14. PACHYGONE Miers, Ann. Mag. Nat. Hist., ser. 2, 7: 37, 43. 1851.

粉绿藤属 fen lü teng shu

Woody vines. Leaf blade usually ovate, peltate, palmately 3–5-veined. Inflorescences axillary, botryoid, racemose or narrowly paniculate. Male flowers: sepals 6–12, imbricate, outer whorl minute and bracteolelike, inner whorl large; petals 6, small, with basal inflexed auricles clasping opposite stamen; stamens 6, free, anthers corpulent, dehiscing with a transverse slit. Female flowers: sepals and petals as in male flowers; staminodes 6, shorter than petal; carpels 3, with one side swollen, ovate, glabrous, style curved outward. Drupes obovate or rotund, slightly compressed, style scar near base; endocarp bony, reniform-rounded, slightly concave on each side; condyle small, subspatulate. Seed curved; endosperm absent or scanty; cotyledons large, thick, much longer than radicle.

Ten to twelve species: S and SE Asia and Oceania; three species (all endemic) in China.

1. Pachygone sinica Diels, Notizbl. Bot. Gart. Mus. Berlin-Dahlem 11: 209. 1931.

粉绿藤 fen lü teng

Woody vines up to 7 m or longer. Branches and branchlets rugosely striate, branchlets slender, pubescent. Petiole slender and erect, 1.5-4 cm, glabrous, apex slightly swollen and twining; leaf blade ovate, rarely broadly ovate or lanceolate, 5-9 × 2-5 cm, thinly leathery, both surfaces glabrous, base rounded or sometimes subtruncate, apex acuminate, palmately 3-5-veined, basal pair of veins often slender or inconspicuous, reticulate veins fine, raised on both surfaces. Inflorescences racemose or narrowly paniculate, 1-10 cm; rachis slender and pubescent; bracteoles 2, closely adnate to sepals. Male flowers: sepals in 2 whorls of 3, outer whorl oblong-lanceolate, ca. 1.1 mm, sparsely puberulent outside, inner whorl broadly elliptic or broadly ovate-elliptic, 1.5-1.7 mm, puberulent on midrib outside; petals 6, fleshy, lanceolate, 1.6-1.7 mm, with basal inflexed auricles clasping opposite stamen; stamens 6, 1.3-1.6 mm, anthers large and dehiscing with transverse slit. Female flowers: sepals and petals as in male flower but usually smaller; staminodes 6; carpels 3(or 4). Drupes oblate; endocarp ellipticreniform, crustaceous, 1.3-1.4 × ca. 1 cm, rugose on surface. Fl. Sep-Oct, fr. Feb.

• Forests. C, N, and W Guangdong, E and N Guangxi.

An unpublished IUCN list recorded this species as vulnerable: VU(A1c,2c;B2c).

2. Pachygone valida Diels in Engler, Pflanzenr. 46(IV.94): 243. 1910.

肾子藤 shen zi teng

Limaciopsis valida (Diels) H. S. Lo.

Woody vines. Branches light brownish yellow, striate; branchlets often slightly twining, puberulent. Petiole deeply grooved, 3–7 cm, glabrous, apex slightly swollen; leaf blade

ovate to broadly ovate, sometimes broadly ovate-rotund, 6-18 × 3-12 cm, leathery, both surfaces glabrous, base subtruncate or slightly cordate, rarely cuneate or slightly rounded, apex often cuspidate, palmately 5(-7)-veined, reticulate veins thin, dense, raised on both surfaces, conspicuous abaxially. Inflorescences axillary or borne on old and leafless branches, solitary or paired, narrowly paniculate thyrses, branching shorter than 1 cm. Male flowers: bracteoles 2, lanceolate-ovate, ca. 0.6 mm, closely adnate to sepals; sepals in 2 whorls of 3, subrotund, broadly ovate to rhombic-rotund, deeply emarginate, ca. 1.5 mm, margin thin; petals 6, cuneate, ca. 0.6 mm, with apical auricles clasping opposite stamen; stamens 6, slightly longer than petals, pollen cells large, divaricate, dehiscing with a transverse slit. Female flowers: sepals and petals as in male flower but petals with margin inflexed on both sides; staminodes absent; carpels 3, ovate-semispheroidal, style curved outward. Drupes oblate, 1.7-1.8 cm; endocarp subhelicoid-reniform, crustaceous, ca. 1.5 × 1.2 cm, reticulately ornamented on surface; condyle conspicuously curved. Seeds rotund; endosperm almost absent. Fl. Apr, fr. Dec-Jan.

 \bullet Dense forests. NW and S Guangxi, S Guizhou, S Yunnan (Mengzi).

3. Pachygone yunnanensis H. S. Lo, Guihaia 10: 181. 1990.

滇粉绿藤 dian fen lü teng

Woody vines. Branchlets olive green, striate, subglabrous. Petiole 1–3 cm, puberulent; leaf blade cordate to ovate-cordate, 5– $10 \times$ ca. 6.5 cm, thinly leathery, grayish green when dry, densely puberulent abaxially, adaxially sparsely puberulent, base cordate, apex cuspidate, palmately 3–5-veined, lateral veins 1 or 2 pairs. Inflorescences axillary, cymose, 5–7-flowered; peduncle ca. 6 mm. Flowers not seen. Fruiting peduncle ca. 1.5 cm. Drupes reniform-globose, 7– 8×9 –10 mm; endocarp irregularly ornamented with branching ridges.

• W Yunnan (Tengchong).

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