

**HOMALIUM PALAWANENSE, A NEW SPECIES OF
FLACOURTIACEAE FROM PALAWAN ISLAND
(PHILIPPINES)**

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A new species of *Flacourtiaceae*, *Homalium palawanense*, from Palawan, Philippines is described and illustrated.

Keywords. New species, Palawan, Philippine flora.

INTRODUCTION

Recent botanical explorations in Palawan island in the Philippines have yielded new species, representing interesting additions to the flora (Kiew, 1993; Mendum & Madulid, 1995; Regalado & Soejarto, 1997). Another such noteworthy species, *Homalium palawanense* (*Flacourtiaceae*), is here described and illustrated. The floral characteristics that distinguish this new species from *Homalium panayanum*, its closest relative, are given in the discussion.

***Homalium palawanense* Regalado, Soejarto & Madulid, sp. nov. Fig. 1.**

H. panayanum F.-Vill. floribus 4- vel 5-meris subsessilibus et inflorescentiis paniculato-spicatis brevibus non divaricatis differt.

Type: Philippines: Palawan, Brooke's Point, Barangay Macagua, Mt Mantalingajan, ridges and slopes at Sandurapi Peak, 1150m, 4 iii 1995, *Soejarto, Fernando & Sagcal* 8790 (holo. PNH; iso. A, E, F, L, US).

Shrub to small tree; young branches glabrous, terete. *Leaves* alternate, spirally arranged, crowded at tips of branches; petioles 2–3mm long; blades coriaceous, broadly elliptic to elliptic-obovate, (2–)3.5–6cm long, (1.5–)2.5–3.5cm wide, glabrous; margins shallow-crenate, glandular-toothed; apices acute to oblique; bases attenuate. *Inflorescences* a terminal panicle of spikes, branches 2–3cm long, rachis and branches sparsely puberulous. *Flowers* perfect, solitary (not fascicled), subsessile; pedicel stout, c.1mm long, 0.5mm wide; bracts very small, 0.5mm long, subulate, persistent. *Calyx-tube* obconical, 2.0–2.5mm long, adnate to the ovary, densely lanate pubescent on both surfaces; calyx lobes 4–5, as long as the calyx tube, 2.0–2.5mm

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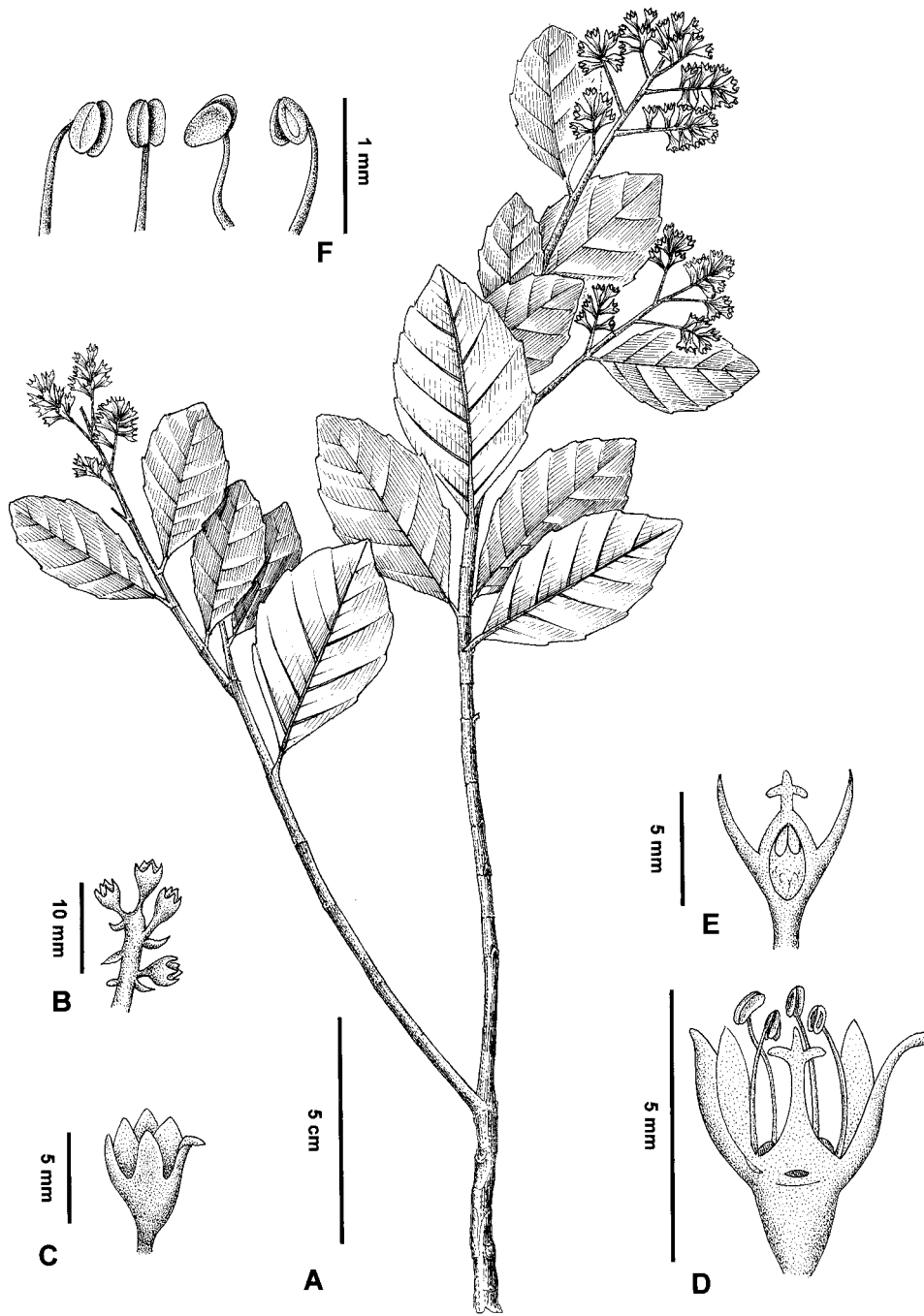


FIG. 1. *Homalium palawanense*. (A) habit, (B) segment of inflorescence, (C) flower bud, (D) opened flower with front and back petals and calyx lobes removed, (E) longitudinal section of ovary, (F) stamens. Drawn from Soejarto, Fernando & Sagcal 8790 (PNH).

long, 2.0–2.5mm wide, acute to obtuse, densely short-pubescent externally. *Corolla* polypetalous, alternating with the calyx lobes; petals 4–5, elliptic, concave, coriaceous. *Stamens* 4–5, solitary opposite each petal; filaments filiform, 1mm long, glabrous; anthers dorsifixed, tetrasporangiate, dehiscing by longitudinal slits. A glandular disk opposite each calyx lobe large, club-shaped, glabrous. *Ovaries* half-inferior, densely pubescent, unilocular with 3 placentas, each with 2 ovules near the apex; styles 3. *Fruits* not seen.

Habitat. Montane rain forests, 800–1150m.

Distribution. Philippines, Palawan Island; possibly endemic.

Field notes. Treelet, 4m tall; flowers dull pinkish purple outside, dull pale green on the inner side of the corolla, the throat pinkish purple.

Other specimens examined. Philippines, Palawan, Puerto Princesa Municipality, Mt Beaufort, west spur, 815m, 28 iii 1984, *Ridsdale* SMHI 213 (L, PNH).

DISCUSSION

The new species is presently known from two collections in Palawan, the first from Mt Beaufort in the central part and the second (type collection) from Mt Mantalingajan in the southern part of the island. The species appears to be endemic to Palawan, hence the epithet. Initial examination of the type specimens at the herbarium of the Philippine National Herbarium (PNH), Manila, and at the herbarium of the Field Museum (F), Chicago, as part of a routine determination process, alerted the authors of the possible existence of a new species. The unusual specimen yielded this set of floral characteristics: glandular disks opposite each of the 4–5 calyx lobes, 4–5 distinct petals, 8–10 free stamens opposite the petals, 3 styles, and unilocular ovary with pendulous ovules. At first the specimen was tentatively identified as *Saxifragaceae* but the combination of floral and vegetative characters of the *Saxifragaceae* do not match that of the Palawan specimen. Further taxonomic query led to the determination of the specimen as one belonging to the *Flacourtiaceae*. Using Sleumer's key (1954: 5) to the genera of Malesian *Flacourtiaceae*, the specimen was ultimately determined as a *Homalium* on the basis of having spike-like racemes or panicles, distinct sepals and petals, receptacles with disk lobes, and the stamens single and opposite each petal. In 1996, one of the authors (DDS) examined critical materials at the Kew Herbarium, and in 1998, the first author (JCR) examined all the Malesian specimens of *Homalium* at the Rijksherbarium in Leiden, the same material examined by the late Dr Sleumer when he wrote his monographic treatment of the family. No *Homalium* specimens were found that match any of the two Palawan specimens cited above.

Following the classification scheme devised by Sleumer (1954) for the Malesian species of *Homalium*, the new species belongs to subgenus *Pythagorea* and section *Pythagorea*. The section *Pythagorea*, characterized by having single stamens opposite

each petal, comprises seven species in Malesia, four of which are found in the Philippines, namely *H. barandae* Vid., *H. panayanum* F.-Vill., *H. multiflorum* Merr., and *H. loheri* Merr. The vegetative (leaf) characters of the new species manifestly show resemblance to *H. panayanum* F.-Vill., although the leaves are quite smaller. In fact, *H. panayanum* is the only other species of *Homalium* found in Palawan island. However, a closer look at the inflorescence and floral characters reveals quite remarkable differences. The new species differs from *H. panayanum* in having 4- to 5-merous flowers which are shortly pedicellate (1mm long) and densely crowded in short, non-spreading panicle of spikes. On the other hand, *H. panayanum* has 6- to 7-merous flowers with slender pedicels 2.5mm long borne on long, branching panicles. Another important distinction is the nature of the calyx lobes, which are linear and covered with spreading hairs in *H. panayanum*; whereas they are acute to obtuse with no fringing hairs in *H. palawanense*. The field notes state *H. palawanense* has greenish flowers with a shade of pinkish purple whereas *H. panayanum* has white flowers. This difference in flower colour is even discernible from specimens in the dry state.

The new species can be added to Sleumer's key (1954: 51), as follows:

6. Racemes elongate, spike-like, simple, solitary _____ *H. longifolium*
6. Panicles divaricate, or of several spike-like racemes forming a few-branched panicle
 7. Leaves entire or obscurely shallow-crenate
 8. Flowers 6- to 7-merous; pedicels 2.5mm long; calyx lobes linear, 1mm wide, covered with spreading hairs _____ *H. panayanum*
 8. Flowers 4- to 5-merous; pedicels 1.0mm long; calyx lobes acute to obtuse, 2.0–2.5mm wide, densely short-pubescent — *H. palawanense*

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