

4. SORBARIA (Seringe ex Candolle) A. Braun in Ascherson, Fl. Brandenburg 1: 177. 1860, nom. cons.

珍珠梅属 zhen zhu mei shu

Gu Cuizhi (谷粹芝 Ku Tsue-chih); Crinan Alexander

Spiraea Linnaeus sect. *Sorbaria* Seringe ex Candolle, Prodr. 2: 545. 1825; *Schizonotus* Lindley, nom. rej.

Shrubs deciduous. Branchlets yellow to green when young, later dark reddish or yellowish brown, terete; buds ovoid to cylindrical, with several exposed, alternate scales, glabrous or slightly pubescent at apex. Leaves alternate, stipulate, pinnate; leaflets opposite, sessile or subsessile, doubly serrate. Inflorescence a large, terminal panicle. Flowers small, numerous. Hypanthium shallowly cupular. Sepals 5, reflexed, short, broad, persistent. Petals 5, imbricate, white, ovate to orbicular, base cuneate, apex obtuse. Stamens 20–50, nearly equaling or longer than petals. Carpels 5, opposite sepals, basally connate, glabrous or subglabrous. Follicles glabrous, dehiscent along adaxial suture. Seeds several.

About nine species: temperate Asia; three species (two endemic) in China.

- 1a. Panicles lax, with spreading branches; fruiting pedicels recurved, pendulous 3. *S. arborea*
- 1b. Panicles rather dense, with erect branches; fruiting pedicels erect.
 - 2a. Stamens 40–50, longer than petals; style terminal 1. *S. sorbifolia*
 - 2b. Stamens ca. 20, equaling or shorter than petals; style lateral 2. *S. kirilowii*

1. *Sorbaria sorbifolia* (Linnaeus) A. Braun in Ascherson, Fl. Brandenburg 1: 177. 1860.

珍珠梅 zhen zhu mei

Shrubs to 2 m tall. Branches erect; branchlets glabrous or slightly pubescent; buds purple-brown, ovoid. Stipules ovate-lanceolate to triangular-lanceolate, 8–13 mm, abaxially slightly pubescent, apex acuminate. Leaflets 11–17, opposite, lanceolate to ovate-lanceolate, 5–7 × 1.8–2.5 cm, glabrous or subglabrous on both surfaces or abaxially densely stellate hairy, lateral veins in 12–16 pairs, base subrounded to broadly cuneate, rarely slightly oblique, apex acuminate or caudate. Panicle 10–12 × 5–12 cm; peduncle and pedicels more or less pubescent and stellate hairy; bracts ovate to linear-lanceolate, 5–10 mm, slightly pubescent on both surfaces, later glabrescent, apex acuminate. Flowers 10–12 mm in diam.; pedicel 5–8 mm. Hypanthium pubescent abaxially at base. Sepals persistent and reflexed (rarely spreading) in fruit, triangular, abaxially sparsely pubescent, apex obtuse or acute. Petals oblong or obovate, 5–7 mm. Stamens 40–50, 1.5–2 × as long as petals. Style terminal. Follicles cylindrical, ca. 3 mm, glabrous; fruiting pedicel erect. Fl. Jul–Aug, fr. Sep.

Open forests; 200–1500 m. Heilongjiang, Jilin, Liaoning, Nei Mongol [Japan, Korea, Mongolia].

- 1a. Leaflets abaxially glabrous or subglabrous 1a. var. *sorbifolia*
- 1b. Leaflets abaxially densely stellate hairy 1b. var. *stellipila*

1a. *Sorbaria sorbifolia* var. *sorbifolia*

珍珠梅(原变种) zhen zhu mei (yuan bian zhong)

Spiraea sorbifolia Linnaeus, Sp. Pl. 1: 490. 1753.

Leaflets abaxially glabrous or subglabrous.

Open forests; 200–1500 m. Heilongjiang, Jilin, Liaoning, Nei Mongol [Japan, Korea, Mongolia].

1b. *Sorbaria sorbifolia* var. *stellipila* Maximowicz, Trudy Imp. S.-Peterburgsk. Bot. Sada 6: 223. 1879.

星毛珍珠梅 xing mao zhen zhu mei

Sorbaria stellipila (Maximowicz) C. K. Schneider.

Leaflets abaxially densely stellate hairy.

Open secondary forests; 200–300 m. Heilongjiang, Jilin [Korea].

2. *Sorbaria kirilowii* (Regel & Tiling) Maximowicz, Trudy Imp. S.-Peterburgsk. Bot. Sada 6: 225. 1879.

华北珍珠梅 hu bei zhen zhu mei

Spiraea kirilowii Regel & Tiling, Fl. Ajan. 81. 1858; *Sorbaria sorbifolia* (Linnaeus) A. Brown var. *kirilowii* (Regel & Tiling) Ito.

Shrubs to 3 m tall. Branches erect; branchlets glabrous; buds red-brown. Stipules linear-lanceolate, 8–15 mm, glabrous or subglabrous, apex obtuse or acute. Leaflets 13–21, lanceolate to oblong-lanceolate, 4–7 × 1.5–2 cm, glabrous on both surfaces or abaxially pubescent in vein axils, lateral veins in 15–23 pairs, reticulate veins conspicuous, base cuneate to rounded, apex acuminate or caudate. Panicle dense, 7–11 × 5–20 cm; peduncle and pedicels glabrous; bracts lanceolate, 2–5 mm, glabrous, apex acuminate. Flowers 5–7 mm in diam.; pedicel 3–4 mm. Hypanthium shallowly cupular, glabrous on both surfaces. Sepals persistent and reflexed (rarely spreading) in fruit, ovate to oblong, glabrous, apex obtuse. Petals white, obovate or broadly ovate, 4–5 mm. Stamens ca. 20, slightly shorter than or equaling petals. Style lateral. Follicles cylindrical, ca. 3 mm; fruiting pedicel erect. Fl. Jun–Jul, fr. Sep–Oct.

• Slopes in open mixed forests; 200–1300 m. Gansu, Hebei, Henan, Nei Mongol, Qinghai, Shaanxi, Shandong, Shanxi.

This species is commonly cultivated under the name 珍珠梅 (zhen zhu mei).

3. *Sorbaria arborea* C. K. Schneider, Ill. Handb. Laubholz. 1: 490. 1905.

高丛珍珠梅 *gao cong zhen zhu mei*

Shrubs to 6 m tall. Branches spreading; branchlets terete, yellow-green and slightly stellate hairy or pubescent when young, later dark red-brown and glabrous; buds purple-brown, ovoid or oblong, glabrous or slightly pubescent at apex. Stipules triangular-ovate, 8–10 mm, glabrous on both surfaces or subglabrous, apex acuminate. Leaflets 13–17, opposite, sessile or nearly so, lanceolate to oblong-lanceolate, 4–9 × 1–3 cm, glabrous on both surfaces or abaxially slightly or densely stellate hairy, lateral veins in 20–25 pairs, abaxially conspicuous, base broadly cuneate, margin doubly serrate, apex acuminate.

Panicle 20–30 × 15–20 cm, many flowered; peduncle and pedicels glabrous or slightly or densely stellate hairy; bracts lanceolate to linear-lanceolate, 4–5 mm, slightly pubescent, apex acuminate. Flowers 6–7 mm in diam.; pedicel 2–3 mm. Hypanthium shallowly cupular, glabrous. Sepals oblong-ovate, glabrous, apex obtuse. Petals white, suborbicular, 3–4 mm, base cuneate, apex obtuse. Stamens 20–30, longer than petals. Carpels 5, glabrous. Follicles cylindric, ca. 3 mm, glabrous, with persistent, reflexed sepals; fruiting pedicel pendulous. Fl. Jun–Jul, fr. Sep–Oct.

• Dense forests, forest margins, slopes, stream sides, roadsides; 1600–3500 m. Gansu, Guizhou, Hubei, Jiangxi, Shaanxi, Sichuan, Xinjiang, Xizang, Yunnan.

- 1a. Rachis, leaflets abaxially, and inflorescence densely stellate hairy 3c. var. *subtomentosa*
- 1b. Rachis, leaflets abaxially, and inflorescence glabrous or slightly stellate hairy.
 - 2a. Rachis, leaflets abaxially, and inflorescence slightly stellate hairy..... 3a. var. *arborea*
 - 2b. Rachis, leaflets abaxially, and inflorescence glabrous 3b. var. *glabrata*

3a. *Sorbaria arborea* var. *arborea*

高丛珍珠梅(原变种) *gao cong zhen zhu mei* (*yuan bian zhong*)

Spiraea arborea (C. K. Schneider) Bean.

Rachis, leaflets abaxially, and inflorescence slightly stellate hairy.

• Slopes near forest margins or by streams; 2500–3500 m. Gansu, Guizhou, Hubei, Jiangxi, Shaanxi, Sichuan, Xinjiang, Xizang, Yunnan.

3b. *Sorbaria arborea* var. *glabrata* Rehder in Sargent, Pl. Wilson. 1: 48. 1911.

光叶高丛珍珠梅 *guang ye gao cong zhen zhu mei*

Spiraea arborea var. *glabrata* (Rehder) Bean.

Rachis, leaflets abaxially, and inflorescence glabrous.

• Dense forests, mountain slopes, stream sides; 2500–3500 m. Gansu, Hubei, Shaanxi, Sichuan, Yunnan.

3c. *Sorbaria arborea* var. *subtomentosa* Rehder in Sargent, Pl. Wilson. 1: 47. 1911.

毛叶高丛珍珠梅 *mao ye gao cong zhen zhu mei*

Rachis, leaflets abaxially, and inflorescence densely stellate hairy.

• Slopes, roadsides; 1600–3100 m. Shaanxi, Sichuan, Yunnan.

