

61. STYLOSANTHES Swartz, Prodr. 7, 108. 1788.

笔花豆腐属 bi hua dou shu

Shrublets or perennial herbs. Stems erect or spreading, with sparse glandular trichomes. Stipules sheathlike, adnate to petiole, not spurred, persistent. Leaves pinnately 3-foliolate; leaflets subsessile. Inflorescences terminal or axillary spikes, with small clustered flowers; bracts membranous, persistent. Bracteoles lanceolate, membranous, persistent. Hypanthium long. Calyx tubular, 5-lobed; abaxial lobe narrow and distinct, adaxial 4 lobes connate. Corolla yellowish orange; standard orbicular, broadly ovate, or obovate, without an auricle, base narrowly cuneate, apex emarginate; wings oblong to obovate, shorter than standard, distinct, auriculate; keels similar to wings. Stamens 10, monadelphous, basal part closed or tubular; anthers dimorphic, alternate with longer 5 almost basifixed and shorter 5 dorsifixed. Ovary linear, sessile, with 2 or 3 ovules; style thin and straight; stigma terminal, calyptriform, extremely small. Legume a loment, oblong to ellipsoid, small, depressed, without a stipe, with coarse reticulate veins, often tuberculate, with 1 or 2 articles, indehiscent, apex with a beak. Seeds ovoid or reniform; hilum usually oblique, with a prominent radicle lobe.

About 25 species: tropical and subtropical Africa, America, and Asia; two species (both introduced) in China.

- 1a. Inflorescences with each flower not subtended by a rudimentary axis; legume ovoid, 2–3 × ca. 1.8 mm, glabrous or near apex pubescent, with 1 article, beak 0.1–0.5 mm, inflexed 1. *S. guianensis*
- 1b. Inflorescences with each flower subtended by a rudimentary axis; legume quadrate, 2–3.5 × ca. 2 mm, commonly pubescent, with 2 articles, beak 3–3.5 mm, uncinata 2. *S. hamata*

1. *Stylosanthes guianensis* (Aublet) Swartz, Kongl. Vetensk. Acad. Nya Handl. 10: 301. 1789.

圭亚那笔花豆 gui ya na bi hua dou

Trifolium guianense Aublet, Hist. Pl. Guiane 2: 776. 1775; *Stylosanthes gracilis* Kunth.

Herbs or shrublets, 60–100 cm tall, erect or rarely climbing. Stems glabrous or sparsely pubescent. Stipules sheathing, 0.4–2.5 cm. Leaves 3-foliolate; petiole short; petiolules ca. 1 mm; leaflet blades ovate, elliptic, or lanceolate, 0.5–3(–4.5) × 0.2–1(–2) cm, glabrous, sparsely villous, or setose, base cuneate, margin sometimes sinuate, apex acute to cuspidate. Inflorescences 1–1.5 cm, with 2–40 clustered flowers, each flower without a rudimentary axis; primary bracts 1–2.2 cm, densely long spreading setose; secondary bracts 2.5–5.5 × ca. 0.8 mm. Bracteoles 2–4.5 mm. Hypanthium 4–8 mm. Calyx tube ellipsoid to oblong, 3–5 × 1–1.5 mm. Corolla orangish yellow, with red slender striations; standard 4–8 × 3–5 mm. Legume ovoid, 2–3 × ca. 1.8 mm, glabrous or near apex pubescent, with 1 article, beak 0.1–0.5 mm and inflexed. Seeds grayish brown, oblate-ellipsoid, ca. 2.2 × 1.5 mm. 2n = 20.

Cultivated and naturalized in Guangdong and Taiwan [native range from Mexico to N Argentina].

This species is grown for fodder and green fertilizer and is naturalized in additional areas of SE Asia.

2. *Stylosanthes hamata* (Linnaeus) Taubert, Verh. Bot. Vereins Prov. Brandenburg 32: 22. 1890.

有钩柱花草 you gou zhu hua cao

Hedysarum hamatum Linnaeus, Syst. Nat., ed. 10, 2: 1170. 1759; *Stylosanthes procumbens* Swartz, nom. illeg. superfl.

Herbs or shrublets, 10–50 cm tall, prostrate or ascending.

Stems sparsely pubescent. Stipules sheathing, 4–12 mm. Leaves 3-foliolate; petiole short; petiolules ca. 0.5 mm; leaflet blades ovate, elliptic, or lanceolate, 8–14 × 3–5 mm, commonly glabrous, base cuneate, margin setose, apex acute and mucronate. Inflorescences 1–1.5 cm, with 2–10 clustered flowers, each flower subtended by a rudimentary axis; primary bracts 1–1.2 cm, spreading setose; secondary bracts 2–3.5 × ca. 0.5 mm. Bracteoles ca. 2 mm. Hypanthium 2–2.5 mm. Calyx tube oblong, ca. 2 × 1 mm. Corolla yellow, with red slender striations; standard ca. 4 × 3 mm. Legume quadrate, 2–3.5 × ca. 2 mm, commonly pubescent, with 2 articles, beak 3–3.5 mm and uncinata. Seeds light brown, ellipsoid, ca. 2 × 1 mm. 2n = 20.

Reported as cultivated in Hainan [native to Caribbean, Central America, SE North America, and South America].

No material of this species has been seen by the present authors.

The species is cultivated for fodder.

