



A New Endemic Thai Species of *Argyreia* (Convolvulaceae)

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Abstract

A new species of *Argyreia* (Convolvulaceae) from Thailand is described and illustrated, and it is placed in relation to the known Thai species by inserting it into the key to *Argyreia* from the *Flora of Thailand* account. *Argyreia suddeana* can be recognised by its unusually large, pendant flowers, arranged in capitate inflorescences with overlapping pinkish bracts, and a rose-pink bell-shaped corolla with flaring limb.

Key words: *Argyreia variabilis*, Asia, Ratchaburi

Introduction

The genus *Argyreia* Lour. is quite possibly the most taxonomically complex and difficult of the Asian genera of Convolvulaceae. No revision or monograph for the whole genus exists and often-cited estimates of the number of species state ‘ca 90 species’ (Oostroom & Hoogland 1953, Mabberley 2008) to as many as 125 species (Staples & Brummitt 2007), which actually seem too low for the observed morphological diversity. Flora accounts are making progress in understanding the species delimitation and nomenclature (Fang & Staples 1995, Staples & Traiperm 2010), though a comprehensive revisionary study of the entire genus is needed. For Thailand, 34 species were described in the recent flora account (Staples & Traiperm 2010), making *Argyreia* the most species-rich genus of Convolvulaceae in Thailand. And to date, Thailand has the highest number of species for any country studied so far in tropical Asia making it the centre for species richness in *Argyreia*.

Between the time when the Convolvulaceae account for the *Flora of Thailand* was completed (circa 2007) and its publication (Staples 2010) a considerable quantity of new specimen collections had accumulated and these disclose a number of new distribution records and some new species. These will be dealt with in a series of papers now under preparation. Here we describe a new species of the genus *Argyreia*, the first of several discovered among the recent collections.

Taxonomy

Argyreia suddeana Traiperm & Staples, *sp. nov.* (Fig. 1, 2)

Similar to *A. variabilis* Traiperm & Staples (in Staples & Traiperm 2008: 98) in having a showy, bell-shaped corolla and glabrous sepals, but differing from that species by larger, broadly elliptic-ovate to rhombic, or triangular-ovate, pinkish bracts; the acute sepals 10–15 mm long; and the smaller pendent corolla, 4.5–6 cm long.

Type:—THAILAND. Ratchaburi: Mae Nam Pa Chee Wildlife Sanctuary, ca 1.5 km from Huay Muang ranger substation along open ridge top, 19 October 2010, Staples, Suddee & Bongcheewin 1416 (holotype BKF!; isotypes A!, BKF!, K!, QBG!, SING!).

Phenology:—Flowering and fruiting in October.

Ecology:—on hill sides in disturbed, recently burned, dry deciduous dipterocarp forest with patches of bamboo, on quartzite-granitic substrate. The canopy varied in height from 3–7 m, was fairly open, admitting a lot of light down to ground level, which had a substantial layer of herbs, grasses, ferns, and creepers.

Distribution:—known so far from two discrete populations within Mae Nam Pha Chee Wildlife Sanctuary, Ratchaburi province, Thailand.

Elevation:—190–250 m.

Conservation assessment:—There is not yet enough information about the distribution, abundance, nor threats to this species; we consider it Data Deficient (DD) at this time.

Etymology:—we take great pleasure in naming this new species after our colleague, Dr Somran Suddee, senior botanist in the Forest Herbarium (BKF), who first collected it.

Specimens examined:—THAILAND. Ratchaburi: Mae Nam Pha Chee Wildlife Sanctuary, along unpaved dirt track near Huay Muang ranger substation, 13 October 2008, *Suddee, Trisarasi & Karaket 3860* (BKF), same locality, 19 October 2010, *Staples, Suddee & Bongcheewin 1414* (BKF).

Somran Suddee first collected this species in 2008 on a shady hill slope above a dirt track in the wildlife sanctuary; two years later he brought Staples back to the same place to recollect it. Thus the two paratypes cited above are from one population (and possibly the same plant, the only one seen there), whereas the type gathering was from a larger population ca 1–2 km away on a more exposed ridge that was discovered during a more extensive survey in 2010.

Identification key

Specimens of *A. suddeana* will key out in two places in the key to species of *Argyreia* in the *Flora of Thailand* (Staples & Traiperm 2010: 338–340), because the inflorescence peduncle length (used at couplet 22) varies in *A. suddeana* from 2–3.5 cm long. The following modified couplets should identify the new species from those most similar to it:

25. Sepals broadly obovate to orbicular, 15–17 mm long 32. *A. variabilis*
- Sepals ovate-oblong or elliptic to broadly elliptic, 10–15 mm long 25A&B
25A Sepals ovate-oblong, 11–15 mm long, of which upper 6–9 mm is linear acumen; corolla hairy outside 16. *A. maingayi*
25B Sepals elliptic to broadly elliptic, 10–15 mm long, apex acute; corolla glabrous outside *A. suddeana*
44. Plant axial parts, leaves, bracts densely brown pubescent to hirsute; sepals broadly obovate to orbicular or elliptic to broadly elliptic, glabrous; corolla 4.5–7 cm long 44A&B
- Plant body variously hairy but not as above; sepals obovate to orbicular or ovate-elliptic, strigose to shaggy hairy outside; corolla 2.3–5.0 cm long 45
44A Sepals broadly obovate to orbicular, 15–17 mm long; corolla 6–7 cm long 32. *A. variabilis*
44B Sepals elliptic to broadly elliptic, 10–15 mm long; corolla 4.5–6 cm long *A. suddeana*

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