Thailentadopsis Kostermans (Leguminosae: Mimosoideae: Ingeae) Resurrected

Author(s): G. P. Lewis and B. D. Schrire

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Thailentadopsis Kostermans (*Leguminosae*: *Mimosoideae*: *Ingeae*) resurrected

G. P. LEWIS[1] & B. D. SCHRIRE[1]

Summary. *Thailentadopsis* Kosterm. is resurrected to accommodate three Asian species of tribe *Ingeae* that are rejected from neotropical *Calliandra* Benth., *Havardia* Small, *Painteria* Britton & Rose and *Pithecellobium* Mart., all genera with which species of *Thailentadopsis* have been previously associated. The closest genus to *Thailentadopsis* appears to be *Cathormion* Hassk. from SE Asia and Australia. Two new combinations are proposed and a key to species is provided.

INTRODUCTION

During preparation of tribe *Ingeae* for *Legumes of the World* (Lewis *et al.*, in prep.) our attention was drawn to three Asian species included in a broadly defined *Havardia* Small by Nielsen (1981: 184). All three had previous binomials in *Pithecellobium* (or its earlier alternative spelling of *Pithecolobium*). *Pithecolobium tenue* Craib from Thailand was transferred by Kostermans, first to *Acacia* (1954), and then (1977) to his newly described monospecific genus *Thailentadopsis* which he thought combined characters of several other mimosoid genera, a view with which we concur. The other two species are *Pithecolobium nitidum* Vahl from Sri Lanka (later moved to *Painteria* by Kostermans (1954)) and *Pithecellobium vietnamense* I. C. Nielsen which is endemic to S Vietnam. Nielsen (1981, *loc. cit.)* rejected all three from *Pithecellobium sensu stricto*, a genus of about 20 species confined to the neotropics. Barneby & Grimes (1996: 160) provisionally excluded all three from *Havardia*. The species have yet to be included in any molecular studies but a distinctive (superficially *Entada*-like) fruit type separates them from generic allies with similar lignescent stipules and flower type.

The species under debate appear morphologically most similar to the monospecific genus *Cathormion* from SE Asia and Australia. *Cathormion umbellatum* (Vahl) Kosterm. has spinescent stipules similar to those of *Thailentadopsis* but its fruits break up into hard, woody, indehiscent, one-seeded units whereas those of *Thailentadopsis* are leathery and dehiscent, and do not fracture along interseminal joints. *Cathormion umbellatum* subsp. *umbellatum* is known from Sri Lanka, S India, Thailand, Cambodia and S Vietnam, a geographical distribution which encompasses the full range of the three species of *Thailentadopsis*, and further strengthens the hypothesis of a possible relationship between the two genera.

Bentham (1875) drew attention to the similarity between *Calliandra ?geminata* Benth. from Sri Lanka (here placed as a synonym of *Thailentadopsis nitida*) and

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[1] Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3AB, U.K.

Calliandra alternans Benth. from Madagascar, and further commented that there existed three other Old World species of *Calliandra*. Villiers (in Du Puy *et al.*, 2002: 271 – 285) moved *Calliandra alternans* to his new genus *Viguieranthus* and implied that the genus contains five species additional to the eighteen occurring in Madagascar. Thulin *et al.* (1981) accounted for two African calliandras at opposite ends of a northeast-southwest arid African corridor and Villiers (*loc. cit.*) stated that *Viguieranthus* also occurs in Asia, where only three Indo-Burmese species have been ascribed to *Calliandra* (Bentham, *loc. cit.*, Barneby 1998: 3). Villiers (*loc. cit.*), however, did not formally transfer these five from *Calliandra* so that no combinations exist for them in *Viguieranthus*. The three Asian calliandras, which all have elastically dehiscent oblanceolate pods, should not be confused with *Thailentadopsis*, although their similar foliage and occasional lignescent stipular spines are remarkably similar and the whole group of species under discussion here should be further studied before taxon relationships can be elucidated.

Thailentadopsis is resurrected to accommodate the three species that cannot be confidently placed in any other currently accepted ingoid genera. Two of these require new combinations. The necessary nomenclatural alterations are effected below after a short generic description. A key to the species is also provided.

Thailentadopsis *Kosterm.*, Ceylon J. Sci., Biol. Sci. 12 (2): 131 (1977). Type: *T. tenuis* (Craib) Kosterm.

Shrubs or treelets. Leaves bipinnate; a pair of lignescent stipular spines at the petiole base; petiole, leaf and pinnae rachises winged or not, pinnae in 1 – 2 pairs, leaflets in 1 – 6 opposite pairs, increasing in size from base to apex of pinna, chartaceous, rhomboid, trapezoid to obovate, asymmetrical; a stalked gland between each pinna pair and usually between each leaflet pair. Inflorescences few-flowered pedunculate umbels or heads, these clustered into axillary fascicles or terminal pseudo-panicles, calyces campanulate, corollas campanulate to trumpet-shaped, stamens numerous, their filaments white, fused basally into a tube equal in length to the corolla, ovary glabrous. Fruit a submoniliform, dehiscent, leathery pod, 5 – 25 cm long.

Thailentadopsis nitida *(Vahl) G. P. Lewis & Schrire* **comb. nov.**

Mimosa nitida Vahl, Symb. Bot. 2: 103 (1790).
Acacia nitida (Vahl) Willd., Sp. Pl. 4 (2): 1086 (1806).
Pithecolobium nitidum (Vahl) Benth., London J. Bot. 3: 202 (1844). Type: Sri Lanka, *Koenig*, s.n. (holotype: LINN, isotype: C).
Painteria nitida (Vahl) Kosterm., Bull. Organ. Natuurw. Onderz. Indonesië 20: 14 (1954) & in Fl. Ceylon 1: 494 – 495 (1980).
Inga geminata Wight & Arn., Prodr. Fl. Ind. Orient. 1: 269 (1834). Type: *Koenig* s.n., Herb. Smith (holotype: LINN).
Pithecolobium geminatum (Wight & Arn.) Benth., London J. Bot. 3: 202 (1844); Baker in Hook. f., Fl. Brit. India 2: 303 (1878).
Calliandra ?geminata (Wight & Arn.) Benth., Trans. Linn. Soc. London 30: 548 (1875).

Thailentadopsis tenuis (*Craib*) *Kosterm.*, Ceylon J. Sci., Biol. Sci. 12 (2): 131 (1977).

Pithecolobium tenue Craib, Bull. Misc. Inform., Kew 1927: 394 (1927); Nielsen in Fl. Thailand 4 (2): 205 – 206, t. 51: 19 (1985). Type: Thailand: Kampêng Pêt, Mê Lamung, 500 m, *Kerr* 6095 (holotype: ABD, isotypes: BM, E, K!).

Acacia tenue (Craib) Kosterm., Bull. Organ. Natuurw. Onderz. Indonesië 20: 69 (1954).

Thailentadopsis vietnamensis (*I. C. Nielsen*) *G. P. Lewis & Schrire* **comb. nov.**

Pithecellobium vietnamense I. C. Nielsen, Adansonia, sér. 2, 19 (1): 34, tab. 2 (1979) & in Fl. Camb., Laos & Vietnam 19: 111, t. 20 (1981). Type: S Viêtnam, Lâm Dông (Long Khanh): Col de Blao, 700 m, *Schmid* s.n., Nov. 1959 (holotype P).

KEY TO THE SPECIES OF *THAILENTADOPSIS*

1. Petiole and pinnae rachises not winged, largest leaflets 1.5 × 1 cm, pods 5 – 12 cm long, plant from Sri Lanka ..... *T. nitida*
1. Petiole, leaf and pinnae rachises narrowly winged, smallest leaflets over 1.5 cm long, pods 15 – 25 cm long 2
2. Leaflets in 1 – 3 pairs per pinna, 2.5 – 6 × 1.4 – 2.5 cm, plant from Thailand ..... *T. tenuis*
2. Leaflets in (3 –)4 – 6 pairs per pinna, 1.5 – 2.5 × 0.7 – 1.5 cm, plant from Vietnam ..... *T. vietnamensis*

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