

A NEW SPECIES OF REYNOSIA (RHAMNACEAE) FROM JAMAICA

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MATERIAL OF THE TREE described here was kindly sent by Mr. George R. Proctor of the Institute of Jamaica, who collected it atop a wooded limestone hill in Hanover Parish.¹ The first collection, made in August, 1965, included slightly immature fruit, which he described as "green, about 10-septate, exuding orange-yellow latex when cut." These data, taken at face value, do not point to the Rhamnaceae. The correct family was not suspected until flowers were taken from the same place in May, 1970. As it turns out, the "septa" noted are the lamellae of the ruminant endosperm of the solitary seed (FIGURE 1, d). *Reynosa*, the only genus of the family with ruminant endosperm, is represented on Cuba, Hispaniola, and Puerto Rico, and is distributed from the Virgin Islands to Florida and the Bahamas. Its apparent absence from Jamaica has been puzzling, so the present discovery is in a sense geographically fulfilling. The Jamaican plant is not a very exceptional member of the genus and can be distinguished from other species only in a suite of technical character-expressions, which nevertheless are sufficient justification for its recognition as a new species.

Reynosa jamaicensis, sp. nov.

Arbor 12-metralis; laminae ovatae vel ovaes 4–7 cm. longae 2.4–5.3 cm. latae; petioli 5–10 mm. longi; pedicelli sub anthesi 2 mm. longi post anthesin 4–6 mm. longi; cupula floris 1–3 mm. longa 1.5–2 mm. lata cellulis mucilaginis multis; sepala 4; petala 4; stamina 4; drupa (non plane matura) 15–20 mm. longa 12–15 mm. crassa.

Glabrous, unarmed tree 12 m. tall; branches and leaves opposite; two- or three-year-old branchlets with gray-brown, transversely scored and longitudinally wrinkled bark; innovations with smooth, red-tinged epidermis; blades ovate to less commonly oval, 4–7 cm. long, 2.4–5.3 cm. broad, firm in texture or even thinly coriaceous, paler beneath than above, entire-margined, with the midnerve prominent beneath and the 6 or 7 secondary nerves on each side strongly camptodrome and only slightly if at all prominent beneath; petioles very deeply grooved ventrally, 5–10 mm. long; stipules triangular, 1 mm. long, each pair joined into an eventually deciduous intrapetiolar unit. Flowers solitary or in axillary

¹My procrastination of several months before examining the material must now be the occasion of deep apology to George Proctor and to C. Dennis Adams. If I had examined the material promptly as requested, Dr. Adams would have been able to include the genus in his "Flowering Plants of Jamaica," a work which by this time is doubtless very near publication.

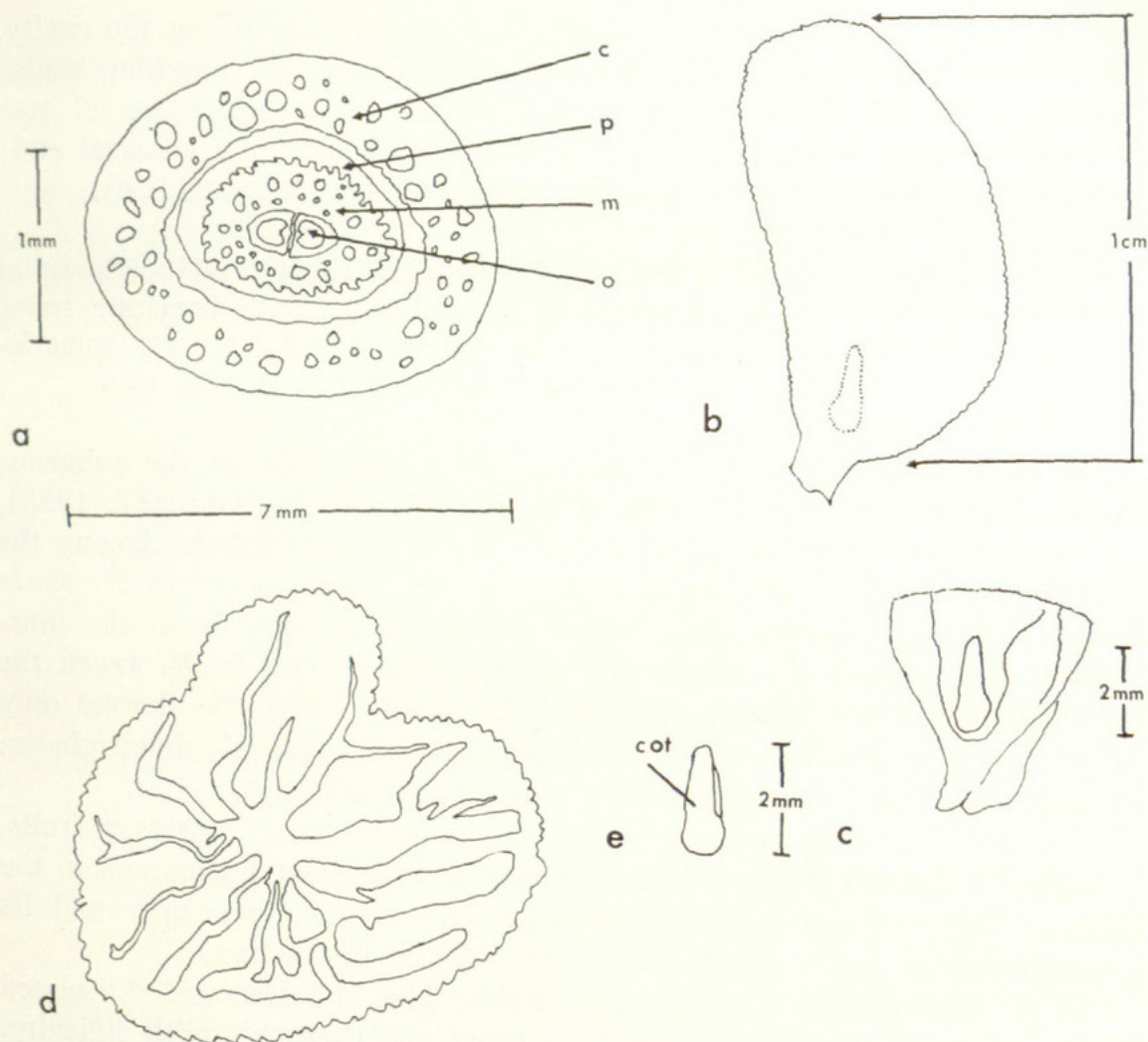


FIGURE 1. *Reynosia jamaicensis*. a, transection of the lower part of floral cup (c) with many mucilage cells and ovary showing pericarp (p), mesocarp (m), and ovule (o). b, outline of the slightly immature dried seed and persistent funiculus as seen from the side; dotted line indicating the position of the embryo within. c, longisection of the lower part of a slightly immature seed showing the embryo embedded in the corneous endosperm. d, mid-transection of slightly immature seed, showing the corneous, highly ruminant endosperm. e, embryo showing cotyledon (cot).

fascicles of 2 or 3; pedicels about 2 mm. long at anthesis, 4–6 mm. in fruit; floral cup 1–1.3 mm. long, 1.5–2 mm. broad, thick and with numerous mucilage cells (FIGURE 1, a); sepals 4, triangular, 1 mm. long, green; petals 4, obdeltoid, 0.5 mm. long, emarginate, vaguely unguiculate, cream-colored; stamens 4, about equalling the petals, the anthers brown; ovary bilocular (the partition extremely weak, FIGURE 1, a), the mesocarp with numerous mucilage cells (FIGURE 1, a); ovules solitary in each locule, erect, only one of the two maturing; raphe dorsal; style thin-conic; stigma capitate, brown; fruit (not quite mature) prolate when dried, 15–20 mm. long, 12–15 mm. thick, with a thin, mucilaginous mesocarp, a thin but tough, cartilaginous or corneous endocarp, and a single large locule; funicle columnar, corneous, about 1 mm. long and thick;

seed (FIGURE 1, b, c) solitary, when fresh completely filling the cavity, in the dry condition filling less than half of it, oblong but somewhat hump-backed when dry, 9–11 mm. long, reddish brown and rugulose all over except for one smooth patch on the dorsal side near the chalazal end; endosperm ruminant (FIGURE 1, d); embryo minute (FIGURE 1, e).

Jamaica. Hanover Parish, summit of Bubby Hill, about 1 mi. southwest of Hillsbrook, about 1,450 ft. elevation, 29 August 1965, with immature fruits, George R. Proctor 26686 (holotype, TEX; isotypes A, BM, IJ, US). Same locality, 31 May 1970, with flowers, Proctor 31306 (A, BM, IJ, TEX, US).

Because of the presence of petals, the species falls in the subgenus *NEOREYNOSIA* Suessenguth (Nat. Pflanzenfam. ed. 2. 20d: 137. 1953), the systematic merits of which remain to be substantiated. Among the described species of the genus, our plant is most similar to *Reynosia krugii* Urban of Puerto Rico, which moreover matches it in the numerous flowers and the ample size of the leaves. But in *R. krugii* the leaf blades are acuminate; stipules 2 mm. long; and the flowers only 1.5 mm. long, including both cup and calyx, are not copiously mucilaginous. Monographic work in progress may reveal other affinities.

Mucilage has not previously been reported in *Reynosia* flowers or fruits, but my dissections indicate that mucilage cells are not uncommon in the genus. However, the copious mucilage-flow in *R. jamaicensis* and its "orange-yellow" color when fresh may well be distinctive.

Mr. Proctor (in litt.) reports that Bubby Hill is a steep-sided, isolated hill which can be ascended at only one point and then only with difficulty. The foliage of *R. jamaicensis* was dark green when fresh. The density of the woodland precluded precise observations, but the crown of the tree was rather dense and irregularly shaped. Two-thirds of the associates of *R. jamaicensis* are likewise endemic Jamaican species. The other Jamaican endemics collected on Bubby Hill are: *Alvaradoa jamaicensis* Benth. (Simaroubaceae), *Bernardia* sp. nov. ined. (Euphorbiaceae), *Bursera* sp. nov. ined. (Burseraceae), *Calypttranthes acutissima* Urban (Myrtaceae), *Comocladia parvifoliola* Britton (Anacardiaceae), *Diospyros* sp. nov. ined. (Ebenaceae), *Epidendrum parvilobum* Fawcett & Rendle (Orchidaceae), *Gesneria scabra* Swartz (Gesneriaceae), *Psychotria balbiana* DC. vel aff. (Rubiaceae), *Quiina jamaicensis* Grisebach (Quiinaceae), *Rondeletia cincta* Grisebach (Rubiaceae), *Selaginella hispida* (Willd.) A. Br. ex Urban (Selaginellaceae), *Terminalia arbuscula* Swartz (Combretaceae), *Thrinax parviflora* Swartz subsp. *parviflora* (Palmae), *Tournefortia staminea* Grisebach (Boraginaceae), *Xylopia muricata* L. (Annonaceae), *Xylosma nitida* (Hell.) A. Gray ex Grisebach (Flacourtiaceae). Also gathered were specimens of the following species which are either of wider or of unknown distribution: *Ananthacorus angustifolius* (Swartz) Underwood & Maxon (Polypodiaceae), *Anthurium cordatum* (Willd.) G. Don (Araceae), *Catopsis berteroniana* (Schultes) Mez (Bromeliaceae), *Cordia* sp. indet. (Boraginaceae), *Ficus pertusa* L.f. (Moraceae), *Guapira*

fragrans (Dum.-Cour.) Little (Nyctaginaceae), *Malpighia glabra* L. (Malpighiaceae), *Polystichum trapezoides* (Swartz) Presl (Polypodiaceae) and *Tillandsia canescens* Swartz (Bromeliaceae).

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