

***Milusa longiflora* (Hook.f. & Thomson) Baill. ex Finet & Gagnep.
(Annonaceae), a new record for Thailand**

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ABSTRACT. *Milusa longiflora*, newly recorded from Kanchanaburi, Thailand, is described and illustrated.

The genus *Milusa* Lesch. consists of ca. 45 species distributed mostly in Asia (Kessler et al. 2000). About 15 species have been recorded for Thailand (Mols and Kessler 2003). The latest newly described species, *M. tirunelvelica*, was described on material from India by Murugan et al. (2004). The Annonaceae is now under revision for the Flora of Thailand, coordinated by Paul Kessler.

Recently, the first author found *M. longiflora* during her field work to Bueng Namthip, Thongphaphum National Park, Tumbon Banrai, Kanchanaburi Province in 2003. The description herein is based on this Thai material.

Milusa longiflora (Hook.f. & Thomson) Baill. ex Finet & Gagnep. Bull. Soc. Bot. France 53:153. 1906; J.Sinclair. in Gard. Bull. Singapore. 14: 378.1955.— *Uvaria badajamba* Roxb., Hort. Beng. 43. 1814, *nomen nudum*.— *Guatteria badajamba* Wall., Cat. 6443. 1832, *nomen nudum*.— *Saccopetalum longiflorum* Hook.f. & Thomson, Fl. Brit. Ind. 1: 151. 1855.— Type: India, Eastern Bengal, Purneah, Wallich 6443 (holotype K; isotype BR, G, P), fr. Fig. 1.

Deciduous tree, 15–20 m high. *Outer bark* greyish-brownish, fissure bark pale-brown, inner bark brown-white. *First branch* 10–15 m above the ground. *Leaves* simple, alternate; lamina elliptic to obovate or obovate-oblong, 18–20 by 7.5–9.5 cm, apex acute to acuminate, base cuneate to obtuse, margins entire, upper surface green, glossy, nearly glabrous except for the veins, lower surface pubescent with brown hairs; secondary veins in 9–14 pairs, slightly sunken above, prominent beneath. *Petiole* 0.5–0.8 cm long. *Inflorescence* racemose, 2–5-flowered, campanulate, axillary, subaxile, terminal or cauliflorous. *Pedicels* 1 cm long, pubescent. *Young flowers* greenish, then yellow. *Torus* hairy. *Sepals* 3, valvate, deltoid, acute, almost triangulate, 0.2 by 0.2 cm, upper surface glabrous except base hairy, lower surface pubescent, edge with brown hairs. *Petals* 6, valvate, outer petals smaller than inner petals, sepal-like, oblong-ovate, 0.4 by 0.2 cm (outer), oblong-lanceolate, 2–2.1 by 0.7 cm (inner); upper surface of outer petals puberulent, lower surface of outer petals pubescent; upper surface of inner petals tomentose, lower

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surface of inner petals puberulent. *Stamens* numerous, elliptic (miliusoid), 1 mm long; subsessile filament, angles truncate. *Carpels* 11–13, 2 mm long; ovaries cylindrical, 1–1.5 by 0.8 mm, setose; stigma cylindrical, 0.5 mm long, sessile; ovules 8–10, globose. *Fruits* aggregate (monocarps), pedicel 1–1.5 cm long; 3–12, elliptic-cylindrical or sub-spheroid, 2–4.5 cm long; young fruit greenish, to pink, orange, red, when old purple-black, aril red; pericarp ca. 0.3 mm thick; monocarp stipe 1–2 cm long. *Seeds* 3–6, kidney-shape, 0.8–1 cm broad, 1.5–2 cm long. *Pollen grains* monads.

Thailand.— NORTHERN: Mae Hong Son [18 June 1973, *Geesink, Phanichpol, Santisuk* 5970 (BKF)]; Chiang Mai [Doi Ang Khang, 14 Nov. 1992, *Santisuk* 8556 (BKF)]; Lampoon [Doi Khun Tan National Park, *Maxwell* 94-284, *Maxwell* 94-573; 28 Dec. 1994, *Maxwell* 94-1311 (CMU)]; SOUTH-WESTERN: Uthai Thani [Huai Kha Khaeng, Banrai, 18 June 1976, *Van Beusekom & Santisuk* 2876 (BKF); 9 April 1996, *Wongprasert* s.n. (BKF)]; Kanchanaburi [Bueng Namthip, Thongphaphum National Park, 29 Jan. 2004, *Khumchompoo & Thongpukdee* 22 (BKF)].

Distribution.— Burma, India.

Ecology.— Mixed deciduous forest, 300–350 m above sea level. Recorded from one site growing in moist soil. Flowering January–February. Fruiting March–May.

Vernacular.— Pe-or-ka-sae (เป้ออกแซ).

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REFERENCES

- Kessler, P.J.A., Jessup, L.W., and Kruijer, J.D. 2000. Provisional Checklist of Asiatic-Australian species of Annonaceae. Queensland Herbarium, Department of Primary Industries, Brisbane.
- Mols, J. and Kessler, P.J.A. 2003. The Genus *Miliusa* (Annonaceae) in the Austro-Malesian Area. *Blumea* 48: 421–462.
- Murugan, C., Manickam, V. S., Sundaresan, V. and Jothi, G.J. 2004. *Miliusa tirunelveltica*, a new species of Annonaceae from the Kalakkad-Mundanthurai Tiger Reserve, Western Ghats, India. *NOVON*. 14(1): 102–104.

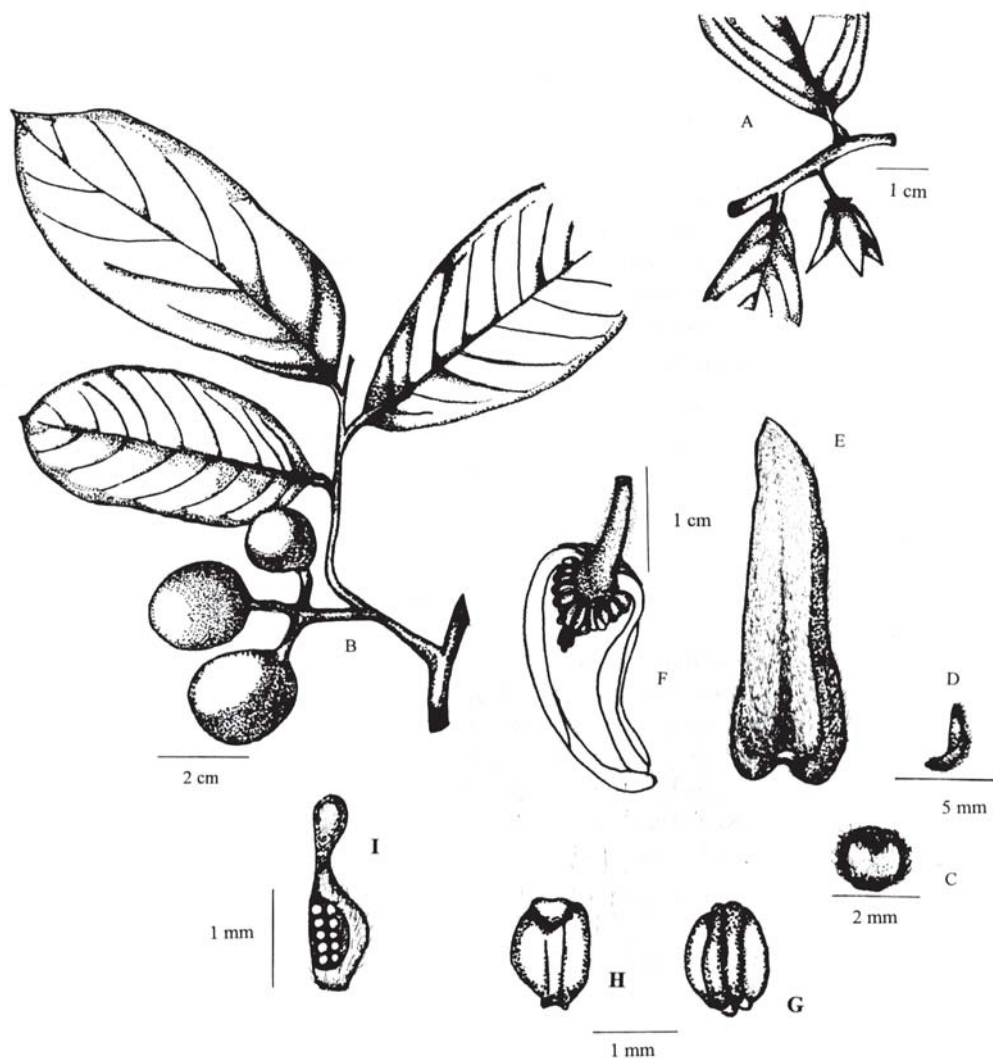


Figure 1. *Miliusa longiflora* (Hook.f. & Thomson) Baill. ex Finet & Gagnep.: A. flowering branch; B. fruiting branch; C. sepal (under surface); D. outer petal; E. inner petal (upper surface); F. reproductive parts; G. stamen (abaxial); H. stamen (adxial); I. dissected pistil with ovules. (Khumchompoo & Thongpukdee 22)