

#### 4. CENTAURIUM Hill, Brit. Herb. 62. 1756.

白金花属 bai jin hua shu

*Erythraea* Borkhausen.

Annuals. Stems erect, obscurely 4-angled. Leaves opposite. Cymes pseudodichotomous, sometimes spicate. Flowers [4- or] 5-merous. Calyx lobed nearly to base. Corolla salverform, lobes shorter than tube. Stamens inserted at throat of corolla tube; filaments filiform, erect at first, helically coiled later; anthers dehiscing longitudinally. Ovary partly 2-locular. Style linear; stigma lobes orbicular. Capsules 2-valved, many seeded. Seed coat alveolate.

40–50 species: worldwide except subsaharan Africa; two species in China.

- 1a. Inflorescences spicate cymes; flowers sessile; calyx lobes 6–8 mm, apex obtuse ..... 1. *C. japonicum*
- 1b. Inflorescences dichotomous or racemoid; flowers pedicellate; calyx lobes 2.5–3 mm, apex acuminate ..... 2. *C. pulchellum*

**1. *Centaurium japonicum*** (Maximowicz) Druce, Bot. Soc. Exch. Club Brit. Isles 4: 613. 1917.

日本白金花 ri ben bai jin hua

*Erythraea japonica* Maximowicz, Bull. Acad. Imp. Sci. Saint-Petersbourg, sér. 3, 31: 67. 1886.

Plants 5–30 cm tall, glabrous. Stems much branched. Basal leaves short petiolate; leaf blade spatulate, 1–2 cm × 8–10 mm including petiole, base narrowed, apex rounded, veins 1–3 and abaxially prominent. Stem leaves sessile, oblong, elliptic, or ovate-elliptic, 0.8–2.2 cm × 3–12 mm, base rounded and nearly clasping, apex obtuse to rounded; veins 1–3, prominent. Cymes spicate. Flowers sessile. Calyx tubular, 3–4 mm; lobes linear to narrowly elliptic, 6–8 mm, apex obtuse, midvein prominent. Corolla white outside, pink inside, 1–1.3 cm, tube narrowly tubular; lobes narrowly oblong, 3–5 mm, margin entire or serrulate, apex obtuse. Filaments 1.5–2 mm; anthers ellipsoid, 0.5–0.7 mm. Style 3–3.5 mm. Capsules narrowly ellipsoid, 8–10 mm. Seeds dark brown, globose, 0.3–0.5 mm in diam. Fl. and fr. May-Jul.

Weed in cultivated land. Taiwan [Japan].

**2. *Centaurium pulchellum*** (Swartz) Druce, Fl. Berkshire 342. 1897.

美丽白金花 mei li bai jin hua

Plants 4–10(–25) cm tall, glabrous. Stems simple to much branched, obscurely 4-angled. Leaves sessile; lower leaves elliptic to ovate-elliptic, 0.6–1.7 cm × 3–6 mm, base rounded, apex obtuse, veins 1–3 and abaxially distinct; upper leaves elliptic-lanceolate, 0.6–2 cm × 2–7 mm, base rounded and nearly clasping, apex acuminate, acute, or mucronate, veins 1–3. Cymes laxly dichotomous or racemose. Pedicel 3–5 mm, slender, 4-angled. Calyx lobes subulate or linear-lanceolate, 2.5–3 mm, apex acuminate, midvein distinct or strongly crested. Corolla white, pink, or purple, 1.3–1.5 cm; lobes narrowly oblong, 2.7–3.2 mm, margin entire, apex obtuse. Filaments 1.5–2 mm; anthers ellipsoid, 0.5–0.7 mm. Style 2–2.5 mm. Capsules ellipsoid, 7.5–9 mm. Seeds blackish, globose, 0.2–0.3 mm in diam. Fl. and fr. May-Jul.

100–2200 m. Fujian, Gansu, Guangdong, Guangxi, Hainan,

Hebei, Heilongjiang, Hunan, Jiangsu, Jiangxi, Jilin, Liaoning, Nei Mongol, Ningxia, Qinghai, Shaanxi, Shandong, Shanxi, Taiwan, Xinjiang, Zhejiang [India, Russia; N Africa, C and W Asia, Europe].

- 1a. Calyx lobes linear-lanceolate; corolla purple ..... 2a. var. *pulchellum*
- 1b. Calyx lobes subulate; corolla white or pink ..... 2b. var. *altaicum*

#### **2a. *Centaurium pulchellum* var. *pulchellum***

美丽白金花 (原变种) mei li bai jin hua (yuan bian zhong)

*Gentiana pulchella* Swartz, Kongl. Vetensk. Acad. Nya Handl. 3: 85. 1783.

Calyx lobes linear-lanceolate, midvein distinct. Corolla purple.

Along streams, wastelands, wet places. Xinjiang [India; N Africa, C and W Asia, Europe].

**2b. *Centaurium pulchellum* var. *altaicum*** (Grisebach) Kitagawa & H. Hara, J. Jap. Bot. 13: 26. 1937.

白金花 bai jin hua

*Erythraea ramosissima* Persoon var. *altaica* Grisebach in A. de Candolle, Prodr. 9: 57. 1845; *E. meyeri* Bunge; *E. ramosissima* var. *albiflora* Boissier.

Calyx lobes subulate, midvein strongly crested. Corolla white or pink.

Wet cultivated land, grasslands, along streams, sandy places especially near shores; below 100–2200 m. Fujian, Gansu, Guangdong, Guangxi, Hainan, Hebei, Heilongjiang, Hunan, Jiangsu, Jiangxi, Jilin, Liaoning, Nei Mongol, Ningxia, Qinghai, Shaanxi, Shandong, Shanxi, Taiwan, Xinjiang, Zhejiang [India, Russia; C Asia].

