

### THREE NEW TAXA FOR THE FLORA OF COSTA RICA

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#### ABSTRACT

New species of *Eugenia* (Myrtaceae), *Paullinia* (Sapindaceae), and *Parathesis* (Myrsinaceae) from Costa Rica are described.

KEY WORDS: Costa Rica, Myrtaceae, *Eugenia*, *Paullinia*, Sapindaceae, *Parathesis*, Myrsinaceae, systematics

In preparation of the treatments of Myrtaceae, Myrsinaceae, and Sapindaceae for the *Manual de Las Plantas de Costa Rica*, the following new species were found.

#### MYRTACEAE

*EUGENIA TERESAE* J.F. Morales, *spec. nov.* TYPE: COSTA RICA. San José: Zona Protectora La Cangreja, Santa Rosa de Puriscal, bosque primario en las márgenes del Río Negro, falda S.E. de la Fila La Cangreja, 400 m, 9° 42' 50" N, 84° 23' 30" W, 8 May 1993 (fl,fr), *Morales 1430* (HOLOTYPE: INB; Isotypes: B,CAS,COL,CR,F,K,MEXU,MO,NY,US,VEN).

Species insignis foliis fructusaque amplissimis, a speciebus nobis notis bene distincta.

Shrub 3-4 m tall; branchlets sparsely puberulent. Leaves opposite; petioles canaliculate above, puberulent, 0.8-2.0 cm long, rugose; blade 13.5-28.5 × 5.0-17.5 cm, elliptic to lanceolate, glabrate; acuminate at apex, acute to cuneate at the base; venation impressed above, prominent, puberulent and conspicuous below, secondary veins 10-14, brochidodromus. Inflorescence cauliflorous, fasciculate, puberulent, 1-11-flowered; pedicels 3-8 mm long; bracteoles deltate, 1.0-1.5 mm long, scarious, persistent; calyx lobes 4, membranaceous, elliptic, obtuse to rounded, in 2 series,

external ones 2-4 × 5-7 mm, internal ones 5-7 × 9-11 mm; petals ovate, white, 1.5-1.6 × 1.0-1.4 cm, reflexed, deciduous after anthesis; stamens ca. 480; filaments 6-11 mm long; anthers basifixed, ca. 1 mm long; style 1.7-1.9 cm long. Fruits globose to subglobose, 1.8-2.5 × 1.9-2.4 cm, yellow to cream, granular, glabrous; pericarp ca. 2 mm thick; seed 1.6-2.1 cm diam., smooth.

Restricted to the wet tropical forests of the southern Pacific lowlands of Costa Rica, between Carara Biological Reserve and the Osa Peninsula, 100-400 m.

*Eugenia teresae* differs from all the Mesoamerican species by its large leaves and flowers. It is somewhat related to *Eugenia sarapiquensis* Sanchez, but differs from that species in its longer leaves and bigger flowers and fruits.

Additional specimens examined: COSTA RICA. Puntarenas: Cantón de Osa, Rincón, cabeceras Quebrada Salto, 100 m, 24 Jun 1990 (fr), *Herrera 4256* (CR,INB,MO); Golfito, Parque Nacional Corcovado, trail to Cedral, near El Cedral, 150 m, 20 Mar 1995 (fl), *Morales & Moraga 3666* (INB). San José: Zona Protectora La Cangreja, Santa Rosa de Puriscal, 300-400 m, 29 Jul 1992 (fr), *Morales 277* (CR,INB,MO), 10 Aug. 1992 (fr), *Morales 338* (INB,CR), 3 Mar 1994 (fl), *Morales, et al. 2408* (B,CR,INB,K,MO,NY,USJ).

## MYRSINACEAE

**PARATHESIS ACOSTENSIS** J.F. Morales, *spec. nov.* TYPE: COSTA RICA.

San José: Cantón de Acosta, Fila Bustamante, cabeceras de Quebrada Colorado, 1040 m, 9° 43' N, 84° 16' W, 29 May 1994 (fl), *Morales, et al. 2856* (HOLOTYPE: INB).

Arvor parva, ramuli ferrugineo-tomentelli. Folia petiolata, petiolo 4-6 cm longo; lamina elliptica, 14-40 × 6-15 cm. Inflorescentia terminalis, paniculata, ferrugineo-tomentella; pedicelli 5-7 mm longi; petala 4-5 mm longa.

Trees or small trees, (2-)5-22 m; branchlets thick, densely ferrugineous-tomentose. Leaves: petiole 4-6 cm, ferrugineous-tomentose; leaf blades 14-40 × 6-15 cm, broadly elliptic; abruptly short-acuminate at the apex, obtuse basally; minutely serrate; glabrate above; minutely ferrugineous-puberulent beneath, mostly along the veins; the primary lateral veins 25-33 pairs. Inflorescences terminal, openly pyramidal, tripinnately paniculate, conspicuously ferrugineous-tomentose. Flowers corymbose, pale pinkish; pedicels 5-7 mm; sepals 1.5-2.0 mm, ovate, acute, ferrugineous-tomentose; petals narrowly lanceolate, 4-5 mm long, villous within; filaments 1.5-2.0 mm long, the anthers erect at anthesis, slender, ca. 1.5 mm long, not punctate. Fruit black-purple, globose, 6-7 mm in diameter (dry).

This species is known from the southern Pacific lowlands of Costa Rica, between Acosta and the Osa Peninsula, at 0-700(-1000) m.

*Parathesis acostensis* is closely related to *P. amplifolia* Lundell from Panamá, but differs by its anthers erect at anthesis, not punctate. Most of the material were previously identified as *P. aeruginosa* Standley.

Additional specimens examined: COSTA RICA. Puntarenas: Parque Nacional Corcovado, Estación San Pedrillo, 21 Sep 1993 (fr), *Aguilar 2364* (INB,MO); Cantón de Golfito, Península de Osa, Estación Los Patos, 5 June 1994 (fr), *Aguilar 3335* (CR,INB,MO); Reserva Forestal Golfo Dulce, Río Rincón valley, 28 Apr 1988 (fl), *Hammel & Robles 16768* (INB,MO); Reserva Forestal Golfo Dulce, Playa Campanario o San Josecito, 4 Aug 1993 (fr), *Harmon 332* (INB); Parque Nacional Corcovado, Arco de Piedra to Río Corcovado, June 1989 (fl), *Kernan 1155* (CR,INB,MO); Cantón de Osa, Rancho Quemado, 25 Aug 1992 (fr), *Marín & Marín 500* (CR,INB,MO); Aguabuena, W of Rincón, 17 Apr 1993, *Thomsen 876* (C,INB,K,USJ).

#### SAPINDACEAE

***PAULLINIA TALAMANCENSIS*** J.F. Morales, *spec. nov.* TYPE: COSTA RICA. Puntarenas: Foothills of the Cordillera de Talamanca, between Sitio Cotón (Cotonsito) and Mellizas, 1300-1450 m, 8° 54' N, 82° 46' W, 11 Mar 1984 (fl,fr), *Davidse, et al. 25563* (HOLOTYPE: INB; Isotype: MO).

Fruticosa volubilis; corpus lignosum simplex; rami teres, glabris. Folia 3-foliolato-pinnata; foliola elliptica, 4.5-15.0 cm longa, 3-5 cm lata. Thyrsi axillares, solitarii, 4.5-15.0 cm longi. Fructus manifeste stipitatus, globosus.

Lianas; stems slightly sulcate when young, subterete when fully mature, glabrous to glabrate; wood simple. Leaves pinnately 3-foliolate; petiole without wings, somewhat sulcate above; leaflets 4.5-15.0 × 3-5 cm, elliptic; acute to abruptly short-acuminate at the apex, cuneate to obtuse basally; subentire to very obscurely crenate above the middle; glabrous; stipules not seen. Inflorescences axillary, solitary, 4.5-13.5(-15.0) cm long, glabrous; bracteoles ovate, ca. 1 mm long, scarious; pedicels 2-4 mm, glabrous, articulated about midway. Flowers white, in small helicoid thyrses; sepals ca. 2 mm, rounded, glabrous; mature flowers unknown. Capsules 0.8-1.1 cm long, conspicuously stipitate, globose, 3-locular, nonwinged, red, very sparsely puberulent to glabrate, short-acuminate at the apex; seeds unknown.

*Paullinia talamancensis* is restricted to the foothills of the Cordillera de Talamanca, near San Vito de Coto Brus, at 1200-1850 m, but probably will be found in Panamá.

This species is closely related to *Paullinia austin-smithii*, from northern and northwestern of Costa Rica, but differs by its not winged, conspicuously stipitate fruits.

Additional specimens examined: COSTA RICA. Puntarenas: Foothills of the Cordillera de Talamanca, around Tres Colinas, 20 Mar 1984 (fr), *Davidse, et al.*

25687 (INB,MO); Coto Brus, Finca Cafrosa, 12 Mar 1996 (fr), *Navarro 268* (CR,INB,MO).

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