

***Radermachera eberhardtii* (Bignoniaceae), a new record for Thailand**

PRACHAYA SRISANGA*, CHUSIE TRISONTHI & THAWATCHAI SANTISUK*****

ABSTRACT. *Radermachera eberhardtii* Dop, a new record for Thailand, is described and illustrated. The key to *Radermachera* in the Flora of Thailand is emended. *Radermachera microcalyx* C.Y. Wu & W.C. Yin, previously known from China (Guangxi and Yunnan), is placed in the synonymy of *R. eberhardtii*.

Radermachera Zoll. & Moritz consists of ca. 15 species. The distribution is in tropical Asia: India (Assam), Myanmar, South China, Thailand, Cambodia, Laos, Vietnam, Malaysia, Taiwan, Ryu Kyu Is., Philippines, Borneo and Indonesia (Steenis, 1976; Santisuk, 1985). In the account of Bignoniaceae for the Flora of Thailand (Santisuk, 1987), five indigenous species in the genus *Radermachera* Zoll. & Moritz are recorded. During an expedition by the first author to Doi Phu Kha National Park, Nan province, specimens belonging to this genus were collected. They were later identified as *R. eberhardtii* Dop, a new record for Thailand.

C.Y. Wu and W.C. Yin (1979) established *R. microcalyx* for a plant from southern China (Guangxi and Yunnan). They recognised this species as showing affinity with *R. glandulosa* (Blume) Miq., but differing in some quantitative characters, i.e. smaller calyx (3–5 mm long and wide). After examining some of the paratype specimens cited in the protologue (C.W. Wang 75298, 76948 & 81097, all in KUN), those collections of *R. microcalyx* matched well with *R. eberhardtii* (i.e. yellow flower, more or less straight corolla tube, tubular calyx with five irregular lobes, and leaflets with some scattered immersed minute glands on the lower surface. Hence, the authors feel that *R. microcalyx* should be treated as conspecific with *R. eberhardtii*.

The following emendment is made to the Flora of Thailand *Radermachera* key:

- 1. Leaves 1-pinnately compound
 - 1.*Calyx cupular, evenly truncate or subtruncate. Corolla tube slightly curved, white tinged pink or purplish. Capsules straight, crowded, hanging in bunch **1. *R. glandulosa***
 - 1.*Calyx tubular with 5 irregular lobes. Corolla tube more or less straight, yellow. Capsules tortuous, widely spaced **6. *R. eberhardtii***
- 1. Leaves 2- or 3-pinnately compound or biternate

Radermachera eberhardtii Dop, Bull. Mus. Hist. Nat. (Paris) 32: 233. 1926, incl. var. *acuta* Dop, l.c.: 234; in Fl. Indo-Chine 4: 587. 1930; Steenis, Blumea 23 (1): 125. 1976; Santisuk & Vidal in Fl. C.L.V. 22: 17. 1985; Santisuk, Nat. Hist. Bull. Siam Soc. 33(2):

*Herbarium, Queen Sirikit Botanic Garden, P.O. Box 7, Mae Rim, Chiang Mai 50180, Thailand.

**Biology Department, Faculty of Science, Chiang Mai University, Chiang Mai 50200, Thailand.

***The Forest Herbarium, National Park, Wildlife and Plant Conservation Department, Chatuchak, Bangkok. 10900, Thailand.

71. 1985. Type: Vietnam, *Eberhardt* 1594 (P!, 2 sheets). — *R. microcalyx* C.Y. Wu & W.C. Yin in Wu, Fl. Yunnan. 2: 711, fig. 197, 1–4. 1979; Zhang & Santisuk in Wu & Raven, Fl. China 18: 218. 1998. **synon. nov.** Type: China, Yunna, Xishuangbanna, *Yan Hui Li* 380 (not located). Figs. 1, 2 (p. 127).

Evergreen tree 7–15 m high. Branchlets terete, lenticellate, minutely glandular. *Leaves* 1 pinnate, 25–30 cm long; rachis minutely glandular; leaflets 5–7; lamina chartaceous to subcoriaceous, elliptic to ovate, (10–)14–20(–25) by (3.5–)4.5–6(–11) cm; apex acute, acuminate or caudate; base cuneate, oblique; margin entire; both surfaces glabrous, minutely glandular throughout and with sparse medium glands around base on lower surface; midrib raised and prominent below; secondary veins in 6–10 pairs; petioles 1–2 cm or up to 6 cm in terminal leaflet, minutely glandular. *Flowers* in terminal panicle, ca. 20 cm long, minutely glandular; pedicels 5–10 mm long, minutely glandular. *Calyx* green, 6–7 mm long, minutely glandular, medium glands in groups at middle; tube 4–5 mm long; lobes 5, irregular, ca. 2 mm long, apex acute. *Corolla* yellow, 3–3.5 cm long, minutely glandular; tube 2.5–3 cm long; lobes ovate to orbicular, 0.6–1 cm long, hairy especially outside, margin fimbriate. *Stamens* 4, didynamous, hairy at insertion; filaments glabrous, shorter pair ca. 4 mm long, longer pair 5–6 mm long; anthers glabrous, 1.5–2 mm long, dehiscing by longitudinal slits. *Staminode* 1, ca. 2 mm long. *Ovary* cylindrical, 2–2.5 mm long, minutely glandular; style 7–10 mm long, glabrous; stigma bilobed. *Disc* ca. 0.5 mm high, glabrous. *Capsule* terete, curved, 10–25 cm long, minutely glandular, dehiscing by 2 valves; valves 4–6 mm wide. *Seeds* flat, 8–15 by 1–2 mm included wing.

Thailand.— NORTHERN: Nan [Doi Phu Kha National Park, 19° 13' N 101° 05' E, *Srisanga* 1324 (BKF, QBG); *Srisanga* 1450 (QBG)]; Chiang Mai [Doi Suthep, *Maxwell* 88-276 (AAU)].

Distribution.— China (Guangxi and Yunnan) and Vietnam.

Ecology.— By shady stream in evergreen forest, 300–950 m altitude. Flowering March–April. Fruiting April–December.

ACKNOWLEDGEMENTS

Much appreciation is due to the curators and staff of AAU, BKF, CMU, KUN, P and QBG for their kind permission to study specimens and staff of Doi Phu Kha National Park for assistance in the field. We are grateful to Ms Soraya Klankoom for the line drawing and Mr Pasakorn Kaewket for technical assistance. This work was supported by a grant from the Thailand Research Fund.

REFERENCES

- Santisuk, T. 1985. Bignoniaceae of mainland South-east Asia. Nat. Hist. Bull. Siam Soc. 33(2): 61–101.
- _____. 1987. Bignoniaceae. In: Smitinand, T. & Larsen, K. (eds), Flora of Thailand 5(1): 32–66.
- Steenis, C.G.G.J. van. 1976. Conspectus of the genera *Radermachera* and *Fernandoa* in Indo-Malesia (Bignoniaceae). Blumea 23: 121–138.
- Wu, C. Y. and W. C. Yin. 1979. Bignoniaceae. In: Wu, C. Y. (ed.), Flora Yunnanica 2: 711.
- Zhang, Z. and T. Santisuk. 1998. Bignoniaceae. In: Wu, C. Y. and Raven, P.H. (eds), Flora of China 18: 218.

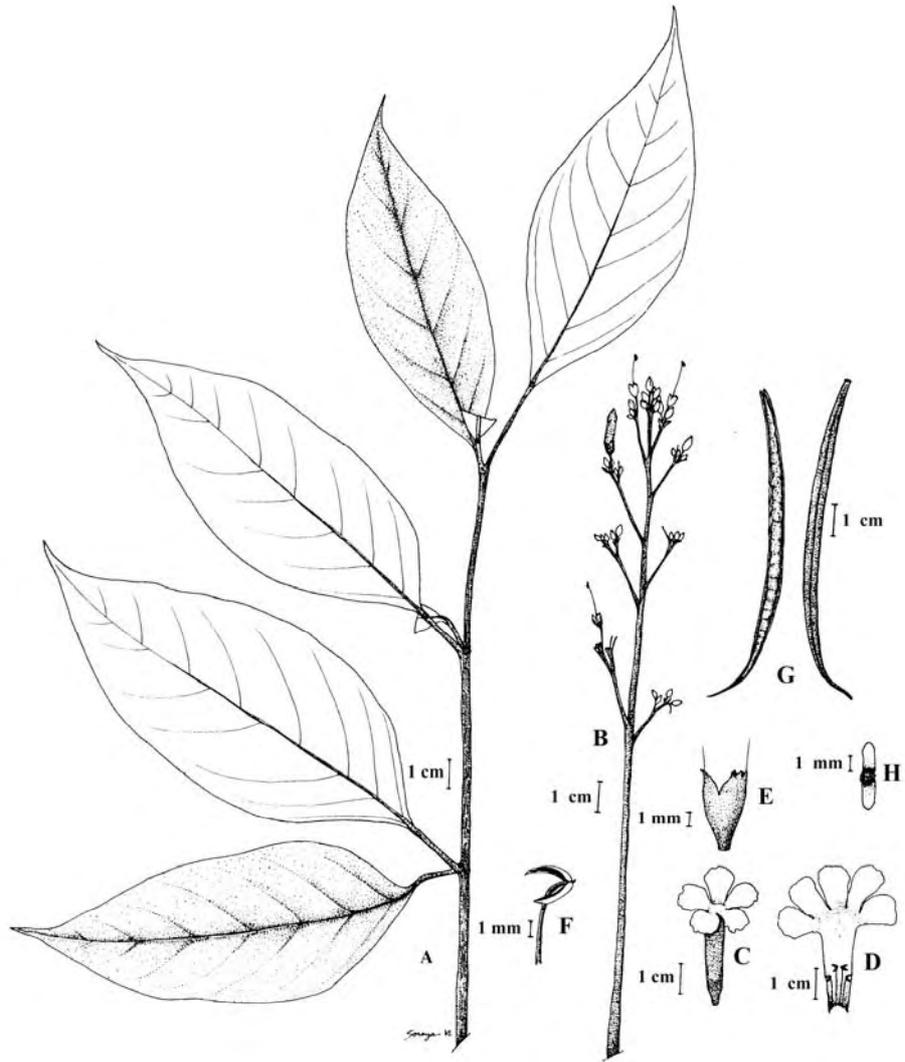


Figure 1. *Radermachera eberhardtii* Dop: A. leaves; B. inflorescence; C. corolla; D. opening corolla; E. calyx; F. stamen; G. fruit; H. seed. A–F from *Srisanga* 1324 (BKF, QBG); G–H from *Srisanga* 1450 (QBG). Drawn by Soraya Klankoom.