

## THE GENUS *ALANGIUM* IN INDIA

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Lindley described the family Alangiaceae with 2 genera *e.g.* *Alangium* and *Marlea* [Nat. Syst. Bot. (ed. 2) 39, 1836]. These genera were later transferred to Cornaceae and Alangiaceae as a separate family was not maintained. Harms combined the 2 genera into one *i.e.* *Alangium* but did not remove the expanded genus from Cornaceae (Pflanzenr. 3, 8: 260, 1896). Wangerin separated *Alangium* from Cornaceae and placed it in a unigeneric family Alangiaceae (Pflanzenr. 4, 220b: 1-24, 1910). This treatment has been followed by all subsequent authors.

C. B. Clarke described only one species under *Alangium*, *e.g.* *A. lamarckii* Thw. (Hooker's Fl. Brit. Ind. 2: 741, 1879) and 2 species of *Marlea* *e.g.* *M. barbata* R. Br. ex C. B. Cl. and *M. begoniaefolia* Roxb. from India proper placing the two genera under Cornaceae. Clarke described a variety also under *M. begoniaefolia*, *e.g.* var. *alpina* C. B. Cl. This variety was raised to the rank of a species by Gamble and Brandis (Ind. Trees 355, 1906) who named it as *Marlea alpina* (C. B. Cl.) Gamble ex Brandis. Neither Harms nor Wangerin in their treatment of the genus *Alangium* mentioned anything about this variety of Clarke.

Smith and Cave made a critical and comparative study of *Marlea begoniaefolia* and its variety, *alpina* (Rec. bot. Surv. India 6: 96, 1914) and came to the conclusion that the variety should be raised to the rank of a distinct species as had been done by Gamble and Brandis. They made a new combination for this species as *A. alpinum* (C. B. Cl.) W. W. Sm. & G. A. Cave.

The genus *Alangium* was established by Lamarck (Encycl. Meth. Bot. 1: 174, 1783) with 3 species, *e.g.* *A. tomentosum*, *A. decapetalum* and *A. hexapetalum*. The generic name *Alangium* has been conserved over *Kara-Angolam* Adans. and *Angolam* Adans. (Fam. 2: 84, 1763) and *Angolamia* Scopoli (Introd. 107, 1777). *A. tomentosum* and *A. decapetalum* are considered as identical, and conspecific with *Grewia salvifolia* L.f. which is now called *A. salvifolium* (L.f.) Wanger. *A. hexapetalum* although very closely allied to this species can be distinguished by shape and size of leaves and fruits among

other things and is considered a subspecies of the same and has been named as *A. salvifolium* ssp. *hexapetalum* (Lam.) Wanger. The typical species is here designated as *A. salvifolium* ssp. *salvifolium* to distinguish it from the ssp. *hexapetalum*.

The characters of the genus *Alangium* is given below, followed by a key for distinguishing the Indian species. An enumeration of the Indian species with synonyms is also given.

### *Alangium* Lamck.

Short sized trees, rarely shrubs or woody climbers, deciduous or perennial. Leaves simple, alternate, exstipulate, petiolate. Flowers in axillary, corymbose inflorescence, hermaphrodite, regular, tubular in bud. Calyx cup-shaped with 4-10 teeth. Petals 4-10, valvate, alternating the calyx teeth. Stamens equal in number with the petals and alternate to them in one whorl, or more and may be in one or more whorl; anthers linear, loculi dehiscent longitudinally and laterally, pollens globular. Intrastaminal disc well-developed. Ovary superior, 1-2-celled, with one pendulous anatropous ovule in each cell; style simple, stigma usually lobed. Fruit drupaceous, 1-2-celled, with 1 seed in each cell; endocarp hard, mesocarp leathery or spongy; cotyledons foliaceous, flat.

Stamens double the number of petals or more ...	<i>salvifolium</i>
Fruit $\pm$ 1 cm long; leaves lanceolate or elliptic lanceolate, acute ...	ssp. <i>salvifolium</i>
Fruit $\pm$ 2 cm long; leaves oblanceolate, acuminate ...	ssp. <i>hexapetalum</i>
Stamens as many as petals :	
Petals less than 1 cm, stigma not lobed ...	<i>barbatum</i>
Petals about 2 cm, stigma 2-3 lobed :	
Fruit 1-1.4 cm long and 5-6 mm broad, not compressed ...	<i>chinense</i>
Fruit 1.8-2 cm long and 7-9 mm broad, compressed ...	<i>alpinum</i>

***Alangium salvifolium*** (Linn. f.) Wangerin in Eng. Pflanzenr. 4(220b): 9, 1910; Koord. in Schum. Syst. Verz. 1: fam. 229. 103, 1912. *Grewia salvifolia* L.f. Sppl. Pl. 409, 1781.

ssp. *salvifolium*. *A. salvifolium* ssp. *decapetalum* Wangerin Eng. in Pflanzenr. 4(220b): 11, 1910.

*A. lamarckii* Thw. Enum. 133; Clarke in Fl. Brit. Ind. 2: 74, 1897. *A. decapetalum* Lam. Encycl. Meth. Bot. 1: 174, 1783. *A. tomentosum* Lam. Encycl. Meth. Bot. 1: 174, 1783.

This is a short tree or a shrub widely distributed over the plains of India from the foot of the Himalayas to extreme south. It is also found in Ceylon & Burma.

ssp. **hexapetalum** (Lam.) Wangerin in Eng. Pflanzenr. 4(220b): 9, 1910; Bloemb. in Blumea 1(2): 250, 1935. *A. hexapetalum* Lam. Encycl. Meth. Bot. 1: 175, 1783. *A. sundanum* Miq. Fl. Ind. Bat. 1(1): 774, 1856. *A. glandulosum* Thw. Enum. 133, 1859. *A. lamarckii* var. *glandulosum* (Thw.) Clarke in Fl. Brit. Ind. 2: 74, 1879.

This is a scandent shrub or a short tree with drooping branches. It is found in peninsular India, Andamans, Ceylon and Malaysia.

**Alangium barbatum** (R. Br. ex Clarke) Baill. in Adans. 5: 195, 1865; Wangerin in Eng. Pflanzenr. 4(220b): 16, 1910. *Marlea barbata* R. Br. in Wall. Cat. no. 7129 nom. nud.; Clarke in Fl. Brit. Ind. 2: 743, 1879. *Karangolum barbatum* O. Ktze. Rev. Gen. 273, 1891.

A small tree, all parts shaggy with spreading long

golden or brown hairs; occurs in Assam and Burma.

**A. chinense** (Lour.) Harms in Ber. Deuts. Bot. Ges. 15: 24, 1897; Rehder in Sargent Pl. Wilson 2: 552, 1916 p.p. et Bibl. 487, 1947; Bloemb. in Blumea 1: 255, 1935; Hara, Fl. E. Himal. 219, 1966. *A. begoniaefolium* (Roxb.) Bailh. Hist. Pl. 6: 270, 1877. *A. begoniaefolium* ssp. *cubegoniaefolium* Wangerin in Eng. Pflanzenr. 4(220b): 20, 1910. *Stylidium chinense* Lour. Fl. Cochinch. 1: 221, 1790. *Marlea begoniaefolia* Roxb. Pl. Corom. 3: 80, t. 203, 1819; Clarke in Fl. Brit. Ind. 2: 743, 1879 p.p.

A small tree with spreading often zig zag branches and ovate leaves with angular margin; found in North Bengal from the foot of the hills to an elevation of 1500 m, Sikkim, Bhutan, Assam, Burma and S. E. Asia.

**A. alpinum** (Clarke) W. W. Smith & G. H. Cave in Rec. Bot. Surv. India 6: 96, t. 7, 1914; Hara, Fl. E. Himal. 219, 1966. *Marlea begoniaefolia* Roxb. var. *alpina* Clarke in Fl. Brit. Ind. 2: 744, 1879. *M. alpina* (Clarke) Gamble ex Brandis Ind. Trees 355, 1906.

A small tree of temperate regions in E. Himalaya.