## 79. ARCHANGELICA Wolf, Gen. Pl. 32. 1776.

古当归属 gu dang gui shu

Pan Zehui (潘泽惠); Mark F. Watson

Herbs, perennial, stout. Stem hollow. Leaves large, 2–3-pinnatisect. Umbels compound, terminal or lateral; rays numerous; bracts and bracteoles several, lanceolate or linear-lanceolate. Calyx teeth obsolete. Petals white, elliptic to oblong, apex acuminate, inflexed. Stylopodium short conic, margin sinuolate. Fruit ellipsoid, flattened dorsally, glabrous; ribs all corky-winged, lateral wings slightly broader than dorsal, intervals broad; vittae many, moderate in size to small and almost encircling the seed. Seed face plane or slightly concave. Carpophore 2-cleft to base.

About ten species: N temperate region; two species in China.

Archangelica is closely allied to Angelica; see the taxonomic comment under that genus.

1a. Leaves pubescent or hispidulous, terminal leaflets undivided; vittae 3–4 in each furrow, 6–7 on commissure ...... 1. A. brevicaulis 1b. Leaves glabrous, terminal leaflets often 3-lobed; vittae many, small and encircling the seed ................................ 2. A. decurrens

## **1. Archangelica brevicaulis** (Ruprecht) Reichenbach, J. Bot. 14: 45, 1876.

短茎古当归 duan jing gu dang gui

Angelocarpa brevicaulis Ruprecht in Osten-Sacken & Ruprecht, Sert. Tianschan. 48. 1869; Angelica brevicaulis (Ruprecht) B. Fedtschenko; Coelopleurum brevicaule (Ruprecht) Drude

Plants 40–100 cm. Root brown, cylindric, stout, with annular rings, aromatic. Stem 2–3 cm thick, sometimes shortened, thinly ribbed. Basal and lower petioles 9–20 cm, sheaths oblong or saccate, 3–6 cm wide, hispidulous along nerves; blade broadovate, 13– $17 \times 10$ –17 cm, 2–3-pinnate; leaflets short-petiolulate, ovate to oblong, 3–7 × 1.5–3 cm, base attenuate, margin obtusely or acutely toothed, pubescent adaxially, densely hispidulous abaxially. Umbels 6–15 cm across; peduncles, rays and pedicels hispidulous; bracts 1–2, narrow-lanceolate, margin ciliate; rays 20–40, 4–7 cm; bracteoles many, linear-lanceolate, longer than pedicels, hispidulous; umbellules 24–25-flowered. Petals oblong. Fruit 6–8 × 3–5 mm; dorsal ribs thick-winged, lateral ribs broadly winged, but narrower than the body; vittae 3–4 in each furrow, 6–7 on commissure. Fl. Jul–Aug, fr. Aug–Sep. n=11\*.

Meadows, damp stream banks; 2500–3400 m. W Xinjiang [Kyrgyzstan, Tajikistan].

This species has reputed medicinal value and is cultivated in Xin-

jiang, where the roots are used as a regional substitute for the traditional Chinese medicine "du huo" (see *Angelica biserrata*).

## 2. Archangelica decurrens Ledebour, Fl. Altaic. 1: 316. 1829.

下延叶古当归 xia yan ye gu dang gui

Angelica officinalis Moench var. decurrens (Ledebour) Avé-Lallemant; Angelica archangelica var. decurrens (Ledebour) Weinert.

Plants 1–2 m. Root brown, cylindric, stout. Stem 2–6 cm thick, thinly ribbed. Basal leaves to 100 cm (including petiole). Cauline leaves petiolate, petioles 8–17 cm, sheaths saccate-inflated, to 6 cm wide, glabrous; blade broadly triangular-ovate, 11–15(–20) × 11–17 cm, 2–3-pinnate; leaflets subsessile, oblong to ovate-lanceolate, base cuneate, margin irregularly toothed, glabrous, terminal leaflets often 3-lobed, decurrent along petiolules. Umbels subglobose, 7–15 cm across; bracts 4–7, lanceolate, pubescent; rays 20–50, 2.5–5 cm, subequal, hispidulous; bracteoles 5–10, linear-lanceolate, margin ciliate, shorter than or equaling pedicels; umbellules 30–50-flowered. Petals broad-ovate. Fruit 5–10 × 3–5 mm; ribs all thick-winged, lateral ribs narrower than the body; vittae numerous, small, encircling the seed. Fl. Jul–Aug, fr. Aug–Sep.

Forests, shrubby thickets, ravines, river banks, damp areas; 500–1500 m. Nei Mongol, Xinjiang [Kazakhstan, Kyrgyzstan, Mongolia, Russia (Siberia); C and E Asia].

This species has reputed medicinal value in Nei Mongol.

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