

3. ARUNCUS Linnaeus, Opera Var. 259. 1758.

假升麻属 jia sheng ma shu

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

Herbs perennial, sometimes woody at base, monoecious. Rhizome robust. Stems erect, angled. Leaves exstipulate, 1–3-pinnate, rarely 3-foliolate; leaflets sharply doubly serrate. Inflorescence a large, spikelike, many-flowered panicle; peduncle and pedicels pubescent and sparsely stellate hairy; bracts and bracteoles linear-lanceolate. Flowers sessile or subsessile, unisexual, rarely bisexual. Hypanthium cupular, with ringlike disk on rim. Sepals (4 or)5(or 6), persistent in fruit, triangular, abaxially glabrous or nearly so, margin entire, apex acute. Petals 5, white, obovate, base cuneate, apex obtuse. Male flowers: stamens 15–30, borne on rim of hypanthium; filaments slender, longer than petals; carpels obsolescent. Female flowers: filaments short; anthers sterile; carpels 3 or 4(–8). Follicles glabrous, pendulous in fruit, dehiscent along adaxial suture. Seeds 2.

Three to six poorly defined species: N temperate zone; two species (one endemic) in China.

- 1a. Plants to 3 m tall; leaves 2- or 3-pinnate, leaflets rhombic-ovate, ovate-lanceolate, or long elliptic, apex acuminate or long acuminate; panicle lax, 10–40 cm 1. *A. sylvester*
- 1b. Plants to 0.7 m tall; leaves 1- or 2-pinnate or 1- or 2-ternate, leaflets suborbicular or broadly ovate, rarely rhombic-ovate, apex rounded, obtuse, or acute; panicle dense, 5–25 cm 2. *A. gombalanus*

1. *Aruncus sylvester* Kosteletsky ex Maximowicz, Trudy Imp. S.-Peterburgsk. Bot. Sada 6: 169. 1879.

假升麻 jia sheng ma

Spiraea aruncus Linnaeus, Sp. Pl. 1: 490. 1753; *Aruncus asiaticus* Pojarkova; *A. dioicus* (Walter) Fernald var. *kamtschaticus* (Maximowicz) H. Hara; *A. dioicus* var. *tenuifolius* (Nakai ex H. Hara) H. Hara; *A. dioicus* var. *triternatus* (Wallich ex Maximowicz) H. Hara; *A. dioicus* var. *vulgaris* (Maximowicz) H. Hara; *A. kamtschaticus* (Maximowicz) Rydberg; *A. kamtschaticus* var. *tomentosus* (Koidzumi) Miyabe & Tatewaki; *A. sylvester* var. *kamtschaticus* Maximowicz; *A. sylvester* var. *tenuifolius* Nakai ex H. Hara; *A. sylvester* var. *tomentosus* Koidzumi; *A. sylvester* var. *triternatus* Wallich ex Maximowicz; *A. sylvester* var. *vulgaris* Maximowicz; *A. tomentosus* (Koidzumi) Koidzumi; *Astilbe aruncus* (Linnaeus) Treviranus; *Ulmaria aruncus* (Linnaeus) Hill.

Plants to 3 m tall, woody at base. Stems dark purplish, glabrous. Leaves 2- or 3-pinnate; petiolules 4–10 mm; leaflets rhombic-ovate, ovate-lanceolate, or long elliptic, 5–13 × 2–8 cm, subglabrous on both surfaces, base cuneate, margin irregularly toothed, apex acuminate to long acuminate. Panicle lax, 10–40 × 7–17 cm; peduncle and pedicels glabrescent in fruit; bracts and bracteoles sparsely pubescent. Flowers 2–4 in diam.; pedicel ca. 2 mm. Hypanthium slightly pubescent. Sepals spreading or erect in fruit. Male flowers with filaments ca. 2 × as long as petals. Fl. Jun, fr. Aug–Sep.

Mixed forests on montane slopes, valleys; 1800–3500 m. Anhui, Gansu, Guangxi, Heilongjiang, Henan, Hunan, Jiangxi, Jilin, Liaoning, Shaanxi, Sichuan, Xizang, Yunnan [Bhutan, NW India (Himachal Pradesh), Japan, Korea, Mongolia, Nepal, Russia, Sikkim; SW Asia, Europe, ?NW North America (Alaska)].

2. *Aruncus gombalanus* (Handel-Mazzetti) Handel-Mazzetti, Anz. Akad. Wiss. Wien, Math.-Naturwiss. Kl. 60: 152. 1924.

贡山假升麻 gong shan jia sheng ma

Pleiosepalum gombalanum Handel-Mazzetti, Anz. Akad. Wiss. Wien, Math.-Naturwiss. Kl. 59: 139. 1922; *Aruncus dioicus* (Walter) Fernald var. *rotundifoliolatus* H. Hara.

Plants to 70 cm tall. Rhizome thick, woody. Stems reddish-brown, slightly pubescent above, glabrous below. Leaves 1- or 2-pinnate or 1- or 2-ternate; petiolules absent or terminal leaflets shortly petiolulate; leaflets suborbicular or broadly ovate, rarely rhombic-ovate, 4–5 × 3–4 cm, abaxially sparsely pubescent on veins, base cuneate, rarely truncate or rounded, margin sometimes slightly lobed, apex rounded, obtuse, or acute. Panicle dense, 5–25 cm; bracts and bracteoles glabrous. Flowers ca. 4 mm in diam.; pedicel ca. 3 mm or absent. Hypanthium abaxially glabrous. Sepals spreading or reflexed in fruit. Male flowers with filaments longer than petals. Follicles parallel. Fl. Jun, fr. Aug–Sep.

• Grassy slopes on mountain summits; 3000–4000 m. E Xizang, NW Yunnan.

