

13. Tribe AMORPHEAE

紫穗槐族 *zi sui huai zu*

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Small trees, shrubs, or herbs, with glandular punctae or pustules. Leaves paripinnate, imparipinnate, or less often pinnately to digitately 3-foliolate or 1-foliolate; stipels sometimes present. Flowers in racemes, spikes, or heads, terminating axis of origin (most becoming leaf-opposed). Calyx marcescent, upper lobes sometimes joined higher. Corolla papilionaceous, imperfect, or absent; lower petals often epistemonous, sometimes little differentiated. Stamens (5–)9 or 10, almost free to largely joined, usually monadelphous; anthers usually uniform, sometimes gland-tipped. Ovary 1- or 2(–)7-ovuled. Legumes 1-seeded, indehiscent, continuous with receptacle and falling together with marcescent calyx. Seeds with small hilum.

Eight genera and 240–250 species: all native to the Americas; one species (introduced) in China.

The Amorpheae was first thought to be most closely related to the Psoraleae, but both molecular and morphological analyses now place it as sister to the Dalbergioid clade (e.g., McMahon & Hufford, *Amer. J. Bot.* 91: 1219–1230. 2004).

53. AMORPHA Linnaeus, Sp. Pl. 2: 713. 1753.

紫穗槐属 *zi sui huai shu*

Shrubs or shrublets, glandular-punctate. Leaves imparipinnate; stipules small or absent; leaflets many, small. Inflorescences terminal, racemes or spikes, these sometimes in leafy panicles. Calyx 5-toothed. Corolla reduced to just standard, embracing stamens and pistil. Stamens 10, monadelphous, sheath split adaxially; anthers uniform. Ovary sessile, 2-ovuled. Legume oblong, falcate, indehiscent, often densely glandular-warty, falling with persistent calyx. Seed with small hilum.

About 15 species: mostly in North America, including Mexico; one species (introduced) in China.

1. *Amorpha fruticosa* Linnaeus, Sp. Pl. 2: 713. 1753.

紫穗槐 *zi sui huai*

Deciduous shrubs, 1–4 m tall. Stems pubescent, glabrescent. Leaves 10–15 cm; stipules bristlelike; petiole 1–2 cm; leaflets 11–25, ovate to elliptic, 1–4 × 0.6–2 cm, abaxially white puberulent, adaxially glabrous or sparsely pubescent, black glandular-dotted, base broadly cuneate or rounded, apex acute, obtuse, or retuse, with a shortly curved spinose tip. Racemes 1 to many, terminal or subterminal, 7–15 cm, densely pubescent; bracts 3–4 mm. Calyx 2–3 mm; teeth triangular, shorter than tube. Standard purple, obcordate, ca. 6 mm; wings and keel

absent. Style puberulent. Legume dark brown, oblong, curved, 6–10 × 2–3 mm, apex beaked, strongly glandular-dotted, 1-seeded. Seed lustrous, reniform, ca. 5 mm, curved upward. Fl. May–Jun, fr. Jul–Sep.

Sandy banks of ravines, cultivated or escaped. Anhui, Fujian, Gansu, Guangxi, Hebei, Heilongjiang, Henan, Hubei, Jiangsu, Jiangxi, Jilin, Liaoning, Nei Mongol, Ningxia, Qinghai, Shaanxi, Shandong, Shanxi, Sichuan, Xinjiang, Zhejiang [native to North America; widely introduced in N Asia and Europe].

This is a variable species with many synonyms and described varieties in North America. It is regarded as a noxious weed in some parts of the United States.