

## PLAGIOPTERACEAE

斜翼科 xie yi ke

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Lianas climbing, woody, laticiferous. Branches and branchlets densely stellate hairy. Leaves opposite, simple, pinnately veined; stipules 2, free, minute. Inflorescence axillary, paniculate, multi-flowered, densely stellate hairy. Flowers bisexual, small. Calyx (2–)4(or 5)-partite, segments unequal in length. Petals 3, rarely 4, sepal-like, reflexed. Stamens numerous; filaments free; anthers 4-celled but becoming 2-celled at dehiscence. Ovary 3-loculed, sessile, superior, densely tomentose; ovules 2 per locule; style 1, subulate; stigma minutely 3-lobed. Fruit a capsule, not fleshy, dehiscent but finally septicial with 3 apical spatulate wings. Seeds unknown.

One species: S China, Myanmar, Thailand.

Baas et al. (Grana 18: 69–89. 1979) provided two interpretations of the perianth, one similar to the above (although with petals (3 or)4(or 5)) and another in which the inner whorl is regarded as a calyx, the outer whorl as bracteoles or an epicalyx, and the corolla consequently absent.

In their detailed review, Baas et al. (loc. cit.) were unable to place *Plagiopteron* with any confidence and concluded that the genus deserved family rank, following Airy Shaw's earlier concept (Kew Bull. 18: 249–273. 1965). The molecular evidence presented in abstract by Simmons et al. (Amer. J. Bot. 87(6, Abstracts): 156–157. 2000) placed *Plagiopteron* clearly in the Celastraceae, close to the Hippocrateoid genera. Savolainen et al. (Kew Bull. 55: 257–306. 2000) and Soltis et al. (Bot. J. Linn. Soc. 133: 381–461. 2000) similarly placed the genus. The general appearance of the plant, a woody climber with fairly large opposite leaves, small flowers in many-flowered terminal cymes, and fruit with *Acer*-like wings supports this affinity. Further similarities were found in the elastic material of the leaf midrib vascular cylinder. The pollen of *Plagiopteron* is apparently unusual for Celastraceae (Baas et al., loc. cit.).

Chang Hung-ta. 1989. *Plagiopteron*. In: Chang Hung-ta, ed., Fl. Reipubl. Popularis Sin. 49(1): 48–50.

### 1. PLAGIOPTERON Griffith, Calcutta J. Nat. Hist. 4: 244. 1843.

斜翼属 xie yi shu

Morphological characters and geographic distribution are the same as those of the family.

**1. *Plagiopteron suaveolens*** Griffith, Calcutta J. Nat. Hist. 4: 244. 1843.

斜翼 xie yi

*Plagiopteron chinense* X. X. Chen; *P. fragrans* Griffith.

Branchlets brown stellate tomentose. Petiole ca. 1 cm, densely tomentose; leaf blade elliptic, ovate-elliptic, or ovate-oblong, 8–15 × 4–9 cm, papery, abaxially densely brown stellate tomentose, adaxially finally pubescent on veins only, midvein strongly prominent abaxially, raised adaxially, lateral veins 5 or 6 pairs, base rounded or slightly cordate, less often acute to obtusely cuneate, or apparently finely crenate in dried material, margin entire, apex acute to acuminate. Inflorescence paniculate, axillary, toward twig apices, usually shorter than leaf blade; peduncle densely brown stellate tomentose, lower unbranched part of peduncle 4–6 cm. Pedicel ca. 6 mm, tomentose; bracteoles lanceolate, 2–3 mm. Sepals (2–)4(or 5), spreading or re-

flexed, unequal in size, lanceolate, 1–1.5 mm, tomentose. Petals 3 or 4, sepal-like, narrowly ovate, 3–4 mm, outside tomentose, inside with sparser weak hairs. Stamens ca. 50; filaments filiform, 2–5 mm, glabrous; anthers globose or pyriform, minute, glabrous, dehiscent by apical pores. Ovary densely brown pubescent, 3-loculed; ovules 2 per locule; style ca. 2 mm, slender, tapering to apex, nearly as long as filaments, tomentose at base; stigma minute. Capsule woody, reportedly ca. 4 cm (Baas et al., loc. cit.), with 3 long obovate wings at apex, wings 2.5–3 cm, longitudinally veined, sparsely stellate hairy. Seeds unknown.

Scrub, evergreen forests; ca. 200 m. SW Guangxi [Myanmar, Thailand].

For *Plagiopteron suaveolens* Griffith as the correct name for the species, see Daniel (Taxon 40(4): 619–620. 1991).

This species is endangered in China; the few extant plants are in need of protection.

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