

**1. MACROPODIUM R.** Brown in W. T. Aiton, Hortus Kew. 4: 108. 1812.

长柄芥属 chang bing jie shu

Herbs perennial, rhizomatous, puberulent. Trichomes simple and minutely forked. Stems erect, unbranched. Basal leaves long petiolate, rosulate, simple, entire, serrate, or denticulate. Cauline leaves petiolate, uppermost sessile, not auriculate, entire or serrate. Racemes numerous flowered, dense, ebracteate or rarely lowermost few flowers bracteate, elongated in fruit. Fruiting pedicels slender or thickened, divaricate. Sepals oblong-linear, base of lateral pair not saccate, margin narrowly membranous. Petals white; blade linear-oblong or linear-lanceolate, apex obtuse; claw shorter than sepals. Stamens 6, distinctly exserted, subequal in length; filaments dilated at base, filiform; anthers oblong-linear, twisted after dehiscence, obtuse at apex. Nectar glands 2, lateral, semiannular or annular; median glands absent. Ovules 8–22 per ovary. Fruit dehiscent siliques, linear, strongly latiseptate; valves papery, with a prominent midvein and distinct lateral veins, glabrous, torulose; gynophore 0.3–3 cm; replum rounded; septum complete, membranous, translucent, veinless; style obsolete, rarely to 1 mm, subconical; stigma capitate, entire. Seeds uniseriate, winged, ovate or orbicular, strongly flattened; seed coat smooth, not mucilaginous when wetted; cotyledons accumbent.

Two species: China, Japan, Kazakstan, Mongolia, Russia; one species in China.

**1. *Macropodium nivale*** (Pallas) R. Brown in W. T. Aiton, Hortus Kew. 4: 108. 1812.

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*Cardamine nivalis* Pallas, Reise Russ. Reich. 2: 113. 1773.

Herbs (20–)30–50(–63) cm tall, sparsely puberulent with trichomes ca. 0.1 mm. Stems glabrous basally, puberulent above. Basal leaves rosulate; petiole (1–)3–10(–15) cm; leaf blade oblong, elliptic, or lanceolate, 3–8 × (1.5–)2–3.5 cm, glabrous or margin puberulent, base obtuse or cuneate, margin entire, denticulate, or serrulate, apex obtuse or subacute. Lowermost cauline leaves petiolate, uppermost sessile; middle cauline leaves sessile or shortly petiolate, lanceolate, lanceolate-oblong, or elliptic, 3–9 × 0.6–2.5 cm, margin entire, apex acute. Fruiting pedicels stout, 0.5–2 mm, horizontal, puberulent. Sepals oblong-linear, 4–5 × 1–1.5 mm, glabrous. Petals white, linear to linear-oblong, 6–10 × 0.7–1 mm; claw slender, 3–5 mm. Filaments white, 5–8 mm; anthers purplish, oblong-linear, 1.5–2 mm. Ovules 12–18 per ovary. Fruit linear, (1.8–)2.2–4(–4.8) cm × 3–4.5 mm, glabrous, strongly torulose; gynophore 3–6 mm, puberulent, strongly recurved; style 0.2–1 mm. Seeds brown, orbicular or ovate-oblong, 2.5–3.2 × 1.8–3 mm; wing 0.2–0.5 mm. Fl. Jul–Aug, fr. Aug–Sep.  $2n = 30$ .

Alpine meadows, river banks; 2000–2200 m. Xinjiang [Kazakstan, Mongolia, Russia].

