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John J. Pipoly III

University of Florida-IFAS/Broward County Extension, jpipoly@nova.edu

Jon M. Ricketson

Missouri Botanical Garden

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Author(s): John J. Pipoly III and Jon M. Ricketson

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A New Species of *Cybianthus* (Myrsinaceae) from the Cordillera del Condor (Ecuador and Peru)

John J. Pipoly III

Broward County Parks & Recreation Division, 950 NW 38th St., Oakland Park, Florida 33309, U.S.A.
jipipoly@broward.org

Jon M. Ricketson

Missouri Botanical Garden, P.O. Box 299, St. Louis, Missouri 63166-0299, U.S.A.
jon.ricketson@mobot.org

ABSTRACT. *Cybianthus condorensis* Pipoly & Ricketson, a new species from the Cordillera del Condor of Ecuador and Peru, is described herewith. Because of its alternate, coriaceous, and revolute leaves; scattered to densely appressed lepidote branchlets, inflorescence rachises, and calyces; subsessile pistillate flowers; and sandy habitat, this species is easily recognized.

RESUMEN. Se describe e ilustre una nueva especie para la ciencia, *Cybianthus condorensis* Pipoly & Ricketson, proveniente de la Cordillera del Condor, del Ecuador y Perú. Con sus hojas alternas, láminas coriáceas y con márgenes revolutas, envés, ramitas, raquis de la inflorescencia y cáliz esparcidamente-densamente adpreso-lepidotos, flores pistiladas subsésiles, y también el hábitat sobre suelos arenosos, fácilmente se distingue esta nueva especie.

Key words: Cordillera del Condor, *Cybianthus*, ecology, Ecuador, Myrsinaceae, Peru.

In our continuing work to produce accurate checklists and update our understanding of the systematic biology of the genus *Cybianthus* Mart. as redefined by Agostini (1980) and later Pipoly (1987), we happened upon a suite of specimens of a very unusual species of *Cybianthus* discovered by a study carried out in the Cordillera del Condor of Ecuador and Peru. This study has greatly facilitated our knowledge about the flora of this area, while discovering many apparently disjunct species from the Guiana Highlands to the sandstone mountains of the Cordillera del Condor shared by Ecuador and Peru. Building on our previous work (Pipoly, 1987, 1988, 1991a, 1991b, 1992, 1996, 1998; Pipoly & Ricketson, 2006, 2014), we offer the following novelty as we prepare the manuscript for our treatment of the Myrsinoideae (Primulaceae) for the *Flora of Ecuador*.

Cybianthus condorensis Pipoly & Ricketson, sp. nov. TYPE: Peru. Cajamarca: San Ignacio, Distr. Huarango, Poblado Huarandoza, Caserío El Edén, camino a la Montaña Negra, bosque achaparrado húmedo lluvioso, suelo arenoso, 1598 m, 23 mayo

2007 (stam. fl), J. Perea & V. Flores 3208 (holotype, HUT image seen; isotypes, AMAZ not seen, MO!, MOL not seen, QCNE not seen, USM not seen). Figure 1.

Species haec quoad folia alterna laminas coriaceas secus margines leviter revolutas, ramulos laminas foliares adaxialiter inflorescentiae rhachim pedicellos necnon calyces dense adpresso ferrugineo-lepidotos etiam flores pistillatos subsessiles *Cybianthus peruviana* (A. DC.) Miq. arte valde affinis, sed ab eo petiolis secus ramulos angulatos longe decurrentibus, ramulis denique praecclare alatis (non teretibus), perianthio carnosus (non chartaceo) atque corolla floris staminalis 3–3.2 (non 2.2–2.6) mm longa perfacile separabilis; etiam habitat neblisylvam vel sylvam enanam (non terram firmam nec sylvam premontanam).

Tree 6 m tall. *Branchlets* sharply angulate, 5–6 mm diam., longitudinally winged downward from decurrent petioles, wings ca. 1 mm in height when dried, densely appressed ferruginous-lepidote. *Leaves* alternate; blade coriaceous, oblanceolate to elliptic or rarely obovate, (6.5–) 11.5–15(–19.5) × 3–5.5(–8) cm, apically, abruptly short-acuminate or obtuse, acumen, when present, to 0.4 mm, basally acute, unequal, decurrent on petiole and to stem wings, inconspicuously pellucid-punctate and punctate-lineate above and below, glabrous and pusticulate above, secondary veins 39 to 46 pairs, not visible above, barely raised below; with scattered appressed-lepidote scales below, midrib depressed above, prominently raised below, margin inrolled to revolute, entire, epunctate; petiole slender, tapering and lacking a swollen pulvinus, canaliculate, 0.9–1.3 cm, 0.8–1.1 mm diam., densely appressed-lepidote. *Staminate inflorescence* with 1 to 4 racemose branches from base, 1–7 cm, much shorter than leaves, 20- to 66-flowered, rachis lepidote, peduncle (0–)0.3–0.5 cm; inflorescence bract and inflorescence branch bract unknown; floral bract 1 per flower, caducous, coriaceous, shorter than pedicels, linear-lanceolate, 0.5–0.7 × 0.1 mm, apically acute, inconspicuously punctate and punctate-lineate, densely lepidote abaxially, margin entire; pedicels cylindrical, 0.5–0.7 mm, densely lepidote. *Staminate flower* 4-merous; calyx (in bud) cupuliform, 1.2–1.4 mm, tube ca. 0.5 mm, lobes widely ovate to suborbicular, 1.2–1.3 × 1.1–1.2 mm, apically long-attenuate, brown

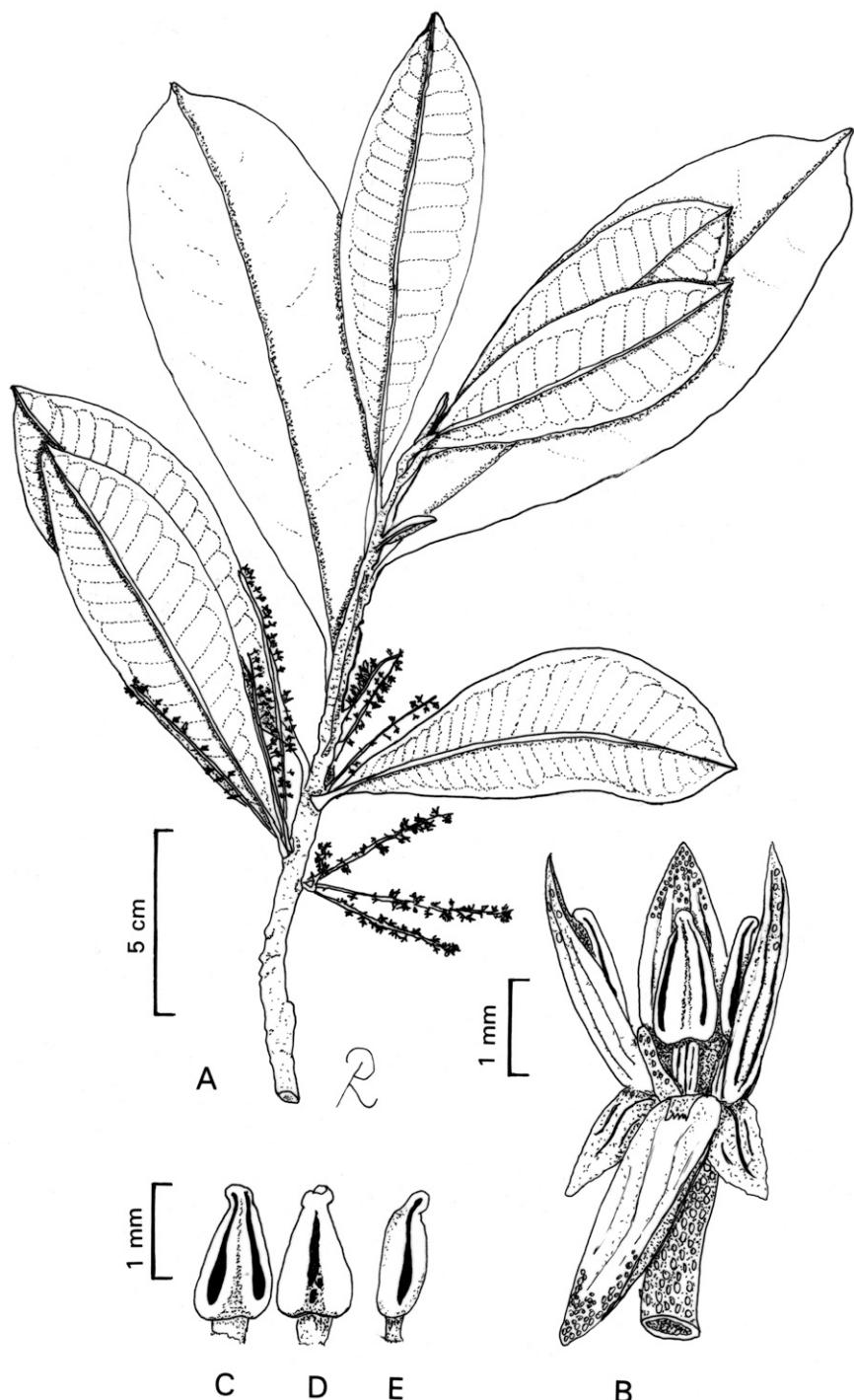


Figure 1. *Cybianthus condorensis* Pipoly & Ricketson.—A. Flowering branch.—B. Staminate flower.—C. Detail of staminate stamen, adaxial surface.—D. Detail of staminate stamen, abaxial surface.—E. Detail of staminate stamen, lateral margin. A drawn from isotype, J. Perea & V. Flores 3208 (MO); B-E drawn from paratype, J. Perea & V. Flores 2372 (MO).

punctate, with a few scattered lepidote scales, margin subentire to erose; corolla cupuliform, 3–3.2 mm, tube 0.8–1.1 mm, lobes narrowly elliptic, 2.8–3 × 0.7–0.8 mm, apically acute, prominently brown-punctate-lineate, glabrous externally except for a few lepidote scales, margin glabrous, entire; stamens 2.6–2.8 mm, basifixed ca. 1/3 length, staminal tube 0.8–1.1 mm, anthers linear-lanceolate, 1–1.5 × 0.4–0.6 mm, apiculate, basally cordate, dorsal connective brown punctate; pistillode lageniform, hollow, 1.5–1.7 × 2 mm, stigma not detectable. *Pistillate inflorescence* with 1 to 3 racemose branches from base, 4–6 cm, shorter than leaves, 6- to 15-flowered; rachis lepidote, peduncle 0.2–0.5 cm, densely lepidote; inflorescence bract and inflorescence branch bract unknown; floral bract caducous, coriaceous, shorter than pedicels, linear-lanceolate, 0.5–0.7 × 0.1 mm, apically acute, inconspicuously punctate and punctate-lineate, densely lepidote abaxially, margin entire; pedicels cylindrical, 0.5–0.7 mm, densely lepidote. *Pistillate flower* subsessile, 4-merous; calyx carnose, coryliform, 1.1–1.3 mm, tube 0.1–0.2 mm, lobes broadly ovate, 0.9–1.2 × 0.8–0.9 mm, apically acute, conspicuously orange to brown punctuate, sparsely scattered lepidote along margin and apical portion without, glabrous within, margin entire, glabrous; corolla (in bud) carnose, campanulate, 2.3–2.5 mm, tube 0.8–0.9 mm, glabrous, lobes ovate, 1.5–1.6 × 0.9–1.1 mm, apically acute to rounded, inconspicuously punctate, lepidote apically without, glandular-granulose apically within, margin entire, glabrous; staminodes 2–2.3 mm, filaments 0.5–0.6 mm, adnate to the corolla tube, the tube carnose, 0.2–0.3 mm, epunctate, glabrous, elobate, apically free portion flat, 0.2–0.3 mm, brown-punctate-lineate, glabrous, anthers erect, ovate, 1.1–1.2 × 0.7–0.8 mm, apiculate, apiculum pointing ventrally, basally cordate, glabrous, dehiscent by wide slits, dorsifixed ca. 1/3 from base, connective prominently punctate; pistil obnapiform, 1.5–1.7 mm, 1.3–1.5 mm diam., epunctate, densely translucent lepidote, style 0.2–0.3 mm, stigma punctiform, densely translucent lepidote, placenta coryliform, ovules 2, exposed on basal placenta. *Fruit* (developing) globose, ca. 3 mm diam., densely translucent glandular-lepidote at first, then glabrescent.

Ecology and distribution. *Cybianthus condorensis* occurs from the northern end of the Cordillera del Condor in Ecuador and ends in Peru with the terminal range of that same cordillera, in cloud and elfin forests, from 1200 to 1598 m.

Etymology. The epithet “*condorensis*” refers to the geographic range of the species, spread throughout the Cordillera del Condor in southeastern Ecuador and northeastern Peru.

Notes. With its alternate, coriaceous, slightly revolute leaf blades; scattered to densely and closely appressed lepidote branchlets, leaf undersides, inflorescence rachis, pedicels, and calyx; subsessile pistillate flowers; and sandy soil habitat, *Cybianthus condorensis* most resembles *C. peruvianus* (A. DC.) Miq. However, *C. condorensis* is easily separated from *C. peruvianus* by its decurrent petioles running down the branchlets, the branchlets sharply angulate and with prominent longitudinal ridges forming wings (vs. subterete and without wings), the pistillate calyx and corolla carnose (vs. chartaceous), the staminate corolla 3–3.2 (vs. 2.2–2.6) mm long, and its lower cloud to elfin forest, rather than lowland to premontane forest habitat.

Specimens examined. ECUADOR. Morona-Santiago: Río Tsuirim entre Centros Shurar de Numpatkain y Banderas, bosque primario sobre terrazas de caliza, 03°20'58"S, 78°14'34"W, 1300 m, 25 Oct. 1999 (stam. fl.), P. Fuentes, J. Ronquillo & P. Tiui 1221 (MO, QCNE). Zamora-Chinchipe: private forest close to village of Las Orquídeas (Río Nangarita), 04°15'S, 78°40'W, 1500 m, 2000 (pist. fl.), J. Homeier & Univ. Gottingen Excursion 210 (GOET, LOJA, MO, QCA). PERU. Cajamarca: San Ignacio, Distr. Huarango, Poblado Huarandoza, Caserío El Porvenir, bosque montano húmedo intervenido, 05°06'38"S, 78°47'07"W, 1200 m, 29 mayo 2006 (stam. fl.), J. Perea & V. Flores 2372 (HUT, MO, MOL, QCNE, USM); Caserío El Edén, camino a la Montaña, 05°09'58"S, 78°43'31"W, 1583 m, 28 July 2007 (pist. fl.), J. Perea & V. Flores 3446 (AMAZ, HUT, MO, MOL, QCNE, USM).

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