## 2. AMETHYSTEA Linnaeus, Sp. Pl. 1: 21. 1753.

## 水棘针属 shui ji zhen shu

Herbs annual. Stems erect. Leaves petiolate; leaf blade palmatipartite, margin rarely entire. Panicles terminal; floral leaves similar to stem leaves, reduced; bracteoles linear. Calyx campanulate, 10-veined, veins conspicuous; teeth 5, subregular, enlarged in fruit. Corolla tube included or slightly exserted, not hairy annulate inside, 2-lipped; upper lip 2-lobed, lobes similar to lateral lobes of lower lip; lower lip slightly larger, 3-lobed, middle lobe subcircular. Stamens 4, anterior 2 fertile, involute in bud, elongate after anthesis, exserted from sinus of upper lip, posterior 2 reduced to staminodes, minute, or almost absent; anthers 2-celled, cells divaricate, longitudinally dehiscent, apically confluent. Style unequally 2-cleft, posterior lobe short or inconspicuous. Nutlets obovoid triquetrous.

A monotypic genus: Asia.

## 1. Amethystea caerulea Linnaeus, Sp. Pl. 1: 21. 1753.

## 水棘针 shui ji zhen

Stems 30-100 cm tall, base sometimes woody, pyramidally branched, purplish, pilose or puberulent especially on nodes. Petiole 0.7-2 cm, purple or purplish green, grooved, narrowly winged, sparsely hirsute; leaf blade triangular to subovate, sometimes purplish, usually 3-5partite, lobes lanceolate, adaxially puberulent to subglabrous, abaxially glabrous, margin coarsely serrate to double serrate; middle lobe  $2.5-4.7 \times 0.8-1.5$  cm; lateral lobes  $2-3.5 \times 0.7-1.2$ cm, asymmetrical, decurrent. Panicles composed of lax, long pedunculate cymes; peduncle sparsely glandular; bracteoles ca. 1 mm, ciliate. Pedicel 1-2.5 mm, sparsely glandular. Calyx ca. 2 mm, papillate outside, glandular, the 5 accessory veins inconspicuous; teeth triangular, ca. 1 mm, apically acuminate, ciliate. Corolla blue or purplish blue, tube glabrous; limb glandular, lobes of upper lip oblong-ovate to ovate, lower lip slightly larger. Nutlets abaxially nettedwrinkled, adaxially ribbed, smooth, areole ca. 1/2 as long as nutlet. Fl. Aug-Sep, fr. Sep-Oct.

Fields, sandy soil along rivers, open roadsides, streamsides; 200–3400 m. Anhui, Gansu, Hebei, Henan, Hubei, Jilin, Liaoning, Nei Mongol, Shaanxi, Shandong, Shanxi, Sichuan, Xinjiang, Xizang, Yunnan Japan, Kazakhstan, Korea, Kyrgyzstan, Mongolia, Russia; SW Asial.

Used medicinally for perspiration.