Punctelia colombiana sp. nov. (Parmeliaceae) from South America

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Punctelia colombiana Sérusiaux, a species apparently endemic to Colombia, is described as new. It is the only isidiate species in the genus with filiform conidia.

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Introduction

While searching for a name for a few African lichen specimens belonging to the genus *Punctelia* (Sérusiaux 1983), I had the opportunity to examine numerous interesting collections of the genus from South America. Three specimens from Colombia proved to represent a new species, which proved to be the only isidiate species of the genus with filiform conidia. As shown by Krog (1982), most *Punctelia* species have a particular type of conidia referred to as unciform by that author. There are, however, three species in which the conidia are filiform: *Punctelia hypoleucites* (Nyl.) Krog, *P. microsticta* (Müll. Arg.) Krog and *P. negata* (Nyl.) Krog. That species within the *Parmelia borreri* group have either long or short pycnoconidia was already known by Lynge (1914), and more recently Culberson & Culberson (1982) used that character to distinguish two species previously confused as one.

Punctelia colombiana Sérusiaux sp. nov.

Thallus corticola, arcte appressus et adnatus, lobis 2–3 mm latis, ± imbricatis, cum margine inciso-crenata, superne viridi-cinereus, rugosus vel reticulatus, pseudocyphellis rotundatis, albis, 0.1–0.2 mm latis, inferne niger. Isidia saepius numerosa, variabilia, coralliformia, cylindrica vel squamiformia et incisa, thalli superficiem obtegentes. Rhizinae numerosae, saepius nigrae brevesque. Pycnidiosporae filiformes, 9–12 × 1 µm. Apothecia 0.4–0.7 cm diam, sessilia; discus brunneus, ab initio concavus deinde planus; externum excipulum rugatum valde pseudocyphellatum. Asci 8-spori; sporae ellipsoideae, 14–16(–17) × (9–)10–12(–13) µm. Acidum gyrophoricum et atranorinum continent.

Typus: Colombia, Archer 1380 (S holotypus).

Thallus closely appressed and adnate on bark. Lobes 2–3 mm broad, more or less imbricate, rounded, with a margin more or less irregularly incised and crenate. Upper surface ash-grey to greenish grey, not glossy, rugose to clearly reticulately wrinkled, with rounded, sometimes slightly raised, pseudocyphellae; pseudocyphellae white, evenly scattered, 0.1–0.2 mm large. Isidia always present, usually numerous and covering most of the thallus, rather variable, varying from cylindrical or coralloid isidia with brown tips to dorsiventral, irregularly but finely incised squamules with a lower cortex fragile and soon eroded, sometimes whitish downy on their lower side but never disintegrating into soralia. Lower surface black, except for a dark brown submarginal zone; rhizines numerous, mostly simple and black but sometimes penicillate and whitish. Medulla white. Pycnidia few, appearing like small black dots on the upper surface. Conidia numerous, filiform, straight, 9–12 × 1 µm. Apothecia 0.4–0.7 cm diam, sessile; disc chestnut-brown, at first concave but becoming almost flat; outer exciple rugose and with numerous pseudocyphellae. Spores 8 per ascus, ellipsoid, 14–16(–17) × (9–)10–12(–13) µm (including the 1 µm thick spore wall). TLC: atranorin, gyrophoric acid and an asso-

NORD. J. BOT. 4: 717–718, LICHENOL 018

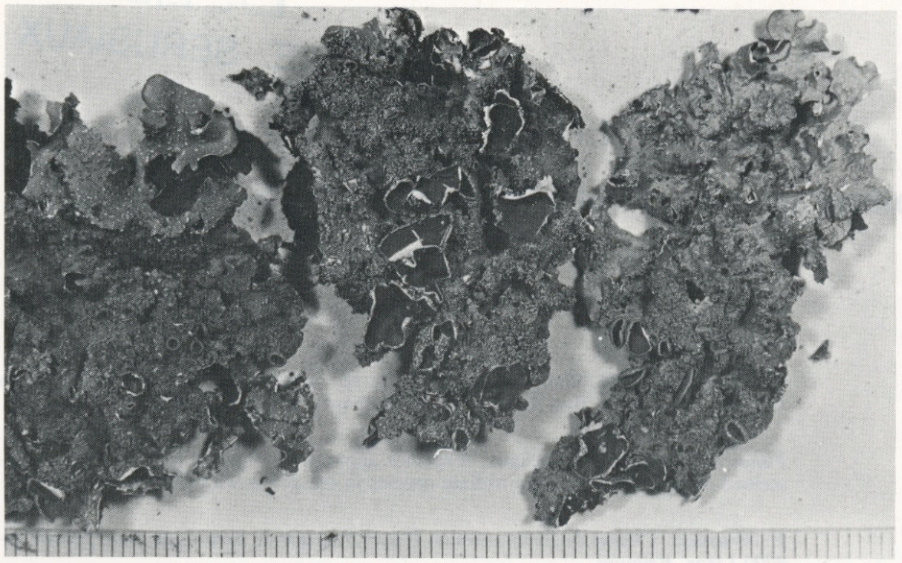

Fig. 1. *Punctelia colombiana*, holotype. Each line on the scale: 1 mm.

ciated unknown (determined by TLC, following Culberson & Ammann 1979).

Type: Colombia, Dept. Antioquia, Medellín, ±1800 m, October 1930, Archer 1380 (S holotype).

Other specimens examined: Colombia, Dept. Antioquia, Medellín, 1 km above San Javier, 1 m from ground on trunk of coffee plant, partly wooded pastured slope, July 1971, Nee & Mori 4265 (US). Near Silvia, 2°35′N 76°25′W, 8000–9000 ft, on dead stunted bushes on slopes of mountains, December 1967, Garrett Co. 54 (BM).

The isidia are quite variable in this new species; the variation is similar to that found in *Punctelia rudecta* (Ach.) Krog, a species with unciform conidia, a pale lower surface and lecanoric acid in the medulla. *P. constantimontium* Sérusiaux also has a black underside and gyrophoric acid in the medulla. It can be distinguished from *P. colombiana* by its straight or unciform conidia never exceeding 7 µm in length and by its squamules which are always flattened and dorsiventral. As far as I am aware, no close relative to *P. colombiana* is currently known.

Attention must be drawn to the seemingly restricted distribution of the four *Punctelia* species with filiform conidia. Although collections from all parts of South America were examined, *P. colombiana* was detected only in the Andean mountains of Colombia.

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