

Dilleniaceae Novae Neotropicae: VI. A New Species of *Tetracera* from Panama

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ABSTRACT. As a result of examination of the Missouri Botanical Garden Dilleniaceae collection, a new species of *Tetracera* was found. *Tetracera macphersonii*, from Panama, is described and illustrated, and its relationships are discussed. A key to the species of *Tetracera* from Mesoamerica is provided.

RESUMEN. Como resultado de la revisión de la colección de la familia Dilleniaceae depositada en el Jardín Botánico de Missouri, U.S.A., se describe una nueva especie del género *Tetracera* (*T. macphersonii*) de Panamá. Se discuten sus relaciones con las especies afines. Se presenta una ilustración y una clave de las especies del género presentes en Mesoamérica.

Tetracera L. is remarkable within the Dilleniaceae because it is the only genus that is present in both hemispheres (pantropical), and its flowers are unisexual and bisexual (androdioecious in all neotropical species; Kubitzki, 1970) in an otherwise entirely bisexual family (Dickison, 1968; Hoogland, 1951, 1952, 1953, 1972; Kubitzki, 1970).

***Tetracera macphersonii* Aymard, sp. nov.** TYPE: Panama. Province Panamá: along El Llano-Carti road, near Nussagandi, wet forest, 9°15' N, 79°00' W, 350 m, 21 July 1986, G. McPherson 9753 (holotype, PMA; isotype, MO). Figure 1.

Species nova quae a *T. asperula* Miquel foliis ellipticis vel obovato-ellipticis, 3–8 cm longis, 1.5–4 cm latis, thyrsis 2.5–3 cm longo, 2–3 floribus, pedicello 2–3 mm longo, sepalis 9 haud ciliatis, fructu ex folliculis 3 constante, 10–11 mm longo, rostrum 2–3 longum terminante, semine unico in quaque locula differt.

Liana. Branches sparsely stellate-pubescent, glabrescent. Leaves subcoriaceous, scabrous, elliptic or obovate-elliptic, 3–8 cm long, 1.5–4 cm wide, the base cuneate or obtuse, the apex rounded or acute, margins entire, often subrevolute from middle to apex of the blade, the veins raised below, with 5–8 parallel nerves on each side of mid-nerve,

convergent toward margin, lepidote-stellate above, glabrous beneath except along the midrib and secondary nerves, these sparsely appressed-pubescent, petiole 1.2–1.7 cm long, subulate, canaliculate, appressed-pubescent. Inflorescence an axillary, rarely terminal, 2–3 flowered thyrsis, 2.5–3 cm long, appressed-pubescent, with stellate and simple trichomes; pedicel 2–3 mm long, densely stellate-pubescent. Flowers bisexual; sepals 9, suborbicular, unequal, eciliate, the outer three 4–6 mm long, sparsely lepidote-stellate without, glabrous within, internal six 5–8 mm long, lepidote-stellate without, glabrous within; petals not seen; stamens 80–100, 3.5–4 mm long, the filaments glabrous, the anthers ca. 0.5 mm long. Fruit of three follicles each 10–11 mm long, coriaceous, smooth, shining and glabrous externally, opening by longitudinal slits, rostrate, the rostrum 2–3 mm long; seed 1 per locule, 2–4 mm long, black, with aril longer than seed and deeply lacerate.

Distribution and ecology. Only known from the type collection: El Llano-Carti road, near Nussagandi, restricted to mesothermic humid forests.

Because of its scabrous leaves and inflorescences in thyrses, *T. macphersonii* belongs to the section *Tetracera* (Kubitzki, 1970). It is most similar to *T. asperula* Miquel, but differs in its elliptic or obovate-elliptic leaves 3–8 cm long, 1.5–4 cm wide (vs. lanceolate or lanceolate-elliptic leaves 7–19 cm long, 3–8 cm wide); inflorescences 2.5–3 cm long, pedicel 2–3 mm long, inflorescences with 2–3 flowers and sepals 9, eciliate (vs. inflorescences 8–20 cm long, pedicel 4–20 mm long, with 3–6 flowers and sepals 5–6, ciliate), and fruits with 3 follicles, 10–11 mm long, rostrum 2–3 mm long, seed 1 per locule (vs. fruits with 4–5 follicles, 14–17 mm long, rostrum 1 mm long, seeds 2–several per locule).

KEY TO THE MESOAMERICAN SPECIES OF *TETRACERA*

1. Nervation craspedromous; sepals sericeous inside 2

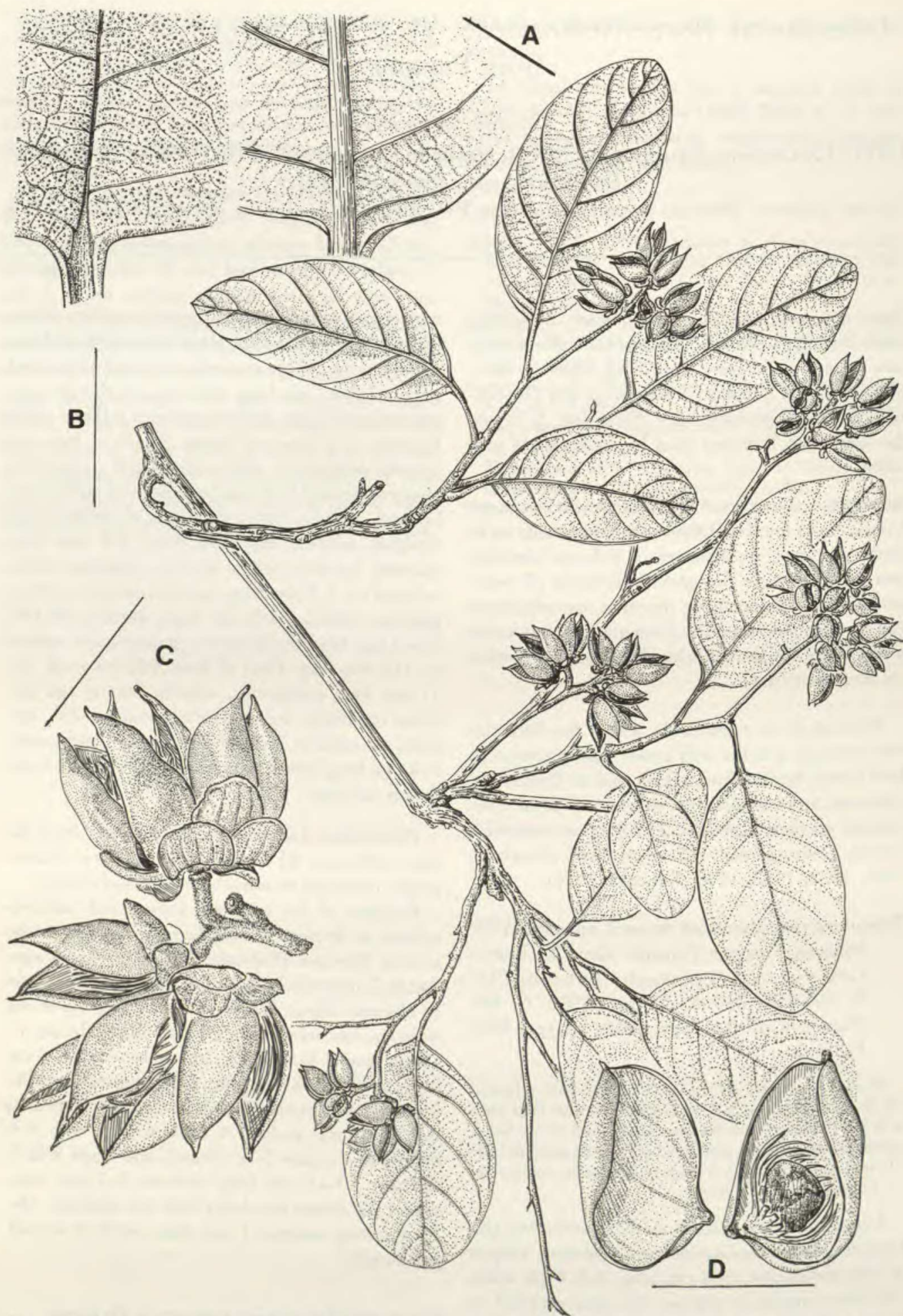


Figure 1. *Tetracera macphersonii* Aymard (G. McPherson 9753, MO, PMA). —A. Base of both faces of the leaf lamina. —B. Habit. —C. Follicles. —D. Seed with an aril deeply lacerate. Scale: A, C, D = 1 cm; B = 5 cm.

- 1. Nervation brochidodromous; sepals glabrous inside 4
- 2(1). Leaves abruptly attenuate at base; follicles 1
 *T. portobellensis* Beurling (Mexico to Panama)
- 2. Leaves rounded to narrowly cuneate at base; follicles 3–5 3
- 3(2). Leaves glabrescent beneath; flower buds globose; follicles glabrous to sparsely strigose at apex
 *T. volubilis* L. subsp. *volubilis* (Mexico to Panama)
- 3. Leaves pilose beneath; flower buds obovate; follicles densely tomentose
 *T. volubilis* subsp. *mollis* (Standley) Kubitzki (Mexico to Panama)
- 4(1). Leaves dentate *T. hydrophila* Triana & Planchon (Belize to Panama)
- 4. Leaves entire or subsinuate 5
- 5(4). Petioles appressed-pubescent (simple trichomes); inflorescences 2.5–3 cm long; pedicel 3 mm long; sepals 9; follicles glabrous
 *T. macphersonii* Aymard (Panama)
- 5. Petioles stellate-pubescent; inflorescences 10–30 cm long; pedicel 0.5–1 mm long; sepals 5; follicles sparsely pilose at apex
 *T. willdenowiana* Steudel subsp. *willdenowiana* (Guatemala, Belize, Panama)

Acknowledgments. I thank G. Davidse (MO), G. McPherson (MO), and K. Kubitzki (HBG) for comments on the manuscript, R. Gereau (MO) for the verification of the Latin diagnosis and for valuable comments on the manuscript, and J. Myers for the excellent illustration.

Literature Cited

Dickison W. C. 1968. Comparative morphological studies in Dilleniaceae. III. The carpels. *J. Arnold Arbor.* 49: 317–329.

Hoogland, R. D. 1951. Dilleniaceae. In C. G. G. J. van Steenis (editor), *Flora Malesiana*, ser. 1, vol. 4: 141–174. Djakarta.

———. 1952. A revision of the genus *Dillenia*. *Blumea* 7: 1–145.

———. 1953. The genus *Tetracera* (Dilleniaceae) in the eastern Old World. *Reinwardtia* 2: 185–225.

———. 1972. Dilleniaceae. In T. Smitinand & K. Larsen (editors), *Flora of Thailand* 2(2): 95–108.

Kubitzki, K. 1970. Die Gattung *Tetracera* (Dilleniaceae). *Mitt. Bot. Staatssamml. München* 8: 1–98. Bangkok.