forest.

B Lorr.: RRR. **L** - . Most probably overlooked.

Lit.: L8.

(+)**filifera** Döbbeler

In algal films over siliceous rocks in an old quarry.

B Ard.: RRR. **L** - . Most probably overlooked.

Lit.: L8.

(+)**soleiformis** Döbbeler

In algal films over rotting wood in a forest.

B Lorr.: RRR. **L** - . Most probably overlooked.

Lit.: L8.

EPILICHEN Clem.

(*)*scabrosus* (Ach.) Clem., syn. *Buellia scabrosa* (Ach.) A. Massal. Reported from **L** Lorr. on *Baeomyces rufus* by Ko: 253, but no relevant specimen has been examined.

EVERNIA Ach.

prunastri (L.) Ach.
Syn.: *E. arenaria* auct., non (Retz.) Fr., *Letharia arenaria* auct., *E. herinii* P. A. Duvign., *E. prunastri* var. *herinii* (P. A. Duvign.) Maas Geest.
Corticolous on roadside trees, in orchards, in forests, along rivers, exceptionally saxicolous, on siliceous and sandstone rocks or walls, or terricolous, in sand dunes.
B Mar.: CC, Fl.: CC, Camp.: C, Brab.: C, Mosan: *C*, Ard.: *CC*, Lorr.: *C*. **L** Ard.: CC, Lorr.: C.
Lit.: Ba: 9, Ca: 122-123, Ho: 128, La66: 446-447, La68: 79, NL84: 14, Qu: 130, 133-134, WS: 34, 69, Massart (1910: Phot. 239), Ramaut & Lambinon (1962).

arenaria auct., non (Retz.) Fr., see *E. prunastri*

divaricata (L.) Ach. The report of this species from **L** Lorr. by Ko: 108 and Feltgen (1902: 168) is not supported by any herbarium material, and is therefore most doubtful.

furfuracea (L.) W. Mann, see *Pseudevernia furfuracea*

herinii P. A. Duvign., see *E. prunastri*

olivetorina Zopf, see *Pseudevernia furfuracea*

FELLHANERA Vězda

bouteillei (Desm.) Vězda
On leaves and twigs of *Buxus*, on needles and twigs of *Picea*, or on small branches of *Calluna* and *Vaccinium*, always in sheltered and humid conditions.
B Mosan: R, Ard.: R. **L** Lorr.: RR.
Lit.: Mü1: 144, Mü2: 195, NL84: 14, Sé: 143, van den Boom & Sérusiaux (1996: 21).

subtilis (Vězda) Diederich & Sérus.
Syn.: *Bacidia subtilis* Vězda
Mainly on twigs and needles of *Picea*, also on small branches of *Calluna* and *Vaccinium*, on leaves of *Buxus*, and on the smooth bark of *Alnus*, *Corylus* and *Salix*, always in rather humid conditions.
B Mar.: RRR, Mosan: RRR, Ard.: R, Lorr.: RRR. **L** Ard.: RRR, Lorr.: R.
Lit.: Di: 101-102, Ho: 117, 130, L3: 27, NL84: 14, Sé: 142, 143, van den Boom & Sérusiaux (1996: 22).

viridisorediata Aptroot, Brand & Spier
Corticolous on *Populus* and *Salix*.
B Mar.: RRR, Mosan: RRR. **L** - . Probably overlooked.
Lit.: NL97: 23, Aptroot et al. (1998).

sp. (as '*Fellhanera* sp. 1' in Diederich 1989)
On bark of old *Quercus* trees in well-preserved, humid forests.
B - . **L** Lorr.: RR.
This species is still undescribed.
Lit.: Di: 102-103.

vezdae (Coppins & P. James) V. Wirth, see *Fellhaneropsis vezdae*

FELLHANEROPSIS Sérus. & Coppins

myrtillicola (Erichsen) Sérus. & Coppins
Syn.: *Bacidia gorgonea* Vězda & Poelt
On leaves and twigs of *Buxus*, on needles and twigs of *Picea*, and on branches of *Calluna* and *Vaccinium*, always in sheltered and humid conditions.
B Mosan: RRR, Ard.: RR. **L** Lorr.: RR.
Lit.: NL84: 14, Sérusiaux (1996: 207), van den Boom & Sérusiaux (1996: 22).

vezdae (Coppins & P. James) Sérus. & Coppins
Syn.: *Bacidia vezdae* Coppins & P. James, *Fellhanera vezdae* (Coppins & P. James) V. Wirth
Mainly corticolous, often overgrowing mosses on the bark of *Quercus*, once on saxicolous mosses.
B Mosan: AR, Ard.: R, Lorr.: RR. **L** Ard.: RRR, Lorr.: AR.
Lit.: Di: 55-56, L2: 92, NL84: 14, NL92: 168, NL97: 48.

FELTGENIOMYCES Diederich

***luxemburgensis** Diederich
On *Lecidella conspurcatosorediosa*.
B - . **L** Lorr.: RRR (†<1999) (type locality).
Lit.: Di: 241, LF1: 304-307.

FLAVOCETRARIA Kärnefelt & Thell

nivalis (L.) Kärnefelt & Thell, syn. *Cetraria nivalis* (L.) Ach. The ancient report of this species from **L** Ard. by Ko: 142 is not sustained by any relevant specimens (La66: 405-406), and most probably represents a misidentification.

FLAVOPARMELIA Hale

caperata (L.) Hale
Syn.: *Parmelia caperata* (L.) Ach., *Pseudoparmelia caperata* (L.) Hale
Corticolous, in forests (mainly on *Quercus*) and on roadside trees (e. g. *Fraxinus* and *Tilia*), rarely saxicolous, on mossy, siliceous rocks.
B Mar.: AR, Fl.: AR, Camp.: R, Brab.: AR, Mosan, Ard., Lorr.: *AR*. **L** Ard.: AR, Lorr.: AR.
Lit.: Ca: 136-137, Ho: 173, La66: 434-435, Qu: 100, 102, WS: 37, 75.

soredians (Nyl.) Hale
Syn.: *Parmelia soredians* Nyl.
On *Tilia* along a road.
B Mosan: RRR. **L** - .
Lit.: L8.

FLAVOPUNCTELIA (Krog) Hale

flaventior (Stirt.) Hale
Syn.: *Parmelia flaventior* Stirt., *P. andreana* Müll. Arg.
Corticolous, mostly found on *Malus* and *Pyrus* in orchards, also on *Quercus*, *Tilia* and *Ulmus* in parkland conditions.
B Mar.: RRR, Brab.: R (E part only), Mosan: R. **L** Distr. unknown: RRR (†<1850). **F** Mosan: RRR (1978).
The species was formerly mainly found in orchards near Liège (**B** Brab. and Mosan), but has not been found there since 1966.
Lit.: Ho: 139, 179, 598, L4: 19, La66: 435, Qu: 103, 105-107, Diederich (1986a: 120), Lambinon & Parmentier (1960).

FULGENSIA A. Massal. & De Not.

fulgens (Sw.) Elenkin
Syn.: *Caloplaca fulgens* (Sw.) Körb., *Placodium fulgens* (Sw.) Gray
On soil and mosses in Xerobromion communities, in dry and very sunny conditions.
B Mosan: AR, decreasing, Lorr.: RRR. **L** - . **F** Mosan: RRR.
Lit.: Ertz: 19, 26, Ma: 247-250, NL84: 14.

FUSARIUM Link

***peltigerae** Westend.
On the thallus of *Peltigera rufescens*.
B Fl.: RRR (<1849) (type locality). **L** - .
Lit.: Hawksworth (1979: 218-220).

FUSCIDEA V. Wirth & Vězda

cyathoides (Ach.) V. Wirth & Vězda var. **cyathoides**
Syn.: *Lecidea cyathoides* (Ach.) Ach., *L. rivulosa* Ach., *Biatora rivulosa* (Ach.) Fr., incl. *F. cyathoides* var. *corticola* (Fr.) H. Magn.
On natural outcrops of siliceous rocks, mainly in exposed conditions, also on acidic bark (*Alnus incana*, *Betula*, *Tilia*, but mainly on *Fagus*).
B Ard.: AR. **L** Ard.: R, Lorr.: RR.
Lit.: Di: 103-104, Mü1: 144, Mü2: 196, NL92: 170, NL97: 48.

lightfootii (Sm.) Coppins & P. James
Syn.: *Biatora lightfootii* (Sm.) Hepp, *Biatorina lightfootii* (Sm.) Körb., *Catillaria lightfootii* (Sm.) H. Olivier
Corticolous on *Alnus*, *Fraxinus*, *Sarothamnus* and *Tilia*, also lignicolous.
B Fl.: RRR (†<1900), Mosan: RRR, Ard. RR. **L** Ard.: RR, Lorr.: RRR.
Lit.: Di: 104-105, L3: 31, NL92: 154, NL97: 48.

praeruptorum (Du Rietz & H. Magn.) V. Wirth & Vězda
On natural outcrops of siliceous rocks, usually in sheltered niches.
B Mosan: RRR, Ard.: R. **L** Ard.: RRR. **F** Ard.: RRR.
Lit.: L7: 86.

viridis Tønsberg, see *Ropalospora viridis*

FUSCOPANNARIA P. M. Jørg.

leucophaea (Vahl) P. M. Jørg.
Syn.: *Pannaria leucophaea* (Vahl) P. M. Jørg., *P. microphylla* '(Sw.)' Delise, *Parmeliella microphylla* '(Sw.)' Müll. Arg.
On natural siliceous rocks in valleys. The only recent record is on rocks near water level.
B Mosan: RRR (†<1900), Ard.: RR (1988). **L** - .
Lit.: L8, Sérusiaux (1984: 84-85).

mediterranea (Tav.) P. M. Jørg.
Syn.: *Pannaria mediterranea* Tav.
On *Fraxinus*, in humid old forests.
B Ard.: RRR (1992, only on one tree, which has now been removed, extinct ?), Lorr.: RRR (†1986). **L** - .
Lit.: L2: 97, L4: 28, Sérusiaux (1984: 85).

saubinetii (Mont.) P. M. Jørg.
Syn.: *Pannaria saubinetii* (Mont.) Nyl.
Terricolous over sandstone, probably in humid conditions.
B - . **L** RRR (†<1850).

The only known collection is scanty and has been referred to that species with doubt. Now extinct throughout the area of study.
Lit.: L8, Sérusiaux (1984: 81).

GASPARRINIA Tornab., nom. rej., see *Caloplaca*

GEISLERIA Nitschke

sychnogonoides Nitschke, see *Strigula sychnogonoides*

GELATINOPSIS Rambold & Triebel

ericetorum* (Körb.) Rambold & Triebel, syn. *Nesolechia ericetorum* Körb. The report from **L by Ko: 264 is not sustained by any relevant material and is therefore most doubtful.

GONGYLIA Körb.

**nadvornikii* Servít, see *Sagediopsis barbara*

GRAPHINA Müll. Arg.

anguina (Mont.) Müll. Arg.
On *Quercus*.
B - . **L** - . **F** Brab.: RR.
Lit.: BDL1: 219.

GRAPHIS Adans.

elegans (Sm.) Ach.
Corticolous on smooth bark (e. g. *Acer*, *Fagus*, *Ilex*) inside forests.
B Fl.: RRR (†<1864), Ard.: RR. **L** Lorr.: RRR (†1902).
Lit.: Di: 106, L5: 19-20, L8.

scripta (L.) Ach.
Corticolous, mainly on the smooth bark of *Carpinus* and *Corylus*, often on young trunks, well-developed even at a low luminosity.
B Mosan: AR, Ard.: AC, Lorr.: *AC*. **L** Ard.: AC, Lorr.: AC.
Lit.: Di: 107, NL84: 14.

dendritica (Ach.) Ach., see *Phaeographis dendritica*

lyellii (Sm.) Ach., see *Phaeographis lyellii*

GUIGNARDIA Viala & Ravaz

**olivieri* (Vouaux) Sacc., see *Telogalla olivieri*

**microthelia* (Wallr.) Keissl., see *Roselliniella microthelia*

GYALECTA Ach.

flotowii Körb.
Corticolous, on *Fagus* and *Fraxinus*, either inside forests or on isolated trees in meadows.
B Mosan: RRR, Ard.: RRR. **L** Lorr.: RRR.
Lit.: L2: 93, NL84: 14, NL92: 154, NL97: 48.

jenensis (Batsch) Zahlbr.
Saxicolous, on shaded, calcareous or sandstone rocks, either in natural or artificial (walls) habitats.
B Mosan: AR, Ard.: RR, Lorr.: RR. **L** Lorr.: R.
Lit.: Ertz: 19, Mü1: 142, NL77: 20, NL84: 14, NL87: 21, NL92: 170, NL97: 48.

truncigena (Ach.) Hepp
Corticolous, on *Fraxinus* along roads and on isolated *Tilia*.
B Mosan: RRR, Lorr.: RRR (†1986). **L** - .
Lit.: L2: 93, NL97: 23.

ulmi (Sw.) Zahlbr.
Syn.: *Phialopsis rubra* (Hoffm.) Körb.
Corticolous, on very old, isolated *Sorbus* trees in parkland conditions.
B - . **L** Lorr.: RRR.
The species was mentioned several times from **B** Fl., Brab., Mosan and Ard. last century, but the relevant material has not been examined.
Lit.: DG: 19, L7: 86.

cupularis (Hedw.) Schaer., see *G. jenensis*

hypoleuca (Ach.) Zahlbr., see *Petractis hypoleuca*

GYALIDEOPSIS Vězda

anastomosans P. James & Vězda
Corticolous, mainly on young trees, rarely lignicolous, once on *Picea* twigs.
B Fl.: RRR, Brab.: RR, Mosan: R, Ard.: AR, Lorr.: R. **L** Ard.: R, Lorr.: R.
Three fertile specimens have been collected in Belgium and Luxembourg.
Lit.: Di: 108, L2: 93, L3: 34, NL84: 14, NL92: 170.

muscicola P. James & Vězda
On *Quercus*, over mosses, in a humid, well-preserved forest.
B Ard.: RRR. **L** - .
Lit.: L5: 20.

GYROPHORA Ach., see *Umbilicaria*

HAEMATOMMA A. Massal.

ochroleucum (Neck.) J. R. Laundon
On siliceous or sandstone rocks, usually in protected, dry and ± vertical surfaces; also corticolous on old *Fagus* and *Quercus* in well-preserved forests, more rarely on *Populus* or *Salix*, in shaded or opened conditions.
Two chemotypes are known from the study area:
H. ochroleucum s. s., syn. *H. coccineum* (Dicks.) Körb., *H. coccineum* var. *ochroleucum* (Neck.) Th. Fr.: **B** Ard.: R. **L** Ard.: RR, Lorr.: R.
H. ochroleucum var. *porphyrium* (Pers.) J. R. Laundon, syn. *H. porphyrium* (Pers.) Zopf, *H. coccineum* var. *porphyrium* (Pers.) Th. Fr.: **B** Mar.: R, Fl: AR, Camp.: RRR, Brab.: RRR, Mosan: RR, Ard.: R. **L** Ard.: RR, Lorr.: *AR*.
Lit.: Ba: 9, Di: 109-110, Ho: 131, La68: 77, NL84: 14, NL92: 170, Lambinon (1968b: 405).

coccineum (Dicks.) Körb., see *H. ochroleucum* s. s.

coccineum var. *ochroleucum* (Neck.) Th. Fr., see *H. ochroleucum* s. s.

coccineum var. *porphyrium* (Pers.) Th. Fr., see *H. ochroleucum* var. *porphyrium*

ochroleucum var. *porphyrium* (Pers.) J. R. Laundon, see under *H. ochroleucum*

porphyrium (Pers.) Zopf, see *H. ochroleucum* var. *porphyrium*

ventosum (L.) A. Massal., see *Ophioparma ventosa*

HALECANIA M. Mayrhofer

viridescens Coppins & P. James
Corticolous, mainly on young trunks of *Alnus*, *Fraxinus*, *Malus* and *Salix*, in sheltered and humid conditions.
B Mosan: R, Ard.: R, Lorr.: R. **L** Ard.: R, Lorr.: R.
Lit.: Di: 110-111, L5: 21, NL84: 14, NL92: 170.

HAWKSWORTHIANA U. Braun

***peltigericola** (D. Hawksw.) U. Braun
Syn.: *Ramularia peltigericola* D. Hawksw.
On *Peltigera rufescens*.
B - . **L** Lorr.: RR.
Lit.: L4: 29.

HEPPIA A. Massal.

guepinii (Delise) Nyl., see *Peltula euploca*

HETERODERMIA Trevis.

speciosa (Wulfen) Trevis., syn. *Physcia speciosa* (Wulfen) Nyl. The ancient report of this species from **L** Ard. by Ko: 160 is not sustained by any herbarium material and is most doubtful.

HOBSONIA Massee

***christiansenii** B. L. Brady & D. Hawksw.
On corticolous lichens, mainly *Physcia* spp., often in nitrophilous conditions.
B - . **L** Lorr.: AR.
Lit.: Di: 241-242, LF0: 18.

HOMOSTEGIA Fuckel

***piggotii** (Berk. & Broome) P. Karst.
On *Parmelia saxatilis*.
B Ard.: RR. **L** - .
Lit.: L5: 21, NL97: 49.

HUILIA Zahlbr., see *Porpidia*

HYMENELIA Kremp.

epulotica (Ach.) Lutzoni
Syn.: *H. prevostii* (Duby) Kremp., *Lecanora prevostii* (Duby) Th. Fr.
Saxicolous on ± sunny calcareous outcrops, in natural conditions.
B Brab.: RRR, Mosan: RR, Lorr.: RR. **L** Lorr.: RRR.
Lit.: DG: 32, NL77: 20, NL84: 14, NL87: 21, NL97: 49.

ceracea (Arnold) M. Choisy, see under *Ionaspis*

lacustris (With.) M. Choisy, see *Ionaspis lacustris*

prevostii (Duby) Kremp., see *H. epulotica*

HYPERPHYSCIA Müll. Arg.

adglutinata (Flörke) H. Mayrhofer & Poelt
Syn.: *Physcia adglutinata* (Flörke) Nyl., *P. elaeina* auct., non (Wahlenb.) A. L. Sm.

Corticolous, on roadside trees (*Gingko biloba*, *Salix*, *Tilia*, *Ulmus*), rarely saxicolous, on limestone outcrops, on brick or sandstone walls, or on gravestones, in nitrophilous conditions.
B Mar.: R, Fl.: RRR, Mosan: RR, Ard.: RR. **L** Ard.: RR, Lorr.: RR.
Lit.: Ho: 132, 577, La66: 483, NL84: 14, NL97: 49, WS: 51, 101, Barkman (1990: 14-15).

HYPOCENOMYCE Choisy

caradocensis (Nyl.) P. James & Gotth. Schneider
Corticolous or lignicolous, mainly on *Quercus*, *Pinus* and *Picea*, usually in well-lit conditions.
B Ard.: RR. **L** Ard.: RR, Lorr.: AR.
Lit.: Di: 112, L4: 23, NL84: 14.

scalaris (Ach.) Choisy
Syn.: *Lecidea scalaris* (Ach.) Ach., *Psora scalaris* (Ach.) Hook., *L. ostreata* (Hoffm.) Schaer.
On dry bark of *Pinus*, more rare on bark or lignum of *Betula*, *Picea* or *Quercus*, also known on *Fagus*, *Prunus*, *Pyrus*, etc., rarely saxicolous, on natural, siliceous and sandstone outcrops.
B Mar.: RRR, Fl.: RRR, Camp.: AR, Brab.: RRR, Mosan, Ard.: *AR*. **L** Ard.: AR, Lorr.: AR.
Lit.: Ba: 9, Di: 113, DSL: 234, Ho: 134, 218, 578, NL84: 14, Qu: 94, 96, Vanek (1976).

HYPOGYMNIA (Nyl.) Nyl.

farinacea Zopf
Syn.: *Hypogymnia bitteriana* (Zahlbr.) Räsänen
On roadside trees (*Fraxinus*) and in forests (on *Fagus* and *Quercus*).
B Ard.: R. **L** Ard.: RR.
Lit.: La66: 391-392, WS: 34-35, 70.

physodes (L.) Nyl.
Syn.: *Parmelia physodes* (L.) Ach.
Corticolous on all kinds of trees, especially well-developed on acidified bark, incl. on *Picea*, also terricolous or saxicolous.
B Mar.: AC, Fl.: AC, Camp.: *AR*, Brab.: C, Mosan: *C*, Ard.: *CC*, Lorr.: *C*. **L** Ard.: CC, Lorr.: C.
Lit.: Ca: 130-131, Ho: 135, La66: 382-387, Qu: 94, 97-98, WS: 35, 71.

tubulosa (Schaer.) Hav.
Syn.: *Parmelia tubulosa* (Schaer.) Bitter
Corticolous on all kinds of trees, but exceptional on conifers, mostly in humid habitats.
B Mar.: RR, Fl.: RR, Camp.: R, Brab.: AR, Mosan: AR, Ard.: AC, Lorr.: AR. **L** Ard.: C, Lorr.: AC.
Lit.: Ca: 132, Ho: 117, 137, 580, La66: 387-391, Qu: 98-99, WS: 35-36, 72, Zwaenepoel et al. (1994: 37).

bitteriana (Zahlbr.) Räsänen, see *H. farinacea*

intestiniformis (Vill.) Räsänen, see *Brodoa intestiniformis*

vittata (Ach.) Parrique, syn. *Parmelia vittata* (Ach.) Nyl. This species has not been correctly reported from the study area (fide La66: 380).

HYPOTRACHYNA (Vain.) Hale

revoluta (Flörke) Hale
Syn.: *Parmelia revoluta* Flörke
Corticolous, mainly on *Acer*, *Fagus*, *Fraxinus* and *Quercus* in forests, in non-polluted areas, rare on roadside trees and in orchards.
B Mar.: AR, Fl.: AR, Camp.: R, Brab.: AR, Mosan.: R, Ard.: AR, Lorr.: R. **L** Lorr.: AR.
Lit.: Ca: 142, Ho: 186, La66: 441, La69: 154, NL77: 22, NL84: 16, NL92: 170, NL93: 45, NL97: 49, Qu: 107, 109, VGH: 114, WS: 41, 82, Barkman (1990: 13), Diederich (1985a: 23), Lambinon & Parmentier (1960).

sinuosa (Sm.) Hale, syn. *Parmelia sinuosa* (Sm.) Ach. Reported from **B** by DG: 36, but no material seen.

ICMADOPHILA Trevis.

ericetorum (L.) Zahlbr.
Syn.: *I. aeruginosa* (Scop.) Trevis.
On soil, peat, plant debris, dead mosses and rotten wood, usually over siliceous or sandstone rocks in shaded conditions or among *Cladina* and *Cladonia* patches.
B Camp.: RRR (†1850), Brab.: RR (†<1900), Ard.: RR, Lorr.: RR (1965). **L** Lorr.: R→ RR.
Lit.: La66: 290-293, La68: 74, Mü4: 109, Diederich (1986a: 119), Feltgen (1902: 178).

aeruginosa (Scop.) Trevis., see *I. ericetorum*

ILLOSPORIUM C. Mart., see *Pronectria*

**carneum* Fr., see under *Pronectria*

**corallinum* Roberge, see *Marchandiomyces corallinus*

+*puniceum* Lib. This fungus, described from **B** Ard., is a non-lichenicolous species of Myxobacteriales (fide Hawksworth 1979: 280).

IMMERSARIA Rambold & Pietschm.

athroocarpa (Ach.) Rambold & Pietschm.
Syn.: *Lecidea athroocarpa* (Ach.) Ach., *Porpidia athroocarpa* (Ach.) Hertel & Rambold
On exposed, natural outcrops of siliceous rocks.
B Ard.: RR. **L** - .
Lit.: L8, Mü2: 197.

IMSHAUGIA S. L. F. Meyer

aleurites (Ach.) S. L. F. Meyer
Syn.: *Parmeliopsis aleurites* (Ach.) Nyl., *Cetraria aleurites* (Ach.) Th. Fr., *P. pallescens* (Hoffm.) Zahlbr.
Corticolous, on *Pinus sylvestris*, exceptionally on *Betula* and *Fagus*.
B Ard.: RRR. **L** Lorr.: R.
It is suspected that this species occurs almost only on native *Pinus sylvestris* trees and never on the widespread planted *Pinus*.
Lit.: La66: 369-372, La68: 78, Mü1: 152, Mü2: 197, WS: 44-45, 89, Diederich (1985a: 24), Diederich & Schwenninger (1990).

IONASPIS Th. Fr.

lacustris (With.) Lutzoni
Syn.: *Aspicilia lacustris* (With.) Th. Fr., *Hymenelia lacustris* (With.) M. Choisy, *Lecanora lacustris* (With.) Nyl.
On siliceous, at least periodically inundated rocks, often in streams.
B Ard.: AR. **L** Ard.: RR.
Lit.: La69: 105, Mü1: 150, NL87: 20, NL92: 170.

The closely related species *Hymenelia ceracea* (Arnold) M. Choisy may be present in the study area, but its taxonomic value remains to be studied (Lutzoni & Brodo 1995).

JULELLA Fabre

+*fallaciosa* (Arnold) R. C. Harris, syn. *Polyblastia fallaciosa* Arnold. This species was reported from **L** Lorr. on *Betula* by Ko: 304, but no specimen has been seen.

KARSCHIA Körb.

***talcophila** (Flot.) Körb.
Syn.: *Poetschia talcophila* (Flot.) Stein
On *Diploschistes scruposus*.
B - . **L** Ard.: RR.
Lit.: L1: 6.

**saxatilis* (Schaer.) Rehm, see *Dactylospora saxatilis*

KILIASIA Hafellner

**episema* (Nyl.) Hafellner, see *Toninia episema*

LAESTADIA Auersw.

**solorinae* Vain., see *Epibryon solorinae*

LASALLIA Mérat

pustulata (L.) Mérat
Syn.: *Umbilicaria pustulata* (L.) Hoffm.
On exposed, siliceous and sandstone rocks, exceptionally on the roots of *Pinus*, usually abundant but very sensitive to trampling.
B Mosan: RR, Ard.: AR-AC. **L** Ard.: R, Lorr.: RR. **F** Ard.: R.
Lit.: La66: 354-357, NL77: 20, NL92: 170, Diederich (1986a: 119-120).

LAUDERLINDSAYA J. C. David & D. Hawksw.

acroglypta (Norman) R. Sant., see *Normandina acroglypta*

borreri (Tul.) J. C. David & D. Hawksw., see *Normandina pulchella*

chlorococca (Leight.) Diederich & Sérus., see *Normandina acroglypta*

erichsenii (Keissl.) Diederich & Sérus., see *Normandina acroglypta*

LAWALREEA Diederich

***lecanorae** Diederich
On *Lecanora persimilis* (mainly in apothecia).
B - . **L** Ard.: RRR (type locality), Lorr.: R.
Lit.: Di: 242, LF1: 308-310.

LECANACTIS Körb.

abietina (Ach.) Körb.
Corticolous, mainly on the dry and rough bark of old *Quercus* trees in well-preserved forests, rarely at the base of *Picea* in humid habitats.
B Mosan: RR, Ard.: R (locally common in the Anlier forest). **L** Ard.: RRR, Lorr.: AR.
Lit.: Di: 114, NL84: 14, NL97: 49.

latebrarum (Ach.) Arnold
Syn.: *Lepraria latebrarum* (Ach.) Ach.
Saxicolous, on siliceous or sandstone rocks in dry and sheltered crevices or underhangs, rarely epiphytic, on old *Quercus* or seldom on *Fagus*.
B Mosan: RRR, Ard.: AR (locally abundant in the Ourthe and Semois valleys). **L** Ard.: RR, Lorr.: R.
Lit.: Di: 114-115, L5: 22-23, NL84: 14.

illecebrosa (Dufour) Fr., see *Lecanographa amylacea*

lyncea (Sm.) Fr., see *Lecanographa lyncea*

plocina auct., non (Ach.) A. Massal., see *Cresponea premnea* var. *saxicola*

stenhammarii (Stenh.) Arnold, see *Dirina stenhammarii*

LECANIA A. Massal.

coeruleorubella (Mudd) M. Mayrhofer
On the vertical surface of shaded walls, on mortar.
B - . **L** Ard.: RR, Lorr.: RR.
Lit.: van den Boom (1992: 234).

cuprea (A. Massal.) van den Boom & Coppins
Syn.: *Bacidia cuprea* (A. Massal.) Lettau
In shaded niches of natural, calcareous or sandstone outcrops, rarely on mosses, also found on artificial substrates like brick.
B Mosan: AR, Ard.: RR. **L** Lorr.: RR.
Lit.: Ertz: 19, NL84: 14, NL92: 170, NL97: 49, van den Boom (1992: 234-238).

cyrtella (Ach.) Th. Fr.
Corticolous and lignicolous, on *Acer*, *Carpinus*, *Malus*, *Populus*, *Sambucus*, etc., in nitrophilous conditions.
B Fl.: RR, Brab.: RR, Mosan: R, Ard.: RRR. **L** Ard.: RR, Lorr.: R.
Lit.: Ca: 108, Di: 115-116, DSL: 241, Ho: 138, 580 (erroneous: the specimens in GENT correspond to *Lecanora hagenii* s. l.), Mü4: 109, NL84: 14, NL97: 49.

cyrtellina (Nyl.) Sandst.
Corticolous, on *Acer campestre* and at the base of a trunk of *Carpinus*, in forests.
B Mosan: RR. **L** Ard.: RRR.
Lit.: NL84: 14, van den Boom & Sérusiaux (1996: 22).

erysibe (Ach.) Mudd
On mortar and concrete, sometimes on bricks or other artificial substrates, also on sandstone rocks, always in ruderal and nitrophilous conditions.
B Fl.: RRR, Camp.: RR, Mosan: RR, Ard.: RRR. **L** Ard.: RR, Lorr.: RR.
Lit.: NL84: 14, NL92: 170, NL93: 44, van den Boom (1992: 238-240), Zwaenepoel et al. (1994: 37).

globulosa (Flörke) van den Boom & Sérus.
Syn.: *Bacidia globulosa* (Flörke) Hafellner & V. Wirth, *Catillaria globulosa* (Flörke) Th. Fr., *Biatorina globulosa* (Flörke) Körb.
Corticolous, mainly on the rough bark of *Quercus* in forests, rarely on isolated trees (*Fraxinus*, *Malus*).
B Mosan: RR, Ard.: R, Lorr.: *R*. **L** Ard.: R, Lorr.: R.
Lit.: Di: 83, L3: 27-28, L8, NL84: 13.

hutchinsiae (Nyl.) A. L. Sm.
On natural, siliceous and sandstone outcrops, mostly in deeply shaded habitats.
B Mosan: RRR, Ard.: RR. **L** Lorr.: RR.
Lit.: NL84: 14, van den Boom (1992: 240-242).

inundata (Körb.) M. Mayrhofer
On calcareous, natural outcrops, and in artificial habitats like on old walls or concrete.
B Mosan: RR, Ard.: RR, Lorr.: RRR. **L** Ard.: RRR, Lorr.: RR. **F** Lorr.: RR.
Lit.: L5: 23, NL84: 14, NL92: 170, van den Boom (1992: 242-244).

naegelii (Hepp) Diederich & van den Boom
Syn.: *Bacidia naegelii* (Hepp) Zahlbr., *Bilimbia naegelii* (Hepp) Anzi
Corticolous, often on *Fraxinus* or *Populus*, in open and rather nitrophilous conditions.
B Mar.: RRR, Mosan: RR, Ard.: RR. **L** Ard.: RR, Lorr.: AR.
Lit.: Di: 53-54, L3: 26, NL92: 154-155, NL97: 49.

rabenhorstii (Hepp) Arnold
On calcareous, naturals outcrops, also found on walls, concrete, etc.
B Mar.: RRR, Fl.: R, Camp.: RR, Brab.: RR, Mosan: AR, Ard.: RR, Lorr.: RRR. **L** Ard.: RR, Lorr.: R.
Lit.: L5: 23-24, NL84: 14, van den Boom (1992: 245-247).

suavis (Müll. Arg.) Mig.
On the vertical surface of a natural, calcareous outcrop, and on mortar on the wall of a church.
B Mosan: RRR. **L** Ard.: RRR.
Lit.: NL92: 155, van den Boom (1992: 248).

sylvestris (Arnold) Arnold
On concrete.
B Mosan: RRR. **L** - .
Lit.: van den Boom (1992: 248-250).

turicensis (Hepp) Müll. Arg.
On natural, calcareous and sandstone outcrops and on walls.
B Fl.: RRR, Mosan: R, Ard.: RRR, Lorr.: RRR. **L** Lorr.: RR.
Lit.: NL84: 14, van den Boom (1992: 250-253).

dimera (Nyl.) Th. Fr., see *L. dubitans*

dubitans (Nyl.) A. L. Sm., syn. *L. dimera* (Nyl.) Th. Fr. Reported from **B** by DG: 32 and from **L** by Ko: 201, but no material seen.

fuscella (Schaer.) A. Massal., syn. *L. syringea* (Ach.) Th. Fr. This species was mentioned from **B** by DG: 32 and **L** Lorr. by Feltgen (1902: 178), but no relevant material has been seen by us. The recent record from **B** Mar. by Ho: 138, 580 refers to *Cliostomum griffithii* (specimen in GENT checked !).

syringea (Ach.) Th. Fr., see *L. fuscella*

LECANOGRAPHA Egea & Torrente

lyncea (Sm.) Egea & Torrente
Syn.: *Lecanactis lyncea* (Sm.) Fr., *Opegrapha lyncea* (Sm.) Hook., incl. *O. lyncea* var. *fuliginosa* Turner & Borrer
On the dry side of an old *Quercus* tree in a humid and well-preserved forest.
B - . **L** Lorr.: RRR.
Lit.: DG: 18, Di: 176-177, L4: 28.

amylacea (Pers.) Egea & Torrente, syn. *Lecanactis illecebrosa* (Dufour) Fr. The ancient report of this species from **L** by Ko: 271 is most doubtful, as not sustained by any relevant specimen.

LECANORA Ach.

achariana A. L. Sm.
On siliceous boulders in a river (splash zone).
B - . **L** Ard.: RR.
Lit.: NL92: 155.

agardhiana Ach.
Syn.: *L. agardhianoides* A. Massal.
On hard calcareous, natural outcrops.
B Mosan: RR. **L** - .
Lit.: DG: 32, L8.

aitema (Ach.) Hepp
On acid bark (especially *Pinus*, also *Quercus*), and on lignum, in forests or their edges, locally common on dead standing trees in bogs.
B Mosan: RRR, Ard.: R (AR in Haute Ard.). **L** Ard.: RRR. **F** Ard.: RRR.
Lit.: NL84: 14.

albella (Pers.) Ach.
Syn.: *Lecanora pallida* (Schreb.) Rabenh.
Corticolous, most frequent on *Quercus*, usually in forest.
B Mosan: RR, Ard.: R, Lorr.: RRR. **L** Ard.: RR, Lorr.: R.
Lit.: Di: 128-129, L5: 27-28, NL84: 15.

albescens (Hoffm.) Branth & Rostr.
Syn.: *Placodium albescens* (Hoffm.) A. Massal.
On concrete and mortar of walls, also on natural outcrops of siliceous rocks, calcareous sandstone and limestone, rarely lignicolous.
B Mar., Fl., Camp., Brab.: *AR-C*, Mosan: *CC*, Ard.: *AC*, Lorr.: *CC*. **L** Ard.: *AC*, Lorr.: *CC*. **F** Mosan: *CC*, Ard.: *AC*.
Lit.: Mü1: 151, NL84: 14, NL92: 170, VGH: 114.

allophana Nyl.
Syn.: *L. subfusca* (L.) Ach., non auct., nom. rej.
Corticolous, mainly on *Fraxinus* along roads.
B Mosan: RRR, Lorr.: RRR. **L** Lorr.: R (†1891). Perhaps overlooked.
Lit.: Di: 119-120, L5: 24, L8, Mü1: 151 (from **B** Ard., specimen not seen), NL84: 14.

argentata (Ach.) Malme
Syn.: *L. subfuscata* H. Magn., *L. subfusca* auct., non (L.) Ach., incl. *L. subrugosa* Nyl.
Corticolous, in forests (on *Carpinus*, *Fagus*, *Quercus*), and on isolated trees (*Acer*, *Fraxinus*, *Populus*).
B Mar.: *AR*, Fl.: RRR, Brab.: R, Mosan: AR, Ard.: AR, Lorr.: AR. **L** Ard.: AR, Lorr.: AR.
The specimens called *L. subrugosa* mainly occur on the bark of *Quercus*; following Lumbsch & Feige (1996: 261), they represent an extreme morphological variant of *L. argentata* caused by the substrate.
Lit.: Di: 120, 136, Ho: 117, 155, 157, 590, NL84: 14, 15.

barkmaniana Aptroot & van Herk (‘*barkmaneana*’)
Corticolous, on *Populus* ×*canadensis*.
B Fl.: RR. **L** - . Overlooked ?
Lit.: L8.

campestris (Schaer.) Hue
On mortar of old walls, on stones, and on natural, sandstone and siliceous outcrops in exposed and sunny conditions.
B Fl.: AR, Camp.: R, Brab.: R, Mosan: RR, Ard.: RR. **L** Ard.: RRR, Lorr.: R.
Lit.: La69: 104, Mü1: 151, NL84: 14, NL92: 170, VGH: 114, Zwaenepoel et al. (1994: 37).

carpinea (L.) Vain.
Corticolous, mainly on smooth bark (e. g. on *Carpinus*), in forests, orchards and along roads.
B Mar.: C, Fl.: C, Camp.: R, Brab.: AC, Mosan: R, Ard., Lorr.: *AC*. **L** Ard.: AC, Lorr.: AR.

Lit.: Ba: 9, Ca: 94, Di: 120-121, DSL: 238-239, Ho: 140, Mü1: 152, NL84: 14.

chlarotera Nyl.
Corticolous on roadside trees (*Fraxinus*, *Populus* and *Tilia*, also on *Juglans*, *Malus* and *Pyrus*), exceptionally in forests on *Carpinus*.
B Mar.: CC, Fl.: CC, Camp.: C, Brab.: C, Mosan: AR, Ard.: AR, Lorr.: R. **L** Ard.: RR, Lorr.: AR.
Lit.: Ba: 9, Ca: 96-97, Di: 121-122, Ho: 142, NL84: 14, Qu:85-86.

compallens van Herk & Aptroot
Corticolous, on old *Sorbus domestica* in a pasture, and on *Tilia* along road.
B Mosan: RRR. **L** Lorr.: RR. Probably overlooked ?
Lit.: L8, van Herk & Aptroot (1999: 546-548).

conizaeoides Cromb.
Syn.: *L. pityrea* Erichsen
Very common on bark and lignum, toxitolerant, able to re-colonize trees between periodical invasions by *Athelia arachnoidea*, exceptionally saxicolous on sandstone rock.
B Mar.: C, Fl.: CC, Camp.: CC, Brab.: CC, elsewhere: *CC*. **L** Ard.: CC, Lorr.: CC. **F** Mosan, Ard.: *CC*.
Lit.: Ba: 9, Ca: 98-99, Di: 122-124, DSL: 238, Ho: 146, Qu: 85, 87, Margot (1965).

crenulata Hook., non auct.
On hard calcareous, natural outcrops, rarely on tufa or sandstone rocks or on mortar.
B Brab.: RRR, Mosan: AR (locally common). **L** Lorr.: RR.
We use this epithet here for a species with large apothecia and a thick apothecial margin, most common on natural outcrops of hard calcareous rocks, described in Poelt & Leuckert (1995: 313-316) and illustrated in Wirth (1995: 471). A more widespread taxon with smaller apothecia and a thinner apothecial margin, often growing in anthropogenic habitats (walls, gravestones) and described in Fröberg (1997: 31, as *L. crenulata*), is treated below as *L. crenulata* auct. The nomenclature of both taxa requires further studies.
Lit.: Ertz: 19, NL77: 20, NL84: 15, NL97: 49.

crenulata auct., non Hook.
Saxicolous, on walls (sandstone, mortar, etc.) or gravestones, rarely on natural, calcareous rocks (marl rock: **NL** Brab.), exceptionally corticolous, on the base of an old *Sorbus* in a pasture.
B Fl.: R, Brab.: RR, Mosan: *R*, Ard.: RRR. **L** Ard.: RR, Lorr.: RR. **NL** Brab.: RR.
Lit.: NL92: 155, VGH: 114, Zwaenepoel et al. (1994: 37).

dispersa (Pers.) Sommerf.
On anthropogenic substrata (walls, mortar, concrete), but also on limestone, sandstone and siliceous rocks in natural conditions, rarely lignicolous or corticolous in nitrophilous habitats.
B *CC*. **L** *CC*. **F** *CC*.
Lit.: Ca: 101-102, Ho: 149, La69: 82, 104, Mü1: 151, NL87: 21, NL92: 170, Qu: 88-89, VGH: 114.

epanora (Ach.) Ach.
On siliceous rocks rich in heavy metals, mostly developed on dry underhangs, in natural and artificial (disused quarries) habitats.
B Ard.: RR. **L** - . **F** Ard.: R.
Lit.: L5: 24-25, NL77: 20, NL97: 49.

expallens Ach.
Syn.: *L. conizaea* (Ach.) Nyl.
Very common on bark and lignum in forests and on isolated trees.
B Mar.: CC, Fl.: CC, Camp.: C, Brab.: CC, elsewhere: *CC*. **L** Ard.: CC, Lorr.: CC. **F** Mosan, Ard.: *CC*.
Lit.: Ba: 9, Ca: 103-104, Di: 124-125, DSL: 237-238, Ho: 152, Qu: 88, 90-91.

flotowiana Spreng.
On exposed, calcareous, natural outcrops, also on concrete, asbestos and gravestones.
B Fl.: RRR, Brab.: RRR, Mosan: AR, Ard.: RR. **L** Lorr.: RRR. **F** Lorr.: RRR. Overlooked.
Lit.: Ertz: 19, NL77: 20, NL87: 21, NL97: 49.

gangaleoides Nyl.
On natural, sandstone and siliceous outcrops, often on vertical surfaces.
B Mosan: RR, Ard.: RR. **L** Ard.: RRR, Lorr.: RRR.
Lit.: La69: 104, NL84: 15, NL92: 155.

(*)**gisleriana** Müll. Arg.
Syn.: *L. gisleri* Poelt & Ullrich
On siliceous rocks rich in heavy metals, initially lichenicolous on *Lecanora epanora*, *L. subaurea* or rarely *L. soralifera*, later forming an independent thallus.
B Ard.: RR. **L** - .
Lit.: L5: 25, NL97: 50.

hagenii (Ach.) Ach.
Corticolous on slightly nitrophilous bark of deciduous trees, or lignicolous, perhaps also occasionally saxicolous on siliceous rocks in nitrophilous communities.
B Mar.: RRR, Fl.: AR, Brab.: AR, Mosan: AR, Ard.: RR, Lorr.: RR **L** Lorr.: AR.

The distinction of this species from *L. dispersa* and *L. umbrina* is still poorly understood, and some records might be misidentifications.
Lit.: Di: 125-126, DSL: 240, Ho: 117, 151, Mü1: 152, NL84: 15.

handelii J. Steiner
On siliceous rocks rich in heavy metals, mainly found on slate rubbles in disused quarries and on railway or road cuttings.
B Ard.: RR. **L** - . **F** Ard.: RRR.
Lit.: L5: 25, NL77: 20, NL97: 50.

horiza (Ach.) Linds.
Syn.: *L. parisiensis* Nyl.
Corticolous, on *Fraxinus*, *Sorbus* and *Ulmus*, mainly on roadside trees.
B Fl.: RRR, Mosan: RR. **L** Lorr.: RRR.
Lit.: DG: 33, L7: 86, NL84: 15.

hybocarpa (Tuck.) Brodo
Corticolous, on old *Fraxinus* along road.
B Mosan: RRR. **L** - .
Lit.: L8, NL84: 15.

intricata (Ach.) Ach.
On siliceous rocks, usually in rather exposed conditions, either in natural or artificial (slate debris in disused quarries) conditions.
B Ard.: R. **L** - .
Lit.: Mü1: 152, NL77: 20, Sé: 138.

intumescens (Rebent.) Rabenh.
Corticolous, mainly on *Fagus* and *Quercus* in forest, rarely on *Juglans* in more open situations.
B Ard.: R, Lorr.: RR. **L** Ard.: R, Lorr.: RR. **D** Ard.: RRR.
Lit.: Di: 126, L5: 25-26, Mü1: 151.

muralis (Schreb.) Rabenh.
Syn.: *L. muralis* var. *versicolor* (Pers.) Tuck., *Placodium saxicolum* (Pollich) Körb.
Saxicolous, on calcareous, natural outcrops in nitrophilous conditions, but most common on walls, roofs and concrete, rarely on lignum or at the base of trees covered by dust, incl. in highly polluted areas.
B *CC*. **L** *CC*. **F** *CC*.
Lit.: Ca: 105, Di: 127-128, Ho: 154, Qu: 91-92, VGH: 114, Sansen & Deronde (1990).

orosthea (Ach.) Ach.
Syn.: *Lecidea orosthea* (Ach.) Ach.
On dry, vertical overhangs of natural, siliceous outcrops, never found on artificial substrates.
B Mosan: RR, Ard.: AR-AC. **L** Ard.: R, Lorr.: RR.
Lit.: La69: 102, Mü4: 109, NL77: 21, NL84: 15, NL92: 155.

persimilis (Th. Fr.) Nyl.
Corticolous on roadside trees (*Fraxinus*, *Populus*, *Salix*, *Tilia*), also in forests on *Quercus*, most common in nitrophilous conditions.
B - , most probably overlooked. **L** Ard.: RRR, Lorr.: AC-AR.
Lit.: Di: 129-130.

piniperda Körb.
Corticolous on *Salix*, and lignicolous on *Picea*, *Populus tremula* and *Sarothamnus*.
B - . **L** Ard.: RR, Lorr.: RR.
Lit.: Di: 130-131, NL92: 170.

polytropa (Hoffm.) Rabenh.
Saxicolous on siliceous rocks, usually in exposed conditions, on natural outcrops or in artificial habitats, incl. walls, debris in disused quarries, railway ballast, etc.
B Fl.: RRR, Mosan: RR, Ard.: AR. **L** Ard.: R, Lorr.: RRR.
Lit.: Mü1: 152, NL77: 21, NL92: 170, Zwaenepoel et al. (1994: 37).

pruinosa Chaub.
Syn.: *L. pruinifera* Nyl.
On vertical surfaces of natural, calcareous outcrops in exposed conditions.
B Brab.: RRR, Mosan: AR. **L** - .
Lit.: Ertz: 19, L5: 28, La69: 105, NL77: 21, NL84: 15, NL97: 50.

pulicaris (Pers.) Ach.
Syn.: *L. chlarona* (Ach.) Nyl., *L. coilocarpa* (Ach.) Nyl.
Corticolous, mainly on the smooth bark of *Alnus*, *Fagus* and *Tilia*, exceptionally on *Fraxinus* and *Quercus*, mostly found on branches inside forests.
B Mosan: R, Ard.: AR, Lorr.: R. **L** Ard.: AR, Lorr.: AR.
Lit.: Di: 131, La69: 104, Mü1: 151, NL84: 15.

rugosella Zahlbr.
Corticolous, mainly on roadside trees (*Acer*, *Fraxinus*, *Populus*, *Tilia*, etc.).
B - , most probably overlooked. **L** Lorr.: AR.
Lit.: Di: 131-132.

rupicola (L.) Zahlbr. subsp. **rupicola**
Syn.: *L. sordida* (Pers.) Th. Fr.
Saxicolous, on subvertical, siliceous, natural outcrops, rarely on exposed brick walls.
B Camp.: RRR, Mosan: RRR, Ard.: AR. **L** Ard.: RR, Lorr.: RRR. **F** Mosan: RR.
Lit.: La69: 104, Mü1: 151, NL92: 170, Sé: 138.

rupicola subsp. **subplanata** (Nyl.) Leuckert & Poelt
Syn.: *L. subplanata* Nyl.
On siliceous, natural outcrops, mainly on vertical surfaces.
B Ard.: RR. **L** - .
Lit.: Sé: 138.

saligna (Schrad.) Zahlbr.
Syn.: *L. saligna* var. *sarcopis* (Ach.) Hillmann, *L. sarcopis* (Ach.) Ach., *L. effusa* (Hoffm.) Ach.
Corticolous and lignicolous, most common on *Quercus*, usually in open situations.
B Mar.: RRR, Camp.: RR, Mosan: RR, Ard.: R, Lorr.: R. **L** Ard.: R, Lorr.: AR.
Lit.: Di: 133-134, Mü1: 152, NL84: 15.

sambuci (Pers.) Nyl.
On the bark of a very old *Populus* along a road.
B - . **L** Lorr.: RRR.
Lit.: Di: 134-135, Mü4: 109 (material to be checked).

silvae-nigrae V. Wirth
On siliceous, natural outcrops and scree-covered slope underneath, not found on artificial habitats nearby (e. g. slate pebbles in disused quarries).
B Ard.: RRR (but abundant in its single locality). **L** - .
Lit.: Sé: 142.

soralifera (Suza) Räsänen
Saxicolous on siliceous rocks, usually in exposed conditions, in natural habitats, most common on slate debris in disused quarries near Vielsalm.
B Ard.: R. **L** - .
Lit.: NL77: 21, Sé: 138.

strobilina (Spreng.) Kieff.
Formerly on bark of *Pinus*, recently twice on old *Fagus* along roads.
B Fl.: RRR (†<1850), Ard.: RR. **L** Lorr.: RR (†1891).
Lit.: Di: 135-136, L5: 28, L8.

subaurea Zahlbr.
On siliceous rocks rich in heavy metals, mostly in open situations, locally abundant on slate debris in disused quarries near Vielsalm.
B Ard.: RR. **L** - .
Lit.: NL77: 21, Sé: 142.

subcarnea (Lilj.) Ach.
On siliceous, natural outcrops, often on shaded, vertical surfaces or on overhangs.
B Mosan: RR, Ard.: AR. **L** Ard.: R.
Several populations from Ard. (**B** and **L**) have been examined by TLC and all contain protocetraric acid. Thus, the closely related *L. ochroidea* (Ach.) Nyl. does not seem to occur in the study area.
Lit.: La69: 104, Mü4: 109, NL84: 15, NL92: 171, NL97: 50.

subcarpinea Szatala
Syn.: *L. nemoralis* auct., non Makar.
Corticolous, on smooth bark (e. g. of *Fraxinus*) in forests.
B Mosan: RR, Ard.: AR, Lorr.: RR. **L** Ard.: RR, Lorr.: R.
Lit.: Di: 126-127 (sub *L. leptyrodes*), L5: 26 (sub *L. leptyrodes*), NL92: 155-156, NL97: 50.

sulphurea (Hoffm.) Ach.
On exposed, siliceous, natural outcrops and on sandstone wall, sometimes associated with *Tephromela atra*.
B Ard.: RR. **L** Ard.: RR, Lorr.: RRR.
Lit.: La69: 102, NL92: 171.

swartzii (Ach.) Ach.
Syn.: *L. subradiosa* auct., non Nyl.
Saxicolous, on dry underhangs of natural, siliceous and sandstone outcrops.
B Mosan: RRR, Ard.: AR. **L** Lorr.: RRR.
Lit.: NL77: 21, NL92: 156, Sé: 138, Leuckert & Poelt (1989: 161).

symmicta (Ach.) Ach.
Incl. *L. saepincola* (Ach.) Arnold, *L. symmictera* Nyl.
Corticolous or lignicolous, mostly found on smooth bark and young twigs in open situations (*Malus*, *Populus*, *Quercus*, *Salix*).
B Mar.: RRR, Fl.: RR, Brab.: RR, Mosan: R, Ard.: R, Lorr.: RRR. **L** Ard.: RR, Lorr.: AR.
The Luxembourg material seems to be heterogeneous and represent two distinct taxa (Di: 137-138).
Lit.: Di: 137-138, DSL: 238, Mü1: 152, NL84: 15.

umbrina (Ach.) A. Massal.
Corticolous on eutrophicated bark, rarely in forest on *Quercus*, exceptionally on lignum.
B Mar.: RR, Fl.: RRR, Ard., Lorr.: *AR*. **L** Lorr.: AR.
The differences between this species and the mainly saxicolous *L. dispersa* have to be studied further.
Lit.: Di: 138, DSL: 240, Ho: 139, 151, Mü1: 152.

varia (Hoffm.) Ach.
Lignicolous or corticolous, often on fence posts.
B Camp.: RR, Mosan: RR, Ard.: *R*. **L** Ard.: RR, Lorr.: R.
Lit.: Ba: 9, Di: 139, Mü1: 152, NL77: 21, NL87: 21.

agardhianoides A. Massal., see *L. agardhiana*

albescens ‘var. *minor*’. A name of uncertain application, mentioned from **B** Fl. by Zwaenepoel et al. (1994: 37).

allophana var. *glabrata* (Ach.) Steiner, see *L. glabrata*

atra (Huds.) Ach., see *Tephromela atra*

atrynea (Ach.) Nyl., see *L. cenisia*

badia (Hoffm.) Ach., see *Protoparmelia badia*

brunnea auct. belg., non (Sw.) Ach., see *Moelleropsis nebulosa*

cadubriae (A. Massal.) Hedl., syn. *Lecidea cadubriae* (A. Massal.) Nyl. Reported from **B** by DG: 24, but no material seen.

caesioalbicans Zahlbr. Reported from **B** by DG: 32, but no material seen. A name of uncertain application.

caesiocinerea Malbr., see *Aspicilia caesiocinerea*

calcarea (L.) Sommerf., see *Aspicilia calcarea*

cenisia Ach., syn. *L. atrynea* (Ach.) Nyl. This species was reported from **B** Mosan by DG: 33 and NL84: 14, but so far no correctly identified specimen has been seen.

chlarona (Ach.) Nyl., see *L. pulicaris*

cinerea (L.) Sommerf., see *Aspicilia cinerea*

coarctata (Sm.) Ach., see *Trapelia coarctata*

coilocarpa (Ach.) Nyl., see *L. pulicaris*

conferta auct., non (Duby) Grognot, see *L. xanthostoma*

conizaea (Ach.) Nyl., see *L. expallens*

crassa (Huds.) Ach., see *Squamarina cartilaginea*

cupreogrisea Th. Fr., see *Aspicilia cupreogrisea*

demissa (Körb.) Zahlbr., see *Caloplaca demissa*

deusta (Stenh.) Nyl., see *Miriquidica deusta*

distans (Ach.) Nyl., see *L. populicola*

endoleuca Hue, see under *Aspicilia*

effusa (Hoffm.) Ach., see *L. saligna*

flandrica B. de Lesd. Described from **F** Mar. by Bouly de Lesdain (1960), but no material has been seen.

fragilis (Scop.) Zahlbr., see *Squamarina gypsacea*

gelida auct. belg., non (L.) Ach., see *Placopsis lambii*

gibbosula H. Magn., see *Aspicilia gibbosa*

(*)*gisleri* Poelt & Ullrich, see *L. gisleriana*

glabrata (Ach.) Malme, syn. *L. subfuscata* f. *glabrata* (Ach.) Poelt, *L. allophana* var. *glabrata* (Ach.) Steiner. Reported from **B** by DG: 33, but no material seen.

grumosa (Pers.) Du Rietz, see *Tephromela grumosa*

hypoptoides (Nyl.) Nyl. This species was reported from **B** Ard. by Mü1: 152 (‘det. H. Magnusson’), but no specimen has been seen by us.

intrudens H. Magn., see *Miriquidica intrudens*

lacustris (With.) Nyl., see *Ionaspis lacustris*

laevata (Ach.) Nyl., see *Aspicilia laevata*

laevis Poelt. This species, which is very close to *L. horiza*, was mentioned from **B** Brab. by Arts & Hoffmann (1995) and from **B** Mosan by Barkman (1958) (see also Lambinon 1959) and Lambinon (1963: 244), but no correctly identified specimen has been examined by us.

lentigera (Weber) Ach., see *Squamarina lentigera*

leptyrodes (Nyl.) Degel. The material published under this name from the study area belongs to *L. subcarpinea* Szatala.

lusca Nyl. Reported from **B** by DG: 32, but no material seen. A name of uncertain application.

marginata (Schaer.) Hertel & Rambold, syn. *Lecidea marginata* Schaer. Reported from **B** by DG: 24, but no material seen.

menyhartii Steiner. This species was reported from **B** Ard. by Mü3: 45 (as *L.* cf. *m.*, ‘det. Magn.’), but no material has been seen by us. A name of uncertain application.

mutabilis (Ach.) Nyl., see *Megaspora verrucosa*

nemoralis auct., non Makar., see *L. subcarpinea*

nephaea Sommerf., see *Protoparmelia nephaea*

nitens (Pers.) Ach., see under *Protoparmelia*

pallida (Schreb.) Rabenh., see *L. albella*

pannonica Szatala. Reported from **B** Camp. (NL93: 44), but no relevant specimen seen.

parisiensis Nyl., see *L. horiza*

pityrea Erichsen, see *L. conizaeoides*

populicola (DC.) Duby, syn. *L. distans* (Ach.) Nyl. Reported from **B** by DG: 33, but no material seen.

prevostii (Duby) Th. Fr., see *Hymenelia epulotica*

pruinifera Nyl., see *L. pruinosa*

radiosa (Hoffm.) Schaer., see *Lobothallia radiosa*

saepincola (Ach.) Arnold, see *L. symmicta*

sarcopis (Ach.) Ach., see *L. saligna*

sordida (Pers.) Th. Fr., see *L. rupicola* subsp. *rupicola*

subcircinata Nyl., see *Lobothallia radiosa*

subdepressa Nyl., see *Aspicilia subdepressa*

subfusca (L.) Ach., non auct., nom. rej., see *L. allophana*

subfusca auct., non (L.) Ach., see *L. argentata*

subfuscata H. Magn., see *L. argentata*

subfuscata f. *glabrata* (Ach.) Poelt, see *L. glabrata*

subplanata Nyl., see *L. rupicola* subsp. *subplanata*

subradiosa auct., non Nyl., see *L. swartzii*

subrugosa Nyl., see *L. argentata*

symmictera Nyl., see *L. symmicta*

tongletii Hue (‘*tongleti*’), see *Acarospora tongletii*

xanthostoma Cl. Roux, syn. *L. conferta* auct., non (Duby) Grognot. Reported from **B** Ard. by Giralt & van den Boom (1996: 81) and from **B** Fl. by Zwaenepoel et al. (1994: 37), but no correctly identified specimen has been seen.

LECIDEA Ach.

cyrtidia Tuck.
On well-lit, siliceous rocks in a rather open *Quercus* wood.
B Ard.: RRR. **L** - .
This species belongs to a still undescribed genus, together with *L. plebeja* Nyl.
Lit.: L8.

fuliginosa Taylor
On exposed, siliceous rocks, especially along fissures, in natural habitats.
B Ard.: RR. **L** Ard.: RRR.
This species does not belong to *Lecidea* s. s., but its exact generic position requires further studies.
Lit.: L7: 86.

fuscoatra (L.) Ach.
Syn.: *L. fumosa* (Hoffm.) Ach., incl. *L. fuscoatra* var. *grisella* (Flörke) Nyl., *L. grisella* Flörke
On siliceous, or rarely sandstone rocks, often in exposed conditions, in natural or artificial (especially in disused quarries) habitats.
B Mosan: R, Ard.: AC, Lorr.: RRR. **L** Ard.: *AC*, Lorr.: RR.
Lit.: La69: 102, Mü1: 143, NL84: 15, NL87: 21, NL92: 171, Vanek (1976).

lapicida (Ach.) Ach. var. **pantherina** Ach.
Syn.: *L. pantherina* (Ach.) Th. Fr., *L. lapicida* var. *lactea* (Schaer.) V. Wirth
On exposed, siliceous rocks, in natural habitats.
B Ard.: RR. **L** - .
Lit.: La69: 102, Mü1: 144, Sé: 138.

lithophila (Ach.) Ach.
On siliceous rocks, usually in exposed conditions, in natural or artificial habitats, especially common on slate debris in disused quarries near Vielsalm.
B Ard.: AR. **L** - .
Lit.: Mü1: 143, NL77: 21, Sé: 138.

nylanderi (Anzi) Th. Fr.
On *Tilia* along road within a forest.
B Ard.: RRR. **L** - . Most probably overlooked.
This species does not belong to *Lecidea* s. s., but its exact generic position requires further studies.
Lit.: L8.

plana (J. Lahm) Nyl.
Syn.: *L. latypea* Ach., incl. var. *aequata* (Flörke) Arnold
On siliceous rocks, in rather exposed conditions, in natural or artificial (slate debris in disused quarries) habitats.
B Ard.: RR. **L** - .
Lit.: L8.

pycnocarpa (Körb.) Ohlert
On exposed, siliceous outcrops, mostly in slightly protected conditions.
B Ard.: RR. **L** Ard.: RRR.
This species does not belong to *Lecidea* s. s., but its exact generic position requires further studies.
Lit.: NL92: 156.

aeneofusca (Flot.) Flörke, see *Trapeliopsis aeneofusca*

aeruginosa Borrer, see *Trapeliopsis flexuosa*

albocaerulescens auct., non (Wulfen) Ach., see *Porpidia albocaerulescens*

atrata (Ach.) Wahlenb., see *Tremolecia atrata*

atrofusca (Hepp) Mudd, see *Mycobilimbia hypnorum*

cadubriae (A. Massal.) Nyl., see *Lecanora cadubriae*

caesioalbescens (H. Magn.) Vain. Reported from **B** Ard. by Remy (1979), but no material seen.

cinereoatra Ach., see *Porpidia cinereoatra*

coarctata (Sm.) Nyl., see *Trapelia coarctata*

contigua auct., non Fr., see *Porpidia macrocarpa*

crustulata (Ach.) Spreng., see *Porpidia crustulata*

cyathoides (Ach.) Ach., see *Fuscidea cyathoides* var. *cyathoides*

cyclisca (A. Massal.) Malbr., see *Clauzadea cyclisca*

decipiens (Hedw.) Ach., see *Psora decipiens*

deusta (Stenh.) Nyl., see *Miriquidica deusta*

dicksonii auct., non (J. F. Gmel.) Ach., see *Tremolecia atra*

elaeochroma (Ach.) Ach., see *Lecidella elaeochroma* f. *elaeochroma*

entochrysoides Hue, see *Placolecis opaca*

epizanthoidiza auct. belg., non Nyl., see *Biatora chrysantha*

erratica Körb., see *Micarea erratica*

erythrophaea Sommerf., syn. *Biatora erythrophaea* (Sommerf.) Fr. Reported from **L** Lorr. by Ko: 247, but no relevant specimen has been seen.

fumosa (Hoffm.) Ach., see *L. fuscoatra*

furvella Mudd, see *Rimularia furvella*

fuscorubens (Nyl.) Nyl., see *Clauzadea monticola*

geophana Nyl., see *Steinia geophana*

glomerulosa (DC.) Steud., see *Lecidella elaeochroma* f. *elaeochroma*

granulosa (Hoffm.) Ach., see *Trapeliopsis granulosa*

grisella Flörke, see *L. fuscoatra*

griseoatra (Flot.) Schaer., see *Miriquidica griseoatra*

harmandii B. de Lesd. Reported from **B** by DG: 24, but no material seen. A name of uncertain application.

hydrophila Fr., see *Porpidia hydrophila*

hypnorum Lib., see *Mycobilimbia hypnorum*

hypnorum auct. p. p., non Lib., see *Lecidea sanguineoatra* under *Mycobilimbia*

lapicida (Ach.) Ach. var. *lapicida*. Reported from **B** by DG: 24 and from **L** Lorr. by Ko: 260-261 (as *Lecidella lapicida*), but no material seen.

latypea Ach., see *L. plana*

latypiza Nyl., see *Lecidella carpathica*

leptocline Flot. f. *tongletii* Hue, see under *Buellia*

limitata auct., non Scop., see *Lecidella elaeochroma* f. *elaeochroma*

lucida (Ach.) Ach., see *Psilolechia lucida*

lurida (Ach.) DC., see *Psora lurida*

macrocarpa (DC.) Steud., see *Porpidia macrocarpa*

marginata Schaer., see *Lecanora marginata*

meiospora (Nyl.) Nyl. Reported from **B** by DG: 24, but no material seen. A name of uncertain application.

misella (Nyl.) Nyl., see *Micarea misella*

monticola Schaer., see *Clauzadea monticola*

nigrocruenta Anzi, see *Porpidia nigrocruenta*

oligotropha J. R. Laundon, see *Placynthiella oligotropha*

olivacea (Hoffm.) A. Massal., see *Lecidella elaeochroma* f. *elaeochroma*

orosthea (Ach.) Ach., see *Lecanora orosthea*

ostreata (Hoffm.) Schaer., see *Hypocenomyce scalaris*

pantherina (Ach.) Th. Fr., see *L. lapicida* var. *pantherina*

parasema auct., non (Ach.) Ach., see *Lecidella elaeochroma* f. *elaeochroma*

patavina A. Massal., see *Lecidella patavina*

rivulosa Ach., see *Fuscidea cyathoides* var. *cyathoides*

sanguineoatra auct., non (Wulfen) Ach., see under *Mycobilimbia*

sapinea (Fr.) Zahlbr., see *Trapeliopsis flexuosa*

scalaris (Ach.) Ach., see *Hypocenomyce scalaris*

'*scibba*'. This epithet, published by Arts & Hoffmann (1995) for a species collected in **B** Brab., most probably represents a misspelling for '*Lecidea scabra*', a synonym of *Lecidella scabra*.

silacea (Ach.) Ach. Reported from **L** by Ko: 260 (as *Lecidella silacea*), but no specimen seen.

sorediza Nyl., see *Porpidia tuberculosa*

soredizodes (Nyl.) J. R. Laundon, see *Porpidia soredizodes* (Nyl.) Sandst.

spadana B. de Lesd. Reported from **B** (type locality) by BDL3: 29-30, but no material seen. A name of uncertain application.

speirea (Ach.) Ach., see *Porpidia speirea*

stigmatea Ach., see *Lecidella stigmatea*

sylvicola Flot., see *Micarea sylvicola*

templetonii Taylor, see *Mycobilimbia hypnorum*

tenebricans (Nyl.) Nyl. Reported from **B** Ard. by Mü3: 45, but no specimen has been seen by us. A name of uncertain application.

tenebrosa Flot., see *Schaereria fuscocinerea*

testacea (Hoffm.) Ach., see *Psora testacea*

tumida A. Massal., see *Porpidia tuberculosa*

turgidula Fr. Reported from **L** by Ko: 263 (as *Lecidella turgidula*), but no specimen seen.

uliginosa (Schrad.) Ach., see *Placynthiella uliginosa*

viridescens (Schrad.) Ach., see *Trapeliopsis viridescens*

**vitellinaria* Nyl., see *Carbonea vitellinaria*

vulgata Zahlbr., see *Lecidella stigmatea*

LECIDELLA Körb.

anomaloides (A. Massal.) Hertel & H. Kilias
On siliceous rocks by a river.
B Ard.: RRR (Semois valley). **L** - .
Lit.: L8.

carpathica Körb.
Syn.: *Lecidea latypiza* Nyl.
On exposed, and sometimes nitrophilous, slightly calcareous rocks, found in natural, and rarely in artificial habitats.
B Mar.: RRR, Fl.: RRR, Brab.: RRR, Mosan: AR, Ard.: RR, Lorr.: RRR. **L** Ard.: R. **F** Mosan: RR.
Lit.: DG: 24, NL97: 50.

conspurcatosorediosa (Harm.) Diederich
Corticolous, mainly on *Fagus*, also on *Acer*, *Carpinus* and *Quercus*, only in the industrialized SW of Luxembourg, on dust-impregnated bark.
B - . **L** Lorr.: R.
The nomenclature and taxonomy of this species require clarification. It possibly represents corticolous populations of *L. scabra*.
Lit.: Di: 141-143.

elaeochroma (Ach.) Choisy
Syn.: *Lecidea elaeochroma* (Ach.) Ach., *L. glomerulosa* (DC.) Steud., *L. olivacea* (Hoffm.) A. Massal., *L. parasema* auct., non (Ach.) Ach., *L. limitata* auct., non Scop., incl. *Lecidella achristotera* (Nyl.) Hertel & Leuckert, *L. euphorea* (Flörke) Hertel
Corticolous, very common, mainly on smooth bark (e. g. of *Carpinus*), never on conifers, toxitolerant.
B Mar.: CC, Fl.: CC, Camp.: R, Brab.: AR, Mosan, Ard., Lorr.: *C*. **L** Ard.: AC, Lorr.: C.
The taxonomic value of the sorediate thalli, sometimes recognized as f. *soralifera* (Erichsen) D. Hawksw., requires further studies. This forma is known from **B** Mar.: AR, Fl.: R, Mosan: RRR. **L** Ard.: RRR, Lorr.: RR. **F** Lorr.: RRR.
Lit.: Ba: 9, Ca: 107, Di: 144-146, Ho: 157, 160, 592, L1: 7, L5: 28-29, NL84: 15, NL92: 171.

flavosorediata (Vězda) Hertel & Leuckert
Corticolous on roadside or isolated trees (*Acer*, *Fraxinus*, *Populus*, *Sorbus domestica*) in rather eutrophic conditions, or on *Fagus* in forest in acidic conditions.
B Mosan: RRR (1968), Ard.: R. **L** Lorr.: R. Probably overlooked.
Lit.: L2: 94, Tholl et al. (1999).

laureri (Hepp) Körb.
Corticolous on *Populus*.
B - . **L** Lorr.: RRR.
Lit.: Di: 146-147, L5: 29.

scabra (Taylor) Hertel & Leuckert
On siliceous or slightly calcareous rocks, in natural and artificial habitats.
B Fl.: RR, Camp.: *R*, Brab.: R, Mosan: R, Ard.: R, Lorr.: RR. **L** Ard.: RR, Lorr.: RR.
Lit.: NL92: 156, NL93: 44, NL97: 50, Knoph et al. (1997: 39), Zwaenepoel et al. (1994: 37).

stigmatea (Ach.) Hertel & Leuckert
Syn.: *Lecidea stigmatea* Ach., *L. vulgata* Zahlbr.
On sandstone and calcareous rocks, in natural and artificial (walls, mortar, etc.) conditions.
B Fl.: AC, Camp.: *AC*, Brab.: R, Mosan: AR, Ard.: RRR. **L** Ard.: RR, Lorr.: AR.
Lit.: NL92: 157, NL93: 44, NL97: 50, VGH: 114.

viridans (Flot.) Körb.
On exposed, siliceous rocks in natural conditions.
B Ard.: RRR. **L** - .
Lit.: L8.

achristotera (Nyl.) Hertel & Leuckert, see *Lecidella elaeochroma* f. *elaeochroma*

aglaea (Sommerf.) Körb., see *Tephromela aglaea*

euphorea (Flörke) Hertel, see *Lecidella elaeochroma* f. *elaeochroma*

fuscorubens (Nyl.) Stein, see *Clauzadea monticola*

immersa (Hoffm.) Körb., see *Clauzadea immersa*

patavina (A. Massal.) Knoph & Leuckert, syn. *Lecidea patavina* A. Massal. Reported from **B** Ard. by Mü3: 45 [as *Lecidea p.* var. *aequata* (Flörke) H. Magn., det. Magnusson], but no specimen has been examined.

pilularis (Körb.) Stein, see *Biatora sphaeroides* under *Mycobilimbia*

sabuletorum (Schreb.) Körb., see *Mycobilimbia sabuletorum*

**vitellinaria* (Nyl.) Kremp., see *Carbonea vitellinaria*

LECIDOMA Gotth. Schneid. & Hertel

demissum (Rutstr.) Gotth. Schneid. & Hertel, syn. *Psora demissa* (Rutstr.) Almq. Reported from **L** Lorr. by Ko: 229, but no specimen has been seen.

LECIOGRAPHA A. Massal.

**monspeliensis* (Nyl.) Müll. Arg., see *Opegrapha parasitica*

**zwackhii* Zwackh, see *Opegrapha zwackhii*

LECOTHECIUM Trevis.

corallinoides (Hoffm.) Körb., see *Placynthium nigrum*

LEMMOPSIS (Vain.) Zahlbr.

arnoldiana (Hepp) Zahlbr.
Saxicolous, on sandstone and mortar close to a spring, in shaded and sheltered conditions (in forest).
B - . **L** Lorr.: RRR. Perhaps overlooked.
Lit.: L7: 86.

LEMPHOLEMMA Körb.

The genus is seldom collected and several collections still await identification. Further species are expected to occur in the study area.

polyanthes (Bernh.) Malme

Syn.: *L. chalazanellum* (Nyl.) Zahlbr., *L. chalazanodes* (Nyl.) Zahlbr., *Physma compactum* (Wallr.) A. Massal., ?*L. fasciculare* (Wulfen) Zahlbr., *L. myriococcum* (Ach.) Th. Fr.

Vertical, mossy surface of wall and of calcareous rocks.

B Mosan: RRR, Ard.: RRR. **L** Lorr.: RRR.

Lit.: DG: 20, NL92: 157.

chalazanellum (Nyl.) Zahlbr., see *L. polyanthes*

chalazanodes (Nyl.) Zahlbr., see *L. polyanthes*

chalazanum (Ach.) B. de Lesd. Reported from **B** by DG: 20 and NL87: 21, but no relevant specimen has been seen.

fasciculare (Wulfen) Zahlbr., see *L. polyanthes*

myriococcum (Ach.) Th. Fr., see *L. polyanthes*

LENORMANDIA Delise, nom. rej.

jungermanniae Delise, see *Normandina pulchella*

LEPRA Willd.

rubens (Reichard) Willd., see *Lepraria rubens*

LEPRARIA Ach.

The genus is poorly known and requires meticulous collections and systematic TLC analysis. The treatment presented here is therefore provisional.

borealis Lohtander & Tønsberg

On siliceous rocks, mainly in fissures or overgrowing mosses, in natural or artificial habitats.

B Ard.: RR. **L** - .

Lit.: NL97: 23.

caesioalba (B. de Lesd.) J. R. Laundon

On siliceous, rarely sandstone rocks, also on walls, often growing over mosses in well-lit and exposed conditions.

B Ard.: AR. **L** Ard.: AR, Lorr.: RR.

Lit.: NL84: 15, NL92: 171.

crassissima (Hue) Lettau

Saxicolous, very frequent on sandstone rocks (especially inside forests), sometimes on walls (incl. in cities), also on other calcareous or on siliceous rocks, in humid forests rarely on the bark of old *Fagus* or *Quercus* trees.

B Mosan: AR, Ard.: R (locally common in the Semois valley). **L** Ard.: RRR, Lorr.: AR. **F** Lorr.: RRR.

Lit.: Di: 150, Ertz: 19, NL84: 15, NL92: 157-158, NL97: 50.

eburnea J. R. Laundon

Over saxicolous mosses on siliceous rocks or walls, only found in artificial habitats.

B Ard.: RRR. **L** Lorr.: RR. Overlooked.

Lit.: L7: 87.

elobata Tønsberg

Corticolous, on *Carpinus*, *Fagus* and *Salix*, mainly at forest edges.

B Mosan: RR. **L** Lorr.: RR.

Lit.: L7: 87.

flavescens Clauzade & Cl. Roux

Saxicolous, on overhang and vertical surface of an exposed calcareous outcrop (tufa).

B Lorr.: RRR. **L** - . Overlooked ?

Lit.: L8.

incana (L.) Ach.

Syn.: *L. glaucella* (Flörke) Nyl.

Corticolous, on all kind of barks, toxitolerant, or saxicolous, on calcareous or siliceous rocks, rarely terricolous.

B Mar.: C, Fl.: C, elsewhere: *C-CC*. **L** Ard.: CC, Lorr.: CC.

This epithet has been used for almost any *Lepraria* with small, bluish soredia; parts of the saxicolous populations may represent *L. borealis*.

Lit.: Ca: 109-110, Di: 150-152, Ho: 162, NL84: 15, Qu: 91, 93-94.

jackii Tønsberg

On a sandstone rock inside a well-preserved forest.

B - . **L** Lorr.: RRR. Most probably overlooked.

Lit.: L7: 87.

lobificans Nyl.

Corticolous, most common over mosses on *Quercus* in humid forests, also on mosses growing on sheltered, calcareous or sandstone outcrops, or on walls.

B Fl., Camp.: *AR*, Brab.: R, Mosan: AR, Ard.: AR, Lorr.: AR. **L** Ard.: AC, Lorr.: C.

Lit.: Di: 152, Ertz: 19, NL84: 15, NL93: 45, NL97: 50, Hoffmann & Van Rompu (1995), Zwaenepoel et al. (1994: 37).

nivalis J. R. Laundon
On sheltered, calcareous outcrops, incl. on *Hedera* 'trunks' climbing over them.
B Mosan: RR, most probably overlooked. **L** - .
Lit.: Ertz: 19, NL97: 24.

nylanderiana Kümmerl. & Leuckert
On vertical and sheltered, siliceous, natural outcrops, mainly overgrowing mosses.
B - . **L** Ard.: RRR.
Lit.: L7: 87.

rigidula (B. de Lesd.) Tønsberg
Corticolous, on all kinds of trees, in rather open conditions (incl. isolated trees and orchards), also abundant on rather dry underhangs of siliceous rocks.
B Mosan: RR, Ard.: AR, Lorr.: R. **L** Ard.: R, Lorr.: R.
Lit.: Di: 152-153, NL84: 15, NL97: 50, Kümmerling et al. (1995).

umbricola Tønsberg
Corticolous, on *Quercus* in forest, or saxicolous, on sandstone outcrop.
B Ard.: RRR, Lorr.: RRR. **L** - .
Lit.: L8.

alba Ach., nom. superfl., see *L. lactea*

candelaris (L.) Fr., see *Chrysothrix candelaris*

glaucella (Flörke) Nyl., see *L. incana*

lactea (L.) Hue, syn. *L. alba* Ach., nom. superfl. A name of uncertain application, reported from **B** by DG: 40.

latebrarum (Ach.) Ach., see *Lecanactis latebrarum*

lesdainii (Hue) R. C. Harris, see *Botryolepraria lesdainii*

membranacea (Dicks.) Vain., see *Leproloma membranaceum*

neglecta (Nyl.) Lettau. Reported from **B** by Sé: 138 [as 'auct., non (Nyl.) Lettau'] and by Lambinon (1963: 231), but no correctly identified material has been seen.

rubens (Reichard) Ach, syn. *Lepra rubens* (Reichard) Willd. A name of uncertain application, reported from **B** by DG: 40.

LEPROCAULON Nyl.

microscopicum (Vill.) D. Hawksw.
Syn.: *L. quisquiliare* (Leers) M. Choisy, *Stereocaulon quisquiliare* (Leers) Hoffm.
On crevices of siliceous or slightly calcareous, natural outcrops, always in well-lit but rather sheltered conditions, also on railway or road cuttings of such outcrops.
B Mosan: AR, Ard.: AR. **L** Ard.: AR. **F** Mosan: RR, Ard.: R.
Lit.: La66: 308- 312, Diederich (1985a: 22).

quisquiliare (Leers) M. Choisy, see *L. microscopicum*

LEPROLOMA Cromb.

membranaceum (Dicks.) Vain.
Syn.: *Lepraria membranacea* (Dicks.) Vain., *Crocynia membranacea* (Dicks.) Zahlbr., *Amphiloma lanuginosum* (Ach.) Nyl.
On siliceous, natural outcrops, in well-lit conditions, also found on railway or road cuttings of such outcrops, rarely on sandstone rocks or on trees (especially on *Fagus*).
B Mosan: RR, Ard.: AC. **L** Ard.: AR, Lorr.: R. **F** Ard.: R.
Lit.: Di: 153-154, Mü5: 25, NL84: 15, Laundon (1989: 13).

vouauxii (Hue) J. R. Laundon
Corticolous, on *Acer*, *Malus*, *Populus*, *Quercus*, etc., in well-lit conditions, and saxicolous, on calcareous rocks or walls.
B Camp.: *R*, Brab.: RRR, Mosan: AR, Ard.: RR, Lorr.: RR. **L** Ard.: RR. Lorr.: AC.
Lit.: Di: 154, NL92: 171, NL93: 45, Laundon (1989: 16).

LEPROPLACA (Nyl.) Hue

chrysodeta (Räsänen) J. R. Laundon, see *Caloplaca chrysodeta*

xantholyta (Nyl.) Harm., see *Caloplaca xantholyta*

LEPTOGIUM (Ach.) Gray

biatorinum (Nyl.) Leight.
On calcareous soil in Mesobromion communities.
B - . **L** Lorr.: RR.
Lit.: L6: 142, L8.

byssinum (Hoffm.) Nyl.
Syn.: *Collema byssinum* Hoffm.
On calcareous sand in dunes.
B Mar.: RRR. **L** - .
Lit.: L8.

corniculatum (Hoffm.) Minks
Syn.: *L. palmatum* (Huds.) Minks

On strongly mineralized, acidic soil, in a vegetation dominated by *Cladonia* species.
B - . **L** Ard.: RRR.
Lit.: L6: 142, Schl: 90, 220.

cyanescens (Rabenh.) Körb.
Syn.: *L. caesium* (Ach.) Vain.
On periodically inundated, siliceous rocks, usually at the shore of rivers.
B Ard.: R. **L** Ard.: RR. **F** Ard.: RRR.
Lit.: L8.

diffractum Körb.
On vertical surfaces of hard calcareous, natural outcrops.
B Mosan: R. **L** - .
Lit.: L7: 87, NL84: 15.

gelatinosum (With.) J. R. Laundon
Syn.: *L. sinuatum* (Huds.) A. Massal., *L. scotinum* var. *sinuatum* (Huds.) Torss., *L. scotinum* (Ach.) Fr.
In Mesobromion and Xerobromion communities, on soil or mosses over calcareous rocks, also on walls, rarely over siliceous rocks.
B Mar.: RR, Fl.: RRR (†<1850), Mosan: AC, Lorr.: RR. **L** Ard.: RR, Lorr.: AC. **F** Lorr.: R.
Lit.: Ertz: 19, L8.

lichenoides (L.) Zahlbr.
Syn.: *L. lacerum* (Retz.) Gray, incl. var. *lophaeum* (Ach.) Zahlbr. and var. *pulvinatum* (Hoffm.) Zahlbr.
On trees or on rocks, generally over or between mosses, in humid and sheltered conditions, rare on calcareous substrates or in exposed conditions.
B Mosan: R, Ard.: AR, Lorr.: R. **L** Ard.: RR, Lorr.: AR.
Lit.: L8.

magnussonii Degel. & P. M. Jørg.
On periodically humid or inundated, siliceous rocks.
B Ard.: RR. **L** Ard.: RRR. **F** Ard.: RRR.
Lit.: L8.

massiliense Nyl.
On hard calcareous, natural outcrops.
B Mosan: RR. **L** - .
Lit.: L8.

plicatile (Ach.) Leight.
On calcareous or siliceous, natural outcrops or walls, often in shaded or humid conditions.
B Mosan: R, Ard.: RRR. **L** Ard.: RR, Lorr.: RR.
Lit.: L8.

saturninum (Dicks.) Nyl.
Syn.: *Mallotium saturninum* (Bernh.) A. Massal.
Ecology of the only specimen unknown, but almost certainly corticolous.
B - . **L** Distr. unknown: RRR (†<1850).
Lit.: DG: 21, Diederich (1986a: 120).

schraderi (Bernh.) Nyl.
On calcareous rocks, on soil or over mosses, often in Mesobromion communities, rarely on walls.
B Mar.: RRR, Brab.: RRR, Mosan: R. **L** Lorr.: R. **F** Mar.: RRR (<1920), Lorr.: RR.
Lit.: L8, Jørgensen (1994: 25).

subtile (Schrad.) Torss.
Syn.: *L. minutissimum* (Flörke) Fr.
On decorticated wood of *Salix* and on sandstone in a quarry.
B - . **L** Lorr.: RR.
Lit.: L6: 143, L7: 87-88, L8.

tenuissimum (Dicks.) Körb.
On sandstone rocks or on sandy soil, also on wall or in Mesobromion communities, often over mosses.
B Ard.: RRR. **L** Lorr.: RR.
Lit.: L6: 143, L8.

teretiusculum (Wallr.) Arnold
Syn.: *L. microscopicum* Nyl.
On shaded, calcareous or siliceous rocks, also at the shore of rivers.
B Mosan: RR, Ard.: RR. **L** Ard.: RRR, Lorr.: RRR (Moselle).
Lit.: L8, NL92: 159.

turgidum (Ach.) Cromb.
On natural, calcareous or siliceous outcrops, and on artificial substrates (walls, asbestos, soil in industrial wasteland), often over mosses.
B Mosan: R, Ard.: RRR. **L** Ard.: RRR, Lorr.: R.
Some specimens are difficult to separate from *L. schraderi*.
Lit.: L8.

caesium (Ach.) Vain., see *L. cyanescens*

lacerum (Retz.) Gray, see *L. lichenoides*

microphyllum (Ach.) Leight., see *Collema fragrans*

microscopicum Nyl., see *L. teretiusculum*

minutissimum (Flörke) Fr., see *L. subtile*

muscicolum (Sw.) Fr., see *Polychidium muscicola*

palmatum (Huds.) Minks, see *L. corniculatum*

scoticum (Ach.) Fr., see *L. gelatinosum*

sinuatum (Huds.) A. Massal., see *L. gelatinosum*

LEPTORHAPHIS Körb.

+**epidermidis** (Ach.) Th. Fr.
Syn.: *Arthopyrenia epidermidis* (Ach.) A. Massal., *L. oxyspora* (Nyl.) Körb.
On *Betula*, either in natural or artificial conditions.
B Fl.: RRR (<1900), Brab.: R (<1900), Mosan: RRR, Ard.: R (but locally abundant). **L** - .
Lit.: DG: 15, Mü1: 141, Aguirre (1991: 105-110).

+**maggiana** (A. Massal.) Körb.
On *Carpinus* and *Corylus*, in forests or in ruderal conditions.
B Mosan: RRR. **L** Lorr.: RRR. Most probably overlooked.
Lit.: NL97: 24.

+*atomaria* (Ach.) Szatala, syn. *Microthelia atomaria* (Ach.) Körb. Reported from **L** by Ko: 310, but no specimen seen.

+*oxyspora* (Nyl.) Körb., see *L. epidermidis*

+*tremulae* Körb. Reported from **L** by Ko: 316, but no specimen has been seen. Earlier reports of this name often refer to *L. atomaria*, fide Aguirre (1991).

LEPTOSPHAERIA Ces. & De Not.

***ramalinae** (Desm.) Sacc.
On *Ramalina fastigiata*.
B - . **L** Ard.: RRR (1967).
Lit.: Di: 155, LF1: 310-311.

LESDAINEA Harm.

maritima B. de Lesd., see *Trimmatothele maritima*

LETHARIA (Th. Fr.) Zahlbr.

arenaria auct., see *Evernia prunastri*

LEUCOCARPIA Vězda

abscondita (Coppins & Vězda) Hafellner, see *Macentina abscondita*

stigonemoides (Orange) Hafellner & Kalb, see *Psoroglaena stigonemoides*

LIBERTIELLA Speg. & Roum., see *Scutula*

**didymospora* D. Hawksw. & Miądlikowska, see under *Scutula*

**malmedyensis* Speg. & Roum., see under *Scutula*

LICHENOCHORA Hafellner

***inconspicua** Hafellner
On *Mycobilimbia sabuletorum*.
B - . **L** Lorr.: RRR.
Lit.: L8.

***obscuroides** (Linds.) Triebel & Rambold
Syn.: *L. thallina* (Cooke) Hafellner
On *Phaeophyscia orbicularis*.
B Fl.: RRR. **L** Lorr.: R.
Lit.: Di: 155-156, L5: 29, Hafellner (1989: 363-368).

**thallina* (Cooke) Hafellner, see *L. obscuroides*

LICHENOCONIUM Petr. & Syd.

***erodens** M. S. Christ. & D. Hawksw.
On a great variety of lichens belonging to *Cladonia*, *Evernia*, *Flavoparmelia*, *Hypogymnia*, *Lecanora*, *Lecidella*, *Mycoblastus*, *Parmelia*, *Parmeliopsis*, *Pertusaria*, *Platismatia*, *Ramalina* and *Usnea*.
B Mosan: RRR, Ard.: AR, Lorr.: R. **L** Ard.: AR, Lorr.: AC.
Lit.: Di: 243-244, LF0: 20.

***lecanorae** (Jaap) D. Hawksw.
Most frequent on *Lecanora* spp., also on *Imshaugia*, *Lecidella*, *Parmelia*, *Pertusaria* and *Punctelia*.
B Ard.: RR. **L** Ard.: AR, Lorr.: AC.
Lit.: Di: 244, LF0: 20.

***lichenicola** (P. Karst.) Petr. & Syd.
On *Physcia tenella*.
B - . **L** Lorr.: RRR. **D** Lorr.: RRR.
Lit.: Di: 244-245, L5: 29, LF0: 20-21.

***pyxidatae** (Oudem.) Petr. & Syd.
On *Cladonia pyxidata* and *C.* cf. *rei*.
B Lorr.: RRR. **L** - . **F** Lorr.: RRR. **D** Lorr.: RRR.
Lit.: L8, LF0: 21.

***reichlingii** Diederich
On *Ramalina fraxinea*.
B - . **L** Lorr.: RR (type locality).
Lit.: Di: 245, LF0: 21-23.

***usneae** (Anzi) D. Hawksw.
On *Evernia prunastri*, *Pertusaria pertusa*, *Ramalina fastigiata*, *R. fraxinea* and *Usnea ceratina*.
B Ard.: RRR. **L** Ard.: RRR, Lorr.: RR. **F** Lorr.: RRR.
Lit.: Di: 245-246, LF0: 23, NL97: 51.

*__xanthoriae__ M. S. Christ.
On *Xanthoria parietina* and *X. polycarpa*.
B - . **L** Lorr.: RR.
Lit.: Di: 246, L5: 29.

LICHENODIPLIS Dyko & D. Hawksw.

*__lecanorae__ (Vouaux) Dyko & D. Hawksw.
On *Caloplaca cerinella*, *C. holocarpa* and *Lecanora saligna*.
B Ard.: RRR. **L** Lorr.: AR.
Lit.: Di: 247, L4: 23, LF0: 23, NL97: 51.

LICHENOPELTELLA Höhn.

*__hydrophila__ R. Sant. ined.
On *Verrucaria* species, especially *V. hydrela*, *V. pinguicula* and *V. praetermissa*, in or near streams.
B Ard.: RRR. **L** Ard.: RRR, Lorr. (Moselle): RRR.
Lit.: Molitor & Diederich (1997: 73).

*__peltigericola__ (D. Hawksw.) R. Sant.
Syn.: *Actinopeltis peltigericola* D. Hawksw.
On *Peltigera didactyla* and *P. rufescens* (lower side of the thallus).
B - . **L** Ard.: RRR, Lorr.: RR.
Lit.: L5: 6.

*__santessonii__ (P. M. Kirk & Spooner) R. Sant.
Syn.: *Micropeltopsis santessonii* P. M. Kirk & Spooner
On *Peltigera membranacea* (lower side of the thallus).
B - . **L** Lorr.: RRR.
Lit.: L6: 143.

*__thelidii__ Diederich
On *Thelidium minutulum*, in streams.
B - . **L** Lorr.: RR (type locality).
Lit.: Molitor & Diederich (1997: 73-74).

LICHENOSTICTA Zopf

*__alcicornaria__ (Linds.) D. Hawksw.
On *Cladonia* species, especially *C. chlorophaea*, *C.* cf. *subulata* and *C. symphycarpa*.
B Mosan: RR. **L** Ard.: RRR, Lorr.: RRR.
Lit.: L5: 29-30.

LICHENOSTIGMA Hafellner

*__cosmopolites__ Hafellner & Calatayud
On *Xanthoparmelia conspersa* and *X. mougeotii*.
B Ard.: *AC*. **L** Ard.: *AC*.
Lit.: L6: 147 (sub *Sphaerellothecium araneosum*), L8.

*__elongata__ Nav.-Ros. & Hafellner
On *Aspicilia caesiocinerea*, *A.* sp. and *Lobothallia radiosa*.
B Mosan: RR. **L** Ard.: R. **F** Mosan: RR. Most probably common but overlooked in some parts of the study area.
Lit.: NL92: 159, NL97: 51, Navarro-Rosinés & Hafellner (1996).

*__rugosa__ G. Thor
On *Diploschistes scruposus*.
B Mosan: RRR. **L** Ard.: RR, Lorr.: RR.
Lichenicolous fungus, exceptionally lichenized.
Lit.: LF0: 7-9, NL92: 171.

LICHENOTHELIA D. Hawksw.

The genus is obviously widespread in the study area, including on roofs. Other, possibly undescribed species are expected, as several collections do not belong to *L. convexa*, but cannot be assigned to any known taxa.

+__convexa__ Henssen
On exposed, natural, siliceous outcrops.
B Ard.: RR. **L** - . **F** Ard.: RRR. Most probably overlooked.
Lit.: L8.

LINDAUOPSIS Zahlbr.

**caloplacae* Zahlbr., see under *Tremella*

LITHOICEA Gray p. p., see *Verrucaria*

LOBARIA (Schreb.) Hoffm.

__pulmonaria__ (L.) Hoffm.
Corticolous, mostly on old *Fagus*, *Fraxinus* and *Quercus* trees, in well-preserved forests.
B Brab.: RR (†<1900), Mosan: RR (†<1900), Ard.: AR→RR (now only present in the southern part), Lorr.: R→RR. **L** Ard.: RR (†1979), Lorr.: RR (†1947).
Lit.: L4: 19, La66: 219-223, WS: 36, 73.

__virens__ (With.) J. R. Laundon
Syn.: *L. laetevirens* (Lightf.) Zahlbr., *Sticta herbacea* (Huds.) Delise

Saxicolous, on mossy, natural, siliceous and sandstone outcrops in forests.
B Mosan: RR (†1892), Ard.: R→ RRR. **L** Lorr.: RR (†1966).
A single, quite depauperate, population of this species has been found in the study area in 1998.
Lit.: La66: 214-216, La68: 73-74.

laetevirens (Lightf.) Zahlbr., see *L. virens*

scrobiculata (Scop.) DC., see *Lobarina scrobiculata*

verrucosa (Huds.) Hoffm., see *Lobarina scrobiculata*

LOBARINA (Vain.) Cromb.

scrobiculata (Scop.) Cromb.
Syn.: *Lobaria scrobiculata* (Scop.) DC., *L. verrucosa* (Huds.) Hoffm.
Corticolous, mainly on *Fraxinus* and *Quercus*, in well-preserved forests.
B Ard.: AR (†1991), Lorr.: R (†1984). **L** Ard.: RRR (†<1900), Lorr.: RR (†<1900).
Not seen in the study area since 1991 and possibly extinct.
Lit.: L4: 24, La66: 216-219.

LOBOTHALLIA (Clauzade & Cl. Roux) Hafellner

radiosa (Hoffm.) Hafellner
Syn.: *Aspicilia radiosa* (Hoffm.) Poelt & Leuckert, *Lecanora radiosa* (Hoffm.) Schaer., *L. subcircinata* Nyl., *Placodium circinatum* (Pers.) Gray
On hard calcareous rocks, especially common in nitrophilous conditions, in natural and artificial habitats.
B Mosan: *AC* (locally common). **L** Lorr.: RR. Overlooked.
Lit.: Ertz: 20, La69: 105, NL77: 19, NL84: 12, NL92: 171, NL97: 51.

LOPADIUM Körb.

disciforme (Flot.) Kullh.
Corticolous, mainly on *Quercus*, in rather well-preserved forests.
B Ard.: R (recorded only in the southern parts of the district), Lorr.: R. **L** - .
Lit.: L2: 94 (sub *L. pezizoideum*), L3: 34.

pezizoideum (Ach.) Körb. All records from the study area are misidentifications for *L. disciforme*.

MACENTINA Vězda

abscondita Coppins & Vězda
Syn.: *Leucocarpia abscondita* (Coppins & Vězda) Hafellner
Corticolous, on *Corylus* and *Sambucus*, in sheltered and humid or in ruderal conditions.
B Mosan: RR. **L** Ard.: RRR, Lorr.: RR. Probably overlooked.
Lit.: L7: 88, NL84: 15, NL97: 51.

stigonemoides Orange, see *Psoroglaena stigonemoides*

MALLOTIUM (Ach.) Gray, see *Leptogium*

MARCHANDIOMYCES Diederich & D. Hawksw.

***aurantiacus** (Lasch) Diederich & Etayo
On macrolichens in Xanthorion communities, mainly on *Phaeophyscia*, *Physcia* and *Xanthoria*.
B - , probably overlooked. **L** Ard.: RRR, Lorr.: AR.
Lit.: Di: 247-248 (sub *M. corallinus*), LF1: 312-314 (sub *M. corallinus*).

***corallinus** (Roberge) Diederich & D. Hawksw.
Syn.: *Illosporium corallinum* Roberge
On *Lecanora conizaeoides*, *Lepraria caesioalba* and *Parmelia saxatilis*.
B Ard.: RRR, Lorr.: RRR. **L** Lorr.: RR.
Lit.: L8.

MASSALONGIA Körb.

carnosa (Dicks.) Körb.
Over saxicolous mosses in humid localities in large valleys.
B Ard.: RR (†1962). **L** - .
Now extinct throughout the area of study.
Lit.: Sérusiaux (1984: 83).

MEGALARIA Hafellner

grossa (Nyl.) Hafellner
Syn.: *Catillaria grossa* (Nyl.) Körb., *Catinaria grossa* (Nyl.) Vain., *Buellia premnea* (Fr.) Kickx, *Catinaria leucoplaca* (DC.) Zahlbr.
On bark of *Quercus*, probably in forests.
B Fl.: RRR (†<1864). **L** - .
Now extinct throughout the area of study.
Lit.: L5: 30.

pulverea (Borrer) Hafellner & Schreiner
Syn.: *Catillaria pulverea* (Borrer) Lettau
Corticolous, mainly on *Quercus*, in well-preserved forests.
B Ard.: RR, Lorr.: RRR. **L** - .
Lit.: L3: 28.

laureri (Th. Fr.) Hafellner, syn. *Catinaria laureri* (Th. Fr.) Degel. The only record of this species from the study area (John 1990a: 111, 1990b: 60) is a mistake for *Lecidella laureri*.

MEGASPORA (Clauzade & Cl. Roux) Hafellner & V. Wirth

verrucosa (Ach.) Hafellner & V. Wirth
Syn.: *Pachyospora verrucosa* (Ach.) A. Massal., *Lecanora mutabilis* (Ach.) Nyl.
Over mosses in Mesobromion communities.
B Mosan: RR (known only from the western parts of the district). **L** - . **D** Ard.: RRR.
Lit.: L1: 7.

MELANELIA Essl.

disjuncta (Erichsen) Essl.
Syn.: *Parmelia disjuncta* Erichsen, *P. sorediata* auct., non (Ach.) Th. Fr.
On siliceous and sandstone rocks in natural, open habitats.
B Ard.: AR. **L** Ard.: RR, Lorr.: RRR.
Lit.: La66: 431 (sub *P. substygia*), Mü1: 154, NL92: 159, Sé: 138.

elegantula (Zahlbr.) Essl.
Syn.: *Parmelia elegantula* (Zahlbr.) Szatala
Corticolous, mainly on roadside trees (most common on *Fraxinus*), also in orchards (*Malus*), always in rather nitrophilous conditions.
B Fl.: R, Camp.: RRR, Brab.: R, Mosan: AR, Ard.: AR, Lorr.: RRR. **L** Ard.: AR, Lorr.: AR.
Lit.: Ho: 176, 598, La66: 428, WS: 38, 76.

exasperata (De Not.) Essl.
Syn.: *Parmelia exasperata* De Not., *P. aspera* A. Massal., *P. aspidota* (Ach.) Poetsch
Corticolous, mainly on the rather acid bark of branches and twigs of *Fraxinus*, *Juglans*, *Populus*, *Pyrus*, *Quercus* and *Salix*, in open habitats (meadows, orchards, etc.), incl. roadside trees, rarely found on trunks of roadside trees (*Fraxinus*, *Juglans* and *Tilia*).
B Brab.: RRR (†<1900), Mosan: R, Ard: R, Lorr.: RR. **L** Ard.: RR, Lorr.: RR. **F** Lorr.: RRR.
Lit.: La66: 426, WS: 38-39, 77, Diederich (1985a: 23).

exasperatula (Nyl.) Essl.
Syn.: *Parmelia exasperatula* Nyl.
Corticolous, mainly on roadside trees, especially on *Fraxinus* and *Ulmus*, or in orchards, always in rather nitrophilous conditions.
B Mar.: R, Fl.: AR, Camp.: AR, Brab.: AR, Mosan, Ard., Lorr.: *AC*. **L** Ard.: AC, Lorr.: AC.
Lit.: Ca: 139, Ho: 177, La66: 429, Qu: 103-104, WS: 39, 78.

glabratula (Lamy) Essl. subsp. **glabratula**
Syn.: *Parmelia glabratula* (Lamy) Nyl., *P. laete-virens* (Flot.) Rosend.
Corticolous, in forests (on *Fagus* and *Quercus*), in orchards and on roadside trees (e. g. *Fraxinus* and *Tilia*), rarely saxicolous over sandstone.
B Mar.: C, Fl.: AR, Camp.: R, Brab.: AR, Mosan, Ard., Lorr.: *C*. **L** Ard.: C, Lorr.: C.
Lit.: Ca: 140-141, Ho: 180, La66: 426-427, NL84: 16, Qu: 107-108, WS: 39, 79.

glabratula subsp. **fuliginosa** (Duby) J. R. Laundon
Syn.: *Parmelia fuliginosa* (Duby) Nyl.
Saxicolous, on sandstone or siliceous rocks, mostly in natural habitats.
B Mosan: RR, Ard.: AR. **L** Lorr.: RR.
Lit.: NL77: 22, NL84: 16, NL92: 171.

laciniatula (H. Olivier) Essl.
Syn.: *Parmelia laciniatula* (H. Olivier) Zahlbr.
Mainly on roadside trees (*Fraxinus* and *Tilia*) or in orchards (on *Malus* and *Pyrus*), always in nitrophilous conditions.
B Fl.: RR, Camp.: RRR, Brab.: RRR, Mosan: AR, Ard.: AC, Lorr.: R. **L** Ard.: AC, Lorr.: AR.
Lit.: Ho: 139, 179, 600, La66: 429-430, WS: 40, 80.

olivacea (L.) Essl.
Syn.: *Parmelia olivacea* (L.) Ach.
On *Alnus glutinosa* and *Salix* in a sheltered and humid small valley.
B Ard.: RRR (1960). **L** - .
Lit.: L6: 144-145, La66: 425-426.

panniformis (Nyl.) Essl.
Syn.: *Parmelia panniformis* (Nyl.) Vain.
On siliceous rocks in slightly sheltered, natural conditions.
B Ard.: RRR (1963). **L** - . **D** 'Ard.': RRR (Saarland, Orscholz).
Lit.: L6: 145, La66: 430.

sorediata (Ach.) Goward & Ahti
Syn.: *Parmelia sorediata* (Ach.) Th. Fr., *P. sorediosa* Almb., *P. disjuncta* auct. belg. p. p., non Erichsen

On siliceous rocks, in open conditions, in natural and artificial (slate rubbles in disused quarries) conditions.
B Ard.: RR. **L** Ard.: RRR.
Lit.: L8.

stygia (L.) Essl.
Syn.: *Parmelia stygia* (L.) Ach.
On exposed, natural, siliceous rocks.
B Ard.: RRR. **L** - .
Lit.: L8.

subargentifera (Nyl.) Essl.
Syn.: *Parmelia subargentifera* Nyl.
Corticolous, mainly on roadside trees, exceptionally saxicolous, on walls or exposed, natural sandstone outcrops, always in nitrophilous conditions.
B - . **L** Ard.: RR, Lorr.: R.
Lit.: La68: 78, La69: 150, WS: 42, 84, Diederich (1985a: 23), Diederich (1986a: 121).

subaurifera (Nyl.) Essl.
Syn.: *Parmelia subaurifera* Nyl.
Corticolous, mainly on isolated trees, exceptionally saxicolous on siliceous rocks; a rather ubiquitous species, not requiring nitrophilous conditions, thus also found inside forests.
B Mar.: C, Fl.: AC, Camp.: R, Brab.: AC, Mosan, Ard., Lorr.: *AC*. **L** Ard.: AC, Lorr.: AC.
Lit.: Ca: 146-147, Ho: 190, La66: 427-428, WS: 42-43, 85, Lambinon (1968b: 404).

glabra (Schaer.) Essl., syn. *Parmelia glabra* (Schaer.) Nyl. Reported from **B** by DG: 35, but no material seen.

MELASPILEA Nyl.

granitophila (Th. Fr.) Coppins
On siliceous rocks in dry and sheltered underhangs.
B Ard.: RRR. **L** - .
Lit.: L8.

ochrothalamia Nyl.
Corticolous on old *Quercus* in well-preserved forests.
B Lorr.: RRR. **L** - .
Lit.: L2: 94.

MENEGAZZIA A. Massal.

terebrata (Hoffm.) A. Massal.
Syn.: *M. pertusa* (Schrank) Stein, *Parmelia pertusa* (Schrank) Schaer.
Epiphytic, mainly on *Fagus* in old forests, or saxicolous, on sandstone rocks.
B Ard.: R, decreasing. **L** Lorr.: RRR (†<1840).
Lit.: L4: 19, La66: 375-379, NL97: 51, Diederich (1985a: 22), Margot et al. (1975).

pertusa (Schrank) Stein, see *M. terebrata*

MERISMATIUM Zopf

***discrepans** (J. Lahm) Triebel
On *Protoblastenia rupestris* and on a sterile crust on natural, calcareous outcrops.
B Mosan: RR. **L** - .
Lit.: NL97: 24-25.

***heterophractum** (Nyl.) Vouaux
On *Mycobilimbia sabuletorum* in a Mesobrometum.
B - . **L** - . **F** Lorr.: RRR.
Lit.: L5: 31.

***scammoecum** Lettau
On hard calcareous, natural outcrops, probably lichenicolous on epilithic crusts.
B Mosan: RRR. **L** - .
Lit.: L8.

**lopadii* (Anzi) Zopf, see *M. nigritellum*

**nigritellum* (Nyl.) Vouaux, syn. *M. lopadii* (Anzi) Zopf. The Luxembourg specimens published under this name (Di: 157, LF0: 9-10) refer to a different, unidentified fungus.

MICAREA Fr.

alabastrites (Nyl.) Coppins
On *Tilia* along a river in woodland, in a very humid locality.
B Ard.: RRR. **L** - .
Lit.: L4: 25.

bauschiana (Körb.) V. Wirth & Vězda
On sheltered and shaded, calcareous or siliceous rocks, in natural habitats.
B Mosan: RR, Ard.: RR. **L** - .
Lit.: L8, NL84: 15.

botryoides (Nyl.) Coppins
On rocks, soil, roots, bryophytes or on moribund plants in dry and shaded underhangs of siliceous or sandstone rocks, usually very abundant, also at the base of *Pinus* in woodland, often with *M. myriocarpa*.
B Mosan: RRR, Ard.: AR. **L** Lorr.: R. **F** Ard.: RRR. **D** Ard.: RRR.
Lit.: Di: 158-159, L4: 25, NL84: 15, NL92: 171, NL97: 51.

confusa Coppins & van den Boom
Terricolous on decaying mosses, wood, stones and sandy soil, in industrial wasteland, contaminated with heavy metals (especially Zn).
B Camp.: RR (type locality). **L** - .
Lit.: Coppins & van den Boom (1995).

curvata Coppins
On rather exposed, siliceous rocks in natural habitats.
B Ard.: RR. **L** Ard.: RRR.
Lit.: NL92: 159.

deminuta Coppins
On moribund bryophytes, at the edge of a *Picea* plantation.
B Ard.: RRR. **L** - .
Lit.: Coppins (1995: 58-60).

denigrata (Fr.) Hedl.
Syn.: *Catillaria synothea* auct., non Ach.
On trees, on *Calluna* or on wood, rarely on decaying mosses, often in ruderal conditions.
B Camp.: *AR*, Brab.: RRR, Mosan: RR, Ard.: R. **L** Ard.: RR, Lorr.: RR.
Lit.: Di: 159-160, L4: 25, Mü1: 144, NL87: 22, NL92: 171, NL93: 45, NL97: 51.

erratica (Körb.) Hertel, Rambold & Pietschm.
Syn.: *Lecidea erratica* Körb.
On siliceous rocks, usually in humid conditions, and on siliceous pebbles at ground level, in ruderal habitats.
B Brab.: RRR, Ard.: RR. **L** Ard.: RRR. Most probably overlooked.
Lit.: L8, Remy (1979).

globulosella (Nyl.) Coppins
On the base of a *Pinus* trunk in plantation.
B Mosan: RRR. **L** - .
The identity of the only population referred to this species requires further study.
Lit.: L3: 32.

hedlundii Coppins
On a vertical, sheltered sandstone rock.
B - . **L** Lorr.: RRR.
Lit.: NL92: 160.

leprosula (Th. Fr.) Coppins & A. Fletcher
On soil over decaying plants, and on siliceous rocks, overgrowing mosses, in natural and artificial (disused quarries) habitats.
B Ard.: AR. **L** Ard.: RR.
Lit.: L4: 26, NL92: 171, Sé: 138.

lignaria (Ach.) Hedl. var. **lignaria**
Syn.: *Bacidia lignaria* (Ach.) Lettau
On sandstone and siliceous rocks, often over detritus, rarely on bark, in natural and artificial (disused quarries) habitats.
B Ard.: AR, Lorr.: RRR. **L** Ard.: R, Lorr.: R.
Lit.: Di: 157, L4: 24-25, NL84: 15, NL87: 22, NL92: 171.

lithinella (Nyl.) Hedl.
On siliceous or sandstone rocks, and on moribund mosses, often on vertical surfaces.
B Camp.: RRR, Ard.: RR, Lorr.: RRR. **L** Ard.: RR, Lorr.: RR.
Lit.: L4: 26, NL92: 171, NL97: 51, Sé: 138.

lutulata (Nyl.) Coppins
On siliceous rocks, mostly in dry and sheltered underhangs in natural habitats.
B Mosan: RR, Ard.: AR. **L** Ard.: RRR. **F** Ard.: RRR. **D** Ard.: RRR.
Lit.: L4: 26, NL84: 15, NL87: 22, NL97: 51.

melaena (Nyl.) Hedl.
On *Fagus* and *Pinus* (mainly base of trunk) inside forests.
B Ard.: RR. **L** Lorr.: RRR.
Lit.: Di: 160, L4: 26, Goffinet (1992).

misella (Nyl.) Hedl.
Syn.: *Lecidea misella* (Nyl.) Nyl.
Lignicolous, rarely over decaying plants, in rather ruderal conditions.
B Camp.: RRR. **L** Ard.: RR, Lorr.: RR.
Lit.: Di: 160-161, L4: 26, NL93: 45.

myriocarpa Coppins
On hard acidic rocks, rarely on sandstone rocks, and on exposed roots in dry and sheltered underhangs, usually associated with *M. botryoides*.
B Ard.: AR. **L** Lorr.: RRR.
Lit.: L4: 26.

nigella Coppins
Corticolous, at the base of *Corylus*, above a stream.
B Ard.: RRR. **L** - .
Lit.: L8.

nitschkeana (Rabenh.) Harm.
Corticolous, on thin branches of *Alnus*, *Calluna*, *Picea* or *Sarothamnus*, sometimes lignicolous, in rather open conditions.
B Mar.: RRR, Mosan: RR, Ard.: R, Lorr.: RRR. **L** Ard.: RR, Lorr.: RR.
Lit.: Di: 161-162, L4: 27, NL84: 15, NL92: 172.

parva Coppins
On vertical, siliceous rocks, in shaded and sheltered habitats, once by a river at 30 cm above water level.
B Ard.: RRR. **L** Ard.: RRR.
Lit.: L7: 88, NL84: 15, Coppins (1995: 60-62).

peliocarpa (Anzi) Coppins & R. Sant.
Syn.: *Bacidia trisepta* (Hellb.) Zahlbr., *Bilimbia trisepta* (Hellb.) Zahlbr.
Corticolous, mainly on old *Quercus* trees, rarely lignicolous, or saxicolous on siliceous rocks, and then often growing over *Aspicilia*, *Neofuscelia*, etc.
B Brab.: RRR, Mosan: RRR, Ard.: AR, Lorr.: R. **L** Ard.: AR, Lorr.: AR.
Lit.: Di: 162, L2: 94-95, Mü3: 43, NL84: 15, NL92: 172.

prasina Fr.
Syn.: *Biatorina prasina* (Fr.) Syd., *Catillaria prasina* (Fr.) Th. Fr., *C. micrococca* (Körb.) Th. Fr.
Corticolous, on all kinds of trees, lignicolous, and saxicolous, over sandstone rocks.
B Brab.: AR, Camp.: *AR*, Mosan, Ard., Lorr.: *C.* **L** Ard.: C, Lorr.: C.
The populations referred to this species are heterogeneous and two different species are involved. This matter requires further studies.
Lit.: Ba: 8, Ca: 111-112, Di: 162-163, DSL: 234-235, Ho: 164 (erroneous, all specimens from GENT examined are misidentifications), L4: 25, NL97: 51.

pycnidiophora Coppins & P. James
Corticolous, on *Acer* and *Fagus*, in well-preserved forests.
B Ard.: RR. **L** Lorr.: RR.
Lit.: Di: 163-164, L4: 27, NL92: 160, NL97: 25.

subnigrata (Nyl.) Coppins & H. Kilias
On exposed, siliceous rocks in natural habitats ('pierriers') and on debris in old quarries.
B Ard.: RR. **L** - . **F** Ard.: RRR.
Lit.: L8.

sylvicola (Flot.) Vězda & V. Wirth
Syn.: *Lecidea sylvicola* Flot.
On siliceous rocks, mostly in humid and sheltered underhangs, in natural or artificial (disused quarries) habitats.
B Ard.: R. **L** - .
Lit.: NL97: 51, Sé: 138.

ternaria (Nyl.) Vězda, syn. *Bacidia ternaria* (Nyl.) Lettau. Reported from **B** Ard. by Lambinon (1964b: 144), but no corresponding specimen has been seen by us.

MICROCALICIUM Vain.

***arenarium** (A. Massal.) Tibell
Syn.: *Calicium citrinum* auct.
On *Psilolechia lucida*, over siliceous or sandstone rocks, exceptionally on roots of *Quercus*, always in dry and sheltered underhangs.
B Mosan: R, Ard.: AR. **L** Ard.: RR, Lorr.: R.
Lit.: Di: 164-165, LF0: 10, NL84: 15, NL87: 22, NL92: 172, Sé: 138, Van Landuyt (1996).

MICROGLAENA Körb.

modesta (Nyl.) A. L. Sm., see *Thelenella modesta*

muscorum (Fr.) Th. Fr. var. *moniacensis* (Hue) Zahlbr., syn. *Verrucaria muscicola* var. *moniacensis* Hue. Described from **B** Mosan by Hue (1898), but no material seen. A name of uncertain application.

MICROPELTOPSIS Vain.

**santessonii* P. M. Kirk & Spooner, see *Lichenopeltella santessonii*

MICROPHIALE (Stizenb.) Zahlbr.

diluta (Pers.) Zahlbr., see *Dimerella pineti*

MICROTHELIA Körb., nom. rej.

+*atomaria* (Ach.) Körb., see *Leptorhaphis atomaria*

+*micula* auct., non Körb., see *Peridiothelia fuliguncta*

**scabrida* J. Lahm, see *Endococcus stigma*

MILOSPIUM D. Hawksw.

***deslooveri** Diederich & Sérus.
On a sterile and still unidentified crust with *Trentepohlia* over shaded, siliceous rocks.
B Ard.: RR (Semois valley, type locality). **L** - .
Lit.: L8.

***graphideorum** (Nyl.) D. Hawksw.
On *Dirina stenhammarii*, on a vertical, shaded, calcareous overhang.
B Mosan: RRR. **L** - .
Lit.: NL99.

MIRIQUIDICA Hertel & Rambold

deusta (Stenh.) Hertel & Rambold
Syn.: *Lecanora deusta* (Stenh.) Nyl., *Lecidea deusta* (Stenh.) Nyl.
On exposed, siliceous, natural outcrops.
B Ard.: RR. **L** - .
Lit.: NL77: 21, L8.

intrudens (H. Magn.) Hertel & Rambold
Syn.: *Lecanora intrudens* H. Magn.
On exposed, siliceous, natural outcrops.
B Ard.: RRR. **L** - . **F** Ard.: RRR.
Lit.: L8, Sé: 142.

sp.
On shaded, siliceous rocks along a road.
B - . **L** - . **F** Ard.: RRR.
This species seems to be undescribed.
Lit.: L8.

griseoatra (Flot.) Hertel & Rambold, syn. *Lecidea griseoatra* (Flot.) Schaer. Reported from **B** by DG: 24, but no material seen.

MOELLEROPSIS Gyeln.

nebulosa (Hoffm.) Gyeln.
Syn.: *Pannaria nebulosa* (Hoffm.) Nyl., *Lecanora brunnea* auct. belg., non (Sw.) Ach.
On sandy and well-drained soil, over natural outcrops or on road banks.
B Brab.: RR (†<1900), Mosan: RRR (†1890), Ard.: R (†1894), Lorr.: RRR (†1902). **L** - .
Now extinct throughout the area of study.
Lit.: Sérusiaux (1984: 83-84).

MOLLISIA (FR.) P. Karst.

**lesdainii* (Vouaux) Vouaux, see *Unguiculariopsis lesdainii*

MONODICTYS S. Hughes

***cellulosa** S. Hughes
Syn.: *M. lepraria* (Berk.) M. B. Ellis
On the thallus of *Pertusaria coccodes*.
B - . **L** Lorr.: RRR.
Lit.: Di: 248-249, LF0: 18.

**lepraria* (Berk.) M. B. Ellis, see *M. cellulosa*

MUELLERELLA Müll. Arg.

***hospitans** Stizenb.
On apothecia of *Bacidia rubella*.
B Mosan: RRR, Lorr.: RRR. **L** - .
Lit.: L2: 95.

***lichenicola** (Sommerf.) D. Hawksw.
On the thallus of *Caloplaca crenulatella*, *C. dolomiticola*, *C. saxicola*, *C. variabilis*, *Catillaria lenticularis*, *Mycobilimbia sabuletorum*, *Protoblastenia rupestris* and *Verrucaria* sp.
B Fl.: RR, Brab.: RRR, Mosan: RR. **L** Lorr.: R. **F** Lorr.: RR.
Lit.: Ertz: 20, LF0: 10, NL97: 51.

***pygmaea** (Körb.) D. Hawksw. var. **pygmaea**
Syn.: *Tichothecium pygmaeum* Körb.
On the thallus of *Lecidea fuscoatra* and *Lobothallia radiosa*.
B Mosan: RRR, Ard.: RRR. **L** Ard.: RR, Lorr.: RRR.
Lit.: L4: 27, L8, NL92: 172, NL97: 51, Sé: 138.

***pygmaea** var. **athallina** (Müll. Arg.) Triebel
On the thallus of *Aspicilia calcarea*, *Caloplaca variabilis*, *Lecanora albescens*, *L. campestris*, *Lecidella stigmatea* and *Porpidia* sp.
B Mar.: RRR, Mosan: RRR, Ard.: RRR. **L** Lorr.: RR. **F** Lorr. (Moselle): RRR.
Lit.: L8.

***pygmaea** var. **ventosicola** (Mudd) Triebel
On *Rhizocarpon reductum* (thallus).
B Ard.: RRR. **L** - .
Lit.: L8.

***triseptata** Diederich
Syn.: *Capronia triseptata* (Diederich) Etayo
On *Buellia griseovirens* (thallus).
B - . **L** Lorr.: RRR (type locality).
Lit.: Di: 165, LF0: 10-12.

MYCOBILIMBIA Rehm

Biatora epixanthoides (Nyl.) Diederich
Syn.: *Bacidia epixanthoides* (Nyl.) Lettau
Corticolous, on the bark of old *Quercus* trees, in well-preserved forests.
B Ard.: R, Lorr.: R. **L** Ard.: RRR, Lorr.: RRR.
This species belongs to *Mycobilimbia* (fide Printzen 1995: 175), but the combination in that genus has never been made.
Lit.: Di: 57-58, L2: 92, NL97: 45.

hypnorum (Lib.) Kalb & Hafellner
Syn.: *Lecidea hypnorum* Lib., *L. atrofusca* (Hepp) Mudd, *L. templetonii* Taylor
Muscicolous, over calcareous rocks, in rather exposed conditions.
B Mosan: RR, Ard.: RRR (< 1830, type locality). **L** Lorr. (Moselle): RRR.
Lit.: DG: 23-24, L8, La69: 102.

lobulata (Sommerf.) Hafellner
Syn.: ?*Toninia syncomista* (Flörke) Th. Fr.
On calcareous, natural outcrops, usually in fissures.
B Mosan: RR. **L** - .
Lit.: DG: 25, L8, NL84: 15.

sabuletorum (Schreb.) Hafellner
Syn.: *Bacidia sabuletorum* (Schreb.) Lettau, *Lecidella sabuletorum* (Schreb.) Körb., *Bilimbia hypnophila* (Ach.) Th. Fr., incl. *M. accedens* (Arnold) V. Wirth & Hafellner, syn. *Bacidia accedens* (Arnold) Lettau
Saxicolous, on mosses, over calcareous, natural sandstone rocks or tufa, rarely on the bark of old trees, usually in sheltered conditions.
B Brab.: RR, Mosan: AR, Ard.: RR, Lorr.: RR. **L** Lorr.: AR.
Lit.: Di: 166-167, Ertz: 20, L1: 6 (sub *B. accedens*), NL84: 15, NL87: 22, NL92: 172, NL97: 52.

Lecidea sanguineoatra auct., non (Wulfen) Ach.
Syn.: *Lecidea hypnorum* auct. p. p., non Lib.
On the bark of an old *Quercus* in a humid valley in forest.
B - . **L** Ard.: RRR.
This species is close to *Mycobilimbia hypnorum*.
Lit.: Di: 140.

Biatora sphaeroides (Dicks.) Körb.
Syn.: *Catillaria sphaeroides* (A. Massal.) Schuler, *Bilimbia sphaeroides* (Dicks.) Th. Fr., *Biatora pilularis* (Körb.) Hepp, *Lecidella pilularis* (Körb.) Stein
On bark of old trees (*Fraxinus* and *Quercus* mainly), once on mosses over a sandstone rock by a stream, always in well-preserved, humid forests.
B Ard.: R (locally AR in the south), Lorr.: RRR. **L** Lorr.: R.
This species belongs to *Mycobilimbia* (fide Printzen 1995: 219), but the combination in that genus has never been made.
Lit.: Di: 59-60, L2: 93.

accedens (Arnold) V. Wirth & Hafellner, see *M. sabuletorum*

MYCOBLASTUS Norman

fucatus (Stirt.) Zahlbr.
Syn.: *Mycoblastus sterilis* Coppins & P. James
Corticolous, rarely lignicolous, mostly conspicuous on smooth, acid bark in disturbed forests.
B Mosan: RR, Ard.: *C*, Lorr.: *C*. **L** Ard.: C, Lorr.: C (but absent in the most polluted SW).
Lit.: Di: 167-168, L2: 95, NL84: 15.

sanguinarius (L.) Norman
On acid bark, mainly *Quercus*, in well-preserved forests.
B Ard.: R (locally AR in the south). **L** - .
Lit.: DG: 25.

sterilis Coppins & P. James, see *M. fucatus*

MYCOCALICIUM Vain.

subtile (Pers.) Szatala, syn. *Calicium subtile* Pers. var. *minutellum* (Ach.) Zahlbr. Reported from **B** by DG: 16 and from **L** by Ko: 298, but no material seen.

MYCOPORELLUM Müll. Arg., see *Mycoporum*

MYCOPORUM Nyl.

Syn.: *Mycoporellum* Müll. Arg.

(+)**antecellans** (Nyl.) R. C. Harris
Syn.: *Arthopyrenia antecellans* (Nyl.) Arnold
On *Fagus* in forest.
B Ard.: RR. **L** - . Overlooked ?
Lit.: L5: 10, L8.

(+)**Mycoporellum sacromontanum** (Strasser) Redinger
On shaded, siliceous rocks, in natural or artificial conditions.
B Ard.: RR. **L** - . Most probably overlooked.
The combination of this epithet in *Mycoporum* has never been made.
Lit.: L8.

+*hippocastani* (DC.) Coppins, see *Cyrtidula hippocastani*

Mycoporellum obscurum (Pers.) A. L. Sm. Reported from **B** by DG: 16, but no material seen. A name of uncertain application.

+*quercus* (A. Massal.) Müll. Arg., see *Cyrtidula quercus*

NAETROCYMBE Körb.

+**fraxini** (A. Massal.) R. C. Harris
Syn.: *Arthopyrenia fraxini* A. Massal.
Corticolous on *Corylus*, *Populus* and *Quercus*, usually in forests.
B Fl.: RRR (†1868), Mosan: RRR, Ard.: RR (†<1865). **L** - . Probably widespread, but overlooked.
Lit.: L5: 10-11, NL97: 25.

+**punctiformis** (Pers.) R. C. Harris
Syn.: *Arthopyrenia punctiformis* auct., non A. Massal., *A. analepta* auct., non (Ach.) A. Massal.
On smooth bark, often on branches and twigs.
B Mosan: RRR (1922), Ard.: R. **L** Lorr. (Moselle): RRR. Most probably overlooked.
Lit.: L5: 12, Mü1: 140, NL92: 149.

+**saxicola** (A. Massal.) R. C. Harris
Syn.: *Arthopyrenia saxicola* A. Massal., *Pyrenocollema saxicola* (A. Massal.) Coppins
On calcareous or siliceous rocks and stones in streams, associated with algae and cyanobacteria, probably not lichenized.
B Mosan: RRR. **L** Lorr.: RR. **F** Lorr. (Moselle): RRR.
Lit.: Molitor & Diederich (1997: 74-76).

+*rhyponta* (Ach.) R. C. Harris, syn. *Arthopyrenia rhyponta* (Ach.) A. Massal., *A. fumago* (Wallr.) Mudd. Reported from **B** by DG: 15 and from **L** by Ko: 315, but no material seen.

NECTRIA (Fr.) Fr.

+*indigens* (Arnold) Rehm, see *Nectriopsis indigens*

**lecanodes* Ces., see *Nectriopsis lecanodes*

**lichenicola* (Ces.) Sacc., see *Pronectria robergei*

**rubefaciens* Ellis & Everh., see *Trichonectria rubefaciens*

**verrucariae* Vouaux, see *Pronectria verrucariae*

NECTRIOPSIS Maire

+**indigens** (Arnold) Diederich & Schroers
Syn.: *Nectria indigens* (Arnold) Rehm
Fungicolous, always associated with *Naetrocymbe saxicola* on stones in streams.
B - . **L** Lorr.: RR. **F** Lorr. (Moselle): RRR.
Lit.: L8, Molitor & Diederich (1997: 76-77).

***lecanodes** (Ces.) Diederich & Schroers
Syn.: *Nectria lecanodes* Ces.
On *Peltigera*.
B - . **L** Lorr.: RRR. **F** Mar.: RRR.
Lit.: Bouly de Lesdain (1914: 157), L7: 88, L8, Vouaux (1912-14: 187-188).

***micareae** Diederich, van den Boom & Ernst
On *Micarea* sp. (close to *M. prasina*), on *Betula* and *Prunus padus*.
B Camp.: RRR. **L** - .
Lit.: L8.

NEOCOLEROA Petr.

***inundata** (Vain.) Diederich
Syn.: *Arthonia exilis* auct., non (Flörke) Anzi f. *inundata* Vain., *Conida inundata* (Vain.) Sacc.
On saxicolous *Woessia arnoldiana* and *W. inundata*, and on a sterile thallus of *Woessia* sp. on *Sorbus* by a road.
B - . **L** Lorr.: RR. **F** Mar.: RRR.
Lit.: L8.

**lichenicola* (Hansf.) M. E. Barr subsp. *bouteillei* (Bricaud, Cl. Roux & Sérus.) M. E. Barr, syn. *Wentiomyces lichenicola* (Hansf.) D. Hawksw. subsp. *bouteillei* Bricaud, Cl. Roux & Sérus. The specimen published in L7: 90 belongs to *N. inundata*.

NEOFUSCELIA Essl.

loxodes (Nyl.) Essl.
Syn.: *Parmelia loxodes* Nyl., *P. isidiotyla* Nyl.
On natural, siliceous outcrops, mostly in well-lit habitats, also on a wall of sandstone in a village.
B Mosan: RRR, Ard.: AR-AC. **L** Ard.: RR, Lorr.: RR.
Lit.: Ertz: 20, Mü1: 154, NL77: 22, NL84: 16, NL92: 160, Sé: 138.

pulla (Ach.) Essl.
Syn.: *Parmelia pulla* Ach., *P. prolixa* (Ach.) Carroll, *P. perrugata* Nyl., *P. sprengelii* Flörke
On exposed, siliceous rocks in natural and artificial habitats, locally common on roofs, rare on sandstone.
Two morphologically slightly different chemotypes are sometimes recognized as distinct taxa:
N. pulla s. s.: **B** Mosan: AR, Ard.: AC. **L** Ard.: *AC*, Lorr.: R.
N. delisei (Duby) Essl., syn. *Parmelia pulla* var. *delisei* (Duby) H. Magn., *P. delisei* (Duby) Nyl.: **B** Ard.: R. **L** - .
Lit.: L8, La66: 425, Mü1: 154, Diederich (1985a: 23).

verruculifera (Nyl.) Essl.

Syn.: *Parmelia verruculifera* Nyl., *P. glomellifera* (Nyl.) Nyl.

On siliceous, natural outcrops, or on artificial substrates (walls, roofs), in well-lit or shaded habitats.

B Brab.: RRR, Mosan: AR, Ard.: AC. **L** Ard.: *AC*, Lorr.: RR.

Lit.: Mü1: 154, Sé: 138.

delisei (Duby) Essl., see *N. pulla*

NEPHROMA Ach.

laevigatum Ach.

Corticolous on *Fraxinus* or *Salix*, in old, humid forests (ecology of the two recent localities in **B** Lorr.).

B Ard.: RR (†1884), Lorr.: RR. **L** - .

Lit.: L4: 27-28, L6: 144, La66: 286-288, Schl: 161, 254 (probably erroneous).

parile (Ach.) Ach.

On siliceous and sandstone rocks, often over mosses, or over basic bark, always in sheltered and humid conditions; the only recent specimen on a vertical, siliceous rock by a river at 30 cm above water level.

B Mosan: RR (†1961), Ard.: R (†1966), Lorr.: RRR (†1968). **L** Ard.: RRR, Lorr.: R (†<1850).

Lit.: L4: 18, La66: 283-286, Diederich (1986a: 120), Schlechter (1995: 470).

resupinatum (L.) Ach., syn. *N. tomentosum* (Hoffm.) Flot. The ancient report of this species from **L** by Ko: 168-169 is not sustained by any herbarium material, and is therefore most doubtful.

tomentosum (Hoffm.) Flot., see *N. resupinatum*

NESOLECHIA A. Massal.

**ericetorum* Körb., see *Gelatinopsis ericetorum*

**lesdainii* Vouaux, see *Unguiculariopsis lesdainii*

**punctum* A. Massal., see *Phaeopyxis punctum*

**thallicola* (A. Massal.) A. Massal., see *Phacopsis thallicola*

**vitellinaria* (Nyl.) Rehm, see *Carbonea vitellinaria*

NORMANDINA Nyl.

acroglypta (Norman) Aptroot

Syn.: *Lauderlindsaya acroglypta* (Norman) R. Sant., *L. chlorococca* (Leight.) Diederich & Sérus., *Sphaerulina chlorococca* (Leight.) R. Sant., *L. erichsenii* (Keissl.) Diederich & Sérus., *Thelidium erichsenii* Keissl.

Corticolous, on *Acer*, *Malus* and *Populus*, in forests or in orchards.

B Mosan: R, Lorr.: RRR. **L** Lorr.: RRR.

Lit.: Di: 218-219, L5: 21-22, L7: 89, LF0: 17, NL84: 14, NL97: 52.

pulchella (Borrer) Nyl.

Syn.: *Lauderlindsaya borreri* (Tul.) J. C. David & D. Hawksw., *Lenormandia jungermanniae* Delise

Corticolous or overgrowing corticolous bryophytes, rarely saxicolous on siliceous outcrops, sometimes over *Lobaria virens* or *Nephroma parile*, in well-preserved forests, once recorded on an old roadside *Ulmus* (**B** Mosan).

B Brab.: RRR, Mosan: R, Ard.: R, Lorr.: AR. **L** Lorr.: RR. **F** Mar.: RRR (†<1924). **D** Lorr.: RRR.

Lit.: La66: 179-181, NL84: 15, NL97: 52, Diederich (1985a: 22-23), Hoffmann & Van Rompu (1995).

OCHROLECHIA A. Massal.

androgyna (Hoffm.) Arnold

Corticolous, in humid forests, mostly on old *Fagus* and *Quercus*, exceptionally on mosses over rocks.

B Mosan.: RR, Ard.: AC, Lorr.: RR. **L** Ard.: AC, Lorr.: AR.

Lit.: Di: 170-171, La68: 77, La69: 105, Mü1: 152, NL84: 15, NL97: 52.

arborea (Kreyer) Almb.

Corticolous, on *Fraxinus*, along roadside.

B Ard.: RRR, Lorr.: RRR. **L** - .

Lit.: L8.

microstictoides Räsänen

Corticolous, on *Betula*, *Fagus*, *Picea*, *Pinus*, *Populus* and *Quercus*, rarely lignicolous, mostly at the edge of forests, or in rather open *Betula* woods or *Pinus* plantations.

B Mosan: R, Ard.: AR, Lorr.: RR. **L** Ard.: R, Lorr.: R.

Lit.: Di: 171, L5: 31-32, NL84: 15.

pallescens (L.) A. Massal.

Corticolous on *Quercus*, and lignicolous on fence posts.

B Ard.: RR (†1870). **L** Lorr.: RRR (†1891).

Now extinct throughout the area of study.

Lit.: L5: 32, Di: 172.

parella (L.) A. Massal.
On siliceous, natural rocks, once on brick in artificial conditions.
B Mosan: RRR, Ard.: RRR. **L** Ard.: RRR, Lorr.: RRR. **F** Mosan: RRR.
Lit.: DG: 34, La69: 105, Mü1: 152, NL92: 160.

subviridis (Høeg) Erichsen
Syn.: *O. yasudae* auct., non Vain.
Corticolous, mostly on *Quercus* in forests.
B Mosan: RR, Ard.: RR, Lorr.: R. **L** Ard.: RR, Lorr.: AR.
Lit.: Di: 172-173, La69: 105, NL84: 15.

tartarea (L.) A. Massal.
On natural, siliceous outcrops.
B Ard.: RR (1964). **L** - .
Lit.: DG: 34, La69: 105.

turneri (Sm.) Hasselrot
On bark of *Populus*.
B - . **L** Lorr.: RRR. Most probably overlooked.
Lit.: Di: 173, L5: 32.

sordidogrisea (Erichsen) Schreiner & Hafellner., syn. *Pertusaria sordidogrisea*. Reported from **B** Ard. by Mü1: 150, but no specimen has been seen.

yasudae auct., non Vain., see *O. subviridis*

OMPHALINA Quél.
Syn.: *Phytoconis* Bory

hudsoniana (H. S. Jenn.) H. E. Bigelow
Syn.: *Coriscium viride* (Ach.) Vain.
On peat or decaying plants and mosses, over natural, siliceous or sandstone rocks, in humid conditions.
B Ard.: RR. **L** Lorr.: RRR.
Lit.: La66: 485-486, NL92: 160.

umbellifera (L.: Fr.) Quél.
Syn.: *O. ericetorum* (Fr.) M. Lange, *O. pseudandrosacea* (Bull.) M. M. Moser, *Botrydina vulgaris* Bréb. p. p.
On soil, decaying plants and mosses, rarely on lignum, in very humid conditions.
B Ard.: AR, Lorr.: RR. **L** Ard.: RRR, Lorr.: R.
Lit.: Di: 231, La69: 108.

ericetorum (Fr.) M. Lange, see *O. umbellifera*

pseudandrosacea (Bull.) M. M. Moser, see *O. umbellifera*

OPEGRAPHA Ach.

atra Pers.
Syn.: *O. bullata* auct., incl. *O. atra* var. *reticulata* (Lam. & DC.) Schaer. and var. *rimosa* (DC.) Zahlbr.
Corticolous, mainly on the smooth bark of *Carpinus*, *Corylus* and *Fagus*, sometimes on other trees, inside forests, incl. coppices, rarely along roads.
B Mar.: AR, Camp.: RRR, Brab.: RR, Mosan: R, Ard.: R, Lorr.: *AR*. **L** Ard.: RR, Lorr.: AR.
Lit.: Ba: 9, Di: 174-175, Ho: 117, 166, 594, NL84: 16, Hoffmann & Van Rompu (1995).

calcarea Sm.
Syn.: *O. chevallieri* Leight.
On calcareous, natural outcrops.
B Mosan: RR. **L** - .
The identity of the material referred to this species requires further studies. Several species might be involved and confusion with *O. saxatilis* is likely.
Lit.: DG: 18, La69: 100, NL77: 22.

culmigena Lib.
Syn.: *O. herbarum* Mont., *O. betulina* Sm.
Corticolous, on *Acer* in a well-preserved forest and on branches of *Juniperus* cf. *sabina*, or on old, desiccated culms and leaves of *Poa nemoralis*.
B Ard.: RR (type locality). **L** Lorr.: RRR (†1902).
Lit.: Di: 175, L5: 32-33, L8, NL97: 25.

lithyrga Ach.
On shaded overhangs of siliceous rocks, in natural habitats.
B Mosan: RR, Ard.: R. **L** Ard.: RRR.
Lit.: DG: 18, L7: 88, NL84: 16, NL92: 160.

mougeotii A. Massal.
On calcareous and sandstone rocks, on vertical surfaces in shaded habitats.
B Mosan: AR, Ard.: RRR, Lorr.: RR. **L** Lorr.: R. **F** Lorr. (Moselle): RRR.
The distinction of this species from *O. varia* requires further studies.
Lit.: L5: 33, NL84: 16, NL92: 172.

ochrocheila Nyl.
Corticolous, mainly on *Acer*, *Fagus* and *Quercus*, on roots of *Populus* by a river at water level, and on lignum of *Carpinus*, mainly in humid and well-preserved forests.
B Brab.: RRR, Mosan: RRR, Ard.: RR. **L** Lorr.: RR.
Lit.: Di: 178-179, L5: 33-34, NL97: 52.

rufescens Pers.
Syn.: *O. herpetica* (Ach.) Ach.

Corticolous, on the smooth bark of deciduous trees, mainly *Acer* and *Fraxinus*, in shaded and well-preserved forests.
B Mar.: RRR, Mosan: R, Ard.: AR. **L** Ard.: RRR, Lorr.: RR.
Lit.: DG: 18, Di: 179, NL87: 22, NL97: 52.

***rupestris** Pers.
On *Bagliettoa* and *Verrucaria* species, especially *B. steineri*, *V. calciseda*, *V. muralis* and *V. nigrescens*, mainly on natural, calcareous or sandstone outcrops.
B Mosan: AR. **L** Lorr.: RR. **F** Mar.: RRR, Lorr. (Moselle): RRR.
Lit.: BDL2: 45 (sub *Leciographa monspeliensis*), L5: 34 (sub *O. saxatilis*), NL84: 16 (sub *O. parasitica*), NL87: 22, Vouaux (1912-14: 491).

saxatilis DC.
?Incl. *O. saxicola* Ach.
On natural outcrops of hard calcareous rock.
B Mosan: RR. **L** - .
Lit.: Tonglet (1898: 37, sub *O. saxicola*), NL84: 16, NL97: 52.

varia Pers.
Syn.: *O. diaphora* (Ach.) Ach., *O. lichenoides* Pers., *O. pulicaris* auct., non Pers.: Fr., incl. *O. diaphora* var. *chlorina* (Pers.) Schaer. and var. *signata* Ach.
Corticolous on various trees (especially *Acer*, *Fraxinus*, *Quercus* and *Ulmus*), in forests and on isolated trees.
B Mar.: RR, Mosan: R, Ard.: RR, Lorr.: RRR. **L** Ard.: RR, Lorr.: AR.
Lit.: Di: 175-176, 179-180, Ho: 167, 169, 595, NL84: 16, NL92: 172, NL97: 25-26, 52.

variiformis Anzi (‘*variaeformis*’)
On a natural, calcareous outcrop in sunny conditions.
B - . **L** Lorr. (Moselle): RRR.
Lit.: L8.

vermicellifera (Kunze) J. R. Laundon
Corticolous, most frequent on dry sides of old trees (*Populus*, *Quercus*, *Salix*, etc.) in valleys, also present and locally abundant on *Hedera* ‘trunks’ climbing over sheltered, calcareous rocks.
B Fl.: RRR (†<1900), Brab.: RRR, Mosan: AR, Ard.: R. **L** Ard.: RRR, Lorr.: AR. **F** Lorr.: RRR.
Lit.: Di: 180-181, Ho: 139, 170, 595, L2: 96-97, NL84: 16, NL97: 52.

viridis Pers.
Syn.: *Zwackhia involuta* (Wallr.) Körb.
Corticolous, mostly on smooth bark in humid and shaded forests.
B Ard.: R. **L** Ard.: RR, Lorr.: AR.
Lit.: Di: 181, NL92: 172, NL97: 52.

vulgata Ach. var. **vulgata**
Syn.: *O. cinerea* Chevall.
Corticolous, in rather humid forests, on various trees, but especially on *Sambucus*, formerly also found on *Ulmus* along roads.
B Mar.: R, Brab.: RRR, Mosan: AR, Ard.: RR, Lorr.: RR. **L** - .
Lit.: DG: 18, DSL: 232, Ho: 167, 595, La69: 100, NL84: 16, Barkman (1990: 14), van den Boom & Sérusiaux (1996: 22).

vulgata var. **subsiderella** Nyl.
Syn.: *O. subsiderella* (Nyl.) Arnold, *O. niveoatra* (Borrer) J. R. Laundon, *O. dubia* Arnold
Corticolous, in humid forests, mainly on *Carpinus* and *Quercus*.
B Mar.: R, Brab.: RRR, Mosan: RRR, Ard.: RRR. **L** Ard.: RR, Lorr.: R.
Lit.: DG: 18, Di: 177-178, DSL: 232, Ho: 168, 218, 595, L5: 33, NL84: 16, NL97: 52, Barkman (1990: 14-15).

betulina Sm., see *O. culmigena*

bullata auct., see *O. atra*

chevallieri Leight., see *O. calcarea*

cinerea Chevall., see *O. vulgata* var. *vulgata*

diaphora (Ach.) Ach., see *O. varia*

dubia Arnold, see *O. vulgata* var. *subsiderella*

herbarum Mont., see *O. culmigena*

herpetica (Ach.) Ach., see *O. rufescens*

horistica (Leight.) Stein, see *Enterographa zonata*

lichenoides Pers., see *O. varia*

lineola (Chevall.) Mathieu. Reported from **B** by DG: 18, but no material seen. A name of uncertain application.

lyncea (Sm.) Hook., see *Lecanographa lyncea*

+*macularis* (Ach.) Ach., refers to the non-lichenized ascomycete *Polymorphum quercinum* (Pers.) Chevall.

niveoatra (Borrer) J. R. Laundon, see *O. vulgata* var. *subsiderella*

**parasitica* (A. Massal.) H. Olivier, syn. *Leciographa monspeliensis* (Nyl.) Müll. Arg. The Belgian material published as *O. parasitica* or *L. monspeliensis* is here considered as belonging to *O. rupestris*. The true *O. parasitica*, which is lichenicolous on *Aspicilia calcarea*, does not occur in the study area.

prosodea Ach. The ancien report of this species from **B** Mar. on *Hedera* by Kickx (1865: 18-19) might be correct, but no corresponding specimen has yet been seen.

pulicaris auct., non Pers.: Fr., see *O. varia*

saxicola Ach., see *O. saxatilis*

subsiderella (Nyl.) Arnold, see *O. vulgata* var. *subsiderella*

zonata Körb., see *Enterographa zonata*

zwackhii* (Zwackh) Källsten, syn. *Leciographa zwackhii* Zwackh. The ancient report of this species from **L Lorr. by Ko: 284-285 is not sustained by any relevant specimen and is therefore most doubtful.

OPHIOPARMA Norman

ventosa (L.) Norman
Syn.: *Haematomma ventosum* (L.) A. Massal.
On exposed, siliceous rocks.
B Ard.: RR. **L** - .
A single, very reduced and sterile population remains in the study area.
Lit.: DG: 32, L8.

PACHYOSPORA A. Massal.

verrucosa (Ach.) A. Massal., see *Megaspora verrucosa*

PACHYPHIALE Lönnr.

carneola (Ach.) Arnold
Syn.: *P. cornea* (With.) Poetsch
On *Acer* and *Fraxinus*, in well-preserved forests.
B Ard.: RR, Lorr.: RRR. **L** - .
Lit.: L4: 28.

fagicola (Hepp) Zwackh
Corticolous, on *Fraxinus*, *Populus* and *Tilia*.
B - . **L** Ard.: RRR, Lorr.: RRR.
Lit.: Di: 182, L3: 33, NL92: 161.

cornea (With.) Poetsch, see *P. carneola*

PANNARIA Delise

conoplea (Ach.) Bory
Syn.: *Pannaria rubiginosa* (Ach.) Bory var. *lanuginosa* auct., non (Hoffm.) Zahlbr.
Over saxicolous and corticolous mosses, in humid old forests.
B Brab.: RR (†<1898), Ard.: RR (†<1896), Lorr.: RRR (1990). **L** Lorr.: RRR (†<1850).
The only remaining population in the study area (**B** Lorr.) is made of three small thalli on two trees.
Lit.: L6: 143-144, Sérusiaux (1984: 84).

pezizoides (Weber) Trevis.
Syn.: *P. brunnea* (Sw.) A. Massal.
Over terricolous mosses in humid localities.
B Fl.: RRR (†<1867), Ard.: RR (†<1861). **L** Lorr.: RR (†1947).
Now extinct throughout the area of study.
Lit.: Sérusiaux (1984: 85).

brunnea (Sw.) A. Massal., see *P. pezizoides*

leucophaea (Vahl) P. M. Jørg., see *Fuscopannaria leucophaea*

mediterranea Tav., see *Fuscopannaria mediterranea*

microphylla '(Sw.)' Delise, see *Fuscopannaria leucophaea*

nebulosa (Hoffm.) Nyl., see *Moelleropsis nebulosa*

plumbea (Lightf.) Bory, see *Degelia plumbea*

rubiginosa (Ach.) Bory. The species probably existed in **B** Fl. before 1815, but no specimen has been seen (Sérusiaux 1984: 85-86).

rubiginosa (Ach.) Bory var. *lanuginosa* auct., non (Hoffm.) Zahlbr., see *P. conoplea*

saubinetii (Mont.) Nyl., see *Fuscopannaria saubinetii*

PARANECTRIA Sacc.

***oropensis** (Ces.) D. Hawksw. & Piroz.
On corticolous lichens (*Buellia punctata*, *Parmelina tiliacea* and *Xanthoria candelaria*).
B - . **L** Lorr.: RRR.
Lit.: L8.

PARMELIA Ach.

omphalodes (L.) Ach. subsp. **omphalodes**
On siliceous, natural outcrops, usually in exposed and well-lit conditions.
B Ard.: RR. **L** - . **F** Ard.: RR.
Lit.: La66: 440, NL77: 22.

omphalodes subsp. **discordans** (Nyl.) Skult
Syn.: *P. omphalodes* var. *discordans* (Nyl.) H. Magn., *P. discordans* Nyl.
On siliceous, natural outcrops, usually in exposed and well-lit conditions.
B Ard.: RR. **L** - .
Lit.: La66: 440-441, Mü1: 154, NL77: 22, Hale (1987: 23-24).

saxatilis (L.) Ach.
Corticolous, on all kinds of trees, or saxicolous, mainly on siliceous outcrops, most common in forests.

B Mar.: R, Fl.: RR, Camp.: AR, Brab.: AR, Mosan, Ard., Lorr.: *C*. **L** Ard.: C, Lorr.: C. **F** Mosan, Ard.: *C*.
Lit.: Ca: 144, Ho: 188, La66: 438-439, Qu: 110-111, WS: 41, 83.

submontana Hale
On old *Aesculus*, *Populus* and *Tilia* near a cemetery or a chapel, on *Acer* and *Fraxinus* along a road, on *Quercus* in a pasture and on branches of *Fagus* in a forest.
B Ard.: RRR, Lorr.: RRR. **L** Lorr.: RR. Overlooked.
Lit.: L8.

sulcata Taylor
Corticolous, on all kinds of trees, common in nitrophilous communities in well-lit conditions.
B, L and **F**: CC everywhere.
Lit.: Ca: 151-152, Ho: 196, La66: 439-440, Qu: 113-114, WS: 43-44, 87.

acetabulum (Neck.) Duby, see *Pleurosticta acetabulum*

andreana Müll. Arg., see *Flavopunctelia flaventior*

aspera A. Massal., see *Melanelia exasperata*

aspidota (Ach.) Poetsch, see *Melanelia aspidota*

borreri (Sm.) Turner, see *Punctelia borreri*

borreri auct. p. p., non (Sm.) Turner, see *Punctelia subrudecta* and *P. ulophylla*

borreri var. *pseudoborreri* (Asahina) Lambinon & Targé, see *Punctelia borreri*

borreri var. *ulophylla* (Ach.) Nyl., see *Punctelia ulophylla*

caperata (L.) Ach., see *Flavoparmelia caperata*

cetrarioides (Duby) Nyl., see *Cetrelia olivetorum*

coniocarpa Laurer, nom. illeg., see *Parmotrema chinense*

conspersa (Ach.) Ach., see *Xanthoparmelia conspersa*

crinita Ach., see *Parmotrema crinitum*

delisei (Duby) Nyl., see *Neofuscelia pulla*

diffusa auct., non (Weber) Rebent., see *Parmeliopsis ambigua*

discordans Nyl., see *Parmelia omphalodes* subsp. *discordans*

disjuncta Erichsen, see *Melanelia disjuncta*

disjuncta auct. belg. p. p., non Erichsen, see *Melanelia sorediata*

dubia (Wulfen) Schaer. A name of uncertain application, referring either to *Punctelia subrudecta* or to *P. ulophylla*.

elegantula (Zahlbr.) Szatala, see *Melanelia elegantula*

exasperata De Not., see *Melanelia exasperata*

exasperatula (Nyl.) Essl., see *Melanelia exasperatula*

fahlunensis auct., see *Tuckermannopsis hepatizon*

flaventior Stirt., see *Flavopunctelia flaventior*

fuliginosa (Duby) Nyl., see *Melanelia glabratula* subsp. *fuliginosa*

furfuracea (L.) Ach., see *Pseudevernia furfuracea*

glabra (Schaer.) Nyl., see *Melanelia glabra*

glabratula (Lamy) Nyl., see *Melanelia glabratula* subsp. *glabratula*

glomellifera (Nyl.) Nyl., see *Neofuscelia verruculifera*

hyperopta Ach., see *Parmeliopsis hyperopta*

incurva (Pers.) Hale, see *Arctoparmelia incurva*

isidiotyla Nyl., see *Neofuscelia loxodes*

laciniatula (H. Olivier) Zahlbr., see *Melanelia laciniatula*

laetevirens (Flot.) Rosend., see *Melanelia glabratula* subsp. *glabratula*

loxodes Nyl., see *Neofuscelia loxodes*

molliuscula auct. belg. p. p., non Ach., see *Xanthoparmelia conspersa*

mougeotii D. Dietr., see *Xanthoparmelia mougeotii*

olivacea (L.) Ach., see *Melanelia olivacea*

panniformis (Nyl.) Vain., see *Melanelia panniformis*

pastillifera (Harm.) R. Schub. & Klem., see *Parmelina pastillifera*

perlata (Huds.) Ach., see *Parmotrema chinense*

perrugata Nyl., see *Neofuscelia pulla*

pertusa (Schrank) Schaer., see *Menegazzia terebrata*

physodes (L.) Ach., see *Hypogymnia physodes*

prolixa (Ach.) Carroll, see *Neofuscelia pulla*

protomatrae Gyeln., see *Xanthoparmelia protomatrae*

pubescens (L.) Vain., see *Pseudephebe pubescens*

pulla Ach., see *Neofuscelia pulla*

pulla var. *delisei* (Duby) H. Magn., see *Neofuscelia pulla*

quercina (Willd.) Vain., see *Parmelina quercina* var. *quercina*

reticulata Taylor, see *Rimelia reticulata*

revoluta Flörke, see *Hypotrachyna revoluta*

scortea (Ach.) Ach., see *Parmelina tiliacea*

sinuosa (Sm.) Ach., see *Hypotrachyna sinuosa*

soredians Nyl., see *Flavoparmelia soredians*

sorediata (Ach.) Th. Fr., see *Melanelia sorediata*

sorediata auct., non (Ach.) Th. Fr., see *Melanelia disjuncta*

sorediosa Almb., see *Melanelia sorediata*

sprengelii Flörke, see *Neofuscelia pulla*

stenophylla auct. p. m. p., non (Ach.) Heugel, nom. conf., see *Xanthoparmelia conspersa* and *X. somloënsis* var. *somloënsis*

stictica (Duby) Nyl., see *Punctelia stictica*

stygia (L.) Ach., see *Melanelia stygia*

subargentifera Nyl., see *Melanelia subargentifera*

subaurifera Nyl., see *Melanelia subaurifera*

subrudecta Nyl., see *Punctelia subrudecta*

taractica Kremp., see *Xanthoparmelia somloënsis* var. *somloënsis*

tiliacea (Hoffm.) Ach., see *Parmelina tiliacea*

trichotera Hue, see *Parmotrema chinense*

tubulosa (Schaer.) Bitter, see *Hypogymnia tubulosa*

verruculifera Nyl., see *Neofuscelia verruculifera*

vittata (Ach.) Nyl., see *Hypogymnia vittata*

PARMELIELLA Müll. Arg.

triptophylla (Ach.) Müll. Arg.
Corticolous, on *Quercus* and *Sorbus* in humid, old and well-preserved forests.
B Ard.: RRR (†<1900), Lorr.: RRR. **L** Lorr.: RRR (1992).
Lit.: L3: 33, L4: 19, NL92: 161, Sérusiaux (1984: 86).

microphylla '(Sw.)' Müll. Arg., see *Fuscopannaria leucophaea*

plumbea (Lightf.) Vain., see *Degelia plumbea*

PARMELINA Hale

pastillifera (Harm.) Hale
Syn.: *Parmelia pastillifera* (Harm.) R. Schub. & Klem.
Mostly on old roadside trees, mainly on *Fraxinus*, also on *Acer* and other trees.
B Brab.: RRR, Mosan: RR, Ard.: AR, Lorr.: AR. **L** Ard.: AR, Lorr.: AR.
Lit.: Ho: 139, 183, 600, La66: 437, NL84: 16, WS: 40-41, 81.

quercina (Willd.) Hale var. **quercina**
Syn.: *Parmelia quercina* (Willd.) Vain.
Ecology unknown, most probably on trees in well-lit conditions.
B Brab.: RRR (†<1861), Ard.: RRR (†<1865). **L** - .
Now extinct throughout the area of study.
Lit.: La66: 436.

tiliacea (Hoffm.) Hale
Syn.: *Parmelia tiliacea* (Hoffm.) Ach., *P. scortea* (Ach.) Ach.
Mainly on old roadside trees (e. g. on *Fraxinus*), also in orchards, exceptionally saxicolous on old walls.
B Mar.: RR, Fl.: RR (†<1900), Camp.: RR, Brab.: AR, Mosan: AC, Ard.: AC, Lorr.: AC. **L** Ard.: AC, Lorr.: AC.
Lit.: Ca: 153, Ho: 139, 198, 608, La66: 436-437, Qu: 113, 415, WS: 44, 88.

PARMELIOPSIS Nyl.

ambigua (Wulfen) Nyl.
Syn.: *Parmelia diffusa* auct., non (Weber) Rebent.
Corticolous, mainly on *Betula* and *Fagus*, also found on *Picea* (base of trees) and old *Vaccinium* stems, mainly inside forests over acidic soil, exceptionally saxicolous, on siliceous rocks.
B Camp.: RR, Brab.: RRR, Mosan: AR-AC, Ard.: AC (locally C), Lorr.: AR. **L** Ard.: AC, Lorr.: C. **F** Ard.: *AR*.
Lit.: La66: 365-369, Mü1: 152, WS: 45, 90, Lambinon (1968b: 404).

aleurites (Ach.) Nyl., see *Imshaugia aleurites*

hyperopta (Ach.) Arnold, syn. *Parmelia hyperopta* Ach. Reported by Feltgen (1902: 179) from **L** Lorr. on a *Pinus* log in a railway station, probably of foreign origin. The report is not sustained by any collection and thus not accepted.

pallescens (Hoffm.) Zahlbr., see *Imshaugia aleurites*

PARMOTREMA A. Massal.

chinense (Osbeck) Hale & Ahti
Syn.: *Parmelia perlata* (Huds.) Ach., *P. trichotera* Hue, *P. coniocarpa* Laurer, nom. illeg.
Epiphytic on well-lit bark, either in forests or more usually in exposed conditions.
B Mar.: AR, Fl.: RR, Brab.: AR→R, Mosan: AR, Ard.: AR, Lorr.: AR. **L** Ard.: RRR, Lorr.: R.
Lit.: Ho: 184, L4: 19, La66: 443-444, Barkman (1990: 13, 15).

crinitum (Ach.) Hale
Syn.: *Parmelia crinita* Ach.
On rocks and at the base of a *Fagus* trunk, always in forest conditions.
B Mosan: RRR (†1854), Ard.: RRR (†1969). **L** Lorr.: RRR (†<1850).
Now extinct throughout the area of study.
Lit.: L6: 144, La66: 438, Diederich (1986a: 120).

reticulatum (Taylor) Choisy, see *Rimelia reticulata*

PECCANIA A. Massal.

coralloides (A. Massal.) A. Massal. Reported from **B** Mosan by DG: 19 and Tonglet (1898: 18), but no material seen.

PELTIGERA Willd.

canina (L.) Willd.
On humus-rich or mossy soil and rocks, usually slightly basic, in rather open conditions.
B Mar.: RR, Camp.: RRR (†1898), Brab.: RR (†1899), Mosan: R (†1964), Ard.: R, Lorr.: R. **L** Ard.: R, Lorr.: R.
Lit.: Goffinet et al. (1995: 189-190), Vitikainen (1994: 32).

collina (Ach.) Schrad.
Syn.: *P. scutata* (Dicks.) Duby
On epiphytic mosses, or more rarely siliceous rocks, in well-preserved and humid forests.
B Mar.: RRR (†1867), Ard.: RR (†1884), Lorr.: R→RRR (only two trees left with it). **L** Lorr.: RRR (†<1850).
Lit.: L4: 18, Diederich (1986a: 121), Goffinet et al. (1995: 190).

degenii Gyeln.
Syn.: *P. nitens* (Anders) Gyeln.
On mosses over calcareous or sandstone rocks, or more rarely at the base of trees, always in forest conditions.
B Brab.: RRR (†1886), Mosan: RR (†1968), Ard.: RR (†1965), Lorr.: RR (†1964). **L** Lorr.: RR (†1979).
Now extinct throughout the area of study.
Lit.: Diederich (1985a: 24), Goffinet et al. (1995: 190-191).

didactyla (With.) J. R. Laundon
Syn.: *P. spuria* (Ach.) DC., *P. erumpens* (Taylor) Elenkin, *P. pusilla* Körb.
Terricolous, often over mosses, most rarely on rotting logs, usually in disturbed and slightly nitrophilous conditions.
B Mar.: RRR, Fl.: R (1961), Camp.: AR, Brab.: AR, Mosan: AR-AC, Ard.: AR-AC. **L** Ard.: AR, Lorr.: AR-AC.
Lit.: Goffinet et al. (1995: 191), Vannerom & Jacques (1999), Vitikainen (1994: 40).

elisabethae Gyeln.
On mosses over siliceous or calcareous rocks.
B Mosan: RRR, Ard.: RR, Lorr.: RR. **L** Ard.: RRR.
The material referred to this species is not very characteristic and may represent atypical populations of *P. horizontalis*.
Lit.: Goffinet et al. (1995: 192).

horizontalis (Huds.) Baumg.
On mosses over rocks, sometimes on trees, rotting logs or soil, always in well-preserved, humid forests.
B Fl.: RRR (†1867), Brab.: RR (†1867), Mosan: R, Ard.: AR, Lorr.: RR. **L** Ard.: RR, Lorr.: AR.
Lit.: Goffinet et al. (1995: 191-192), Vitikainen (1994: 46).

hymenina (Ach.) Delise
Syn.: *P. lactucifolia* auct., non (With.) J. R. Laundon, *P. polydactyla* auct. belg. p. p., non (Neck.) Hoffm.
On soil, on terricolous or saxicolous mosses, or rarely epiphytic; a rather ubiquitous species present in natural and artificial habitats.
B Mar.: RRR (†1945), Fl.: R (†1882), Brab.: R, Mosan: AR-AC, Ard.: AR. **L** Ard.: R, Lorr.: RR.
Lit.: Goffinet et al. (1995: 192-193), Vitikainen (1994: 49).

lepidophora (Nyl.) Bitter
Terricolous, on dry, sandy soil.
B Lorr.: RRR (1968). **L** Ard.: RRR (1987), Lorr.: RRR (1966).
Lit.: L5: 34, Goffinet et al. (1995: 193), Vitikainen (1994: 52).

leucophlebia (Nyl.) Gyeln.
Syn.: *P. aphthosa* (L.) Willd. var. *variolosa* (A. Massal.) J. W. Thomson, *P. aphthosa* auct. belg., non (L.) Willd.
Saxicolous, or more rarely terricolous, often over mosses, usually in shaded and humid conditions.
B Mosan: R (†1965), Ard.: R→RRR, Lorr.: RR (†1965). **L** Ard.: RR, Lorr.: RR.
Lit.: Diederich (1985a: 24), Goffinet et al. (1995: 193-194), Vitikainen (1994: 55).

malacea (Ach.) Funck
On saxicolous mosses, rarely terricolous or on plant remains, in exposed conditions.
B Camp.: RRR (†<1900), Ard.: R (†1973). **L** Ard.: R.
Lit.: Mü5: 28, Schl: 167-168, 257, Goffinet et al. (1995: 194).

membranacea (Ach.) Nyl.
Syn.: *P. canina* auct. belg. p. p., non (L.) Willd.
On mosses, usually on soil or rocks, rarely on trees, mostly observed near rivers or in moist forests.

B Fl.: RR (†1867), Camp.: RRR (†1869), Brab.: RR (†1899), Mosan: R, Ard.: AR, decreasing, Lorr.: RR. **L** Ard.: R.

Lit.: Goffinet et al. (1995: 195), Vitikainen (1994: 63).

neckeri Müll. Arg.

Syn.: *P. polydactyla* auct. belg. p. p., non (Neck.) Hoffm.

On terricolous mosses, usually in highly mineralized conditions, very rarely at the base of 'dusty' trees.

B Mar.: RR, Fl.: RRR, Brab.: RR (?†1964), Mosan: R, Ard.: RR, Lorr.: RR (1962). **L** Ard.: RR, Lorr.: RR.

Lit.: Goffinet et al. (1995: 195-196), Vitikainen (1994: 66).

neopolydactyla (Gyeln.) Gyeln.

On siliceous soil by a road.

B Ard.: RRR (†1962). **L** - .

The identity of the only known collection is not absolutely certain. Now extinct throughout the area of study.

Lit.: Goffinet et al. (1995: 196).

polydactylon (Neck.) Hoffm.

Note: '*polydactyla*' is an orthographic variant of '*polydactylon*'.

In highly different ecological conditions: on mossy rocks in well-lit or shaded conditions, or terricolous in artificial habitats.

B Brab.: RRR (†<1900), Mosan: RR (1963), Ard.: RR. **L** Ard.: RRR, Lorr.: RR.

Lit.: Goffinet et al. (1995: 196).

ponojensis Gyeln.

Terricolous, on calcareous soil or on old mining rubbles.

B Brab.: RRR (†<1900). **L** Lorr.: RR. **D** Ard.: RR. Overlooked ?

Lit.: Diederich (1985a: 24), Goffinet et al. (1995: 196-197), Schlechter (1995: 467-468).

praetextata (Sommerf.) Zopf

Syn.: *P. canina* subsp. *praetextata* (Flörke) Ozenda & Clauzade, *P. subcanina* Gyeln.

On saxicolous or terricolous mosses in diverse, natural and artificial habitats, but most common inside forests, epiphytic only in well-preserved humid forests.

B Fl: RR (†1867), Brab.: R (1969), Mosan: AC, Ard.: AR, Lorr.: AR-AC. **L** Ard.: AR, Lorr.: AC.

Lit.: Goffinet et al. (1995: 197-198), Vitikainen (1994: 76).

rufescens (Weiss) Humb.

Syn.: *P. canina* var. *rufescens* (Weiss) Mudd, *P. canina* var. *crispa* Kickx

On saxicolous mosses, or terricolous, mostly in dry, well-lit and carbonates-rich habitats, in natural and artificial conditions, very rare at the base of 'dusty' trees; a characteristic species of Xero-bromion communities.

B Mar.: R, Fl.: RR, Camp.: RRR, Brab.: R, Mosan: AR-AC (locally common), Ard.: R, Lorr.: R-AR. **L** Ard.: RR, Lorr.: AR (C in the SW).

Lit.: Goffinet et al. (1995: 198-199), Vannerom & Jacques (1999), Vitikainen (1994: 79), Zwaenepoel et al. (1994: 37).

venosa (L.) Hoffm.

On sandy soil in humid conditions, at least for parts of the year.

B Fl.: RR (†1867), Brab.: RR (†<1955), Ard.: RR (†1854), Lorr.: RR (†1977). **L** Lorr.: RR (†1897).

Now extinct throughout the area of study.

Lit.: Goffinet et al. (1995: 199), Vitikainen (1994: 86).

aphthosa auct. belg., non (L.) Willd., see *P. leucophlebia*

aphthosa (L.) Willd. var. *variolosa* (A. Massal.) J. W. Thomson, see *P. leucophlebia*

canina auct. belg. p. p., non (L.) Willd., see *P. membranacea*

canina var. *crispa* Kickx, see *P. rufescens*

canina subsp. *praetextata* (Flörke) Ozenda & Clauzade, see *P. praetextata*

canina var. *rufescens* (Weiss) Mudd, see *P. rufescens*

erumpens (Taylor) Elenkin, see *P. didactyla*

lactucifolia auct., non (With.) J. R. Laundon, see *P. hymenina*

nitens (Anders) Gyeln., see *P. degenii*

polydactyla (Neck.) Hoffm., see *P. polydactylon*

polydactyla auct. belg. p. p., non (Neck.) Hoffm., see *P. hymenina* and *P. neckeri*

pusilla Körb., see *P. didactyla*

scutata (Dicks.) Duby, see *P. collina*

spuria (Ach.) DC., see *P. didactyla*

subcanina Gyeln., see *P. praetextata*

PELTULA Nyl.

euploca (Ach.) Poelt, syn. *Heppia guepinii* (Delise) Nyl. Reported from **B** by DG: 21, but no material seen.

PERIDIOTHELIA D. Hawksw.

+**fuliguncta** (Norman) D. Hawksw.
Syn.: *Microthelia micula* auct., non Körb.
Corticolous, on *Tilia*, often in ruderal conditions.
B Mosan: RRR, Ard.: RRR. **L** Lorr.: RRR.
A non-lichenized species, included here because it looks like a lichen and is usually studied by lichenologists.
Lit.: L7: 88.

PERTUSARIA DC.

albescens (Huds.) Choisy & Werner
Syn.: *P. albescens* var. *corallina* (Zahlbr.) J. R. Laundon, *P. discoidea* (Pers.) Malme, *P. globulifera* (Turner) A. Massal., *P. henrici* sensu Erichsen, *P. orbiculata* (Schreb.) Zahlbr.
Corticolous, on roadside trees (mainly *Fraxinus* and *Populus*), in orchards (on *Malus* and *Pyrus*) and in forests (mainly on *Fagus* and *Quercus*).
B Mar.: R, Fl.: AR, Camp.: AR, Brab.: AC, Mosan: AR, Ard., Lorr.: *AC-C*. **L** Ard.: AC, Lorr.: C.
One single fertile specimen is known from Luxembourg.
Lit.: Ca: 114-115, Di: 184-186, DSL: 236-237, Ho: 139, 200, NL84: 16, Hanko (1983: 236).

amara (Ach.) Nyl.
Syn.: *P. faginea* auct.
Corticolous, on all kinds of trees along roads or inside forests, exceptionally saxicolous, on exposed, siliceous rocks.
B Camp.: AR, Mosan: AR, Ard., Lorr.: *C*. **L** Ard.: CC, Lorr.: C. **F** Mosan: RRR.
Two chemical strains have been observed: with, and without protocetraric acid, the latter being the rarest.
Lit.: Ba: 10, Di: 186, Mü1: 150, NL84: 16.

aspergilla (Ach.) J. R. Laundon
Syn.: *P. dealbescens* auct., non Erichsen, *P. dealbata* auct., non (Ach.) Nyl.
Saxicolous on siliceous rocks, in well-lit, exposed or shaded, natural habitats.
B Ard.: AR. **L** Ard.: RR.
Lit.: Di: 183, La69: 104, NL77: 22.

coccodes (Ach.) Nyl.
Corticolous, in forests (on *Fagus* and *Quercus*) and on roadside trees (e. g. *Fraxinus*, *Tilia*).
B Fl.: RRR, Brab.: RR, Mosan: R, Ard., Lorr.: *AR*. **L** Ard.: AR, Lorr.: AR.
Lit.: Di: 187, Ho: 139, 201, 609, La68: 76, NL84: 16, Hanko (1983: 197).

corallina (L.) Arnold
On siliceous and sandstone rocks, usually in exposed situations, either in natural habitats or on slate debris in disused quarries.
B Ard.: *AR*. **L** Ard.: R, Lorr.: AR.
Lit.: Di: 183, La68: 76, Mü1: 150, NL92: 172.

coronata (Ach.) Th. Fr.
On bark of *Fagus*, *Fraxinus* and *Quercus* in well-preserved forests.
B Ard.: RRR, Lorr.: RRR. **L** Lorr.: RR.
Lit.: Di: 187-188, L5: 34.

excludens Nyl.
On a rather shaded, siliceous, natural outcrop.
B Ard.: RRR. **L** - .
Lit.: L5: 19, 34.

flavida (DC.) J. R. Laundon
Syn.: *P. lutescens* (Hoffm.) Lamy
Corticolous, mostly on old *Fagus* and *Quercus* inside well-preserved forests, also on roadside trees (*Fraxinus*, *Tilia*, *Ulmus*), exceptionally lignicolous.
B Mosan: R, Ard.: AR, Lorr.: R. **L** Ard.: AC, Lorr.: AC (but absent in the industrialized SW part).
Lit.: Di: 188, Mü1: 150, NL84: 16.

hemisphaerica (Flörke) Erichsen
Corticolous, mainly on *Fagus* and *Quercus* inside forests.
B Mosan: R, Ard.: AR, Lorr.: R. **L** Ard.: AC, Lorr.: C.
Lit.: Di: 188-189, La68: 76, NL84: 16.

hymenea (Ach.) Schaer.
Syn.: *P. wulfenii* DC.
Corticolous, mainly in forests on old trees of *Fagus* and *Quercus*, rarely on *Acer*.
B Mosan: RRR, Ard.: RR, Lorr.: RR. **L** Ard.: RR, Lorr.: R.
Lit.: Di: 189-190, NL97: 53.

lactea (L.) Arnold
On exposed and well-lit, siliceous rocks in natural habitats.
B Mosan: RR, Ard.: R. **L** Ard.: R.
Lit.: La68: 76, Mü1: 150, NL77: 22, NL92: 172.

leioplaca DC.
Syn.: *P. leucostoma* A. Massal.
On the smooth bark of *Carpinus* and other trees in shaded forests.

B Mosan: R, Ard.: AR, Lorr.: RR. **L** Ard.: AR, Lorr.: AR.
Lit.: Di: 190, Mü1: 150, NL84: 16, NL97: 53.

multipuncta (Turner) Nyl.
Corticolous, on *Carpinus* and *Fraxinus* inside forests.
B Brab.: RRR (†<1900), Ard.: RRR. **L** Ard.: RRR.
Lit.: Di: 190-191, L5: 34-35, Hanko (1983: 171).

pertusa (Weigel) Tuck.
Syn.: *P. communis* DC., incl. *P. rupestris* (DC.) Schaer.
Corticolous, on all kinds of trees, and saxicolous, on siliceous and sandstone rocks.
B Mar.: RRR, Fl.: RR, Camp.: RR, Brab.: RR, Mosan: AR, Ard.: AR, Lorr.: R. **L** Ard.: AC, Lorr.: CC.
Lit.: Ba: 10, Ca: 114-115, Di: 191-192, DSL: 236, Ho: 139, 202, 609, La68: 76, NL84: 16, Hanko (1983: 118).

pseudocorallina (Lilj.) Arnold
On siliceous rocks, in exposed conditions, either in natural habitats or in disused quarries.
B Ard.: R. **L** - .
Lit.: DG: 31, NL77: 22, Sé: 138.

pupillaris (Nyl.) Th. Fr.
Corticolous, on the smooth bark of *Acer*, *Alnus*, *Corylus*, etc.
B Mosan: RR, Ard.: R, Lorr.: RR. **L** Ard.: AR, Lorr.: RR.
Lit.: Di: 192, L2: 97, NL87: 22, NL97: 53.

pustulata (Ach.) Dufour
Syn.: *P. melaleuca* (Turner & Borrer) Duby
On the smooth bark of *Carpinus* along a river at the edge of a forest.
B - . **L** Lorr.: RRR (1986).
Lit.: DG: 31, Di: 193, L5: 35.

communis DC., see *P. pertusa*

conglobata (Ach.) Th. Fr. Reported from **L** by Ko: 225, but no specimen seen.

dealbata auct., non (Ach.) Nyl., see *P. aspergilla*

dealbescens auct., non Erichsen, see *P. aspergilla*

discoidea (Pers.) Malme, see *P. albescens*

faginea auct., see *P. amara*

flavicans Lamy. This species has been reported as the host of *Dactylospora saxatilis* (L5: 19, as *P.* cf. *flavicans*). This identification requires further studies.

globulifera (Turner) A. Massal., see *P. albescens*

henrici sensu Erichsen, see *P. albescens*

leucostoma A. Massal., see *P. leioplaca*

lutescens (Hoffm.) Lamy, see *P. flavida*

melaleuca (Turner & Borrer) Duby, see *P. pustulata*

ocellata (Wallr.) Körb. Reported from **L** Lorr. by Ko: 336, but no specimen seen.

orbiculata (Schreb.) Zahlbr., see *P. albescens*

pertusa var. *leiotera* (Nyl.) Zahlbr. Reported from **B** by DG: 31, but no material seen.

rupestris (DC.) Schaer., see *P. pertusa*

sordidogrisea Erichsen, see *Ochrolechia sordidogrisea*

velata (Turner) Nyl. Reported from **B** by DG: 31, but no material seen.

wulfenii DC., see *P. hymenea*

PETRACTIS Fr.

clausa (Hoffm.) Kremp.
On shaded and slightly humid, calcareous rocks, always in natural conditions.
B Mosan: AR, Ard.: RRR (<1900). **L** - .
Lit.: DG: 19, La69: 100, NL84: 16, NL87: 22, NL97: 53, Vězda (1965: 135).

hypoleuca (Ach.) Vězda
Syn.: *Gyalecta hypoleuca* (Ach.) Zahlbr.
On shaded, calcareous, natural outcrops.
B Mosan: RR, possibly overlooked. **L** - .
Lit.: DG: 19, Ertz: 20, 27, L8, Vězda (1965: 138).

PEZIZA Fr.

**circinans* Lib., nom. inval., see *Corticifraga peltigerae*

PEZIZELLA Fuckel

***epithallina** (W. Phillips & Plowr.) Sacc.
On *Peltigera didactyla* and *P. rufescens*.
B - . **L** Lorr.: RR.
Lit.: L5: 35.

PHACOPSIS Tul.

***oxyspora** (Tul.) Triebel & Rambold
On *Xanthoparmelia conspersa* (inducing galls on the thallus).
B Ard.: RRR (1961). **L** - .
Lit.: L8.

**lesdainii* Vouaux, see *Echinodiscus lesdainii*

thallicola* (A. Massal.) Triebel & Rambold, syn. *Nesolechia thallicola* (A. Massal.) A. Massal. The report of this species from **L by Ko: 264 is not sustained by any material and is therefore most doubtful.

PHAEOCALICIUM A. F. W. Schmidt

+*populneum* (Duby) A. F. W. Schmidt, syn. *Calicium populneum* Duby. The report of this species from **L** by Ko: 297 is most doubtful as no specimen could be examined.

PHAEOGRAPHIS Müll. Arg.

dendritica (Ach.) Müll. Arg.
Syn.: *Graphis dendritica* (Ach.) Ach.
On *Castanea* in unknown ecological conditions.
B Brab.: RRR (†<1900). **L** - .
Now extinct throughout the area of study.
Lit.: NL97: 26, Coppins (1981: 243).

inusta (Ach.) Müll. Arg.
On young *Carpinus*, *Corylus* and *Fagus* in a well-preserved forest.
B Ard.: RRR. **L** - .
Lit.: NL97: 26.

smithii (Leight.) B. de Lesd.
Corticolous in unknown ecological conditions for the only known Belgian specimen; on *Quercus* in **F** Brab.
B Fl.: RRR (†<1900). **L** - . **F** Brab.: RRR (†1910).
Now extinct throughout the area of study.
Lit.: BDL1: 218-219, NL97: 26, Coppins (1981: 243), Purvis et al. (1992: 462).

lyellii (Sm.) Zahlbr., syn. *Graphis lyellii* (Sm.) Ach. The ancient report of this species from **L** Lorr. by Ko: 283 is not sustained by any relevant specimen and is therefore most doubtful.

PHAEOPHYSCIA Moberg

cernohorskyi (Nádv.) Essl.
Syn.: *P. strigosa* (Poelt & Buschardt) N. S. Golubk.
On exposed limestone outcrop in a Xerobromion community.
B Mosan: RRR. **L** - .
Lit.: NL97: 26-27.

chloantha (Ach.) Moberg
Syn.: *Physcia luganensis* (Mereschk.) Moberg
Corticolous (phorophyte unknown) in a large shaded valley.
B Ard.: RRR (†1868). **L** - .
Now extinct throughout the area of study.
Lit.: La66: 479.

ciliata (Hoffm.) Moberg
Syn.: *Physcia ciliata* (Hoffm.) Du Rietz
Corticolous (phorophyte and ecological conditions unknown).
B - . **L** Distr. unknown: RRR (†<1850).
Now extinct throughout the area of study.
Lit.: Diederich (1986a: 121).

endophoenicea (Harm.) Moberg
Corticolous, on *Fraxinus*, *Malus* and *Tilia*, on roadside trees or in orchards.
B Mosan: RRR, Lorr.: RRR. **L** Lorr.: RRR.
Lit.: L8.

nigricans (Flörke) Moberg
Syn.: *Physcia nigricans* (Flörke) Stizenb.
Saxicolous, mainly on artificial, at least slightly calcareous substrata (e. g. disused quarries, concrete posts, gravestones, walls), or corticolous, on old isolated trees with a dust-impregnated bark.
B Fl.: RR, Camp.: RR, Mosan: R, Ard.: AR, Lorr.: R. **L** Ard.: R, Lorr.: AR.
Lit.: La66: 481-482, Mü1: 158, NL87: 22, NL93: 45, VGH: 114, WS: 45-46, 91.

orbicularis (Neck.) Moberg
Syn.: *Physcia orbicularis* (Neck.) Poetsch, *P. obscura* (Humb.) Fürnr., *P. cycloselis* (Ach.) Vain., *P. virella* (Ach.) Flagey
Corticolous, mostly on isolated trees, also saxicolous, mainly on artificial substrata, very common in nitrophilous communities.
B Mar.: CC, Fl.: C-CC, Brab.: AC-C, elsewhere: *C.* **L** Ard.: AR, Lorr.: C.
Lit.: Ca: 155-156, Ho: 203, La66: 482-483, Qu: 113, 116-117, WS: 46, 92.

sciastra (Ach.) Moberg
Syn.: *Physcia sciastra* (Ach.) Du Rietz
On exposed, natural, calcareous or rarely siliceous rocks, and in artificial conditions, incl. on roofs, asbestos and slate debris, always in at least slightly nitrophilous communities.
B Mosan: R, Ard.: AR, Lorr.: RR. **L** Ard.: RRR, Lorr.: R. **F** Lorr. (Moselle): RRR.
Lit.: La66: 481.

strigosa (Poelt & Buschardt) N. S. Golubk., see *P. cernohorskyi*

PHAEOPYXIS Rambold & Triebel

***varia** Coppins, Rambold & Triebel
On *Trapeliopsis pseudogranulosa*.
B Ard.: RR. **L** Ard.: RRR.
Lit.: L8.

punctum* (A. Massal.) Rambold, Triebel & Coppins, syn. *Nesolechia punctum* A. Massal. Reported from **L by Ko: 264, but no corresponding specimen has been seen.

PHAEOSPORA Stein

***lecanorae** Eitner
On *Lecanora* species, especially *L. albescens*.
B - . **L** Lorr.: RR. **F** Mar.: RRR (<1914).
Lit.: L8, LF0: 12 (sub *P. parasitica*).

***rimosicola** (Mudd) Hepp
On *Rhizocarpon hochstetteri*.
B Ard.: RRR. **L** - .
Lit.: L8.

parasitica* (Lönnr.) Arnold. The **L report in LF0: 12 refers to *P. lecanorae* (see L8).

PHAEOSPOROBOLUS D. Hawksw. & Hafellner

***alpinus** R. Sant., Alstrup & D. Hawksw.
On *Ochrolechia androgyna*, *Pertusaria albescens*, *P. amara* and *P. pertusa*.
B - . **L** Ard.: RR, Lorr.: AR.
Lit.: L5: 35-36.

***usneae** D. Hawksw. & Hafellner
On *Usnea subfloridana*, and probably on other lichens (e. g. *Lecanora pulicaris*).
B Ard.: RRR. **L** Ard.: *AR*, Lorr.: *AR*.
The populations referred to this species may be heterogeneous and include other, non-described taxa.
Lit.: Di: 249-250, L5: 36, LF1: 315-316.

PHARCIDIA Körb., see *Stigmidium*

**coniodes* Nyl., see *Sphaerellothecium coniodes*

**frigida* (Sacc.) Vouaux, see *Stigmidium frigidum*

**lithoiceae* B. de Lesd., see under *Zwackhiomyces*

**mammilula* (Anzi) Vouaux f. *tenacis* Vouaux, see *Pronectria tenacis*

**maritima* B. de Lesd., see under *Stigmidium*

**parvipuncta* (Stein) G. Winter, see *Epibryon parvipunctum*

PHIALOPSIS Körb.

rubra (Hoffm.) Körb., see *Gyalecta ulmi*

PHLYCTIS Wallr.

agelaea (Ach.) Flot.
On very old *Fagus* trees in forest (recent collection near Berdorf), also on other trees, mainly *Salix* (French records).
B - . **L** Lorr.: RRR (Berdorf). **F** Mar.: R (1910).
Lit.: BDL1: 186, DG: 34, NL92: 161.

argena (Spreng.) Flot.
Corticolous, on all kinds of deciduous trees, in open and sheltered conditions.
B Mar.: R, Fl.: RR, Camp.: AR, Brab.: AC, Mosan: *C*, Ard.: *C*, Lorr.: *CC*. **L** Ard.: C, Lorr.: CC.
Lit.: Ba: 10, Ca: 116-117, Di: 194-195, DSL: 237, Ho: 205, NL84: 16, NL97: 53.

PHOMA Sacc.

***cytospora** (Vouaux) D. Hawksw.
On *Parmelia sulcata*.
B - . **L** Lorr.: RRR.
Lit.: L6: 145.

***lecanorina** Diederich
On *Lecanora expallens*.
B - . **L** Lorr.: RRR (type locality).
Lit.: Di: 250, LF0: 23-25.

***peltigerae** (P. Karst.) D. Hawksw.
Syn.: *Phyllosticta peltigerae* P. Karst.
On *Peltigera rufescens*.
B - . **L** Lorr.: RRR. **F** Mar.: RR (<1910)
Lit.: BDL1: 276, L5: 36, Vouaux (1912-14: 192-193).

**truncata* B. de Lesd., see *Abrothallus microspermus* Tul.

PHRAGMONAEVIA Rehm

**fuckelii* Rehm, see *Corticifraga fuckelii*

**peltigerae* (Nyl.) Rehm, see *Corticifraga peltigerae*

PHYLLOSTICTA Pers.

**peltigerae* P. Karst., see *Phoma peltigerae*

PHYSALOSPORA Niessl

**galactinae* Vouaux, see *Zwackhiomyces lecanorae*

**lecanorae* (Stein) G. Winter, see *Zwackhiomyces lecanorae*

**leptogiophila* (G. Winter) Vouaux, see *Cyanomyces leptogiophilus*

PHYSCIA (Schreb.) Michx.

adscendens (Fr.) H. Olivier
On exposed and nitrophilous bark, mainly on trees along roads and in orchards, rarely lignicolous, also saxicolous, especially on concrete and asbestos.
B Mar.: CC, Fl.: CC, elsewhere: *AC-C*. **L** Ard.: AC, Lorr.: C.
Lit.: Ca: 157-158, Ho: 206, La66: 471-472, Qu: 117-119, WS: 46-47, 93.

aipolia (Humb.) Fürnr.
Mainly on isolated trees (e. g. *Fraxinus*), in slightly nitrophilous conditions.
B Mar.: R, Fl.: RRR, Camp.: RRR, Brab.: R, Mosan: R, Ard.: AR, Lorr.: R. **L** Ard.: R, Lorr.: AR.
Lit.: Ho: 213, La66: 472-473, WS: 47, 94.

caesia (Hoffm.) Fürnr.
On exposed and nitrophilous natural rocks and artificial substrates (concrete, asbestos, old walls and gravestones), rarely on the dust-enriched base of old isolated trees.
B Mar.: AR, Fl.: C, Brab.: AR, elsewhere: *AR-C*. **L** Ard.: AR, Lorr.: AC.
Lit.: Ca: 160-161, Ho: 209, La66: 474, Qu: 119-120, WS: 48, 95.

clementei (Turner) Maas Geest.
Syn.: *P. clementiana* (Ach.) Kickx, *P. astroidea* auct., non (Clem.) Nyl.
On isolated trees (incl. exotic ones like *Gingko biloba*) with a well-lit and slightly nitrophilous bark.
B Fl.: RR (†1954), Brab.: RR (†1852), Mosan: RRR (†1952), Ard.: RRR (†1868). **L** - .
Now extinct throughout the area of study.
Lit.: La66: 474-475, Barkman (1990: 13-14).

dimidiata (Arnold) Nyl.
On exposed and nitrophilous siliceous rocks, also on artificial substrates, especially old walls.
B Brab.: RRR (1962), Mosan: RRR, Ard.: RR. **L** - . **D** Ard.: RRR.
Lit.: La66: 477, Diederich (1985a: 25; the specimen mentioned belongs to *P. tribacia*).

dubia (Hoffm.) Lettau var. **dubia**
Corticolous at the base of roadside trees with an enriched bark (*Fraxinus*, *Tilia*, *Ulmus*, etc.), and saxicolous, on nitrophilous, natural, siliceous or calcareous sandstone rocks, but especially on artificial substrates, like roofs and old walls.
B Mar.: AR, Fl.: R, Camp.: RR, Brab.: *R*, Mosan: *R*, Ard.: *AR*, Lorr.: *R*. **L** Ard.: AR, Lorr .: AR.
Lit.: Ho: 211, Mü1: 158, NL93: 45, WS: 48-49, 96.

dubia var. **teretiuscula** (Ach.) Clauzade & Cl. Roux
Syn.: *P. teretiuscula* (Ach.) Lynge
Mainly on natural, exposed, siliceous outcrops, usually in thermophilous habitats, rare on artificial substrates like roofs and old walls, once found on tree nearby rocks covered by the taxon.
B Mosan: R, Ard.: AR. **L** Ard.: AR.
Lit.: La66: 477-478, Mü1: 158, Giralt & van den Boom (1996: 81), Lambinon (1968b: 405).

semipinnata (J. F. Gmel.) Moberg
Syn.: *P. leptalea* (Ach.) DC.
On well-lit trees and branches in rather nitrophilous conditions.
B Mar.: RRR (†1962), Mosan: RRR (†1851), Ard.: RR (†1856). **L** Lorr.: R (†1891).
Now extinct throughout the area of study.
Lit.: La66: 470-471.

stellaris (L.) Nyl.
On trunks, branches and twigs of deciduous trees in open situations (roadside, orchards, hedges, etc.).
B Mar.: AR, Fl.: AR, Camp.: RRR, Brab.: AR, Mosan: AR, Ard.: R, Lorr.: R. **L** Ard.: RRR, Lorr.: AR.
Lit.: Ho: 213, La66: 473-474, WS: 49, 97.

subalbinea Nyl.
Syn.: *P. wainioi* Räsänen, *P. caesiella* (B. de Lesd.) Suza
On natural, exposed, siliceous outcrops and on artificial substrates (mainly old walls), rarely corticolous on roadside trees (*Fraxinus*).
B Mosan: RR (1929), Ard.: R. **L** Ard.: R.
Lit.: La66: 475-476, WS: 50, 100.

tenella (Scop.) DC.
Corticolous, mainly on roadside trees and in orchards, often in well-lit situations and on bark rich in dust, always in nitrophilous communities, also lignicolous, rarely saxicolous, on concrete or other artificial substrates.
B Mar.: CC, Fl.: CC, Brab.: CC, elsewhere: *C-CC*. **L** Ard.: C, Lorr.: C.
Lit.: Ca: 162-163, Ho: 215, La66: 471, Qu: 119, 121-122, WS: 49-50, 98.

tribacia (Ach.) Nyl.
On natural, sheltered, siliceous outcrops and on artificial substrates (mainly old walls), also corticolous on *Fraxinus* and *Tilia* on roadsides.
B Fl.: RRR, Mosan: RR, Ard.: R. **L** Ard.: R.
Lit.: Ho: 167, 217, 618, La66: 476, NL92: 173, NL97: 53, WS: 50, 99.

vitii Nádv.
Corticolous on roadside bole of *Ulmus*.
B Mosan: RR (1968). **L** - .
The species has not been recorded in the study area for more than thirty years and may be extinct, as its only habitat (*Ulmus* trees along roads) has almost disappeared.
Lit.: La66: 476.

adglutinata (Flörke) Nyl., see *Hyperphyscia adglutinata*

astroidea auct., non (Clem.) Nyl., see *P. clementei*

caesiella (B. de Lesd.) Suza, see *P. subalbinea*

ciliaris (L.) DC., see *Anaptychia ciliaris*

ciliata (Hoffm.) Du Rietz, see *Phaeophyscia ciliata*

clementiana (Ach.) Kickx, see *P. clementei*

cycloselis (Ach.) Vain., see *Phaeophyscia orbicularis*

detersa auct. belg., non (Nyl.) Poelt, see *Physconia enteroxantha*

elaeina auct., non (Wahlenb.) A. L. Sm., see *Hyperphyscia adglutinata*

enteroxantha Nyl., see *Physconia enteroxantha*

farrea auct., non (Ach.) Vain., *Physconia perisidiosa*

grisea (Lam.) Zahlbr., see *Physconia grisea*

leptalea (Ach.) DC., see *P. semipinnata*

leucoleiptes auct., non (Tuck.) Lettau, see *Physconia enteroxantha*

luganensis (Mereschk.) Moberg, see *Phaeophyscia chloantha*

muscigena (Ach.) Nyl., see *Physconia muscigena*

nigricans (Flörke) Stizenb., see *Phaeophyscia nigricans*

obscura (Humb.) Fürnr., see *Phaeophyscia orbicularis*

opuntiella Buschardt & Poelt, see *Agonimia opuntiella*

orbicularis (Neck.) Poetsch, see *Phaeophyscia orbicularis*

perisidiosa Erichsen, see *Physconia perisidiosa*

pulverulenta (Hoffm.) Fürnr., see *Physconia distorta*

sciastra (Ach.) Du Rietz, see *Phaeophyscia sciastra*

speciosa (Wulfen) Nyl., see *Heterodermia speciosa*

teretiuscula (Ach.) Lynge, see *P. dubia* var. *teretiuscula*

venusta (Ach.) Nyl., see *Physconia venusta*

virella (Ach.) Flagey, see *Phaeophyscia orbicularis*

wainioi Räsänen, see *P. subalbinea*

PHYSCONIA Poelt

distorta (With.) J. R. Laundon
Syn.: *P. pulverulacea* Moberg, *P. pulverulenta* (Hoffm.) Poelt, *Physcia pulverulenta* (Hoffm.) Fürnr.
Corticolous on old isolated trees (mainly *Fraxinus*, *Populus*, *Tilia*, *Ulmus*, rarely *Juglans*, *Quercus*, etc.) on roadside, in orchards, pastures or along streams, in rather nitrophilous conditions.
B Mar.: RR, Fl.: RRR, Camp.: RRR (1920), Brab.: AR→ RRR, Mosan: AR, Ard.: AR, Lorr.: AC. **L** Ard.: AR, Lorr.: AC.
Lit.: Ho: 167, 219, 618, La66: 478-479, WS: 53, 105.

enteroxantha (Nyl.) Poelt
Syn.: *Physcia enteroxantha* Nyl., *P. detersa* auct. belg., non (Nyl.) Poelt, *P. leucoleiptes* auct., non (Tuck.) Lettau
Corticolous, on roadside trees and in orchards (mainly *Fraxinus*, *Tilia* and *Ulmus*), in rather nitrophilous conditions.
B Mar.: R, Fl.: RRR, Camp.: RRR, Brab.: R, Mosan: R, Ard.: AR-AC, Lorr.: AR. **L** Ard.: AR, Lorr.: AR.
Lit.: Ho: 220, 619, La66: 480-481, WS: 51, 102.

grisea (Lam.) Poelt
Syn.: *Physcia grisea* (Lam.) Zahlbr.
Corticolous on old roadside trees and in orchards (mainly *Fraxinus*, *Populus*, *Tilia* and *Ulmus*, also on *Malus*, *Pyrus*, etc.), rare on concrete or on old calcareous walls, always in rather nitrophilous conditions.
B Mar.: C, Fl.: C, Brab.: C, elsewhere: *AR-AC*. **L** Ard.: R, Lorr.: AC.
Lit.: Ca: 164-165, Ho: 220, La66: 479-480, Qu: 122-123, VGH: 114, WS: 52, 103.

perisidiosa (Erichsen) Moberg
Syn.: *Physcia perisidiosa* Erichsen, *P. farrea* auct., non (Ach.) Vain.
Corticolous on old roadside trees (mainly *Fraxinus*, *Populus*, *Tilia* and *Ulmus*), especially at the base of the trunk, also saxicolous on old graves or on limestone rocks.
B Mar.: RRR, Mosan: RR, Ard.: RR, Lorr.: R. **L** Ard.: R, Lorr.: AC.
Lit.: La66: 480, WS: 52, 104.

muscigena (Ach.) Poelt, syn. *Physcia muscigena* (Ach.) Nyl. Reported from **B** by DG: 40, but no material seen and hence doubtful.

pulveracea Moberg, see *P. distorta*

pulverulenta (Hoffm.) Poelt, see *P. distorta*

venusta (Ach.) Poelt, syn. *Physcia venusta* (Ach.) Nyl. The material from **B** referred to this southern European species by DG: 40 most probably belongs to *P. perisidiosa*.

PHYSMA A. Massal.

compactum (Wallr.) A. Massal., see *Lempholemma polyanthes*

PHYTOCONIS Bory, see *Omphalina*

PLACIDIOPSIS Beltr.

cartilaginea (Nyl.) Vain.
Syn.: *P. custnani* (A. Massal.) Körb.
On soil in Xerobromion communities over calcareous rocks.
B Mosan: RR, perhaps overlooked. **L** - .
Lit.: L8, La69: 99, Breuss (1996: 77).

cinerascens (Nyl.) Breuss
On soil in Xerobromion communities over calcareous rocks.
B Mosan: RRR (1905), perhaps overlooked. **L** - .
Lit.: Breuss (1996: 81).

custnani (A. Massal.) Körb., see *P. cartilaginea*

PLACIDIUM A. Massal.

pilosellum (Breuss) Breuss
Syn.: *Catapyrenium pilosellum* Breuss, *Dermatocarpon rufescens* auct. p. p., non (Ach.) Th. Fr., *D. trapeziforme* auct. p. p., non (J. König) Trevis.
On calcareous soil, mainly in Xerobromion communities, sometimes on artificial substrates like wall crevices.
B Mosan: AR in suitable localities, especially in the main valleys. **L** Lorr.: RR. **F** Mosan: AR in suitable localities in the Meuse valley.
By far the most common species of the genus in the Mosan district.
Lit.: Ertz: 36, NL84: 13, Breuss (1990: 98-103).

rufescens (Ach.) A. Massal.
Syn.: *Catapyrenium rufescens* (Ach.) Breuss, *Dermatocarpon rufescens* (Ach.) Th. Fr.
In crevices of old calcareous walls.
B Mosan: RR, most probably overlooked. **L** - .
Lit.: Breuss (1990: 104-111).

squamulosum (Ach.) Breuss
Syn.: *Catapyrenium squamulosum* (Ach.) Breuss, *Dermatocarpon rufescens* auct. p. p., non (Ach.) Th. Fr., *D. trapeziforme* auct. p. p., non (J. König) Trevis.
On calcareous soil, mainly in Mesobromion and Xerobromion communities.
B Mosan: R, probably overlooked. **L** Lorr.: R. **F** Lorr.: RRR.
Lit.: Breuss (1990: 114-125).

lachneum (Ach.) B. de Lesd., syn. *Catapyrenium lachneum* (Ach.) R. Sant. The specimens from **L** Lorr. published under this name by Diederich (1986a: 118) refer to *Placidium pilosellum* and *P. squamulosum*.

PLACOCARPUS Trevis.

(*)**schaereri** (Fr.) Breuss
Syn.: *Dermatocarpon monstrosum* (Schaer.) Vain.
On natural, hard calcareous rocks in dry and sunny conditions, initially parasitic on *Lecanora* (probably *L. muralis*), soon forming an independent thallus.
B Mosan (Molignée valley): RRR (1988). **L** - .
Lit.: L6: 145, La66: 192-195.

PLACODIUM F. H. Wigg.

albescens (Hoffm.) A. Massal., see *Lecanora albescens*

circinatum (Pers.) Gray, see *Lobothallia radiosa*

crassum (Huds.) Th. Fr., see *Squamarina cartilaginea*

fulgens (Sw.) Gray, see *Fulgensia fulgens*

gelidum (L.) Körb., see *Placopsis gelida*

gypsaceum (Sm.) A. Massal., see *Squamarina gypsacea*

lentigerum (Weber) Th. Fr., see *Squamarina lentigera*

saxicolum (Pollich) Frege, see *Lecanora muralis*

PLACOLECIS Trevis.
Syn.: *Astroplaca* Bagl.

opaca (Fr.) Hafellner
Syn.: *Astroplaca opaca* (Fr.) Bagl., *Lecidea entochrysoides* Hue
On natural, dry and sunny, calcareous rocks.
B Mosan: R (type locality of *L. entochrysoides*). **L** - .
Lit.: Ertz: 20, 27, L8, Schneider (1979: 64-67).

PLACOPSIS (Nyl.) Linds.

lambii Hertel & V. Wirth
Syn.: *P. gelida* auct. belg., non (L.) Linds., *Lecanora gelida* auct. belg., non (L.) Ach.
On slate debris, especially those rich in heavy metals, in disused quarries.
B Ard.: RR (but common in its localities). **L** - . **F** Ard.: RRR.
Lit.: L5: 37, NL77: 22.

gelida (L.) Linds., syn. *Placodium gelidum* (L.) Körb. Reported from **L** Ard. by Ko: 190-191, but no specimen has been seen.

gelida auct. belg., non (L.) Linds., see *P. lambii*

PLACOPYRENIUM Breuss

Catapyrenium subtrachyticum B. de Lesd.
On calcareous stones of a wall.
B - . **L** - . **F** Mar.: RRR (1902) (type locality).
According to Breuss (1990: 144), this taxon belongs to *Placopyrenium*, but its taxonomic status requires further studies.
Lit.: BDL1: 232, Breuss (1990: 144).

trachyticum (Hazsl.) Breuss
Syn.: *Dermatocarpon trachyticum* (Hazsl.) Vain.
On a tufa rock, on a calcareous gravestone and on a sandstone wall in an old castle.
B Fl.: RRR. **L** Lorr.: RR. Overlooked ?
Lit.: L8, Mü4: 109.

PLACYNTHIELLA Elenkin
Syn.: *Saccomorpha* Elenkin

dasaea (Stirt.) Tønsberg
Corticolous, on acid bark, usually at the base of trees, lignicolous or terricolous, on soil, plant detritus, etc.
B - , overlooked. **L** Ard.: R, Lorr.: AR.
Lit.: L8.

icmalea (Ach.) Coppins & P. James
Syn.: *Saccomorpha icmalea* (Ach.) Clauzade & Cl. Roux
On various acidic substrates, incl. bark, wood (incl. burned or rotting), plant debris, humus-rich soil or sand, sometimes very abundant, either in exposed or shaded habitats; rare on shaded, siliceous rocks.
B Mar.: RRR, Camp.: *AC*, Mosan: RR, Ard., Lorr.: *AC*. **L** Ard.: AC, Lorr.: AC.
Lit.: Di: 206, NL93: 45-46, NL97: 54, Coppins & van den Boom (1995: 89).

oligotropha (J. R. Laundon) Coppins & P. James
Syn.: *Lecidea oligotropha* J. R. Laundon, *Saccomorpha oligotropha* (J. R. Laundon) Clauzade & Cl. Roux
Terricolous, on humus-rich soil or on old rotting stumps.
B Camp.: *AR*, Ard.: AR. **L** Ard.: RRR, Lorr.: RRR (†1891). **F** Mosan: RRR, Ard.: RRR.
Lit.: La69: 84, 102, NL87: 23, Sé: 139.

uliginosa (Schrad.) Coppins & P. James
Syn.: *Lecidea uliginosa* (Schrad.) Ach., *Saccomorpha uliginosa* (Schrad.) Hafellner
Terricolous, on detritus and humus-rich soil, or on dead or rotting bark.
B Camp.: *R*, Ard.: *AR*, Lorr.: RRR. **L** Ard.: RRR, Lorr.: R.
Lit.: Di: 206, La69: 84, 102, Mü1: 143, Sé: 139.

PLACYNTHIUM (Ach.) Gray

hungaricum Gyeln.
On exposed, hard calcareous rocks, often along cracks remaining moistened during longer periods.
B Mosan: R. **L** - .
Lit.: Ertz: 20, L8.

nigrum (Huds.) Gray
Syn.: *Lecothecium corallinoides* (Hoffm.) Körb.
On hard calcareous substrates (natural rocks, walls, concrete, etc.) submitted to periodic flushing.
B Fl.: RR, Brab.: RRR, Mosan: AC, Ard.: RR, Lorr.: *AR*. **L** Ard.: RRR, Lorr.: AR.
Lit.: Ertz: 20, Mü2: 197, NL84: 16, NL92: 173, NL97: 54.

subradiatum (Nyl.) Arnold
On vertical faces of exposed, hard calcareous rocks, mainly on surfaces submitted to periodic flushing.
B Mosan: RR. **L** - . **F** Mosan: RRR.
Lit.: Ertz: 20, L8, NL84: 16.

tremniacum (A. Massal.) Jatta
On hard calcareous rocks, mainly on surfaces submitted to periodic flushing.
B Mosan: RR. **L** - .
Lit.: Ertz: 20, L8.

garovaglii (A. Massal.) Malme, syn. *P. nigrum* var. *caesium* auct. Reported from **B** by DG: 21, but no material seen.

nigrum var. *caesium* auct., see *P. garovaglii*

PLATISMATIA W. L. Culb. & C. F. Culb.

glauca (L.) W. L. Culb. & C. F. Culb.
Syn.: *Cetraria glauca* (L.) Ach.
Corticolous on old isolated trees (e. g. *Fraxinus*, *Tilia*) and in forests (on bark of almost all species, incl. exotic conifers), rarely on siliceous rocks, exceptionally on acidic soil.
B Mar.: RRR, Camp.: R, Brab.: R, Mosan: AC, Ard.: C, Lorr.: AR. **L** Ard.: AC, Lorr.: AR.
Lit.: Ho: 167, 223, 621, La66: 419-424, Qu: 122, 124-125, WS: 53-54, 106, Lambinon (1968b: 405), Schumacker (1965).

PLECTOCARPON Fée

lichenum* (Sommerf.) D. Hawksw., syn. *Celidium stictarum* Tul. Reported from **L by Ko: 291, but no corresponding specimen has been seen.

PLEOPSIDIUM Körb.

chlorophanum (Wahlenb.) A. Massal.
Syn.: *Acarospora chlorophana* (Wahlenb.) A. Massal.
On natural, siliceous outcrops in dry, exposed underhangs.
B Ard.: RR. **L** - . **F** Ard.: RRR.
Lit.: L4: 20, Sé: 140.

PLEOSPORA Ces. & De Not.

**rufescentis* Vouaux, see *Dacampia rufescentis*

PLEUROSTICTA Petr.

acetabulum (Neck.) Elix & Lumbsch
Syn.: *Parmelia acetabulum* (Neck.) Duby
Mainly on old roadside trees (e. g. on *Fraxinus*, *Tilia* and *Ulmus*) or in orchards and extensive pasture, also saxicolous on old gravestones or walls.
B Mar.: C, Fl.: C, Camp.: AR, Brab.: AR, Mosan, Ard. (except Haute Ard.: R) and Lorr.: *AC*. **L** Ard.: AC, Lorr.: C.
Lit.: Ca: 134-135, Ho: 171, La66: 432, Qu: 100-101, WS: 36-37, 74, Lambinon (1968b: 405).

POETSCHIA Körb.

+*buellioides* Körb. This non-lichenized fungus was reported from **L** Lorr. by Ko: 254 as a lichen; no relevant specimen has been seen.

**talcophila* (Flot.) Stein, see *Karschia talcophila*

POLYBLASTIA A. Massal.

The genus is poorly collected in the study area and requires further studies.

albida Arnold
On shaded, vertical, natural sandstone or tufa rocks, in or at the edge of forests.
B - . **L** Lorr.: RR. Most probably overlooked.
Lit.: L8.

cupularis A. Massal.
Syn.: *P. intercedens* (Nyl.) Lönnr.
On natural, calcareous rocks, in rather humid and sheltered conditions.
B Mosan: RR. **L** - .
Lit.: BDL2: 44, NL87: 22.

deminuta Arnold
On natural, exposed, calcareous rocks.
B Mosan: RR. **L** - .
Lit.: NL84: 17.

dermatodes A. Massal.
On natural, exposed, calcareous rocks.
B Mosan: RR. **L** - .
Lit.: NL87: 22, NL97: 54.

philaea Zschacke
Terricolous, in Mesobromion and Xerobromion communities.
B Mosan: RRR. **L** Lorr.: RRR.
Lit.: L6: 145, L8.

allobata (Stizenb.) Zschacke, see *Agonimia allobata*

+*fallaciosa* Arnold, see *Julella fallaciosa*

intercedens (Nyl.) Lönnr., see *P. cupularis*

pertusula (Nyl.) Zschacke, syn. *Thelidium pertusulum* (Nyl.) B. de Lesd. Reported from **B** Mosan by BDL2: 43-44 and Zschacke (1933: 434), but no material seen. A name of uncertain application, tentatively included in *P. sepulta* by Clauzade & Roux (1985: 622).

sepulta A. Massal. Reported from **B** Mosan by BDL2: 44, but no material seen. See also *P. pertusula*.

vouauxii B. de Lesd., see *Agonimia vouauxii*

POLYCHIDIUM (Ach.) Gray

muscicola (Sw.) Gray
Syn.: *Leptogium muscicolum* (Sw.) Fr.

Terricolous over siliceous rocks, in moist and sheltered or exposed conditions.
B Ard.: RR (<1900). **L** Ard.: RRR (1991).
Lit.: DG: 19, La68: 73, La69: 102.

POLYCOCCUM Körb.

***crassum** Vězda
On *Peltigera* sp.
B - . **L** Lorr.: RRR.
Lit.: Hawksworth & Diederich (1988: 300).

***kerneri** J. Steiner
On *Lecidea fuscoatra* (thallus).
B - . **L** - . **F** Mosan: RRR.
Lit.: Hawksworth (1994: 340-342).

***marmoratum** (Kremp.) D. Hawksw.
On *Verrucaria* sp. over calcareous rocks.
B Mosan: RR. **L** - .
Lit.: NL97: 28.

***microstictum** (Mudd) Arnold
On *Acarospora fuscata*.
B - . **L** Ard.: RRR.
Lit.: L8.

***opulentum** (Th. Fr.) Arnold
On *Thelidium decipiens*, *Verrucaria calciseda* and an unidentified crust, all over calcareous rocks.
B Mosan: R. **L** - .
Lit.: Ertz: 20, 27, NL97: 28.

***peltigerae** (Fuckel) Vězda
Syn.: *Didymosphaeria peltigerae* Fuckel
On *Peltigera* species, especially *P. praetextata* and *P. rufescens*.
B Mosan: RRR. **L** Lorr.: R. **F** Mar.: RR (<1914). **D** Ard.: RRR.
Lit.: Bouly de Lesdain (1914: 161), LF0: 12, Hawksworth & Diederich (1988: 303-304), Vouaux (1912-14: 107).

***pulvinatum** (Eitner) R. Sant.
Syn.: *P. galligenum* Vězda
On *Physcia caesia*.
B - . **L** Lorr.: R.
Lit.: L5: 37.

***tinantii** Diederich
On *Caloplaca ferruginea*.
B - . **L** Distr. unknown: RRR (†<1850) (type locality).
Lit.: Di: 196, LF1: 316-318.

arnoldii* (Hepp) D. Hawksw., syn. *Tichothecium arnoldii* (Hepp) A. Massal. Reported from **L by Ko: 317, but no specimen seen.

**galligenum* Vězda, see *P. pulvinatum*

POLYSPORINA Vězda

simplex (Davies) Vězda
Syn.: *Biatorella simplex* (Davies) Branth & Rostr., *Sarcogyne simplex* (Davies) Nyl.
On exposed, natural, siliceous outcrops.
B Ard.: AR. **L** Ard.: R.
Lit.: DG: 31, NL92: 161.

PORINA Müll. Arg.

aenea (Wallr.) Zahlbr.
Syn.: *Trichothelium aeneum* (Wallr.) R. C. Harris, *P. carpinea* (Pers.) Zahlbr.
Corticolous on smooth bark, mainly on *Carpinus*, *Corylus*, *Fagus* and *Fraxinus*, also on twigs and leaves of *Buxus*, usually in sheltered coppices or woodlands.
B Mar.: RRR, Mosan: AR, Ard.: *AC* (but absent in Haute Ard.), Lorr.: *AC*. **L** Ard.: AR, Lorr.: AC.
Lit.: Di: 197, Ho: 218, 223, NL84: 17, van den Boom & Sérusiaux (1996: 22).

borreri (Trevis.) D. Hawksw. & P. James
Corticolous, on *Acer*, in sheltered forests.
B Mosan: RR. **L** - .
Lit.: L7: 89, NL84: 17.

byssophila (Hepp) Zahlbr.
On steep, shaded, calcareous rocks in sheltered habitats.
B Mosan: RR. **L** Lorr.: RRR.
Lit.: NL84: 17.

chlorotica (Ach.) Müll. Arg.
Syn.: *Sagedia chlorotica* (Ach.) A. Massal., *Trichothelium chloroticum* (Ach.) R. C. Harris
On natural, siliceous and sandstone outcrops, usually in shade, occasionally on frequently submerged rocks by small streams, rarely on iron.
B Mar.: RRR, Fl.: RRR, Mosan: R, Ard.: AR, Lorr.: RR. **L** Ard.: RR, Lorr.: R.
Lit.: Mü1: 141, NL77: 22, NL84: 17, NL92: 161, NL97: 54.

interjungens (Nyl.) Zahlbr.
On quartzitic boulders in a stream.
B Ard.: RRR. **L** - .
Lit.: L8.

lectissima (Fr.) Zahlbr.
On natural, siliceous rocks, on shaded, vertical surfaces, usually submitted to periodic flushing or spraying.
B Mosan: RRR, Ard.: AR. **L** Ard.: RRR.
Lit.: DG: 15, La69: 98.

leptalea (Durieu & Mont.) A. L. Sm.
Syn.: *Segestria leptalea* (Durieu & Mont.) R. C. Harris
Corticolous, on *Acer*, *Carpinus*, *Cornus*, *Fagus* and *Quercus*, also on twigs and leaves of *Buxus*, most common on smooth bark in shade.
B Mosan: AR, Ard.: R, Lorr.: RR. **L** Ard.: RR, Lorr.: R.
Lit.: Di: 198, L3: 33, NL84: 17, NL92: 173, NL97: 54, Tholl et al. (1999), van den Boom & Sérusiaux (1996: 22).

linearis (Leight.) Zahlbr.
Syn.: *Trichothelium lineare* (Leight.) R. C. Harris, *Sagedia persicina* Körb.
Saxicolous on calcareous and sandstone rocks in shaded, sheltered habitats.
B Mosan: AR, Ard.: RR. **L** Lorr.: RR.
Lit.: DG: 15, Ertz: 20, La69: 98, NL84: 17, NL97: 54.

carpinea (Pers.) Zahlbr., see *P. aenea*

POROCYPHUS Körb.

coccodes (Flot.) Körb.
On siliceous and calcareous, natural outcrops and walls, usually in ruderal conditions.
B Ard.: RRR. **L** Lorr.: RR. Most probably overlooked.
Lit.: L8.

rehmicus (A. Massal.) Zahlbr.
On shaded or exposed, calcareous outcrops; also on a wall close to a river, almost at water level.
Two distinct taxa might be involved: *P. rehmicus* s. s. with large ascospores (16-25 × 6-12 µm) and *P. byssoides* with smaller ones (10-16 × 6-9 µm).
P. rehmicus s. s.: **B** - . **L** Lorr.: RRR.
P. byssoides Hepp: **B** Mosan: R, Ard.: RRR. **L** - .
Lit.: NL97: 28-29.

byssoides Hepp, see *P. rehmicus*

PORPIDIA Körb.
Syn.: *Huilia* Zahlbr.
The genus is widespread and locally common in the study area, but little studied. Several collections may represent additional taxa.

albocaerulescens (Wulfen) Hertel & Knoph
Syn.: *Lecidea albocaerulescens* auct., non (Wulfen) Ach.
On siliceous rocks in sheltered conditions by a river (for the only recent specimen).
B Ard.: RR (1963). **L** - . **F** Ard.: RRR (<1900).
Lit.: L8, Hertel & Knoph (1984: 480), Knoph & Schrüfer (1993: 2-4).

cinereoatra (Ach.) Hertel & Knoph
Syn.: *Lecidea cinereoatra* Ach.
On siliceous rocks, mainly in natural habitats.
B Ard.: AR. **L** - .
Lit.: Mü1: 143, Mü4: 109, Sé: 138.

contraponenda (Arnold) Knoph & Hertel
On natural, siliceous outcrops or on slate debris in disused quarries.
B Ard.: R. **L** - .
Lit.: L8.

crustulata (Ach.) Hertel & Knoph
Syn.: *Lecidea crustulata* (Ach.) Spreng., incl. var. *macrospora* Körb.
On siliceous rocks in natural and artificial (especially rubbles and pebbles) habitats.
B Camp.: RRR, Mosan: *AR*, Ard.: *AC*, Lorr.: RR. **L** Ard.: RR.
Lit.: DG: 23, La69: 102, Mü1: 143, NL77: 21.

glaucophaea (Körb.) Hertel & Knoph
On shaded, siliceous rocks in natural habitats.
B Ard.: RR. **L** Ard.: RR.
Lit.: L8.

hydrophila (Fr.) Hertel & A. J. Schwab
Syn.: *Lecidea hydrophila* Fr.
On siliceous rocks very close to water level in small rivers.
B Ard.: AR. **L** - .
Lit.: L4: 29, NL87: 22.

macrocarpa (DC.) Hertel & A. J. Schwab
Syn.: *Lecidea macrocarpa* (DC.) Steud., ?*Lecidea contigua* auct., non Fr., incl. *Porpidia nigrocruenta* (Anzi) Diederich & Sérus., syn. *Lecidea nigrocruenta* Anzi
On siliceous rocks in natural and artificial (especially slate rubbles) habitats.
B Mosan: RRR, Ard.: *AR*, Lorr.: RRR. **L** Ard.: RR.
Lit.: L4: 28-29, Mü1: 143, NL77: 21, NL92: 173, Sé: 138-139.

musiva (Körb.) Hertel & Knoph
On natural, siliceous rocks.
B Ard.: R. **L** - .
This species might be an extreme variant of *P. cinereoatra*.
Lit.: L8.

platycarpoides (Bagl.) Hertel
On natural, siliceous outcrops, in humid and sheltered conditions, once found on slate debris.
B Ard.: R. **L** Ard.: RRR.
Lit.: L8.

soredizodes (Nyl.) J. R. Laundon
Syn.: *Lecidea soredizodes* (Nyl.) Sandst.
On siliceous rocks in natural and artificial (walls, rubbles and slates) habitats.
B Brab.: RRR, Mosan: RR, Ard.: R. **L** Lorr.: RRR. Most probably overlooked.
Lit.: NL84: 17, NL87: 23, NL97: 54.

tuberculosa (Sm.) Hertel & Knoph
Syn.: *Lecidea sorediza* Nyl., *L. tumida* A. Massal.
On siliceous rocks in natural and artificial (walls, rubbles and slates) habitats.
B Fl.: RRR, Brab.: RRR, Mosan: *AR*, Ard.: AC, Lorr.: RR. **L** Ard.: *AC*, Lorr.: RR.
Lit.: La69: 102, NL77: 21, NL92: 173, NL97: 54, Sé: 139.

athroocarpa (Ach.) Hertel & Rambold, see *Immersaria athroocarpa*

nigrocruenta (Anzi) Diederich & Sérus., see *Porpidia macrocarpa*

speirea (Ach.) Kremp., syn. *Lecidea speirea* (Ach.) Ach. Reported from **L** Lorr. by Ko: 266, but no relevant specimen has been seen.

PRONECTRIA Clem.

Anamorphs: *Acremonium* (not observed in the study area) and *Illosporium* C. Mart.
Two species of *Pronectria* known from the study area have recently been combined in *Xenonectriella* (Rossman et al. 1999: 169-170). We prefer to keep them provisionally in *Pronectria* until the whole genus has been critically re-examined.

***Illosporium carneum** Fr.
Syn.: *Aecidium peltigerae* DC.
On *Peltigera* species.
B Mosan: RRR, Ard.: RRR (<1830). **L** Lorr.: RR. **F** Mar.: RR (<1914).
The name *I. carneum* is used for the anamorph of several *Pronectria* species developing on *Peltigera*, especially *P. erythrinella* (Nyl.) Lowen and *P. robergei*. In the study area, it has never been observed together with a species of *Pronectria*.
Lit.: Bouly de Lesdain (1914: 169), Marchand (1826), Hawksworth (1979: 232-235), Libert (Pl. Crypt. Ard. no. 383, K), Vouaux (1912-14: 317).

***leptaleae** (J. Steiner) Lowen
Syn.: *Xenonectriella leptaleae* (J. Steiner) Rossman & Lowen
On *Phaeophyscia orbicularis*.
B - . **L** Lorr.: RRR.
Lit.: L8.

***ornamentata** (D. Hawksw.) Lowen
Syn.: *Xenonectriella ornamentata* (D. Hawksw.) Rossman
On *Peltigera* sp.
B - . **L** Lorr.: RRR.
Lit.: Goffinet et al. (1995: 200), Rossman et al. (1999: 170).

***robergei** (Mont. & Desm.) Lowen
Syn.: *Nectria lichenicola* (Ces.) Sacc.
On *Peltigera didactyla*, *P. polydactylon* s. l. and *P. rufescens*.
B Mar.: RR, Brab.: RRR (†<1900), Ard.: RRR (†<1900). **L** Lorr.: RR.
Lit.: Bouly de Lesdain (1914: 157-158), Goffinet et al. (1995: 200).

***tenacis** (Vouaux) Lowen
Syn.: *Pharcidia mammilula* (Anzi) Vouaux f. *tenacis* Vouaux
On *Collema tenax*.
B - . **L** - . **F** Mar.: RRR (<1910) (type locality).
Lit.: BDL1: 273, Rossman et al. (1999: 60).

***terrestris** Lowen & Diederich
On *Thrombium epigaeum*.
B - . **L** Lorr.: RRR (type locality).
Lit.: Lowen & Diederich (1990: 790-791).

***verrucariae** (Vouaux) Lowen
Syn.: *Nectria verrucariae* Vouaux
On *Verrucaria hochstetteri*.
B - . **L** - . **F** Mar.: RRR (1904) (type locality).
Lit.: Bouly de Lesdain (1914: 157-158), Rossman et al. (1999: 63), Vouaux (1912: 186-187).

***xanthoriae** Lowen & Diederich
On *Xanthoria parietina* (on *Populus*).
B - . **L** Lorr.: RRR.
Lit.: Di: 198-199, Lowen & Diederich (1990: 788-790).

PROTOBLASTENIA (Zahlbr.) J. Steiner

calva (Dicks.) Zahlbr.
On hard, natural, calcareous rocks in dry and sunny conditions.
B Mosan: AR, Lorr.: RR. **L** - .
Lit.: DG: 38, La69: 107, NL97: 54.

cyclospora (Körb.) Poelt
On hard, natural, calcareous rocks in dry and sunny conditions.
B Mosan: AR. **L** - .
Lit.: Ertz: 20, NL84: 17, NL87: 23, NL97: 54.

incrustans (DC.) J. Steiner
On hard, natural, calcareous rocks in dry and sunny conditions.
B Mosan: AR. **L** - .
Lit.: La69: 107, NL97: 54.

rupestris (Scop.) J. Steiner
Syn.: *Biatora rupestris* (Scop.) Fr.
On natural, calcareous outcrops and in artificial habitats (walls, concrete, etc.), also on pebbles in Xerobromion communities.
B Fl.: RRR, Camp.: RRR, Brab.: R, Mosan: AC, Ard.: RR, Lorr.: RR. **L** Ard.: RRR, Lorr.: AR.
Lit.: Ertz: 20, La69: 107, Mü1: 156, NL77: 23, NL84: 17, NL92: 173, NL93: 46, NL97: 54, Hoffmann & Van Rompu (1995), Zwaenepoel et al. (1994: 37).

chondrodes (A. Massal.) Zahlbr., see *Clauzadea chondrodes*

immersa (Hoffm.) J. Steiner, see *Clauzadea immersa*

metzleri (Körb.) J. Steiner, see *Clauzadea metzleri*

monticola (Schaer.) J. Steiner, see *Clauzadea monticola*

quernea (Dicks.) Clauzade, see *Pyrrhospora quernea*

testacea (Hoffm.) Clauzade & Rondon, see *Psora testacea*

PROTOPARMELIA Choisy

(*)**atriseda** (Fr.) R. Sant. & V. Wirth
On hard and rather exposed, siliceous rocks, always associated with *Rhizocarpon geographicum*.
B Ard.: RR. **L** - .
Lit.: L4: 23 (sub *Lecanora nephaea*), Sé: 142.

badia (Hoffm.) Hafellner
Syn.: *Lecanora badia* (Hoffm.) Ach.
On hard and rather exposed, siliceous rocks, rarely on sandstone.
B Ard.: AR. **L** Ard.: RR, Lorr.: RRR.
Lit.: Mü1: 151, NL92: 162, Sé: 139.

hypotremella van Herk, Spier & V. Wirth
On *Quercus* (roadside or scattered trees).
B Mosan: RRR. **L** - . **NL** Camp.: RR. Most probably overlooked.
Lit.: L8, Aptroot et al. (1997).

nephaea (Sommerf.) R. Sant., syn. *Lecanora nephaea* Sommerf. The material published under this name (L4: 23) belongs to *Protoparmelia atriseda*.

Lecanora nitens (Pers.) Ach. Reported from **B** by DG: 33 and Vanek (1976), but no material seen. The species belongs to *Protoparmelia*, but has never been combined there.

PROTOTHELENELLA Räsänen

corrosa (Körb.) H. Mayrhofer & Poelt
On shaded, natural, siliceous rocks.
B Ard.: RRR. **L** - .
Lit.: L8.

PSEUDEPHEBE M. Choisy

pubescens (L.) M. Choisy, syn. *Parmelia pubescens* (L.) Vain. Reported by Mü4: 119 and Mü5: 53 as being present in Libert's exsiccate (from **B** Ard.), but the relevant material (Libert, Pl. Crypt. Ard., Fasc. 1, no 18, LG) is a typical *Polychidium muscicola*.

PSEUDEVERNIA Zopf

furfuracea (L.) Zopf
Syn.: *Parmelia furfuracea* (L.) Ach., *Evernia furfuracea* (L.) W. Mann, incl. *Pseudevernia furfuracea* var. *ceratea* (Ach.) D. Hawksw., syn. *Evernia olivetorina* Zopf
In forests (mainly on *Betula*, *Fagus* and *Quercus*) and on isolated trees (e. g. *Fraxinus*, *Tilia*), most common on acid bark, incl. that of introduced conifers.
B Mar.: RR, Camp.: R, Brab.: AR→RR, Mosan: AR, Ard.: C, Lorr.: AC. **L** Ard.: C, Lorr.: AC.
Lit.: Ca: 124, Ho: 224, 622, La66: 393-404, WS: 54-56, 107-108.

PSEUDOPARMELIA Lynge

caperata (L.) Hale, see *Flavoparmelia caperata*

PSEUDOROBILLARDA M. Morelet

*__peltigerae__ Diederich
On *Peltigera rufescens* (in white necrotic areas of the upper thallus surface).
B Mosan: RRR (type locality). **L** - .
Lit.: NL97: 29-31.

PSILOLECHIA A. Massal.

clavulifera (Nyl.) Coppins
On natural, siliceous and sandstone rocks, or on roots, usually in dry underhangs or in shaded habitats.
B Ard.: RR. **L** Lorr.: RRR.
Lit.: L4: 29, NL92: 162.

leprosa Coppins & Purvis
Saxicolous, on walls contaminated by heavy metals (mainly Cu), often on brick, mainly in artificial, but also in natural habitats, on siliceous rocks enriched with Cu and Fe.
B Fl.: RRR, Camp.: *R*, Mosan: RR, Ard.: RR. **L** - , probably more common, especially on walls.
Lit.: L5: 37-38, NL84: 17, NL93: 46, Coppins & van den Boom (1995: 89).

lucida (Ach.) M. Choisy
Syn.: *Biatora lucida* (Ach.) Fr., *Lecidea lucida* (Ach.) Ach.
Saxicolous, on siliceous and sandstone rocks, almost always in dry and sheltered conditions, in natural and artificial habitats, exceptionally on sand or roots of trees.
B Fl.: RRR, Camp.: *RR*, Brab.: RR, Mosan: AR, Ard.: *C*, Lorr.: RRR. **L** Ard.: *C*, Lorr.: AR.
Lit.: Di: 199, La69: 102, NL77: 21, NL84: 17, NL93: 46, Hoffmann & Van Rompu (1995), Zwaenepoel et al. (1994: 37).

PSORA Hoffm.

decipiens (Hedw.) Hoffm.
Syn.: *Lecidea decipiens* (Hedw.) Ach.
Terricolous in crevices of hard calcareous rocks and in Xerobromion communities, in dry and sunny conditions.
B Mosan: RR. **L** - .
Lit.: Ertz: 20, 27, La69: 103, 126, NL77: 21, NL84: 17.

lurida (Ach.) DC.
Syn.: *Lecidea lurida* (Ach.) DC.
Terricolous in crevices of hard calcareous rocks, usually in dry and sunny conditions.
B Mosan: AR, Ard.: RRR. **L** - . **F** Mosan: RRR, Lorr. (Moselle): RRR.
Lit.: Ertz: 20, La69: 101, 103, 124, NL77: 21, NL84: 17, NL97: 54, John (1986: 55).

testacea Hoffm.
Syn.: *Chrysopsora testacea* (Hoffm.) Choisy, *Lecidea testacea* (Hoffm.) Ach., *Protoblastenia testacea* (Hoffm.) Clauzade & Rondon
In crevices on dry and sunny, calcareous outcrops.
B Mosan: R. **L** Distr. unknown: RRR (†<1850). **F** Mosan: RRR.
Lit.: Ertz: 20, La69: 85, 107, 172, NL97: 54, NL99, Diederich (1986a: 121).

vallesiaca (Schaer.) Timdal
Syn.: *P. deceptoria* (Nyl.) Flagey
Terricolous in deep fissures of hard and exposed, calcareous outcrops.
B Mosan: RRR. **L** - .
Lit.: La69: 103, 124.

deceptoria (Nyl.) Flagey, see *P. vallesiaca*

demissa (Rutstr.) Almq., see *Lecidoma demissum*

scalaris (Ach.) Hook., see *Hypocenomyce scalaris*

PSORINA Gotth. Schneid.

conglomerata (Ach.) Gotth. Schneid., syn. *Toninia conglomerata* (Ach.) Boistel. Reported from **B** by DG: 25, but no material seen.

PSOROGLAENA Müll. Arg.

stigonemoides (Orange) Henssen
Syn.: *Leucocarpia stigonemoides* (Orange) Hafellner & Kalb, *Macentina stigonemoides* Orange
Corticolous, mainly on *Sambucus*, also on *Hedera* and *Sorbus*, usually near rivers or in sheltered and humid conditions.
B Mosan: *R*, Lorr.: RRR. **L** Ard.: RRR, Lorr.: RR. Most probably overlooked.
Lit.: L5: 30, NL92: 159, van den Boom & Sérusiaux (1996: 22).

PSOROMA Michx.

hypnorum (Vahl) Gray
Ecology of the single specimen unknown, probably over terricolous mosses in a humid forest.
B - . **L** Lorr.: RRR (†1947).
Now extinct throughout the area of study.
Lit.: Sérusiaux (1984: 86).

crassum (Huds.) Gray, see *Squamarina cartilaginea*

PSOROTICHIA A. Massal.

schaereri (A. Massal.) Arnold
Syn.: *P. caesia* (Nyl.) Forssell

On calcareous or slightly schistose rocks, incl. on tufa, in shaded or periodically humid habitats.
B Mosan: AR. **L** Lorr.: RRR.
The material referred to this species in the study area might be heterogeneous.
Lit.: Ertz: 20, NL97: 31-32.

caesia (Nyl.) Forssell, see *P. schaereri*

diffracta (Nyl.) Forssell. Reported erroneously from **B** Mosan (NL84: 17, as *P.* cf. *diffracta*), the corresponding specimen belonging to an unidentified cyanobacterial lichen (NL97: 31).

tongletii B. de Lesd. Described from **B** Mosan by Bouly de Lesdain (1909: 174-175) (type locality), but no material seen. A name of uncertain application.

PUNCTELIA Krog

borreri (Sm.) Krog
Syn.: *Parmelia borreri* (Sm.) Turner, *P. borreri* var. *pseudoborreri* (Asahina) Lambinon & Targé
Corticolous, on isolated trees (*Fraxinus*, *Salix* or *Ulmus*).
B Mosan: RR, Ard.: RRR. **L** Lorr.: RRR. Probably overlooked.
Most herbarium specimens named *P. borreri* belong either to *P. subrudecta* or to *P. ulophylla*.
Lit.: La66: 442-443, Targé & Lambinon (1965).

subrudecta (Nyl.) Krog
Syn.: *Parmelia subrudecta* Nyl., *P. borreri* auct. p. p., non (Sm.) Turner
Mainly on old isolated trees, in orchards, on roadside or in pastures, rarely in forests or on slightly calcareous rocks in disused quarries or on road cuttings.
B Mar.: CC, Fl.: CC, Camp.: AR, Brab.: C, Mosan: RR, Ard.: *AR*, Lorr.: *AR*. **L** Ard.: AR, Lorr.: AC.
Lit.: Ca: 148-149, Ho: 192, La66: 441-442, NL84: 16, Qu: 110, 112, VGH: 114, WS: 43, 86, van Herk & Aptroot (in prep.).

ulophylla (Ach.) van Herk & Aptroot, comb. ined.
Syn.: *Parmelia borreri* var. *ulophylla* (Ach.) Nyl., *P. borreri* auct. p. p., non (Sm.) Turner
Mainly on isolated trees, in orchards, on roadside or in pastures, rarely in forests, often occurring together with *P. subrudecta*.
B Mar.: RR, Fl.: RRR, Brab.: RRR, Mosan: RR, Ard.: AR, Lorr.: RRR. **L** Ard.: RRR, Lorr.: R. **F** Mosan: RRR, Lorr.: RR.
The distinction of this species from *P. subrudecta* s. s. has been made recently and the exact distribution and ecology of both species in the area of study require further investigations.
Lit.: van Herk & Aptroot (in prep.).

stictica (Duby) Krog, syn. *Parmelia stictica* (Duby) Nyl. Reported from **B** by DG: 36, but no material seen.

PYCNOTHELIA (Ach.) Dufour

papillaria (Ehrh.) Dufour
Syn.: *Cladonia papillaria* (Ehrh.) Hoffm.
Terricolous on sand or humus-rich soil, formerly locally abundant in heathlands, also found once on soil contaminated with heavy metals by a disused mine.
B Brab.: RRR, Ard.: R, Lorr.: RRR. **L** Ard.: RR, Lorr.: RR (†1891).
Lit.: La68: 74, La69: 85, 94, 130, Mü1: 144, Mü2: 196, Feltgen (1902: 173), Vanek (1976).

PYRENIDIUM Nyl.

***hetairizans** (Leight.) Arnold
On *Staurothele fissa* in a stream over siliceous rocks.
B - . **L** Lorr.: RRR.
Lit.: Molitor & Diederich (1997: 77).

PYRENOCHAETA De Not.

***xanthoriae** Diederich
On *Xanthoria parietina*.
B - . **L** Lorr.: RR (type locality).
Lit.: Di: 251, LF1: 318-319.

PYRENOCOLLEMA Reinke

chlorococcum Aptroot & van den Boom
Terricolous, on zinc-contaminated soil, plant detritus and weathered wood in industrial wasteland.
B Camp.: RRR. **L** - .
Lit.: Aptroot & van den Boom (1998).

halodytes (Nyl.) R. C. Harris
Syn.: *Arthopyrenia halodytes* (Nyl.) Arnold, *A. kelpii* Körb., *Thelidium halodytes* (Nyl.) Erichsen
On artificial calcareous walls (incl. on bricks and mortar) and on *Balanus* in the littoral zone.
B Mar.: R. **L** - . **F** Mar.: RR.
Lit.: La69: 82, 98, Duvigneaud & Lambinon (1963: 27), Santesson (1939: 59).

+*saxicola* (A. Massal.) Coppins, see *Naetrocymbe saxicola*

PYRENULA A. Massal.

chlorospila Arnold
Corticolous, mainly on *Fraxinus*.
B Fl.: RR (†<1868), Brab.: RRR (†<1868), Ard.: RRR (†<1865). **L** - .
This species is extinct throughout the study area, but is still rather abundant in forests along the coast in France, just S of this area.
Lit.: L5: 38.

laevigata (Pers.) Arnold
Corticolous, on smooth bark.
B - . **L** Lorr.: RRR (†<1850).
Exact locality unknown, probably near Echternach.
Now extinct throughout the area of study.
Lit.: DG: 15, Di: 200-201, L5: 39.

macrospora (Degel.) Coppins & P. James
Corticolous in unknown ecological conditions.
B ?Brab.: RRR (†<1868). **L** - .
It is not absolutely certain that the only known specimen was collected in Belgium.
Now extinct throughout the area of study.
Lit.: L5: 39.

nitida (Weigel) Ach.
Corticolous, on *Carpinus* or *Fagus*, exceptionally on *Quercus*, in well-preserved forests.
B Ard.: RR. **L** Ard.: RR, Lorr.: AR.
Lit.: Di: 201-202, La68: 71, Mü1: 140, Mü5: 22, NL97: 54.

nitidella (Schaer.) Müll. Arg.
On young *Carpinus* in forest and on a very old *Tilia* in an open place.
B Brab.: RRR (†1896), Ard. RRR (1988). **L** - . **F** Lorr.: RRR (1985).
Lit.: L5: 39, L8.

+*coryli* A. Massal. The ancient report of this species from **L** by Ko: 311-312 is not sustained by any relevant material, and is therefore most doubtful.

farrea auct., non (Ach.) Branth & Rostr., see *Eopyrenula leucoplaca*

leucoplaca (Wallr.) Körb., see *Eopyrenula leucoplaca*

pinguis Fée. Reported from **B** by DG: 15, but no material seen. A name of uncertain application.

PYRRHOSPORA Körb.

quernea (Dicks.) Körb.
Syn.: *Biatora quernea* (Dicks.) Fr., *Protoblastenia quernea* (Dicks.) Clauzade
Corticolous, most frequent on old *Quercus*, usually in well-lit situations.
B Fl.: RRR (†<1868), Camp.: RRR, Brab.: RR, Mosan: AR, Ard.: R, Lorr.: R. **L** Ard.: RR, Lorr.: AR. Probably overlooked due to frequent confusion with *Lecanora expallens*.
Lit.: Ba: 9, Di: 202, Ho: 218, 225, 622, L5: 39-40, NL84: 17.

rubiginans (Nyl.) P. James & Poelt
On natural, shaded, siliceous outcrops in forests.
B Ard.: R. **L** - .
Lit.: L8.

RACODIUM Fr.

rupestre Pers.
Syn.: *Cystocoleus rupestris* (Pers.) Rabenh.
Saxicolous, on shaded, siliceous and sandstone rocks, usually in humid underhangs protected from rain, exceptionally corticolous.
B Ard.: AR. **L** Lorr.: R.
Lit.: La68: 80, NL92: 173, Sé: 139.

RAMALINA Ach.

farinacea (L.) Ach.
Corticolous, on all kinds of deciduous trees, in open or in forest conditions, rarely saxicolous, on siliceous rocks or sandstone walls.
B Mar.: CC, Fl.: C, Camp.: AR, Brab.: AR, Mosan, Ard., Lorr.: *AC*. **L** Ard.: AC, Lorr.: AC.
Several chemotypes have been recognized in the study area (with protocetraric acid, with hypoprotocetraric ac., and with salazinic ac.), but none of these merits recognition of a separate taxon.
Lit.: Ca: 126-127, Ho: 227, La66: 451-452, La68: 79, Qu: 134-135, WS: 56-57, 109, Diederich (1985a: 25).

fastigiata (Pers.) Ach.
Syn.: *R. populina* (Hoffm.) Vain.
Corticolous on old roadside trees (mainly on *Fraxinus*, *Populus* and *Ulmus*).
B Mar.: C, Fl.: AR, Brab.: AR (†? 1962), Mosan: AR, Ard.: AC, Lorr.: R. **L** Ard.: AR, Lorr.: AR.
Lit.: Ho: 229, L4: 20, La66: 451, WS: 57, 110, Barkman (1990: 13-14).

fraxinea (L.) Ach.
Corticolous on old roadside trees (mainly on *Fraxinus*, *Populus*, *Tilia* and *Ulmus*).

B Mar.: AR, Fl.: AR, Brab.: AR (†? 1962), Mosan: AR, Ard.: AR-AC, Lorr.: R. **L** Ard.: AR, Lorr.: AR.
Until the early eighties, well-developed populations with exuberant specimens occurred throughout the S part of the study area. All these populations are now gone or in a very poor condition.
Lit.: Ho: 231, L4: 20, La66: 450, WS: 57-58, 111.

lacera (With.) J. R. Laundon
Syn.: *R. duriaei* (De Not.) Bagl., *R. evernioides* auct., non Nyl.
Corticolous on *Ulmus*, also on *Populus* and *Salix*.
B Mar.: RR (†1954). **L** - . **F** Mar.: R (†1910).
Now extinct throughout the area of study.
Lit.: BDL1: 88, L4: 20, La66: 453, Barkman (1990: 14), Delzenne-Van Haluwyn (1973: 111-112), Massart (1910: Phot. 281).

pollinaria (Westr.) Ach.
Syn.: *R. intermedia* auct., non (Nyl.) Nyl.
Saxicolous, on dry and sheltered underhangs, either on calcareous or on siliceous rocks (incl. sandstone), rarely on walls.
B Mosan: R, Ard.: AR. **L** Ard.: R, Lorr.: R.
Lit.: La66: 452, NL92: 173, NL97: 55, Diederich (1985a: 25).

thrausta (Ach.) Nyl.
Ecology of the only known specimen unknown.
B - . **L** Distr. unknown: RRR (†<1850).
Now extinct throughout the area of study.
Lit.: L8, Diederich (1986a: 118, sub *Bryoria* cf. *capillaris*).

calicaris (L.) Fr. Reported from **B** by DG: 37 and from **L** by Ko: 110 and Barkman (1949), but no material seen.

capitata (Ach.) Nyl. Reported by Schl: 148-149, 247 from **L** Ard., but this refers to the literature record of *R. polymorpha* by Ko: 111-112 (see under that species).

duriaei (De Not.) Bagl., see *R. lacera*

evernioides auct., non Nyl., see *R. lacera*

intermedia auct., non (Nyl.) Nyl., see *R. pollinaria*

polymorpha (Lilj.) Ach. The report of this species from **L** Ard. by Ko: 111-112 is not supported by any herbarium material, and is therefore doubtful.

populina (Hoffm.) Vain., see *R. fastigiata*

RAMULARIA Unger

**peltigericola* D. Hawksw., see *Hawksworthiana peltigericola*

REFRACTOHILUM D. Hawksw.

***pluriseptatum** Etayo & Cl. Roux
On *Pachyphiale carneola*.
B Ard.: RR. **L** - .
Lit.: Roux et al. (1997).

REICHLINGIA Diederich & Scheid.

?***leopoldii** Diederich & Scheid.
On an unidentified, crustose lichen with *Trentepohlia*, on sandstone and siliceous rocks in dry underhangs, also on *Quercus* in a well-preserved forest.
B Ard.: RRR. **L** Lorr.: RR. Probably overlooked.
Whether this is a lichenicolous fungus on an unidentified crust, or a lichenized hyphomycete is a matter that requires further studies.
Lit.: Diederich & Scheidegger (1996).

RHAPHIDICYRTIS Vain.

trichosporella (Nyl.) Vain.
Corticolous, on old *Quercus*, in well-preserved forests.
B Ard.: RR. **L** - .
Lit.: L8.

RHIZOCARPON DC.
Although frequently collected, the genus is poorly known in the study area; many collections still require examination.

badioatrum (Spreng.) Th. Fr.
On natural, siliceous rocks in rather open conditions, found once in a disused quarry.
B Ard.: RR. **L** Ard.: RR.
Lit.: La69: 103, NL92: 162.

disporum (Hepp) Müll. Arg.
Syn.: *R. montagnei* Körb.
On exposed, natural, siliceous rocks.
B Brab.: RRR, Ard.: RR. **L** - .
The identity of the populations referred to this species in the study area requires further studies.
Lit.: DG: 25, NL77: 23, Werner (1962: 12, misidentification for *R. geminatum*).

(*)**distinctum** Th. Fr.
Syn.: *R. ambiguum* (Schaer.) Zahlbr.
On siliceous rocks, either on natural outcrops or on artificial substrates (incl. bricks), sometimes over *Aspicilia caesiocinerea*.
B Mosan: RRR, Ard.: AR. **L** Ard.: R.

Lit.: DG: 25, Mü1: 144, NL92: 162, Giralt & van den Boom (1996: 81).

furfurosum H. Magn. & J. Poelt
On siliceous rocks rich in heavy metals, either on natural outcrops or on slate debris.
B Ard.: RR. **L** - .
Lit.: Sé: 142-143.

geminatum Körb.
On exposed, siliceous rocks, either on natural outcrops or on artificial substrates (roof, wall).
B Ard.: RR. **L** Ard.: RR, Lorr.: RRR. **F** Mosan: RRR.
Lit.: Mü1: 144, NL77: 23, NL92: 162.

geographicum (L.) DC. subsp. **geographicum**
Syn.: *R. tinei* (Tornab.) Runemark subsp. *vulgare* Runemark
On exposed, siliceous rocks, either on natural outcrops or on artificial substrates.
B Brab.: RRR (†<1900), Mosan: RR, Ard.: *AC*. **L** Ard.: *AC*.
Lit.: Ertz: 20, NL77: 23, NL84: 17, NL92: 173, Runemark (1956: 133).

geographicum subsp. **diabasicum** (Räsänen) Poelt & Vězda
On exposed, siliceous, natural outcrops.
B Ard.: R. **L** Ard.: RRR.
Lit.: L8.

geographicum subsp. **lindsayanum** (Räsänen), comb. ined. (provisionally placed here, art. 34.1b)
Syn.: *R. lindsayanum* Räsänen subsp. *lindsayanum*
On exposed siliceous rocks, either on natural outcrops or on artificial substrates.
B Brab.: RRR (†<1900), Mosan: RRR, Ard.: AR. **L** Ard.: *AR*.
Lit.: Runemark (1956: 122).

hochstetteri (Körb.) Vain.
On exposed or sheltered siliceous outcrops, in at least periodically very humid conditions.
B Mosan: RRR, Ard.: R. **L** - .
Lit.: NL84: 17, NL97: 55.

lavatum (Fr.) Hazsl.
On frequently submerged, siliceous rocks, in or by small streams and rivulets.
B Ard.: AR. **L** - .
Lit.: DG: 25, La69: 103, Mü1: 144.

lecanorinum Anders
Syn.: *R. atrovirens* auct.
On exposed, siliceous rocks (incl. sandstone), either on natural outcrops or on slate debris in disused quarries, also found on roofs.
B Mosan: RRR, Ard.: AC. **L** Ard.: *AC*, Lorr.: RR. **F** Mosan: RRR, Ard.: R.
Lit.: La68: 74, Mü1: 144, NL77: 23, NL92: 173, Sé: 139, Runemark (1956: 108).

oederi (Weber) Körb.
On siliceous rocks, especially those rich in heavy metals, either in natural outcrops or on slate debris in disused quarries.
B Ard.: R. **L** - . **F** Ard.: RR.
Lit.: L5: 5, Mü1: 145, NL77: 23, NL97: 55, Sé: 142.

petraeum (Wulfen) A. Massal.
Syn.: *R. concentricum* auct., non (Davies) Beltr., *R. excentricum* (Ach.) Arnold, *R. perlutum* (Nyl.) Zahlbr.
On rocks containing some quantities of calcium, incl. siliceous and sandstone rocks and hard ‘clay’, in natural or artificial conditions.
B Mosan: R. **L** Ard.: RRR, Lorr.: RRR (<1850). **F** Mosan: RRR.
Lit.: DG: 25, La69: 103.

plicatile (Leight.) A. L. Sm.
Syn.: *R. rubescens* Th. Fr.
On exposed, siliceous rocks, by an artificial dam.
B Ard.: RRR. **L** - .
Lit.: DG: 25, L8.

polycarpum (Grognot) Th. Fr.
On siliceous rocks, either in natural conditions or on slate debris in disused quarries.
B Ard.: RR. **L** - .
Lit.: Mü1: 144, NL87: 23, Sé: 139.

reductum Th. Fr.
Syn.: *R. obscuratum* auct., non (Ach.) A. Massal.
On siliceous rocks, in exposed or rather sheltered conditions, on natural outcrops, but especially common on slate debris in disused quarries, also on pebbles.
B Mosan: RR, Ard.: AR, Lorr.: RRR. **L** Ard.: R. **F** Mosan: RRR, Ard.: RR.
Lit.: Mü1: 144, Mü2: 197, NL77: 23, NL84: 17, NL87: 23, NL92: 173, Sé: 139.

subgeminatum Eitner
On siliceous, natural outcrops.
B Ard.: R. **L** - .
Lit.: Mü1: 144, L8.

(*)**trapeliicola** Brand
Lichenicolous on *Trapelia coarctata*, over siliceous rocks.
B - . **L** Ard.: RRR (type locality).
Lit.: L8.

(*)**viridiatrum** (Wulfen) Körb.
On natural, siliceous outcrops, initially parasitic on *Aspicilia caesiocinerea*.
B Brab.: RRR (†<1900), Ard.: AR. **L** Ard.: RR. **F** Mosan: RRR.
Lit.: DG: 25, NL92: 173, Runemark (1956: 101).

(*)*ambiguum* (Schaer.) Zahlbr., see *R. distinctum*

atrovirens auct., see *R. lecanorinum*

calcareum (Ach.) Anzi, see *R. umbilicatum*

concentricum auct., non (Davies) Beltr., see *R. petraeum*

excentricum (Ach.) Arnold, see *R. petraeum*

grande (Flörke) Arnold. Reported from **B** by DG: 25 and from **L** Lorr. by Ko: 256, but no material seen.

montagnei Körb., see *R. disporum*

obscuratum auct., non (Ach.) A. Massal., see *R. reductum*

perlutum (Nyl.) Zahlbr., see *R. petraeum*

riparium Räsänen. This is a synonym of *R. geographicum* subsp. *kittilense* (Räsänen) (provisionally placed here, art. 34.1b), which is unknown in the study area. The report of this taxon from **B** by Hoffmann (1991) refers without any doubt to *R. geographicum* s. l.

rubescens Th. Fr., see *R. plicatile*

umbilicatum (Ramond) Flagey, syn. *R. calcareum* (Ach.) Anzi. Reported from **B** by DG: 25, but no material seen.

RIMELIA Hale & A. Fletcher

reticulata (Taylor) Hale & A. Fletcher
Syn.: *Parmelia reticulata* Taylor, *Parmotrema reticulatum* (Taylor) Choisy
On *Pinus* in a plantation.
B Mar.: RRR (†1961). **L** - .
Now extinct throughout the area of study.
Lit.: La66: 438.

RIMULARIA Nyl.

furvella (Mudd) Hertel & Rambold
Syn.: *Lecidea furvella* Mudd
On siliceous rocks and slate debris in old quarries, usually in exposed conditions.
B Ard.: R. **L** - .
Lit.: Mü1: 143, Mü2: 197, Sé: 143.

RINODINA (Ach.) Gray
Syn.: *Courtoisia* L. Marchand

archaea (Ach.) Arnold
On *Fraxinus* along a road.
B - . **L** Ard.: RRR (1961).
Lit.: Di: 203, L5: 40, Giralt et al. (1997: 111-112).

aspersa (Borrer) J. R. Laundon
On exposed, siliceous rocks, in natural conditions.
B Ard.: RR. **L** Ard.: RR.
Lit.: L4: 29 (misidentification for *Fuscidea praeruptorum*), L7: 86, Giralt et al. (1997: 112-113).

atrocinerea (Hook.) Körb.
On exposed, siliceous rocks, in natural conditions.
B Mosan: RRR, Ard.: RR. **L** - .
Lit.: L4: 30, Giralt et al. (1997: 114-115).

bischoffii (Hepp) A. Massal.
On exposed, calcareous rocks, including sandstone, mainly in natural conditions.
B Mosan: R. **L** Lorr.: RR.
Lit.: Ertz: 20, NL84: 17, NL97: 55, Giralt et al. (1997: 115-118).

brandii Giralt & van den Boom
On vertical, not overhanging surfaces of siliceous, slightly calcareous rocks in natural, exposed conditions.
B Ard.: RR (type locality). **L** - .
Lit.: Giralt & van den Boom (1996).

calcarea (Arnold) Arnold
On exposed, calcareous rocks, mainly in natural conditions.
B Mosan: AR. **L** - .
Lit.: Ertz: 20, L1: 7 (misidentification for *R. tunicata*), NL84: 17, NL97: 55, Giralt et al. (1997: 118-119).

dubyana (Hepp) J. Steiner
On exposed, calcareous rocks in natural conditions.
B Mosan: RR. **L** - .
Lit.: NL84: 17, Giralt et al. (1997: 121-122), Mayrhofer (1984: 406).

efflorescens Malme
Corticolous, mainly on *Quercus*, rarely over lichens (e. g. species of *Parmelia* s. l.), mainly in forests.
B Mosan: RR, Ard.: RR, Lorr.: RR. **L** Ard.: AR, Lorr.: R.
Lit.: Di: 204, L2: 97, NL84: 17, Giralt et al. (1997: 122-124).

gennarii Bagl.
Syn.: *R. demissa* auct., *R. salina* Degel., *R. subexigua* (Nyl.) H. Olivier
On calcareous, natural and artificial substrates, incl. rocks, walls, mortar, particularly common in rather nutrient-enriched situations.
B Mar., Fl.: *C*, Brab.: RRR, Mosan: AR, Ard.: RR. **L** Ard.: RR, Lorr.: RR.
Lit.: Mü1: 157, NL84: 17, NL92: 162, NL93: 46, VGH: 114, Giralt et al. (1997: 124-127).

griseosoralifera Coppins
Corticolous on neutral to basic bark of deciduous trees (*Malus* and *Pyrus*).
B - . **L** Ard.: RRR, Lorr.: RR.
Lit.: Di: 204-205, L5: 40-41, NL92: 173, Giralt et al. (1997: 127-128).

immersa (Körb.) Arnold
On dry and sunny, calcareous rocks, in natural conditions.
B Mosan: RR. **L** - .
Lit.: Ertz: 20, NL84: 17, NL97: 55, Giralt et al. (1997: 128-129), Mayrhofer (1984: 423).

interpolata (Stirt.) Sheard
On vertical to slightly overhanging, siliceous rocks in a disused quarry.
B Ard.: RRR. **L** - .
Lit.: L4: 30, L6: 145-146, NL92: 162-163 (specimen refers to *R. sicula*), Giralt et al. (1997: 129-130).

lecanorina (A. Massal.) A. Massal.
Syn.: *R. ocellata* (Hoffm.) Arnold
On calcareous rocks in open habitats, mostly on horizontal or sloping surfaces, always in natural habitats.
B Mosan: AR. **L** - .
Lit.: Ertz: 20, NL84: 17, NL97: 55, Giralt et al. (1997: 130-131), Mayrhofer (1984: 431).

occulta (Körb.) Sheard
On natural, siliceous outcrops, in slightly sheltered conditions.
B - . **L** Ard.: RRR.
Lit.: Giralt et al. (1997: 131-132).

oleae Bagl.
Corticolous on *Betula*, *Populus*, etc., or on exotic conifers, and on decorticated wood; a mainly maritime species which occurs mostly in nutrient-enriched or dusty locations.
B Mar.: AR, Fl.: AR, Camp.: RR. **L** Lorr.: RRR.
This species could represent corticolous populations of *R. gennarii*; this matter requires further studies.
Lit.: Giralt et al. (1997: 132-134).

oxydata (A. Massal.) A. Massal. s. l.
Syn.: *R. discolor* (Hepp) Arnold, incl. *R. vezdae* H. Mayrhofer
Mostly on siliceous rocks along streams in moderately shaded and sheltered situations.
B Mosan: RRR (1891), Ard.: RRR (1966). **L** Ard.: RR.
Lit.: NL92: 163, Giralt et al. (1997: 134-136), Mayrhofer (1984: 448).

pityrea Ropin & H. Mayrhofer
On a dusty, decorticated part of an old *Acer* along a road.
B Mosan: RRR. **L** - . Probably overlooked.
Lit.: NL97: 32.

pyrina (Ach.) Arnold
Corticolous, on isolated trees, e. g. on *Aesculus* and *Tilia*.
B Mosan: RRR, Lorr.: RRR. **L** Lorr.: RR.
Lit.: Di: 205, L5: 41, Mü1: 157 (**B** Ard.: to be checked), NL97: 55, Giralt et al. (1997: 137-138).

sicula H. Mayrhofer & Poelt
On a vertical sandstone rock, in a sheltered and shaded, natural habitat.
B - . **L** Lorr.: RRR.
Lit.: Giralt et al. (1997: 138-141).

teichophila (Nyl.) Arnold
On exposed, calcareous rocks in natural conditions.
B Mosan: RRR (1962). **L** - .
Outside of the study area, this species is also known from siliceous rocks, brick, mortar, etc.
Lit.: Giralt et al. (1997: 142-144).

tunicata H. Mayrhofer & Poelt
On exposed, calcareous rocks, in natural habitats.
B Mosan: RR. **L** - .
Lit.: Giralt et al. (1997: 144-146), Mayrhofer (1984: 470).

arenaria (Hepp) Arnold. This species was reported from **B** Ard. by Mü3: 47. It is not clear if this refers to *R. badiella* of which *R. arenaria* is a synonym, to *R. teichophila* (syn. *R. arenaria* auct.), or if it represents a misidentification.

atropallidula Arnold. Reported from **B** Mosan by BDL2: 39, but no material seen. A name of uncertain application.

badiella (Nyl.) Th. Fr. The only report of this species from the study area (**B** Ard., L4: 30) is erroneous (fide Giralt et al. 1997: 104); the material most probably represents a still unidentified species.

confragosa (Ach.) Körb. Reported from **B** by DG: 39 and from **L** Lorr. by Ko: 202, but no material seen. The species exists in **D** Ard. (Manderscheid).

demissa auct., see *R. gennarii*

discolor (Hepp) Arnold, see *R. oxydata*

exigua (Ach.) Gray. All specimens from **B** and **L** studied by Giralt et al. (1997) refer to *R. oleae* or *R. gennarii*. All specimens, except one, from GENT, identified as *R. exigua* (published in Ho: 234), belong to *R. oleae*.

ocellata (Hoffm.) Arnold, see *R. lecanorina*

salina Degel., see *R. gennarii*

sophodes (Ach.) A. Massal. Reported from **B** by DG: 39, but no material seen.

subexigua (Nyl.) H. Olivier, see *R. gennarii*

vezdae H. Mayrhofer, see under *R. oxydata*

RINODINELLA H. Mayrhofer & Poelt

dubyanoides (Hepp) H. Mayrhofer & Poelt
Syn.: *Buellia dubyanoides* (Hepp) Müll. Arg.
On hard calcareous rocks in dry and sunny conditions.
B Mosan: RR. Probably overlooked. **L** - .
Lit.: DG: 39, Mayrhofer (1984: 479).

ROPALOSPORA A. Massal.

viridis (Tønsberg) Tønsberg
Syn.: *Fuscidea viridis* Tønsberg
Corticolous, mainly on the smooth bark of *Alnus*, *Carpinus*, etc., in forests.
B Mosan: RR, Ard.: *AC*, Lorr.: *AC*. **L** Ard.: AC, Lorr.: AC.
All the records are posterior to 1980.
Lit.: Di: 105, L3: 32, NL84: 17.

ROSELLINIELLA Vain.

***cladoniae** (Anzi) Matzer & Hafellner
On *Cladonia furcata* subsp. *subrangiformis*.
B Mosan: RR, Ard.: RR. **L** Ard.: RRR, Lorr.: RRR.
Lit.: L6: 146.

***microthelia** (Wallr.) Nik. Hoffm. & Hafellner, comb. ined.
Syn.: *Guignardia microthelia* (Wallr.) Keissl.
On *Trapelia coarctata* and *T. placodioides*.
B Fl.: RRR, Ard.: RRR. **L** - .
Lit.: L8.

ROSELLINIOPSIS Matzer & Hafellner

***groedensis** (Zopf) Matzer & Hafellner
On *Pertusaria corallina* and *P. lactea*.
B - . **L** Ard.: RRR, Lorr.: RRR.
Lit.: L8.

***tartaricola** (Nyl.) Matzer
On *Pertusaria hemisphaerica*.
B Mosan: RRR (1962), Ard.: RR, Lorr.: RR. **L** Ard.: RR, Lorr.: R.
Lit.: L6: 146 (sub *R. tropica*), NL92: 163.

**tropica* Matzer & R. Sant. The specimens referred to *R. tropica* by L6: 146 all belong to *R. tartaricola* (see NL92: 163).

SACCOMORPHA Elenkin, see *Placynthiella*

SAGEDIA A. Massal.

chlorotica (Ach.) A. Massal., see *Porina chlorotica*

**marina* Deakin, see *Stigmidium marinum*

persicina Körb., see *Porina linearis*

SAGEDIOPSIS (Sacc.) Vain.

***barbara** (Th. Fr.) R. Sant. & Triebel
Syn.: *Gongylia nadvornikii* Servít
On *Porpidia glaucophaea*.
B - . **L** - . **F** Ard.: RRR (1966).
Lit.: L6: 142.

SAGIOLECHIA A. Massal.

protuberans (Ach.) A. Massal.
On vertical to horizontal surfaces of hard calcareous rocks in dry and rather shaded conditions.
B Lorr.: RRR (1963). **L** - .
Lit.: L6: 146.

SARCOGYNE Flot.

regularis Körb.
Syn.: *S. pruinosa* auct., non (Ach.) Mudd, *Biatorella pruinosa* auct., non (Ach.) Mudd
On calcareous, natural outcrops, and on walls and mortar in nitrophilous conditions.
B Fl.: RRR, Brab.: R, Mosan: R, Ard.: RRR, Lorr.: RR. **L** Ard.: RRR, Lorr.: AR. **F** Lorr.: RR.
Lit.: Ertz: 20, La68: 76, La69: 104, Mü1: 150, NL84: 17, NL92: 163, Hoffmann & Van Rompu (1995), Zwaenepoel et al. (1994: 37).

privigna (Ach.) A. Massal. Reported from **B** Ard. by Mü5: 42 and from **L** by Ko: 269, but no specimen has been seen.

pruinosa auct., non (Ach.) Mudd, see *S. regularis*

simplex (Davies) Nyl., see *Polysporina simplex*

SARCOPYRENIA Nyl.

(*)**gibba** (Nyl.) Nyl. var. **geisleri** (Beckh.) Nav.-Ros. & Hladun

Epilithic, on brick, stones, concrete posts, gravestones, etc., often over other lichens, always in artificial conditions.

B Fl.: RR. **L** - . Probably overlooked.

Lit.: L8, VGH: 114.

SARCOSAGIUM A. Massal.

campestre (Fr.) Poetsch & Schied. var. **campestre**

On soil rich in iron, over mosses or on *Peltigera*, mainly in industrial wasteland.

B - . **L** Lorr.: R.

Lit.: L4: 30.

campestre var. **macrosporum** Coppins & P. James

On railway ballast.

B - . **L** Ard.: RRR.

Lit.: L4: 31.

SCHAERERIA Körb.

cinereorufa (Schaer.) Th. Fr.

On slate debris in old quarries.

B Ard.: RR (but abundant in one of its two localities). **L** - .

Lit.: Sé: 143.

fuscocinerea (Nyl.) Clauzade & Cl. Roux

Syn.: *S. tenebrosa* (Flot.) Hertel & Poelt, *Lecidea tenebrosa* Flot.

On exposed, siliceous rocks and on slate debris in old quarries.

B Ard.: AR. **L** Ard.: RRR.

Lit.: Mü1: 151, NL77: 21, Sé: 139.

tenebrosa (Flot.) Hertel & Poelt, see *S. fuscocinerea*

SCHISMATOMMA A. Massal.

decolorans (Sm.) Clauzade & Vězda

Generally corticolous, almost always on old *Quercus* trees in rather shaded conditions, also on *Populus* and on 'bark' of *Hedera*, once found on sandstone rock in forest.

B Mosan: R, Ard.: R, Lorr.: RR. **L** Ard.: RR, Lorr.: AR.

Lit.: Di: 207-208, L3: 33, NL84: 17.

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

On a sandstone rock in shaded and humid conditions, and on an underhang of siliceous rocks by a small river.

B Ard.: RRR. **L** Lorr.: RRR.

Lit.: L8, NL92: 163.

SCLEROCOCCUM Fr.

*__epiphytorum__ Diederich

On *Pertusaria hemisphaerica*.

B - . **L** Ard.: RRR (type locality).

Lit.: Di: 251, LF1: 320-323.

*__sphaerale__ (Ach.) Fr.

On *Pertusaria corallina*.

B - . **L** Ard.: RR, Lorr.: RR.

Lit.: LF0: 18, NL92: 174.

SCLEROPHORA Chevall.

nivea (Hoffm.) Tibell, syn. *Coniocybe pallida* (Pers.) Fr. Reported from **B** by DG: 16, but no material seen.

SCOLICIOSPORUM A. Massal.

chlorococcum (Stenh.) Vězda

Syn.: *Bacidia chlorococca* (Stenh.) Lettau

Corticolous, on all kinds of trees, also present on branches and needles of *Picea*.

B Mosan: *AR*, Ard.: *AC*, Lorr.: *AC*. **L** Ard.: AC, Lorr.: C.

Lit.: Di: 208-209, NL92: 174.

gallurae Vězda & Poelt

On *Salix* and *Sarothamnus* in ruderal conditions.

B Mar.: RRR, Mosan: RR, Ard.: RR. **L** Ard.: RRR.

The distinction between this species and *S. sarothamni* requires further studies.

Lit.: NL84: 17, NL92: 163-164, van den Boom & Sérusiaux (1996: 22).

pruinosum (P. James) Vězda
Corticolous, on *Fagus* and *Quercus*, in dry and shaded situations in forest.
B Mosan: RR, Ard.: RR, Lorr.: RR. **L** Ard.: R, Lorr.: R.
Lit.: Di: 209-210, L4: 31, NL84: 17, NL92: 174.

sarothamni (Vain.) Vězda
On *Calluna* and *Vaccinium* in heaths, also on *Sambucus*.
B Ard.: RRR, Lorr.: RRR. **L** - .
See comments under *S. gallurae*.
Lit.: NL92: 163-164, Sé: 143.

umbrinum (Ach.) Arnold
Syn.: *Bacidia umbrina* (Ach.) Bausch
Most commonly saxicolous on siliceous, natural outcrops, also corticolous, in polluted areas, on bark rich in dust.
B Fl.: RR, Mosan: R, Ard.: AR. **L** Ard.: R, Lorr.: AR (C as an epiphyte in the SW part, absent elsewhere).
Lit.: Di: 210, NL84: 17, NL87: 23, NL92: 174, VGH: 114, Zwaenepoel et al. (1994: 37).

curvatum Sérus. This species has not been found in the study area, but is recorded from a locality in **D** Ard. so close to the Belgian border that its presence in it is most probable. In this locality it is foliicolous, on needles of *Picea*, in a shaded and humid plantation (L7: 89).

SCUTULA Tul.

Anamorph: *Libertiella* Speg. & Roum.
Although the two *Libertiella* species mentioned below have not been connected with certainty to a species of *Scutula*, they are here considered to be *Scutula* anamorphs.

(*)**dedicata** Triebel, Wedin & Rambold
On *Peltigera didactyla*.
B Lorr.: RRR. **L** - .
Lit.: L5: 41 (sub '*S. heerii*'), Triebel et al. (1997: 327).

***Libertiella didymospora** D. Hawksw. & Miądlikowska
On the lower surface of the thallus of *Peltigera rufescens*.
B Mosan: RRR. **L** - .
Lit.: NL97: 24.

***Libertiella malmedyensis** Speg. & Roum.
On the thallus (mainly the lower side) of *Peltigera didactyla*.
B Ard.: RRR (1880) (type locality). **L** - .
Lit.: Hawskworth (1981: 30-33).

**episema* (Nyl.) Zopf, see *Toninia episema*

(*)*heerii* (Hepp) Trevis. Reported from **B** by L5: 41, but the corresponding specimen belongs to the recently described *S. dedicata*.

SEGESTRIA Fr.

leptalea (Durieu & Mont.) R. C. Harris, see *Porina leptalea*

SKYTTEA Sherwood, D. Hawksw. & Coppins

***buelliae** Sherwood, D. Hawksw. & Coppins
On *Buellia punctata*.
B Brab.: RRR, Mosan: RRR. **L** - . Most probably overlooked and much more common.
Lit.: Diederich & Etayo (in prep).

***hawksworthii** Diederich
On *Verrucaria*.
B - . **L** Lorr.: RRR (type locality).
Lit.: LF0: 14-16.

***nitschkei** (Körb.) Sherwood, D. Hawksw. & Coppins
On *Thelotrema lepadinum*, only in ancient woodlands with a long historical continuity.
B Ard.: RRR. **L** Lorr.: RR (near Berdorf).
Lit.: Di: 211-212, LF0: 16.

**acrocordiae* Diederich, see *Unguiculariopsis acrocordiae*

**lesdainii* (Vouaux) W. Y. Zhuang & Korf, see *Unguiculariopsis lesdainii*

SOLENOPSORA A. Massal.

candicans (Dicks.) J. Steiner
On hard calcareous rocks in dry and sunny conditions, always on natural outcrops.
B Mosan: AR. **L** Lorr. (Moselle): RRR. **F** Lorr. (Moselle): RR.
Lit.: Ertz: 20, La69: 85, 105, NL77: 23, NL97: 55.

SOLORINA Ach.

saccata (L.) Ach.
Terricolous on calcareous rocks, usually in crevices and always in sheltered conditions.
B Mosan: AR, Ard.: RRR (restricted to the Malmédy conglomerate), Lorr.: RR. **L** Lorr.: R (extinct ?).
Lit.: Ertz: 20, La66: 238-239, Mü1: 142, NL77: 23, NL97: 55, Diederich (1985a: 25).

SPHAERELLOTHECIUM Zopf

***cladoniicola** E. S. Hansen & Alstrup
On *Cladina arbuscula* subsp. *squarrosa*.
B Brab.: RRR (1888). **L** - .
Lit.: L8.

***coniodes** (Nyl.) Cl. Roux & Diederich
Syn.: *Pharcidia coniodes* Nyl.
On *Baeomyces rufus*.
B - . **L** Lorr.: RRR.
Lit.: NL92: 161, Roux & Triebel (1994: 527-529).

***propinquellum** (Nyl.) Cl. Roux & Triebel
On *Lecanora subcarpinea*.
B - . **L** Ard.: RRR, Lorr.: RR.
Lit.: Di: 215 (sub *Stigmidium schaereri*), L6: 148, Roux & Triebel (1994: 530-533).

**araneosum* (Arnold) Zopf. The material from the study area referred to this taxon (L6: 147) is now assigned to *Lichenostigma cosmopolites* (see under that species). The genuine *S. araneosum*, a fungus confined to *Ochrolechia*, *Pertusaria* and *Varicellaria*, is not known from this area.

SPHAEROPHORUS Pers.

fragilis (L.) Pers.
Saxicolous on natural, siliceous rocks, in rather sheltered conditions.
B Ard.: RRR (1989). **L** Lorr.: RRR (†<1850).
According to La66: 207-208, the old records of this species all refer to *S. globosus*, but two collections (incl. a recent one) definitely belong to *S. fragilis*.
Lit.: L8.

globosus (Huds.) Vain.
Syn.: *S. coralloides* Pers.
Saxicolous, on siliceous or sandstone rocks, and epiphytic, usually at the base of old *Quercus*, in well-preserved forests.
B Mosan: RRR, Ard.: AR (mainly in southern parts). **L** Ard.: RR, Lorr.: RR (†1966).
Lit.: L4: 18, La66: 207-209, La68: 72, NL77: 23, NL92: 174, NL97: 55, Schl: 198 (the Echternach record is erroneous), Diederich (1985a: 25).

compressus Ach., see *Bunodophoron melanocarpum*

coralloides Pers., see *S. globosus*

melanocarpus (Sw.) DC., see *Bunodophoron melanocarpum*

SPHAERULINA Sacc.

***intermedia** Vouaux
On *Leptogium* '*microscopicum*'.
B - . **L** - . **F** Mar.: RRR (<1912) (type locality).
Possibly a synonym of *Sphaerulina dolichotera* (Nyl.) Vouaux (cf. Santesson 1993: 207; see also Hoffmann 1999: 92).
Lit.: Bouly de Lesdain (1914: 159), Vouaux (1912-14: 37-38).

chlorococca (Leight.) R. Sant., see *Normandina acroglypta*

**dolichotera* (Nyl.) Vouaux, see *S. intermedia*

SPHINCTRINA Fr.

***leucopoda** Nyl.
On corticolous *Pertusaria albescens* on *Acer* (in **B**), and on saxicolous *Diploschistes scruposus* (in **L**).
B Ard.: RRR (1957). **L** Ard.: RR.
Lit.: L1: 7-8, LF0: 17, d'Ansembourg & Lambinon (1958: 23, sub *S. turbinata*).

***tubiformis** A. Massal.
Syn.: *S. microcephala* Nyl.
On *Fagus* (probably lichenicolous on *Pertusaria*).
B Fl.: RRR (†<1867). **L** - .
The identification of the only collection requires further studies; it may represent the undescribed taxon mentioned by Purvis et al. (1992: 570, sub *S. turbinata*). Now extinct throughout the area of study.
Lit.: L1: 8.

***turbinata** (Pers.) De Not.
Syn.: *Acolium stigonellum* (Ach.) De Not.
On corticolous *Pertusaria pertusa* inside forests.
B Brab.: RRR (†<1859). **L** Lorr.: RR.
Lit.: Di: 212-213, L1: 8.

* *microcephala* Nyl., see *S. tubiformis*

SPHYRIDIUM Flot., see *Baeomyces*

SPILOMA Ach.

olivaceum (DC.) Ach. A name of uncertain application, reported by DG: 40.

viridans Schaer. A name of uncertain application, reported by DG: 40.

SPILONEMA Bornet

paradoxum Bornet. Reported from **B** by DG: 19, but no material seen.

SQUAMARINA Poelt

cartilaginea (With.) P. James
Syn.: *S. crassa* (Huds.) Poelt, *Lecanora crassa* (Huds.) Ach., *Placodium crassum* (Huds.) Th. Fr., *Psoroma crassum* (Huds.) Gray
Terricolous or saxicolous on calcareous, natural outcrops, in dry and sunny conditions.
B Brab.: RRR, Mosan: AR (common in suitable localities), Ard.: RRR, Lorr.: RR. **L** Lorr.: RRR (†<1850).
Lit.: Ertz: 20, La69: 146, Mü1: 152, NL77: 23, NL84: 17, NL97: 55.

gypsacea (Sm.) Poelt
Syn.: *Placodium gypsaceum* (Sm.) A. Massal., *Lecanora fragilis* (Scop.) Zahlbr.
In crevices in typical Xerobromion communities.
B Mosan: RRR, Lorr.: ?RRR (no material seen). **L** - . **F** Mosan: RRR.
Lit.: DG: 34, Ertz: 27, La69: 146.

lentigera (Weber) Poelt
Syn.: *Lecanora lentigera* (Weber) Ach., *Placodium lentigerum* (Weber) Th. Fr.
Terricolous or saxicolous on calcareous, natural outcrops, in dry and sunny conditions, formerly also on mosses over sandy ground.
B Mosan: RR. **L** Lorr.: RRR (†1891).
Lit.: DG: 34, La69: 146.

oleosa (Zahlbr.) Poelt
On calcareous, natural rocks in dry and sunny conditions.
B Lorr.: RRR. **L** - .
The identity of the only collection reported under this name requires further studies. It may represent an atypical form of *S. cartilaginea*.
Lit.: La69: 146.

crassa (Huds.) Poelt, see *S. cartilaginea*

STAUROTHELE Norman

caesia (Arnold) Arnold
On hard calcareous, natural rocks, in exposed situations.
B Mosan: AR. **L** - .
Lit.: Ertz: 37, NL84: 17, NL97: 55.

fissa (Taylor) Zwackh
On hard, submerged, siliceous rocks in streams.
B Ard.: R. **L** Ard.: RR. Probably overlooked.
Lit.: La69: 99, Mü1: 140, NL97: 55, Molitor & Diederich (1997: 77-78).

frustulenta Vain.
Syn.: *S. catalepta* auct., non (Ach.) Blomb. & Forssell
On walls of siliceous stones.
B Ard.: RRR. **L** Ard.: RRR.
Lit.: NL92: 164.

guestphalica (Körb.) Arnold
On calcareous outcrops, in dry and sunny, natural conditions.
B Mosan: RR. **L** - .
Lit.: NL97: 32-33.

hymenogonia (Nyl.) Th. Fr.
Incl. f. *minor* (Nyl.) Zahlbr. and f. *nubilata* (Nyl.) Zahlbr.
On calcareous outcrops, in dry and sunny, natural conditions.
B Mosan: RRR, Lorr.: RRR. **L** - . **F** Mar.: RRR (1910), Lorr. (Moselle): RRR.
Lit.: DG: 13, L8, Zschacke (1934: 551).

rugulosa (A. Massal.) Arnold
On calcareous stones of a wall in a churchyard.
B - . **L** Lorr.: RRR.
Lit.: L8.

catalepta auct., non (Ach.) Blomb. & Forssell, see *S. frustulenta*

rufa (A. Massal.) Zschacke. Reported from **B** Mosan by Tonglet (1896: 84), but no material seen.

STEINIA Körb.

geophana (Nyl.) Stein
Syn.: *Lecidea geophana* Nyl.
On soil or plant detritus, or over *Peltigera didactyla* and *P. rufescens*, in rather ruderal conditions.
B Mosan: RRR (1967). **L** Ard.: RRR, Lorr.: RR. Most probably overlooked.
Lit.: L5: 41-42.

STENOCYBE (Nyl.) Körb.

+**pullatula** (Ach.) Stein
Syn.: *S. byssacea* (Fr.) Körb.
On *Alnus*, mainly on thin branches over streams or in very humid conditions.

B Mosan: RR, Ard.: R. **L** Ard.: R, Lorr.: AR. **F** Lorr.: RRR. Probably overlooked and widespread.
Lit.: Di: 213-214, L2: 97-98, NL84: 17.

+*byssacea* (Fr.) Körb., see *S. pullatula*

STEREOCAULON Hoffm.

condensatum Hoffm.
On dry soil, on sand or on highly disintegrated, siliceous rocks.
B Camp.: RR (1984), Mosan: RR (†1984), Ard.: RR. **L** - .
Lit.: La66: 326-328, Asperges (1985a), Lambinon & Sérusiaux (1985a: 82-83).

dactylophyllum Flörke
Syn.: *S. coralloides* Fr.
On siliceous rocks, in natural habitats or on slate debris in disused quarries, incl. on rock debris contaminated with heavy metals.
B Mosan: RRR (1984), Ard.: AR. **L** - .
Lit.: La66: 336-338, Lambinon & Sérusiaux (1985a: 83-85).

evolutum Graewe
On siliceous outcrops, in natural conditions.
B Ard.: RRR. **L** - . **F** Ard.: RRR.
Only two localities are known, both in the western part of the Ard. district.
Lit.: L5: 42, La66: 334-335, Lambinon & Sérusiaux (1985a: 85).

nanodes Tuck.
Syn.: *S. nanodes* f. *tiroliense* (Nyl.) I. M. Lamb, *S. tyroliense* (Nyl.) Lettau
On siliceous rocks or on rock debris contaminated with heavy metals, incl. in industrial wasteland and on railway ballast.
B Camp.: RR, Mosan: R, Ard.: R. **L** - .
Lit.: La66: 320-324, NL77: 23, NL97: 56, Lambinon (1964a), Lambinon & Sérusiaux (1985a: 85-86).

pileatum Ach.
On siliceous rocks in natural conditions, once found on railway ballast.
B Ard.: R. **L** - .
Lit.: La66: 324-326, NL97: 56, Lambinon & Sérusiaux (1985a: 86).

saxatile H. Magn.
On dry soil, on sand or on highly disintegrated siliceous rocks.
B Camp. or Fl.: RR (†<1867), Ard.: RRR (†1964). **L** - .
Now extinct throughout the area of study.
Lit.: Sé: 139, 145, Lambinon & Sérusiaux (1985a: 86: 88).

tomentosum Fr.
On highly disintegrated, siliceous or sandstone rocks.
B Mosan: RRR (†1962), Ard.: RRR (†1870). **L** Lorr.: RRR (†<1850).
Now extinct throughout the area of study.
Lit.: La66: 328-334, Diederich (1986a: 121-122), Lambinon & Sérusiaux (1985a: 88).

vesuvianum Pers. var. **nodulosum** (Wallr.) I. M. Lamb
Syn.: *S. denudatum* Flörke
On siliceous rocks or on rock debris contaminated with heavy metals, incl. in industrial wasteland, also found on rusted iron of old rails.
B Camp.: RRR (1983), Mosan: AR, Ard.: AR. **L** - .
Lit.: L4: 31, La66: 316-320, NL77: 23, Coppins & van den Boom (1995: 89), Lambinon & Sérusiaux (1985a: 88-90).

alpinum Laurer. Once recorded from **B** in the last century, but no relevant material seen; the occurrence of this species in the study area is very doubtful (Lambinon & Sérusiaux 1985a: 90).

coralloides Fr., see *S. dactylophyllum*

denudatum Flörke, see *S. vesuvianum* var. *nodulosum*

incrustatum Flörke. All Belgian records of this species refer to *S. saxatile* (Lambinon & Sérusiaux 1985a: 90).

paschale (L.) Hoffm. Old records from **B** or **L** either refer to *S. dactylophyllum* or *S. evolutum* or cannot be confirmed for lack of relevant material; the occurrence of this species in the study area is very doubtful (Lambinon & Sérusiaux 1985a: 90).

quisquiliare (Leers) Hoffm., see *Leprocaulon microscopicum*

tyroliense (Nyl.) Lettau, see *S. nanodes*

STICTA (Schreb.) Ach.

fuliginosa (Dicks.) Ach.
Syn.: *S. sylvatica* var. *fuliginosa* (Dicks.) Hepp
On rocks and trees, often over mosses, always in humid and well-preserved forests.
B Ard.: R (†1928), Lorr.: RR→RRR (only one locality left, with thalli on one tree !). **L** Ard.: RRR (†1890).
Lit.: L4: 18, L6: 147, La66: 234-236, Diederich (1985a: 26).

limbata (Sm.) Ach.
On *Salix*, over mosses.
B Ard.: RRR (†<1896). **L** - .
Now extinct throughout the area of study.
Lit.: L6: 147, La66: 224-226.

sylvatica (Huds.) Ach.
On siliceous (incl. sandstone), natural outcrops, often over mosses.
B Ard.: R (†1923). **L** Ard.: RRR (†1890), Lorr.: R (†<1850).
Now extinct throughout the area of study.
Lit.: L6: 147-148, La66: 226-234, Diederich (1985a: 26).

herbacea (Huds.) Delise, see *Lobaria virens*

sylvatica var. *fuliginosa* (Dicks.) Hepp, see *S. fuliginosa*

STIGMIDIUM Trevis.

***bellemerei** Cl. Roux & Nav.-Ros.
On *Lecania coeruleorubella*.
B - . **L** Ard.: RRR.
Lit.: L8.

***cerinae** Cl. Roux & Triebel
On *Caloplaca flavocitrina*.
B Mosan: RRR. **L** - .
Lit.: NL97: 33.

***clauzadei** Cl. Roux & Nav.-Ros.
On *Verrucaria viridula*.
B - . **L** Lorr.: RRR.
Lit.: L8.

***marinum** (Deakin) Swinscow
Syn.: *Sagedia marina* Deakin
On calcareous stones, shells, etc. close to the sea.
B - . **L** - . **F** Mar.: RR (1910).
This species was often considered to be a lichenicolous fungus. However, van den Boom & Aptroot (1996) suggest that it is a non-parasitic lichen.
Lit.: BDL1: 257-258.

***Pharcidia maritima** B. de Lesd.
On '*Verrucaria anceps*'.
B - . **L** - . **F** Mar.: R (<1910) (type locality).
Lit.: BDL1: 274.

***microspilum** (Körb.) D. Hawksw.
Syn.: *Arthopyrenia microspila* Körb.
On *Graphis scripta*.
B Brab.: RRR (†<1868), Mosan: RR, Ard.: RRR, Lorr.: RR. **L** Lorr.: RR. **F** Lorr.: RRR.
Lit.: Di: 45, L5: 11-12, NL97: 56, Tholl et al. (1999), van den Boom & Sérusiaux (1996: 22).

***pseudopeltideae** Cl. Roux & Triebel ined.
On *Peltigera canina*.
B - . **L** Ard.: RRR (1966).
Lit.: L5: 42 (sub *S. peltideae*), L8.

***rivulorum** (Kernst.) Cl. Roux & Nav.-Ros.
On aquatic *Verrucaria* species (*V. aquatilis*, *V. hydrela* and *V. praetermissa*) in streams.
B Mosan: RR. **L** Ard.: RR, Lorr.: RR.
Lit.: Ertz: 20, 27-28, Molitor & Diederich (1997: 78-80).

***solorinarium** (Vain.) D. Hawksw.
On *Solorina saccata*.
B - . **L** Lorr.: RRR (†<1850).
Lit.: L5: 42.

frigidum* (Sacc.) Alstrup & D. Hawksw., syn. *Pharcidia frigida* (Sacc.) Vouaux. The report of this species from **F Mar. by Bouly de Lesdain (1914: 158) refers to *Neocoleroa inundata* (see L8).

**peltideae* (Vain.) R. Sant. The specimen published in L5: 42 as *S. peltideae* belongs to *S. pseudopeltideae* (see L8).

STRANGOSPORA Körb.

moriformis (Ach.) Stein
On standing, decorticated wood, and on bark of *Populus*.
B Ard.: RR. **L** Lorr.: RR.
Lit.: Mü1: 150, Mü2: 195, NL92: 164.

ochrophora (Nyl.) R. A. Anderson
Syn.: *Biatorella ochrophora* (Nyl.) Arnold
Corticolous, on *Sambucus*, in ruderal conditions.
B Mosan: RRR. **L** Ard.: RRR, Lorr.: RRR. Probably more common, but overlooked.
Lit.: DG: 31, L7: 89, NL84: 12.

pinicola (A. Massal.) Körb.
Syn.: *Biatorella pinicola* (A. Massal.) Anzi
Lignicolous or corticolous, on various barks (incl. *Buxus*, *Populus*, *Ulmus*, etc., and introduced *Picea* and *Pinus*), usually in rather open and ruderal conditions.
B Fl.: RRR, Camp.: RR, Brab.: AR, Mosan: RR, Ard.: R, Lorr.: RR. **L** Ard.: RRR, Lorr.: RR.
Lit.: Di: 215-216, DSL: 236, La69: 104, Mü1: 150, Mü2: 195, NL87: 23, NL93: 46.

deplanata (Almq.) Clauzade & Cl. Roux, syn. *Biatorella deplanata* Almq. Reported from **B** by DG: 31, but no material seen.

STRIGULA Fr.

affinis (A. Massal.) R. C. Harris
Corticolous, on a very old *Tilia* in a village.
B Mosan: RRR. **L** - .
Lit.: NL97: 33-34.

calcarea Bricaud & Cl. Roux
On shaded, calcareous, natural outcrops.
B Mosan: RR. **L** - .
Lit.: Ertz: 20, 28.

jamesii (Swinscow) R. C. Harris
Corticolous, on *Acer pseudoplatanus*, *Fagus*, *Quercus* and *Sorbus*, in forests or on isolated trees.
B Mosan: RR, Lorr.: RR. **L** Lorr.: RR.
Lit.: L3: 33 (sub *S. affinis*), L7: 84, NL92: 164, Tholl et al. (1999).

taylorii (Nyl.) R. C. Harris
Corticolous, on *Aesculus*, or saxicolous, on tufa, in open or shaded conditions.
B Mosan: RRR. **L** Lorr.: RRR.
Lit.: L7: 89.

sychnogonoides (Nitschke) R. C. Harris, syn. *Geisleria sychnogonoides* Nitschke. This species is not known from the study area, but has been collected in **NL** Camp.: RR close to the Belgian border, where it is terricolous in wasted grassland along industrial area, and in heathlands, on sandy soil (L6: 141-142). It probably occurs in similar habitats in Belgium.

SYNALISSA Fr.

symphorea (Ach.) Nyl.
Syn.: *S. ramulosa* auct.
In crevices of hard calcareous rocks, sometimes overgrowing species like *Psora lurida*, always in natural conditions.
B Mosan: AR. **L** - . **F** Lorr. (Moselle): RRR.
Lit.: Ertz: 20, La69: 101, NL77: 23, NL84: 17, NL97: 56, John (1990a: 245, 1990b: 225).

ramulosa auct., see *S. symphorea*

SYNECHOBLASTUS Trevis., see *Collema*

SYZYGOSPORA G. W. Martin

***bachmannii** Diederich & M. S. Christ.
On *Cladonia coniocraea* and *C. furcata* subsp. *subrangiformis*.
B Lorr.: RRR. **L** Lorr.: RRR (type locality).
Lit.: Diederich (1996: 30-35).

***physciacearum** Diederich & M. S. Christ.
On *Physcia tenella* on *Salix* and *Sambucus*.
B Mar.: RRR, Mosan: RRR. **L** - .
Lit.: NL97: 34.

TAENIOLELLA S. Hughes

***beschiana** Diederich
On squamules of the primary thallus of *Cladonia chlorophaea* and *C. pyxidata*.
B - . **L** Ard.: RRR, Lorr.: RRR (type locality).
Lit.: Diederich (1992: 156-158).

***chrysothricis** Diederich
On *Chrysothrix candelaris*.
B - . **L** Lorr.: RR (type locality).
Lit.: Di: 252, LF1: 323-326.

***delicata** M. S. Christ. & D. Hawksw.
On *Candelariella xanthostigma*, *Diploschistes scruposus*, *Lecanora carpinea*, *L. saligna*, *Lecidella elaeochroma*, *Opegrapha vermicellifera* and *Ropalospora viridis*.
B Lorr.: RRR, Ard.: RR. **L** Ard.: RR, Lorr.: RR.
The material included under this name is most probably heterogeneous.
Lit.: Di: 252-253, LF0: 18, NL97: 56.

***phaeophysciae** D. Hawksw.
On *Phaeophyscia orbicularis*.
B Fl.: RR, Mosan: RRR, Ard.: RRR. **L** Ard.: RRR, Lorr.: R.
Lit.: Di: 153, L1: 8, LF0: 19.

***punctata** M. S. Christ. & D. Hawksw.
On *Graphis scripta*.
B Ard.: RR, Lorr.: RRR. **L** Ard.: R, Lorr.: AC.
Lit.: Di: 253-254, LF0: 19, NL97: 56.

***trapeliopseos** Diederich
On *Trapeliopsis flexuosa*.
B - . **L** Ard.: RRR, Lorr.: RRR (type locality).
Lit.: Di: 254, LF1: 326-329.

TAENIOLINA M. B. Ellis

***scripta** (P. Karst.) P. M. Kirk
On *Lepraria incana*.
B - . **L** Lorr.: RR.
Lit.: Di: 254-255, L5: 42.

TELOGALLA Nik. Hoffm. & Hafellner ined.

***olivieri** (Vouaux) Nik. Hoffm. & Hafellner, comb. ined.
Syn.: *Guignardia olivieri* (Vouaux) Sacc.
On *Xanthoria parietina*.
B - . **L** Distr. unknown: RRR (†<1850).
Lit.: L8.

TELOSCHISTES Norman

chrysophthalmus (L.) Th. Fr.
On well-lit twigs in sunny situations.
B Mar.: RRR (†<1867), Brab.: RR (†<1900). **L** - .
Now extinct throughout the area of study.
Lit.: La66: 468-469.

TEPHROMELA Choisy

atra (Huds.) Hafellner
Syn.: *Lecanora atra* (Huds.) Ach., incl. *T. atra* var. *torulosa* (Flörke) Hafellner
On natural, siliceous or sandstone outcrops, also on walls or gravestones, usually in nitrophilous situations, rarely on bark (var. *torulosa*).
B Fl.: RRR, Camp.: RR, Brab.: RR, Mosan: R, Ard.: AR. **L** Ard.: R, Lorr.: R.
Lit.: Ba: 9, Di: 216-217, Ho: 236, Mü4: 109, NL84: 17, NL92: 174, Giralt & van den Boom (1996: 81), Hoffmann & Van Rompu (1995), Zwaenepoel et al. (1994: 37).

grumosa (Pers.) Hafellner & Cl. Roux
Syn.: *Lecanora grumosa* (Pers.) Du Rietz
Saxicolous, on exposed, natural, sandstone or siliceous outcrops, exceptionally corticolous, on old *Fagus* trees.
B Ard.: RR. **L** Ard.: RR, Lorr.: R. **F** Mosan: RRR.
Lit.: Di: 217, L3: 32.

aglaea (Sommerf.) Hertel & Rambold, syn. *Lecidella aglaea* (Sommerf.) Körb. Reported from **B** by DG: 23 and from **L** Lorr. by Ko: 260, but no material seen.

THALLOIDIMA A. Massal., nom. rej. prop., see *Toninia*

THELENELLA Nyl.

modesta (Nyl.) Nyl., syn. *Microglaena modesta* (Nyl.) A. L. Sm., *Dactyloblastus wallrothianus* (Körb.) A. Massal. Reported from **B** by DG: 13 (see also Mayrhofer 1987: 56) and from **L** Lorr. by Ko: 227, but no material seen.

THELIDIUM A. Massal.

decipiens (Nyl.) Kremp.
Syn.: *T. absconditum* (Hepp) Rabenh., *T. amylaceum* auct., non A. Massal., *T. immersum* (Leight.) Mudd, *T. leightonii* M. Choisy
On natural, calcareous outcrops, in exposed conditions.
B Mosan: AR, Ard.: RR, Lorr.: RRR. **L** - .
Lit.: Ertz: 37-38, Mü3: 48, Mü5: 18, NL84: 17, NL87: 23, NL97: 56, Zschacke (1933: 332, sub *T. absconditum*; 341, sub *T. amylaceum*).

dionantense (Hue) Zschacke
Syn.: *Verrucaria dionantensis* Hue
On natural, calcareous outcrops.
B Mosan: RR (type locality). **L** - .
Lit.: Hue (1898), Zschacke (1933: 378).

incavatum Mudd
On a natural, calcareous outcrop (tufa).
B Lorr.: RRR. **L** - .
Lit.: L8.

minutulum Körb.
Syn.: *T. margaceum* (Leight.) Zschacke, *T. mesotropum* (Nyl.) A. L. Sm.
On rocks or stones (calcareous, siliceous or sandstone), in humid habitats or in streams.
B Mosan: RR, Ard.: RRR. **L** Lorr.: R.
The identity of the specimens from **B** Mosan (Neu-Moresnet, NL87: 23) requires further studies; they were collected on contaminated soil in an industrial wasteland.
Lit.: NL87: 23, NL97: 56, Molitor & Diederich (1997: 80-81).

olivaceum (Fr.) Körb.
On calcareous pebbles and sandstone rock.
B Brab.: RRR, Mosan: R, Ard.: R. **L** Ard.: RR, Lorr.: RRR.
Lit.: NL87: 23, Tholl et al. (1999).

papulare (Fr.) Arnold
On natural, calcareous rocks, in shaded habitats.
B Mosan: AR. **L** - . **F** Mosan: RRR.
Lit.: DG: 13, Ertz: 38, La69: 99, NL84: 17, NL87: 23, Zschacke (1933: 407).

zwackhii (Hepp) A. Massal.
On sandstone in a stream, on soil in a Mesobrometum and on siliceous rocks.
B Ard.: RRR. **L** Ard.: RRR, Lorr.: RR.
Lit.: Molitor & Diederich (1997: 81).

absconditum (Hepp) Rabenh., see *T. decipiens*

acrotellum Arnold. Reported from **B** Ard. by BDL3: 36, Mü1: 140 and Mü2: 197, but no material seen.

amylaceum auct., non A. Massal., see *T. decipiens*

bryoctonum Th. Fr., see *Verrucaria bryoctona*

calcareum var. *belgicum* (Hue) Zahlbr., syn. *Verrucaria calcivora* Nyl. var. *belgica* Hue. Described from **B** Mosan (type locality) by Hue (1898), but no material seen. A name of uncertain application.

dionantense var. *lecideiforme* (Hue) Zahlbr., syn. *Verrucaria dionantensis* Hue var. *lecideiformis* Hue. Described from **B** Mosan (type locality) by Hue (1898) (see also Zschacke 1933: 379), but no material seen. A name of uncertain application.

erichsenii Keissl., see *Normandina acroglypta*

flandricum B. de Lesd. Described from **F** Fl. (type locality) (see also Zschacke 1933: 365), but no material seen. A name of uncertain application.

halodytes (Nyl.) Erichsen, see *Pyrenocollema halodytes*

immersum (Leight.) Mudd, see *T. decipiens*

leightonii M. Choisy, see *T. decipiens*

margaceum (Leight.) Zschacke, see *T. minutulum*

mesotropum (Nyl.) A. L. Sm., see *T. minutulum*

pertusulum (Nyl.) B. de Lesd., see *Polyblastia pertusula*

pyrenophorum (Ach.) Mudd. Reported from **B** Mosan by BDL2: 44, but no material seen.

spadanum B. de Lesd. Described from **B** Ard. (type locality) by BDL2: 43 (see also Zschacke 1933: 365-366), but no material seen. A name of uncertain application.

tongletii (Hue) Zahlbr., syn. *Verrucaria tongletii* Hue. Described from **B** Mosan (type locality) by Hue (1898) (see also Zschacke 1933: 379), but no material seen. A name of uncertain application.

THELOCARPON Hue

coccosporum Lettau
On an exposed, horizontal surface of a sandstone rock, in natural conditions.
B - . **L** Lorr.: RRR (near Luxembourg).
Lit.: L8.

depressellum Vain.
On an exposed, sandstone rock, in natural conditions.
B - . **L** Lorr.: RRR (near Berdorf).
Lit.: L8.

***epibolum** Nyl.
On an old thallus of *Peltigera*, and on plant detritus.
B Mosan: RRR, Ard.: RR. **L** Lorr.: ?RR.
The identity of both Luxembourg collections referred to this species is not entirely certain, as the asci were immature, without ascospores.
Lit.: Di: 219, L4: 33, NL97: 56.

intermediellum Nyl.
Syn.: *T. intermixtulum* Nyl.
On decorticated wood of *Quercus*.
B - . **L** Ard.: RRR.
Lit.: Di: 219-221, L4: 31.

laureri (Flot.) Nyl.
On burnt *Pinus* wood and *Molinia* stump in heathland.
B Camp.: RRR. **L** - .
Lit.: L8.

lichenicola (Fuckel) Poelt & Hafellner
On soil and bryophytes in well-lit situations.
B Mosan: RRR. **L** Ard.: RRR.
Lit.: L5: 42.

strasseri Zahlbr.
On rotting trunk lying in forest.
B Ard.: RRR. **L** - .
Lit.: L8.

intermixtulum Nyl., see *T. intermediellum*

THELOMMA A. Massal.

ocellatum (Körb.) Tibell
Lignicolous, on the top of a fence post.
B - . **L** Ard.: RRR.
Lit.: L7: 90.

THELOTREMA Ach.

lepadinum (Ach.) Ach.
Corticolous, mainly on *Carpinus*, *Fagus* and *Quercus* in humid and well-preserved forests.
B Mosan: RR, Ard.: AR, Lorr.: RRR. **L** Ard.: RRR, Lorr.: AR.
Lit.: Di: 221, Vanek (1976).

THERMUTIS Fr.

velutina (Ach.) Flot. This species was mentioned from **B** Ard. by Mü5: 25 on a wooden fence; this report is most dubious, as the species is always saxicolous.

THROMBIUM Wallr.

epigaeum (Pers.) Wallr.
On soil in ruderal conditions or over siliceous rocks.
B Ard.: RRR. **L** Ard.: RR, Lorr.: RRR.
Lit.: L5: 42-43, NL97: 56.

THYREA A. Massal.

confusa Henssen
Syn.: *T. pulvinata* auct., non (Schaer.) A. Massal., incl. f. *canaliculata* Tonglet
On hard calcareous rocks in sunny conditions, but submitted to periodic flushing.
B Mosan: R (type locality of f. *canaliculata*) (locally abundant near Dinant). **L** - .
Lit.: DG: 20, Ertz: 20, La69: 101, NL84: 17, Tonglet (1898: 18).

girardii (Durieu & Mont.) Bagl. & Carestia
On hard calcareous rocks in sunny conditions, but submitted to periodic flushing.
B - . **L** - . **F** Mosan: RRR.
The identity of the populations referred to this species requires further studies.
Lit.: Clauzade & Roux (1985: 747).

pulvinata auct., non (Schaer.) A. Massal., see *T. confusa*

TICHOTHECIUM Flot.

**arnoldii* (Hepp) A. Massal., see *Polycoccum arnoldii*

**gemmiferum* auct., see *Endococcus propinquus*

**pygmaeum* Körb., see *Muellerella pygmaea*

TOMASELLIA A. Massal.

gelatinosa (Chevall.) Zahlbr.
On smooth bark of *Carpinus* in a forest.
B - . **L** Ard.: RRR.
Lit.: Di: 222, L5: 43.

TONINIA A. Massal.
Syn.: *Thalloidima* A. Massal., nom. rej. prop.

aromatica (Sm.) A. Massal.
On calcareous, natural rocks or walls, often on soil in crevices or fissures.
B Mosan: AR, Ard.: RRR, Lorr.: RRR. **L** Lorr.: RR. **F** Mosan: RRR.
Lit.: DG: 25, Ertz: 20, La69: 126, NL84: 17, NL92: 164, Timdal (1991: 41).

athallina (Hepp) Timdal
On hard calcareous, natural outcrops.
B Mosan: RR. **L** - .
Lit.: NL97: 34-35.

candida (Weber) Th. Fr.
On natural, hard calcareous rocks, in dry and sunny conditions.
B Mosan: RR. **L** - .
Lit.: DG: 25, Ertz: 20, 28, La69: 126, NL97: 56.

***episema** (Nyl.) Timdal
Syn.: *Catillaria episema* (Nyl.) H. Olivier, *Kiliasia episema* (Nyl.) Hafellner, *Scutula episema* (Nyl.) Zopf
On *Aspicilia calcarea* over hard calcareous rocks.
B Mosan: RR. **L** - . **F** Mosan: RRR.
Lit.: L5: 21.

philippea (Mont.) Timdal
On hard calcareous rocks in a Xerobromion community.
B Mosan: RRR. **L** - .
Lit.: NL97: 35.

sedifolia (Scop.) Timdal
Syn.: *Toninia caeruleonigricans* auct., non (Lightf.) Th. Fr. ('*coeruleonigricans*' is an orthographic variant), *Thalloidima caeruleonigricans* auct.
In fissures or on highly disintegrated natural, calcareous rocks, also in Mesobromion communities, usually in dry and sunny conditions.
B Brab.: RRR, Mosan: AR. **L** Lorr.: R. **F** Mar.: RRR (1910), Mosan: RR, Lorr.: RRR.
Lit.: BDL1: 211, Ertz: 20, La69: 126, NL84: 17, NL97: 56.

tumidula (Sm.) Zahlbr.
Syn.: *T. mamillaris* (Fr.) Th. Fr.
On natural, hard calcareous rocks, in dry and sunny conditions.
B Mosan: AR. **L** - . **F** Mosan: RR.
Lit.: DG: 25, Ertz: 20, La69: 126, NL84: 17, NL97: 56.

(*)**verrucarioides** (Nyl.) Timdal
Syn.: *T. kolax* Poelt
Lichenicolous lichen, on *Placynthium hungaricum*, *P. nigrum* and *P. tremniacum*, always on hard calcareous, natural outcrops.
B Mosan: R. **L** - .
Lit.: L6: 148, NL84: 18, NL97: 56.

caeruleonigricans auct., non (Lightf.) Th. Fr., see *T. sedifolia*

'*coeruleonigricans*', see *T. sedifolia*

conglomerata (Ach.) Boistel, see *Psorina conglomerata*

(*)*kolax* Poelt, see *T. verrucarioides*

mamillaris (Fr.) Th. Fr., see *T. tumidula*

syncomista (Flörke) Th. Fr., see *Mycobilimbia lobulata*

TRACHYLIA Fr.

arthonioides (Ach.) Fr., see *Arthonia arthonioides*

TRAPELIA M. Choisy

coarctata (Sm.) M. Choisy
Syn.: *Lecanora coarctata* (Sm.) Ach., *Lecidea coarctata* (Sm.) Nyl.
On siliceous rocks, in natural and artificial habitats, also on pebbles, locally abundant on railway ballast.
B Camp.: *AC*, Mosan: AR, Ard.: AR-AC, Lorr.: AR. **L** Ard.: RR, Lorr.: RR.
Lit.: Mü1: 143, NL84: 18, NL92: 174, Sé: 144, Coppins & van den Boom (1995: 89).

corticola Coppins & P. James
Corticolous on acid bark, usually along streams or in sheltered forests.
B Mosan: RRR, Ard.: AR, Lorr.: R. **L** Ard.: RRR, Lorr.: RR.
Lit.: Di: 222-223, L3: 33-34, NL84: 18, NL97: 56.

involuta (Taylor) Hertel
On siliceous rocks, in natural and artificial habitats.
B Mosan: RR, Ard.: AR. **L** Ard.: RR, Lorr.: RR. Overlooked ?
Lit.: NL77: 23, NL84: 18, Sé: 139, 144, Hertel (1973: 511).

obtegens (Th. Fr.) Hertel
On siliceous rocks in natural and artificial habitats, rarely on wood.
B Camp: *R*, Mosan: RR, Ard.: AR. **L** Ard.: RR, Lorr.: RR. Most probably overlooked.
Lit.: NL77: 23, NL84: 18, NL87: 23, NL92: 164, Sé: 144, Coppins & van den Boom (1995: 89).

placodioides Coppins & P. James
Saxicolous, on siliceous and sandstone rocks, able to colonize highly artificial habitats like rusted iron of old rails.
B Fl.: RRR, Mosan: RR, Ard.: AR. **L** Ard.: RRR, Lorr.: RR. **F** Ard.: RRR.
Lit.: L4: 31-32, NL92: 174, NL97: 56.

TRAPELIOPSIS Hertel & Gotth. Schneider

flexuosa (Fr.) Coppins & P. James
Syn.: *Biatora flexuosa* Fr., *Lecidea aeruginosa* Borrer, *L. sapinea* (Fr.) Zahlbr.
Mainly lignicolous, on fence posts or rotting wood, also corticolous, rarely saxicolous on sandstone rocks, or terricolous over peaty or humus-rich soil.
B Mar.: RRR, Fl.: RR, Camp.: RRR, Mosan: RR, Ard.: *AC*, Lorr.: AR. **L** Ard.: AR, Lorr.: AR.
Lit.: Di: 224-225, Ho: 167, 236, 627, NL84: 18.

gelatinosa (Flörke) Coppins & P. James
On humus-rich soil in forest, once corticolous on *Tilia*.
B Ard.: AR. **L** Lorr.: RR.
Lit.: L4: 32, NL92: 165, NL97: 57.

granulosa (Hoffm.) Lumbsch
Syn.: *Lecidea granulosa* (Hoffm.) Ach.
On acid soil, usually over mosses or plant debris, also on rotting wood, abundant in heathlands and disused quarries of siliceous rocks.
B Camp.: *AC*, Brab.: RRR, Mosan: *AR*, Ard. *C*, Lorr.: *AR*. **L** Ard.: AR, Lorr.: AR.
Lit.: Ba: 9, Di: 225, Ho: 218, 237, 627, Mü1: 143, NL77: 21, NL84: 18, Coppins & van den Boom (1995: 89).

percrenata (Nyl.) Gotth. Schneider
Over mosses and plant debris in a peatbog, and on rotting bark of *Quercus*.
B Ard.: RR, Lorr.: RRR. **L** - .
Lit.: L4: 32.

pseudogranulosa Coppins & P. James
On acid and humid soil, or more commonly on dying mosses and plant debris on soil, also often on decorticated wood or on the bark of various trees.
B Mosan: RR, Ard.: *C*, Lorr.: AR. **L** Ard.: *C*, Lorr.: AR.
Lit.: Di: 225-226, L4: 32, NL84: 18, NL97: 57.

aeneofusca (Flot.) Coppins & P. James, syn. *Lecidea aeneofusca* (Flot.) Flörke. Reported from **B** by DG: 24, but no material seen.

viridescens (Schrad.) Coppins & P. James, syn. *Biatora viridescens* (Schrad.) Körb., *Lecidea viridescens* (Schrad.) Ach. Reported from **B** by DG: 24 and from **L** by Ko: 245, but no material seen.

wallrothii (Spreng.) Hertel & Gotth. Schneider, syn. *Biatora wallrothii* (Spreng.) Körb. Reported from **L** Lorr. by Ko: 244, but no specimen seen.

TREMELLA Pers.

***Lindauopsis caloplacae** Zahlbr.
Syn.: *Tremella* sp. 1 (see Diederich 1996)
On *Caloplaca* sp. [type specimen of *C. lactea* f. *ostreaeseda* (Harm.) Zahlbr.].
B - . **L** - . **F** Mar.: RRR (1906).
Lit.: Navarro-Rosinés & Hladun (1996: 164).

***candelariellae** Diederich & Etayo
On *Candelariella aurella*, *C. vitellina* and *C. xanthostigma* (saxicolous, terricolous and corticolous).
B - . **L** Ard.: RRR (type locality), Lorr.: RR.
Lit.: Diederich (1996: 52-55).

***cladoniae** Diederich & M. S. Christ.
On *Cladonia* species, especially *C. coniocraea*, *C. ochrochlora* and *C. parasitica.*
B Mosan: RRR, Lorr.: RR. **L** Lorr.: RR.
Lit.: Diederich (1996: 65-69).

***hypogymniae** Diederich & M. S. Christ.
On *Hypogymnia physodes*.
B - , overlooked. **L** Ard.: AR, Lorr.: R.
Lit.: Diederich (1996: 90-95).

***lichenicola** Diederich
On *Mycoblastus fucatus*.
B Mosan: RR, Ard.: R, Lorr.: RRR. **L** Ard.: AC, Lorr.: AC (but absent in the southern part) (type locality).
Lit.: Di: 233, LF0: 2-5, NL97: 57, Diederich (1996: 97-103).

***pertusariae** Diederich
On *Pertusaria hymenea*.
B Ard.: RR. **L** Lorr.: RRR.
Lit.: NL97: 57, Diederich (1996: 133-136), Tholl et al. (1999).

***phaeophysciae** Diederich & M. S. Christ.
On *Phaeophyscia orbicularis*.
B Fl.: RRR, Ard.: RRR, Lorr.: RRR. **L** Lorr.: R.
Lit.: Diederich (1996: 142-146).

coppinsii* Diederich & G. Marson. Reported from **L on the thallus of *Evernia prunastri* by Di: 232, but the corresponding material belongs to another non-identified fungus (Diederich 1996: 74).

TREMOLECIA Choisy

atrata (Ach.) Hertel
Syn.: *Lecidea atrata* (Ach.) Wahlenb., *Lecidea dicksonii* auct., non (J. F. Gmel.) Ach.
On exposed, siliceous, natural outcrops.
B Ard.: RR. **L** - .
Lit.: L8, Mü1: 143.

TRICHONECTRIA Kirschst.

Anamorphs: *Acremonium* Link and *Cylindrocarpon* Wollenw.

***hirta** (Bloxam) Petch
Anamorph: an unnamed *Cylindrocarpon*
On epiphytic lichens, mainly *Scoliciosporum chlorococcum* and *S. umbrinum*.
B Mosan: RRR, Ard.: RRR. **L** Ard.: AR, Lorr.: AR.
Lit.: Di: 226-227, L5: 43, Rossman (1983: 78).

***rubefaciens** (Ellis & Everh.) Diederich & Schroers
Syn.: *Nectria rubefaciens* Ellis & Everh.
Anamorph: *Acremonium rhabdosporum* W. Gams
On dying, corticolous thalli of *Parmelia saxatilis* and *P. sulcata* in humid forests.
B - . **L** Lorr.: R, probably more common.
Lit.: Di: 168-169, 237, L5: 5-6, 31, L8, Lowen (1995: 91-93).

TRICHOTHELIUM Müll. Arg.

aeneum (Wallr.) R. C. Harris, see *Porina aenea*

chloroticum (Ach.) R. C. Harris, see *Porina chlorotica*

lineare (Leight.) R. C. Harris, see *Porina linearis*

TRIMMATOSTROMA Corda

***lichenicola** M. S. Christ. & D. Hawksw.
On *Candelariella vitellina* (apothecia) and *Pleurosticta acetabulum* (thallus).
B - . **L** Lorr.: RR.
Lit.: L7: 90, L8.

TRIMMATOTHELE Norman

maritima (B. de Lesd.) Zahlbr.
Syn.: *Lesdainea maritima* B. de Lesd., incl. var. *nigricans* B. de Lesd.
On marl and brick in dunes.
B - . **L** - . **F** Mar.: RR (1910) (type locality).
Lit.: BDL1: 259-260.

TUCKERMANNOPSIS Gyeln.

chlorophylla (Willd.) Hale
Syn.: *Cetraria chlorophylla* (Willd.) Vain.
Mainly on roadside trees (e. g. *Fraxinus*, *Tilia*), also rarely found on *Quercus* in rather dry and open forests, exceptionally saxicolous, on shaded, siliceous rocks.
B Camp.: R, Brab.: RRR, Mosan: R, Ard.: AR, Lorr.: RR. **L** Ard.: AC, Lorr.: AR.
Lit.: Ba: 8, L4: 19, La66: 415-419, Mü1: 154, WS: 32-33, 67, Lambinon (1968b: Schumacker (1965).

sepincola (Ehrh.) Hale
Syn.: *Cetraria sepincola* (Ehrh.) Ach.
On thin branches of *Betula*, always in humid and sheltered conditions, once on a fence post.
B Ard.: AR→R (mainly Haute Ard.), Lorr.: R (†1989). **L** Ard.: RRR (1981), Lorr.: RRR (†1966).
Lit.: L4: 19, La66: 412-415, Mü1: 154, WS: 33, 68, Diederich (1985a: 21-22), Lambinon (1968b: 406), Schumacker (1965).

hepatizon (Ach.) Kurok., syn. *Parmelia fahlunensis* auct., *Cetraria hepatizon* (Ach.) Vain. The ancient report of this species from **L** is not sustained by any relevant specimens (La66: 405-406) and most probably represents misidentification.

UMBILICARIA Hoffm.

Syn.: *Gyrophora* Ach.

deusta (L.) Baumg.
On siliceous, usually humid rocks, in natural and artificial habitats.
B Ard.: AR. **L** - .
Lit.: La66: 342-345, Schl: 156, 217 (the ancient report from **L** Lorr. is almost surely a misidentification for *U. polyphylla*) .

grisea Hoffm.
Syn.: *U. murina* (Ach.) DC.
On exposed, natural outcrops of siliceous rocks.
B Ard.: R. **L** - . **F** Ard.: RRR.
Lit.: La66: 348-351, NL77: 23.

hirsuta (Westr.) Hoffm.
On exposed, natural outcrops of siliceous rocks and on slate debris in old quarries.
B Mosan: RRR, Ard.: AR. **L** - . **F** Ard.: RR.
Lit.: La66: 351-354, La69: 145-146, NL77: 23.

polyphylla (L.) Baumg.
On exposed, natural outcrops of siliceous and sandstone rocks, and on slate debris in old quarries.
B Mosan: RRR, Ard.: AR. **L** Lorr.: RR.
Lit.: La66: 345-348, NL77: 23, Diederich (1985a: 26).

polyrrhiza (L.) Fr.
On natural outcrops of siliceous rocks.
B - . **L** - . **F** Ard.: RRR. **D** Ard.: RRR.
Lit.: L8, NL99, Müller (1949: 18).

cylindrica (L.) Duby. Old records from **B** and **L** cannot be confirmed for lack of relevant material; the occurrence of this species in the study area is very doubtful (La66: 341-342).

murina (Ach.) DC., see *U. grisea*

pustulata (L.) Hoffm., see *Lasallia pustulata*

vellea (L.) Hoffm. This species has not been found in the study area, but is recorded from a locality in **D** so close to the Belgian border that its presence in it is possible (La66: 341-342, Müller 1949: 18). It has been found on natural outcrops of siliceous rocks.

UNGUICULARIOPSIS Rehm

***acrocordiae** (Diederich) Diederich & Etayo, comb. ined.
Syn.: *Skyttea acrocordiae* Diederich
On *Acrocordia gemmata*.
B Lorr.: RRR (type locality). **L** - .
Lit.: LF0: 12-14, Diederich & Etayo (in prep.).

***lesdainii** (Vouaux) Etayo & Diederich, comb. ined.
Syn.: *Mollisia lesdainii* (Vouaux) Vouaux, *Nesolechia lesdainii* Vouaux, *Skyttea lesdainii* (Vouaux) W. Y. Zhuang & Korf
On *Lecanora saligna*.
B - . **L** - . **F** Mar.: RR (<1914) (type locality).
Lit.: BDL1: 272, Bouly de Lesdain (1914: 155), Diederich & Etayo (in prep.), Zhuang & Korf (1989).

***refractiva** (Coppins) Coppins
On *Mycobilimbia sabuletorum*.
B - . **L** Lorr.: RRR.
Lit.: Coppins (1988).

***sp.** (as '*Unguiculariopsis* sp. 1' in Diederich 1989)
On *Caloplaca obscurella* on *Malus* in orchards.
B - . **L** Lorr.: RR.
Lit.: Di: 227-228.

URCEOLARIA Ach., nom. rej., see *Diploschistes*

USNEA Adans.

articulata (L.) Hoffm.
Terricolous, in sand dunes, or corticolous on well-lit trees in forests or at their edge.
B Mar.: RRR (†1917), Ard.: RR (†<1900), Lorr.: RRR (†1963). **L** - .
Now extinct throughout the area of study.
Lit.: L4: 19, La66: 453-454.

ceratina Ach.
Syn.: *U. ceratina* var. *incurviscens* (Arnold) H. Olivier
On old trees with a rather acid bark in well-lit situations.

B Brab.: RR (†<1900), Ard.: AR (especially in the southern parts), Lorr.: R. **L** Distr. unknown: R (†<1850).
Lit.: La66: 460-461, NL97: 57, Diederich (1986a: 122).

cornuta Körb.
Syn.: *U. inflata* (Duby) Motyka, *U. intexta* Stirt.
On trees, or on siliceous or sandstone rocks, always inside rather humid forests.
B Mosan: RRR (1962), Ard.: RR (1985). **L** Lorr.: RR (†1964).
Lit.: L8, La66: 457 (sub *U. intexta*), Clerc (1987: 487-489).

filipendula Stirt.
Syn.: *U. dasypoga* auct., non (Ach.) Shirley, *U. muricata* auct., ?non Motyka
On any kind of deciduous trees in forests or in wooded peat bogs, also on roadside trees.
B Mar.: RR, Brab.: RRR (†1916), Mosan: R, Ard.: AC→ AR, Lorr.: AR. **L** Ard.: AR, Lorr.: R.
Lit.: Ho: 239, 629, La66: 462-463, NL84: 18, WS: 58, 112.

flammea Stirt.
Ecology of the only specimen unknown, but probably corticolous.
B - . **L** Lorr.: RRR (†<1850).
Earlier reports of this species refer to *U. cornuta*; there is only one specimen that actually represents this species. Now extinct throughout the area of study.
Lit.: L8, La66: 457-458.

florida (L.) F. H. Wigg.
In forests, mostly on *Betula* and *Quercus*, and on isolated trees, rarely on fence posts, mainly on branches, rarely on trunks.
B Mosan: RRR, Ard.: AR, Lorr.: AR. **L** Ard.: AR, Lorr.: R.
Lit.: La66: 455-456, WS: 58-59, 113.

fragilescens Lynge var. **fragilescens**
On natural outcrops of siliceous rocks.
B Ard. (only in the western part): RR (1963). **L** - .
Lit.: L8, La66: 458.

fulvoreagens (Räsänen) Räsänen
On all kinds of trees (*Alnus*, *Betula*, *Fagus*, *Pinus*, *Populus*, *Prunus spinosa*, *Pyrus*, *Quercus*, *Sorbus aucuparia*), especially on branches, mainly in forests.
B Mosan: RRR, Ard.: R, Lorr.: R. **L** Ard.: R, Lorr.: RR.
Lit.: L8, La66: 460, NL84: 18, NL92: 174, WS: 59, 114, Diederich (1985a: 26).

glabrata (Ach.) Vain.
On trees, mainly on *Quercus*, in forests or on roadside trees in forest conditions.
B Ard.: RR (1965). **L** - .
Lit.: L8, La66: 457.

hirta (L.) F. H. Wigg.
On *Quercus* trees in rather dry forests, over hill tops.
B Camp.: RRR (†1920), Ard.: RRR. **L** Ard.: RR.
Lit.: L8, La66: 454, NL92: 165.

madeirensis Motyka
On trees (*Fagus*) inside forests, for the **B** collections, unknown for the **L** specimen.
B Ard.: RR (†1959). **L** Distr. unknown: RRR (†<1850).
Now extinct throughout the area of study.
Lit.: L8, Clerc (1991: 436).

rubicunda Stirt.
Syn.: *U. rubiginea* auct., non (Michx.) A. Massal.
Presumably on trees for most **B** localities, on sandstone rocks in **L**.
B Brab.: RR (†<1900), Ard.: RR (†<1900). **L** Lorr.: RR (†<1850).
Now extinct throughout the area of study.
Lit.: L8, La66: 456.

subfloridana Stirt.
Syn.: *U. comosa* (L.) Vain.
On any kind of deciduous trees in forests or in wooded peat bogs, also on roadside trees, exceptionally saxicolous.
B Mar.: RR, Fl.: RR, Camp.: RRR, Brab.: R, Mosan: AR, Ard.: AC, Lorr.: AR. **L** Ard.: AR, Lorr.: R.
Lit.: Ca: 128, Ho: 241, 629, La66: 458-459, NL84: 18, WS: 60, 115, Lambinon (1968b: 405).

wasmuthii Räsänen
On deciduous trees in forests (e. g. *Fagus*) and in exposed conditions (on *Prunus spinosa*).
B Ard.: RRR (†1890). **L** Ard.: RRR (1986), Lorr.: RRR (1978).
The specimens reported by La66: 459-460 either refer to *U. madeirensis* or to *U. subfloridana*.
Lit.: L8.

barbata (L.) F. H. Wigg. The report of this species from **L** by Ko: 103 is not supported by any herbarium material; it most probably refers to *U. filipendula*.

comosa (L.) Vain., see *U. subfloridana*

dasypoga auct., non (Ach.) Shirley, see *U. filipendula*

extensa Vain. The specimens reported by La69: 164 are those published as *U. wasmuthii* by La66: 459-460; they refer either to *U. madeirensis* or to *U. subfloridana*.

inflata (Duby) Motyka, see *U. cornuta*

intexta Stirt., see *U. cornuta*

muricata auct., ?non Motyka, see *U. filipendula*

plicata (L.) Wigg. The report of this species from **L** by Ko: 102 is not supported by any herbarium material, and is therefore doubtful.

rubiginea auct., non (Michx.) A. Massal., see *U. rubicunda*

subcornuta Stirt. Once reported from **B** Mar. (on sand dunes) (La66: 455), but no material seen. The occurrence of this species in the study area is very doubtful (L8), as the species does not occur in Europe (Nimis 1993: 730).

VERRUCARIA Schrad.

Syn.: *Lithoicea* Gray p. p.

This genus is still poorly known in the study area. Many taxa are just known from literature records and have not been checked by us. The taxonomic status of several species still requires further studies.

aethiobola Wahlenb.

On siliceous rocks frequently immersed, often in streams.

B Ard.: AR. **L** Ard.: RRR.

Lit.: BDL3: 34, La69: 98.

aquatilis Mudd

On siliceous or sandstone, rarely calcareous rocks or stones, always in streams.

B Mosan: RR, Ard.: RR. **L** Ard.: RRR, Lorr.: RR.

Lit.: Mü1: 140, NL77: 23, NL84: 18, NL87: 23, Molitor & Diederich (1997: 81-82).

arduennica Zschacke

On calcareous rocks.

B Mosan: RRR (<1900) (type locality, indicated as 'in den Ardennen bei Waulsort bei Malmédy' [sic]). **L** - .

The taxonomic status of this species requires further studies.

Lit.: Zschacke (1933: 161-162).

(*)**aspiciliicola** R. Sant.

Syn.: *V. aspiciliae* Zehetl., non (Lahm) Stizenb.

Lichenicolous lichen, parasitic on thalli of *Aspicilia calcarea*, over calcareous, natural outcrops.

B Mosan: RR. **L** - .

Lit.: Ertz: 39-40.

bryoctona (Th. Fr.) Orange

Syn.: *Thelidium bryoctonum* Th. Fr.

Terricolous and muscicolous over sandy soil and concrete.

B Mar.: RRR. **L** - . **NL** Camp.: RRR.

Lit.: L7: 89-90.

caerulea DC.

On exposed or shaded, calcareous, natural outcrops.

B Mosan: R. **L** - .

Lit.: DG: 14, Ertz: 40, NL84: 18, NL97: 57.

calciseda DC.

On well-lit, exposed, calcareous, natural outcrops, also on gravestones.

B Fl.: RRR, Brab.: RRR, Mosan: AR, Ard.: RR, Lorr.: RRR. **L** - . **D** Lorr.: RR.

Lit.: DG: 14, Ertz: 40, La69: 98, NL84: 18, NL87: 23, NL97: 57, John (1986: 53), Zwaenepoel et al. (1994: 37).

compacta (A. Massal.) Jatta

On well-lit, exposed, calcareous, natural outcrops.

B Mosan: R. **L** - .

Lit.: Ertz: 41, NL87: 23, NL97: 57.

cyanea A. Massal.

On shaded and sheltered, calcareous, natural outcrops, also found on walls of calcareous stones.

B Mosan: RR. **L** - .

Lit.: NL84: 18.

dolosa Hepp

Syn. *V. mutabilis* auct. p. p., non Leight., incl. *V. floerkeana* Dalla Torre & Sarnth.

On calcareous, either natural or artificial substrates.

B Mosan: AR, Ard.: R, Lorr.: RRR. **L** Ard.: RR, Lorr.: RR.

Lit.: BDL3: 34, NL84: 18, NL87: 23.

dufourii DC.

On exposed, calcareous, natural outcrops, incl. tufa.

B Mosan: RRR, Ard.: RRR, Lorr.: RR. **L** - .

Lit.: DG: 14, NL87: 23.

elaeodes (Hue) Zschacke

Syn.: *V. dolomitica* (A. Massal.) Kremp. var. *elaeodes* (Hue) Zahlbr., *V. integra* (Nyl.) Nyl. var. *elaeodes* Hue

On calcareous, natural outcrops.

B Mosan: R (type locality), Lorr.: RRR. **L** - . Probably overlooked.

This species is possibly of synonym of *V. cinereorufa* Schaer.

Lit.: Hue (1898), Zschacke (1933: 124).

elaeomelaena (A. Massal.) Arnold
On calcareous and sandstone rocks or stones in streams.
B - . **L** Lorr.: R. **F** Mosan: RRR, Lorr.: RRR.
Lit.: BDL3: 35, La69: 98, Molitor & Diederich (1997: 82-83).

foveolata (Flörke) A. Massal.
Syn.: *V. dolomitica* (A. Massal.) Kremp., *V. veronensis* A. Massal.
On exposed, calcareous, natural outcrops and on stones among grass.
B Mosan: R. **L** - . **F** Mar.: RRR (1910).
Lit.: DG: 14, NL84: 18, NL97: 57, Zschacke (1933: 68).

funckii (Spreng.) Zahlbr.
Syn.: *V. silacea* Servít
On siliceous stones in a stream.
B Ard.: RRR. **L** - .
Lit.: Mü1: 140 (the report from **B** Ard. is likely to refer to *V. hydrela*), NL97: 35.

(*)**fuscella** (Turner) Winch
On calcareous rocks and stones, often over other *Verrucaria* or *Baglietto*a species (lichenicolous ?).
B Mosan: RR, Ard.: RR. **L** - .
Lit.: DG: 14, Mü5: 19.

(*)**fuscula** Nyl.
Syn.: *V. insularis* (A. Massal.) Jatta, *Dermatocarpon insulare* (A. Massal.) Mig.
Lichenicolous lichen, parasitic on thalli of *Aspicilia calcarea*, over calcareous, natural outcrops.
B Mosan: RR. **L** - .
Lit.: Ertz: 41-42, L8.

glaucovirens Grummann
Syn.: *V. virens* Nyl.
On artificial, calcareous substrata (wall, mortar, etc.).
B Mar.: RRR, Camp.: RRR, Mosan: RRR. **L** - .
Lit.: L8.

hochstetteri Fr.
Incl. *V. mastoidea* (A. Massal.) Trevis.
On calcareous rocks, either in natural or artificial conditions.
B Mosan: R. **L** Lorr.: RRR. **F** Mosan: RRR.
Lit.: BDL2: 42-43, Ertz: 42, NL77: 23, NL84: 18, NL97: 57.

hydrela Ach.
Incl. ?*V. hydrela* var. *parasitica* B. de Lesd.
On periodically inundated, siliceous rocks, mostly in streams.
B Mosan: R, Ard.: R. **L** Ard.: AR.
Lit.: BDL3: 34, NL77: 23, NL84: 18, NL87: 23, NL97: 57, Molitor & Diederich (1997: 83-84).

integra (Nyl.) Nyl.
On calcareous rocks, only in natural conditions?
B Mosan: RRR (<1900). **L** - . **F** Mar.: RRR (1910).
Lit.: Zschacke (1933: 70).

(*)**latericola** Erichsen
Syn.: *V. granulosaria* Clauzade & Zehetl.
Lichenicolous lichen, on *Caloplaca biatorina*, *C. cirrochroa* and *C. saxicola*, over siliceous, natural outcrops.
B - . **L** Ard.: RRR. **F** Mosan: RRR.
Lit.: L7: 90.

lecideoides Trevis.
Syn.: *V. frandulosa* Nyl.
On exposed, calcareous, natural outcrops, also found on artificial substrates.
B Mosan: R, Ard.: R. **L** - .
Lit.: BDL2: 42, BDL3: 35, NL97: 57, Remy (1979).

lignicola (B. de Lesd.) Zschacke
Syn.: *V. hydrela* f. *lignicola* B. de Lesd.
On the roots of *Alnus* in a river.
B Ard.: RRR (type locality). **L** - .
The taxonomic status of this species requires further studies.
Lit.: BDL3: 34, Breuss (1998: 835), Clauzade & Roux (1985: 815), Zschacke (1933: 258-259).

macrostoma DC.
Incl. *V. macrostoma* f. *furfuracea* B. de Lesd., *V. velana* (A. Massal.) Zahlbr.
On calcareous, natural outcrops, and on artificial substrates (walls, bricks, mortar, etc.).
B Fl.: RRR, Camp.: RR, Brab.: RR, Mosan: AR, Ard.: RRR. **L** Lorr.: *AR*.
Lit.: DG: 14, Ertz: 42, La69: 98, NL84: 18, NL87: 23, NL93: 46, NL97: 57.

maculiformis Kremp.
On calcareous, natural rocks, pebbles, etc.
B Camp.: RRR, Brab.: RR, Mosan: AR, Ard.: RRR. **L** Lorr. (Moselle): RRR.
Lit.: NL87: 23.

margacea (Wahlenb.) Wahlenb.
On wet or inundated, siliceous rocks, often in streams.
B Ard.: R. **L** Ard.: RR.
Lit.: Mü1: 140, NL92: 165, Molitor & Diederich (1997: 84-86).

marmorea (Scop.) Arnold
On hard calcareous, natural outcrops.
B Mosan: R. **L** - . **F** Fl.: RRR (1910).
Lit.: DG: 14, Ertz: 43, Tonglet (1892), Zschacke (1933: 92).

mortarii Lamy
On calcareous, natural outcrops.
B Mosan: RRR. **L** - . **F** Mar.: RRR (1910).
The taxonomic status of this species requires further studies.
Lit.: Zschacke (1933: 75-76).

muralis Ach.
Syn.: *V. rupestris* Schrad., non (Scop.) F. H. Wigg.
On calcareous, natural outcrops, and on artificial substrates (walls or concrete), exceptionally on wood.
B Fl.: RR, Camp.: RRR, Brab.: RR, Mosan: R, Ard.: RR, Lorr.: RR. **L** Lorr.: *C.* Probably overlooked and common in most districts.
Lit.: Ertz: 43, Mü1: 140, NL77: 23, NL84: 18, NL87: 23, NL92: 165, NL97: 57.

murina Leight.
Syn.: *V. myriocarpa* Lönnr., incl. ?*V. amylacea* A. Massal.
On calcareous, natural outcrops, and on pebbles in Mesobromion communities.
B Mosan: R. **L** Lorr.: RRR.
Lit.: DG: 14, Mü1: 140 and Mü2: 197 (**B** Ard., to be checked).

nigrescens Pers.
Incl. *V. controversa* A. Massal.
On calcareous, natural outcrops, and on artificial substrates (walls, bricks, concrete, mortar, etc.).
B Fl.: *AR*, Camp.: R, Brab.: *AR*, Mosan: AC, Ard.: RR, Lorr.: RR. **L** Lorr.: *C.* Most probably common in most parts of the study area.
Lit.: Ertz: 43-44, Mü1: 140, NL77: 23, NL87: 24, NL84: 18, NL92: 174, NL93: 46, NL97: 57, VGH: 114.

ochrostoma (Leight.) Trevis.
On calcareous substrates in ruderal conditions (wall of church, mortar, concrete).
B Fl.: RRR, Camp.: RRR, Mosan: RR. **L** Lorr.: RRR.
Lit.: NL84: 18, NL93: 46.

pinguicula A. Massal.
On calcareous, natural outcrops.
B Mosan: AR, Ard.: RRR. **L** Lorr. (Moselle): RRR.
Lit.: NL87: 24, NL97: 57.

praetermissa (Trevis.) Anzi
On siliceous or calcareous rocks or stones, rarely on mortar or on iron posts, in streams or on shaded outcrops.
B Mosan: R, Ard.: R. **L** Ard.: RR, Lorr.: R.
Lit.: Ertz: 44, Mü4: 111, NL84: 18, NL97: 58, Molitor & Diederich (1997: 86-87).

rheitrophila Zschacke
Syn.: *V. kernstockii* Zschacke
On partly immersed, siliceous rocks in streams.
B Mosan: RR, Ard.: RR. **L** Ard.: RR.
Lit.: Mü1: 140, NL84: 18, Molitor & Diederich (1997: 87).

sorbinea Breuss
On bark and over epiphytic mosses of an old *Sorbus*, in parkland conditions.
B - . **L** Lorr.: RRR (type locality).
Lit.: Breuss (1998).

subfuscella Nyl.
Syn.: *V. glaucina* auct., non Ach.
On calcareous, natural outcrops, rarely in artificial habitats.
B Mosan: AR, Ard.: R, Lorr.: RRR. **L** Ard.: RR, Lorr. (Moselle): RRR. **F** Lorr. (Moselle): RR.
Lit.: Ertz: 45, Mü4: 111, NL84: 18, NL87: 23, NL97: 58, John (1986: 144), John (1990b: 245), Zschacke (1933: 277).

subtruncatula B. de Lesd.
On calcareous stones in artificial conditions.
B - . **L** - . **F** Mar.: RRR (1910) (type locality).
The taxonomic status of this species requires further studies.
Lit.: BDL1: 241-242, Zschacke (1933: 158).

thalassina (Zahlbr.) Zschacke
On shells close to the sea.
B - . **L** - . **F** Mar.: RRR.
Lit.: Zschacke (1933: 140).

umbrinula Nyl.
On siliceous, natural outcrops.
B Ard.: RRR. **L** - .
Lit.: L8.

viridula (Schrad.) Ach.
Syn.: *V. obductilis* (Nyl.) Zschacke, *V. polygonia* Körb.
On calcareous or siliceous, natural outcrops, and on artificial substrates (walls, concrete, mortar, etc.).
B Fl., Camp., Brab.: *R*, Mosan: AR, Ard.: RR, Lorr.: RR. **L** Lorr.: *C*, most probably common, but under-recorded in large parts of the study area.
Lit.: Ertz: 46, NL84: 18, NL87: 24, NL92: 165, NL93: 46, NL97: 58, Zschacke (1933: 115).

sp. (as '*Verrucaria squamulosa* ined.' in Ertz 1999)
On exposed or partially shaded, hard calcareous, natural outcrops.
B Mosan: RR. **L** - .
This species is still undescribed.
Lit.: Ertz: 44-45.

acrotella Ach. Reported from **B** Ard. by Mü5: 18 and from **L** Lorr. by Ko: 308, but no specimen seen.

amylacea A. Massal., see *V. murina*

anceps Kremp. Reported from **B** Mar. by BDL2: 42 and from **L** Lorr. by Ko: 308, but no material seen.

calcivora Nyl. var. *belgica* Hue, see *Thelidium calcareum* var. *belgicum*

canella Nyl., syn. *V. glaucina* subsp. *canella* (Nyl.) A. L. Sm. This taxon was reported from **B** Mosan on calcareous rocks in NL84: 18. However, this name is considered to be a synonym of *V. fuscella* by Santesson (1993: 231) and by Nimis (1993: 739), and as a possible synonym of *V. aspiciliicola* R. Sant. by Purvis et al. (1992: 637). Without any additional evidence, we prefer to consider this as a doubtful record.

cinereorufa Schaer., see *V. elaeodes*

controversa A. Massal., see *V. nigrescens*

dionantensis Hue, see *Thelidium dionantense*

dionantensis var. *lecideiformis* Hue, see *Thelidium dionantense* var. *lecideiforme*

dolomitica (A. Massal.) Kremp., see *V. foveolata*

dolomitica var. *elaeodes* (Hue) Zahlbr., see *V. elaeodes*

floerkeana Dalla Torre & Sarnth., see *V. dolosa*

frandulosa Nyl., see *V. lecideoides*

fusconigrescens Nyl. Reported from **B** Ard. by BDL3: 33, but no material seen.

glaucina auct., non Ach., see *V. subfuscella*

glaucina subsp. *canella* (Nyl.) A. L. Sm., see *V. canella*

(*)*granulosaria* Clauzade & Zehetl., see *V. latericola*

(*)*insularis* (A. Massal.) Jatta, see *V. fuscula*

integra (Nyl.) Nyl. var. *elaeodes* Hue, see *V. elaeodes*

kernstockii Zschacke, see *V. rheitrophila*

leightonii Hepp, non A. Massal. Reported from **B** by DG: 14, but no material seen.

mastoidea (A. Massal.) Trevis., see *V. hochstetteri*

mucosa Wahlenb. The only Belgian record of this species (BDL3: 34) is erroneous: the corresponding material belongs to *V. rheitrophila* (Zschacke 1933: 193).

muscicola var. *moniacensis* Hue, see *Microglaena muscorum* var. *moniacensis*

mutabilis auct. p. p., non Leight., see *V. dolosa*

myriocarpa Lönnr., see *V. murina*

obductilis (Nyl.) Zschacke, see *V. viridula*

polygonia Körb., see *V. viridula*

rupestris Schrad., non (Scop.) F. H. Wigg., see *V. muralis*

silicea Servít, see *V. funckii*

sphinctrina auct., non Ach. A name used for different species of *Bagliettoa*.

tongletii Hue (as '*tongleti*'), see *Thelidium tongletii*

umbrosa (A. Massal.) Trevis. Reported from **B** by DG: 14, but no material seen. A name of uncertain application.

velana (A. Massal.) Zahlbr., see *V. macrostoma*

veronensis A. Massal., see *V. foveolata*

vicinalis Arnold. Reported from **B** by DG: 14, but no material seen. A name of uncertain application.

virens Nyl., see *V. glaucovirens*

VEZDAEA Tscherm.-Woess & Poelt

acicularis Coppins
On acidic and strongly mineralized soil, on siliceous rocks.
B - . **L** - . **F** Ard.: RRR.
Lit.: L5: 43-44.

aestivalis (Ohlert) Tscherm.-Woess & Poelt
On acidic soil, often over *Peltigera*, also on railway ballast.
B Ard.: RR. **L** Ard.: RRR, Lorr.: RR.
Lit.: L4: 33, NL92: 174.

leprosa (P. James) Poelt & Döbbeler
On rock debris contaminated by heavy metals and on decaying mosses in old quarries and on cemeteries.
B Fl.: RRR, Camp.: *AR*, Mosan: RR. **L** - .
Lit.: L4: 33, NL87: 24, Coppins & van den Boom (1995: 89), Zwaenepoel et al. (1994: 37).

retigera Poelt & Döbbeler
Over hepatics or thalli of *Peltigera*.
B Mosan: RRR. **L** Lorr.: RR.
Lit.: L4: 33, NL87: 24.

rheocarpa Poelt & Döbbeler
On dead plants, bryophytes and old thalli of *Peltigera*.
B Ard.: RRR. **L** Lorr.: RRR.
Lit.: L5: 44, L8.

VOUAUXIELLA Petr. & Syd.

*__lichenicola__ (Linds.) Petr. & Syd.
On *Lecanora argentata*, *L. chlarotera*, *L. rugosella*, *L. saligna* and *L. umbrina*.
B Mosan: RRR, Lorr.: RRR. **L** Ard.: RR, Lorr.: AR.
Lit.: Di: 255-256, LF0: 25, NL97: 58.

*__verrucosa__ (Vouaux) Petr. & Syd.
On *Lecanora hybocarpa*, mainly on the apothecial margin.
B Mosan: RRR. **L** - .
Lit.: L8.

VOUAUXIOMYCES Dyko & D. Hawksw., see *Abrothallus*

**ramalinae* (Nordin) D. Hawksw., see *Abrothallus suecicus*

**truncatus* (B. de Lesd.) Dyko & D. Hawksw., see *Abrothallus microspermus*

VULPICIDA Mattson & M. J. Lai

pinastri (Scop.) Mattson & M. J. Lai
Syn.: *Cetraria pinastri* (Scop.) Gray
On bark of various trees, often on small branches and twigs, mainly near the ground in such a way that the thalli are likely to be covered by snow in winter, once lignicolous, on a fence post.
B Mar.: RR, Mosan: RR, Ard.: AR→RR, decreasing, Lorr.: RRR (†<1944). **L** Lorr.: RR.
Although this species is rapidly decreasing in all parts of the study area, minuscule, young thalli have recently been observed several times in regions where the species did not exist before, or where the atmospheric pollution is important (**B** Mar. and **L** Lorr.).
Lit.: Ho: 116, 571, L4: 19, La66: 410-412, Mü1: 154, NL84: 13, Schumacker (1965).

juniperinus (L.) Mattson & M. J. Lai, syn. *Cetraria juniperina* (L.) Ach. The ancient report of this species from **L** Ard. by Ko: 144 is not sustained by any relevant specimens (La66: 405-406) and most probably represents misidentification.

WEDDELLOMYCES D. Hawksw.

*__epicallopisma__ (Wedd.) D. Hawksw.
On *Caloplaca aurantia*.
B Fl.: RRR, Mosan: R. **L** - . Probably overlooked.
The species occurs on *C. flavescens* along the coast in France, just S of the study area.
Lit.: NL97: 35-36.

WENTIOMYCES Koord.

**lichenicola* (Hansf.) D. Hawksw. subsp. *bouteillei* Bricaud, Cl. Roux & Sérus., see *Neocoleroa lichenicola* subsp. *bouteillei*

WOESSIA D. Hawksw. & Poelt
Syn.: *Bacidina* Vězda
This genus name is used for the so-called *Bacidia phacodes* group. It was described in 1986, but there is a proposal to conserve *Bacidina* Vězda (1991) against it.

arnoldiana (Körb.) Sérus. & Diederich
Syn.: *Bacidia arnoldiana* Körb., *Bacidina arnoldiana* (Körb.) V. Wirth & Vězda, *Woessia fusarioides* D. Hawksw., Poelt & Tscherm.-Woess
Corticolous, on the smooth and rough bark of various trees, also on twigs of *Buxus*, or saxicolous on calcareous rocks, usually in humid situations (one collection made in a stream).
B Camp: RR, Mosan: AR, Ard.: RR. **L** Lorr.: RR.
The material referred to this species is heterogeneous and two different species might be involved. This matter requires further studies.
Lit.: Di: 49-50, L5: 13, NL84: 12, NL92: 168, NL93: 42, NL97: 36-38, van den Boom & Sérusiaux (1996: 21).

caligans (Nyl.) Sérus. & Diederich
Syn.: *Bacidia caligans* (Nyl.) A. L. Sm.
On calcareous walls or concrete, or epiphytic, on *Malus*, *Salix* or *Sambucus*, usually in ruderal conditions.
B Mar.: RRR, Brab.: RRR, Mosan: RR, Ard.: RRR. **L** Ard.: RRR, Lorr.: RR.
Lit.: Di: 51-52, L6: 139, NL84: 12, NL92: 168, NL97: 38, Purvis et al. (1992: 105).

Bacidia chloroticula (Nyl.) A. L. Sm.
Syn.: *Bacidina chloroticula* (Nyl.) Vězda & Poelt, *Bacidia neglecta* Vězda
On bark of trees in orchards or along roads, on leaves or knots of *Buxus*, on old stroma of *Hypocreopsis lichenoides*, and on siliceous stones in a stream.
B Camp.: RRR, Brab.: RR, Mosan: R. **L** Ard.: RRR, Lorr.: RR. **F** Lorr. (Moselle): RRR, most probably widespread.
Lit.: L1: 6, L5: 13-14, Di: 52, NL93: 42, van den Boom & Sérusiaux (1996: 21).

delicata (Leight.) Sérus. & Diederich
Syn.: *Bacidia delicata* (Leight.) Coppins, *Bacidina delicata* (Leight.) V. Wirth & Vězda
Corticolous, on *Populus*, *Pyrus*, *Quercus*, *Salix* and *Sambucus*, usually in sheltered and humid conditions.
B Mosan: R, Ard.: RRR. **L** Ard.: RRR, Lorr.: R.
Lit.: Di: 53, L5: 14, NL84: 12, NL92: 168, NL97: 38-39.

Bacidia egenula (Nyl.) Arnold
Syn.: *Bacidina egenula* (Nyl.) Arnold

Saxicolous, on sandstone rocks, or corticolous, on *Alnus* and *Pyrus*.
B - . **L** Lorr.: RR.
The identity of the material is doubtful and requires further studies.
Lit.: Di: 47, L3: 26.

inundata (Fr.) Sérus. & Diederich
Syn.: *Bacidia inundata* (Fr.) Körb., *Bacidina inundata* (Fr.) Vězda
On ± calcareous rocks in humid and shaded conditions, often in streams.
B Ard.: RR. **L** Ard.: RRR, Lorr.: RR.
Lit.: Mü1: 144, NL97: 39.

Bacidia neosquamulosa Aptroot & van Herk
On *Populus* at margin of a *Picea* plantation.
B Fl.: RRR. **L** - . Probably overlooked.
Lit.: Aptroot & van Herk (1999).

Bacidia phacodes Körb.
Syn.: *Bacidina phacodes* (Körb.) Vězda, *Bacidia albescens* (Stizenb.) Bausch
On *Acer campestre* in sheltered and humid forests.
B Mosan: RR. **L** - . Probably overlooked.
Lit.: L5: 14-15, NL84: 12, van den Boom & Sérusiaux (1996: 22).

Bacidia saxenii Erichsen
On walls, stones, gravestones, normally in ruderal conditions, also on slate debris in a disused quarry.
B Fl.: RRR. **L** Ard.: RRR, Lorr.: RRR.
The report of this species from **B** Camp.: RRR by NL93: 42 is erroneous, the specimen belonging to a possibly undescribed species.
Lit.: L8.

fusarioides D. Hawksw., Poelt & Tscherm.-Woess, see *W. arnoldiana*

XANTHOPARMELIA (Vain.) Hale

conspersa (Ach.) Hale
Syn.: *Parmelia conspersa* (Ach.) Ach., *P. stenophylla* auct., non (Ach.) Heugel, nom. conf., *P. molliuscula* auct. belg. p. p., non Ach.
On exposed, siliceous rocks, on walls or roofs, exceptionally on sandstone rocks, once found on dust-enriched bark.
B Brab.: RR, Mosan: AC, Ard.: AC. **L** Ard.: AC, Lorr.: RRR.
The report of *X. angustiphylla* (Gyeln.) Hale from **B** by Hale (1990: 68) refers to non-isidiate forms of *X. conspersa*. The genuine *X. angustiphylla* does not occur in the study area.
Lit.: La66: 432-433, Diederich (1985a: 23), Lambinon & Sérusiaux (1985b: 207).

mougeotii (D. Dietr.) Hale
Syn.: *Parmelia mougeotii* D. Dietr.
Saxicolous, on exposed, siliceous or sandstone rocks and stones, in natural habitats and on slate debris in old quarries, also on walls.
B Mosan: RR, Ard.: AR. **L** Ard.: AR, Lorr.: RR.
Lit.: La66: 433-434, Lambinon & Sérusiaux (1985b: 209).

protomatrae (Gyeln.) Hale
Syn.: *Parmelia protomatrae* Gyeln.
On a dry and sunny, natural, slightly calcareous, siliceous outcrop.
B Mosan: RRR. **L** - .
Lit.: Schl: 240 (probably a mistake for var. *somloënsis*, see L8), Lambinon & Sérusiaux (1985b: 209-210).

somloënsis (Gyeln.) Hale var. **somloënsis**
Syn.: *X. taractica* (Kremp.) Hale, *Parmelia taractica* Kremp., *P. stenophylla* auct. p. m. p., non (Ach.) Heugel, nom. conf.
On dry and sunny, natural outcrops of siliceous rocks.
B - . **L** Ard.: RRR. **F** Mosan: RRR.
Lit.: L8, Schl: 134, 240, Lambinon & Sérusiaux (1985b: 210).

angustiphylla (Gyeln.) Hale, see *X. conspersa*

incurva (Pers.) Hale, see *Arctoparmelia incurva*

XANTHORIA (Fr.) Th. Fr.

The specimens referred to *X. candelaria* and *X. fallax* should be re-examined, as the recently circumscribed *X. fulva* (Hoffm.) Poelt & Petutschnig and *X. ulophyllodes* Räsänen are likely to occur in the study area (Poelt & Petutschnig 1992).

calcicola Oxner
Syn.: *X. aureola* auct., non (Ach.) Erichsen
Saxicolous, exceptionally corticolous, in natural and artificial habitats, always in nitrophilous conditions.
B Mar.: *CC*, Fl.: AR, Camp.: *AR*, Brab.: *AR*, Mosan: *AC*, Ard.: *AR*, Lorr.: *R*. **L** Ard.: *AR*, Lorr.: *AR*.
Lit.: Ho: 241, La66: 468, VGH: 114, Duvigneaud & Lambinon (1963: 47).

candelaria (L.) Th. Fr.
Syn.: *X. lychnea* (Ach.) Th. Fr.
Corticolous, nitrophilous, on roadside trees, in orchards, etc., often at the base of trunks, rarely saxicolous.
B Mar.: CC, Fl.: CC, elsewhere: *AC-C*. **L** Ard.: AC, Lorr.: AC.
Lit.: Ca: 167-168, Ho: 243, La66: 464, Qu: 125-127, WS: 60-61, 116.

elegans (Link) Th. Fr.
Syn.: *Caloplaca elegans* (Link) Th. Fr.
Saxicolous on all kinds of substrates which are at least slightly calcareous, always in artificial conditions (walls, quarries, etc.), unknown in natural habitats.
B Mar.: RR, Fl.: R, Brab.: R, Camp.: R, Mosan: AR, Ard.: AR, Lorr.: AR. **L** Ard.: R, Lorr.: AR.
Lit.: La66: 466-467, NL92: 174, VGH: 114, Van Landuyt & Hoffmann (1996).

fallax (Hepp) Arnold
Saxicolous, on natural, siliceous outcrops, rarely corticolous, mainly at the base of old roadside trees, always in rather nitrophilous conditions.
B Camp.: RRR, Mosan: RR, Ard.: R. **L** Ard.: R, Lorr.: AR.
Lit.: La66: 465, Mü1: 157, NL92: 174, WS: 61, 117.

parietina (L.) Th. Fr.
Corticolous on roadside trees or in orchards, or saxicolous on all kinds of substrates (especially near the coast), always in nitrophilous conditions.
B Mar.: CC, Fl.: CC, Brab.: C, elsewhere: *AC-C*. **L** Ard.: AC, Lorr.: AC.
Lit.: Ca: 169-170, Ho: 245, La66: 467, Qu: 127-128, WS: 62, 118.

polycarpa (Hoffm.) Rieber
Mainly on well-lit isolated trees or bushes, often on dead branches, usually in ruderal or nitrophilous conditions.
B Mar.: CC, Fl.: CC, Brab.: AC, elsewhere: *AC-C*. **L** Ard.: AC, Lorr.: AR.
Lit.: Ca: 172-173, Ho: 248, La66: 465-466, Qu: 127, 129, WS: 62, 119.

aureola auct., non (Ach.) Erichsen, see *X. calcicola*

lobulata (Flörke) B. de Lesd., see *Caloplaca lobulata*

lychnea (Ach.) Th. Fr., see *X. candelaria*

XANTHORIICOLA D. Hawksw.

***physciae** (Kalchbr.) D. Hawksw.
Syn.: *Coniosporium physciae* (Kalchbr.) Sacc.
On apothecia of *Xanthoria parietina* and *X. polycarpa*.
B Mar.: RRR. **L** Ard.: RRR, Lorr.: RR. **F** Mar.: RR (<1910). Probably overlooked.
Lit.: BDL1: 278, Di: 256, L4: 34.

XENONECTRIELLA Weese

**leptaleae* (J. Steiner) Rossman & Lowen, see *Pronectria leptaleae*

**ornamentata* (D. Hawksw.) Rossman, see *Pronectria ornamentata*

XYLOGRAPHA Fr.

vitiligo (Ach.) J. R. Laundon
On lying, decorticated wood in forest conditions.
B Lorr.: RRR. **L** Lorr.: RRR.
Lit.: Di: 228-229, L4: 34.

parallela (Ach.) Behlen & Desberg. The report of this species from **L** Ard. by Ko: 270 is most doubtful, as not sustained by any specimen.

ZWACKHIA Körb.

involuta (Wallr.) Körb. [in Ko: 277 as '*Zwakhia*', but on p. 349 as '*Zwakhia involuta*'], see *Opegrapha viridis*

ZWACKHIOMYCES Grube & Hafellner

***immersae** (Arnold) Grube & Triebel
On the thallus of *Bacidia bagliettoana*.
B - . **L** - . **F** Mar.: RRR (<1912).
Lit.: Grube & Hafellner (1990: 320).

***lecanorae** (Stein) Nik. Hoffm. & Hafellner, comb. ined.
Syn.: *Physalospora lecanorae* (Stein) G. Winter, *P. galactinae* Vouaux
On *Lecanora albescens*, *L. dispersa* and *L. flotowiana*.
B Brab.: RRR, Mosan: RR. **L** Lorr.: RRR. **F** Mar.: RR (<1910) (type locality of *P. galactinae*).
Lit.: BDL1: 276, NL97: 27-28, Hoffmann (1999: 140-143), Vouaux (1912-14: 81).

***Pharcidia lithoiceae** B. de Lesd.
On *Verrucaria nigrescens*.
B - . **L** - . **F** Mar.: RRR (<1910) (type locality).
Lit.: BDL1: 274, Grube & Hafellner (1990: 340-341).

***martinatianus** (Arnold) Triebel & Grube
On *Porpidia* cf. *crustulata*.
B - . **L** Ard.: RRR.
Lit.: L8.

***physciicola** Alstrup
On corticolous *Physcia caesia*.
B - . **L** Lorr.: RRR.
Lit.: L8.

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List of accepted taxa

Abrothallus De Not.
**acetabuli* Diederich
**bertianus* De Not.
**microspermus* Tul.
**parmeliarum* (Sommerf.) Arnold
**prodiens* (Harm.) Diederich & Hafellner
**suecicus* (Kirschst.) Nordin

Absconditella Vězda
fossarum Vězda & Pišút

Acarospora A. Massal.
cervina A. Massal.
fuscata (Nyl.) Arnold
glaucocarpa (Ach.) Körb.
heppii (Hepp) Körb.
macrospora (Hepp) Bagl.
nitrophila H. Magn.
sinopica (Wahlenb.) Körb.
smaragdula (Wahlenb.) A. Massal.
tongletii (Hue) H. Olivier
veronensis A. Massal.

Acremonium Link
**antarcticum* (Speg.) D. Hawksw.
**lichenicola* W. Gams
**persicinum* (Nicot) W. Gams

Acrocordia A. Massal.
cavata (Ach.) R. C. Harris
conoidea (Fr.) Körb.
gemmata (Ach.) A. Massal.
salweyi (Nyl.) A. L. Sm.

Adelococcus Theiss. & Syd.
**alpestris* (Zopf) Theiss. & Syd.

Agonimia Zahlbr.
allobata (Stizenb.) P. James
globulifera Brand & Diederich
opuntiella (Buschardt & Poelt) Vězda
tristicula (Nyl.) Zahlbr.
vouauxii (B. de Lesd.) Brand & Diederich

Anaptychia Körb.
ciliaris (L.) A. Massal.

Anema Forssell
decipiens (A. Massal.) Forssell
tumidulum Henssen ined.

Anisomeridium (Müll. Arg.) M. Choisy
biforme (Borrer) R. C. Harris
+macrocarpum (Körb.) V. Wirth
polypori (Ellis & Everh.) M. E. Barr

Arctoparmelia Hale
incurva (Pers.) Hale

Arthonia Ach.
apatetica (A. Massal.) Th. Fr.
arthonioides (Ach.) A. L. Sm.
byssacea (Weigel) Almq.
cinnabarina (DC.) Wallr.
didyma Körb.
elegans (Ach.) Almq.
endlicheri (Garov.) Oxner
**excentrica* Th. Fr.
**fuscopurpurea* (Tul.) R. Sant.
galactites (DC.) Dufour
**graphidicola* Coppins
lapidicola (Taylor) Branth & Rostr.
**molendoi* (Frauenf.) R. Sant.
muscigena Th. Fr.
**nephromaria* Nyl.
**phaeophysciae* Grube & Matzer
pruinata (Pers.) A. L. Sm.
punctiformis Ach.
radiata (Pers.) Ach.
spadicea Leight.
**vagans* Almq. var. *lecanorina* Almq.
**varia* (Tul.) Jatta
vinosa Leight.

Arthopyrenia A. Massal.
+analepta (Ach.) A. Massal.
+cinereopruinosa (Schaer.) A. Massal.
salicis A. Massal.

Arthothelium A. Massal.
ruanum (A. Massal.) Körb.

Arthrorhaphis Th. Fr.
citrinella (Ach.) Poelt
(*)*grisea* Th. Fr.
**olivaceae* R. Sant. & Tønsberg

Aspicilia A. Massal.
aquatica Körb.
caesiocinerea (Malbr.) Arnold
calcarea (L.) Mudd
cinerea (L.) Körb.
contorta (Hoffm.) Kremp. subsp. *contorta*
contorta subsp. *hoffmanniana* S. Ekman & Fröberg
gibbosa (Ach.) Körb.
moenium (Vain.) G. Thor & Timdal
recedens (Taylor) Arnold

Athelia Pers.
**arachnoidea* (Berk.) Jülich

Bacidia De Not.
absistens (Nyl.) Arnold
arceutina (Ach.) Arnold
bagliettoana (A. Massal. & De Not.) Jatta
beckhausii Körb.
biatorina (Körb.) Vain.
carneoglauca (Nyl.) A. L. Sm.
circumspecta (Vain.) Malme
fuscoviridis (Anzi) Lettau
hemipolia (Nyl.) Malme
herbarum (Stizenb.) Arnold
rosella (Pers.) De Not.
rubella (Hoffm.) A. Massal.
subincompta (Nyl.) Arnold
trachona (Ach.) Lettau
viridifarinosa Coppins & P. James

Bactrospora A. Massal.
dryina (Ach.) A. Massal.

Baeomyces Pers.
callianthus Lettau
placophyllus Ach.
rufus (Huds.) Rebent.

Bagliettoa A. Massal.
baldensis (A. Massal.) Vězda
parmigera (J. Steiner) Vězda & Poelt
steineri (Kušan) Vězda

Biatora Fr.
chrysantha (Zahlbr.) Printzen
meiocarpa (Nyl.) Arnold

Biatoridium J. Lahm
monasteriense J. Lahm

Biatoropsis Räsänen
**usnearum* Räsänen

Bispora Corda
**christiansenii* D. Hawksw.
**lichenum* Diederich

Botryolepraria Canals, Hern.-Mariné, Gómez-Bolea & Llimona
lesdainii (Hue) Canals, Hern.-Mariné, Gómez-Bolea & Llimona

Brodoa Goward
intestiniformis (Vill.) Goward

Bryophagus Arnold
gloeocapsa Arnold

Bryoria Brodo & D. Hawksw.
bicolor (Ehrh.) Brodo & D. Hawksw.
chalybeiformis (L.) Brodo & D. Hawksw.
fuscescens (Gyeln.) Brodo & D. Hawksw.
implexa (Hoffm.) Brodo & D. Hawksw.
subcana (Stizenb.) Brodo & D. Hawksw.

Buellia De Not.
aethalea (Ach.) Th. Fr.
alboatra (Hoffm.) Th. Fr.
(*)*badia* (Fr.) A. Massal.
disciformis (Fr.) Mudd
griseovirens (Sm.) Almb.
ocellata (Flot.) Körb.
pulverea Coppins & P. James
punctata (Hoffm.) A. Massal.
schaereri De Not.
subdispersa Mig.
venusta (Körb.) Lettau
violaceofusca Thor & Muhr

Buelliella Hafellner
**physciicola* Poelt & Hafellner

Bunodophoron A. Massal.
melanocarpum (Sw.) Wedin

Byssoloma Trevis.
diederichii Sérus.

Calicium Pers.
adspersum Pers.
glaucellum Ach.
lichenoides (L.) Schumach.

viride Pers.

Caloplaca Th. Fr.
albolutescens (Nyl.) H. Olivier
alociza (A. Massal.) Mig.
arenaria (Pers.) Müll. Arg.
atroflava (Turner) Mong. s. l.
aurantia (Pers.) J. Steiner
biatorina (A. Massal.) J. Steiner
brevilobata (Nyl.) Zahlbr.
cerina (Hedw.) Th. Fr. var. *cerina*
cerina var. *chloroleuca* (Sm.) Th. Fr.
cerinella (Nyl.) Flagey
chalybaea (Fr.) Müll. Arg.
chlorina (Flot.) H. Olivier
chrysodeta (Räsänen) Dombr.
chrysophthalma Degel.
cirrochroa (Ach.) Th. Fr.
citrina (Hoffm.) Th. Fr.
(*)*coronata* (Körb.) J. Steiner
crenularia (With.) J. R. Laundon
crenulatella (Nyl.) H. Olivier
decipiens (Arnold) Blomb. & Forssell
demissa (Körb.) Arup & Grube
dolomiticola (Hue) Zahlbr.
erythrocarpa (Pers.) Zwackh
ferruginea (Huds.) Th. Fr.
flavescens (Huds.) J. R. Laundon
flavocitrina (Nyl.) H. Olivier
flavorubescens (Huds.) J. R. Laundon
flavovirescens (Wulfen) Dalla Torre & Sarnth.
granulosa (Müll. Arg.) Jatta
(*)*grimmiae* (Nyl.) H. Olivier
haematites (St.-Amans) Zwackh
herbidella (Hue) H. Magn.
holocarpa (Hoffm.) A. E. Wade
(*)*inconnexa* (Nyl.) Zahlbr.
irrubescens (Arnold) Zahlbr.
lithophila H. Magn.
lucifuga G. Thor
luteoalba (Turner) Th. Fr.
maritima B. de Lesd.
marmorata (Bagl.) Jatta
obscurella (J. Lahm) Th. Fr.
ochracea (Schaer.) Flagey
phlogina (Ach.) Flagey
(*)*polycarpa* (A. Massal.) Zahlbr.
ruderum (Malbr.) J. R. Laundon
saxicola (Hoffm.) Nordin
subpallida H. Magn.
tegularis auct., non (Ehrh.) Sandst.
teicholyta (Ach.) J. Steiner
vacillans (Th. Fr.) H. Magn.
variabilis (Pers.) Müll. Arg.
vitellinula auct., non (Nyl.) H. Olivier
xantholyta (Nyl.) Jatta

Candelaria A. Massal.
concolor (Dicks.) Stein

Candelariella Müll. Arg.
aurella (Hoffm.) Zahlbr.
coralliza (Nyl.) H. Magn.
medians (Nyl.) A. L. Sm.
reflexa (Nyl.) Lettau
vitellina (Hoffm.) Müll. Arg.
xanthostigma (Ach.) Lettau

Capronia Sacc.
**peltigerae* (Fuckel) D. Hawksw.

Carbonea (Hertel) Hertel
**vitellinaria* (Nyl.) Hertel

Catillaria A. Massal.
atomarioides (Müll. Arg.) H. Kilias
chalybeia (Borrer) A. Massal.
lenticularis (Ach.) Th. Fr.
minuta (A. Massal.) Lettau
nigroclavata (Nyl.) Schuler

Catinaria Vain.
atropurpurea (Schaer.) Poelt & Vězda

Cercidospora Körb.
**epipolytropa* (Mudd) Arnold
**xanthoriae* (Wedd.) R. Sant.

Cetraria Ach.
aculeata (Schreb.) Fr.
islandica (L.) Ach.
muricata (Ach.) Eckfeldt

Cetrelia W. L. Culb. & C. F. Culb.
olivetorum (Nyl.) W. L. Culb. & C. F. Culb.

Chaenotheca (Th. Fr.) Th. Fr.
brachypoda (Ach.) Tibell
brunneola (Ach.) Müll. Arg.
chlorella (Ach.) Müll. Arg.
chrysocephala (Ach.) Th. Fr.

ferruginea (Turner & Borrer) Mig.
furfuracea (L.) Tibell
hispidula (Ach.) Zahlbr.
phaeocephala (Turner) Fr.
stemonea (Ach.) Müll. Arg.
trichialis (Ach.) Th. Fr.
xyloxena Nádv.

Chaenothecopsis Vain.
+*pusilla* (Flörke) A. F. W. Schmidt
**vainioana* (Nádv.) Tibell

Chromatochlamys Trevis.
muscorum (Fr.) H. Mayrhofer & Poelt var. *muscorum*

Chrysothrix Mont.
candelaris (L.) J. R. Laundon
chlorina (Ach.) J. R. Laundon

Cladina Nyl.
arbuscula (Wallr.) Hale & W. L. Culb. subsp. *squarrosa* (Wallr.) Burgaz
ciliata (Stirt.) Trass
mitis (Sandst.) Hustich
portentosa (Dufour) Follmann
rangiferina (L.) Nyl.
stygia (Fr.) Ruoss

Cladonia P. Browne
caespiticia (Pers.) Flörke
callosa Harm.
cariosa (Ach.) Spreng.
cenotea (Ach.) Schaer.
cervicornis (Ach.) Flot. subsp. *cervicornis*
cervicornis subsp. *pulvinata* (Sandst.) Ahti
cervicornis subsp. *verticillata* (Hoffm.) Ahti
chlorophaea (Sommerf.) Spreng.
coccifera (L.) Willd.
coniocraea (Flörke) Spreng.
convoluta (Lam.) Anders
cornuta (L.) Hoffm.
crispata (Ach.) Flot.
deformis (L.) Hoffm.
digitata (L.) Hoffm.
fimbriata (L.) Fr.
floerkeana (Fr.) Flörke
foliacea (Huds.) Willd.
furcata (Huds.) Schrad. subsp. *furcata*
furcata subsp. *subrangiformis* (Sandst.) Abbayes
glauca Flörke
gracilis (L.) Willd.
grayi Sandst.
humilis (With.) J. R. Laundon
macilenta Hoffm.
macrophylla (Schaer.) Stenh.
ochrochlora Flörke
parasitica (Hoffm.) Hoffm.
peziziformis (With.) J. R. Laundon
phyllophora Hoffm.
pleurota (Flörke) Schaer.
polycarpoides Nyl.
polydactyla (Flörke) Spreng.
pyxidata (L.) Hoffm. subsp. *pyxidata*
pyxidata subsp. *pocillum* (Ach.) Å. E. Dahl
ramulosa (With.) J. R. Laundon
rangiformis Hoffm.
rei Schaer.
scabriuscula (Delise) Leight.
squamosa (Scop.) Hoffm.
strepsilis (Ach.) Grognot
subulata (L.) F. H. Wigg.
sulphurina (Michx.) Fr.
symphycarpa (Flörke) Fr.
uncialis (L.) F. H. Wigg. subsp. *biuncialis* (Hoffm.) Choisy
zopfii Vain.

Cladosporium Link
**arthoniae* M. S. Christ. & D. Hawksw.

Clauzadea Hafellner & Bellem.
immersa (Hoffm.) Hafellner & Bellem.
metzleri (Körb.) D. Hawksw.
monticola (Schaer.) Hafellner & Bellem.

Clauzadeana Cl. Roux
macula (Taylor) Coppins & Rambold

Clauzadeomyces Diederich
**verrucosus* Diederich

Cliostomum Fr.
griffithii (Sm.) Coppins

Clypeococcum D. Hawksw.
**epicrassum* (H. Oliv.) Nav.-Ros. & Cl. Roux
**hypocenomycis* D. Hawksw.

Coenogonium Ehrenb.
sp.

Collema F. H. Wigg.
auriforme (With.) Coppins & J. R. Laundon
crispum (Huds.) F. H. Wigg.
cristatum (L.) F. H. Wigg.
dichotomum (With.) Coppins & J. R. Laundon
flaccidum (Ach.) Ach.
fragrans (Sm.) Ach.
furfuraceum (Arnold) Du Rietz
fuscovirens (With.) J. R. Laundon
limosum (Ach.) Ach.
multipartitum Sm.
occultatum Bagl.
polycarpon Hoffm.
tenax (Sw.) Ach.

Cornutispora Piroz.
**ciliata* Kalb
**lichenicola* D. Hawksw. & B. Sutton
**triangularis* Diederich & Etayo

Corticifraga D. Hawksw. & R. Sant.
**fuckelii* (Rehm) D. Hawksw. & R. Sant.
**peltigerae* (Nyl.) D. Hawksw. & R. Sant.

Cresponea Egea & Torrente
premnea (Ach.) Egea & Torrente var. *saxicola* (Leigth.) Egea & Torrente

Cyanomyces Nik. Hoffm. & Hafellner ined.
**leptogiophila* (G. Winter) Nik. Hoffm. & Hafellner, comb. ined.

Cyphelium Ach.
**sessile* (Pers.) Trevis.

Cyrtidula Minks
+hippocastani (DC.) R. C. Harris
+quercus (A. Massal.) Minks

Cystocoleus Thwaites
ebeneus (Dillwyn) Thwaites

Dacampia A. Massal.
**rufescentis* (Vouaux) D. Hawksw.

Dactylospora Körb.
**parasitica* (Flörke) Zopf
**pertusaricola* (Tuck.) Hafellner
**saxatilis* (Schaer.) Hafellner

Degelia Arv. & D. J. Galloway
plumbea (Lightf.) P. M. Jørg. & P. James

Dermatocarpon Eschw.
luridum (With.) J. R. Laundon
meiophyllizum Vain.
miniatum (L.) W. Mann

Dibaeis Clem.
baeomyces (L. f.) Rambold & Hertel

Didymellopsis (Sacc.) Clem. & Shear
**pulposi* (Zopf) Grube & Hafellner

Dimerella Trevis.
pineti (Ach.) Vězda

Diploicia A. Massal.
canescens (Dicks.) A. Massal.

Diplolaeviopsis Giralt & D. Hawksw.
**ranula* Giralt & D. Hawksw.

Diploschistes Norman
euganeus (A. Massal.) J. Steiner
gypsaceus (Ach.) Zahlbr.
(*)*muscorum* (Scop.) R. Sant.
scruposus (Schreb.) Norman

Dirina Fr.
stenhammarii (Stenh.) Poelt & Follmann

Echinodiscus Etayo & Diederich
**lesdainii* (Vouaux) Etayo & Diederich

Endocarpon Hedw.
adscendens (Anzi) Müll. Arg.
pallidum Ach.
pusillum Hedw.

Endococcus Nyl.
**brachysporus* (Zopf) Brand & Diederich
**exerrans* Nyl.
**fusiger* Th. Fr. & Almq.
**macrosporus* (Arnold) Nyl.
**parietinarius* (Linds.) Clauzade & Cl. Roux
**propinquus* (Körb.) D. Hawksw.
**protoblasteniae* Diederich
**rugulosus* Nyl.
**verrucisporus* Alstrup (‘*verrucuspora*’)
*sp. (see L8, under *E. brachysporus*)

Enterographa Fée
crassa (DC.) Fée
hutchinsiae (Leight.) A. Massal.
zonata (Körb.) Källsten

Eopyrenula R. C. Harris
grandicula Coppins

Ephebe Fr.
lanata (L.) Vain.

Epibryon Döbbeler
**parvipunctum* (Stein) Diederich
**solorinae* (Vain.) Nik. Hoffm. & Hafellner, comb. ined.

Epicladonia D. Hawksw.
**sandstedei* (Zopf) D. Hawksw.
**stenospora* (Harm.) D. Hawksw.

Epigloea Zukal
(+)*bactrospora* Zukal
(+)*filifera* Döbbeler
(+)*soleiformis* Döbbeler

Evernia Ach.
prunastri (L.) Ach.

Fellhanera Vězda
bouteillei (Desm.) Vězda
subtilis (Vězda) Diederich & Sérus.
viridisorediata Aptroot, Brand & Spier
sp. (as '*Fellhanera* sp. 1' in Diederich 1989)

Fellhaneropsis Sérus. & Coppins
myrtillicola (Erichsen) Sérus. & Coppins
vezdae (Coppins & P. James) Sérus. & Coppins

Feltgeniomyces Diederich
**luxemburgensis* Diederich

Flavoparmelia Hale
caperata (L.) Hale
soredians (Nyl.) Hale

Flavopunctelia (Krog) Hale
flaventior (Stirt.) Hale

Fulgensia A. Massal. & De Not.
fulgens (Sw.) Elenkin

Fusarium Link
**peltigerae* Westend.

Fuscidea V. Wirth & Vězda
cyathoides (Ach.) V. Wirth & Vězda var. *cyathoides*
lightfootii (Sm.) Coppins & P. James
praeruptorum (Du Rietz & H. Magn.) V. Wirth & Vězda

Fuscopannaria P. M. Jørg.
leucophaea (Vahl) P. M. Jørg.
mediterranea (Tav.) P. M. Jørg.
saubinetii (Mont.) P. M. Jørg.

Graphina Müll. Arg.
anguina (Mont.) Müll. Arg.

Graphis Adans.
elegans (Sm.) Ach.
scripta (L.) Ach.

Gyalecta Ach.
flotowii Körb.
jenensis (Batsch) Zahlbr.
truncigena (Ach.) Hepp
ulmi (Sw.) Zahlbr.

Gyalideopsis Vězda
anastomosans P. James & Vězda
muscicola P. James & Vězda

Haematomma A. Massal.
ochroleucum (Neck.) J. R. Laundon

Halecania M. Mayrhofer
viridescens Coppins & P. James

Hawksworthiana U. Braun
**peltigericola* (D. Hawksw.) U. Braun

Hobsonia Massee
**christiansenii* B. L. Brady & D. Hawksw.

Homostegia Fuckel
**piggotii* (Berk. & Broome) P. Karst.

Hymenelia Kremp.
epulotica (Ach.) Lutzoni

Hyperphyscia Müll. Arg.
adglutinata (Flörke) H. Mayrhofer & Poelt

Hypocenomyce Choisy
caradocensis (Nyl.) P. James & Gotth. Schneider
scalaris (Ach.) Choisy

Hypogymnia (Nyl.) Nyl.
farinacea Zopf
physodes (L.) Nyl.
tubulosa (Schaer.) Hav.

Hypotrachyna (Vain.) Hale
revoluta (Flörke) Hale

Icmadophila Trevis.
ericetorum (L.) Zahlbr.

Immersaria Rambold & Pietschm.
athroocarpa (Ach.) Rambold & Pietschm.

Imshaugia S. L. F. Meyer
aleurites (Ach.) S. L. F. Meyer

Ionaspis Th. Fr.
lacustris (With.) Lutzoni

Karschia Körb.
**talcophila* (Flot.) Körb.

Lasallia Mérat
pustulata (L.) Mérat

Lawalreea Diederich
**lecanorae* Diederich

Lecanactis Körb.
abietina (Ach.) Körb.
latebrarum (Ach.) Arnold

Lecania A. Massal.
coeruleorubella (Mudd) M. Mayrhofer
cuprea (A. Massal.) van den Boom & Coppins
cyrtella (Ach.) Th. Fr.
cyrtellina (Nyl.) Sandst.
erysibe (Ach.) Mudd
globulosa (Flörke) van den Boom & Sérus.
hutchinsiae (Nyl.) A. L. Sm.
inundata (Körb.) M. Mayrhofer
naegelii (Hepp) Diederich & van den Boom
rabenhorstii (Hepp) Arnold
suavis (Müll. Arg.) Mig.
sylvestris (Arnold) Arnold
turicensis (Hepp) Müll. Arg.

Lecanographa Egea & Torrente
lyncea (Sm.) Egea & Torrente

Lecanora Ach.
achariana A. L. Sm.
agardhiana Ach.
aitema (Ach.) Hepp
albella (Pers.) Ach.
albescens (Hoffm.) Branth & Rostr.
allophana Nyl.
argentata (Ach.) Malme
barkmaniana Aptroot & van Herk
campestris (Schaer.) Hue
carpinea (L.) Vain.
chlarotera Nyl.
compallens van Herk & Aptroot
conizaeoides Cromb.
crenulata Hook., non auct.
crenulata auct., non Hook.
dispersa (Pers.) Sommerf.
epanora (Ach.) Ach.
expallens Ach.
flotowiana Spreng.
gangaleoides Nyl.
(*)*gisleriana* Müll. Arg.
hagenii (Ach.) Ach.
handelii J. Steiner
horiza (Ach.) Linds.
hybocarpa (Tuck.) Brodo
intricata (Ach.) Ach.
intumescens (Rebent.) Rabenh.
muralis (Schreb.) Rabenh.
orosthea (Ach.) Ach.
persimilis (Th. Fr.) Nyl.
piniperda Körb.
polytropa (Hoffm.) Rabenh.
pruinosa Chaub.
pulicaris (Pers.) Ach.
rugosella Zahlbr.
rupicola (L.) Zahlbr. subsp. *rupicola*
rupicola subsp. *subplanata* (Nyl.) Leuckert & Poelt
saligna (Schrad.) Zahlbr.
sambuci (Pers.) Nyl.
silvae-nigrae V. Wirth
soralifera (Suza) Räsänen
strobilina (Spreng.) Kieff.
subaurea Zahlbr.
subcarnea (Lilj.) Ach.
subcarpinea Szatala
sulphurea (Hoffm.) Ach.
swartzii (Ach.) Ach.
symmicta (Ach.) Ach.
umbrina (Ach.) A. Massal.
varia (Hoffm.) Ach.

Lecidea Ach.
cyrtidia Tuck.
fuliginosa Taylor
fuscoatra (L.) Ach.
lapicida (Ach.) Ach. var. *pantherina* Ach.
lithophila (Ach.) Ach.

nylanderi (Anzi) Th. Fr.
plana (J. Lahm) Nyl.
pycnocarpa (Körb.) Ohlert

Lecidella Körb.
anomaloides (A. Massal.) Hertel & H. Kilias
carpathica Körb.
conspurcatosorediosa (Harm.) Diederich
elaeochroma (Ach.) Choisy
flavosorediata (Vězda) Hertel & Leuckert
laureri (Hepp) Körb.
scabra (Taylor) Hertel & Leuckert
stigmatea (Ach.) Hertel & Leuckert
viridans (Flot.) Körb.

Lemmopsis (Vain.) Zahlbr.
arnoldiana (Hepp) Zahlbr.

Lempholemma Körb.
polyanthes (Bernh.) Malme

Lepraria Ach.
borealis Lohtander & Tønsberg
caesioalba (B. de Lesd.) J. R. Laundon
crassissima (Hue) Lettau
eburnea J. R. Laundon
elobata Tønsberg
flavescens Clauzade & Cl. Roux
incana (L.) Ach.
jackii Tønsberg
lobificans Nyl.
nivalis J. R. Laundon
nylanderiana Kümmerl. & Leuckert
rigidula (B. de Lesd.) Tønsberg
umbricola Tønsberg

Leprocaulon Nyl.
microscopicum (Vill.) D. Hawksw.

Leproloma Cromb.
membranaceum (Dicks.) Vain.
vouauxii (Hue) J. R. Laundon

Leptogium (Ach.) Gray
biatorinum (Nyl.) Leight.
byssinum (Hoffm.) Nyl.
corniculatum (Hoffm.) Minks
cyanescens (Rabenh.) Körb.
diffractum Körb.
gelatinosum (With.) J. R. Laundon
lichenoides (L.) Zahlbr.
magnussonii Degel. & P. M. Jørg.
massiliense Nyl.
plicatile (Ach.) Leight.
saturninum (Dicks.) Nyl.
schraderi (Bernh.) Nyl.
subtile (Schrad.) Torss.
tenuissimum (Dicks.) Körb.
teretiusculum (Wallr.) Arnold
turgidum (Ach.) Cromb.

Leptorhaphis Körb.
+*epidermidis* (Ach.) Th. Fr.
+*maggiana* (A. Massal.) Körb.

Leptosphaeria Ces. & De Not.
**ramalinae* (Desm.) Sacc.

Lichenochora Hafellner
**inconspicua* Hafellner
**obscuroides* (Linds.) Triebel & Rambold

Lichenoconium Petr. & Syd.
**erodens* M. S. Christ. & D. Hawksw.
**lecanorae* (Jaap) D. Hawksw.
**lichenicola* (P. Karst.) Petr. & Syd.
**pyxidatae* (Oudem.) Petr. & Syd.
**reichlingii* Diederich
**usneae* (Anzi) D. Hawksw.
**xanthoriae* M. S. Christ.

Lichenodiplis Dyko & D. Hawksw.
**lecanorae* (Vouaux) Dyko & D. Hawksw.

Lichenopeltella Höhn.
**hydrophila* R. Sant. ined.
**peltigericola* (D. Hawksw.) R. Sant.
**santessonii* (P. M. Kirk & Spooner) R. Sant.
**thelidii* Diederich

Lichenosticta Zopf
**alcicornaria* (Linds.) D. Hawksw.

Lichenostigma Hafellner
**cosmopolites* Hafellner & Calatayud
**elongata* Nav.-Ros. & Hafellner
**rugosa* G. Thor

Lichenothelia D. Hawksw.
+*convexa* Henssen

Lobaria (Schreb.) Hoffm.
pulmonaria (L.) Hoffm.

virens (With.) J. R. Laundon

Lobarina (Vain.) Cromb.
scrobiculata (Scop.) Cromb.

Lobothallia (Clauzade & Cl. Roux) Hafellner
radiosa (Hoffm.) Hafellner

Lopadium Körb.
disciforme (Flot.) Kullh.

Macentina Vězda
abscondita Coppins & Vězda

Marchandiomyces Diederich & D. Hawksw.
**aurantiacus* (Lasch) Diederich & Etayo
**corallinus* (Roberge) Diederich & D. Hawksw.

Massalongia Körb.
carnosa (Dicks.) Körb.

Megalaria Hafellner
grossa (Nyl.) Hafellner
pulverea (Borrer) Hafellner & Schreiner

Megaspora (Clauzade & Cl. Roux) Hafellner & V. Wirth
verrucosa (Ach.) Hafellner & V. Wirth

Melanelia Essl.
disjuncta (Erichsen) Essl.
elegantula (Zahlbr.) Essl.
exasperata (De Not.) Essl.
exasperatula (Nyl.) Essl.
glabratula (Lamy) Essl. subsp. *glabratula*
glabratula subsp. *fuliginosa* (Duby) J. R. Laundon
laciniatula (H. Olivier) Essl.
olivacea (L.) Essl.
panniformis (Nyl.) Essl.
sorediata (Ach.) Goward & Ahti
stygia (L.) Essl.
subargentifera (Nyl.) Essl.
subaurifera (Nyl.) Essl.

Melaspilea Nyl.
granitophila (Th. Fr.) Coppins
ochrothalamia Nyl.

Menegazzia A. Massal.
terebrata (Hoffm.) A. Massal.

Merismatium Zopf
**discrepans* (J. Lahm) Triebel
**heterophractum* (Nyl.) Vouaux
**scammoecum* Lettau

Micarea Fr.
alabastrites (Nyl.) Coppins
bauschiana (Körb.) V. Wirth & Vězda
botryoides (Nyl.) Coppins
confusa Coppins & van den Boom
curvata Coppins
deminuta Coppins
denigrata (Fr.) Hedl.
erratica (Körb.) Hertel, Rambold & Pietschm.
globulosella (Nyl.) Coppins
hedlundii Coppins
leprosula (Th. Fr.) Coppins & A. Fletcher
lignaria (Ach.) Hedl. var. *lignaria*
lithinella (Nyl.) Hedl.
lutulata (Nyl.) Coppins
melaena (Nyl.) Hedl.
misella (Nyl.) Hedl.
myriocarpa Coppins
nigella Coppins
nitschkeana (Rabenh.) Harm.
parva Coppins
peliocarpa (Anzi) Coppins & R. Sant.
prasina Fr.
pycnidiophora Coppins & P. James
subnigrata (Nyl.) Coppins & H. Kilias
sylvicola (Flot.) Vězda & V. Wirth

Microcalicium Vain.
**arenarium* (A. Massal.) Tibell

Milospium D. Hawksw.
**deslooveri* Diederich & Sérus.
**graphideorum* (Nyl.) D. Hawksw.

Miriquidica Hertel & Rambold
deusta (Stenh.) Hertel & Rambold
intrudens (H. Magn.) Hertel & Rambold
sp. (see L8, under *M. deusta*)

Moelleropsis Gyeln.
nebulosa (Hoffm.) Gyeln.

Monodictys S. Hughes
**cellulosa* S. Hughes

Muellerella Müll. Arg.
**hospitans* Stizenb.
**lichenicola* (Sommerf.) D. Hawksw.

**pygmaea* (Körb.) D. Hawksw. var. *pygmaea*
**pygmaea* var. *athallina* (Müll. Arg.) Triebel
**pygmaea* var. *ventosicola* (Mudd) Triebel
**triseptata* Diederich

Mycobilimbia Rehm
Biatora epixanthoides (Nyl.) Diederich
hypnorum (Lib.) Kalb & Hafellner
lobulata (Sommerf.) Hafellner
sabuletorum (Schreb.) Hafellner
Lecidea sanguineoatra auct., non (Wulfen) Ach.
Biatora sphaeroides (Dicks.) Körb.

Mycoblastus Norman
fucatus (Stirt.) Zahlbr.
sanguinarius (L.) Norman

Mycoporum Nyl.
(+)*antecellans* (Nyl.) R. C. Harris
(+)*Mycoporellum sacromontanum* (Strasser) Redinger

Naetrocymbe Körb.
+fraxini (A. Massal.) R. C. Harris
+punctiformis (Pers.) R. C. Harris
+saxicola (A. Massal.) R. C. Harris

Nectriopsis Maire
+indigens (Arnold) Diederich & Schroers
**lecanodes* (Ces.) Diederich & Schroers
**micareae* Diederich, van den Boom & Ernst

Neocoleroa Petr.
**inundata* (Vain.) Diederich

Neofuscelia Essl.
loxodes (Nyl.) Essl.
pulla (Ach.) Essl.
verruculifera (Nyl.) Essl.

Nephroma Ach.
laevigatum Ach.
parile (Ach.) Ach.

Normandina Nyl.
acroglypta (Norman) Aptroot
pulchella (Borrer) Nyl.

Ochrolechia A. Massal.
androgyna (Hoffm.) Arnold
arborea (Kreyer) Almb.
microstictoides Räsänen
pallescens (L.) A. Massal.
parella (L.) A. Massal.
subviridis (Høeg) Erichsen
tartarea (L.) A. Massal.
turneri (Sm.) Hasselrot

Omphalina Quél.
hudsoniana (H. S. Jenn.) H. E. Bigelow
umbellifera (L.: Fr.) Quél.

Opegrapha Ach.
atra Pers.
calcarea Sm.
culmigena Lib.
lithyrga Ach.
mougeotii A. Massal.
ochrocheila Nyl.
rufescens Pers.
**rupestris* Pers.
saxatilis DC.
varia Pers.
variiformis Anzi
vermicellifera (Kunze) J. R. Laundon
viridis Pers.
vulgata Ach. var. *vulgata*
vulgata var. *subsiderella* Nyl.

Ophioparma Norman
ventosa (L.) Norman

Pachyphiale Lönnr.
carneola (Ach.) Arnold
fagicola (Hepp) Zwackh

Pannaria Delise
conoplea (Ach.) Bory
pezizoides (Weber) Trevis.

Paranectria Sacc.
**oropensis* (Ces.) D. Hawksw. & Piroz.

Parmelia Ach.
omphalodes (L.) Ach. subsp. *omphalodes*
omphalodes subsp. *discordans* (Nyl.) Skult
saxatilis (L.) Ach.
submontana Hale
sulcata Taylor

Parmeliella Müll. Arg.
triptophylla (Ach.) Müll. Arg.

Parmelina Hale
pastillifera (Harm.) Hale
quercina (Willd.) Hale var. *quercina*
tiliacea (Hoffm.) Hale

Parmeliopsis Nyl.
ambigua (Wulfen) Nyl.

Parmotrema A. Massal.
chinense (Osbeck) Hale & Ahti
crinitum (Ach.) Hale

Peltigera Willd.
canina (L.) Willd.
collina (Ach.) Schrad.
degenii Gyeln.
didactyla (With.) J. R. Laundon
elisabethae Gyeln.
horizontalis (Huds.) Baumg.
hymenina (Ach.) Delise
lepidophora (Nyl.) Bitter
leucophlebia (Nyl.) Gyeln.
malacea (Ach.) Funck
membranacea (Ach.) Nyl.
neckeri Müll. Arg.
neopolydactyla (Gyeln.) Gyeln.
polydactylon (Neck.) Hoffm.
ponojensis Gyeln.
praetextata (Sommerf.) Zopf
rufescens (Weiss) Humb.
venosa (L.) Hoffm.

Peridiothelia D. Hawksw.
+*fuliguncta* (Norman) D. Hawksw.

Pertusaria DC.
albescens (Huds.) Choisy & Werner
amara (Ach.) Nyl.
aspergilla (Ach.) J. R. Laundon
coccodes (Ach.) Nyl.
corallina (L.) Arnold
coronata (Ach.) Th. Fr.
excludens Nyl.
flavida (DC.) J. R. Laundon
hemisphaerica (Flörke) Erichsen
hymenea (Ach.) Schaer.
lactea (L.) Arnold
leioplaca DC.
multipuncta (Turner) Nyl.
pertusa (Weigel) Tuck.
pseudocorallina (Lilj.) Arnold
pupillaris (Nyl.) Th. Fr.
pustulata (Ach.) Dufour

Petractis Fr.
clausa (Hoffm.) Kremp.
hypoleuca (Ach.) Vězda

Pezizella Fuckel
**epithallina* (W. Phillips & Plowr.) Sacc.

Phacopsis Tul.
**oxyspora* (Tul.) Triebel & Rambold

Phaeographis Müll. Arg.
dendritica (Ach.) Müll. Arg.
inusta (Ach.) Müll. Arg.
smithii (Leight.) B. de Lesd.

Phaeophyscia Moberg
cernohorskyi (Nádv.) Essl.
chloantha (Ach.) Moberg
ciliata (Hoffm.) Moberg
endophoenicea (Harm.) Moberg
nigricans (Flörke) Moberg
orbicularis (Neck.) Moberg
sciastra (Ach.) Moberg

Phaeopyxis Rambold & Triebel
**varia* Coppins, Rambold & Triebel

Phaeospora Stein
**lecanorae* Eitner
**rimosicola* (Mudd) Hepp

Phaeosporobolus D. Hawksw. & Hafellner
**alpinus* R. Sant., Alstrup & D. Hawksw.
**usneae* D. Hawksw. & Hafellner

Phlyctis Wallr.
agelaea (Ach.) Flot.
argena (Spreng.) Flot.

Phoma Sacc.
**cytospora* (Vouaux) D. Hawksw.
**lecanorina* Diederich
**peltigerae* (P. Karst.) D. Hawksw.

Physcia (Schreb.) Michx.
adscendens (Fr.) H. Olivier
aipolia (Humb.) Fürnr.
caesia (Hoffm.) Fürnr.
clementei (Turner) Maas Geest.

dimidiata (Arnold) Nyl.
dubia (Hoffm.) Lettau var. *dubia*
dubia var. *teretiuscula* (Ach.) Clauzade & Cl. Roux
semipinnata (J. F. Gmel.) Moberg
stellaris (L.) Nyl.
subalbinea Nyl.
tenella (Scop.) DC.
tribacia (Ach.) Nyl.
vitii Nádv.

Physconia Poelt
distorta (With.) J. R. Laundon
enteroxantha (Nyl.) Poelt
grisea (Lam.) Poelt
perisidiosa (Erichsen) Moberg

Placidiopsis Beltr.
cartilaginea (Nyl.) Vain.
cinerascens (Nyl.) Breuss

Placidium A. Massal.
pilosellum (Breuss) Breuss
rufescens (Ach.) A. Massal.
squamulosum (Ach.) Breuss

Placocarpus Trevis.
(*)*schaereri* (Fr.) Breuss

Placolecis Trevis.
opaca (Fr.) Hafellner

Placopsis (Nyl.) Linds.
lambii Hertel & V. Wirth

Placopyrenium Breuss
Catapyrenium subtrachyticum B. de Lesd.
trachyticum (Hazsl.) Breuss

Placynthiella Elenkin
dasaea (Stirt.) Tønsberg
icmalea (Ach.) Coppins & P. James
oligotropha (J. R. Laundon) Coppins & P. James
uliginosa (Schrad.) Coppins & P. James

Placynthium (Ach.) Gray
hungaricum Gyeln.
nigrum (Huds.) Gray
subradiatum (Nyl.) Arnold
tremniacum (A. Massal.) Jatta

Platismatia W. L. Culb. & C. F. Culb.
glauca (L.) W. L. Culb. & C. F. Culb.

Pleopsidium Körb.
chlorophanum (Wahlenb.) A. Massal.

Pleurosticta Petr.
acetabulum (Neck.) Elix & Lumbsch

Polyblastia A. Massal.
albida Arnold
cupularis A. Massal.
deminuta Arnold
dermatodes A. Massal.
philaea Zschacke

Polychidium (Ach.) Gray
muscicola (Sw.) Gray

Polycoccum Körb.
**crassum* Vězda
**kerneri* J. Steiner
**marmoratum* (Kremp.) D. Hawksw.
**microstictum* (Mudd) Arnold
**opulentum* (Th. Fr.) Arnold
**peltigerae* (Fuckel) Vězda
**pulvinatum* (Eitner) R. Sant.
**tinantii* Diederich

Polysporina Vězda
simplex (Davies) Vězda

Porina Müll. Arg.
aenea (Wallr.) Zahlbr.
borreri (Trevis.) D. Hawksw. & P. James
byssophila (Hepp) Zahlbr.
chlorotica (Ach.) Müll. Arg.
interjungens (Nyl.) Zahlbr.
lectissima (Fr.) Zahlbr.
leptalea (Durieu & Mont.) A. L. Sm.
linearis (Leight.) Zahlbr.

Porocyphus Körb.
coccodes (Flot.) Körb.
rehmicus (A. Massal.) Zahlbr.

Porpidia Körb.
albocaerulescens (Wulfen) Hertel & Knoph
cinereoatra (Ach.) Hertel & Knoph
contraponenda (Arnold) Knoph & Hertel
crustulata (Ach.) Hertel & Knoph
glaucophaea (Körb.) Hertel & Knoph
hydrophila (Fr.) Hertel & A. J. Schwab
macrocarpa (DC.) Hertel & A. J. Schwab
musiva (Körb.) Hertel & Knoph

platycarpoides (Bagl.) Hertel
soredizodes (Nyl.) J. R. Laundon
tuberculosa (Sm.) Hertel & Knoph

Pronectria Clem.
**Illosporium carneum* Fr.
**leptaleae* (J. Steiner) Lowen
**ornamentata* (D. Hawksw.) Lowen
**robergei* (Mont. & Desm.) Lowen
**tenacis* (Vouaux) Lowen
**terrestris* Lowen & Diederich
**verrucariae* (Vouaux) Lowen
**xanthoriae* Lowen & Diederich

Protoblastenia (Zahlbr.) J. Steiner
calva (Dicks.) Zahlbr.
cyclospora (Körb.) Poelt
incrustans (DC.) J. Steiner
rupestris (Scop.) J. Steiner

Protoparmelia Choisy
(*)*atriseda* (Fr.) R. Sant. & V. Wirth
badia (Hoffm.) Hafellner
hypotremella van Herk, Spier & V. Wirth

Protothelenella Räsänen
corrosa (Körb.) H. Mayrhofer & Poelt

Pseudevernia Zopf
furfuracea (L.) Zopf

Pseudorobillarda M. Morelet
**peltigerae* Diederich

Psilolechia A. Massal.
clavulifera (Nyl.) Coppins
leprosa Coppins & Purvis
lucida (Ach.) M. Choisy

Psora Hoffm.
decipiens (Hedw.) Hoffm.
lurida (Ach.) DC.
testacea Hoffm.
vallesiaca (Schaer.) Timdal

Psoroglaena Müll. Arg.
stigonemoides (Orange) Henssen

Psoroma Michx.
hypnorum (Vahl) Gray

Psorotichia A. Massal.
schaereri (A. Massal.) Arnold

Punctelia Krog
borreri (Sm.) Krog
subrudecta (Nyl.) Krog
ulophylla (Ach.) van Herk & Aptroot, comb. ined.

Pycnothelia (Ach.) Dufour
papillaria (Ehrh.) Dufour

Pyrenidium Nyl.
**hetairizans* (Leight.) Arnold

Pyrenochaeta De Not.
**xanthoriae* Diederich

Pyrenocollema Reinke
chlorococcum Aptroot & van den Boom
halodytes (Nyl.) R. C. Harris

Pyrenula A. Massal.
chlorospila Arnold
laevigata (Pers.) Arnold
macrospora (Degel.) Coppins & P. James
nitida (Weigel) Ach.
nitidella (Schaer.) Müll. Arg.

Pyrrhospora Körb.
quernea (Dicks.) Körb.
rubiginans (Nyl.) P. James & Poelt

Racodium Fr.
rupestre Pers.

Ramalina Ach.
farinacea (L.) Ach.
fastigiata (Pers.) Ach.
fraxinea (L.) Ach.
lacera (With.) J. R. Laundon
pollinaria (Westr.) Ach.
thrausta (Ach.) Nyl.

Refractohilum D. Hawksw.
**pluriseptatum* Etayo & Cl. Roux

Reichlingia Diederich & Scheid.
?**leopoldii* Diederich & Scheid.

Rhaphidicyrtis Vain.
trichosporella (Nyl.) Vain.

Rhizocarpon DC.
badioatrum (Spreng.) Th. Fr.
disporum (Hepp) Müll. Arg.
(*)*distinctum* Th. Fr.

furfurosum H. Magn. & J. Poelt
geminatum Körb.
geographicum (L.) DC. subsp. *geographicum*
geographicum subsp. *diabasicum* (Räsänen) Poelt & Vězda
geographicum subsp. *lindsayanum* (Räsänen), comb. ined. (provisionally placed here, art. 34.1b)
hochstetteri (Körb.) Vain.
lavatum (Fr.) Hazsl.
lecanorinum Anders
oederi (Weber) Körb.
petraeum (Wulfen) A. Massal.
plicatile (Leight.) A. L. Sm.
polycarpum (Grognot) Th. Fr.
reductum Th. Fr.
subgeminatum Eitner
(*)*trapeliicola* Brand
(*)*viridiatrum* (Wulfen) Körb.

Rimelia Hale & A. Fletcher
reticulata (Taylor) Hale & A. Fletcher

Rimularia Nyl.
furvella (Mudd) Hertel & Rambold

Rinodina (Ach.) Gray
archaea (Ach.) Arnold
aspersa (Borrer) J. R. Laundon
atrocinerea (Hook.) Körb.
bischoffii (Hepp) A. Massal.
brandii Giralt & van den Boom
calcarea (Arnold) Arnold
dubyana (Hepp) J. Steiner
efflorescens Malme
gennarii Bagl.
griseosoralifera Coppins
immersa (Körb.) Arnold
interpolata (Stirt.) Sheard
lecanorina (A. Massal.) A. Massal.
occulta (Körb.) Sheard
oleae Bagl.
oxydata (A. Massal.) A. Massal. s. l.
pityrea Ropin & H. Mayrhofer
pyrina (Ach.) Arnold
sicula H. Mayrhofer & Poelt
teichophila (Nyl.) Arnold
tunicata H. Mayrhofer & Poelt

Rinodinella H. Mayrhofer & Poelt
dubyanoides (Hepp) H. Mayrhofer & Poelt

Ropalospora A. Massal.
viridis (Tønsberg) Tønsberg

Roselliniella Vain.
**cladoniae* (Anzi) Matzer & Hafellner
**microthelia* (Wallr.) Nik. Hoffm. & Hafellner, comb. ined.

Roselliniopsis Matzer & Hafellner
**groedensis* (Zopf) Matzer & Hafellner
**tartaricola* (Nyl.) Matzer

Sagediopsis (Sacc.) Vain.
**barbara* (Th. Fr.) R. Sant. & Triebel

Sagiolechia A. Massal.
protuberans (Ach.) A. Massal.

Sarcogyne Flot.
regularis Körb.

Sarcopyrenia Nyl.
(*)*gibba* (Nyl.) Nyl. var. *geisleri* (Beckh.) Nav.-Ros. & Hladun

Sarcosagium A. Massal.
campestre (Fr.) Poetsch & Schied. var. *campestre*
campestre var. *macrosporum* Coppins & P. James

Schaereria Körb.
cinereorufa (Schaer.) Th. Fr.
fuscocinerea (Nyl.) Clauzade & Cl. Roux

Schismatomma A. Massal.
decolorans (Sm.) Clauzade & Vězda
umbrinum (Coppins & P. James) P. M. Jørg. & Tønsberg

Sclerococcum Fr.
**epiphytorum* Diederich
**sphaerale* (Ach.) Fr.

Scoliciosporum A. Massal.
chlorococcum (Stenh.) Vězda
gallurae Vězda & Poelt
pruinosum (P. James) Vězda
sarothamni (Vain.) Vězda
umbrinum (Ach.) Arnold

Scutula Tul.
(*)*dedicata* Triebel, Wedin & Rambold

**Libertiella didymospora* D. Hawksw. & Miądlikowska
**Libertiella malmedyensis* Speg. & Roum.

Skyttea Sherwood, D. Hawksw. & Coppins
**buelliae* Sherwood, D. Hawksw. & Coppins
**hawksworthii* Diederich
**nitschkei* (Körb.) Sherwood, D. Hawksw. & Coppins

Solenopsora A. Massal.
candicans (Dicks.) J. Steiner

Solorina Ach.
saccata (L.) Ach.

Sphaerellothecium Zopf
**cladoniicola* E. S. Hansen & Alstrup
**coniodes* (Nyl.) Cl. Roux & Diederich
**propinquellum* (Nyl.) Cl. Roux & Triebel

Sphaerophorus Pers.
fragilis (L.) Pers.
globosus (Huds.) Vain.

Sphaerulina Sacc.
**intermedia* Vouaux

Sphinctrina Fr.
**leucopoda* Nyl.
**tubiformis* A. Massal.
**turbinata* (Pers.) De Not.

Squamarina Poelt
cartilaginea (With.) P. James
gypsacea (Sm.) Poelt
lentigera (Weber) Poelt
oleosa (Zahlbr.) Poelt

Staurothele Norman
caesia (Arnold) Arnold
fissa (Taylor) Zwackh
frustulenta Vain.
guestphalica (Körb.) Arnold
hymenogonia (Nyl.) Th. Fr.
rugulosa (A. Massal.) Arnold

Steinia Körb.
geophana (Nyl.) Stein

Stenocybe (Nyl.) Körb.
+pullatula (Ach.) Stein

Stereocaulon Hoffm.
condensatum Hoffm.
dactylophyllum Flörke
evolutum Graewe
nanodes Tuck.
pileatum Ach.
saxatile H. Magn.
tomentosum Fr.
vesuvianum Pers. var. *nodulosum* (Wallr.) I. M. Lamb

Sticta (Schreb.) Ach.
fuliginosa (Dicks.) Ach.
limbata (Sm.) Ach.
sylvatica (Huds.) Ach.

Stigmidium Trevis.
**bellemerei* Cl. Roux & Nav.-Ros.
**cerinae* Cl. Roux & Triebel
**clauzadei* Cl. Roux & Nav.-Ros.
**marinum* (Deakin) Swinscow
**Pharcidia maritima* B. de Lesd.
**microspilum* (Körb.) D. Hawksw.
**pseudopeltideae* Cl. Roux & Triebel ined.
**rivulorum* (Kernst.) Cl. Roux & Nav.-Ros.
**solorinarium* (Vain.) D. Hawksw.

Strangospora Körb.
moriformis (Ach.) Stein
ochrophora (Nyl.) R. A. Anderson
pinicola (A. Massal.) Körb.

Strigula Fr.
affinis (A. Massal.) R. C. Harris
calcarea Bricaud & Cl. Roux
jamesii (Swinscow) R. C. Harris
taylorii (Nyl.) R. C. Harris

Synalissa Fr.
symphorea (Ach.) Nyl.

Syzygospora G. W. Martin
**bachmannii* Diederich & M. S. Christ.
**physciacearum* Diederich & M. S. Christ.

Taeniolella S. Hughes
**beschiana* Diederich
**chrysothricis* Diederich
**delicata* M. S. Christ. & D. Hawksw.
**phaeophysciae* D. Hawksw.
**punctata* M. S. Christ. & D. Hawksw.
**trapeliopseos* Diederich

Taeniolina M. B. Ellis
**scripta* (P. Karst.) P. M. Kirk

Telogalla Nik. Hoffm. & Hafellner ined.
**olivieri* (Vouaux) Nik. Hoffm. & Hafellner, comb. ined.

Teloschistes Norman
chrysophthalmus (L.) Th. Fr.

Tephromela Choisy
atra (Huds.) Hafellner
grumosa (Pers.) Hafellner & Cl. Roux

Thelidium A. Massal.
decipiens (Nyl.) Kremp.
dionantense (Hue) Zschacke
incavatum Mudd
minutulum Körb.
olivaceum (Fr.) Körb.
papulare (Fr.) Arnold
zwackhii (Hepp) A. Massal.

Thelocarpon Hue
coccosporum Lettau
depressellum Vain.
**epibolum* Nyl.
intermediellum Nyl.
laureri (Flot.) Nyl.
lichenicola (Fuckel) Poelt & Hafellner
strasseri Zahlbr.

Thelomma A. Massal.
ocellatum (Körb.) Tibell

Thelotrema Ach.
lepadinum (Ach.) Ach.

Thrombium Wallr.
epigaeum (Pers.) Wallr.

Thyrea A. Massal.
confusa Henssen
girardii (Durieu & Mont.) Bagl. & Carestia

Tomasellia A. Massal.
gelatinosa (Chevall.) Zahlbr.

Toninia A. Massal.
aromatica (Sm.) A. Massal.
athallina (Hepp) Timdal
candida (Weber) Th. Fr.
**episema* (Nyl.) Timdal
philippea (Mont.) Timdal
sedifolia (Scop.) Timdal
tumidula (Sm.) Zahlbr.
(*)*verrucarioides* (Nyl.) Timdal

Trapelia M. Choisy
coarctata (Sm.) M. Choisy
corticola Coppins & P. James
involuta (Taylor) Hertel
obtegens (Th. Fr.) Hertel
placodioides Coppins & P. James

Trapeliopsis Hertel & Gotth. Schneider
flexuosa (Fr.) Coppins & P. James
gelatinosa (Flörke) Coppins & P. James
granulosa (Hoffm.) Lumbsch
percrenata (Nyl.) Gotth. Schneider
pseudogranulosa Coppins & P. James

Tremella Pers.
**Lindauopsis caloplacae* Zahlbr.
**candelariellae* Diederich & Etayo
**cladoniae* Diederich & M. S. Christ.
**hypogymniae* Diederich & M. S. Christ.
**lichenicola* Diederich
**pertusariae* Diederich
**phaeophysciae* Diederich & M. S. Christ.

Tremolecia Choisy
atrata (Ach.) Hertel

Trichonectria Kirschst.
**hirta* (Bloxam) Petch
**rubefaciens* (Ellis & Everh.) Diederich & Schroers

Trimmatostroma Corda
**lichenicola* M. S. Christ. & D. Hawksw.

Trimmatothele Norman
maritima (B. de Lesd.) Zahlbr.

Tuckermannopsis Gyeln.
chlorophylla (Willd.) Hale
sepincola (Ehrh.) Hale

Umbilicaria Hoffm.
deusta (L.) Baumg.
grisea Hoffm.
hirsuta (Westr.) Hoffm.
polyphylla (L.) Baumg.
polyrrhiza (L.) Fr.

Unguiculariopsis Rehm
**acrocordiae* (Diederich) Diederich & Etayo, comb. ined.
**lesdainii* (Vouaux) Etayo & Diederich, comb. ined.
**refractiva* (Coppins) Coppins
*sp. (as '*Unguiculariopsis* sp. 1' in Diederich 1989)

Usnea Adans.
articulata (L.) Hoffm.
ceratina Ach.
cornuta Körb.
filipendula Stirt.
flammea Stirt.
florida (L.) F. H. Wigg.
fragilescens Lynge var. *fragilescens*
fulvoreagens (Räsänen) Räsänen
glabrata (Ach.) Vain.
hirta (L.) F. H. Wigg.
madeirensis Motyka
rubicunda Stirt.
subfloridana Stirt.
wasmuthii Räsänen

Verrucaria Schrad.
aethiobola Wahlenb.
aquatilis Mudd
arduennica Zschacke
(*)*aspiciliicola* R. Sant.
bryoctona (Th. Fr.) Orange
caerulea DC.
calciseda DC.
compacta (A. Massal.) Jatta
cyanea A. Massal.
dolosa Hepp
dufourii DC.
elaeodes (Hue) Zschacke
elaeomelaena (A. Massal.) Arnold
foveolata (Flörke) A. Massal.
funckii (Spreng.) Zahlbr.
(*)*fuscella* (Turner) Winch
(*)*fuscula* Nyl.
glaucovirens Grummann
hochstetteri Fr.
hydrela Ach.
integra (Nyl.) Nyl.
(*)*latericola* Erichsen
lecideoides Trevis.
lignicola (B. de Lesd.) Zschacke
macrostoma DC.
maculiformis Kremp.
margacea (Wahlenb.) Wahlenb.
marmorea (Scop.) Arnold
mortarii Lamy
muralis Ach.
murina Leight.
nigrescens Pers.
ochrostoma (Leight.) Trevis.
pinguicula A. Massal.
praetermissa (Trevis.) Anzi
rheitrophila Zschacke
sorbinea Breuss
subfuscella Nyl.
subtruncatula B. de Lesd.
thalassina (Zahlbr.) Zschacke
umbrinula Nyl.
viridula (Schrad.) Ach.
sp. (as '*Verrucaria squamulosa* ined.' in Ertz 1999)

Vezdaea Tscherm.-Woess & Poelt
acicularis Coppins
aestivalis (Ohlert) Tscherm.-Woess & Poelt
leprosa (P. James) Poelt & Döbbeler
retigera Poelt & Döbbeler
rheocarpa Poelt & Döbbeler

Vouauxiella Petr. & Syd.
**lichenicola* (Linds.) Petr. & Syd.
**verrucosa* (Vouaux) Petr. & Syd.

Vulpicida Mattson & M. J. Lai
pinastri (Scop.) Mattson & M. J. Lai

Weddellomyces D. Hawksw.
**epicallopisma* (Wedd.) D. Hawksw.

Woessia D. Hawksw. & Poelt
arnoldiana (Körb.) Sérus. & Diederich
caligans (Nyl.) Sérus. & Diederich
Bacidia chloroticula (Nyl.) A. L. Sm.
delicata (Leight.) Sérus. & Diederich
Bacidia egenula (Nyl.) Arnold
inundata (Fr.) Sérus. & Diederich
Bacidia neosquamulosa Aptroot & van Herk
Bacidia phacodes Körb.
Bacidia saxenii Erichsen

Xanthoparmelia (Vain.) Hale
conspersa (Ach.) Hale
mougeotii (D. Dietr.) Hale
protomatrae (Gyeln.) Hale

somloënsis (Gyeln.) Hale var. *somloënsis*

Xanthoria (Fr.) Th. Fr.
calcicola Oxner
candelaria (L.) Th. Fr.
elegans (Link) Th. Fr.
fallax (Hepp) Arnold
parietina (L.) Th. Fr.
polycarpa (Hoffm.) Rieber

Xanthoriicola D. Hawksw.
**physciae* (Kalchbr.) D. Hawksw.

Xylographa Fr.
vitiligo (Ach.) J. R. Laundon

Zwackhiomyces Grube & Hafellner
**immersae* (Arnold) Grube & Triebel
**lecanorae* (Stein) Nik. Hoffm. & Hafellner, comb. ined.
**Pharcidia lithoiceae* B. de Lesd.
**martinatianus* (Arnold) Triebel & Grube
**physciicola* Alstrup

Summary of abbreviations

B	Belgium	Belgique	België
L	Luxembourg (Grand Duchy)	Luxembourg (Grand-Duché)	Luxemburg (Groothertogdom)
F	northern France	nord de la France	Noord-Frankrijk
D	Germany	Allemagne	Duitsland
NL	The Netherlands	Pays-Bas	Nederland

Mar.	Maritime district	district maritime	Maritiem district
Fl.	Flemish district	district flandrien	Vlaams district
Camp.	Campine district	district campinien	Kempens district
Brab.	Brabant district	district brabançon	Brabants district
Mosan	Meuse district	district mosan	Maasdistrict
Ard.	Ardenne district	district ardennais	Ardens district
Ard. (Haute Ard.)	the Haute Ardenne sub-district of the Ard. district	le sous-district Haute Ardenne du district ard.	het subdistrict Hoge Ardennen in Ard.
Lorr.	Lorraine district	district lorrain	Lotharings district
Lorr. (Moselle)	the Moselle subdistrict of the Lorraine district	le sous-district Moselle dans le district lorrain	het subdistrict Moezel in het Lotharings district

RRR	extremely rare extrêmement rare uiterst zeldzaam	known from 1 locality	connu d'une seule localité	bekend van 1 locatie
RR	very rare très rare zeer zeldzaam	known from 2-4 localities (Mar.: 2-3 localities)	connu de 2-4 localités (Mar.: 2-3 localités)	bekend van 2-4 locaties (Mar.: 2-3 locaties)
R	rare rare zeldzaam	known from 5-9 localities (Mar.: 4-6 localities)	connu de 5-9 localités (Mar.: 4-6 localités)	bekend van 5-9 locaties (Mar.: 4-6 locaties)
AR	rather rare assez rare vrij zeldzaam	known from < 25 % of the 4×4 km² IFBL squares (≥ 10 loc.; Mar.: ≥ 7 loc.)	connu de < 25 % des carrés IFBL de 4×4 km² (≥ 10 loc.; Mar.: ≥ 7 loc.)	bekend uit < 25 % van de IFBL-hokken van 4x4 km² (≥ 10 loc.; Mar.: ≥ 7 loc.)
AC	rather common assez commun vrij algemeen	known from 25-50 % of the IFBL squares	connu de 25-50 % des carrés IFBL	bekend uit 25-50 % van de IFBL-hokken
C	common commun algemeen	known from 50-75 % of the IFBL squares	connu de 50-75 % des carrés IFBL	bekend uit 50-75 % van de IFBL-hokken
CC	very common très commun zeer algemeen	known from 75-100 % of the IFBL squares	connu de 75-100 % des carrés IFBL	bekend uit 75-100 % van de IFBL-hokken

Map of the study area