

# *Amyris amazonica* (Rutaceae), a new species from Ecuador

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**Abstract.** *Amyris amazonica*, from the Amazonian forests of northeastern Ecuador, is described. This new species is characterized by a shrubby or arborescent habit, very large unifoliolate leaves, long petioles, and fasciculate, pseudoracemose inflorescences.

**Key Words:** Amazonia, *Amyris amazonica*, Ecuador, Rutaceae, South America.

**Resumen.** Se describe *Amyris amazonica*, una nueva especie de arbusto o arbolillo de la selva Amazónica del nororiente de Ecuador. Esta nueva especie se caracteriza por presentar hojas unifolioladas con largos pecíolos y muy grandes láminas e inflorescencias pseudoracemosas fasciculadas.

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*Amyris* P. Browne is an American genus of Rutaceae that comprises ca. 40 species, ranging from Texas and Florida to Bolivia and the West Indies. In South America, eight species have been recorded, four of which are unifoliolate (Gereau, 1991). While studying specimens of Rutaceae for Flora of Ecuador, we discovered a species of *Amyris* from the Amazonian forests that is characterized by unusually large unifoliolate leaf blades, very long petioles, and fasciculate pseudoracemose inflorescences. This species is here described as new to science.

***Amyris amazonica*** X. Cornejo & J. Kallunki, **sp. nov.** Type: Ecuador. Prov. Sucumbíos, Parroquia Limoncocha, Reserva Biológica Limoncocha, sendero El Caimán, 00°24'S 76°32'W, 210 m, bosque siempreverde inundado por aguas blancas (varzea), 20 Feb 2004 (fl), C. Cerón 50666 (holotype: QAP). (Fig. 1)

Haec species inter congeneros Americae Australis quoad inflorescentias pseudoracemosas et folia unifoliolata ad *Amyridem macrocarpam* Gereau, quoad folia unifoliolata magna ad *A. crebrinervem* Gereau maxime accedit, sed a hac petiolo cylindrico utroque latere longitudinaliter costato (nec alato), ab illa floris sepalis 4 (vs. 3), ab ambabus petiolo longiore atque lamina foliari majore apice acuminata (nec caudata) distinguitur.

Shrub or tree 3–8 m tall, glabrous. Leaves loosely spiral, sometimes opposite, unifoliolate; petiole 5.5–11.0 cm long, with inconspicuous thin longitudinal ribs on each side, glabrous; petiolule 4–7 mm long; blade lanceolate to elliptic-lanceolate, olive-green adaxially, green abaxially, glabrous on both surfaces, when mature 21–32 × 7.5–13.2 cm (L/W=2.0–2.5), the base widely cuneate, the apex acuminate, the margin more or less entire, the lateral nerves 27–33, prominent beneath, brochidodromous, the submarginal nerve 3–7 mm from the margin. Inflorescence pseudoracemose, axillary to leaves near apex of branch or sometimes also extra-axillary and encircling nodes (as in type), to 8 mm long, glabrous, the main axis 3–4 mm long with persistent bracts ±ovate to lanceolate and 0.5–1.5 mm long, the secondary axes 0.5–0.8 mm long, crowned by 2 opposite lanceolate floral bracts 0.5–0.7 mm long; pedicels 1 mm long. Flower with calyx of 4 sepals, these connate in lower half, 0.6–0.9 × 0.8–1.0 mm, brown-punctate and papillose (when fresh) abaxially, glabrous, the lobes ovate to usually deltoid; petals 4, oblong, ca. 3.0 × 1.7 mm, rounded at apex, subhyaline at margin, cream and erect at anthesis, pinnatinerved adaxially, the distal 2/3 brown-punctate abaxially, glabrous on both surfaces; stamens 6, the filaments free, ca. 2 mm long, inserted at base of ovary,

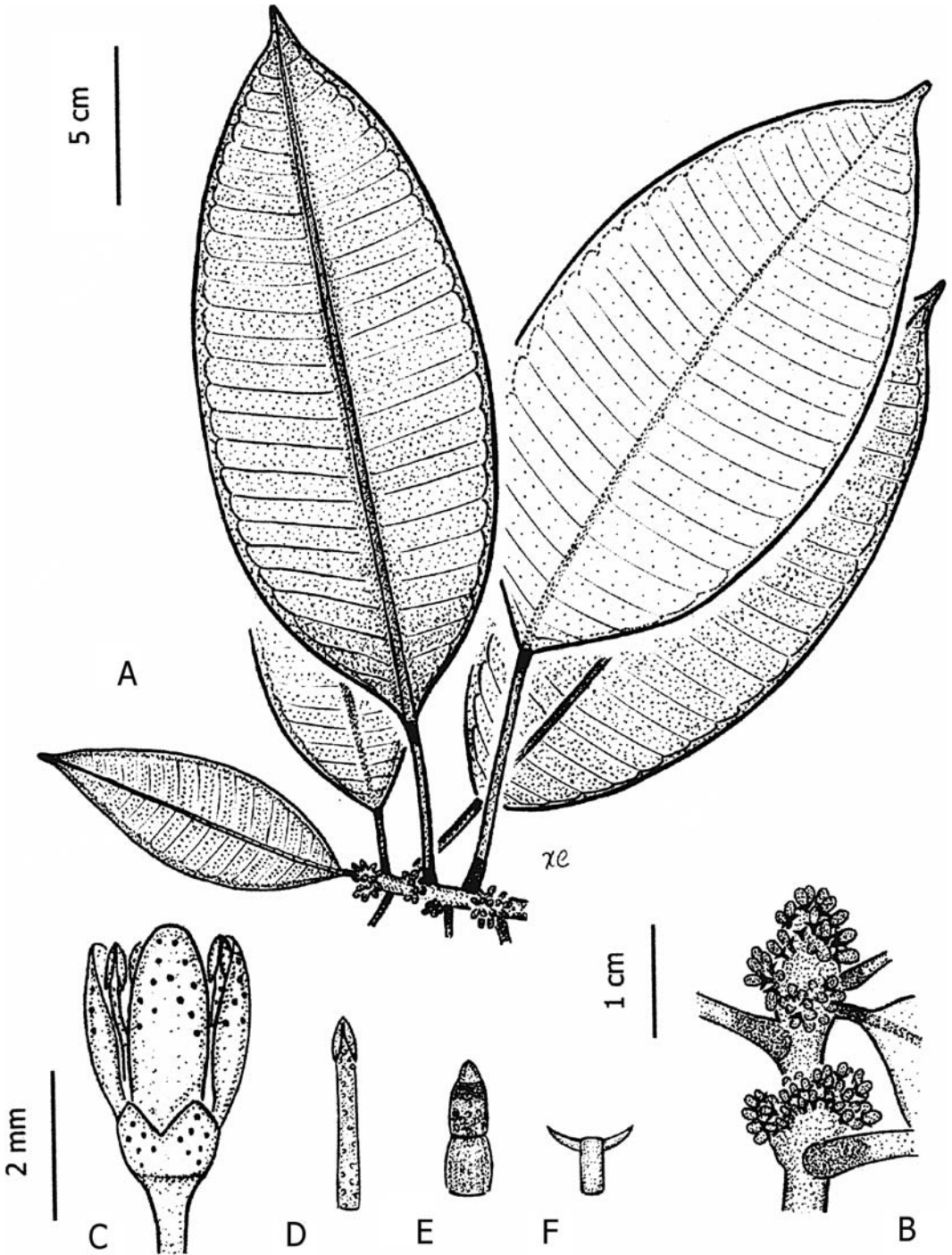


FIG. 1. *Amyris amazonica*. A. Branch. B. Inflorescences. C. Flower at anthesis. D. Stamen. E. Gynophore, ovary, and stigma. F. Secondary axis crowned by two floral bracts. (Drawn from the holotype.)

complanate, granulose, glabrous, the anthers ca.  $0.8 \times 0.5$  mm, elliptic, papillose (when fresh), positioned just above stigma; ovary somewhat ovoid, ca.  $0.8 \times 0.6$  mm, verruculose, glabrous, on a short and stout gynophore ca.  $0.6 \times 0.5$  mm; stigma conical, fleshy-papillose (when fresh). Drupes unknown.

*Local name.*—Venado caspi (Spanish/Quichua). This name suggests that deer eat the fruit of *Amyris amazonica*.

*Ecology.*—Collected in varzea, in swampy land, and on terra firme forests, on red clay soil.

*Uses.*—The bark is used to treat fungal infections of the skin (Cerón 50666).

**Additional specimens examined: ECUADOR.**

NAPO: Nuevo Rocafuerte, al SO de la población, en pica que va al Río Braga, zona pantanosa, 200–230 m, 2 Mar 1981 (imm. fl.), J. Jaramillo & F. Coello 4644 (NY, QCA-n.v.); Yasuní Scientific Research Station, Río Tiputini, NE of its confluence with Río Tivacuno, 6 km E of Maxus Road, km 44, off spur road to Tivacuno oilwell, sendero Perú, ca. 15 min. walk from road, 23 Oct 1996 (st.), M. Bass et al. 395 (F, NY).

Among the South American species of this genus, *Amyris amazonica* is easy to recognize because it has the largest unifoliolate leaves and the longest petioles. In its pseudoracemose inflorescences and unifoliolate leaves, *Amyris amazonica* resembles *A. macrocarpa* Gereau, from Amazonian Peru and Ecuador

(Gereau, 1991), but the former differs from the latter in its longer petioles (5.5–11.0 vs. 0.3–1.2 cm), its larger leaf blades ( $21\text{--}32 \times 7.5\text{--}13.2$  vs.  $8.0\text{--}16.5 \times 3\text{--}5$  cm) with acuminate (vs. caudate) apices, and its flowers with 4 (vs. 3) sepals. In its large unifoliolate leaves, *Amyris amazonica* also resembles *A. crebrinervis* Gereau, from Amazonian Peru (Gereau, 1991), but the petioles of the former are longer (5.5–11.0 vs. 1.3–3.7 cm), cylindrical (vs. adaxially complanate), and have a longitudinal rib (vs. a very narrow longitudinal wing) on each side. In addition, the leaf blades of *A. amazonica* are larger than those of *A. crebrinervis* ( $21\text{--}32 \times 7.5\text{--}13.2$  vs.  $16.8\text{--}23.0 \times 3.7\text{--}6.5$  cm) and have an acuminate (vs. caudate) apex.

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