

**16. SCHNABELIA** Handel-Mazzetti, Akad. Wiss. Wien, Math.-Naturwiss. Kl., Anz. 58: 92. 1921.

四棱草属 *si leng cao shu*

Herbs, perennial. Rhizomes short, thick. Stems and twigs 4-angled, distinctly winged along edges. Leaves opposite, small, simple to deeply 3-lobed and almost palmate, usually early deciduous. Inflorescences axillary, simple cymes or reduced to 1 flower. Flowers usually of 2 kinds, open or cleistogamous. Calyx deeply 4- or 5-lobed, slightly enlarged in fruit, conspicuously 8-10-veined; lobes linear-lanceolate, equal or subequal. Stamens 4, didynamous. Ovary 4-locular; ovules 1 per locule. Stigma slightly 2-cleft. Open flowers with corolla longer than calyx, tube slender, 2-lipped, lower lip 3-lobed, upper lip erect and 2-lobed; stamens exerted; style longer than stamens. Cleistogamous flowers with corolla shorter than calyx; stamens and style shorter than corolla. Nutlets 4, obovate, puberulent, basally obscurely reticulate.

Two species: endemic to China.

The genus is sometimes included in Lamiaceae. There are collections that are somewhat intermediate between the two species.

- 1a. Cymes usually reduced to 1 flower; peduncle longer than 7 mm; calyx 5-dentate ..... 1. *S. oligophylla*
- 1b. Cymes usually 1-3-flowered; peduncle less than 2 mm; calyx 4-dentate ..... 2. *S. tetradonta*

**1. *Schnabelia oligophylla*** Handel-Mazzetti, Akad. Wiss. Wien, Math.-Naturwiss. Kl., Anz. 58: 93. 1921.

四棱草 *si leng cao*

Herbs 60-100(-120) cm tall, erect to climbing. Stems minutely puberulent, soon glabrous; internodes 0.5-8(-12) cm. Petiole 0.3-2.3 cm; leaf blade oblong, triangular-ovate, or ovate, sometimes deeply 3-lobed, 1-5 × 0.8-2 cm, papery, base cuneate, subrounded, or subcordate, margin serrate, apex short acuminate to acute. Cyme usually 1-flowered; bracts awl-shaped. Open flowers: Calyx 10-veined; teeth 5, 5-8 × 1 mm, margin entire, ciliate, apex acuminate. Corolla bluish purple to purple, 1.4-1.8 cm, tube ca. 1.2 × 2 mm; lower lip wedge-shaped to obovate-triangular, middle lobe 8-5.5 mm, lateral lobes 3-5 mm; upper lip broadly elliptic, ca. 4 × 3 mm. Cleistogamous flowers: Calyx ca. 3 mm. Corolla ca. 1.5 mm, lower lip with middle lobe ca. 0.5 mm and lateral lobes ca. 0.2 mm; upper lip ovate to subrounded, ca. 0.2 mm. Nutlets ca. 5 × 2.8 mm.

• 600-1900 m. Fujian, Guangdong, Guangxi, Hainan, Hunan, Jiangxi, Sichuan, NE Yunnan.

Medicinal.

- 1a. Leaf blade 1-3 × 0.8-1.7 cm ..... 1a. var. *oligophylla*
- 1b. Leaf blade 4-5 × 1.5-2 cm ..... 1b. var. *oblongifolia*

**1a. *Schnabelia oligophylla* var. *oligophylla***

四棱草 *si leng cao*

Petiole 3-9 mm; leaf blade ovate to triangular-ovate, 1-3 × 0.8-1.7 cm. Fl. and fr. Apr-Jun.

• Open forests in valleys in calcareous soil; 700 m. Fujian, Guangdong, Guangxi, Hainan, Hunan, Jiangxi, Sichuan.

**1b. *Schnabelia oligophylla* var. *oblongifolia*** C. Y. Wu & C. Chen in C. Chen, Acta Phytotax. Sin. 9: 11. 1964.

长叶四棱草 *chang ye si leng cao*

Petiole 1.8-2.3 cm; leaf blade oblong, 4-5 × 1.5-2 cm. Fl. Apr-May, fr. Oct.

• Forests; 600-1900 m. S Sichuan, NE Yunnan.

**2. *Schnabelia tetradonta*** (Sun) C. Y. Wu & C. Chen in C. Chen, Acta Phytotax. Sin. 9: 7. 1964.

四齿四棱草 *si chi si leng cao*

*Chienodoxa tetradonta* Sun, Acta Phytotax. Sin. 1: 22. 1951.

Herbs 30-70 cm tall. Stems erect, puberulent; internodes 0.5-6 cm. Petiole 3-8 cm; leaf blade ovate, 1-1.4 × 0.7-0.9 cm or smaller, papery, minutely hirsute, base cuneate, margin serrate, apex acute. Cymes 1-3-flowered. Open flowers unknown. Cleistogamous flowers: Calyx 8-veined; teeth 4, linear-lanceolate, 2.5 × 0.8 mm, entire, ciliate. Corolla ca. 1.5 mm, early deciduous, 2-lipped; lower lip 3-lobed, central lobe ca. 0.5 mm, acute, with lateral lobes similar to upper lobes of upper lip; upper lip erect, 2-lobed, lobes ovate, ca. 0.2 mm. Stamens 4, didynamous, shorter than corolla; disc cup-shaped. Ovary pubescent, ca. 0.5 mm. Style as long as ovary, glabrous. Fruiting calyx broadly lanceolate, 3.5-4 × 1.3 mm. Nutlets ca. 3 × 2 mm, pubescent. Fl. and fr. May-Jul.

• Mountain slopes in thickets; 500-1800 m. N Guizhou, C Sichuan.

