

68. CNIDIUM Cusson, Mém. Soc. Méd. Emul. Paris, 280. 1782.

蛇床属 she chuang shu

Pu Fading (溥发鼎 Pu Fa-ting); Mark F. Watson

Herbs, perennial or biennial, rarely annual. Stems usually solitary, sometimes several, branches slender. Basal and lower leaves 2–3-pinnate or 1–2-pinnate; ultimate segments obovate, linear-lanceolate or linear. Upper leaves reduced, smaller, sessile on expanded sheaths. Umbels compound, terminal and lateral; bracts several, usually persistent, linear to lanceolate, rarely caducous; rays 6–15(–20); bracteoles several, linear. Calyx teeth usually obsolete, occasionally minute. Petals white or pinkish, base cuneate, apex notched, with narrow incurved lobule. Stylopodium conic or low-conic; styles longer than stylopodium, reflexed after flowering. Fruit oblong-ovoid or subglobose, slightly compressed dorsally; ribs 5, narrowly corky-winged, lateral ribs a little broader than the others, or ribs subequal; vittae 1 in each furrow, 2 on commissure. Seed face plane, rarely slightly concave. Carpophore 2-parted.

Six to eight species: Asia, Europe; five species (one endemic) in China.

- 1a. Bracteoles oblong or oblong-ovate, broadly white membranous-margined; fruit oblong-ovoid, 3–5 × 2–3 mm ..... 1. *C. dauricum*
- 1b. Bracteoles linear, narrowly or hardly membranous-margined; fruit ovoid, oblong-ovoid or subglobose, 1.5–3.5 × 1–3.5 mm.
  - 2a. Fruit subglobose, 2–3.5 × 2–3.5 mm; stems several; leaves 1–2-pinnate ..... 2. *C. japonicum*
  - 2b. Fruit ovoid or oblong-ovoid, 1.5–3 × 1–2 mm; stem solitary; leaves 2–3-pinnate.
    - 3a. Bracts persistent; bracteole margin very finely ciliate ..... 3. *C. monnieri*
    - 3b. Bracts caducous; bracteole margin slightly scabrous, without cilia.
      - 4a. Ultimate leaf segments linear-lanceolate or falcate, 5–30 × 1.5–3 mm ..... 4. *C. salinum*
      - 4b. Ultimate leaf segments linear, 4–15 × 0.5–1 mm ..... 5. *C. sinchianum*

1. **Cnidium dauricum** (Jacquin) Fischer & C. A. Meyer, Index Sem. Hort. Petrop. 2: 33. 1836.

兴安蛇床 xing an she chuang

*Laserpitium dauricum* Jacquin, Hort. Bot. Vindob. 3: 22. 1776.

Plants perennial, 80–100 cm. Taproot rather thick. Stem solitary, erect, striate. Basal and lower petioles 5–15 cm; blade ovate-triangular, 10–20 × 7–15 cm, 2–3-pinnate; ultimate segments ovate-lanceolate to lanceolate, 5–15 × 2–3 mm. Umbels 5–8 cm across; bracts 6–8, lanceolate, 5–15 mm, margins broadly white membranous; rays 10–20, 2–4 cm, unequal; bracteoles 4–7(–9), oblong or oblong-ovate, ca. equal to or longer than pedicels, margins broadly white membranous, apex cuspidate; umbellules 10–20-flowered; pedicels 5–8 mm. Calyx teeth obsolete. Stylopodium conic. Fruit oblong-ovoid, 3–5 × 2–3 mm; ribs subequal. Seed face plane. Fl. Jul–Aug, fr. Aug–Sep.

Riparian wet grasslands or meadows; 500–2000 m. Hebei, Heilongjiang, Jilin, Nei Mongol [Japan, Korea, Mongolia, Russia].

2. **Cnidium japonicum** Miquel, Ann. Mus. Bot. Lugduno-Batavi 3: 60. 1867.

滨蛇床 bin she chuang

*Selinum japonicum* (Miquel) Franchet & Savatier.

Plants perennial or biennial, 15–20 cm. Taproot elongate, 5–13 cm, or fusiform, ca. 8 mm thick. Stems several. Basal petioles 1–5(–7) cm; blade oblong-ovate, 5–6 × 2–3 cm, 1–2-pinnate; pinnae 3–4 pairs; ultimate segments oblanceolate or obovate, 5–8(–10) × 1.5–4 mm. Umbels 1–2 cm across; bracts 4–5(–8), linear, 3–5 mm; rays 6–9, 1–2 cm, unequal; bracteoles 4–5(–10), linear, 2–4 mm, nearly equal pedicels, hardly membranous margined; umbellules 8–10-flowered. Fruit subglobose, 2–3.5 × 2–3.5 mm; lateral ribs slightly broader than the dorsal. Seed face plane. Fl. Aug–Sep, fr. Sep–Oct. 2n = 20.

Seashores. Liaoning [Japan, Korea].

3. **Cnidium monnieri** (Linnaeus) Cusson, Mém. Soc. Méd. Emul. Paris, 280. 1782.

蛇床 she chuang

Plants annual, 10–60(–80) cm. Taproot 2–3 mm thick. Stem solitary, striate, scabrous. Lower petioles 3–8 cm; blade ovate-lanceolate, 3–8 × 2–5 cm, 2–3-pinnate; ultimate segments linear to linear-lanceolate, 3–10 × 1–1.5 mm, veins and margins scabrous. Umbels 2–3(–5) cm across; bracts 6–10, linear to linear-lanceolate, 2–3 mm, persistent, margins narrowly white membranous, very finely ciliate; rays 8–20(–30), 5–20 mm, unequal; bracteoles 5–9, linear, nearly equal pedicels, margins ciliate; umbellules 15–20-flowered; pedicels 3–5 mm. Calyx teeth obsolete or minute. Stylopodium conic; styles 3–4 times longer than stylopodium. Fruit ovoid, 1.5–3 × 1–2 mm; lateral ribs slightly broader than the dorsal. Seed face plane. Fl. Apr–Jul, fr. Jul–Oct.

Riparian grasslands, field margins. Almost throughout China [India, Korea, Laos, Mongolia, Russia, Vietnam; Europe; adventive in North America].

- 1a. Bracteoles nearly as long as pedicels; calyx teeth inconspicuous; fruit ovoid, 1.5–3 × 1–2 mm ..... 3a. var. *monnieri*  
1b. Bracteoles longer than pedicels; calyx teeth minute; fruit subglobose, 1–2 × 1–2 mm ..... 3b. var. *formosanum*

**3a. *Cnidium monnieri* var. *monnieri***

蛇床(原变种) she chuang (yuan bian zhong)

*Selinum monnieri* Linnaeus, Cent. Pl. I: 9. 1755; *Cicuta monnieri* (Linnaeus) Crantz; *C. sinensis* Zuccagni; *Cnidium microcarpum* Turczaninow; *C. mongolicum* H. Wolff; *Ligusticum mongolicum* (H. Wolff) Leute; *L. monnieri* (Linnaeus) Calestani; *Pinasgelon monnieri* (Linnaeus) Rafinesque; *Seseli daucifolium* C. B. Clarke.

Plants 10–80 cm. Bracteoles nearly as long as pedicels. Calyx teeth obsolete. Fruit ovoid, 1.5–3 × 1–2 mm.

Riparian grasslands, field margins. Almost throughout China [India, Korea, Laos, Mongolia, Russia, Vietnam; Europe; adventive in North America].

The fruits are used as “she chuang zi,” a common herb of traditional Chinese medicine.

**3b. *Cnidium monnieri* var. *formosanum* (Y. Yabe) Kitagawa, J. Jap. Bot. 48: 237. 1973.**

台湾蛇床 tai wan she chuang

*Cnidium formosanum* Y. Yabe, J. Coll. Sci. Imp. Univ. Tokyo 16(4): 63. 1902.

Plants 10–30 cm. Bracteoles longer than pedicels. Calyx teeth minute, triangular. Fruit subglobose, 1–2 × 1–2 mm long.  $2n = 20^*$ .

- Taiwan.

The fruits used as a regional substitute for the medicinal herb “she chuang zi” (see var. *monnieri*).

**4. *Cnidium salinum* Turczaninow, Bull. Soc. Imp. Naturalistes Moscou 17: 733. 1844.**

碱蛇床 jian she chuang

*Cnidium salinum* var. *rhizomaticum* Y. C. Ma; *Kadenia salina* (Turczaninow) Lavrova & V. N. Tikhomirov; *Ligusticum salinum* (Turczaninow) Koso-Poljansky; *Selinum dubium* (Schkuhr) Leute subsp. *salinum* (Turczaninow) Leute; *S. salinum* (Turczaninow) Vodopianova.

Plants perennial or biennial, 20–50(–70) cm. Root 3–6 mm thick; nodes sometimes inflated. Stem solitary, striate. Basal and lower petioles 5–10 cm; blade oblong-ovate, 6–12 × 3–10 cm, 2–3-pinnate, rarely 1–2-pinnate; ultimate segments linear-lanceolate or falcate, 5–30 × 1.5–3 mm, margins slightly revolute. Umbels 3–6 cm across; bracts caducous or occasionally one persistent, linear; rays (6–)10–15, unequal, slightly scabrous inside; bracteoles 4–6, linear, longer than pedicels, margins narrowly membranous, slightly scabrous, not ciliate. Petals white or pinkish. Stylopodium low-conic; styles 2–3 times longer than stylopodium, reflexed. Fruit oblong-ovoid, 2.5–3 × ca. 1.5 mm. Seed face plane or slightly concave. Fl. Jul–Aug, fr. Aug–Sep.

Damp grasslands, wet meadows. Gansu, Hebei, Heilongjiang, Nei Mongol, Ningxia, Qinghai [Mongolia, Russia].

**5. *Cnidium sinchianum* K. T. Fu, Fl. Tsinling. 1(3): 459. 1981.**

辛加山蛇床 xin jia shan she chuang

*Selinum sinchianum* (K. T. Fu) C. Q. Yuan & L. B. Li.

Plants perennial, 20–35 cm. Root coniform, slender. Stem erect, unbranched, glabrous. Lower leaves petiolate; blade triangular-ovate, 2–3-pinnate; ultimate segments linear, 4–15 × 0.5–1 mm. Umbels terminal, peduncle 4–5.5 cm; bracts caducous; rays 6–11, 10–17 mm; bracteoles 8–10, linear, exceeding pedicels, scabrous at margins; umbellules 12–16-flowered; pedicels 2–4 mm. Calyx teeth obsolete. Stylopodium low-conic; styles slightly recurved, ca. 1.2 mm. Fruit oblong-ovoid, ca. 4 mm. Fl. Jun–Sep, fr. Sep–Oct.

- Shady moist places. Shaanxi (Xingjia Shan).

This species is incompletely known, but differs from *Selinum* in the obsolete calyx teeth and the thick, slightly corky fruit ribs.

The following species have been described from Chinese material, but are imperfectly known as no specimens have been seen or the specimens are inadequate.

*Cnidium affine* H. Wolff (Repert. Spec. Nov. Regni Veg. Beih. 12: 451. 1922, not C. A. Meyer, 1849), described from Jilin (“Hsiau Wutai Shan” [Xiaowutai Shan], *W. Limpricht* 545, holotype, ?B).

*Cnidium limprichtii* H. Wolff (Repert. Spec. Nov. Regni Veg. Beih. 12: 451. 1922; *Tilingia limprichtii* (H. Wolff) Leute), described from Shanxi (“Yimaling to Lingsiu,” 1600 m, *W. Limpricht* 637, holotype, ?B).

*Cnidium warburgii* H. Wolff (Repert. Spec. Nov. Regni Veg. 19: 310. 1924), described from C and S Taiwan (*O. Warburg* 9792 & 10686, syntypes, unlocalized).

