

NEW SPECIES OR INTERESTING RECORDS
OF FOLIICOLOUS LICHENS

by

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SUMMARY

Enterographa bartlettii sp. nov. is described from New Zealand. Considerable range extensions are noted for *Arthonia cyanea*, *Asterothyrium decipiens*, *Bacidia aurantiaca*, *B. carnea*, *B. micrommata*, *B. scutellifera*, *Catillaria mirabilis*, *Enterographa multiseptata*, *Mazosia rubropunctata*, *Opegrapha filicina*, *Porina pseudofulvella*, *Tapellaria bilimbioides*, *T. nana* and *T. nigrata*.

This paper is part of continuing world-wide research on the taxonomy and the distribution of foliicolous lichens. A new species is described from New Zealand and interesting data on the taxonomy of several species and considerable range extensions for others are presented.

Arthonia cyanea Müll. Arg.

Rwanda, Gikungu, + 30 km N of Rutsiro, env. 2100 m, + disturbed montane forest, on leaves of *Strombosia scheffleri*, 1974, J.L. De Sloover in J. Lambinon 74/577 (LG, herb. Vězda).

This collection matches well the lectotype of *Arthonia cyanea* (Brazil, Bahia, Kalkmann, G !). However a few differences with the accurate description of the species provided by Santesson (1952 : 78) may be noted for the African collection : apothecia slightly smaller (0.2-0.4 mm in diam.) and spores 2-3-septate (measurements : 14.5-18.5 x 4.5-6.0 μ m; average : 16.5-5.4 μ m). The species was previously known from tropical America, the Phillipines and the Moluccas Islands. It is new for Africa.

Asterothyrium decipiens (Rehm) R. Sant.

U.S.A., Florida, Apalachiola National Forest, along Sopchoppy River, hardwood forest, 1976, Sérusiaux 1792 (LG).

This is the first record of *Asterothyrium decipiens* in the continental United States. This species, as well as *Tapellaria bilimbioides*, *T. nana*, *Bacidia aurantiaca* (see under these species), *Aulaxina quadrangula* (Stirton) R. Sant., *Echinoplaca pellicula* (Müll. Arg.) R. Sant., *Porina nitidula* Müll. Arg. and *Trichothelium epiphyllum* Müll. Arg. (Tucker 1979; Tucker & Harris 1980) must be added to the list of foliicolous lichens from the continental United States provided by Sérusiaux (1979a) (1).

(1) There is little doubt that more foliicolous lichen species occur in S-E United States, especially in Louisiana and Florida. Amongst the collections preserved at FH and amongst those sent to me by Dr. S.C. Tucker, there are at least one new species of *Catillaria* (s.l.) and a confusing species close to *Bacidia apiahica* (Müll. Arg.) Zahlbr. Their

Bacidia aurantiaca Vězda

U.S.A., Florida, Sanford, on palmetto leaves, 1915, Rapp (two collections; FH, LG).

Bacidia aurantiaca was described by Vězda (1974) from two collections made in Guinea/Africa (coll. Lisowski n° 1248, holotypus in herb. Vězda !), and was later reported from the province of Haut-Zaïre in Zaïre (Vězda 1980). This is the first record of the species from the New World.

In the American collections, the thallus is 3-7 mm in diam., rather granulose, continuous, rarely dispersed, greenish. Apothecia abundant, circular, 0.3-0.4 mm diam., constricted at base; margin at first rather thick but soon thin and non prominent, orange pale to almost white; disc at first plane but becoming distinctly convex, bright orange to reddish brown. Excipulum typically paraplectenchymatous, $\pm 30 \mu\text{m}$ thick in the outer parts, not more than $20 \mu\text{m}$ thick under the hypothecium, K+ red, except in the outer parts; hypothecium hyaline, K+ red; hymenium hyaline, 50-70 μm thick. Paraphyses abundant, branched and anastomosed, 1 μm thick, not thickened at their apices. Asci clavate, 8-spored; spores ellipsoid, 3-septate, sometimes with a further oblique septum, constricted at the septa, halonate, 12-15 x 4-5 μm . This species is easily distinguished by its hypothecium and excipulum that turn red with KOH. No other foliicolous *Bacidia* species with a paraplectenchymatous excipulum, an orange disc and 3-septate halonate spores show that reaction.

identification requires the revision of the corticolous species belonging to both *Catillaria* and *Bacidia*, mainly the *B. molybitis-phacodes* aggr., in North America. Tucker (1979) reports *Lopadium fuscum* Müll. Arg. as foliicolous in Louisiana. The only specimen (LSU !) is *L. puiggarii*, following the recent circumscription of those species (Sérusiaux 1979a).

Bacidia carnea Vězda

Trinidad, Maraval Valley, 1913, *Thaxter* (FH).

Bacidia carnea was described by Vězda (1975a) on a single collection from Guinea/Africa (coll. *Lisowski* 1359, holotypus in herb. Vězda !). This is the second published record of that species. A short description of the Trinidad specimen follows. Thallus circular, to 5 mm diam., minutely farinose, continuous, rarely + dispersed, bluish white to bluish. Apothecia + abundant, circular, 0.2-0.3 mm diam., constricted at base; margin at first thick, prominent, pale orange, very minutely pruinose, then becoming thinner and less pruinose; disc plane, flesh-colored. Excipulum typically paraplectenchymatous, 25 μ m thick in the outer parts, + 35 μ m thick under the hypothecium; K-, hypothecium pale brown, + 25 μ m thick, K-; hymenium hyaline, 45-60 μ m thick. Paraphyses abundant, sinuous, branched and anastomosing, 2 μ m thick, not thickened at apices, forming a rather gelatinous mass. Asci clavate, with a + thick wall, 8-spored. Spores ellipsoid, 3-septate, constricted at their septa, halonate, 14-19 x 4-5 μ m. Typical features of this species are the farinose bluish thallus, the apothecia with a thick and prominent margin, the gelatinous paraphyses which are branched, anastomosing and 2 μ m thick. This collection was identified as *Bacidia subtermella* (Nyl.) R. Sant. by R. Santesson in 1954. This latter species has however apothecia with a thin and not prominent margin, simple 1 μ m thick paraphyses, and smaller spores (10 x 15 x 2.5-4.5 μ m).

Bacidia micrommata (Krempelh.) R. Sant.

Zaire, Wangata (N 00°01'; E 18°14'), *Stoner* L 458 (LG).

This species was first mentioned in Africa by Vězda (1980) from two collections in the province of Haut-Zaire. This report suggests a much wider

distribution in the equatorial rain forest of the Zaïre basin. It was formerly known from Indonesia and the Phillipines (Santesson 1952).

Bacidia scutellifera Vězda

Fig. 1-5

Costa Rica, Puntaneras Prov., Las Cruces Tropical Botanical Garden (5-6 km SSE of San Vito), 1400 m, premontane rain forest, on leaves of palmetto, 1979, *T. Nash III* (LG).

This collection, although rather scanty, is nevertheless very typical : the shape of the thallus glomerules, the scutelliform isidia as well as apothecia and ascospores all confirm its identity. The species was formerly known from Africa (West-Guinea, Tanzania, Zaïre and Zimbabwe) and from Asia (West Malaysia and India) (Vězda 1975b, 1980; Sérusiaux 1983). It is new for the New World.

Catillaria mirabilis Vězda

Fig. 6-7

Zaïre/Shaba (formerly Katanga), Plateau des Muhila, ravin de la rivière Laula, 1972, *Malaisse* 2026e, 2030e, 2032, 2042e & 2056e (all in LG).

In the southern parts of Shaba in Zaïre, foliicolous lichens and liverworts are rare and confined to dense dry evergreen forests, riparian forests, and to forests in deep ravines. The Laula ravine on the lower slopes of the Mts Muhila (SSE of Kansimba) is a quite exceptional site, being a deep gorge about 40 m wide with a permanent stream, lying between 1230 and 1450 m elevation. Its flora is both afro-montane and guineo-congolian with many relictual elements. Seventeen species of foliicolous liverworts were recorded from that ravine by Vanden Berghen (1972) and my own studies show twenty-seven species of foliicolous lichens : *Arthonia trilocularis* Müll. Arg., *Aulaxina quadrangula* (Stirton) Müll. Arg., *Bacidia rhapsidophylli* (Rehm) Zahlbr., *B.*

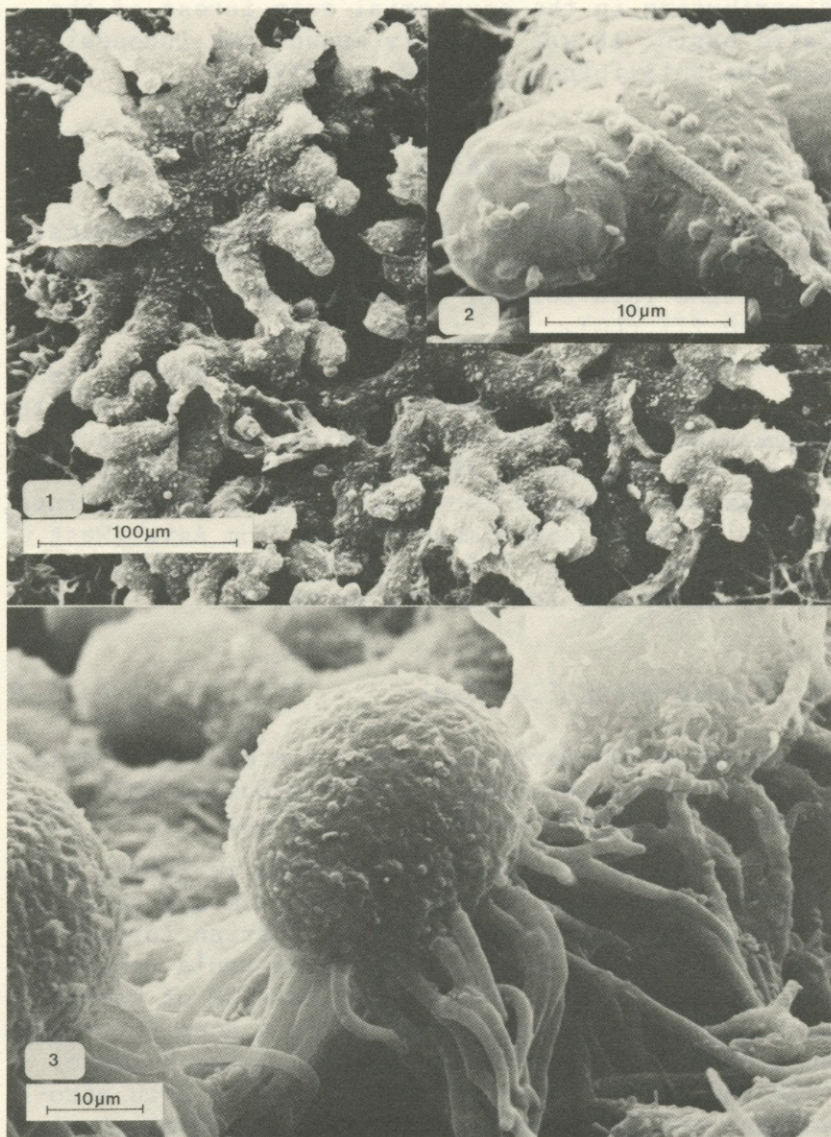


Fig. 1-3. *Bacidia scutellifera* Vězda (Zaire, Kivu, Lambinon 72/20, LG). 1 : Upper view of the thallus glomerules; 2 : detail of the thallus margin. Note the bacteria growing on the surface; 3 : young isidium.

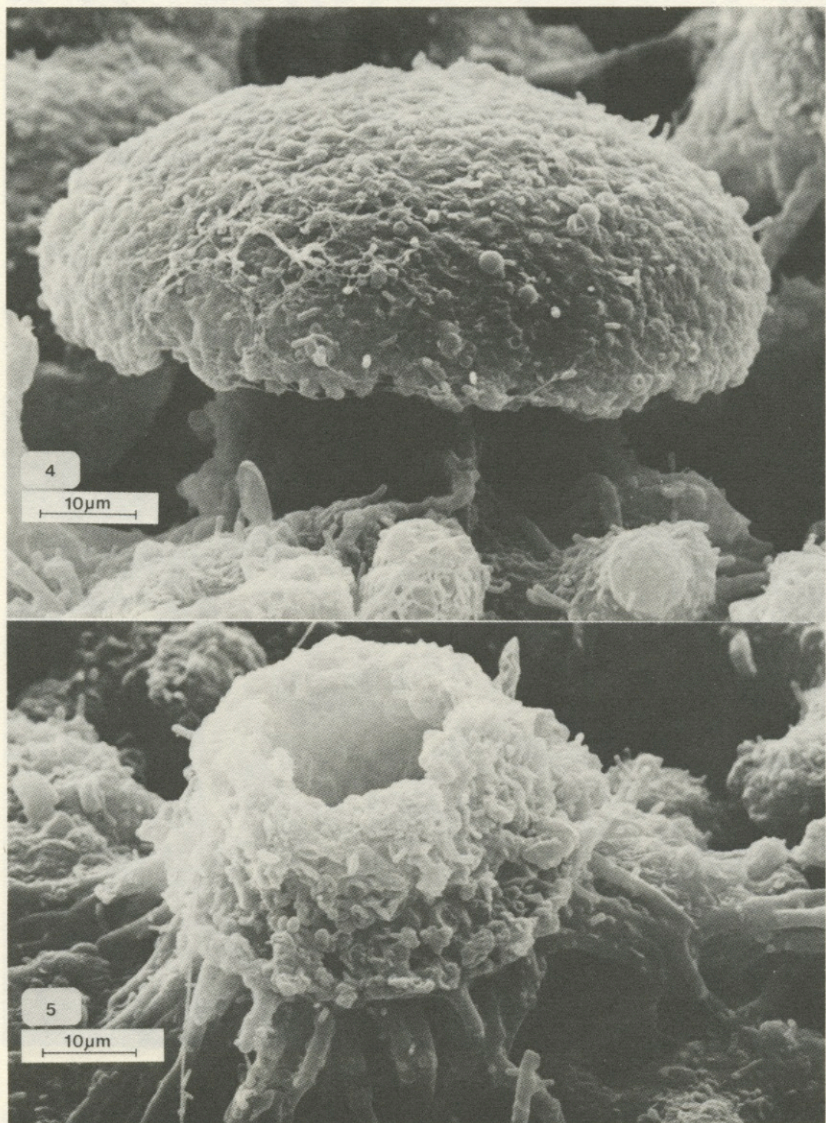


Fig. 4-5. *Bacidia scutellifera* Vězda (Tanzania, Pócs 6438 - ISOTYPUS, LG). 4 : almost ripe isidium; 5 : cupula left on the thallus after isidium ejection.



Fig. 6-7. *Catillaria mirabilis* Vězda. 6 : Zaïre, Haut-Zaïre, *Lisowski* 44380 (LG). View of the thallus, exclusively made of goniocystes; the long hyphae belong to an unknown dematiaceous hyphomycete, assumed to be a saprophyte; 7 : Zaïre, Kivu, *Lambinon* 78/265. Detail view of a goniocyst (material not brought to the critical point).

sublecanorina (Müll. Arg.) Zahlbr., *Byssoloma leucoblepharum* (Nyl.) Vainio, *Calenia conspersa* (Stirton) R. Sant., *Catillaria mirabilis*, *Dimerella epiphylla* (Müll. Arg.) Malme, *D. fallaciosa* (Müll. Arg.) Vězda (2), *Gyalectidium rotuliforme* Müll. Arg., *Gyalidea epiphylla* Vězda, *Mazosia melanophthalma* (Müll. Arg.) R. Sant., *M. rotula* (Mont.) Massal., *Opegrapha filicina* Mont., *Porina atrocoerulea* Müll. Arg., *P. limbulata* (Krempelh.) Vainio, *P. nitidula* Müll. Arg., *P. phyllogena* Müll. Arg., *P. epiphylloides* Vězda, *P. epiphylla* (Fée) Fée, *Raciborskiella janeirensis* (Müll. Arg.) R. Sant., *Strigula elegans* (Fée) Müll. Arg., *S. melanobapha* (Krempelh.) R. Sant., *S. nitidula* Mont., *S. schizospora* R. Sant., *S. subtilissima* (Fée) Müll. Arg. and *Tapellaria phyllophila* (Stirton) R. Sant.

Catillaria mirabilis, described by Vězda in 1980, is a taxon of uncertain generic position. It does not belong to *Catillaria* as circumscribed by Kiliás (1981) : the excipulum is paraplectenchymatous, the paraphyses are thick (reaching 2.5 μm in diam.), simple and straight and the asci are not of the lecanoralean-type. A new genus may be necessary to accommodate this species. The thallus of *C. mirabilis* is composed of small (15–30 μm) glomerules containing an algae colony tightly wrapped up by a layer of entangled hyphae. These glomerules are named ganiocystes and obviously act as diaspores (see Sérusiaux 1984). The species is not uncommon in the

(2) *Patellaria fallaciosa* Müll. Arg. was reduced to synonymy with *Dimerella lutea* (Dickson) Trevisan by Santesson (1952). A. Vězda recently recognized its identity and will soon publish a more detailed account of its diagnostic characters. The species grows a well developed algiferous thallus on the upper side of the leaf, connected over the leaf margin with a free mycelium on the under side. Apothecia are usually located on the free mycelium near the leaf margin. The species is present in Brazil and is known also from three provinces of Zaïre : Kivu, oriental prov. and Shaba.

dense rain forest of the Zaïre basin and must be regarded as guineo-congolian in affinity.

Enterographa bartlettii Sérusiaux species nova

Fig. 8-10

Thallus usque ad 5 mm diam., constatus e numerosis parvis areolis, nunquam continuum thallum formantibus, protothallo nullo; areolae circulares vel elongatae, usque ad 0.4-0.6 mm longae, unaquaque cum unico ascocarpio, viridi-albae vel caesii-albae. Ascocarpia lirellina, irregulariter flexuosa, simplicia, interdum 2-3 ramulis aucta, valde prominentia, 0.3-0.4 mm longa, 130-160 μm lata et 110-130 μm alta; discus angustatus, planus vel + convexus, aurantiaco-brunneus margine thallino fere albo. Textura excipuloidea angustissima incolorataque. Hymenium 50-65 μm altum, hypothecium 10 μm altum, sub hypothecio stratum ex hyphis laxe intricatis hyalinisque formatum. Paraphysoides ramosae anastomosantesque, 0.8-1.0 μm crassae; asci ellipsoidei, pariete crasso, 8-spori. Sporae fusiformes, 7-septatae, microcephalae, 18-21 x 4-5 μm , halo distincto, 2 μm crasso. Alga ad *Phycopeltis* pertinens.

Typus : New Zealand, Waitakere Range near Auckland, epiphyllous on *Griselinia lucida*, 1979, J.K. Bartlett 18599 (LG-holotypus; BM, CHR-isotypi).

Thallus up to 5 mm across, usually smaller, comprising several small and numerous patches, never forming a continuous thallus but occasionally confluent, hypothallus absent; patches circular or elongate, 0.4-0.6 mm diam., each bearing an ascocarp, greenish white to bluish white, surface smooth or slightly irregular, scarcely or rarely nitidous. Ascocarps abundant, linear, irregularly bent or undulate, simple, sometimes bifid or trifid, strongly prominent, 0.3-0.4 mm long, 130-160 μm wide and 110-130 μm high; side surface smooth or slightly irregular, almost white; disc linear, flat or somewhat convex, orange brown or sometimes almost red.

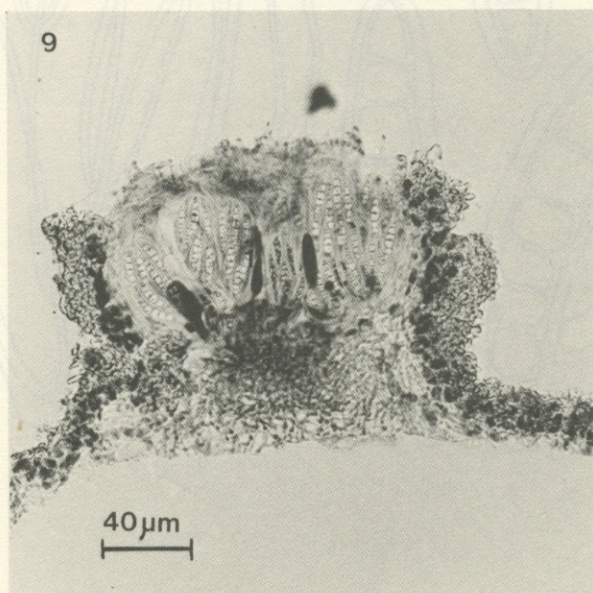
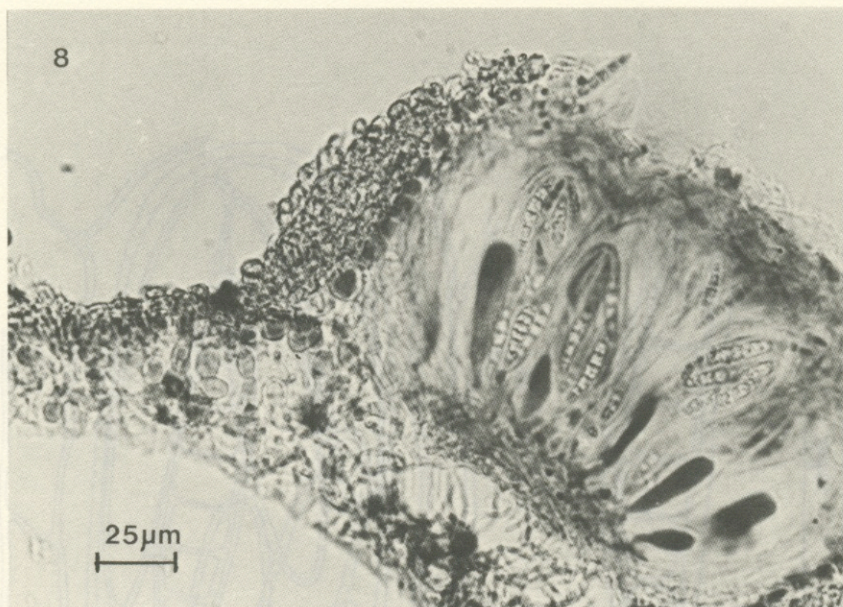


Fig. 8-9. *Enterograppha bartlettii* Sérusiaux, HOLOTYPE. Cross sections through apothecia, stained with lactophenol cotton-blue.

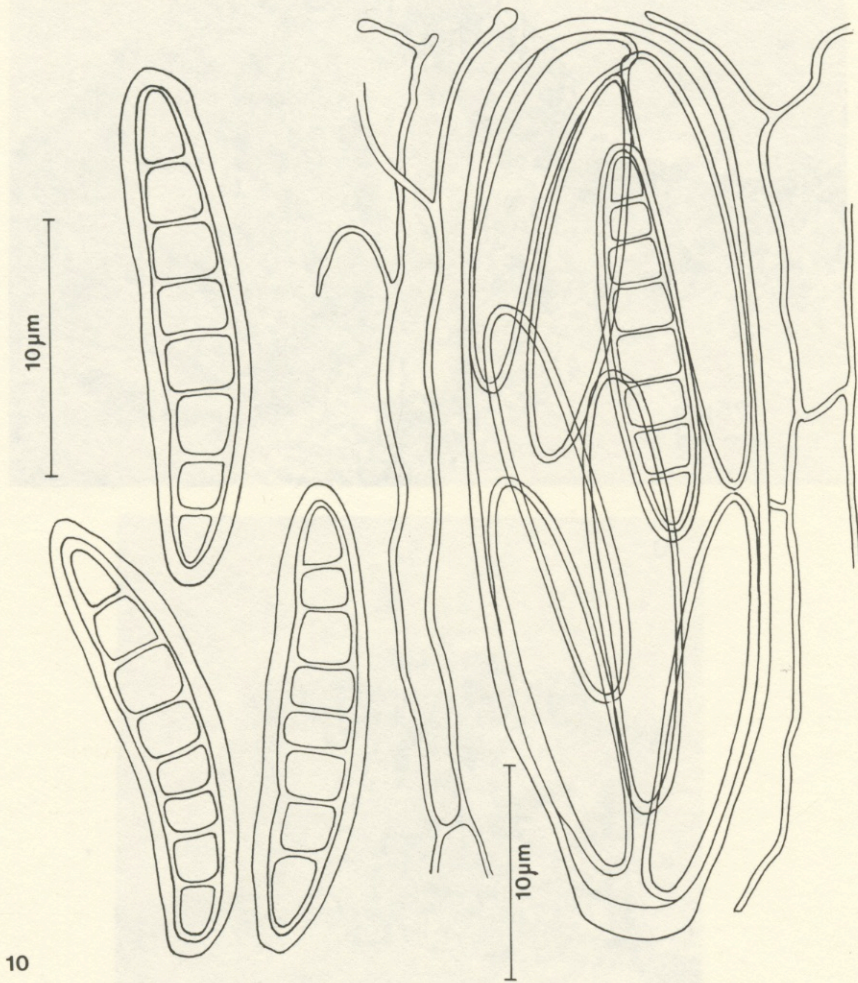


Fig. 10. *Enteroglypha bartlettii* Sérusiaux,
HOLOTYPUS. Spores and hymenium.

Excipuloid tissue very thin, not exceeding 5-8 μm thick, hyaline, formed of a network of coherent hyphae, covered by the algiferous thallus, e.g. the layer of algae (5-10 μm thick) and a + pseudoparenchymatous layer pale brown in section, containing a few crystals. Hymenium 50-65 μm high, hyaline; epithecium 5 μm thick, pale brown; hypothecium 10 μm high, hyaline or very pale brown; layer of very loosely interwoven hyphae present between the hypothecium and the leaf surface, hyaline. Paraphysoids abundant, especially within the epithecium, thin (0.8-1.0 μm thick), branched and anastomosed; asci ellipsoid, thick-walled, 8-spored. Spores fusiform, straight or slightly curved, slightly but distinctly inflated centrally, 7-septate, non constricted at the septa, 18-21 x 4-5 μm , with a 2 μm thick halo. Phycobiont : a species of *Phycopeltis* (Trentepohliaceae), cells rounded or angular, oblong or + rectangular, 6-9 x 3-5 μm , forming a continuous plate but without any regular radiate row of cells.

Enterographa bartlettii grows on the same leaves as *E. bella*, a species described by Santesson (1952) also from New Zealand. The latter is rather common there, being abundant in several collections sent to me by J.K. Bartlett, but so far it is not known from any other part of the world.

The following table illustrates differences between *E. bartlettii* and the other two foliicolous species of *Enterographa* with hyaline hypothecium and underlying layer.

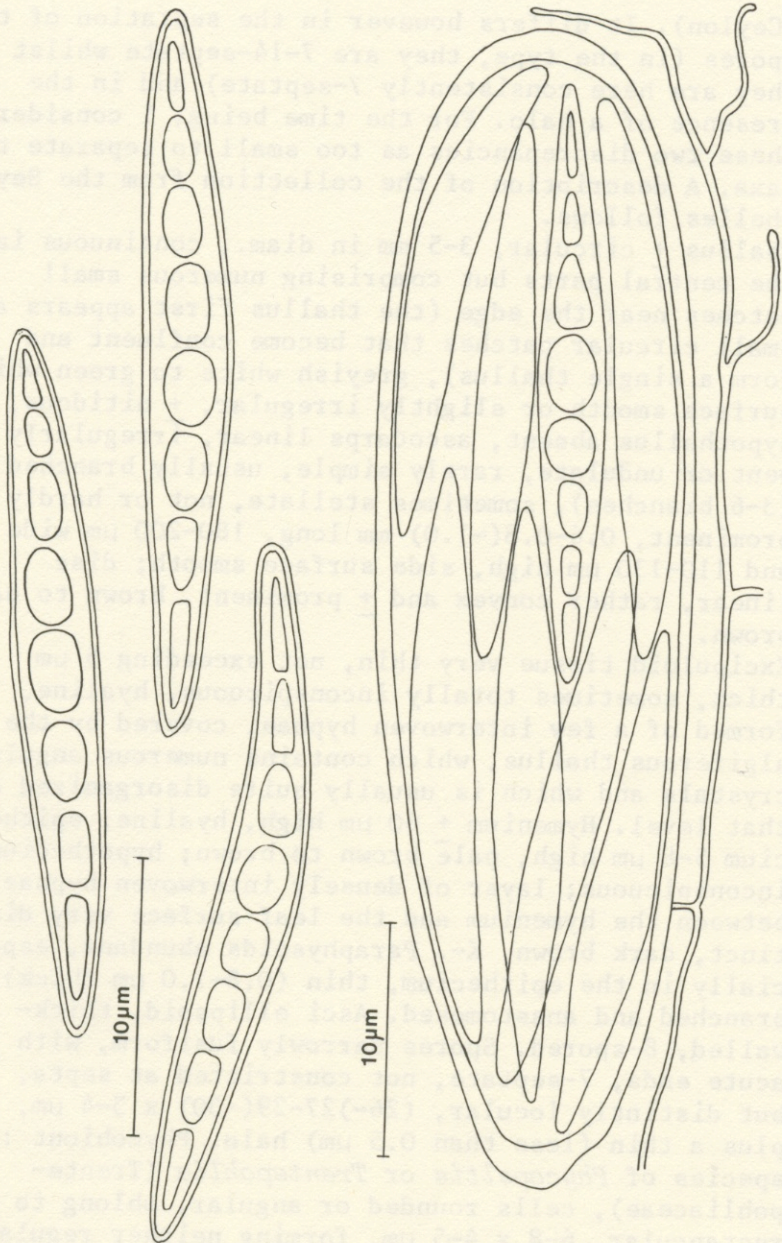
Enterographa multiseptata R. Sant.

Fig. 11

Seychelles Islands (Indian Ocean), La Digue, + 100 m elevation, open forest, on leaves of cinnamon-tree, 1983, J.L. De Sloover (LG).

This collection appears to be almost identical with *Enterographa multiseptata*, a bambusicolous species described by R. Santesson in 1952 and formerly known only from the type-collection in Sri Lanka

	<i>E. bartlettii</i> Sérusiaux	<i>E. bella</i> R. Sant.	<i>E. effusa</i> Vězda
Thallus color	greenish white to bluish white	green to greenish grey	ash grey to grey green
Ascocarps size			
length	0.3-0.4 mm	0.5-0.8(-1.0) mm	0.3-1.3 mm
width	+ 0.15 mm	0.15-0.2 mm	0.5 mm
height	0.1-0.15 mm	less than 0.1 mm	0.2 mm
Spore size	18-21 x 4-5 μ m halo : 2 μ m	22-29 x 4-5 μ m halo : 3-4 μ m	25-30 x 3-3.5 μ m halo : 1.5 μ m
Phycobiont	not forming radiate rows of cells	forming very regular radiate rows of cells	forming + distinct radiate rows of cells



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Fig. 11. *Enterographa multiseptata* R. Sant.
Seychelles Is., *De Sloover* (LG). Spores and hymenium.

(Ceylon). It differs however in the septation of the spores (in the type, they are 7-14-septate whilst they are here consistently 7-septate) and in the presence of a halo. For the time being, I consider these two discrepancies as too small to separate two taxa. A description of the collection from the Seychelles follows.

Thallus + circular, 3-5 mm in diam., continuous in the central parts but comprising numerous small patches near the edge (the thallus first appears as small circular patches that become confluent and form a single thallus), greyish white to green white, surface smooth or slightly irregular, + nitidous, hypothallus absent, ascocarps linear, irregularly bent or undulate, rarely simple, usually branched (3-6 branches), sometimes stellate, not or hardly prominent, 0.6-0.8(-1.0) mm long, 180-200 μm wide and 110-130 μm high, side surface smooth; disc linear, rather convex and + prominent, brown to dark brown.

Excipuloid tissue very thin, not exceeding 5 μm thick, sometimes totally inconspicuous, hyaline, formed of a few interwoven hyphae, covered by the algiferous thallus, which contains numerous angular crystals and which is usually quite disorganized at that level. Hymenium + 60 μm high, hyaline; epithecium 5-8 μm high, pale brown to brown; hypothecium inconspicuous; layer of densely interwoven hyphae between the hymenium and the leaf surface very distinct, dark brown, K-. Paraphysoids abundant, especially in the epithecium, thin (0.8-1.0 μm thick), branched and anastomosed. Asci ellipsoid, thick-walled, 8-spored. Spores narrowly fusiform, with + acute ends, 7-septate, not constricted at septa, but distinctly locular, (26-)27-29(-30) x 3-4 μm , plus a thin (less than 0.5 μm) halo. Phycobiont: a species of *Phycopeltis* or *Trentepohlia* (Trentepohliaceae), cells rounded or angular, oblong to + rectangular, 6-8 x 4-5 μm , forming neither regular radiate rows of cells nor a continuous plate.

Mazosia rubropunctata R. Sant.

Zaïre, Wangata (N 00°01'; E 18°14'), *Stamer* L 458 (LG).

This species was first mentioned in Africa by Vězda (1973) from one collection in Guinea. Known also from South America (Santesson 1952).

Opegrapha filicina Mont.

Fig. 12-13

New Guinea, Madang Prov., rain forest, between Awar Plantation and Boroi (S 4°06'; E 144°48'), at sea level, foliicolous on palm tree, 1980, *Demoulin* 5952 & *Smeets* (LG).

I have hesitated to assign this plentiful collection to *Opegrapha filicina* Mont. As a matter of fact, in this collection, the pycnidia produce two different types of conidia, a feature I have never seen in the several collections of *O. filicina* studied from South America and Africa. This criterium however is not constant as a few pycnidia were observed with crescent-shaped conidia only. The collections available are so far too few to get a good idea of such a variation.

In typical collections of *O. filicina* and in this one, spore ontogeny is worthy of some attention: the five loculae are formed quite early in the spores by internal differential thickening of the wall and constriction of the lumen. A complete septum (= affecting the entire spore wall) eventually appears.

It is very distinct in the collection from New Guinea and represents the weakest point of the spore: the two parts easily break apart at that point.

Two to three further septa appear later in the New Guinean collection but were very rarely seen in specimens from other parts of the world. *O. filicina* is known from the New World, Africa and India (Santesson 1952; Awasthi & Singh 1973). A description of the New Guinean collection follows.

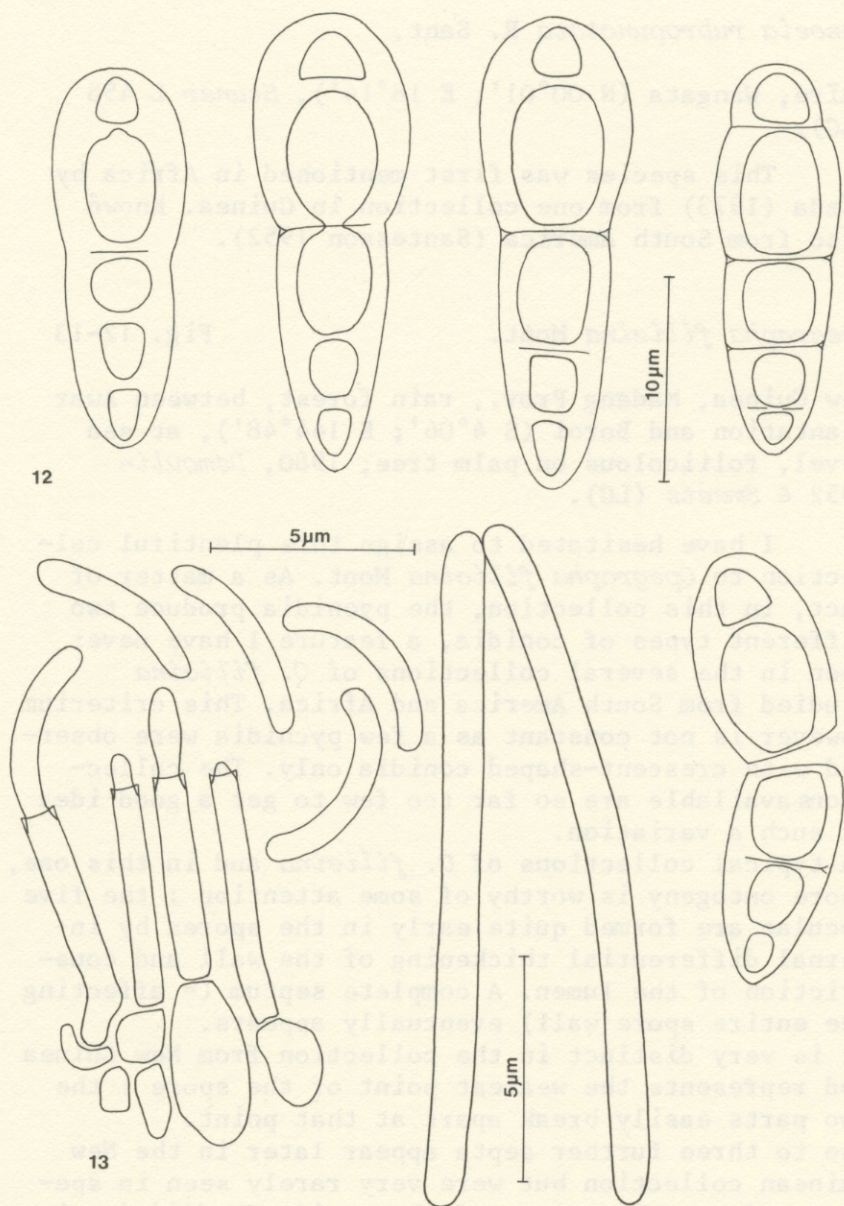


Fig. 12-13. *Opegrapha filicina* Mont. New Guinea, Demoulin 5952 & Smeets (LG). 12 : Different stages of the spore ontogeny; 13 : Conidiophores (phialides) and conidia of two different types.

Thallus + circular, up to 1 cm diam., sometimes larger, very badly delimited at the margins, without any visible hypothallus, usually discontinuous (most probably because of thallus brittleness, being easily flaked off), surface smooth, pale green to green. Ascocarps abundant, linear, irregularly bent or undulate, bifid or trifid, 0.8-1.5(-1.9) mm long, 80-90 μm wide, slightly prominent; margins at first covered by thallus but soon exposed, black; disc linear, greyish. Excipuloid tissue carbonaceous, triangular in transverse section, at first covered by thallus, e.g. the algal layer (+ 10 μm thick). Hymenium 65-75 μm high, hyaline; epithecium 10 μm thick, hyaline; hypothecium 10 μm thick, greyish to pale brown. Paraphyses not very abundant, 1-1.2 μm thick, branched and anastomosed. Asci 50-55 μm high, thick-walled, ovoid to largely clavate, 8-spored. Spores oblong to fusiform, slightly but distinctly microcephalic (the middle cell being slightly larger, especially when young), remaining 1-septate for a long time but quite early with 5 distinct loculi, when old usually with 3-4 complete septa, distinctly constricted at the first septum and easily broken at that level, 19-23 x 5-7 μm , plus a 1-3 μm thick halo when observed in a KOH solution. Pycnidia abundant, circular, adnate and slightly prominent, 0.075-0.1 mm in diam., appearing as black dots, at first covered by the thallus but soon totally exposed, opening by a central ostiole. Conidia of two types, sometimes produced within the same pycnidium: crescent-shaped and 4-5 x 1 μm or filiform (but not rigid, usually + deformed) and 15-16 x 1 μm ; conidiophores abundant, forming a compact layer but only present at the bottom of the pycnidium; conidiogenous cells enteroblastic, phialidic but not proliferating, with conidia arising terminally. Phycobiont: probably *Phycopeltis*; cells angular to oblong, 7-10 x 5-6 μm , forming a continuous plate.

Porina pseudofulvella Sérusiaux

Republic of South Africa, Natal Prov., Nkandla National Forest (between Nkandla and Eshowe), + 1150 m, forest, 1982, Lombinon 82/266 & Sérusiaux (LG).

This species was previously known only from the type-locality in Kenya (Sérusiaux 1979b). The Nkandla Forest in Natal was found to shelter a rather rich foliicolous lichen flora. So far, eleven species have been determined: *Porina nitidula* Müll. Arg. (new for South Africa), *P. epiphylla* (Fée) Fée with the parasymbiotic *Opegrapha phylloporinae* Müll. Arg., *Gyalectidium filicinum* Müll. Arg. (new for S.A.), *G. aspidotum* (Vainio) R. Sant. (new for S.A.), *Echinoplaca pellicula* (Müll. Arg.) R. Sant. (new for S.A.) with the parasite *Hansfordiellopsis lichenicola* (Bat. & Maia) Deighton, *Catillaria bouteillei* (Desm.) Zahlbr., *Bacidia apiatica* (Müll. Arg.) Zahlbr. (new for S.A.), *B. fuscicula* (Müll. Arg.) Zahlbr. (new for S.A.), *Byssoloma leucoblepharum* (Nyl.) Vainio, *Tapellaria epiphylla* (Müll. Arg.) R. Sant. (new for S.A.) and *Lopadium puiggarii* (Müll. Arg.) Zahlbr. (new for S.A.).

Tapellaria bilimbioides R. Sant.

U.S.A., Florida, Coconut Grove, 1897, Thaxter (FH).
Costa Rica, Puntaneras Prov., on the Pacific Coast, Pto Quepos, Parque Nacional de la Punta Catedral, primary forest along the beach, 1979, Sérusiaux 3359 (LG).

Tapellaria bilimbioides is known from Sumatra and the Phillipines (Santesson 1952), India (Awasthi & Singh 1973) and from Cuba and Puerto Rico (Sérusiaux 1976). The two collections mentioned here considerably extend its distribution range in the New World.

Tapellaria nana (Fée) R. Sant.

U.S.A., Florida, Sanford, on palmetto leaves, 1915, Rapp (FH, LG).

Tapellaria nana is closely related to *T. epiphylla* in having only one muriform spore per ascus; it is distinguished by the presence of a thin greyish pruina on the apothecial disc. Known formerly from Brazil, Cuba and Hawai.

Tapellaria nigrata (Müll. Arg.) R. Sant.

New Guinea, Madang Prov., rain forest between Awar Plantation and Boroi (S 4°06'; E 144°48'), at sea level, foliicolous on palm tree, 1980, Demoulin 5956 & Smeets (LG).

This collection is identical to another one made in Brazil, Matto Grosso, Serra de Chapada by Malme (n° 4050b, S) : the spores are 5-septate, as mentioned by Santesson (1952). I was ready to describe these two specimens as belonging to a new species, but on the occasion of a careful scrutiny of the plentiful collection from New Guinea, I discovered several spores with 7 septa (the spores are (4-)8 per ascus, measure 21-29 x 5-6(-7) μm ; when 4 in the ascus, they reach 28-30 x 6-7 μm). Spore septation and size are not very variable within the genus and proved to be good characters for the delimitation of the species (see Santesson 1952) but I believe the discrepancy of these specimens from the typical populations of *T. nigrata* is too small to warrant separate taxonomic status, at least for the time being.

T. nigrata is here recorded for the first time in Asia. It was formerly known from South America and Africa. The collection from New Guinea is parasitized by *Ampullifera ugandensis* Deighton, a distinctive hyphomycete with elongate-ampulliform and rather long (up to 15 μm) hyphopodia and lemoniform truncated conidia (see Hawksworth 1979 for a more complete description).

SPECIES RANGE EXTENSIONS (not mentioned in the text)

Species	First record for :	Collection and herbarium where the material is preserved
<i>Aspidothelium fugiens</i> (Müll.Arg.) R. Sant.	New Caledonia	Bamps 5814b - LG
<i>Byssoloma subdiscordans</i> (Nyl.) P.James	New Caledonia	Bamps 5814b - LG
<i>Calenia microcarpa</i> Vězda	New Caledonia	Bamps 5854b - LG
<i>Calenia submaculans</i> R. Sant.	Colombia	Schultes & Cabrera 13738 in Vězda Lich.Sel. Exsiccati n° 1880 - LG
<i>Catillaria bouteillei</i> (Desm.) Zahlbr.	New Caledonia	Bamps 5854b - LG
<i>Echinoplaca epiphylla</i> Fée	New Caledonia	Bamps 5845b - LG
<i>Lasioloma arachnoideum</i> (Krempelh.) R. Sant.	Costa Rica New Caledonia	Sérusiaux 3359 - LG Bamps 5814b, 5854b - LG
<i>Linhartia patellarioides</i> (Rehm) Vězda	Senegal	Vanden Berghen 2459b - LG
<i>Lopadium elliottii</i> (Vainio) Zahlbr.	Costa Rica	Sérusiaux 3359 - LG
<i>Opegrapha filicina</i> Mont.	Costa Rica	Sérusiaux 3359 - LG
<i>Phyllophiale alba</i> R. Sant.	Costa Rica	Sérusiaux 3359 - LG
<i>Porina nitidula</i> Müll. Arg.	Costa Rica	Sérusiaux 3359 - LG
<i>Sporopodium xantholeucum</i> (Müll. Arg.) Zahlbr.	Costa Rica	Sérusiaux 3359 - LG

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