

# *Averrhoidium dalyi* (Sapindaceae): a new species from western Amazonia

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Acevedo-Rodríguez, P. (Smithsonian Institution, Department of Systematic Biology (Botany), National Museum of Natural History, MRC-166, Washington, DC 20560-0166, U.S.A.; email: [acevedo.pedro@nmnh.si.edu](mailto:acevedo.pedro@nmnh.si.edu)) & M. S. Ferrucci (Instituto de Botánica del Nordeste, C.C. 209, 3400, Corrientes, Argentina; email: [ibone@espacio.com.ar](mailto:ibone@espacio.com.ar)). *Averrhoidium dalyi* (Sapindaceae): a new species from western Amazonia. *Brittonia* 54: 112–115. 2002.—The present paper describes and illustrates the new species *Averrhoidium dalyi* and provides a key to the species of *Averrhoidium*. The new species is known from lowland, terra firme forest in the Purus River basin, in Acre, Brazil, and from Manu National Park in Madre de Dios, Peru.

**Key words:** Sapindaceae, *Averrhoidium*, Acre, Brazil, Madre de Dios, Peru.

Acevedo-Rodríguez, P. (Smithsonian Institution, Department of Systematic Biology (Botany), National Museum of Natural History, MRC-166, Washington, DC 20560-0166, U.S.A.; email: [acevedo.pedro@nmnh.si.edu](mailto:acevedo.pedro@nmnh.si.edu)) & M. S. Ferrucci (Instituto de Botánica del Nordeste, C.C. 209, 3400, Corrientes, Argentina; email: [ibone@espacio.com.ar](mailto:ibone@espacio.com.ar)). *Averrhoidium dalyi* (Sapindaceae): a new species from western Amazonia. *Brittonia* 54: 112–115. 2002.—En el presente artículo se describe, discute e ilustra la nueva especie *Averrhoidium dalyi* coleccionada en la cuenca del Río Purus en el estado de Acre, Brasil y en el Parque Nacional del Manu en el departamento Madre de Dios, Peru. También en el presente se provee una clave para las especies de *Averrhoidium*.

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*Averrhoidium* Baill. is a small genus of Sapindaceae found in the lowlands of continental tropical America. It is currently considered part of the tribe Doratoxyleae, and is closely related to the West Indian genera *Hypelate* P. Browne, *Exothea* Macfad., and *Euchorium* Ekm. & Radlk., and to the African genus *Hippobromus* Eckl. & Zeyder. The genus has a disjunct distribution, with *A. spondioides* (Standl.) Acev.-Rodr. & Ferrucci found in Nayarit, Mexico, and the remaining species in the lowlands of South America. A similar disjunct pattern (Mexico–lowland South America) has been documented for other Sapindaceae, including members of *Serjania* Mill. sect. *Platycoccus* Radlk., *Cardiospermum* L. sect. *Carphospermum* Radlk., and *Talisia* Aubl. subgenera *Cotopais* (Radlk.) Acev.-

Rodr. and *Pitombaria* (Radlk.) Acev.-Rodr. (Acevedo-Rodríguez, 1993; Ferrucci & Acevedo-Rodríguez, 1998; Acevedo-Rodríguez, in press).

Recent botanical exploration for the ongoing Flora of Acre project and examination by the second author of Sapindaceae collections deposited at the Field Museum of Natural History have yielded the discovery of a new species of *Averrhoidium* which we describe herein. This new species brings the total number of known species in the genus to four.

***Averrhoidium dalyi*** Acev.-Rodr. & Ferrucci, sp. nov. (Fig. 1)

TYPE: BRAZIL. Acre: Município Cruzeiro do Sul, Reserva Extrativista do Alto Ju-

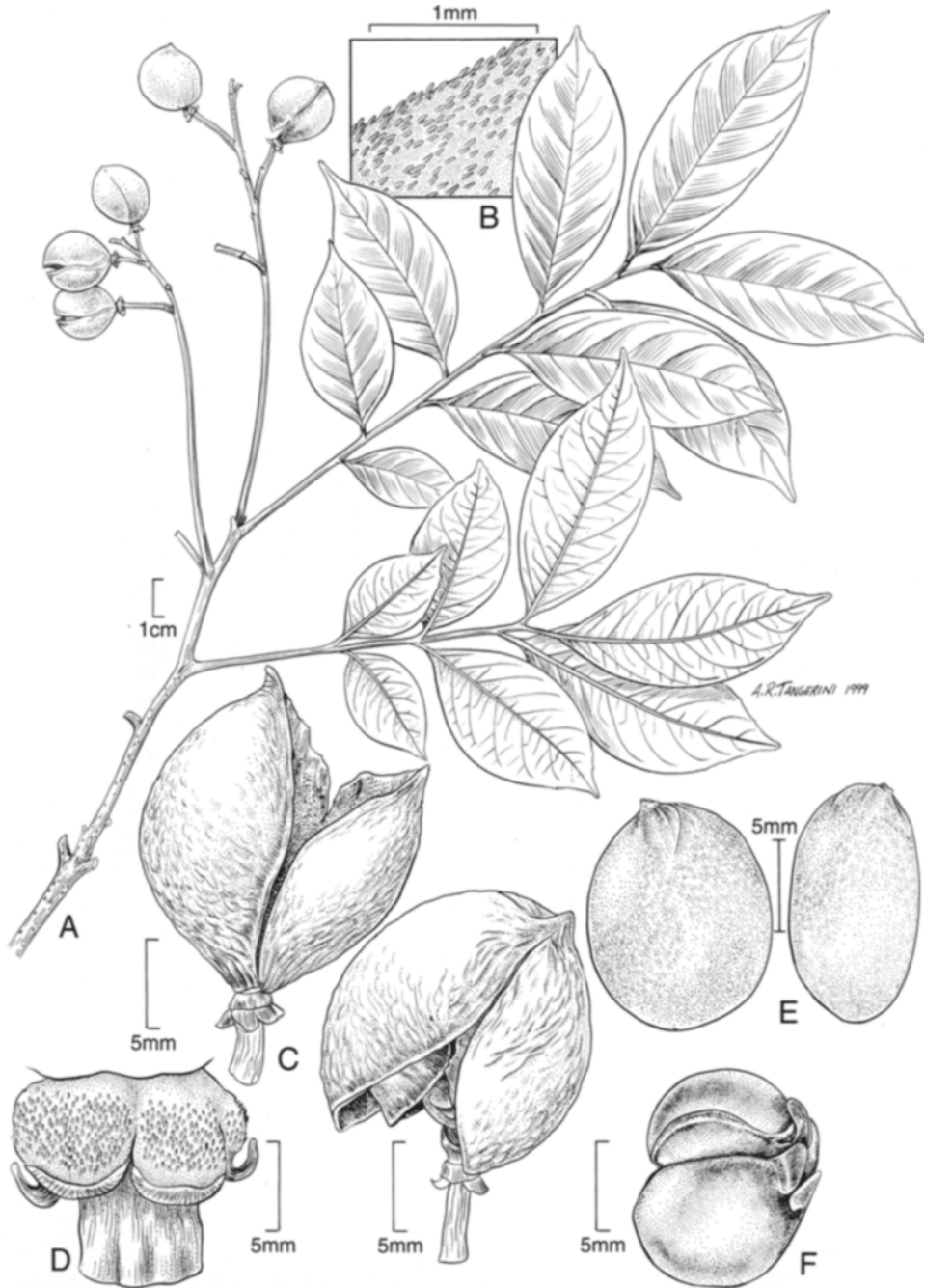


FIG. 1. *Averrhoidium dalyi* (Daly et al. 7531, US). **A.** Fruiting branch. **B.** Detail of leaf rachis showing indument. **C.** Fruits showing apical (left) and basal (right) dehiscence. **D.** Detail of disc showing indument. **E.** Seed, lateral view (left) and ventral view (right). **F.** Embryo, lateral view.

ruá, Rio Juruá, Seringal São Joao, Colocação Tapaúna, moist terra firme forest on tertiary sediments, terrain hilly, dissected by deep, narrow stream beds, 9°12'S, 72°41'W, 19 Mar 1992 (fr), *D. C. Daly, L. Ferreira, J. Ramos, L. Lima & F. Walthier 7531* (HOLOTYPE: US; ISOTYPE: NY).

Ab omnibus ceteris speciebus foliolis integris, et floribus nectariis pubescentibus differt.

Tree 15–25 m tall, trunk to 13 cm dbh, with low plank buttresses; outer bark blackish or dark grayish brown, thin, shed in papery or thick plates, inner bark tan. Stems terete, puberulent, glabrescent at maturity, minutely lenticellate, dull brown. Leaves alternate, pinnately compound; rachis 5–18 cm long, slender, slightly angular, puberulent to glabrous; distal process early deciduous leaving a truncate, sericeous base, ca. 0.5 mm long; leaflets 5–10, alternate to opposite, elliptic, 3–10.5 × 1.5–4.5 cm, chartaceous, concolorous, the adaxial surface glabrous except for the puberulent midvein, the abaxial surface sparsely puberulent, more densely so along veins, the venation brochidodromous, slightly prominent on both surfaces, especially the midvein, tertiary venation finely reticulate, the margins slightly undulate, entire or less often distally serrate, the apex long-acuminate or less often acuminate or acute-mucronate, the base obtuse or acute, sometimes slightly asymmetrical; petiolules slender, 2–5 mm long, puberulent, adaxially carinate; petioles nearly terete, slightly thickened at base, 2.5–5 cm long. Thyrses 10–16 cm long, simple, axes puberulent or glabrous, nearly terete, slightly striate; fruit pedicels 2–4.6

mm long × 1.2–1.9 mm diam., articulated at the base. Flowers unknown. Nectary disk pubescent, with appressed unicellular orange-brown trichomes, persistent at fruit base. Fruits irregularly dehiscent, opening from the apex or from the base, asymmetrically subglobose, ellipsoid or obovoid, puberulent to glabrous, red, 1.5–2.3 × 1.5–1.9 cm, smooth, the pericarp coriaceous, ca. 0.3 mm thick. Seed solitary, pendent, 1.4 × 1.1 cm, the testa thin, coriaceous-fleshy, white when fresh.

*Common name.*—Aroeira.

*Distribution and ecology.*—A subcanopy tree known from the state of Acre, Brazil, and the Department of Madre de Dios, Peru, from lowland terra firme forest.

Additional specimens examined. BRAZIL. Acre: Município Sena Madureira, basin of Rio Purus, Rio Macauã, Colocação Apuí, terra firme forest on poorly drained soils, undulating terrain hilly, dissected by numerous streams, 9°48'S, 69°11'W, 29 Mar 1994 (fr), *Daly et al. 8064* (NY); Município Mal Traumaturogo, Reserva Extrativista do Alto Juruá, foz de Igarapé Caiçora, Faz. José Rubens, várzea forest, 7 May 1993 (fr), *M. Silveira et al. 494* (NY, US).

PERU. Madre de Dios: Provincia Manu, Parque Nacional del Manu, Río Manu, Cocha Cashu Station, 11°50'S, 71°25'W, floodplain forest, 350 m, 25 Apr 1984 (fr), *Foster et al. 9820* (F), 27 Mar 1985 (fr), *McFarland 971* (F).

*Averrhoidium dalyi* differs from all other species of *Averrhoidium* by the entire or seldom distally serrate (vs. serrate) leaflets, the puberulent (vs. pilose to densely pilose) leaf rachis, and the pubescent (vs. glabrous) nectary disk.

The specific epithet honors Dr. Douglas C. Daly, collector of the type and assiduous worker in Brazilian Amazonian botany.

### Key to the species of *Averrhoidium*

1. Leaflets entire or seldom distally serrate; leaf rachis puberulent; nectary disk pubescent ..... *A. dalyi*
1. Leaflets serrate, or seldom subentire; leaf rachis pilose to densely pilose; nectary disk glabrous.
  2. Leaflets (10–)11–16, dentate-serrate, acuminate-mucronate at apex ..... *A. paraguayense*
  2. Leaflets 8–10(–12), coarsely serrate-dentate or less often subentire, obtuse or less frequently acute-mucronate at apex.
    3. Leaflets abaxially glabrous; fruit pedicels ca. 6 mm long ..... *A. spondioides*
    3. Leaflets abaxially puberulous, especially along midveins; fruit pedicels 1.5–3 mm long ..... *A. gardnerianum*

**Acknowledgments**

We thank Alice Tangerini for preparing the fine illustration, and Mark T. Strong and Laurence J. Dorr for reviewing the manuscript. Financial support for the second author was provided by a Smithsonian Institution Short-term Visitor Grant and by a Field Museum Short-Term Visitor Grant.

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