

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 ± 1 cm long; leaves lanceolate or elliptic lanceolate, acute ...	ssp. <i>salvifolium</i>
Fruit ± 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. Sp. 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.) Baih. 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.