

## 28. HYPOESTES Solander ex R. Brown, Prodr. 474. 1810.

枪刀药属 qiang dao yao shu

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Shrubs or perennial herbs, decumbent or erect, with cystoliths. Leaves opposite, petiolate; leaf blade margin entire or dentate. Inflorescences of axillary or terminal bracteate spikes to panicles of spikes or of variously disposed cymes (these sometimes clustered in leaf axils); bracteoles usually 4, in 2 to rarely more pairs, distinct or connate, inner pair sometimes partially adnate to outer pair, forming an involucre enclosing 1 or sometimes more flowers. Calyx small, usually obscured by bracteoles, scarious or membranous, 5-lobed; lobes equal or subequal in length. Corolla rose-pink, purplish, or whitish, resupinate 180° by torsion of tube; tube subcylindric to expanded distally into a narrow throat; limb 2-lipped; lower lip (in upper position) shallowly 3-lobed; upper lip (in lower position) subentire or shallowly 2-lobed; lobes ascending cochlear in bud. Stamens 2, inserted near apex of corolla tube, exerted from mouth of corolla; anthers 1-theous; theca mucous. Ovary with 2 ovules per locule; style exerted from mouth of corolla; stigma 2-lobed, lobes equal or unequal. Capsule stalked, 2–4-seeded; retinacula present. Seeds smooth or ornamented.

About 150 species: Old World; three species in China.

- 1a. Outer bracteoles connate for more than half their length, forming a conspicuous tube; capsule glabrous ..... 1. *H. purpurea*  
1b. Outer bracteoles inconspicuously connate only at base if at all, not forming a conspicuous tube; capsule pubescent.  
2a. Outer bracteoles 2.5–4 mm, lanceolate-subulate to linear ..... 2. *H. cumingiana*  
2b. Outer bracteoles 7–17 mm, elliptic to obovate to oblanceolate ..... 3. *H. triflora*

### 1. *Hypoestes purpurea* (Linnaeus) R. Brown, Prodr. 474. 1810.

红丝线 hong si xian

*Justicia purpurea* Linnaeus, Sp. Pl. 1: 16. 1753; *Hypoestes sinica* Miquel; *Peristrophe purpurea* (Linnaeus) Hochreutiner.

Shrubs or perennial herbs, to 1.5 m tall, spreading to erect. Stems ± 4-angled when young, sulcate, slightly puberulent. Petiole 1–3.5 cm, sparsely pubescent; leaf blade ovate to ovate-elliptic, 5–13 × 1.5–7 cm, abaxially pale green and glabrous, adaxially green and sparsely pubescent or glabrous except for pubescent along veins and on margin, secondary veins 5–8 on each side of midvein, base narrowed and cuneate, margin entire, subundulate, or sinuate-crenate, apex acuminate to acute. Inflorescences of terminal or axillary spikes, 1–3 cm, often arranged in large panicles forming a many-flowered thyse to 7 cm or of dense cymose clusters in axils of leaves or subleaflike bracts; outer bracteoles connate for more than half their length, forming a 5–8 mm obconic involucre, abaxially glabrous or pubescent; inner bracteoles smaller than and partially adnate to outer pair. Calyx ca. 5 mm, 5-lobed ± halfway to base; lobes equal, margin ciliate. Corolla reddish purple to purple, 2–2.7 cm, outside puberulent; lip in lower position lanceolate, subentire; lip in upper position triangularly obovate. Staminal filaments to 1.2 cm, glabrous. Style glabrous; stigma equally 2-lobed. Capsule oblong-ovoid, 0.7–1 cm, glabrous. Seeds elliptic-ovate in outline, tuberculate. Fl. Sep–Oct, fr. Oct.

Thickets, along trails and roads, evergreen broad-leaved forests, rocky shores; near sea level to 1200 m. Guangdong, Guangxi, Hainan, Taiwan [Laos, Philippines].

*Hypoestes purpurea* is a medicinal and ornamental plant.

### 2. *Hypoestes cumingiana* (Nees) Benth & J. D. Hooker, Gen. Pl. 2: 1122. 1876.

枪刀菜 qiang dao cai

*Peristrophe cumingiana* Nees in A. Candolle, Prodr. 11: 498. 1847.

Herbs to 1 m tall, suffrutescent. Stems subterete, ascending to decumbent, distally minutely pubescent. Petiole to 2 cm; leaf blade ovate-oblong to linear-lanceolate, 4–14 × 1–4 cm, both surfaces glabrous, secondary veins 3–6 on each side of midvein, base truncate to cuneate, margin slightly undulate, apex acuminate to acute. Panicles terminal or axillary, to 40 cm, lax; branches of panicle usually subtended by subleaflike inflorescence bracts; floral bracts lanceolate, ca. 4.5 × 1 mm; bracteoles lanceolate-subulate to linear, outer pair 2.5–4 mm, puberulent, inner pair smaller. Flowers single or paired, crowded at tips of branches. Calyx 5-lobed nearly to base, lobes subulate, outside puberulent with non-glandular and gland-tipped trichomes. Corolla white to light purple with darker purple markings, 1.6–2 cm, outside puberulent; tube basally cylindrical and ca. 1 mm wide for 5–8 mm; lip in lower position elliptic, 8–1.2 × 7–8 mm, apex rounded; lip in upper position ca. 10 × 4 mm. Staminal filaments ca. 8 mm. Style 1.4–2 cm, sparsely strigose; stigma 2-lobed. Capsule oblong-ovoid, ca. 1.3 cm, densely puberulent. Seeds blackish brown, ovate in outline, ca. 3 × 3 mm, verrucose. Fl. Nov–Mar, fr. Mar–Jun.

Trailsides slopes, along streams; 100–500 m. Taiwan [Philippines].

### 3. *Hypoestes triflora* (Forsskål) Roemer & Schultes, Syst. Veg. 1: 141. 1817.

三花枪刀药 san hua qiang dao yao

*Justicia triflora* Forsskål, Fl. Aegypt.-Arab. 4. 1775; *Dicliptera riparia* Nees var. *yunnanensis* Handel-Mazzetti.

Herbs to 1 m tall, decumbent, much branched. Stems 4-angled, sulcate, strigose. Petiole 1–3 cm, pubescent; leaf blade ovate, ovate-elliptic, or oblong, (1.3–)3–10 × (1–)2–4 cm, both surfaces sparsely pubescent, secondary veins 4–7 on each side

Fl. China 19: 467–468. 2011.

of midvein, base cuneate and decurrent onto petiole, margin minutely crenate to denticulate, apex acuminate. Cymes pedunculate in leaf axils and/or in axils of subleaflike bracts distally or in a terminal cluster, (1–)3(–5)-flowered; outer pair of bracteoles elliptic to obovate to oblanceolate,  $0.7\text{--}1.7 \times 0.4\text{--}0.6$  cm, green toward apex, abaxially pilose, base cuneate, apex rounded to acute; inner pair of bracteoles linear-lanceolate to oblanceolate, smaller, basally connate, apex acute. Calyx ca. 6 mm, 5-lobed almost to base; lobes linear-lanceolate, ca. 5 mm. Corolla white to pink with maroon markings, ca. 1.5 cm, outside pubescent; tube basally cylindrical and ca. 1 mm wide for ca. 1 cm; lip in lower position lanceolate, ca.  $5 \times 1.5$  mm, apex slightly 2-lobed; lip in upper position oblong, ca.  $5 \times 3$  mm. Ovary pubescent; style ca. 1.4 cm, glabrous; stigma unequally 2-lobed. Capsule ca. 9 mm, pubescent (at least distally). Seeds black, ovate in outline, ca.  $2 \times 2$  mm, verrucose. Fl. Jul–Sep, fr. Sep–Jan.  $2n = 30$ .

Trailsides, forests; 300–2400 m. Yunnan [Bhutan, India, Myanmar, Nepal; Africa].

Fl. China 19: 467–468. 2011.