

***Meizotropis* (Leguminosae-Papilionoideae), a new genus record for Thailand**

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ABSTRACT

Meizotropis buteiformis (Leguminosae), a new genus and species record for Thailand, is described and illustrated.

KEYWORDS: *Butea*, *Meizotropis buteiformis*, Fabaceae, Faboideae.

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INTRODUCTION

Meizotropis Voigt was established by Voigt (1845) based on *M. buteiformis* Voigt, which was grown in Serampore garden, India, from seeds sent by Griffith in 1837. The genus has two species, *Meizotropis buteiformis* and *M. pellita* (Hook.f. ex Prain) Sanjappa and is closely related to *Butea* Roxb. ex Willd. (Sanjappa, 1987; Lewis *et al.*, 2005). They are similar in having orange flowers, diadelphous stamens, and a samara as pod, *Meizotropis*, however, differs from *Butea* in several characters. *Meizotropis* is an erect or scandent shrub, has small flowers (2.8–3 cm long), a standard shorter than the keels, and the free parts of the filaments arising at the same level from the staminal sheath, while *Butea* is a tree, with large flowers (6–7 cm long), a standard longer than the keels, and the free parts of the filaments arising at different levels from the staminal sheath (Sanjappa, 1987). *Meizotropis* was known from India (Baker, 1876; Sanjappa, 1987), Bhutan (Grierson & Long, 1987), and China (Dezhao *et al.*, 2010). During botanical expeditions in the forests of Sukothai, northern Thailand, *Meizotropis buteiformis* was discovered. We here present a

description of the genus and species and an illustration.

DESCRIPTION

Meizotropis Voigt, Hort. Suburb. Calcutt. 239. 1845; Prain, Bull. Misc. Inform. Kew 1908: 385. 1908; Sanjappa, Bull. Bot. Surv. India 29: 202. 1987; Blatt., J. Ind. Bot. Soc. 8(3): 135. 1929. Type species: *M. buteiformis* Voigt.

Erect or scandent shrub. *Stipules* present. *Leaves* alternate, pinnately trifoliolate, long-petiolate. *Leaflets*: terminal leaflets broadly ovate or orbicular; lateral leaflets ovate; stipels present. *Inflorescences* axillary or terminal, racemose; bracts and bracteoles present. *Flowers* papilionaceous, small, up to 3 cm long. *Calyx* campanulate, bilabiate, both sides pubescent. *Corolla* orange; standard ovate, shorter than the wings, lateral appendages present; wings oblong, pocket present; keel elliptic, pocket present. *Stamens* 10, diadelphous (9+1), free filaments at the same level from the staminal sheath; anthers uniform. *Ovary* oblong, 2-ovuled. *Pods* samaras. *Seeds* reniform.

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Two species, ranging from India, Nepal, Bhutan, Bangladesh and Myanmar to China (Xizang), one species reaching northern Thailand.

***Meizotropis buteiformis* [*buteaeformis*] Voigt, Hort. Suburb. Calcutt.: 239. 1845; Sanjappa, Bull. Bot. Surv. India 29(1–4): 202. 1987.— *Megalotropis buteiformis* (Voigt) Griff., Not. Pl. Asiat. 4: 441. 1845.— *Butea buteiformis* (Voigt) Grierson & D.G.Long, Notes Roy. Bot. Gard. Edinburgh 37(2): 346. 1979; Fl. Bhutan 1(3): 688. 1987; Mabb., Taxon 29: 605. 1980; Dezhao *et al.* in C.Y.Wu *et al.*, Fl. China 10: 223. 2010. Type: India, Hort. Serampore, *Griffith s.n.* (lectotype K! [K000900342], designated by Sanjappa, 1987).**

— *Butea minor* Buch.-Ham. ex Baker in Hook.f., Fl. Brit. India 2: 195. 1876. Type: Nepal, *Wallich, Numer. List no. 5439* (lectotype K! [K000900343] designated by Grierson & D.G.Long, 1979; isolectotypes K! [K001120918, K001120919]. Figs. 1–2.

Scandent shrub, 3.5–4 m long. *Stipules* caducous; stipels linear, 0.5–0.8 mm long, caducous. *Leaves*: petioles 7.3–21.5 cm long, angular; rachis 5–12.5 cm long; petiolules 0.8–1.5 cm long; terminal leaflet broadly ovate or orbicular, 16–27 × 12.5–30 cm, base obtuse or rounded, apex acute, attenuate or obtuse, margin entire, both surfaces pubescent; lateral veins 7–10 pairs; lateral leaflets ovate,

12.5–34.5 × 11.5–20 cm, base cuneate or obtuse, apex acute, margin entire, both surfaces pubescent; lateral veins 7–10 pairs. *Inflorescences* 12–100 cm long; peduncle 9–12 mm long; pedicels 1.5–2 cm long, pubescent; bracts lanceolate, 4–7 × 3–5 mm, caducous; bracteoles inserted on the top of the pedicel, linear, 5–6 mm long, caducous. *Flowers* 2.8–3 cm long. *Calyx* 1–1.2 cm long; tube 0.9–1 mm long; lobes triangular, 1–2 mm long. *Corolla*: standard ovate, 3–3.2 × 1.2–1.5 cm, apex acute, base obtuse, claw 1–1.3 mm long; wing petals oblong, 3.2–3.5 × 0.4–0.5 cm, apex acute, base oblique, claw 1.2–1.4 mm long; keel petals elliptic, 3.3–3.5 × 0.7–0.8 cm, apex acute, base oblique, claw 1.2–1.5 mm long. *Stamens*: filaments 2.7–3.2 cm long; anthers elliptic, 0.8–1 mm long. *Ovary* oblong, 1.2–1.5 cm long, pubescent; style 1.5–1.6 cm long. *Pods* 6.5–8.5 × 2.7–4 cm, pubescent. Seeds 2–2.3 × 1.5–1.8 cm.

Thailand.— NORTHERN: Sukhothai [Klang Dong, Thung Saliam, 7 Feb. 2015, *Maknoi 7453* (KKU!, QBG!)]].

Distribution.— India, Nepal, Bhutan, Bangladesh, Myanmar, China.

Vernacular.— Thong khruue noi (ทองเครือน้อย).

Ecology.— On dry open hillsides, flowering and fruiting in August–April (based on specimens from outside of Thailand).



Figure 1. Flowers and pods of *Meizotropis buteiformis* Voigt (*Maknoi 7453*). Photo by Charan Maknoi.

Note.— The Thai material has only flowers and young pods. Therefore, the descriptions of other characters are based on specimens from other countries; Bhutan [27 June 1979, *Grierson & Long* 2320 (K!)], India [Assam, *Parry* 304 (K!); Bengal, *Haines* 994 (K!); *Bullock* 616 (K!); *Griffith s.n.* (K!)], Bangladesh [*Griffith* 1679 (K!)] and Nepal [*s. coll.* 5439 (K!).

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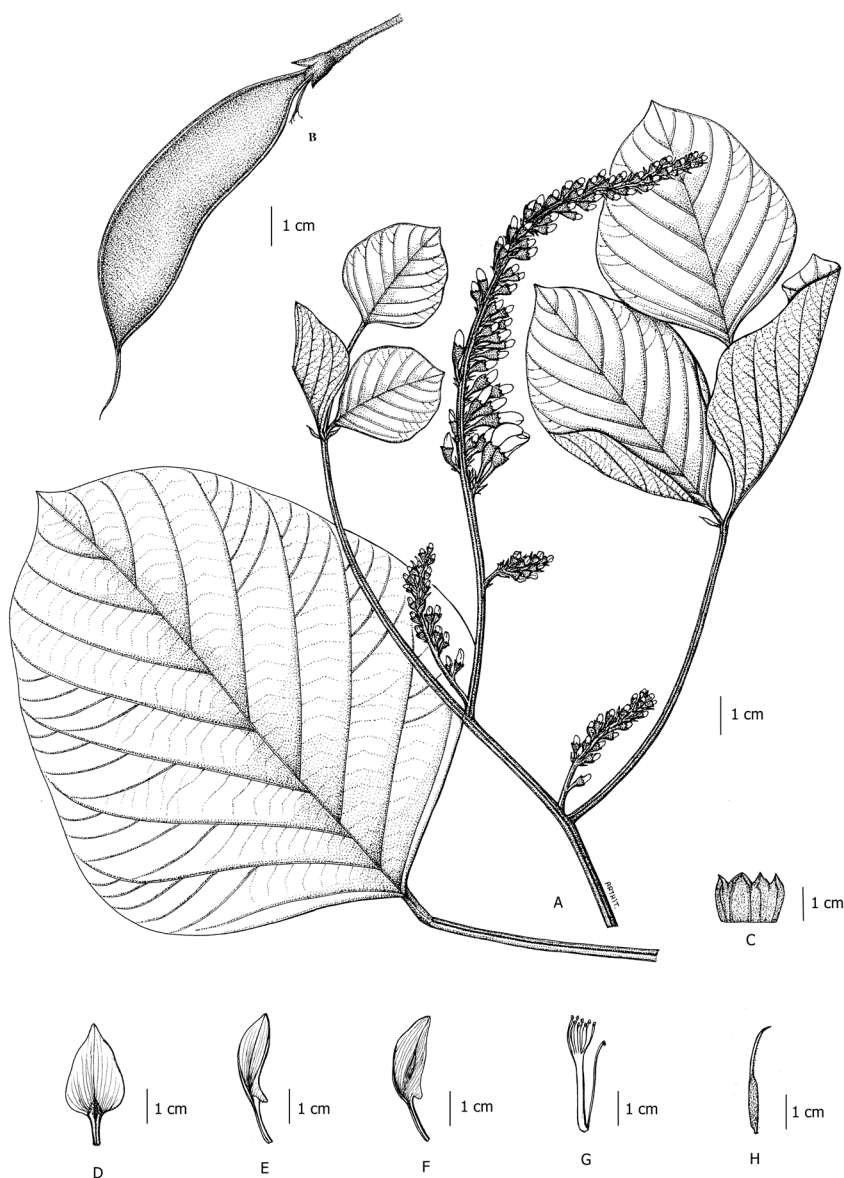


Figure 2. *Meizotropis buteiformis* Voig: A. a mature terminal leaflet and young branch with inflorescences; B. pod; C. calyx; D. standard; E. wing; F. keel; G. stamens; H. ovary (all except A. from Maknoi 7453, A. from *Griffith s.n.*). Drawn by Arthit Khamkamnoed.

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