ADDITIONAL RECORDS OF LEGUMINOSAE-MIMOSOIDEAE FOR THAILAND

Prachaya Srisangal1,2, Chusie Trisonthi2, and Ivan C. Nielsen3

ABSTRACT

Archidendron alternifoliolatum (T. L. Wu) Nielsen and Entada rheedei Spreng. subsp. sinohimalensis (GRIERSON & LONG) Panigrahi are reported as new records for the flora of Thailand from Doi Phu Kha National Park, Nan Province. Descriptions, illustrations and information on their distribution are provided.

Key words: Archidendron, Entada, Leguminosae-Mimosoideae, new record, Doi Phu Kha National Park, Thailand.

INTRODUCTION

Since the publication of Leguminosae-Mimosoideae in Flora of Thailand by NIELSEN (1985), much botanical exploration has taken place and additional records have been reported, viz. Archidendron robinsonii (Gagnep.) Nielsen by MAXWELL (1998), Entada reticulata Gagnep. by CHUAKUL & NIELSEN (1998), and Acacia tonkinensis Nielsen by SRISANGA & SASIRAT (2000). During a floristic survey of vascular plants of Doi Phu Kha National Park, Nan Province between 1999-2001, specimens belonging to Archidendron and Entada were collected. They were later identified as Archidendron alternifoliolatum (T. L. Wu) Nielsen and Entada rheedei Spreng. subsp. sinohimalensis (Grierson & Long) Panigrahi, respectively, and represent new records for the flora of Thailand. The descriptions are based on the Thai collections examined.


1 Herbarium, Queen Sirikit Botanic Garden, P.O. Box 7, Mae Rim, Chiang Mai 50180, Thailand
2 Biology Department, Faculty of Science, Chiang Mai University, Chiang Mai 50200, Thailand
3 Department of Systematic Botany, Institute of Biological Sciences, University of Aarhus, Nordlandsvej 68, DK-8240 Risskov, Denmark
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Figure 1 Archidendron alternifoliatum (T. L. Wu) Nielsen: A. flowering branch; B. flower; C. opened flower; D. distal pinna gland, lateral view (left), dorsal view (right); E. pod; F. middle seed with funiculus; G. proximal seed with funiculus. A–D from Srisanga 539 (QBG); E–G from Srisanga et al. 792 (QBG).
Figure 2. *Archidendron alternifoliatum* (T. L. Wu) Nielsen: Flowers (Same tree as Srisanga 539). Photo by P. Srisanga, 18 March 1999.

Figure 5. *Entada rheedei* Spreng. subsp. *sinohimalensis* (Grierson & Long) Panigrahi: A. flowering branch; B. leaflet, upper surface (left), lower surface (right); C. flower; D. pistil. All from Srisanga & Warthana 643 (QBG).
Tree 10–15 m high; branchlets terete with longitudinal ridges, brownish, lenticellate, puberulous to glabrous. Leaves: rachis (7–) 9–12 cm long, puberulous to glabrescent; gland 2–4.5 cm above the base, c. 1 mm long, sessile, elliptic or circular in outline; pinnae 1–2 pairs, 5–15 cm long, puberulous; glands 1–3 mm below the junctions of the petiolules, 0.5–1 mm diam., circular, often with raised margins; leaflets (2–) 3 (–4) pairs, proximal pairs alternate, distal pair always opposite, chartaceous, 6–19 cm long, 2.5–6 cm wide, lanceolate to elliptic; base cuneate often asymmetrical; apex acuminate; midrib and veins prominent on lower surface, both surfaces glabrous or with few hairs along midrib and leaf base; petiolule 2–4 mm long, puberulous. Inflorescences of axillary and terminal panicles, up to 12 cm long, puberulous; peduncle 0.8–2 cm long, puberulous to sericeous, bearing a head of 15–22 sessile or subsessile flowers, each subtended by a c. 1 mm long, triangular, sericeous bract. Flowers: Calyx 2–2.5 mm long, funnel-shaped, sericeous, lobes 5, triangular. Corolla white, 5–6 mm, funnel-shaped, sericeous, lobes 5, 1.5–2 mm long. Staminal tube shorter than corolla tube, 2–2.5 mm long. Ovary 1.5–2 mm long, glabrous, stipitate; stipe c. 1.5 mm long, glabrous. Pod (Srisanga et al. 792) 9–14 cm long, c. 4.5 cm wide, oblong, glabrous, dehiscent along both sutures. Seeds about 5–7, ellipsoid, flattened, discoid, c. 2.8 cm long, 2 cm wide, 1–2 cm high, the terminal ones turbinate-truncate.

Distribution.—China (Yunnan, Wang Chi-wu 82790, holotype SCBI !) and northern Thailand.

Ecology.—Hill evergreen forest; 1,500–1,650 m altitude.

Phenology.—Flowering: March–April; Fruiting: July–September.


Note.—Archidendron alternifoliolatum was previously known only from Yunnan, China and this is the first description of its flowers. Nielsen (1983) and Nielsen, Baretta-Kuiipers, & Guinet (1984) transferred this species to Archidendron.


Woody climber; branchlets terete with longitudinal shallow grooves, brown puberulous to velutinous. Leaves: rachis 5–8 cm long, brown puberulous to velutinous; pinnae (1–) 2 pairs, (4–) 6–10 (–15) cm long, brown puberulous to velutinous; leaflets (4–) 5–6 pairs, opposite or subopposite, (1.3–) 2–4 (–5.5) cm long, 1–2.3 cm wide, elliptic, oblong to narrowly obovate; base rounded to subcordate, often asymmetrical; apex rounded, obtuse.
to broadly acute, puberulous on both surfaces especially along midrib and margin, distal pair usually larger than proximal pairs; petiolule 0.5–2 mm long, densely puberulous. Inflorescence spikes, solitary in the leaf axils or sometimes more spikes from a short-shoot; rachis 8.5–15 cm long, brown puberulous to velutinous. Flowers foetid, sessile, each subtended by a c. 1 mm long, brown puberulous to velutinous bract. Calyx green, campanulate, 1–1.3 mm long, brown puberulous to velutinous lobes 5, broad triangular. Petals yellowish, elliptic, 2–3 mm long, glabrous. Stamens white; filaments 5–6 mm long; anthers c. 0.8 mm long. Ovary c. 1 mm long, glabrous, sessile or subsessile. Pod straight to slightly curved, oblong, up to 2 m long, 7–15 cm wide; endocarp and exocarp woody. Seeds subcircular, flattened, c. 4 cm long and wide, 1–1.5 cm thick.

**Distribution.**—Eastern Himalaya: Nepal, Sikkim, northeastern India, Bangladesh to China (Yunnan), Laos and northern Thailand.

**Ecology.**—Hill evergreen forest, often in open disturbed places; 600–1,500 m altitude.

**Phenology.**—Flowering: February–June; Fruiting: September–October.


**Notes.**—According to PANIGRAHI (1985), the correct spelling of this species is *E. rheedei* in accordance with Art. 73.7 of the International Code of Botanical Nomenclature 1988.

*E. rheedei* subsp. *sinohimalensis* is easily distinguished by its brown puberulous to velutinous leaflet blade segments, inflorescence, and calyx.

*E. rheedei* subsp. *rheedei* is widely distributed throughout the Old World tropics from Africa, Mascarene Islands, tropical Asia to northern Australia and Oceania, usually recorded from elevations up to 900 m. Its distribution is more southerly whilst *E. rheedei* subsp. *sinohimalensis* is confined to Eastern Himalaya, China (Yunnan), Laos and northern Thailand, but in some areas it seems to be sympatric with subsp. *rheedei*. Therefore one could argue that subsp. *sinohimalensis* deserves varietal rank only. Population studies of the site preferences of the two subspecies in northern Thailand are needed in order to confirm this.

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