Rahowardiana globifera (Solanaceae), a New Species from Colombia

Sandra Knapp

The Natural History Museum, Cromwell Road, London, SW7 5BD, United Kingdom

William G. D'Arcy

Missouri Botanical Garden, P.O. Box 299, St. Louis, Missouri 63166-0299, U.S.A.

ABSTRACT. Rahowardiana globifera, newly described from Antioquia, Colombia, is a second species for this striking, high-climbing solanaceous genus.

Rahowardiana is a small group of relatively rare epiphytic shrubs first described from Panama (D'Arcy, 1973: 670). It is a member of tribe Juanulloeae, whose members are all neotropical woody epiphytes. Rahowardiana is most closely related to Juanulloa, sharing with that genus narrow tubular flowers and highly branched inflorescences. Work in progress by V. Persson, S. Knapp & S. Blackmore suggests the genera share several pollen characters. Rahowardiana is distinctive, however, in its congested globose inflorescence with highly contrasting corollas and calvces.

Rahowardiana globifera Knapp & D'Arcy, sp. nov. TYPE: Colombia. Antioquia: Parque Nacional Natural "Las Orquídeas," Sector Venados, 890 m, 6°33'N, 76°19'W, 1 Apr. 1988 (fl, fr), Cogollo, Ramirez & Alvarez 2895 (holotype, JAUM-018167; isotypes, COL not seen, FMB not seen, MO). Figure 1.

Frutex scandens, foliis obovatis coriaceis magnis petiolatis. Inflorescentia congesta globosa, pedicellis brevis. Flores calycibus tubulosis, coriaceis purpurea, corollis albis, antheris linearis. Bacca anguste turbinata.

High-climbing, unarmed, scandent shrub, twigs stout, drying strongly angled; pubescence (seen only on leaf undersides) of slender, erect, weak, collapsing, simple, uniseriate hairs 3–5 cells long, the distal cells smaller. Leaves obovate, $15-30 \times 10-21$ cm, apically rounded, basally obtuse, veins obscure above, prominently elevated beneath, the lateral veins 4 on each side, looping and anastomosing 5–10 mm from the margin, the minor venation mostly perpendicular, the margins slightly revolute, subcoriaceous, concolorous, glabrous above, beneath softly and evenly pubescent; petioles drying dark, 15-25mm long, ca. 5 mm thick, drying longitudinally ridged and crossed with numerous transverse fissures. Inflorescence a condensed, crowded, globose panicle or raceme ca. 15 cm long, forming spheres ca. 35 cm diam.; peduncle not evident, pedicels stout, ca. 5 mm long, glabrous. Flowers with calyx purple, tubular, strongly angled, 7-8 cm long, ca. 15 mm wide apically, coriaceous, irregularly sinuate lobed, the tips of the lobes green; corolla white, the tips of the lobes purple dorsally, ca. 6.5 cm long (immature), the lobes 0.5-1 cm long; stamens 5, the filaments straight, glabrous, inserted at or near the base of the corolla tube, anthers linear, ca. 15 mm long, 2-3 mm wide, yellow, the connective drying dark, the thecae confluent at the apex, dehiscing longitudinally; ovary pale brown, conical, ca. 1 cm long, narrowly beaked, glabrous, surmounting a distinct, slightly lighter colored, slightly undulating annular nectary, style white, markedly different in color from the ovary, straight, 5-6 cm long, stigma strongly bifurcate, the lobes ca. 1 mm long, minutely papillate. Fruit a pale yellow, narrowly ovoid berry, ca. 9.5 cm long, basally 1 cm wide, expanding to ca. 2 cm wide about 4 mm from the base, then narrowing into a slender beak 4-5 cm long; seed fabiform, ca. 6×3.5 mm, tan colored, the surface minutely pitted.

Rahowardiana globifera resembles Rahowardiana wardiana D'Arcy, from Panama. It differs in its stouter twigs; larger, more coriaceous leaves, which are puberulent beneath; in its short pedicels; larger calyces; white instead of yellow flowers; and larger fruit. The inflorescences of this species are twice or three times as large as those of R. wardiana.

Recent collecting in northwestern Colombia has uncovered many interesting new plants, one of which is described here. The collecting area, Parque Nacional "Las Orquídeas," is on the Pacific slope of the Western Cordillera, an area of high rainfall and high relief. This species was found in premontane rainforest, climbing in the overstory within hand's reach. It is locally abundant, and the large, unusual inflorescences can be seen at a distance (Cogollo, pers. comm.).

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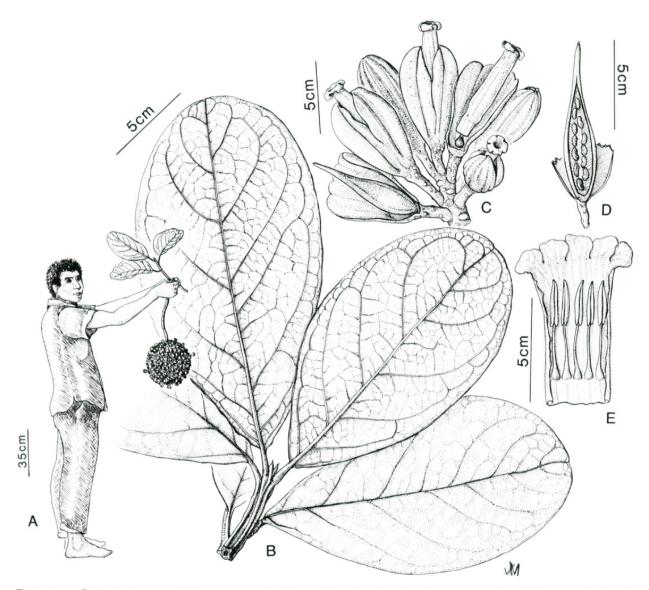


Figure 1. Rahowardiana globifera Knapp & D'Arcy (Cogollo, Ramírez & Alvarez 2895, MO). —A. Twig with leaves and pendent inflorescence. —B. Twig with leaves. —C. Portion of inflorescence showing flowers and fruit. —D. Fruit, opened to show seeds. —E. Corolla opened to show stamens.

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D'Arcy, W. G. 1973. [1974]. Solanaceae. In: R. E. Woodson et al., Flora of Panama. Ann. Missouri Bot. Gard. 60: 573–870.



D'Arcy, William G. and Knapp, Sandra. 1993. "Rahowardiana globifera (Solanaceae), a new species from Colombia." *Novon a journal of botanical nomenclature from the Missouri Botanical Garden* 3, 429–430.

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