

56. CHRISTOLEA Cambessèdes in Jacquemont, Voy. Inde 4(Bot.): 17. 1835.

高原芥属 gao yuan jie shu

Koelzia K. H. Rechinger.

Herbs perennial with a woody caudex or herbaceous base. Trichomes simple. Stems branched from caudex and above, sometimes woody at base. Basal leaves absent. Cauline leaves petiolate, dentate, uppermost sometimes entire. Racemes ebracteate, elongated in fruit. Fruiting pedicels slender, ascending, suberect, or reflexed. Sepals oblong, caducous, base of lateral pair not saccate. Petals white, longer than sepals; blade spatulate or oblong-obovate, apex rounded; claw purple, subequalling sepals. Stamens 6, tetradynamous; filaments not dilated at base; anthers oblong, apiculate at apex. Nectar glands confluent and subtending bases of all stamens; median glands present. Ovules 10–20 per ovary. Fruit dehiscent siliques, linear, oblong, or lanceolate, latiseptate, sessile; valves papery, with a distinct midvein, glabrous or puberulent, torulose; replum rounded, covered by connate valve margin; septum complete, membranous, translucent, veinless; style obsolete, rarely to 0.5 mm; stigma capitate, entire or slightly 2-lobed. Seeds uniseriate, wingless, sometimes distally appendaged, oblong, slightly flattened, often transversely oriented in locule; seed coat minutely reticulate, not mucilaginous when wetted; cotyledons incumbent.

Two species: Afghanistan, China, Kashmir, Nepal, Pakistan, Tajikistan; two species (one endemic) in China.

- 1a. Plants with a woody caudex; petals 5–6.5 mm; fruiting pedicels ascending; fruit 1.5–3(–3.5) cm, straight, subappressed to rachis, valve apex acute or acuminate 1. *C. crassifolia*
- 1b. Plants herbaceous; petals 2.5–3.5 mm; fruiting pedicels reflexed; fruit 1–1.5 cm, subfalcate, divaricate-reflexed, valve apex obtuse 2. *C. niyaensis*

1. *Christolea crassifolia* Cambessèdes in Jacquemont, Voy. Inde 4(Bot.): 17. 1844.

高原芥 gao yuan jie

Christolea afghanica (K. H. Rechinger) K. H. Rechinger; *C. crassifolia* var. *pamirica* (Korshinsky) Korshinsky; *C. incisa* O. E. Schulz; *C. pamirica* Korshinsky; *Ermania pamirica* (Korshinsky) Ovczinnikov & Junussov; *Koelzia afghanica* K. H. Rechinger; *Parrya ramosissima* Franchet.

Herbs perennial, (8–)15–40(–50) cm tall; caudex woody, compactly branched, to 2.5 cm in diam. Stems branched, sometimes woody at base, hirsute with simple trichomes to 1.2 mm, rarely glabrous. Leaves all cauline, several to many; petiole (2–) 5–12(–15) mm; leaf blade highly variable in shape, pubescence, or margin, usually obovate, spatulate, rhomboid, oblong, or elliptic, (0.8–)1.3–3.5(–5) × 0.4–1.6(–2.5) cm, leathery, densely to sparsely pubescent, rarely glabrous, base cuneate or attenuate, margin dentate or rarely incised along distal half, sometimes entire, apex acute or obtuse. Racemes several to many flowered. Fruiting pedicels 5–9(–12) mm, glabrous or sparsely puberulent, ascending. Sepals oblong, 3–4 × 1.5–2 mm, glabrous or sparsely puberulent. Petals white with purplish claws, 5–6.5 × 2–3 mm; claw 2.5–3.5 mm. Filaments white, median pairs 2.5–3 mm, lateral pair 1.5–2 mm; anthers oblong, 0.9–1.2 mm. Fruit linear, oblong, or lanceolate, 1.5–3(–3.5) cm × (2–) 2.7–4(–4.5) mm, subappressed to rachis, straight, flattened; valves constricted between seeds, glabrous or puberulent, base obtuse, apex acute or subacuminate; style obsolete or to 0.4 mm.

Seeds brown, oblong, 1.8–2.3 × 0.9–1.5 mm, laterally oriented. Fl. Jun–Sep, fr. Jul–Oct. 2n = 14*.

Alpine steppe, rocky slopes, bare slopes; 3500–4700 m. Qinghai, Xinjiang, Xizang [Afghanistan, Kashmir, Nepal, Pakistan, Tajikistan].

2. *Christolea niyaensis* Z. X. An, Fl. Xinjiang. 2(2): 376. 1995.

尼雅高原芥 ni ya gao yuan jie

Herbs short-lived perennial, ca. 25 cm tall. Stems branched, herbaceous, sparsely covered with simple, papillate trichomes 0.1–0.2 mm. Leaves all cauline, shortly petiolate or sessile; leaf blade oblong-lanceolate or subelliptic, 1–1.5 cm × 3–6 mm, subleathery, sparsely papillate, base cuneate, margin dentate, apex acute. Racemes several flowered. Fruiting pedicels 4–7 mm, glabrous, curved, reflexed, slender. Sepals oblong, 1.7–2 × ca. 1 mm, sparsely papillate, margin membranous. Petals white, obovate-oblong, 2.5–3.5 × ca. 1 mm; claw obsolete. Filaments white, median pairs ca. 2 mm, lateral pair ca. 1 mm; anthers oblong, 0.6–0.8 mm. Fruit oblong, 1–1.5 cm × 3–3.5 mm, divaricate-reflexed, subfalcate, flattened; valves constricted between seeds, glabrous, base and apex obtuse; style to 0.5 mm. Seeds brown, oblong, ca. 1.5 × 0.8. Fl. and fr. Jun.

• Rocky areas; ca. 2700 m. S Xinjiang (Minfeng Xian).

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