

57. **BERULA** W. D. J. Koch in Röhling, *Deutschl. Fl.*, ed. 3, 2: 25, 433. 1826.

天山泽芹属 *tian shan ze qin shu*

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

Siella Pimenov.

Herbs perennial, aquatic or semi-aquatic, glabrous throughout. Rhizomatous, root fibrous. Stem suberect, usually stoloniferous. Aerial leaves 1-pinnate, submerged leaves more dissected. Umbels compound, usually opposite leaves; bracts and bracteoles several, oblong or lanceolate, margins membranous, usually reflexed. Calyx teeth subulate or triangular, caducous. Petals white, obovate, base short-attenuate, apex retuse with small inflexed lobule. Stylopodium conic; styles longer than the stylopodium, recurved. Fruit ovoid, subdidymous, slightly compressed laterally, glabrous; exocarp corky and slightly thickened; dorsal and intermediate ribs filiform, lateral ribs obscure; vittae numerous, small, forming a continuous band encircling the seed. Seed face plane. Carpophore 2-cleft to base.

Two species: Africa, C and SW Asia, Australia, Central America (Mexico), Europe, North America; one species in China.

1. ***Berula erecta*** (Hudson) Coville, *Contr. U.S. Natl. Herb.* 4: 115. 1893.

天山泽芹 *tian shan ze qin*

Sium erectum Hudson, *Fl. Angl.* 103. 1762; *Berula angustifolia* Mertens & W. D. J. Koch, nom. illeg. superfl.; *Siella erecta* (Hudson) Pimenov; *Sium angustifolium* Linnaeus, nom. illeg. superfl.

Plants 40–50(–100) cm. Stem hollow, branched, rooting at basal nodes. Submerged leaves 3–4-pinnate; ultimate segments linear. Aerial leaves 1-pinnate; pinnae 4–9(–15) pairs, basal pairs remote, sessile, ovate-lanceolate or oblong, 1.5–5(–7) ×

0.8–2.5(–3) cm, base obliquely truncate, usually with 1 lobe at basal edge, margins serrate or irregularly incised. Upper leaves smaller, sheaths expanded. Umbels 4–6 cm across; bracts 3–6, oblong or lanceolate, 6–21 mm, entire or incised; rays 5–15 (–20), 2–3 cm, unequal; bracteoles 5–8, 1.5–5 mm, unequal, usually entire, nearly as long as or longer than the pedicels; umbellules 10–20-flowered; pedicels 2–5 mm, unequal. Calyx teeth 0.4–0.8 mm. Fruit 2–2.2 × 1.5–2 mm. Fl. May–Jun, fr. Jul–Aug.

Streamsides, other riparian habitats on plains or hills; ca. 1500 m. Xinjiang [Afghanistan, NW India, Kashmir, Kazakhstan, Kyrgyzstan, W Nepal, Pakistan, Russia, Tajikistan, Turkmenistan, Uzbekistan; N Africa, SW Asia, Europe; introduced in the Americas and Australia].

