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A Revised Treatment of Boraginaceae for Panama

Author(s): James S. Miller

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other than "habitat in Jamaica," and the choice of a lectotype will require study of material in European herbaria. The name *Cordia glabra* has been improperly applied to this species; Johnston (1940) showed that this name should be considered a synonym of *Bourreria succulenta*.

*Additional specimens examined.* PANAMA. BOCAS DEL TORO: Almirante, *Cooper 406* (CFMR, F, NY, US); on lower Changuinola River, *Stork 273* (UC, US). CANAL AREA: between Farfan beach and Vera Cruz, *Duke 11733* (MO). CHIRIQUÍ: Progresso, *Cooper & Slater 300* (CFMR, F, US); without definite locality, *Cooper & Slater 307* (CFMR, F, NY, US). COLÓN: Santa Rita Ridge, 500 m, *McPherson 8456* (MO). HERRERA: carretera a Pesé, *Lao 585* (MO). LOS SANTOS: Punta Mala, *Croat 9756* (DUKE), *9763B* (MO (2)). PANAMÁ: vicinity of Pacora, 0–20 m, *Allen 3455* (BM, BR, F, G, MO); cerca del Río Chame, *Moron 28* (MO). SAN BLAS: Permé, *Cooper 235* (NY, US).

***Cordia correae*** James S. Miller, sp. nov.

TYPE: Panama. Coclé: La Mesa, 4 km north of El Valle, disturbed tropical wet forest and roadside, 875 m, 3 Jan. 1974, *M. Nee & J. D. Dwyer 9164* (holotype, MO 2414635; isotype, DUKE). Figure 2.

Arbor vel frutex ad 8 m alta, ramunculis glabris ad strigillosis. Folia persistens, petiolis 5–10(–14) mm longis, strigillosis; laminae anisophyllae, coriaceae, foliis maioribus ovatis ad anguste ovatis, 10.3–17.6 cm longis, 4.8–8.8 cm latis, apice acuminatis, basi rotundatis ad obtusis, superficie sparsim strigillosa, pagina inferiore minute strigillosa. Inflorescentiae internodales vel axillares, cymosae, ad 5.5 cm latae. Flores sessiles; calyx urceolatus, 5.6 mm longus, rufostrigillosus. Fructus drupaceus, aurantiacus, putamine inaequaliter ovoideo, 8.4–13 cm longo, 6.2–9 mm lato, ruminato.

Tree or shrub 4(–8) m tall, the twigs nearly glabrous to strigillose. Leaves persistent; petioles 5–10(–14) mm long, canaliculate adaxially, unevenly and often sparsely strigillose; blades anisophyllous, coriaceous, the larger ones ovate to narrowly ovate, 10.3–17.6 cm long, 4.8–8.8 cm wide, the smaller ones ovate, 7–8 cm long, 4–5.5 cm wide, the apex acuminate, the base rounded to obtuse or rarely acute, the margin entire, the adaxial surface with widely scattered appressed hairs, the abaxial surface minutely strigillose. Inflorescences subterminal, internodal or axillary, few per stem, cymose, to 5.5 cm broad, expanding somewhat in fruit, peduncle 1.8–5.3 cm long,

strigillose, the hairs brown. Flowers sessile; calyx urceolate, 5.6 mm long, 3 mm wide at the mouth, the 5 lobes deltate, 0.7–1.4 mm long, ribs absent, rufous-strigillose; corolla white, tubular with reflexed lobes, 8.5 mm long, 5-merous, the lobes oblong, 3.6 mm long, 1.9 mm wide, the tube 7.8 mm long; stamens 5, the filaments 10.5 mm long, the upper 6 mm free, glabrous, the anthers oblong, ca. 1 mm long; ovary ovoid, glabrous; style ca. 4 mm long, the stylar branches 2.3 mm long, the stigma lobes clavate. Fruits borne in the slightly expanded, saucer-shaped calyx, orange at maturity, drupaceous, glabrous, the stone inequilaterally ovoid, 8.4–13 mm long, 6.2–9 mm broad, ruminant, the endocarp bony.

*Distribution.* *Cordia correae* occurs in wet forests from 800 to 1,000 m in elevation and is known only from Panama in the provinces of Coclé, Panamá, and Veraguas.

*Cordia correae* is known from only a few collections from Panama in the region of El Valle and from Cerro Jefe. Its closest relative is probably *C. protracta* I. M. Johnston, a species of low elevations along the Atlantic coast of San Blas and adjacent Colombia. The two species share similar habits of growth, branching patterns, anisophyllous leaves, and distinctly five-lobed calyces. The fruits of *C. correae*, however, are orange, subglobose, and have a ruminant surface, while those of *C. protracta* are white, elongate, and ridged longitudinally. *Cordia correae*, which is endemic to Panama, is named in honor of Profesora Mireya D. Correa A., who has done much to advance the study of Panamanian plants.

*Additional specimens examined.* PANAMA. COCLÉ: La Mesa above El Valle, along road which ends in pasture, 810 m, *Croat 25310* (MO, NY); vicinity of La Mesa, N of El Valle, 1,000 m, *Gentry 6813* (AAU, MO, NY); Cerro Pilon, El Valle Site Area of WEP COR, *Kirkbride 1071* (NY); La Mesa, 4 km N of El Valle, 850–875 m, *Nee & Dwyer 9214* (MO (2), NY). PANAMÁ: along road, 18.9 km N of Cerro Azul, *Mori & Kallunki 4998* (AAU, DUKE, NY, (2)). VERAGUAS: vicinity of Cerro Tute, forested slopes along trail to summit, 850–1,000 m, *McPherson 10684* (MO).

***Cordia croatii*** James S. Miller, sp. nov.

TYPE: Panama. Veraguas: 5 mi. west of