

***Thepparatia* (Malvaceae), a new genus from Thailand**

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ABSTRACT. A new genus with a single species *Thepparatia thailandica* Phuph. is described.

INTRODUCTION

In 2004 C. Bayer and K. Kubitzki combined Tiliaceae Juss; Byttneriaceae R.Br., Bombacaceae Kunth, Sterculiaceae (DC.) Bartl. and Triplochitonaceae K. Schum. into Malvaceae, a cosmopolitan family of 243 genera and probably more than 4300 species. They divided Malvaceae into 9 subfamilies.

Subfamily Malvoideae Burnett (1835) is now composed of 110 genera and 1730 species (Bayer & Kubitzki, 2004). In Thailand there are 19 genera and about 60 species which belong to subfam. Malvoideae. They are trees, shrubs, herbs and, exceptionally, climbers.

As part of a revision of the Malvaceae for the Flora of Thailand project the study of a collection from Tak province, made by R. Pooma et al., proved very interesting. This specimen possesses the characters of the Malvaceae, subfam. Malvoideae, Tribe Gossypieae (without gossypol glands) but is a woody climber, a novel feature of the family Malvaceae and this material is clearly of an undescribed genus.

DEDICATION

The genus is, by gracious permission dedicated to Her Royal Highness Princess Maha Chakri Sirindhorn, who has made great efforts to conserve the natural environments in Thailand. Thepparat is her royal title.

***Thepparatia* Phuph. gen. nov.**

Genus monotypicus *Thespesia* Sol. ex Correa affinis est sed differt habito lignoso scandenti, foliis sine nectariis, pedicellis articulatis, epicalyce quinquelobato, tubo staminum pistillum superanti, stigmatem non lobato, ovario quinqueloculari.

Type species: *Thepparatia thailandica* Phuph.

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Woody climber. Stem glabrous. Leaves cordate, shallowly 3-lobed, crenate-serrate without foliar nectaries, stipules caducous. Inflorescences racemose, terminal, floral pedicel articulate; epicalyx segments 5–7, persistent, without nectaries; calyx 5-lobed; petal apices yellow, dark red towards the base; staminal column 5-toothed at apex with numerous, dense, shortly-stalked anthers throughout the column; ovary 5-locular, ovules 12 per locule; style undivided; stigma papillose, with short hairs at the tip, included in the column.

This monotypic genus is related to *Thespesia* Sol. ex Correa but differs in habit, being a woody climber, and the following characters: leaves without foliar nectaries, pedicels articulate, epicalyx 5-lobed, staminal tube longer than pistil, stigma not lobed, ovary 5-locular. (see also Table 1).

Thepparatia thailandica Phuph. **sp. nov.**

Planta lignosa scandens usque ad 20 m longa, foliis trilobatis 8–12 cm longis et 7–12 cm latis margine crenato-serratis, corolla campanulata 3–3.5 cm in diametro lutea ad centrum atrorubenti, stigmatate apicaliter pubescenti tubo staminum incluso.

Typus: Thailand, Northern, Tak Province, 21 March 2005, R. Pooma *et al.* 4981 (holotypus **BKF!**; isotypus **K!**). Figs. 1–3.

Woody climber, ca. 20 m long, 10–15 cm diam, stem terete, glabrous. *Leaves* spiral, crowded at the ends of branches, shallowly 3-lobed, 7–12 by 8–12 cm, base cordate, apex acuminate, margin irregularly crenate-serrate, upper surface gland dotted, also on midrib and nerves, glabrous, lower surface minutely stellate pubescent mixed with some large stellate hairs, chartaceous; petiole 5–10 cm long, minutely stellate puberulous; stipules filiform, 4–6 mm, caducous. *Inflorescences* terminal, drooping, racemose, up to 20 cm long, stellate tomentose; flowers many, pedicels 1.5–1.8 cm, articulation ca. 0.5 cm from the base of flower. *Epicalyx* reddish-green connate at base, segments 5–7, oblong to elliptic, 7–10 by 3–5 mm, stellate tomentose on both surfaces, persistent. *Calyx* green, 10–14 mm long, 5-lobed, connate to about the middle, lobes ovate, acute, 5–8 by 4–5 mm, each lobe with a nerve along the middle, stellate tomentose on both surfaces. *Corolla* yellow with a large dark red centre; petals 5, obovate, 3–3.5 by 1.5–2 cm, outside stellate-puberulous, with longitudinal lines, inside glabrous, apex reflexed, base dark red. *Staminal tube* 1.5–2 cm long, apex unequally 5-toothed, densely antheriferous throughout the tube, filaments ca. 1 mm, frequently in pairs, anthers yellow, horse-shoe shaped, numerous; base of the staminal tube and base of petals connate, deciduous. *Ovary* ovoid, densely pubescent, ca. 3 by 3 mm, 5-celled, 12 ovules per cel, style ca. 1.6 cm, included in the staminal tube, undivided, stigmas papillose, shortly hairy at the tip. Fruit not seen.

Thailand.— NORTHERN: Tak.

Distribution.— Only known from the type locality.

Ecology.— Near stream in dry evergreen forest, ca 700 m.

Vernacular.— Khrueta thepparat (เครือเทพรัตน์).

Table 1. Diagnostic characters of genus *Thespesia* and genus *Thepparatia*

Characters	<i>Thespesia</i>	<i>Thepparatia</i>
habit	shrub or tree	woody climber
leaves	entire, mostly with abaxial foliar nectaries	crenate-serrate, without foliar nectaries
pedicels	mostly inarticulate	articulate
flowers	axillary, solitary or 2–3-flowered raceme-like inflorescences	interminal raceme, more than 10 flowers
epicalyx	3–8, caducous	5–7, persistent
pistil	longer than the staminal tube	shorter than the staminal tube
stigma	clavate, 5-sulcate	small, not sulcate

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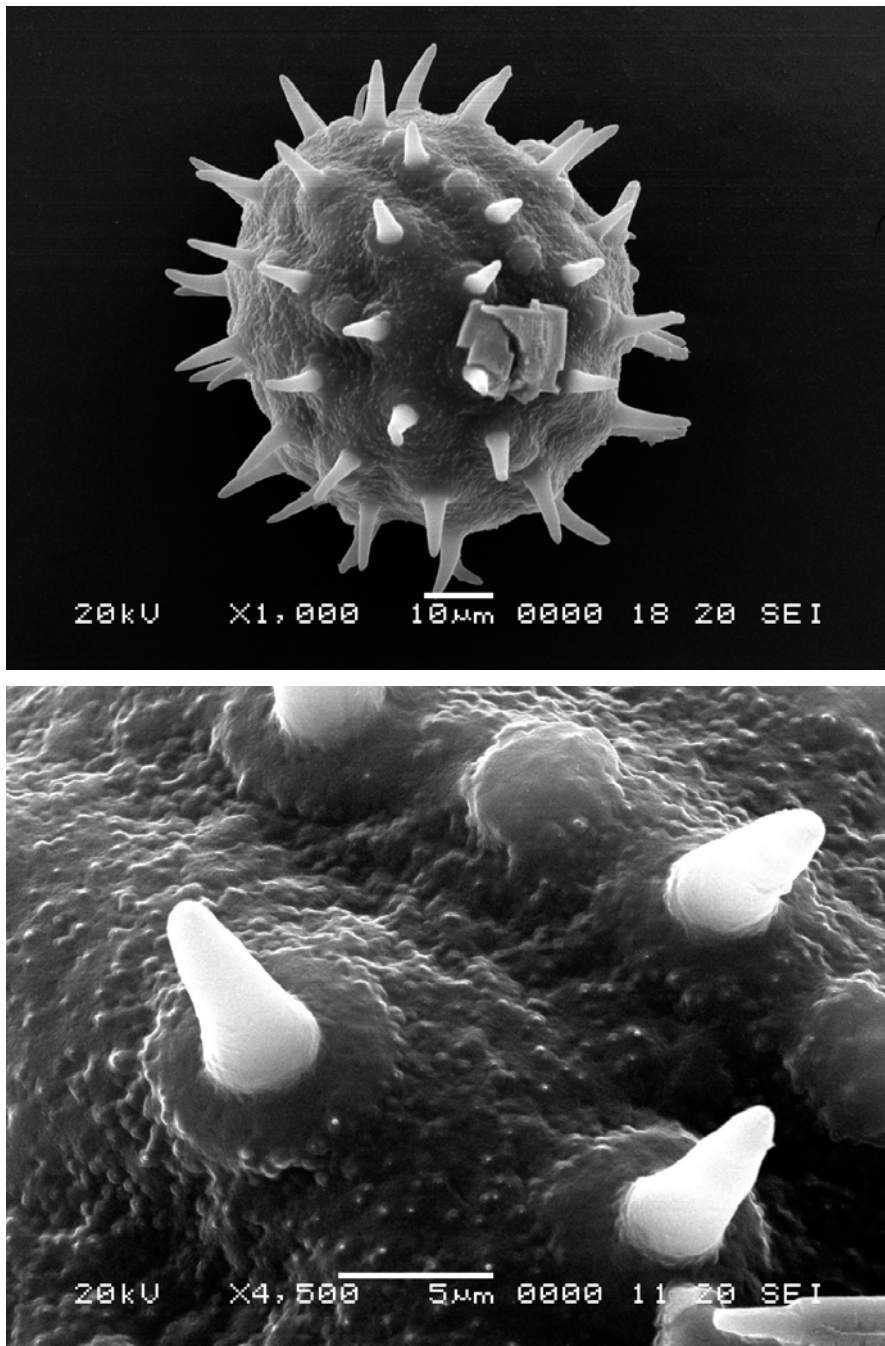


Figure 1. *Thepparatia thailandica* Phuph.: SEM micrograph of pollen grain and detail showing ornamentation.

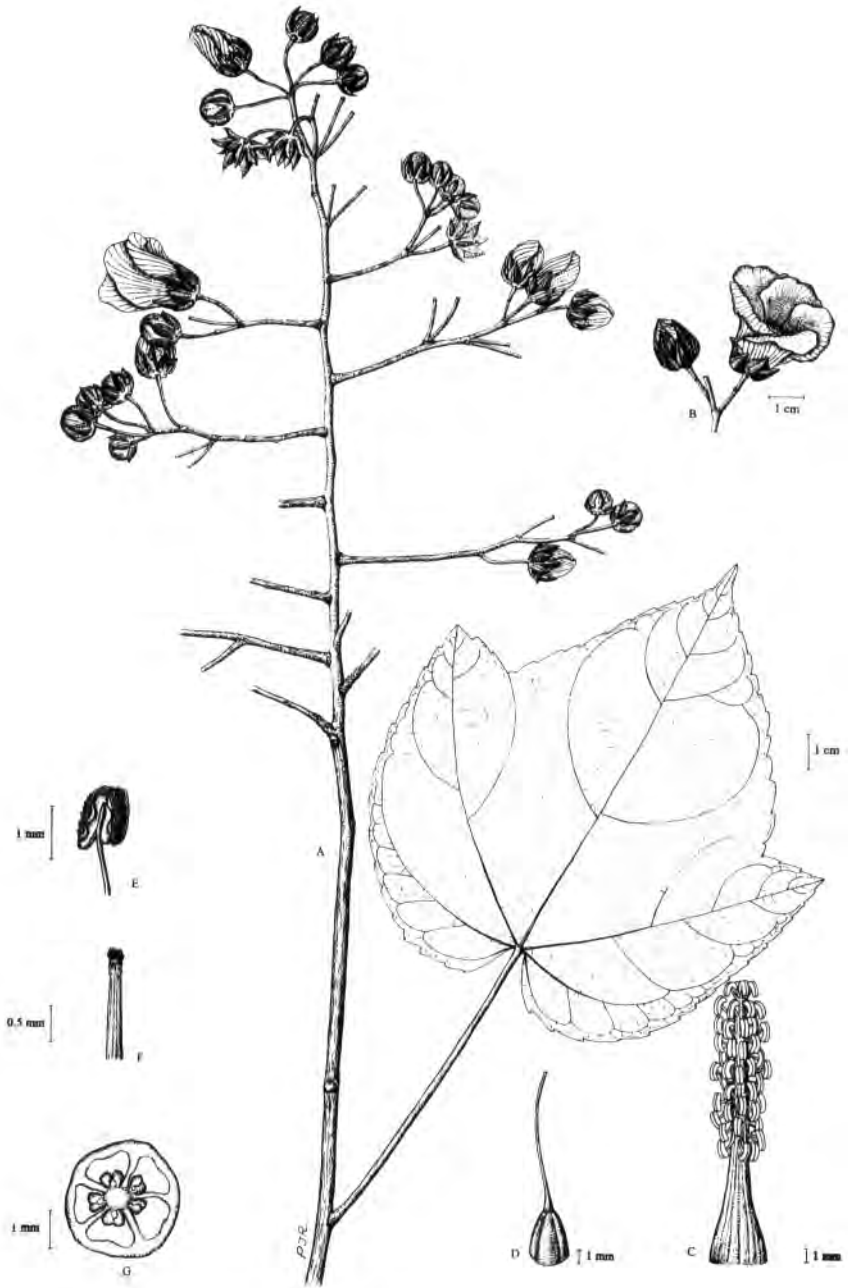


Figure 2. *Thepparatia thailandica* Phuph.: A. flowering branch; B. flowers; C. staminal column with numerous anthers; D. pistil; E. anther; F. stigma; G. cross-section of ovary.



Figure 3. *Thepparatia thailandica* Phuph.: A. flowering branch; B.-C. habit. Photographed by R. Pooma.