

1. PINGUICULA Linnaeus, Sp. Pl. 1: 17. 1753.

捕虫堇属 bu chong jin shu

Herbs, perennial [or annual], terrestrial [epilithic or epiphytic], rhizomatous, without rhizoids, stolons, or traps. Roots fibrous. Leaves in a basal rosette, simple, petiolate or sessile, soft and fleshy; leaf blade adaxially usually with numerous viscid glands, veins pinnate, margin entire and usually involute. Inflorescences with a solitary flower, rarely a 2- or 3-flowered raceme, without scales, bracts, or bracteoles. Calyx 2-lipped; lower lip 2-lobed; upper lip 3-lobed. Corolla open at throat, palate of lower lip not raised; lower lip larger than upper lip, spurred, 3-lobed, middle lobe larger; upper lip 2-lobed. Capsule loculicidal, opening by 2 valves. Seeds many per capsule.

About 55 species; N temperate regions, most diverse in Central America, extending S to Patagonia; two species in China.

- 1a. Roots 0.4–1 mm thick; leaf blade 1–4 cm; pedicel and calyx glabrous; corolla 9–20 mm, white but spur yellowish 1. *P. alpina*
- 1b. Roots 0.1–0.2 mm thick; leaf blade 0.5–1 cm; pedicel and calyx glandular pilose; corolla 6–9 mm, pale violet including spur 2. *P. villosa*

1. *Pinguicula alpina* Linnaeus, Sp. Pl. 1: 17. 1753.

高山捕虫堇 gao shan bu chong jin

Herbs, perennial, overwintering by a resting bud; bud ovoid, ca. 1 cm. Roots numerous, 0.4–1 mm thick. Leaves shortly petiolate; leaf blade pale green, elliptic-oblong to lanceolate-oblong, 1–4.5 × 0.5–1.7 cm, abaxially glabrous, secondary veins 5–7 on each side of midvein, base broadly cuneate, margin involute, apex obtuse to rounded. Flowers 1–5, from generative (spring) rosette. Pedicel 2.5–13 cm × 0.4–1.2 mm, glabrous, apical part enlarged in fruit. Calyx parted from base into 2 lips, glabrous; lower lip 1–2.5 mm, 2-lobed, lobes obovate; upper lip 2–4 mm, 3-lobed, lobes triangular-ovate. Corolla mostly white with 1 or more yellow spots on palate, 0.9–2 cm; tube shortly funnellform-tubular, 3–7 mm, outside glabrous, inside puberulent; spur yellowish, cylindric, straight, ± as long as corolla tube, apex rounded; lobes of lower lip circular to broadly ovate, apex rounded to obtuse; lobes of upper lip broadly ovate to suborbicular, apex obtuse. Filaments curved, 1.4–1.6 mm; anther thecae confluent. Ovary globose, ca. 1.5 mm in diam.; style short but distinct; stigma lower lip circular and ciliate, upper lip deltoid. Capsule ovoid-oblong, 5–7 mm, glabrous. Seeds narrowly ellipsoid, 0.6–0.8 mm; seed coat with small prominent elongate reticulations. Fl. May–Jul, fr. Jul–Sep. $2n = 32$.

Bogs and wet places on mountains; 1800–4500 m. Chongqing, Gansu, NE Guizhou, W Hubei, E Qinghai, S Shaanxi, Sichuan, S and SE Xizang, NW Yunnan [Bhutan, N India, Kashmir, Mongolia, N Myanmar, Nepal, Russia; Europe].

The report of *Pinguicula vulgaris* Linnaeus from Shaanxi (Iconogr. Cormophyt. Sin. 4: 148. 1975) is in fact *P. alpina*.

2. *Pinguicula villosa* Linnaeus, Sp. Pl. 1: 17. 1753.

北捕虫堇 bei bu chong jin

Herbs, perennial, overwintering by a resting bud. Roots numerous, 0.1–0.2 mm thick. Leaves shortly petiolate; leaf blade pale green, elliptic to broadly elliptic, 5–10(–15) × 4–8 mm, abaxially glabrous, secondary veins 4 or 5 on each side of midvein, base broadly cuneate, margin strongly involute, apex rounded. Flowers 1 or 2, from generative rosette. Pedicel 2.5–8 × 0.4–1 mm, glandular pilose. Calyx parted from base into 2 lips, outside glandular pilose, inside glabrous; lower lip 2-

lobed, 0.5–1 mm, lobes ovate-lanceolate; upper lip 3-lobed, 1–2 mm, lobes ovate-lanceolate. Corolla pale violet with yellow stripes in throat, 6–9 mm; tube shortly funnellform-tubular, 2.5–3 mm, outside glabrous, inside sparsely puberulent; spur cylindric-conic, straight, longer than corolla tube, apex rounded; lobes of lower lip oblong, apex obtuse to truncate; lobes of upper lip oblong, apex obtuse. Filaments curved, 1–1.2 mm; anther thecae confluent. Ovary globose, 1.2–1.5 mm in diam.; style short; stigma lower lip semicircular and ciliate, upper lip obtuse. Capsule obovoid, 5–6 mm, glabrous. Seeds narrowly ellipsoid; seed coat with small prominent elongate reticulations. Fl. Jun–Aug, fr. Aug–Oct. $2n = 16$.

Sphagnum bogs. NE Nei Mongol [Japan, Russia (Far East, Siberia); N Europe, North America].

