

TWO LARGE-LEAVED SPECIES OF *POUTERIA* (SAPOTACEAE)
FROM ECUADOR.

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Al Gentry has brought to my attention two species of *Pouteria* from western Ecuador that are notable in Sapotaceae for their large leaves. One is heretofore undescribed, and the other apparently has been overlooked since its original collection and description.

***Pouteria capacifolia* Pilz, sp. nov.**

(Plate 17. Figure 1).

Arbor 25 m alta, folia obovata, 40-50 cm longa, 20-25 cm lata, basi cuneata, apice obtusa vel rotundata; costae 30-40 jugatae; petioli 3-20 mm longi; flores solitarii vel 2-4 ad axillam foliorum fasciculati; pedicelli rufo-pubescentes, 2-5 cm longi; sepala 4, ovata, 12-14 mm longa, dorso rufo-sericeo, intus glabro; corolla tubulosa, 15-20 mm longa; lobi 6, rotundati, 4.5-5 mm longi, tubo 2-3-plo longiores; filamenta brevia, paullo infra faucem affixa; staminodia lanceolata, 2-3 mm longa; ovarium 8-10 loculare, dense pilosum; bacca subglobosa; semina ca. 6, semina matura ignota.

Tree to 25 m tall; leaves chartaceous, obovate, 40-50 cm long, 20-25 cm wide, glabrous above, finely rufous pubescent beneath, the base cuneate, the apex obtuse to rounded, mucronate at times; secondary veins relatively straight, arcuate near margin, 30-40 pairs; tertiary veins fine, generally perpendicular to the secondaries except near the midvein, irregularly anastomosing and branched; petiole flattened adaxially, 3-20 mm long, rufous pubescent; flowers 1-4 in leaf axils or at recently defoliated nodes, the pedicels 2-5 cm long, densely rufous pubescent; sepals 4, ovate 12-14 mm long, 10 mm wide, rufous sericeous externally except for margin of inner sepals, adaxial surface of all sepals glabrous; corolla creamy white, cylindrical, 15-20 mm long, the tube 12-13 mm long, nearly glabrous, the 6 lobes rounded, 4.5-5 mm long, 3-4 mm wide, pale sericeous externally, papillate on inner surface; stamens 6, the filaments 1-1.5 mm long, papillate, attached at level of sinuses or 1 mm below; staminodes lanceolate, 2-3 mm long, papillate; style 11-14 mm long, pilose along proximal half, papillose above; ovary 2-3 mm high, densely pale pilose, the locules 8-10; fruit brown, subglobose, 10 cm or more in diameter, mealy roughened; seeds about 6 per fruit, mature seed unknown.

TYPE: *ECUADOR*: LOS RÍOS: Río Palenque Science Center, km 56 Quevedo-Santo Domingo, alt. 150-220 m, along trail 3, 100 m before junction with trail 4, 7 March 1975, *C. H. Dodson 5808* (HOLOTYPE: MO; ISOTYPE: US, MO, SEL, Río Palenque Science Center).

DISTRIBUTION: *ECUADOR*: Wet forests of Los Rios and Pichincha provinces in Ecuador, at altitudes of 150-680 m.

ADDITIONAL MATERIAL EXAMINED: *ECUADOR*: LOS RÍOS: Río Palenque Science Center, 6 March 1974, *C. H. Dodson 5440* (MO, US, SEL); PICHINCHA: 1 km S of Santo Domingo de los Colorados, 3 Feb. 1974, *Al Gentry 9577* (MO, duplicates QCA and to be distributed); Tinalandia, 16 km E of Santo Domingo de los Colorados, 680 m alt., wet forest and forest edge, 27 Oct. 1974, *Al Gentry, F. Ortiz & R. Narvaez 12162* (MO, duplicates QCA and to be distributed).

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Circumscriptions of genera in Sapotaceae differ widely between authors. This large-leaved *Pouteria* (sensu Cronquist, 1946) is referable to section *Rivicoa* A.DC. in Baehni's (1942) treatment of the genus. Aubreville (1961, 1972) holds a much narrower generic concept for South American Sapotaceae, and this taxon is referable to *Radlkofarella* Pierre in his treatments. Until more monographic work is completed, I prefer to maintain a broader circumscription of *Pouteria*.

"Capacifolia" draws attention to the large leaves of this species.

Pouteria gigantea (Diels) Pilz, comb. nov. (Plate 17. Figure 2).

Vitellaria gigantea Diels, Notizbl. Bot. Gart. Berlin-Dahlem 14:35. 1938.

Tree to 45 m tall; leaves coriaceous, obovate, 35-55 cm long, 17-25 cm wide, glabrous above, appressed rufous to pale pubescent beneath, the base and apex broadly rounded, the apex rarely mucronate; secondary veins prominent, arcuate near margin, 16-19 pairs; tertiary veins zig-zag, irregularly anastomosing and branched; petiole stout, canaliculate, 2.5-3.5 cm long, 0.5-1 cm wide, rufous pubescent; flowers 2-6 in leaf axils or at recently defoliated nodes, subsessile, the pedicels 1 mm long, mature flowers unknown (description of a nearly mature bud); sepals 5, imbricate, ovate, 5 mm long, 4 mm wide, finely rufous pubescent throughout; corolla 2.5-3 mm long, the tube less than 1 mm long, rufous pubescent, the 5 lobes imbricate, rounded, rather thick, glabrous; stamens 5, the filaments stout, 0.5 mm long, attached at level of sinuses; staminodes stout, 1 mm long, 1 mm wide (protologue — 1.8-2 mm long, apex bilobed); style 1 mm long; ovary 1.5 mm high, densely rufous pubescent, the locules 5 (?); fruit grey-green, badly parasitized, to 12 cm in diameter, densely rufous pubescent; seeds unknown.

TYPE: In the protologue Diels cited three collections (*Schultze-Rhnhof* 1930, 1962, and 1975) from San Carlos de los Colorados, Ecuador, collected in September and October 1935. It is believed these collections were never distributed to other herbaria and were destroyed at Berlin during World War II (John Wurdack, pers. comm. to Al Gentry). Because of the apparent loss of the Schultze-Rhnhof collections, I here designate as neotype: *ECUADOR*: LOS RÍOS: Río Palenque Science Center, km 56 Quevedo-Santo Domingo, alt. 150-220 m, tree to 30 m, leaves very large, along entrance road 100 m before entrance to trail 1. 'Guapapango'. 4 March 1975, C. H. Dodson 5801 (NEOTYPE: MO; ISONEOTYPE: US, Río Palenque Science Center, SEL).

DISTRIBUTION: Wet forest of Los Ríos and Pichincha provinces in western Ecuador.

ADDITIONAL MATERIAL EXAMINED: *ECUADOR*: LOS RÍOS: Río Palenque Science Center, 1 March 1976, C. H. Dodson 5993 (MO, SEL, Río Palenque Science Center).

The affinities of this distinctive species are uncertain. The stout staminodes and thick corolla are unusual for *Pouteria*, although the single flower I observed was immature. Thick, fleshy, subglobose corollas are characteristic of *Sarcaulus*, but in that genus the corolla lobes are strictly valvate. In the flower I observed they are clearly imbricate. Additional material, particularly fruit and mature seeds, is needed to clarify the affinities of this species.

LITERATURE CITED

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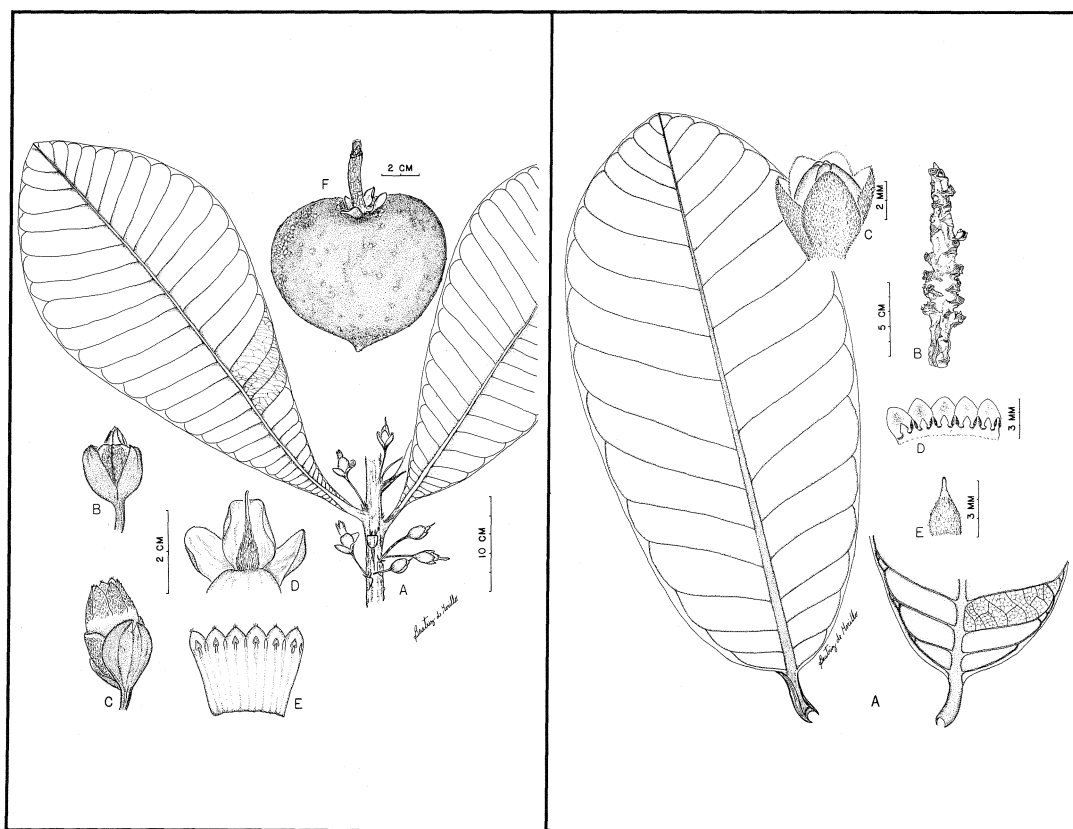


Figure 1

Figure 2

Plate 17

Plate 17. Figure 1. *Pouteria capacifolia* Pilz: A, habit; B, young flower; C, mature flower; D, flower with corolla removed; E, corolla opened to show attachment of stamens and staminodes; F, fruit. A-E after *Dodson 5808* (MO); F after *Gentry et al. 12162* (MO). Figure 2. *Pouteria gigantea* (Diels) Pilz: A, leaf, adaxial and abaxial surfaces; B, defoliated branch with a single flower; C, unopened flower; D, corolla opened to show attachment of stamens and staminodes; E, pistil. A-E after *Dodson 5801* (MO, SEL).