

1. CERCIS Linnaeus, Sp. Pl. 1: 374. 1753.

紫荆属 *zi jing shu*

Chen Dezhaoh (陈德昭 Chen Te-chao), Zhang Dianxiang (张奠湘); Supee Saksuwan Larsen, Michael A. Vincent

Shrubs or trees. Leaves alternate, simple, entire, veins palmate, base cordate to truncate or cuneate, apex acute to attenuate or emarginate; stipules caducous, small, scalelike or membranous. Flowers zygomorphic, bisexual, purplish red, pink, or white, in solitary racemes or subumbellate clusters on branches of current year or older branches or trunks, flowering before or as leaves expand; bracts scalelike, often imbricate, aggregated at base of racemes; bracteoles minute or absent. Calyx shortly campanulate, slightly oblique, apex unequally 5-toothed; teeth broadly triangular. Petals 5, appearing papilionaceous, but with standard smallest and inside other petals. Stamens 10, free, included; filaments often hairy in lower part; anthers dorsifixed, opening lengthwise. Ovary shortly stipitate; ovules 2–10; style filiform; stigma capitate. Legumes compressed, narrowly oblong to broadly linear, usually narrowly winged along ventral suture, indehiscent or dehiscent, both ends acuminate or obtuse. Seeds 2 to many, compressed, suborbicular, without endosperm.

Eleven species: four confined to North America, one in E and S Europe, one in C Asia; five species (all endemic) in China.

Cercis siliquastrum Linnaeus and *C. canadensis* Linnaeus are sometimes cultivated in China.

- 1a. Flowers in subumbellate clusters, without peduncles or with short peduncles to 1 mm.
 - 2a. Legume thin, usually indehiscent, winged, with small curved beak; leaves papery, thinner, abaxially glabrous or puberulent on veins 4. *C. chinensis*
 - 2b. Legume thick and hard, dehiscent, valves not winged, twisting upon dehiscence, with thick straight beak; leaves subleathery, thicker, often comose-pubescent on axils of veins at base 5. *C. chingii*
- 1b. Flowers in racemes with conspicuous peduncles.
 - 3a. Leaves rhombic-ovate, asymmetric on two sides, base obtusely triangular, both surfaces often glaucous 1. *C. chuniana*
 - 3b. Leaves broadly ovate, ovate-orbicular, or cordate, symmetric, base cordate or subtruncate, abaxially hairy or glabrous, not glaucous.
 - 4a. Racemes longer, rachis 2–10 cm; leaves abaxially puberulent, densely hairy on veins; legume basally attenuate, dorsal and ventral sutures equal in length 2. *C. racemosa*
 - 4b. Racemes short, rachis less than 2 cm; leaves glabrous or sparsely pubescent in axils of veins; legume basally rounded and obtuse, dorsal and ventral sutures unequal 3. *C. glabra*

1. *Cercis chuniana* F. P. Metcalf, Lingnan Sci. J. 19: 551. 1940.

垂丝紫荆 *chui si zi jing*

广西紫荆 *guang xi zi jing*

Trees, 8–15 m tall. Trunk to 27 cm d.b.h., bark dark gray-brown. Young branchlets dark brown to black, rusty pubescent, lenticels scattered. Petiole 2–3.5 cm, moderately stout, glabrous or pubescent; leaf blade broadly ovate-orbicular, 6–12.5 × 6.5–10.5 cm, abaxially puberulent especially on principal veins, adaxially glabrous, principal veins 5, raised abaxially, reticulate veins conspicuous on both surfaces, base truncate or shallowly cordate, apex acute, slightly attenuate. Racemes solitary, pendulous, 2–10 cm, 6–20-flowered; peduncle and rachis hairy. Flowers 1–1.2 cm; pedicel 0.8–1 cm, slender. Calyx ca. 5 mm. Petals rose-red; standard tinged with deep reddish spots. Stamens included; filaments hairy at base. Legume slightly curved, compressed, oblong, 5–10 × 1.2–1.8 cm, wing 2–2.5 mm wide, dorsal and ventral sutures subequal in length, basally attenuate, apex acute, with a beak 5–7 mm; stipe 3.5–4 mm; fruiting pedicel 1.3–1.5 cm. Seeds 2–9, compressed. Fl. May, fr. Oct.

Cercis likiangensis Chun ex Y. Chen.

• Dense forests, mountain slopes, roadsides, beside villages; 1000–1900 m. W Guizhou, W Hubei, Hunan, Shaanxi, E Sichuan, NE Yunnan.

Trees, 6–27 m tall. Trunk to 20 cm d.b.h., bark grayish. Young branchlets reddish, becoming brownish red when dry; lenticels numerous, dense, small. Petiole 0.9–1.3 cm, slender, both ends slightly inflated; leaf blade rhombic-ovate, 5–9 × 3–5 cm, papery, both surfaces often glaucous especially adaxially, abaxially sparsely puberulent on axils of veins at base, base obtusely triangular, asymmetric, apex long acuminate. Racemes 3–5 cm, 7–15-flowered. Flower 1–1.3 mm; pedicel 0.8–1 cm, slender. Calyx broadly campanulate, 5–6 mm; teeth 5, shallow. Petals rose-pink to whitish pink; filaments hairy only at very base, otherwise glabrous. Legume purplish red, becoming reddish brown when dry, very compressed, narrowly oblong, 6–9 × 1.3–1.7 cm, both ends acute, apex with sharp, small beak 2–3 mm; wing narrow, less than 1 mm wide; stipe 4–5 mm; fruiting pedicel 1–1.5 cm. Seeds 2–5, blackish brown, compressed, broadly ovoid-orbicular, ca. 6 × 5 mm, smooth. Fl. unknown, fr. Sep–Nov.

• Mountain valleys, open or dense forests, by streams; 600–1900 m. Fujian, N Guangdong, NE Guangxi, SE Guizhou, SE Hunan, S Jiangxi, ?Zhejiang.

3. *Cercis glabra* Pampanini, Nuovo Giorn. Bot. Ital., n.s., 17: 393. 1910.

湖北紫荆 *hu bei zi jing*

2. *Cercis racemosa* Oliver, Hooker's Icon. Pl. 19: t. 1894. 1889.

Cercis funiushanensis S. Y. Wang & T. B. Chao; C.

pubescens S. Y. Wang; *C. yunnanensis* H. H. Hu & W. C. Cheng.

Trees, 6–20 m tall. Trunk to 30 cm d.b.h. or more. Bark and branchlets grayish black. Petiole 2–4.5 cm; leaf blade often purplish red when young, greenish when mature, cordate or triangular-orbicular, 5–12(–20) × 4.5–11.5(–18) cm, thickly papery to subleathery, adaxially shiny, glabrous or comose-pubescent in vein axils, principal veins (5–)7, base shallowly to deeply cordate, rarely truncate, apex obtuse or acute. Raceme short; rachis 5–10 mm, 4–12-flowered. Flowers light purplish red or pink, 1.3–1.5 cm; pedicel 1–2.3 cm, slender. Legume purplish red, broadly linear, (7–)9–15 × 1.2–1.5 cm, wing 2–2.3 mm, sutures unequal (rarely equal), dorsal suture slightly longer, base rounded to acuminate, apex acuminate; stipe 2–3 mm. Seeds 1–8, compressed, suborbicular, 6–7 × 5–6 mm. Fl. Mar–Apr, fr. Sep–Nov.

- Open or dense forests, mountain slopes, along valleys near roads, on rocks; 600–1900 m. Anhui, Guangdong, Guangxi, Guizhou, Henan, Hubei, Hunan, Shaanxi, Sichuan, Yunnan, Zhejiang.

Plants called “*Cercis gigantea* Cheng et Keng f.” (in Wei & He,

Fl. Zhejiang. 3: 279. 1993) may represent a distinct species, but too little material was available to be certain. This needs further study. The name was not validly published because no Latin description or diagnosis was provided and no type was indicated (*Vienna Code*, Art. 36.1, 37.1).

4. *Cercis chinensis* Bunge, Enum. Pl. China Bor. 21. 1833.

紫荆 zi jing

Cercis chinensis f. *alba* S. C. Hsu; *C. chinensis* f. *pubescens* C. F. Wei; *C. chinensis* f. *rosea* P. S. Hsu; *C. pauciflora* H. L. Li.

Shrubs, 2–5(–8) m tall. Bark and branchlets grayish white. Leaf blade greenish when young with only petiole slightly purple, suborbicular or triangular-orbicular, 5–10 cm, ca. as long as wide or slightly longer than wide, papery, both surfaces usually glabrous, or abaxially puberulent on veins, base shallowly to deeply cordate, margin membranous, transparent when fresh, apex acute. Flowers purplish red, pink, or white, 1–1.3 cm, 2–10-clustered on old branches or especially on trunk; pedicel 3–9 mm; keel tinged with deep purple stripes. Ovary glabrous to densely puberulent; ovules 5–8. Legume greenish, becoming stramineous at maturity, compressed, narrowly oblong, 4–8 × 1–1.2 cm, dorsal and ventral suture equal or subequal, wing 1.5–2 mm, base long attenuate, apex acute or shortly acuminate, with slender and curved beak; stipe 2–4 mm. Seeds 2–6, blackish brown, shiny, broadly oblong, 5–6 × ca. 4 mm. Fl. Mar–Apr, fr. Aug–Oct. $2n = 14^*$.

- Dense forests or limestone areas, commonly cultivated. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hebei, Henan, Hubei, Hunan, Jiangsu, Liaoning, Shaanxi, Shandong, Shanxi, Sichuan, Yunnan, Zhejiang.

5. *Cercis chingii* Chun, J. Arnold Arbor. 8: 20. 1927.

黄山紫荆 huang shan zi jing

Shrubs, 2–6 m tall. Bark light gray, smooth. Branchlets grayish white at first, blackish brown when dry, with numerous, dense, small lenticels, brownish puberulent when young, glabrescent with age. Petiole 1.5–3 cm, slightly thickened at both ends; leaf blade brownish when dry, ovate-orbicular or reniform, 5–11 × 5–12 cm, subleathery, abaxially puberulent on principal veins and in axils of veins at base, principal veins 5, raised abaxially, base cordate or truncate, apex acute with a 5–8 mm mucro or rounded without mucro. Flower clusters borne on old branches, light purplish red, becoming whitish. Calyx 5.5–6 mm. Petals ca. 1 cm. Legumes 7–8.5 × ca. 1.3 cm, thickly leathery, valves twisting upon dehiscence, wing absent, stipe absent; beak robust, ca. 8 × 2 mm, hard. Seeds 3–6, embedded in thick, slightly white (brown when dry), spongy pulp. Fl. Feb–Mar, fr. Sep–Oct. $2n = 14^*$.

- Sparse forests, shrubby areas, roadsides, cultivated in gardens; low elevations. Anhui, N Guangdong, Zhejiang.

CERCIDEAE