

NOMENCLATURAL NOTES ON SOME INDIAN SPECIES OF ARALIACEAE

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ABSTRACT

This paper deals with the nomenclature, synonymy, identity and distribution of some species of Indian Araliads. Recent authors have shown that nomenclatural changes are required in the genera *Brassaiopsis*, *Schefflera*, *Acanthopanax* and *Dendropanax*. The correct identity of some species also needs elucidation. These are discussed in the following pages. Some new combinations are also made.

The family Araliaceae is one of the three of the order Umbelliflorae (Umbellales), which is generally regarded as the most highly specialized group of the Archichlamydeae. The other two families are Umbelliferae (Nom. alt.: Apiaceae) and Cornaceae, the latter sometimes split into more than one family, viz., Alangiaceae, Davidiaceae and Nyssaceae. The Araliaceae as a group is particularly difficult to study because of constant problems in relation to the delimitation of many genera and species. Among the recent authors who have contributed most to our knowledge of the family are Harms (1894, 1909), Viguier (1909, 1923), Smith (1917), Nakai (1924), Handel-Mazzetti (1933), Li (1942) and Philipson (1951). Their works have shown that in some Indian species and varieties of *Brassaiopsis* Decne. & Planch., *Schefflera* J. R. & G. Forst., *Acanthopanax* Miq., and *Dendropanax* Decne. & Planch., nomenclatorial changes are required and the identity of some plants needs clarification and correction. These are dealt with in the following pages. Some new combinations are also proposed.

1. *Brassaiopsis glomerulata** (Blume) Regel, in Gartenfl., 12: 275, t. 411, 1863; Kuntze, Rev. Gen., 271, 1891; Li, *Sargentia*, 2: 58, 1942; Raizada, *Indian For.*, 84: 474, 1958, sphalm. "glomerata".
Basi. *Aralia glomerulata* Blume, Bijdr., 872. 1825.
Syn. *Hedera glomerulata* DC. Prod., 4: 265, 1830; Don, Gen. Syst., 3: 394, 1834; Hook., Bot. Mag., t. 4804, 1854.
Syn. *Macropanax glomerulatum* Miq., Fl. Ind. Bat., 1, pt. 1: 764, 1855.
Syn. *Brassaiopsis speciosa* Decne. & Planch., Rev. Hort. sér. 4, 3: 106, 1854; Clarke, in Hook. f., Fl. Brit. Ind., 2: 737, 1879; Brandis, Ind. Trees, 352, 1907; Fl. Assam, 2: 358, 1938.

* The correct spelling of the species epithet is "glomerulata", and not "glomerata" as mentioned in some floras. Blume (1825), De Candolle (1830), Miquel (1855), Regel (1863), Kuntze (1891), Merrill (1927), Handel-Mazzetti (1933) and Li (1942) have consistently used the original spelling "glomerulata", which must, therefore, be retained for this plant. (vide Article 73, International Code of Botanical Nomenclature).

Syn. *B. floribunda* Seem., J. Bot., 2: 292, 1864.

Syn. *Gastonia longifolia* Hort. ex Seem., loc. cit. 246.

The following new combinations and transfers are necessitated by the fact that the specific name *Brassaiopsis speciosa* Decne. & Planch. (loc. cit.) has been changed to *B. glomerulata* by Regel (loc. cit.), based on *Aralia glomerulata* Blume (loc. cit.). This is done in accordance with the provisions of Article 56 of the International Code of Botanical Nomenclature (Paris Code, July 1954).

Var. 1. *glomerulata*

Brassaiopsis speciosa Decne. & Planch. var. *typica* Clarke, in Hook. f., Fl. Brit. Ind., 2: 737, 1879, nomen illegitimum.

Distribution: From Nepal and Assam to Chittagong, alt. 0 to 5,000 ped. (Wallich; J. D. Hooker et T. Thomson; Burkill; Gage; Jenkins; Prain; Clarke); Indo-China; Yunnan, Kwangsi, Hainan, China (Henry; C. W. Wang; F. C. How); Java (Forbes; T. Anderson).

N.B. The above method of citation of an infra-specific taxon, purporting to indicate the nomenclatural type, has been specifically recommended by the International Code of Botanical Nomenclature, Article 26 (Paris Code, July 1954).

Var. 2. *subovata* (Clarke) Maheshwari, comb. nov.

Basi. *B. speciosa* Decne. & Planch. var. *subovata* Clarke, loc. cit.

Distribution: Sikkim, alt. 6,000 ped. (J. D. Hooker; G. King; Herb. Otto Kuntze); Khasia (J. D. Hooker et T. Thomson).

Var. 3. *hirta* (Clarke) Maheshwari, comb. nov.

Basi. *B. speciosa* Decne. & Planch. var. *hirta* Clarke, loc. cit.

Distribution: Kachar.

Var. 4. *rufo-stellata* (Clarke) Maheshwari, comb. nov.

Basi. *B. speciosa* Decne. & Planch. var. *rufo-stellata* Clarke, loc. cit.; Fl. Assam, 2: 359, 1938.

Distribution: Sibsagar, Assam (U. N. Kanjilal); Kachar; Khasia, alt. 4,000 ped. (J. D. Hooker et T. Thomson); Chittagong.

Var. 5. serrata (Clarke) Maheshwari, *comb. nov.*

Basi. *B. speciosa* Decne. & Planch. var. *serrata*
Clarke, *loc. cit.*; Fl. Assam, *loc. cit.*

Distribution: Darjeeling, East Himalaya (*Herb. Griffith* 2689); Kachin Hills, Upper Burma (*Shaik Mokim*).

2. Schefflera elata (Buch.-Ham.) Harms, in Engl. & Prantl, *nat. Pflanzenfam.*, 3(8):38, 1894; Viguier, *Ann. Sci. nat. sér.* 9, 9:330, 1909; Chung, *Mem. Sci. Soc. China*, 1:186, 1924; Li, *Sargentia*, 2:23, 1942; Raizada, *Indian For.*, 84:506, 1958.

Basi. *Hedera elata* Buch.-Ham., in Don, *Prod. Fl. Nep.*, 187, 1825; DC. *Prod.*, 4:264, 1830; Wall. *Cat.*, 4914, 1832, nomen.

Syn. *Agalma elatum* Seem., *J. Bot.*, 2:298, 1864.

Syn. *Heptapleurum elatum* Clarke, *loc. cit.* 728;
Cat. Pl. Kumaon, 76, 1906.

Var. 1. elata

Distribution: Nepal (*Wallich*); Sikkim, alt. 5 to 6,000 ped. (*J. D. Hooker*; *S. Kurz*); Nainital, alt. 5 to 7,000 ped. (*Strachey et Winterbottom*); Yunnan, China (*Henry*).

Var. 2. griffithii (Seem.) Maheshwari, *comb. nov.*

Basi. *Agalma griffithii* Seem., *J. Bot.*, 2:299, 1864.

Syn. *Heptapleurum glaucum* Kurz, *For. Fl.*, 1:538, 1877, (non Clarke, 1879).

Syn. *H. elatum* Clarke var. *griffithii* Clarke, *loc. cit.*; Fl. Assam, 2:351, 1938.

Distribution: Khasia Hills, alt. 4 to 6,000 ped. (*Mann*); Bhutan (*Griffith* 2064); Burma, Martaban, 5 to 7,000 ped.

Baillon (1878) described several new species of *Schefflera* from New Caledonia and was the first to regard *Heptapleurum* Gaertn., as a section of *Schefflera* J. R. & G. Forst. In "Die Natürlichen Pflanzenfamilien" and "Botanische Jahrbücher", Harms (1894, 1909), following Baillon (*op. cit.*), suggested that *Heptapleurum* Gaertn. should be put under the older name of *Schefflera* J. R. & G. Forst.—a genus based on two Fiji and New Zealand plants which seem to be truly *Heptapleura*, and proposed a few new combinations. He was followed by Merrill (1908, 1927, 1935), Merrill & Rolfe (1908), Viguier (1909, 1923), Gamble (1919), Ridley (1922), Chung (1924), Handel-Mazzetti (1933), Hui-Lin Li (1942), Philipson (1951) and many other workers, so the genus *Heptapleurum* is now reduced to *Schefflera*. Moreover, the characters are such that for practical purposes it seems best to retain *Schefflera* in the wider sense. Recently, the name *Schefflera* J. R. & G. Forst. (1776) was conserved over the older valid name for this group—*Sciodaphyllum* P. Br. (1756), because it is very well known and extensively used (Rickett & Stafleu, 1960). *Schefflera digitata* Forst. of New Zealand, is the type species of the genus. The above new combination is proposed for the variety known in Indian floras as *Heptapleurum elatum* Clarke var. *griffithii* Clarke (*loc. cit.*).

3. Schefflera rostrata (Wight) Harms, in Engl. & Prantl, *Nat. Pflanzenfam.*, 3(8):38, 1894; Viguier, *Ann. Sci. nat. sér.* 9, 9:329, 1909; Gamble, *Fl. Madras*, pt. 3, 569, 1919.

Basi. *Hedera rostrata* Wight, *Icon. t.* 1013-1014, 1853.

Syn. *Agalma rostratum* Seem., *loc. cit.* 298.

Syn. *Heptapleurum rostratum* Bedd., *Fl. Sylv.*, 2:122, 1874; Clarke, *loc. cit.* 729; Brandis, *Ind. Trees*, 348, 1907.

Var. 1. rostrata

Distribution: Nilgiris, alt. 7,000 ped. (*Gardner*); Ceylon (*fide Viguier*).

Var. 2. micrantha (Clarke) Maheshwari, *stat. nov.*

Basi. *Heptapleurum rostratum* Bedd. var. *micranthum* Clarke, *loc. cit.* 729.

Syn. *Schefflera micrantha* Gamble, *Fl. Madras*, 569, 1919, (non Ridley, 1922).

Distribution: Sisparah, Nilgiris District (*Gamble*); Penins. Ind. Or. (*Herb. Wight*).

4. Schefflera venulosa (Wight & Arn.) Harms, in Engl. & Prantl, *Nat. Pflanzenfam.*, 3(8):39, 1894; Chung, *Mem. Sci. Soc. China*, 1:186, 1924; Li, *Sargentia*, 2:34, 1942.

Basi. *Paratropia venulosa* Wight & Arn., *Prod.*, 1:377, 1834.

Syn. *Heptapleurum venulosum* Seem., *J. Bot.*, 3:80, 1865; Clarke, in Hook. f., *Fl. Brit. Ind.*, 2:729, 1879 (excl. syn. p. p.); Brandis, *Ind. Trees*, 348, 1907; Fl. Assam, 2:353, 1938.

Syn. *Hedera terebinthacea* Wall. *Cat.* 4920, 1828, nomen, p.p.

Syn. *Aralia digitata* Roxb., *Hort. Beng.*, 22, 1814, nomen, et *Fl. Ind.*, 2:107, 1832.

Distribution: Throughout tropical and subtropical India, from the North-West Himalayas to the Peninsular India, and Bihar, Bengal and Assam (*Herb. Royle*; *G. King*; *C. E. C. Fischer*; *J. S. Gamble*; *W. A. Talbot*; *W. G. Craib*; *D. Prain*; *J. D. Hooker et T. Thomson*; *Witt*); Burma (*S. Kurz*; *J. H. Lace*; *A. Meebold*); Yunnan, China (*Forrest*; *Henry*; *Handel-Mazzetti*; *J. F. Rock*); Indo-China (*fide Hui-Lin Li*).

In Indian floras this plant goes under the name of *Heptapleurum venulosum* Seem. (1865). In his treatment of the Araliaceae of India, Clarke (1879) has united this species with *Heptapleurum ellipticum* Seem. (Syn. *Schefflera elliptica* Harms). The type of the latter species was described from Java (*Sciodaphyllum ellipticum* Blume, 878 p., 1825). Craib (I, 798 p., 1931), in an enumeration of the Siamese species of *Schefflera*, considers that the two species are distinct, and after comparing the Asiatic and Javan materials, Li (1942) has supported this separation. The Asiatic species differs from the Javan species, *S. elliptica*, in the numerous umbels which are racemosely arranged on the elongated 10-15 cms. long panicle branches, while in Javan material, the umbels are few in number and are

subcorymbosely arranged on the rather short panicle branches.

The oldest validly published name for this plant is that of Roxburgh, *Aralia digitata*, of 1832. Since the combination *Schefflera digitata*, is preoccupied for a New Zealand species, the next valid name is *Paratropia venulosa* Wight & Arn. (1834). As the specific epithet is only the valid one, the above new combination was made by Harms (*loc. cit.*).

5. *Acanthopanax cissifolius* (Griff. ex Seem.) Harms, in Engl. et Prantl, *Nat. Pflanzenfam.*, 3(8):50, 1894; Hand.-Mazz., *Symb. Sin.*, 7: 697, 1933; Li, *Sargentia*, 2: 78, 1942; Raizada, *Indian For.*, 84: 469, 1958.

Basi. *Aralia cissifolia* Griff. ex Seem., *J. Bot.*, 6: 134, 1868; Clarke, *loc. cit.* 722.

Syn. *Eleutherococcus cissifolius* Nakai, *Chosen-shokubutsu*, 1: 420, 1914, et *J. Arnold Arbor.*, 5: 9, 1924, et *Fl. Sylvat. Koreana*, 16: 27, 1927.

Var. 1. cissifolius

Syn. *Aralia cissifolia* Griff. ex Seem. var. *normalis* Clarke, *loc. cit.* 722.

Distribution: Lachen (*Hooker fil.*); Sikkim, alt. 9 to 13,000 ped. (*G. H. Cave*; *Smith et Cave*; *Gammie*); Bhutan (*Griffith*; *Dungbo*); Yunnan, China (*Forrest*; *C. Schneider*; *Handel-Mazzetti*).

Var. 2. scandens (Clarke) Maheshwari, *comb. nov.*

Basi. *Aralia cissifolia* Griff. ex Seem. var. *scandens* Clarke, *loc. cit.*; Cat. Pl. Kumaon, 76, 1906.

Syn. *A. scandens* Edgew. Mss. in *Herb. Hook.*, nomen illegitimum.

Distribution: Kumaon, alt. 9,000 ped.; Madhari Pass, alt. 8 to 9,000 ped. (*Strachey et Winterbottom*); Tehri Garhwal (*J. F. Duthie*); Mussorrie (*G. King*); Sikkim, alt. 7 to 13,000 ped. (*Hooker fil.*).

6. *Dendropanax chevalieri* (Viguier) Merr., *J. Arnold Arbor.*, 19: 59, 1938; *Brittonia*, 4: 132, 1941; Li, *Sargentia*, 2: 39, 1942; Philipson, *Bull. Brit. Mus. nat. Hist. (Bot.)*, 1: 19, 1951.

Basi. *Gilibertia chevalieri* Viguier, Lecomte, *Fl. Gén. Indo-Chine*, 2: 1181, f. 141, 1923.

Syn. *Dendropanax japonicum* sensu Clarke, in *Hook. f., Fl. Brit. Ind.*, 2: 733, 1879, (non Seem., 1864).

Syn. *Gilibertia sinensis* Nakai, *J. Arnold Arbor.*, 5: 24, 1924, pro parte; Rehder, *J. Arnold Arbor.*, 8: 180, 1927.

Syn. *G. siamensis* Craib, *Kew Bull.* 206, 1931, et *Fl. Siam. Enum.*, 1: 796, 1931.

Syn. *Textoria sinensis* Nakai, *J. Jap. Bot.*, 15: 9, 1939.

Syn. *Dendropanax burmanicus* Merr., *Brittonia*, 4: 129, 1941.

Distribution: Khasia Hills, Eastern India, alt. 4 to 5,000 ped. (*Hooker fil. et Thomson*; *Griffith*; *Oldham*;

U. N. Kanjilal); China (*H. H. Hu*; *Handel-Mazzetti*; *H. H. Chung*; *Merrill*); Indo-China (*vide Viguier*); Burma (*Kingdon-Ward*); Siam (*vide Craib*).

This is the plant listed in our floras under the name of *Dendropanax japonicum* Seem. Recently, Nakai (1924) has shown that Seemann's *D. japonicum*, is a Japanese species, different from that occurring on the Asiatic mainland and for which he proposed the name *Gilibertia sinensis*. However, the generic name *Gilibertia* Ruiz. et Pav., is illegitimate, being a later homonym of that of J. F. Gmelin, and therefore cannot stand according to the International Code of Botanical Nomenclature. In his revision of the Araliaceae of China, Hui-Lin Li (*loc. cit.*) described a species from the mainland of China, *Dendropanax chevalieri* (Viguier) Merr., which was originally collected from Indo-China. This species, with polymorphic leaves, has been shown to extend from Siam through Indo-China to China, and through Burma to the Khasia Hills, Assam (*see Philipson, op. cit.*). The correct identity of our Indian plant is, therefore, *Dendropanax chevalieri* (Viguier) Merr., *loc. cit.* The distinguishing characters are its rather thick leaves, variable in size, form and texture, mostly entire, sometimes 3-5-8-lobed, with prominent and elevated veins on both surfaces and reddish-brown translucent glands; oblong fruits with longitudinal ribs.

7. *Merrillioanax listeri* (King) Li, *Sargentia*, 2: 63, f. 10, 1942.

Basi. *Dendropanax listeri* King, *J. Asiat. Soc. Beng.*, 67: 294, 1898; *Ann. R. Bot. Gdn. Calcutta*, 9: t. 55, 1901; Merrill, *Brittonia*, 4: 133, 1941.

Syn. *Nothopanax membranifolius* Smith, *Notes R. Bot. Gdn. Edinb.*, 10: 53, 1917; Nakai, *J. Jap. Bot.*, 15: 10, 1939.

Syn. *Gilibertia myriantha* Hand.-Mazz., *Anz. Akad. Wiss. Math.-Nat. Wien*, 60: 184, 1923.

Syn. *G. listeri* Hand.-Mazz., *loc. cit.* 185.

Syn. *G. membranifolia* Hand.-Mazz., *Symb. Sin.*, 7: 621, 1933.

Distribution: North-eastern India: Diphla Hills, Assam (*J. L. Lister* 198, TYPE); Yunnan, China (*Forrest*; *Handel-Mazzetti*; *J. F. Rock*; *C. W. Wang*).

In our floras the name of this plant is given as *Dendropanax listeri* King. The type of this species was originally described and later redescribed and illustrated by King (*loc. cit.*) from Assam. Nakai (*loc. cit.*), and Merrill (*loc. cit.*) noted the differences between this species and *Nothopanax* as well as *Dendropanax*, in both of which genera the type species has been placed. The differences, judging from the characters currently used for differentiating genera in Araliaceae, led Hui-Lin Li (*loc. cit.*) to erect a new genus for this species, *Merrillioanax*, in honour of Dr. E. D. Merrill. The correct name for the Indian plant is therefore, *Merrillioanax listeri* (King) Li, *loc. cit.* The genus has affinities with *Dendropanax* and *Nothopanax*. It resembles the former in its simple leaves and inarticulate pedicels, but

can be readily distinguished by the paniculate inflorescences, the bilocular ovaries and the two distinct styles. It is apparently nearer to *Nothopanax* than to *Dendropanax*; however the uniformly simple leaves and the inarticulate pedicels clearly separate it from *Nothopanax*.

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