Notes on the genus Callicarpa (Lamiaceae) in Thailand

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ABSTRACT. During a revision of Callicarpa for the Flora of Thailand, one new record was found for Thailand, Callicarpa furfuracea Ridl.. Two taxa are reduced to synonymy: C. villosissima Ridl. and C. poilanei Dop are placed under C. arborea Roxb. and C. angustifolia King & Gamble respectively. Five names are typified: Callicarpa angustifolia, C. furfuracea, C. maingayi King & Gamble, C. poilanei and C. villosissima.

INTRODUCTION

The genus Callicarpa was described by Linnaeus (1753) with one species, C. americana L. It comprises ca 140 species worldwide and is distributed mainly in temperate, subtropical and tropical Asia, America, Australia and some Pacific islands (Harley et al., 2004). According to Cantino et al. (1992), the genus Geunsia Blume should be included as a synonym of the genus Callicarpa. Fletcher (1938) carried out a preliminary revision of the genus in Thailand, enumerating 12 species and 14 taxa. Later, Moldenke (1980), The Forest Herbarium, Royal Forest Department, Thailand (2001) and Govaerts et al. (2007) published their checklists of Callicarpa in which 18, 11 and 14 taxa, respectively were listed for Thailand.

In the process of revising the genus for the Flora of Thailand, a new record was found, namely C. furfuracea, two synonyms are presented and C. angustifolia, C. furfuracea, C. maingayi, C. poilanei and C. villosissima are lectotypified.

NEW RECORD

Callicarpa furfuracea Ridl., J. Fed. Malay. States Mus. 10(2): 150. 1920; Ridl., Fl. Mal. Penins. 2: 615. 1923. Type: Malaysia, Pahang, Gunong Senyum, June 1917, Evans s.n. (lectotype K!, selected here; isolectotypes K!, SING!). Figs. 1A-C.

Scandent or woody climber, rarely a shrub, 1.5–5 m high; young branches brown, obtusely 4-angled, sometimes nodes with an interpetiolar woody ridge, and with very dense dark brown or brown overlapping stellate or dendroid hairs; old branches grey, slightly angled with many lenticels, glabrescent. Leaves simple, opposite-decussate, ovate, obovate,
obcordate, or broadly elliptic, rarely lanceolate to narrowly oblong, coriaceous, (5–)10–32 by (1.5–)7–24 cm, apex usually obtuse or acute, rarely retuse or acuminate, base rounded or slightly cordate, margin dentate to obscurely dentate; upper surface with sparse brownish stellate hairs when young, later glabrous, shiny, midrib slightly sunken or flattened; lower surface with dense greyish-brown or grey overlapping stellate hairs, midrib prominent; petiole (1.7–)2–7 cm long, furrowed on upper surface. Inflorescence an indeterminate thyrs with opposite dichasial cymes 2–4 cm long; peduncle 0.3–1.8 cm long; pedicels 1–3 mm long; bracts elliptic or lanceolate, 0.8–7 mm long; bracteoles deciduous, elliptic to linear elliptic, 0.5–2 mm long. Calyx cup-shaped, 1.2–2.5 mm long with dense grey or brownish-grey overlapping stellate hairs and with sessile glands within; calyx tube 1–2.5 mm long, apex truncate or with 4 minute teeth, ca 0.1 by 0.1–0.2 mm. Corolla creamy white to white, 4–merous, 4–6 mm long; tube 2–4 mm long, swollen, glabrous at base, with dense stellate hairs distally, glabrous within; corolla lobes thickened, concave, reflexed, ovate or rounded, 1–1.5 by 0.7–1.5 mm, apex rounded or obtuse, outside with densely stellate hairs, ciliate at margin or apex, sparsely glandular pubescent or glandular within. Stamens 4, filaments white, flattened, 2.5–4 mm long; anthers yellow, broadly elliptic, 2–2.8 mm long, opening by longitudinal slits. Ovary ovoid to subglobose, 0.5–1 mm long, with dense grey stellate hairs and yellow glands; style 4–7 mm long, thickening towards emarginated apex. Fruits drupaceous, ovoid to obvoid, 3–6 when young, ripening black, shiny with enlarged persistent calyx.


NOTES — Southern Thailand and Peninsular Malaysia.

Ecology.— In both shaded and open evergreen and limestone forests; 50–350 m; flowering: December to May; fruiting: June to October.

Vernacular.— To (ต้อย) (Krabi); Plao Khon (ปล้อขอน), Hu Khwai Khao (หุข hashtable) (Nakhon Si Thammarat).

Notes.— Most specimens of Callicarpa furfuracea in Thailand were previously identified as C. maingayi King & Gamble. C. furfuracea differs from C. maingayi in being a scandent shrub or woody climber rather than a tree, possessing a longer corolla (e’ 4 mm long rather than < 4 mm long) and a pubescent rather than glabrous ovary. Ridley (1920) described Callicarpa furfuracea based on Evans s.n. with several duplicates. A duplicate deposited at K was chosen as the lectotype because it is the best preserved collection.

LECTOTYPIFICATIONS

**Callicarpa maingayi** King & Gamble, Bull. Misc. Inform. Kew 1908: 106. 1908. Type: Malaysia, Malacca, 21 Nov. 1865, Maingay in Kew Distribution 1192 (lectotype K!, selected here, isolecoty BM!). Figs. 1D, 1E & 1F.

Note.— Callicarpa maingayi is widespread in peninsular Malaysia and southern Thailand. Three collections, Derry 1005, Maingay in Kew Distribution 1192 and Ridley 2787, were mentioned in the original description. Maingay in Kew Distribution 1192 deposited at K is chosen as the lectotype because it is well preserved.


Notes.— The type specimens of both Callicarpa angustifolia and C. poilanei are similar in having a prominent interpetiolar ridge, grey to brownish-grey indumentum on the lower leaf surface and a glabrous or sparsely pubescent ovary. Therefore, the latter
species is reduced to a synonym of the former. *C. angustifolia* is distributed in northeastern, southeastern and southern Thailand to Cambodia and Vietnam. Five different collections of *C. angustifolia* (Curtis 3197, King’s Collectors 7036 & 8236, Ridley 8330 and Scortechini 1596) and six collections of *C. poilanei* (Chevalier 31781, Harmand s.n., Pierre 5226 & s.n. and Poilane 8265 & 17611) were cited in the original description. Therefore, King’s collector 7036 (at K) and Poilane 17611 (at P) are selected as the lectotypes of *C. angustifolia* and *C. poilanei*, respectively.

King and Gamble (1908) described *C. angustifolia* from Malaysia and reported it as having a hairy ovary and narrow leaves (up to 4 cm wide), but the Thai material can have either a glabrous or hairy ovary and wider leaves (up to 9 cm wide).


Notes.— *Callicarpa arborea* is variable in leaf characters such as overall shape (elliptic, ovate, broadly elliptic or elliptic-ovate to oblong-ovate), the shape of the base (cuneate or attenuate) and hair type (dendroid or tomentose-stellate). The type material and other specimens previously determined as *C. villosissima* display characters which fall within this range and as there is no discontinuity, this name is reduced to synonymy under *C. arborea* Roxburgh (1820) in the protologue stated that *C. arborea* is a native of Chittagong but did not cite any specimen. Therefore, the illustration Icon. Roxb. t. 2033 (deposited at K) was selected as the lectotype by Rajendran and Daniel (2002). For *C. villosissima*, there was no designation of a holotype in the protologue. Kloss 6851 which was mentioned in the original description and deposited at K, is chosen as the lectotype.

This species is very widespread in Nepal, Bhutan, India, Sri Lanka, Bangladesh, Burma, China, Indochina, Malaysia, Singapore, Indonesia, Philippines, New Guinea and Thailand, except in the eastern region.

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Figure 1. *Callicarpa furfuracea* Ridl.: A. flowering branch, B. flowers, C. fruits; *Callicarpa maingayi* King & Gamble: D. flowering branch, E. flowers, F. fruits. Photographed by C. Leeratiwong.
Figure 2. *Callicarpa angustifolia* King & Gamble: A. flowering branch, B. Inflorescences, C. fruits; *Callicarpa arborea* Roxb.: D. flowering branch, E. flowers, F. fruits. Photographed by C. Leeratiwong.
REFERENCES


