

27. **NOTOCHAETE** Bentham, Edward's Bot. Reg. 15: t. 1289. 1829.

钩萼草属 *gou e cao shu*

Herbs erect. Rhizomes robust. Stems stellate or hirsute, becoming subglabrous. Leaves long petiolate; petiole flattened laterally; leaf blade ovate to circular. Cymes in upper leaf axils, subglobose in outline, many flowered; bracts linear, rigid, apex hooked, longer than corolla. Calyx tubular, ± conspicuously 5-veined; teeth 5, with apical or subapical hooked spine. Corolla reddish, yellow, or white, small; tube straight, included, glabrous, or glabrous outside but ± villous at throat inside, 2-lipped; upper lip erect, galeate, entire, densely villous outside, glabrous inside; lower lip subequally 3-lobed, villous outside, glabrous inside. Stamens 4, didynamous, anterior 2 longer, ascending beneath upper lip of corolla; filaments puberulent basally; anthers close together in pairs, with 2 divergent cells. Ovary glabrous or stellate at apex. Style filiform, subequally 2-cleft. Nutlets triquetrous, oblong, apex truncate.

Two species: Bhutan, China, India (Sikkim), Myanmar, Nepal; both in China.

- 1a. Leaf base broadly cuneate to roundish; bracts ca. 1 cm; calyx 5–7 mm; corolla reddish or yellow; nutlets glabrous 1. *N. hamosa*
1b. Leaf base shallowly cordate to cordate; bracts 1.3–1.5 cm; calyx 1.3–1.6 cm; corolla white; nutlets stellate at apex 2. *N. longiaristata*

1. **Notochaete hamosa** Bentham, Edward's Bot. Reg. 15: t. 1289. 1829.

钩萼草 *gou e cao*

Stems 1–2.5 m tall, to 6 mm in diam. at base; branches and stems striate, sparsely stellate, glabrescent. Petiole 3–7 cm; leaf blade ovate, 5–14×2.5–8 cm, densely hirtellous, slightly scabrid adaxially, sparsely stellate abaxially, base broadly cuneate to rounded, margin densely serrulate-crenulate near base, apex acuminate. Verticillasters ca. 2.5 cm in diam. in flower, to 3.5 cm in fruit, shorter than petiole; bracts ca. 1 cm, villous, stellate abaxially. Calyx ca. 5–7 mm, stellate on basal half outside, glabrous inside, densely villous at throat; teeth deltoid, ca. 4 mm including spine, to 6 mm in fruit, with subterminal hooked spine abaxially. Corolla reddish or yellow, ca. 6 mm; tube erect, ca. 5 mm. Nutlets brown, ca. 4×2 mm, glabrous. Fl. Aug-Sep, fr. Oct.

Margins of subtropical evergreen forests, valleys; 1200–2500 m. Yunnan [Bhutan, India (Sikkim), Myanmar, Nepal].

2. **Notochaete longiaristata** C. Y. Wu & H. W. Li, Acta Phytotax. Sin. 10: 154. 1965.

长刺钩萼草 *chang ci gou e cao*

Stems 35–80 cm tall, grooved, to 8 mm in diam. at base, retrorse hirsute, glabrescent. Petiole 2–8 cm, sparsely hirsute; leaf blade ovate-orbicular, 3.5–10×3–9 cm, adaxially sparsely hirsute, densely so on margin, abaxially glabrous, sparsely hirsute and stellate on veins, base shallowly cordate to cordate, margin serrate-crenate, apex acute. Verticillasters 3 or 4, ca. 2.5 cm in diam. in flower, to 4 cm in diam. in fruit, much shorter than petiole; bracts 1.3–1.5 cm, glabrous. Calyx apex sparsely stellate outside, glabrous inside; tube ca. 7 mm including spines in flower, to 1 cm in fruit; lobes deltoid, apex extending directly into a long hooked spine. Corolla white; tube ca. 5 mm, ± villous at throat inside; upper lip erect, galeate, entire, densely villous; lower lip spreading, villous outside, glabrous inside. Ovary densely stellate. Nutlets brownish, ca. 4×2.5 mm, truncate, apex stellate. Fl. Oct-Nov, fr. Nov.

- Streamsides in dense forests; 2000–2400 m. Xizang, Yunnan.

