

51. AEGOPODIUM Linnaeus, Sp. Pl. 1: 265. 1753.

羊角芹属 yang jiao qin shu

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Herbs, perennial, essentially glabrous. Stem erect, branching above or simple. Basal and lower leaves petiolate, sheaths broad, membranous; blade broadly triangular to triangular in outline, ternate or ternate-2–3-pinnate; ultimate segments ovate or ovate-lanceolate, serrate, dentate-divided or lobed. Upper leaves reduced, usually ternate-pinnate. Umbels compound, terminal and lateral; peduncles longer than the leaves; bracts and bracteoles usually absent; rays ascending-spreading. Calyx teeth obsolete. Petals white or pinkish, obovate, apex with narrow inflexed lobule. Stylopodium conic; styles long, reflexed. Fruit oblong, oblong-ovoid or ovoid, slightly flattened laterally, glabrous; mericarp subrounded in cross section; ribs filiform, prominent to obscure; vittae inconspicuous. Seed face plane. Carpophore bifid at apex.

About seven species: Asia, Europe; five species (two endemic) in China.

Aegopodium anthriscoides (H. de Boissieu) H. de Boissieu (Bull. Soc. Bot. France 56: 350. 1909; *Carum anthriscoides* H. de Boissieu, Bull. Soc. Bot. France 53: 426. 1906) was described from Chongqing (“Tchen-Kéou” [Chengkou], *P. G. Farges s.n.*, holotype, P). However, it is not treated in this account as it is imperfectly known.

- 1a. Lower leaves ca. 23 cm, ternate-3–4-pinnate 5. *A. handelii*
- 1b. Lower leaves 3–15 cm, ternate-2-pinnate, rarely 3-pinnate.
 - 2a. Petals with several purple-red nerves 2. *A. latifolium*
 - 2b. Petals with single nerve.
 - 3a. Ultimate leaf segments broad-ovate, doubly serrate 3. *A. tadshikorum*
 - 3b. Ultimate leaf segments lanceolate or ovate-lanceolate, irregularly serrate.
 - 4a. Ultimate leaf segments lanceolate, apex long-acuminate to caudate 4. *A. henryi*
 - 4b. Ultimate leaf segments ovate or ovate-lanceolate, apex acute to acuminate 1. *A. alpestre*

1. *Aegopodium alpestre* Ledebour, Fl. Altaic. 1: 354. 1829.

东北羊角芹 dong bei yang jiao qin

Aegopodium alpestre var. *daucifolium* Gorovoj; *A. alpestre* f. *scabrum* Kitagawa; *A. alpestre* f. *tenerum* Hara; *A. alpestre* f. *tenuisectum* Kitagawa; *Carum alpestre* (Ledebour) Koso-Poljansky.

Plants (20–)30–100 cm. Roots fibrous from an elongate, slender rootstock. Stem hollow. Basal petioles 5–13 cm; blade broad-triangular in outline, 3–9 × 3.5–12 cm, ternate-2-pinnate; ultimate segments long-ovate or ovate-lanceolate, 1.5–3.5 × 0.7–2 cm, sessile, base cuneate, irregularly sharp-serrate, apex acute to acuminate. Umbels 3–8 cm across; peduncles 7–15 cm; rays 9–17, 2–4.5 cm; umbellules 10–15 mm across, many-flowered; pedicels 3–10 mm, unequal. Petals white. Styles 2–3 × stylopodium. Fruit oblong or oblong-ovoid, 3–3.5 × 1.8–2.5 mm. Fl. and fr. Jun–Aug.

Mixed forests or grassy places on mountain slopes; 900–2200 m. Heilongjiang, Jilin, Liaoning, Nei Mongol, Xinjiang [Japan, Korea, Mongolia, SE Russia].

Plants from E Kazakhstan, C Asia to Pakistan, and NW India are sometimes included within *Aegopodium alpestre*, but we agree with those authors who recognize these western plants as a separate species, *A. kashmiricum* (R. R. Stewart ex Dunn) Pimenov.

2. *Aegopodium latifolium* Turczaninow, Bull. Soc. Imp. Naturalistes Moscou 17: 719. 1844.

宽叶羊角芹 kuan ye yang jiao qin

Plants 40–90 cm. Stem few-branched above. Basal peti-

oles 5–20 cm; blade broad-triangular or rounded, 8–10 cm, width equaling or longer than the length, ternate-2-pinnate; pinnae 3–5; ultimate segments broad-ovate or obovate-oblong, 4–8 × 3–7 cm, base cuneate, glabrous on both surfaces, coarsely mucronate-dentate. Cauline leaves few, ternate-2-pinnate or 3-lobed. Terminal umbels ca. 6 cm across, lateral umbels smaller; rays 11–15, 2–3.5 cm, apical parts roughened; umbellules ca.

15 mm across. Petals white, purple-red nerves several. Styles ca. $2 \times$ stylopodium. Fruit oblong, $3\text{--}3.5 \times 2\text{--}2.5$ mm. Fl. May.

Lower mountain slopes, grassy places; ca. 1000 m. Xinjiang [Russia (E Siberia)].

This is a rather poorly known species in China and was previously thought to be endemic to the Lake Baikal region of E Siberia.

3. *Aegopodium tadshikorum* Schischkin in Schischkin & Bobrov, Fl. URSS 16: 600. 1950.

塔什克羊角芹 ta shi ke yang jiao qin

Plants 70–100 cm. Stem shallowly fluted, subglabrous, few-branched above. Basal petioles 10–20 cm; blade broad-triangular, 10–15 cm, ternate-2-pinnate; pinnae petiolulate; petiolules 3–6 cm; ultimate segments subovate, $3\text{--}11 \times 2\text{--}6$ cm, undivided or 2–3-lobed, both surfaces slightly roughened, sharply serrate or doubly serrate. Upper leaves smaller, 3-lobed, lobes ovate or ovate-lanceolate, sharply serrate. Terminal umbels 5–9 cm across; rays 13–20, 2–5 cm, somewhat unequal, apical parts roughened; umbellules 10–15 mm across, pedicels 2–9 mm, unequal. Petals white. Styles ca. 2 mm, $4\text{--}5 \times$ stylopodium. Fruit subovoid, $4\text{--}6 \times$ ca. 3 mm. Fl. and fr. May–Jul.

Forests or grassy places on mountain slopes; ca. 1100 m. W Xinjiang (Xinyuan) [Kyrgyzstan, Tajikistan].

This is a rather poorly known species in China.

4. *Aegopodium henryi* Diels, Bot. Jahrb. Syst. 29: 497. 1901.

巴东羊角芹 ba dong yang jiao qin

Plants 45–100 cm. Stem terete, striped, subglabrous. Basal leaves long-petiolate, petioles 5–8 cm; blade broad-triangular, ca. 14 cm, ternate-2–3-pinnate; ultimate segments lanceolate, $1.5\text{--}4 \times 0.8\text{--}1.5$ cm, base subtruncate to cuneate, irregularly serrate, apex long-acuminate or caudate. Upper leaves smaller, pinnate, petioles wholly sheathing. Umbels 3.5–4 cm across; peduncles 6–20 cm; rays 8–18, 2.5–4.5 cm, roughened; umbellules ca. 1 cm across, many-flowered; pedicels ca. 4 mm, unequal. Petals white, obovate. Styles ca. 1 mm. Fruit oblong-ovoid or long-ovoid, $3\text{--}3.5 \times 1.5\text{--}2$ mm. Fl. and fr. Jun–Aug.

• Lower mountain slopes; 500–1700 m. Gansu, W Hubei (Badong), Shaanxi, Sichuan.

This species is treated as endemic to China as literature reports from NE India and Myanmar are here considered dubious.

5. *Aegopodium handelii* H. Wolff in Handel-Mazzetti, Symb. Sin. 7: 717. 1933.

湘桂羊角芹 xiang gui yang jiao qin

Plants 50–100 cm. Stem stout, terete, shallowly fluted, hollow, branches spreading. Lower leaves petiolate, petioles 4–7

cm; blade broad-triangular, ca. 23 cm, ternate-3–4-pinnate; ultimate segments ovate or broad-ovate, $1.5\text{--}2.5 \times 1\text{--}1.5$ cm, base cuneate, margins and nerves roughened on both surfaces. Upper leaves reduced, ternate-pinnate. Umbels 3–5 cm across; peduncles 8–15 cm, apex roughened; rays 9–11, 3–4(–6) cm, slightly roughened; umbellules 0.8–1.4 cm across, many-flowered; pedicels 3–10 mm, unequal. Petals white. Styles $1\text{--}2 \times$ stylopodium. Fruit oblong-ovoid to long-ovoid, ca. 3.5×2 mm. Fl. and fr. Jul–Aug.

• Forests, among shrubs on valley sides; 800–1200 m. NE Guangxi (Longsheng), Guizhou, SW Hunan (Wugang), Zhejiang.

