

Two new records of *Pavetta* (Rubiaceae) in Thailand

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ABSTRACT. *Pavetta kedahica* Bremek. and *P. salicina* (Ridl.) Bremek. are presented as new records from peninsular Thailand and are described and illustrated.

INTRODUCTION

Pavetta L. (Rubiaceae) is a genus of over 340 species distributed from Africa through Arabia, India and South-East Asia to tropical Australia (Bremekamp, 1934 & Govaerts et al., 2007). The last treatments of this genus for Thailand were those of Craib (1934), Bremekamp (1934) and Govaerts et al. (2007). They recognised 11 species and four varieties, 14 species and two varieties, and 16 species and one variety respectively. During the course of fieldwork towards the *Pavetta* treatment for Flora of Thailand, specimens representing the Malay species *P. kedahica* Bremek. and *P. salicina* (Ridl.) Bremek. were collected in Phangnga and Phuket provinces and Yala province respectively in peninsular Thailand. Descriptions, photographs and line drawings of these two species are provided.

MATERIALS & METHODS

In preparing the Flora of Thailand treatment of *Pavetta*, specimens (including types) from the following herbaria were examined: BCU, BK, BKF, CMU, KKU, PSU, QBG and SING. Taxa were delimited using comparative morphology.

NEW RECORDS

Pavetta kedahica Bremek., Repert. Spec. Nov. Regni Veg. 37: 83. 1934; Wong in Ng, Tree Fl. Mal. 4: 387. 1989. Type: Malaysia, Malay Peninsula, Kedah, Pulau Adang, April 1894, *Ridley* 15886 (holotype K!, isotype SING!).

Shrub 2–6 m high; branchlets glabrous. *Leaves* simple, opposite; petiole 0.5–3 cm long, glabrous; blade obovate, 10–13 by 4.5–6 cm, base attenuate to cuneate, apex acuminate, margin entire to slightly undulate, subcoriaceous, with 7–10 pairs of lateral nerves, domatia at lateral nerve axils; midrib prominent underneath. *Interpetiolar stipules* triangular, 4–5 mm long, aristate to cuspidate, glabrous outside, sericeous inside. *Bacterial nodules* on the

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leaf blade orbicular or irregular, 0.8–3 mm in diam., sometimes absent. *Inflorescences* axillary, corymbose, with 10–15 flowers; peduncle 2–3 cm long, glabrous; pedicels 4–10 mm long, glabrous. *Flowers* fragrant. *Calyx* green, cup-shaped, 0.7–1 mm long, glabrous; lobes dentate, 0.1–0.2 mm long, glabrous. *Corolla* white, tube 1.2–1.6 cm long, glabrous outside, densely pilose inside; lobes 4, oblong to elliptic, 5–6 by 1.8–2 mm, apex obtuse, sparsely pilose at the base, margins sparsely ciliate. *Stamens* 4, filaments 0.9–1 mm long, inserted at the mouth of the corolla tube; anthers longitudinally spirally contorted at dehiscence, dorsifixed, linear, 4–5 mm long, base sagittate, apex apiculate. *Style* white, slender, exerted, 3–3.5 cm long; stigma green, fusiform, 4–5 mm long, sparsely pubescent; ovary globose, 1–1.2 by 0.8–1 mm, glabrous. *Fruits* green, globose, 5–7 mm in diam., glabrous, with persistent calyx at apex. *Seeds* 1–2, semiglobose with one face flattened-convex. Figs. 1.

Thailand.— PENINSULAR: Phangnga [Ko Lawa Yai, 17 July 2003, *Thangthong* 311 (KKU) & 312 (KKU)]; Phuket [Sirinath National Park, Nai Yang Beach, 16 May 2004, *Leeratiwong* 05–239 (KKU)].

Distribution.— Malay Peninsula, Sumatra.

Ecology.— Strand vegetation.

Phenology.— Flowering May–July, fruiting July–August.

Notes.— *P. kedahica* is closely related to *P. sylvatica* but it differs in having a shorter corolla tube which is ciliate at the corolla lobe margin. The former is a species of littoral vegetation, while the latter is found in evergreen forest.

Pavetta salicina (Ridl.) Bremek., Repert. Spec. Nov. Regni Veg. 37: 103. 1934; Wong in Ng, Tree Fl. Malaya 4: 387. 1989.— *Webera salicina* Ridl., J. Fed. Malay States Mus. 4: 34. 1909. Type: Malay Peninsula, Pahang, Telom Waterfall, 8 Nov. 1908, *Ridley* 13610 (holotype SING, isotype K!).— *Tarenna salicina* (Ridl.) Ridl., Fl. Mal. Penins. 2: 104. 1923.

Shrub 1–2 m high; branchlets glabrous. *Leaves* simple, opposite; petiole 0.5–1.5 cm long, glabrous; blade narrowly elliptic to lanceolate, 9–14 by 0.5–1.5 cm, chartaceous, with 6–7 pairs of sparsely pubescent lateral nerves, midrib prominent below, sparsely pubescent, base attenuate to cuneate, apex acuminate to caudate. *Interpetiolar stipules* triangular, 4–5 mm long, aristate to cuspidate, glabrous outside and inside. *Bacterial nodules* on the leaf blade orbicular or irregular, 0.8–2 mm in diam. *Inflorescence* terminal, corymbose, with numerous flowers; peduncle short, 1–1.3 cm long, glabrous; pedicels 5–10 mm long, glabrous. *Calyx* green, cup-shaped, 0.8–1 mm long, glabrous; lobes dentate, 0.1–0.2 mm long, glabrous. *Corolla* white, tube 1–1.2 cm long, glabrous outside, pilose inside; lobes 4, oblong to lanceolate, 5.5–7 by 2.5–3 mm, apex acute, sparsely pilose at base. *Stamens* 4, filaments ca. 1 mm long, inserted at the mouth of the corolla tube; anthers longitudinally spirally contorted at dehiscence, dorsifixed, linear, 5–5.5 mm long, base sagittate, apex apiculate. *Style* white, slender, exerted, 2–2.5 cm long; stigma green, fusiform, 5–6 mm long, sparsely pubescent; ovary globose, ca 1 by 1 mm, glabrous. *Fruits* globose, ca 1 cm diam., glabrous, with persistent calyx at apex. *Seeds* 2. Fig. 2.

Thailand.— PENINSULAR: Yala [Khao Han Kut, 27 March 1998, *Niyomdham* 5376 (BKF)].

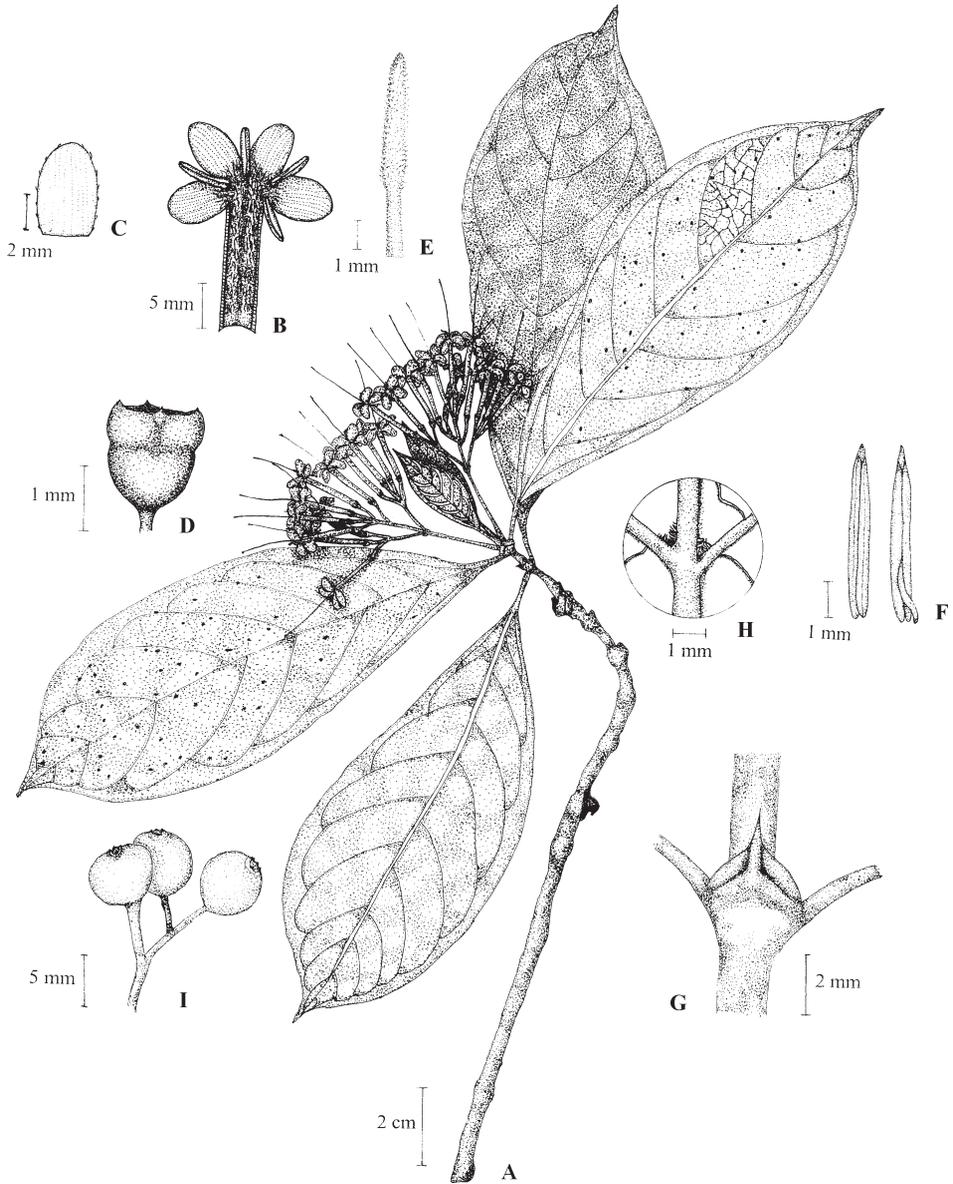


Figure 1. *Pavetta kedahica* Bremek.: A. habit; B. corolla with the tube opened longitudinally; C. corolla lobe, showing the ciliate margin; D. calyx and ovary; E. stigma; F. anther; G. stipule; H. domatia at lateral nerve axils; I. fruits. All from Thangthong 311 (KKU) & 312 (KKU). Drawn by J. Thangthong.

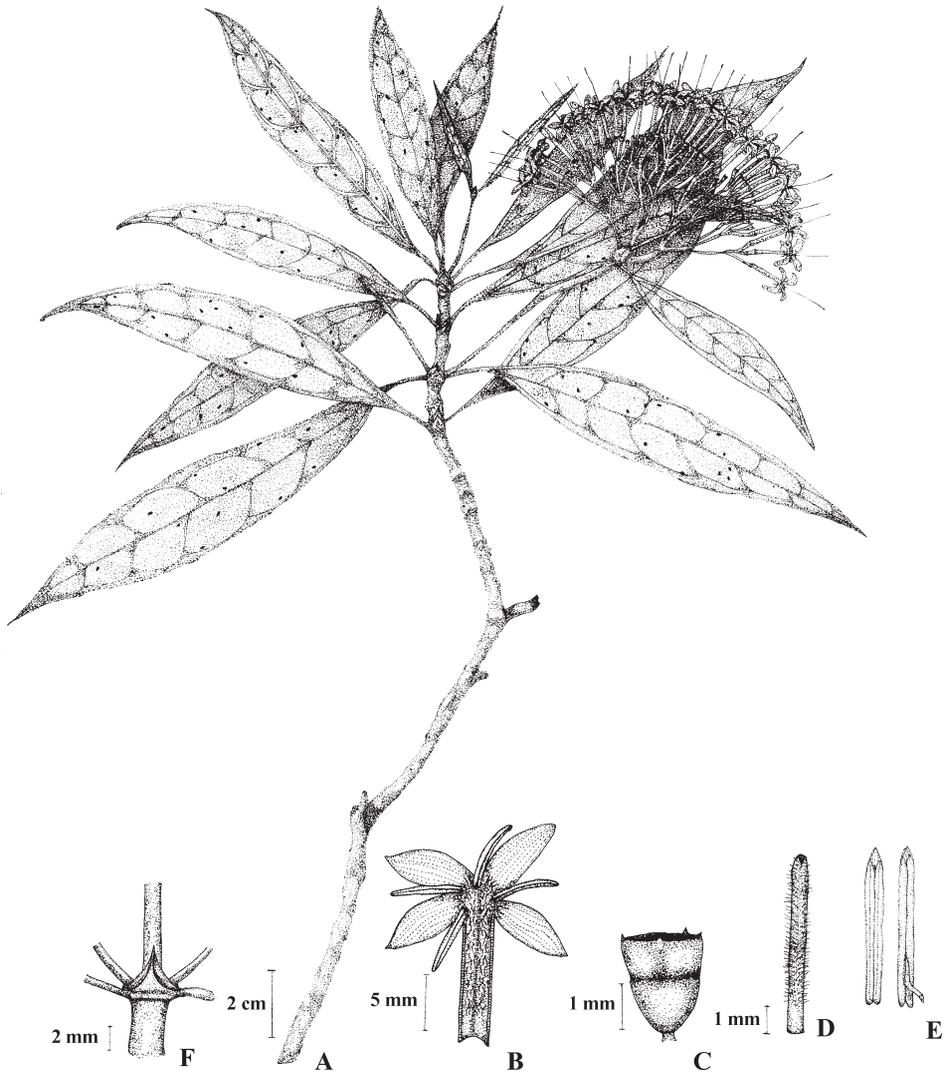


Figure 2. *Pavetta salicina* (Rild.) Bremek: A. habit; B. corolla with the tube opened longitudinally; C. calyx and ovary; D. stigma; E. anther; F. stipule. All from *Niyomdham* 5376 (BKF). Drawn by J. Thangthong.

Distribution.— Malay Peninsula.

Ecology.— Evergreen forest.

Phenology.— Flowering March–April.

Notes.— *Pavetta salicina* is similar to *P. graciliflora* but it differs in having pubescence on the lower surface of its leaf blade and corolla lobes which are more than half as long as the corolla tube.

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