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CONTRIBUTION TO THE STUDY OF LICHENS FROM KIVU (ZAIRE), RWANDA AND BURUNDI. III. VEZDAEA, A NEW GENUS FOR AFRICA

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SUMMARY

The genus *Vezdaea* Tsch.-Woess & Poelt is recorded as new for Africa where it is represented by a new species : *Vezdaea foliicola* Sérusiaux sp. nov.

RESUME

Le genre *Vezdaea* Tsch.-Woess & Poelt est découvert pour la première fois en Afrique, où il est représenté par une espèce nouvelle : *Vezdaea foliicola* Sérusiaux sp. nov.

The collection of foliicolous lichens recently made in Kivu (Zaire), Rwanda and Burundi has already proved to be mostly interesting (Sérusiaux 1978). This paper deals with the discovery of the genus *Vezdaea* in this material. Detailed information about the area and its ecogeographical position can be found in Lambinon & Sérusiaux (1977).

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Vezdaea foliicola Sérusiaux sp. nov.

Thallus crustaceus, supracuticulariter crescens, cinereo-viridis. Ascocarpia rotunda vel saepe irregularia, 0.8-1.0 mm diam., leviter convexa, bruneola, interdum leviter tomentosa. Excipulum nullum, hypothecium indistinctum, "hymenium" hyalinum. Asci numerosi, membranis incrassatis, 8-spori. Paraphyses ramosae anastomosantesque, reticula circum ascos formantes. Sporae 1-septatae, ellipsoideae, 16.5-19 x 4-6 μ m, leviter sed distincte verrucosae. Algae ad Chlorococcaceae probabiliter pertinentes. Holotypus : Lambinon 71/1115 (LG).

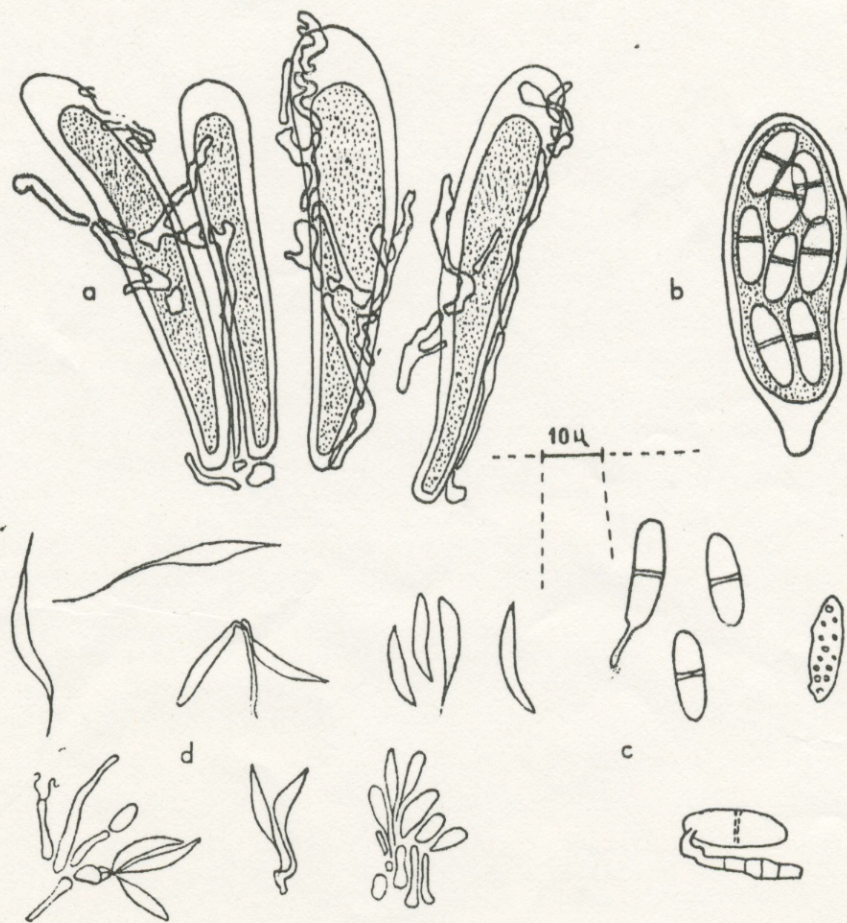
Thallus epiphyllous, growing on the leaf cuticle, at least in adult stage, \pm circular but with an often irregular periphery (due to the thallus disappearance), up to 12 mm diam., not exceeding 10 μ m thick, ashen green. Ascocarps circular or often irregular in shape and outline, 0.8-1.0 mm diam., slightly convex but giving the impression of being flattened, brownish, when young covered by a minute whitish tomentum (this might in fact be the ascus tips), without margin or in young stages surrounded by intricately whitish hyphae giving the margin a woolly aspect. Excipulum lacking but a few peripheral hyphae suggest an excipulum-like structure, hypothecium ill-defined, the ascus and paraphyses are found in loose tufts, there is no binding hymenial gel and therefore there is no real hymenium.

Asci abundant, clavate, thick-walled, with a double layer and a swollen tholus (especially clear in young asci); paraphyses branched and anastomosed, composed of flattened cells and forming a net work around each ascus. Spores : 8/ascus, 1-septate, not constricted at the septum, (14-) 16.5-19 x 4-6 μ m (average of 17.5 x 5 μ m), ellipsoid to slightly fusiform, with obtuse ends, minutely verrucose when completely mature (verrucae distinctly refringent).

Pycnidiospores produced only in certain young parts of the thallus (obviously lacking in large areas of the thallus, usually in old ones), fusiform with tapering ends, simple, 14-16 x 25-35 μ m, budding on long and \pm straight sterigmata.

Algae : micareoid : globose, green, 5-10 μ m diam., cells grouped in a common gelatinous membrane, probably belonging to the Chlorococcaceae.

Zaire : Central east Afromontane district : Massif du Kahuzi, env. km 37 de la route Bukavu-Walikale, alt. 2300 m, partie inférieure de la forêt de bambous, épiphyllie sur *Culcasia* sp., Lambinon 71/1115 (holotypus : LG, isotypus : GZU, herb. Vězda).



Vezdaea foliicola Sérusiaux, holotypus. a : young hymenium; b : ascus with spores; c : spores (a cluster of 3 immature spores, one completely mature with verrucae, a young one parasitized by an unknown fungus); d : pycnidiospores.

The genus *Vezdaea* has been recently recognized (Tschermak-Woess & Poelt, 1976) to accommodate an European species [*Pachyascus byssaceus* (Vězda) Vězda (= *Catillaria byssacea* Vězda)], whose particularities were earlier described by Vězda (1963, 1970). Tschermak-Woess and Poelt also have shown that this taxon formerly was described as *Lecidea aestivalis* by Ohlert and should therefore be named *Vezdaea aestivalis* (Ohlert) Tsch.-Woess & Poelt. Four other species have been placed in the genus as well (Poelt & Döbbeler, 1975, 1977) : *V. leprosa* (James) Vězda, *V. retigera* Poelt & Döbbeler, *V. rheocarpa* Poelt & Döbbeler and *V. stipitata* Poelt & Döbbeler. Those papers provide information on morphology, anatomy, ecology and taxonomical position of that genus of Lecideaceae.

The taxon discovered in Lambinon African material clearly belongs to that genus because of its ascocarps structure, ascus anatomy, lack of excipulum, branched and anastomosed paraphyses forming a network around individual asci and bicellular spores.

It can be easily distinguished from the species of the sect. *Stipitatae* Poelt & Döbbeler (*V. stipitata* and *V. leprosa*) by its sessile ascocarps and from the only species of the sect. *Rheocarpae* Poelt & Döbbeler (*V. rheocarpa*) by its paraphyses which reach the ascus tips (in *V. rheocarpa*, paraphyses are scarce and do not exceed half the ascus length). *V. foliicola* seems to belong to the sect. *Vezdaea* and can be distinguished from *V. retigera* by its spores (unicellular in *V. retigera*) and from *V. aestivalis* by its ascocarps color, pycnidiospores, as well as its distribution and ecology. As a matter of fact *V. aestivalis* has flesh-colored ascocarps, bacilliform pycnidiospores 10-12 x 2 µm and is encountered in Europe overgrowing living or dead mosses and liverworts.

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