

# A NEW SPECIES AND NEW COMBINATION IN *CAMPYLONEURUM* C. PRESL (POLYPODIACEAE)

During a taxonomic revision of the neotropical fern genus *Campyloneurum* C. Presl, I found that a new combination and new species name are needed for two South American taxa.

***Campyloneurum nitidissimum* (Mett.) Ching**  
**var. *abruptum* (Lindman) B. León, comb. nov.**  
*Polypodium repens* Aublet var. *abruptum*  
Lindman, Ark. Bot. 1: 245. 1903. TYPE: Brazil. Matto Grosso: Serra do Itapirapuam, ad arbores, 28 Apr. 1894, *Lindman (Regnell Exped. I) 3345* (lectotype, here designated, S; islectotype, K). Figure 1A, B, C.

*Polypodium nitidissimum* Mett. var. *latior* Rosenstock, Repert. Spec. Nov. Regni Veg. 12: 474. 1913. TYPE: Bolivia. La Paz: Yungas septentrionalis, Polo Polo, prope Coroico, 900 m, *Buchtien 3526* (holotype, S; isotypes, F, US).

*Campyloneurum nitidissimum* var. *abruptum* occurs from Venezuela and Colombia to Bolivia and Brazil, usually at 100–1,500(2,000) m. It grows terrestrially on slopes of rock, sand, or clay, at the base of trees, and rarely as a hemiepiphyte in lower montane or lowland forests. It is usually misidentified in herbaria as *C. coarctatum* (Kunze) Fée, from which it differs by its narrow, long-creeping stem, widely spaced phyllopodia, and leaves less than 40 cm long.

*Campyloneurum nitidissimum* is characterized by its dark brown, linear scales, and stem 5–10 mm wide. *Campyloneurum nitidissimum* var. *nitidissimum* generally has asymmetrically divided primary areoles and two to three sori between secondary veins, and always has subcoriaceous leaves. *Campyloneurum nitidissimum* var. *abruptum* differs from the typical variety by having undivided primary areoles, two sori between secondary veins, and herbaceous-chartaceous leaves.

*Selected specimens examined.* VENEZUELA. MERIDA: ESE of Santa Bárbara, 7°41'N, 71°28'W, 9 Mar. 1980, *Liesner & González 9236* (MO). TÁCHIRA: W of Pinal, W of bridge over Río Frío, 27–30 Aug. 1966, *Steyermark & Rabe 96710* (GH). BARINAS: Pedraza, above El Algarrobo, 8°31'N, 70°35'W, 3 Aug. 1983, *Werff & Ortiz 5810* (UC). COLOMBIA. BOLÍVAR: Boca Verde, on Río Sinú, 13–14 Feb. 1918, *Pennell 4216* (NY). SUR DE SANTANDER: vicinity of Barranca Bermeja, Magdalena

valley, between Sogamoso and Colorado rivers, 19 Feb. 1935, *Haught 1567* (US). BOYACA: Casanare, Tauramena, bosques del Río Caja, 13 Apr. 1963, *Uribe 4281* (US). TOLIMA: Alto de Consuelo, Honda, July 1923, *Ariste 4997* (F, GH). HUILA: 10 km SSW (by road) of La Plata, on road to Purace, 29 Apr. 1972, *Duncan 1889* (UC). ECUADOR. PICHINCHA: between Nono and Nanegal, 14 km NW of Nono, 4 Sep. 1976, *Croat 38838* (UC). NAPO: Río Wai Si Aya, a northern tributary to Río Aguarico, 8 Aug. 1980, *Brandbyge et al. 32661* (AAU). PASTAZA: Río Bufe, northern tributary of Río Bobonaza, 2°20'S, 76°40'W, 19 July 1980, *Ollgaard et al. 34779* (AAU). PERU. SAN MARTÍN: Chazuta, Río Huallaga, Apr. 1935, *Klug 4080* (F, GH, S, UC, US). HUANUCO: Huánuco, near confluence of Río Cayumba with Río Huallaga, 10 Oct. 1936, *Mexia 8272* (BM, F, GH, S, UC). PASCO: Oxapampa, Quebrada Honda, camino a Tunqui, 17 Aug. 1985, *León 667* (GH, USM). JUNÍN: camino a Tarma, antes de Carpapata, 1 Oct. 1982, *León 340* (GH, USM). MADRE DE DIOS: Tambopata, lodge "Cuzco Amazónico," Apr. 1986, *León 884* (USM). BOLIVIA. LA PAZ: Larecacha, between Caranavi and Guanay, 15°33'S, 67°45'W, 28 Nov. 1980, *Croat 51658* (MO, UC); Nor Yungas, 4.5 km below Yolosa, 16°12'S, 67°50'W, 19–20 Oct. 1982, *Solomon 8549* (MO); Tumupasa, 22 Jan. 1912, *R. S. Williams 1059* (GH, NY). TARIJA: Arce, vic. Comunidad Sidras, 22°14'S, 64°32'W, 6 May 1983, *Solomon 10535* (NY, UC). BRAZIL. RORAIMA: Posto Mucajaí, Río Mucajaí, vic. Mucajaí airstrip, 13 Mar. 1971, *Prance et al. 10923* (K, NY, S, US). AMAZONAS: Río Curuquete, Cachoeira República, 25 July 1971, *Prance et al. 14584* (NY, US). PARÁ: W bank of Río Maicuru, ca. 23 km from Lageira, 0°55'S, 54°26'N, 29 July 1981, *Strudwick et al. 3702* (NY). RODÔNIA: basin of Río Madeira, 2 km below confluence of Río Abunã, 12 Nov. 1968, *Prance et al. 8341* (S, US). MATO GROSSO: Mato do Curupira, 18 Feb. 1894, *Lindman (Regnell Exped. I) 3075* (S); gorge of Veu de Noiva, Chapada dos Guimaraes, 17 Oct. 1973, *Prance et al. 19105* (US). GOÍAS: Yateri, Balsamo, 9 Feb. 1895, *Macedo 5298* (S, US). MINAS GERAIS: Rio Branco, 13 Nov. 1930, *Mexia 5298* (BM, NY, S).

***Campyloneurum wurdackii* B. León, sp. nov.**  
TYPE: Venezuela. Bolívar: Cerro Pijiguao, Sierra Suapuré, 400–450 m, 19 Jan. 1956, *Wurdack & Monachino 41303* (holotype, MO; isotype, US). Figure 1D, E, F.

Differt haec species a *Campyloneurum repens* 3–4 venulis excurrentibus in quaque areola. Mediae venulae excurrentes venulis transversalibus junctae sunt, formantes areolas secundarias. Haec species differt ab *C. nitidissimum* paleis lanceolatis, 3–4 mm longis.

Terrestrial. Stem long-creeping, not pruinose, 2–3 mm diam.; scales light brown, lanceolate, 3–

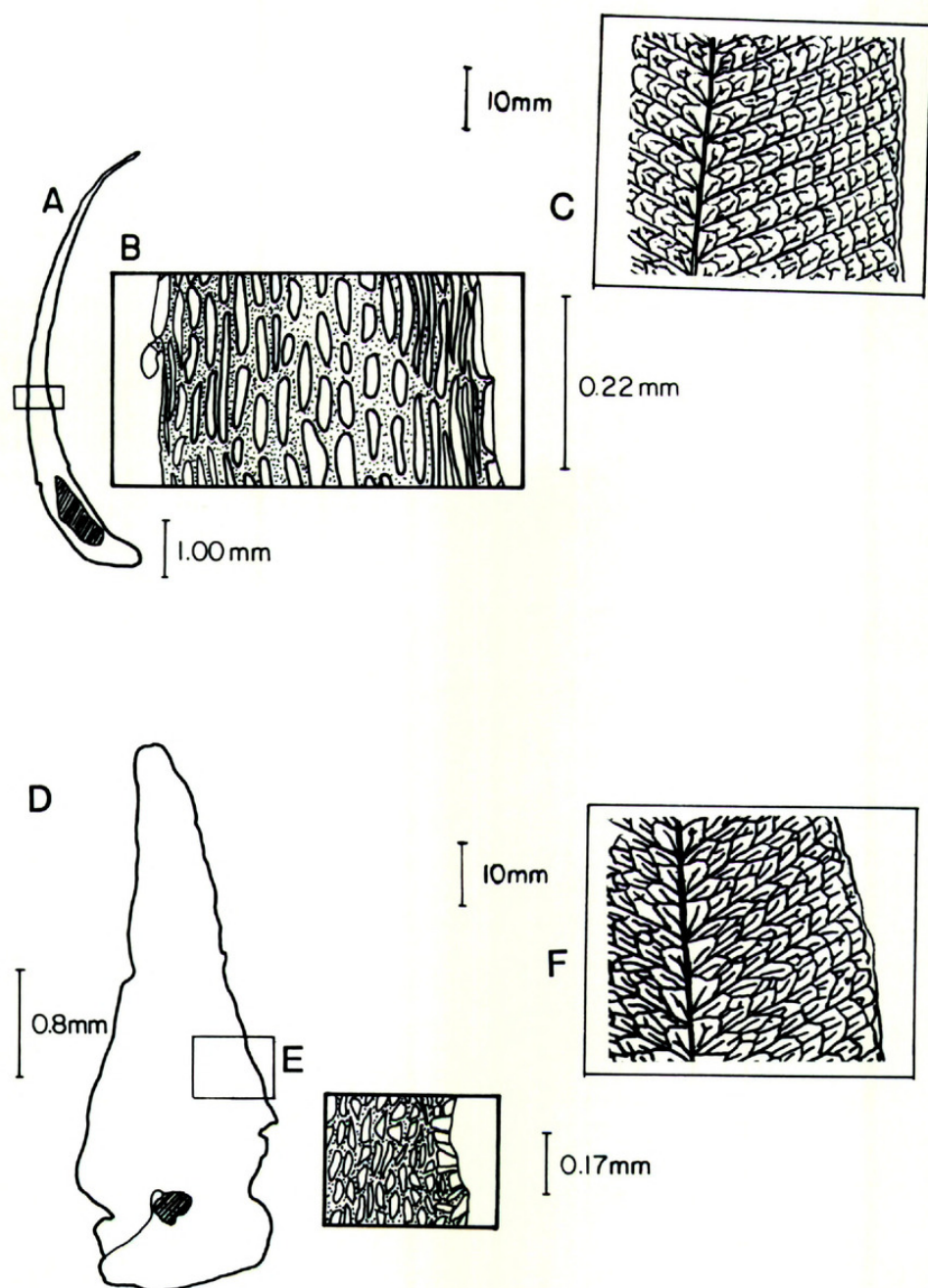


FIGURE 1. A-C. *Campyloneurum nitidissimum* var. *abruptum*.—A. Stem scale (100 $\times$ ).—B. Cell structure from the middle part of the stem scale (100 $\times$ ) (A-B, *Mexia* 8272 F).—C. Detail of venation pattern (1 $\times$ ) (*Karsten* s.n. W). D-F. *Campyloneurum wurdackii* (*Wurdack & Monachino* 41303 MO).—D. Stem scale.—E. Cell structure from middle part of the stem scale (100 $\times$ ).—F. Detail of the venation pattern (1 $\times$ ). (Hatched area on both scales represents the insertion zone.)

4 mm long, 1–1.3 mm wide, with bases auriculate, apices obtuse or rarely acute; phyllopodia 5 mm apart. Leaves 19–41 cm long; petiole 4–8 cm long, stramineous. Lamina simple, lanceolate, with bases cuneate then long decurrent, apices acuminate to slightly caudate. Veins prominent or prominulous, secondary veins straight, 60–65° divergent from the costa, tertiary veins forming 7–8 primary areoles between the costa and margin, excurrent veinlets 3–4 per areole, simple or furcate, central veinlet generally anastomosed with the transverse

vein forming asymmetric secondary areoles. Sori subterminal or medial, rarely basal, on the free excurrent vein; paraphyses absent.

*Paratype*. VENEZUELA. TERRITORIO FEDERAL AMAZONAS: Atures, 23 km NE of Puerto Ayacucho, near Cachama, 5°51'N, 67°24'W, 17–19 Apr. 1978, *Davidse & Huber* 15306 (MO).

*Campyloneurum wurdackii* is known only from Venezuela, where it has been collected twice from mossy places in lowland forests at 90–500 m.

*Campyloneurum wurdackii* and *C. nitidissimum* var. *abruptum* have similar cuneate leaf bases that are decurrent on the petiole. However, the former species has a stem 2–3 mm wide, lanceolate scales, and venation with divided primary areoles (Fig. 1D–F), while the latter has a stem 5–10 mm wide, linear scales, and venation with usually undivided primary areoles (Fig. 1A–C).

*Campyloneurum wurdackii* appears to be closely related to *C. brevifolium*, as both species have asymmetrically divided areoles, approximate leaves, and slightly clathrate stem scales. However, the former has a stem 2–3 mm wide and lanceolate stem scales, whereas the latter has a stem 5–10 mm wide and ovate-lanceolate stem scales.

Vareschi (Fl. Venez. 1(2): 950. 1969) previously named *Campyloneurum wurdackii* as *Polypodium repens* Aublet var. *spathulatum* Vareschi a nomen nudum because it lacked a Latin descrip-

tion. He cited *Wurdack 41130* as the type of his new variety, but this number represents an angiosperm (J. Kallunki, pers. comm.). The number *41130* undoubtedly is a typographic error for *Wurdack 41303*, a specimen of *Campyloneurum* that corresponds to the description of his new variety and from the same locality cited by Vareschi. The name honors Dr. J. J. Wurdack, who collected the type.

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