

25. PRUNELLA Linnaeus, Sp. Pl. 2: 600. 1753.

夏枯草属 xia ku cao shu

Herbs perennial. Leaves pinnatifid to subentire. Verticillasters 6-flowered, in terminal ovoid or ovoid-globose spikes; bracts broad, membranous, margin ciliate, overlapping; bracteoles minute or absent. Pedicel very short or absent. Calyx tubular-campanulate, ± flattened dorsiventrally, irregularly 10-veined, netted between veins, 2-lipped, base hairy, throat glabrous; upper lip flat, truncate, shortly 3-toothed; lower lip 2-cleft to 1/2 of lip, teeth lanceolate, mouth closed in fruit. Corolla tube gradually dilated on 1 side, exserted, throat slightly constricted, scaly annulate inside, limb 2-lipped; upper lip straight, galeate, margin entire; lower lip 3-lobed, middle lobe largest, concave, denticulate; lateral lobes oblong, reflexed. Stamens 4, anterior 2 longer, ascending to underside of upper lip, parallel, free; filament apex dentate; anther cells 2, divaricate. Ovary glabrous. Style glabrous, apex equally 2-cleft, lobes subulate. Nutlets brown, subglobose, ovoid to oblong, glabrous, smooth or tuberculate, apex rounded.

About seven broadly defined species (15 by some authors): Africa, Asia, Europe, North America; four species (one cultivated) in China.

- 1a. Corolla tube upwardly curved, 2–2.7 cm, ca. 3/4 as long as calyx; spike conspicuously long pedunculate; sterile tooth of anterior filaments short, tubercular; adaxial calyx teeth conspicuous; nutlets subglobose, slightly tuberculate, conspicuously grooved on margin and back 4. *P. grandiflora*
- 1b. Corolla with straight tube, less than 2 cm, less than 2/3 as long as calyx; spike short pedunculate to sessile; sterile tooth of anterior filaments longer than anther; adaxial calyx teeth inconspicuous; nutlets ovoid to oblong, smooth.
 - 2a. Plants conspicuously hispid throughout; corolla blue-purple, upper lip with a conspicuous hispid belt on back 3. *P. hispida*
 - 2b. Plants sparsely strigose or subglabrous throughout; corolla purple, red-purple, reddish, to white, upper lip glabrous or subglabrous on back.
 - 3a. Plants slender; corolla slightly exserted, ca. 1.3 cm 1. *P. vulgaris*
 - 3b. Plants robust; corolla much exserted, 1.8–2.1 cm 2. *P. asiatica*

1. *Prunella vulgaris* Linnaeus, Sp. Pl. 2: 600. 1753.

夏枯草 xia ku cao

Stems 20–30 cm, ascending, base much branched, purple-red, sparsely strigose or subglabrous. Petiole 0.7–2.5 cm, upper ones shorter; leaf blade lanceolate to ovate, 1.5–6×0.6–2.5 cm, glabrous to sparsely villous, base truncate to broadly cuneate-decurrent, margin undulate to entire, apex obtuse to rounded. Spikes 2–4 cm, sessile; floral leaves similar to cauline leaves, sessile or short petiolate, subovate; bracts purplish, broadly cordate, ca. 7×11 mm, cuspidate, veins sparsely hispid. Calyx campanulate, ca. 1 cm, sparsely hispid, tube ca. 4 mm; upper lip suboblanceolate, subtruncate; lower lip narrower, teeth acuminate. Corolla purplish or white, ca. 1.3 cm, slightly exserted, glabrous; tube ca. 7 mm, base ca. 1.5 mm wide, gradually dilated to ca. 4 mm wide at throat; upper lip subcircular, ca. 5.5 mm in diam., ± galeate, emarginate; lower lip ca. 1/2 as long as upper lip, middle lobe subobcordate, fringed; lateral lobes oblong, spreading, minute. Anterior stamens very long. Nutlets oblong-ovoid, ca. 1.8×0.9 mm, slightly 1-furrowed. Fl. Apr–Jun, fr. Jul–Oct.

Open slopes, grasslands, wet streamsides, forest margins, thickets; to 3200 m. Fujian, Gansu, Guangdong, Guangxi, Guizhou, Henan, Hubei, Hunan, Jiangxi, Shaanxi, Sichuan, Taiwan, Xinjiang, Xizang, Yunnan, Zhejiang [Bhutan, India, Japan, Kazakhstan, Korea, Kyrgyzstan, Nepal, Pakistan, Russia, Tajikistan, Turkmenistan, Uzbekistan; Africa, SW Asia, Europe, North America].

- 1a. Leaves ovate-oblong to ovate, 1.5–6×0.7–2.5 cm, inconspicuously undulate to subentire; adaxially hirtellous or subglabrous; abaxially subglabrous 1a. var. *vulgaris*
- 1b. Leaves lanceolate to oblong-lanceolate, 1.5–4×0.6–1 cm, entire, glabrous or sparsely villous 1b. var. *lanceolata*

1a. *Prunella vulgaris* var. *vulgaris*

夏枯草 xia ku cao

Prunella vulgaris var. *elongata* Makino; *P. vulgaris* var. *japonica* Kudô; *P. vulgaris* var. *leucantha* Schur.

Leaves ovate-oblong to ovate, 1.5–6×0.7–2.5 cm, margin inconspicuously undulate to subentire, adaxially hirtellous or subglabrous, abaxially subglabrous.

Open slopes, grasslands, wet streamsides; to 3000 m. Fujian, Gansu, Guangdong, Guangxi, Guizhou, Henan, Hubei, Hunan, Jiangxi, Shaanxi, Sichuan, Taiwan, Xinjiang, Xizang, Yunnan, Zhejiang [Bhutan, India, Japan, Kazakhstan, Korea, Kyrgyzstan, Nepal, Pakistan, Russia, Tajikistan, Turkmenistan, Uzbekistan; Africa, SW Asia, Europe, North America].

Used medicinally.

1b. *Prunella vulgaris* var. *lanceolata* (W. P. G. Barton) Fernald, Rhodora 15: 183. 1913.

狭叶变种 xia ye bian zhong

Prunella pennsylvanica Willdenow var. *lanceolata* W. P. G. Barton, Fl. Philadelph. Prod. 64. 1815; *P. vulgaris* var. *elongata* Benth.

Leaves lanceolate to oblong-lanceolate, 1.5–4×0.6–1 cm, margin entire, glabrous to sparsely villous.

• Grassy slopes, forest margins, thickets; to 3200 m. Sichuan, Yunnan.

2. *Prunella asiatica* Nakai, Bot. Mag. (Tokyo) 44: 19. 1930.

山菠菜 shan bo cai

Prunella asiatica var. *albiflora* (Koidzumi) Nakai; *P. vulgaris* Linnaeus var. *albiflora* Koidzumi.

Stems purple-red, numerous, ascending, 20–60 cm, pilose especially toward apex. Petiole 1–2 cm; leaf blade ovate to ovate-oblong, 3–4.5×1–1.5 cm, adaxially appressed puberulent or subglabrous, abaxially sparsely pilose on veins, base cuneate to attenuate, margin slightly undulate or crenate-serrate, apex obtuse to acute. Spikes terminal, 3–5 cm, sessile; floral leaves subsessile or short petiolate, broadly lanceolate;

bracts tinged red, reduced at apex, oblate, 5–8×6–8 mm, caudate, veins pilose. Pedicel ca. 2 mm. Calyx ca. 1 cm, apex red or purple, white villous, tube ca. 4 mm, turbinate; upper lip subcircular, ca. 6 mm wide, truncate; lower lip narrower, ca. 3.5 mm, teeth lanceolate, spiny. Corolla purplish or dark purple to white, 1.8–2.1 cm, glabrous; tube ca. 1 cm, abruptly dilated beyond middle; upper lip oblong, ca. 9×6 mm, concave, keeled; lower lip ca. 8×9 mm, middle lobe subcircular, fringed; lateral lobes oblong, small, pendulous. Anterior stamens very long. Nutlets ovoid, ca. 1.5×1 mm, apex rounded, glabrous. Fl. May-Jul, fr. Aug-Sep.

Grassy slopes, wet areas, thickets; to 1700 m. Anhui, Heilongjiang, Jiangsu, Jiangxi, Jilin, Liaoning, Shandong, Shanxi, Zhejiang [Japan, Korea].

Used as a diuretic.

3. *Prunella hispida* Benth, Pl. Asiat. Rar. 1: 66. 1830.

硬毛夏枯草 ying mao xia ku cao

Prunella stolonifera H. Léveillé & Giraudias; *P. vulgaris* Linnaeus var. *hispida* (Benth) Benth.

Stem base prostrate, 15–30 cm, striate, densely hirsute. Petiole 0.5–1.5 cm; leaf blade ovate to ovate-lanceolate, 1.5–3×1–1.3 cm, densely hispid, base rounded, margin undulate-serrate to crenate-serrate, apex acute. Spikes 2–3×2 cm; floral leaves subsessile; bracts subcordate, 8–10 mm wide, abruptly acuminate, densely hirsute, margin hispid. Pedicel less than 1 mm. Calyx purple, tubular-campanulate, ca. 1 cm, hispid on veins; upper lip subcircular, ca. 6×5 mm; lower lip ca. 3 mm wide, teeth lanceolate, spinescent. Corolla dark purple to blue purple, ca. 1.5(–1.8) cm, glabrous, tube ca. 1 cm, base ca. 1.5 mm, gradually dilated to 4 mm wide at throat; upper lip oblong, ca. 5×4 mm, keeled, concave, emarginate, hispid on back; lower lip ca. 5×6 mm, with middle lobe subcircular, undulate-lobulate; lateral lobes oblong, minute, pendulous. Anterior stamens very long. Nutlets ovoid, ca. 1.5×1 mm, slightly flattened abaxially, apex rounded, glabrous. Fl. and fr. Jun-Jan.

Forest margins, grassy slopes; 1500–3800 m. Sichuan, Xizang, Yunnan [India].

4. *Prunella grandiflora* (Linnaeus) Jacquin, Fl. Austriac. 4: 40. 1776.

大花夏枯草 da hua xia ku cao

Prunella vulgaris Linnaeus var. *grandiflora* Linnaeus, Sp. Pl. 2: 600. 1753; *P. grandiflora* (Linnaeus) Moench.

Stems ascending, 15–60 cm, villous-hirsute. Petiole 2.5–4 cm, hispid; leaf blade ovate-oblong, 3.5–4.5×2–2.5 cm, sparsely hirsute, abaxially subglabrous, ciliolate, base subrounded, margin entire, apex obtuse. Spikes ca. 4.5 cm, oblong, pedunculate; floral leaves sessile, oblong-lanceolate; bracts numerous, mucronate, sparsely villous on veins. Pedicel ca. 1 mm. Calyx ca. 8 mm, veins sparsely hirsute, tube ca. 3 mm; upper lip subcircular, ca. 5×5 mm, subrounded, with teeth broadly triangular, spinescent, lateral teeth longer; lower lip oblong, ca. 6×3 mm, with teeth lanceolate, spinescent. Corolla blue, 2–2.7 cm, tube ca. 9 mm, curved; upper lip oblong, ca. 12×7 mm, recurved; middle lobe of lower lip undulate-lobulate; lateral lobes pendulous.

Nutlets subglobose, slightly tuberculate, back and margin conspicuously grooved. Fl. Sep, fr. Oct.

Cultivated in Nanjing [C and W Asia, Europe].

