### **19. MYOSOTIS** Linnaeus, Sp. Pl. 1: 131. 1753.

勿忘草属 wu wang cao shu

Herbs annual or perennial, short pubescent or glabrescent. Leaves alternate. Cymes becoming racemelike after anthesis, ebracteate or rarely with few bracts. Calyx 5-lobed or parted, slightly enlarged or not in fruit. Corolla blue or white, rarely light purple, usually salverform, rarely campanulate or funnelform; throat appendages 5, scalelike; lobes 5, spreading, rotund, margin convolute. Stamens included; anthers ovate to elliptic, apex obtuse. Ovary 4-parted. Style linear; stigma discoid, mucronate. Gynobase flat or slightly convex. Nutlets 4, usually ovate, appressed, lenticular, vertical, smooth, shiny, attachment scar basal.

About 50 species: Africa, Asia, Australia, Europe, North America; five species in China.

- 1a. Calyx 5-lobed for 1/2–2/3 its length, sparsely strigose outside.
  - 2a. Pedicel 6–8 mm in fruit: nutlets ovoid: lower stem nodes without roots: leaf blade oblanceolate to oblong 2 M. caespitosa
  - Pedicel to 22 mm in fruit; nutlets triangular; lower stem nodes with roots; leaf blade oblong
- 1b. Calyx 5-lobed nearly to base, densely pubescent with straight and hooked hairs.
  - 3a. Stems usually diffuse; inflorescences few flowered; pedicel reflexed or recurved, to 15 mm; nutlet
  - 3b. Stems erect; inflorescences many flowered; pedicel erect, 4-6 mm in fruit; nutlet base without appendages
    - 4a. Rhizomes slender, producing separate lax sterile shoots to 10 cm tall and flowering stems ............................... 5. M. krylovii

#### 1. Myosotis sparsiflora Mikan, Bot. Taschenbuch 74. 1807.

稀花勿忘草 xi hua wu wang cao

Strophiostoma sparsiflorum (Mikan) Turczaninow.

Herbs annual. Stems diffuse, much branched at base, 15-25 cm tall; branches spreading, sparsely pilose with hooked hairs. Lower stem leaves obovate or lanceolate,  $2-3 \times 0.8-1.2$ cm, sparsely pilose, base attenuate, decurrent and forming a wing, apex obtuse to  $\pm$  acute. Upper stem leaves sessile, ovate-lanceolate to elliptic, apex acute. Inflorescences terminal on branches, ebracteate. Pedicel reflexed or recurved. to 1.5 cm in fruit, densely pubescent, with hooked hairs. Flowers few and scattered; upper flowers several. Calvx 1.5–2 mm, slightly enlarged in fruit, to 4-5 mm; lobes lanceolate, ca. 2/3 as long as calyx, densely spreading pilose, with hooked hairs, apex acuminate. Corolla light blue-purple, ca. 2 × 3 mm; lobes ovate, ca. as long as corolla tube. Anthers ovate, apex with orbicular appendages. Nutlets ovoid, ca. 2 × 1–1.2 mm, smooth, shiny, with light yellow, fleshy, pubescent appendages at base. 2n = 18.

Marshes, moist places. Xinjiang (Gongliu Xian, Tien Shan) [Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Turkmenistan, Uzbekistan; SW Asia, C Europe].

#### 2. Myosotis caespitosa C. F. Schultz, Prodr. Fl. Starg. Suppl. 1: 11. 1819.

湿地勿忘草 shi di wu wang cao

Myosotis lingulata Lehmann; M. scorpioides Linnaeus subsp. caespitosa (C. F. Schultz) Hermann; M. uliginosa Schrader.

Herbs perennial, with dense fibrous adventitious roots. Stems unbranched, sometimes branched, 15–50(–70) cm tall, sparsely strigose. Lower stem leaves petiolate, oblong to oblanceolate, 2-3 cm × 3-8 mm, sparsely strigose, base attenuate, margin entire, apex obtuse; upper stem leaves sessile, oblanceolate to linear-lanceolate, 3–7 cm × 5–13 mm. Inflorescences elongated after anthesis, to 10-20 cm in fruit, ebracteate, or lower several flowers from axils of linear bracts. Pedicel divaricate, 6-8 mm in fruit, usually longer than calyx. Calyx campanulate, cuneate at base, 5-lobed nearly to middle, ca. 2 mm, to 3-4 mm in fruit; lobes triangular, stiff, sparsely strigose outside, apex obtuse. Corolla light blue, 2-3 mm; tube ca. as long as calyx; throat yellow, with 5 appendages; limb 3-4 mm wide; lobes divaricate, ovate, ca. 1.5 mm. Anthers elliptic, ca. 0.6 mm, upper appendages rounded, ca. 3 × as long as anthers. Nutlets dark brown, ovoid, 1.5-2 mm, smooth, narrowly marginate above, apex obtuse. 2n = 22, 44, 48, 86, 88.

Stream banks, moist places, slopes. Gansu, Hebei, Heilongjiang, Jilin, Liaoning, Sichuan, Xinjiang, Yunnan [N Africa, temperate and subtropical Asia, Europe, North America].

#### 3. Myosotis bothriospermoides Kitagawa, Rep. Inst. Sci. Res. Manchoukuo 4: 41. 1936.

承德勿忘草 cheng de wu wang cao

Herbs with ascending stems rooting on lower nodes, often branched. Branches sparsely strigose. Stem leaves sessile, oblong to narrowly oblong, sparsely strigose, base attenuate, apex obtuse. Inflorescences widely spaced, strongly elongated after anthesis. Pedicel 1.5-2.5 mm, to 2.2 cm after anthesis. Calyx ca. 3.5 mm, to 6 mm in fruit, sparsely strigose outside; lobes narrowly ovate-oblong, ca. 2.6-3 mm in fruit, margin ciliate, apex  $\pm$  acute to obtuse. Corolla blue, ca. 3.5 mm; tube ca. 1.5 mm. Filaments inserted at middle of corolla tube, ca. 0.4 mm; anthers elliptic, apex with rounded membranous appendages. Ovary smooth, ca. 0.5 mm. Style linear, ca. 1.2 mm, smooth. Nutlets dark brown, dorsiventrally

compressed, adaxially nearly flat, deltoid,  $1.6-1.7 \times 1.5-1.6$  mm, shiny, base broadly cuneate, margin narrow, abaxially convex, apex obtuse.

Moist areas. Hebei (Chengde Xian).

## **4. Myosotis alpestris** F. W. Schmidt, Fl. Boem. Cent. 3: 26. 1794

勿忘草 wu wang cao

Myosotis alpestris subsp. asiatica Vestergren ex Hultén; M. imitata Sergievskaja; M. suaveolens Waldstein & Kitaibel; M. sylvatica Ehrhart subsp. alpestris Koch.

Herbs perennial. Stems single, erect or cespitose, 20-45 cm tall, sparsely spreading strigose, sometimes cottony. Basal and lower stem leaves petiolate, narrowly oblanceolate to linear-lanceolate, to 8 cm  $\times$  5–12 mm, strigose, hairs discoid at base, base attenuate, decurrent into a wing, margin entire, apex rounded to  $\pm$  acute; upper stem leaves sessile, smaller. Inflorescences to 15 cm after anthesis, ebracteate. Pedicel erect in fruit, 4–6 mm, densely short strigose. Calyx 1.5–2.5 mm, to 4–5 mm in fruit, parted nearly to base; lobes lanceolate, with densely spreading or hooked hairs, apex acuminate. Corolla blue; tube ca. 2.5 mm; throat appendages ca. 0.5 mm; limb 6–8 mm wide; lobes 5, orbicular, ca. 3.5 mm. Anthers elliptic, apex with an orbicular appendage. Nutlets dark brown, ovoid, ca. 2  $\times$  1 mm, smooth, shiny, base without appendages, margin narrow. 2n = 14, 24, 30, 48, 70, 72.

Forest margins, slopes, meadows. Gansu, Hebei, Heilongjiang, Jiangsu, Jilin, Liaoning, Nei Mongol, Ningxia, Qinghai, Shaanxi, Shandong, Shanxi, Sichuan, Xinjiang, Yunnan [Afghanistan, N India, Kashmir, Kazakhstan, Kyrgyzstan, Pakistan, Russia, Tajikistan, Turkmenistan, Uzbekistan; SW Asia, Europe, North America].

# **5. Myosotis krylovii** Sergievskaya, Sist. Zametki Mater. Gerb. Krylova Tomsk. Gosud. Univ. Kiybyseva, 6–7: 6. 1936.

细根勿忘草 xi gen wu wang cao

Herbs biennial. Rhizomes producing elongated sterile shoots and flowering stems, to 10 cm tall. Stems very delicate with widely spaced cymes. Basal leaves oval, tapering abruptly into a long petiole; lower leaves short petiolate; upper leaves sessile, oblong-lanceolate, 2–5 cm × 5–13 mm, sparsely pubescent, apex acute. Axis of cymes slightly flexuous. Pedicel filiform, sometimes slightly curved, 3–4 mm. Calyx ca. 2 mm, accrescent after anthesis; lobes grayish, linear-lanceolate, with hooked hairs at base of calyx. Corolla blue; tube ca. 2 mm; limb 5(–10) mm wide. Nutlets black, ca. 1.5 mm, shiny, apex acute.

Coniferous forests. Xinjiang (Altay Shan and adjacent areas) [Kazakhstan, Kyrgyzstan, Mongolia, Russia, Tajikistan, Turkmenistan, Uzbekistan].

Flora of China 16: 360–361. 1995.