THREE PREVIOUSLY UNDESCRIBED SPECIES OF
VACCINIUM (ERICACEAE)
FROM COSTA RICA AND PANAMA

Robert L. Wilbur
Department of Biology
Duke University
Durham, North Carolina 27708, U.S.A.
rwilbur@duke.edu

James L. Luteyn
New York Botanical Garden
Bronx, New York 10458-5126, U.S.A.
jluteyn@nybg.org

ABSTRACT

Three new species of Vaccinium (Ericaceae) are described from Costa Rica and Panama: Vaccinium almedae Wilbur & Luteyn, V. furfaraceum Wilbur & Luteyn, and V. luteynii Wilbur.

KEYWORDS: Ericaceae, Vaccinium, Costa Rica, Panama

RESUMEN

Se describen tres nuevas especies de Vaccinium (Ericaceae) de Costa Rica y Panamá: Vaccinium almedae Wilbur & Luteyn, V. furfaraceum Wilbur & Luteyn, y V. luteynii Wilbur.

PALABRAS CLAVES: Ericaceae, Vaccinium, Costa Rica, Panamá

INTRODUCTION

In order to validate the names of three new species of Vaccinium (Ericaceae) prior to their appearance in William Burger’s Flora Costaricensis, which frowns on such distractions appearing therein, their descriptions are presented here. A discussion of the presumed relationships of each of these species will appear in a later paper treating systematically all the species of Vaccinium known from Mexico and Central America.

Vaccinium almedae Wilbur & Luteyn, sp. nov. (Fig. 1). TYPE: PANAMA, CHIRIQUI, Edwin Fabrega Dam and Reserve in Fortuna, along trail to hydrological station, along Rio Hornito, below forestry house along the road in wet forest. 8°45’N, 82°05’W, 1200 m, 20 Jan 1989 (H), Almeda de Nevers & McPherson 6369 (HOLOTYPE: PMA; ISOTYPES: CASI, DUKE, MO, NY).

Frutex epiphyticus 1–2 m altus. Folia coriacea, integra, glabra; nervatia omnibus camptrochoma. Petiol 7–15 × 2–3.5 mm, glabri. Inflorescentiae ramiflorae fasciculatae, pedicellae 5–10 mm longi, gracilis; bracteolae 2, deltatae, 0.5–0.8 mm longae; margo limbatis. Calyx pedicellis articulatus, 3–4 mm longus, glabro; lobis calycis triangulares acutis, 0.2–0.4 mm latis. Corolla cylindrica glabra, 5–9 mm longa; lobi corollae 5, ca. 2.5 mm longi. Stamina 10, filamenta 1–2.5 mm longa, glabra; thecae 1.4–2.2 mm longae, laevigatae, tubuli separati, gracilis 3–4.8 mm longi, truncati.

Coarse, rigid, epiphytic shrubs 1–2 m tall; branchlets and branches ± terete, glabrous or nearly so but current season growth not present, thin, brownish or

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Fig. 1. Vaccinium almedae. A. Habit. B. Detail of leaf axil showing pseudostipular axillary bud scales. C. Leaf with detail of adaxial portion of blade-petiole junction. D. Flower in bud. E. Flower at anthesis with detail of basal pedicellary bracteoles and the thinner sinus tissue between the corolla lobes. F. Longitudinal section of gynoecium through calyx. G. Stamens showing ventral, dorsal, and lateral views (all drawn from the holotype, Almeda et al. 6369).
grayish. **Leaf-blades** coriaceous, elliptic, mostly 6–18 cm long, 3–7.5(–9) cm broad, apically acute to acuminate, basally rounded to shortly tapering and sometimes curling or somewhat conduplicate around the petiole at the junction, marginally entire, glabrous on both surfaces, the venation 3–5-letinserved, the veins ± depressed above except the midrib elevated for the proximal third to half while elevated beneath through the 3–4 order and forming an indistinct reticulum; petioles mostly 7–15 mm long, 2–3.5 mm diam., somewhat flattened above and there rather broadly and shallowly grooved, glabrous. **Inflorescences** mostly ramiflorus, of several to numerous, sessile fascicles (2–10-flowered) emerging from small, depressed mounds 1–2 mm diam., 1–2 mm long; floral bracts ciliate, scale-like, 0.6–15 mm long; pedicels slender, glabrous, 5–10 mm long, 0.2–0.3 mm diam.; bracteoles 2, ciliate, deltoid, 0.5–0.8 mm long. **Flowers** 5-merous; calyx ca. 3–4 mm long, clearly articulate with the pedicels, the hypanthium cylindric-obconic, ca. 1.5–2.2 mm long, 1.6–2 mm diam., glabrous, the lobes broadly based, minute, varying from barely detectable to perhaps as much as 0.2–0.4 mm long, glabrous; corolla cylindric to more typically gradually funnelform, glabrous both externally and internally, greenish-white, 5–9 mm long, flaring to ca. 5–6 mm diam. from a 2–2.5 mm diam. base, the lobes narrowly triangular to deltoid, acute, ca. 2.5 mm long; stamens 10, included, 7–8 mm long, the filaments 1–2.5 mm long, united in the basal 0.5 mm, glabrous, flattened, the anthers attached medially, lacking spurs, 6–7 mm long, the thecae very finely pebbled, ca. 1.4–2.2 mm long, basally incurved and apiculate, the tubules ca. 3–4.8 mm long, dehiscing by truncate to slightly flaring, terminal pores; styles slightly exserted, glabrous. **Berry** immature, 3–4 mm diam., glabrous.

**Distribution.** Presently known only from five collections; three made near the Fabrega Dam site at Fortuna (Chiriqui Province), one from Cerro Colorado (Bocas del Toro Province), Panama in wet forest, at 1150–1500 m, and one from Cerro Arizona near Santa Fe, Veraguas Province. Flowering: Jan.; immature fruits: Apr.

Additional collections examined: **Panama. Bocas del Toro:** region of Cerro Colorado 7 mi from Chami Camp, ca. 8°35′N, 81°45′W, ca. 1500 m. 12 Apr 1986, McPherson 8825 (MO). **Chiriqui:** Fortuna Dam region, along trail to hydrological station on Rio Hornito, below forestry house on hwy, 8°45′N, 82°15′W, 1150–1200 m, 20 Jan 1989, McPherson 13612 (DUKEI, MO); Fortuna dam site, along stream on white sandy soil, 1200 m, 7 Feb 1985, van der Werff & van Hardeveld 6609 (MO, photo NY neg. 13043). **Veraguas:** in forest below summit of Cerro Arizona, above Santa Fe, elev. 4400 ft, Hammel & Kress 8568 (DUKEI).

**Vaccinium furfuraceum** Wilbur & Luteyn, sp. nov. (Fig. 2). **Type: Costa Rica. Limón:** Cantón de Talamanca, filo de exploración minera entre Rio Sukul y Rio Carbrí, Muragushi, 9°22′50″N, 82°56′50″W, 700 m, 14 Jul 1989 (FI). **Herrera** 3286 (HOLotype: INB, ISOTYPES: DUKE, FI, NY) and 4 duplicates to be distributed.

Frutex epiphyticus; ramuli teretes pubescentes vel pilosi. Petioli 2–3(–4) mm longi, pilosi. Lamina ovata vel ovato-elliptica, (2.5–)4–6 × (1.2–)1.8–2.5 cm, basi rotundata, apice acuminata. Inflorescentiae axillares, racemosae vel corymbosae, 3–10(–12) florae. Calyx pedicellis articulatus. Hypanthium squamatum obconicum, 1.5 × 5–6 mm. Corolla extrus squamata; tubus 8–12 mm longus.