## **46. BETONICA** Linnaeus, Sp. Pl. 2: 573. 1753.

药水苏属 yao shui su shu

Herbs erect, perennial, pilose. Basal leaves long petiolate; leaf blade broadly ovate to lanceolate, base strongly cordate, margin coarsely crenate. Verticillasters many flowered, in terminal spikes; floral leaves sessile; bracteoles at least as long as calyx. Calyx tubular-campanulate, 5-veined, hairy, glabrous at throat inside; teeth 5, equal, straight, rigidly spinescent. Corolla cylindric, at least as long as calyx, 2-lipped, without hairy annulus inside, straight or slightly curved downward, rarely dilated at throat; upper lip concave, margin entire or emarginate; lower lip spreading, 3-lobed; middle lobe longer than lateral lobes, obtuse to emarginate. Stamens 4, parallel, ascending to underside of upper lip of corolla; anterior stamens longer, rarely curved laterally at throat after anthesis; anther cells 2, subparallel. Style apex subequally 2-cleft. Nutlets rounded to subtruncate.

About 15 species: SW Asia, Europe; one species cultivated in China.

Many workers consider Betonica to be synonymous with Stachys.

## 1. Betonica officinalis Linnaeus, Sp. Pl. 2: 573. 1753.

药水苏 yao shui su

Betonica glabrata K. Koch; Stachys betonica Bentham; S. officinalis (Linnaeus) Trevisan de Saint-Léon ex Briquet.

Plants rhizomatous. Stems 50-100 cm, striate, densely fine pilose. Petioles of stem leaves 4-7.5 cm; basal leaf blade broadly ovate, 8-12×3-5 cm, pilose, base deeply cordate, margin crenate, apex obtuse; stem leaf blade ovate, 4.5–5.5×3–4 cm, widely spaced. Spikes ca. 4 cm, compact, oblong; lower verticillasters sometimes ± widely spaced; basal floral leaves sessile, oblong-lanceolate, ca. 2.5×1 cm, margin dentate, apex acute; upper floral leaves linear, margin entire, ca. 6.5 mm; bracteoles ovate to linear, ca. 6.5 mm, abaxially puberulent, margin densely pilose, adaxially glabrous, apex rigidly acute. Flowers subsessile. Calyx ca. 6.5 mm, densely pilose; teeth narrowly triangular, ca. 2.5 mm, pilose. Corolla purple, ca. 1.2 cm, puberulent except for base outside; tube cylindric, ca. 8 mm; upper lip oblong, ca. 4×2.5 mm, emarginate, undulate; lower lip oblate, ca. 4×6 mm; middle lobe to 4 mm in diam., broadly ovate, undulate; lateral lobes ovate, ca. 1.5 mm wide. Stamens nearly included; filaments puberulent. Ovary black-brown, glabrous. Fl. May.

Cultivated in China [SW Asia, Europe].