

4. CYANOTIS D. Don, Prodr. Fl. Nepal. 45. 1825, nom. cons.

蓝耳草属 lan er cao shu

Amischophacelus R. S. Rao & Kammathy.

Herbs annual or perennial, erect or creeping. Rhizomes absent. Leaves alternate. Cincinni sessile, subtended by spathe-like involucre bracts; bracts imbricate, 2-seriate, falcate-curved. Flowers actinomorphic. Sepals free or connate only at base. Petals connate and tubular in middle, free at both ends, purple, blue, or white, linear-lanceolate. Stamens 6, all fertile, equal; filaments lanate, rarely glabrous; anther locules longitudinally dehiscent. Ovary 3-loculed; ovules 2 per locule. Capsule 3-valved, obovoid- or broadly oblong, trigonous. Seeds 1 or 2 per valve, cylindrical or quadrangular, reticulate or pitted; hilum at adjoining end of 2 seeds.

About 50 species: tropical and subtropical Africa and Asia to N Australia; five species in China.

The petals are often described as connate basally; they are actually connate only in the middle part, but free at both ends.

- 1a. Cincinni much reduced, with 3–6 flowers, enveloped in leaf sheath 5. *C. axillaris*
- 1b. Cincinni with more flowers, subtended by spathe-like bracts.
 - 2a. Basal leaves rosulate; leaves, involucre bracts, and bracts usually densely arachnoid; roots 1–1.5 mm in diam. 2. *C. arachnoidea*
 - 2b. Basal leaves not rosulate; leaves, involucre bracts, and bracts hirsute or pubescent, rarely sparsely arachnoid; roots much thinner.
 - 3a. Leaf blade usually narrowly oblong; cincinni numerous flowered, semicircular, obviously cristate; bracts to 7 mm wide, sparsely multicellular ciliate 3. *C. cristata*
 - 3b. Leaf blade linear or linear-lanceolate; cincinni not cristate; bracts much narrower, not ciliate.
 - 4a. Plants with bulbs; seeds obviously striate and also finely reticulate 1. *C. vaga*
 - 4b. Plants without bulbs; seeds only finely reticulate 4. *C. loureiroana*

1. *Cyanotis vaga* (Loureiro) Schultes & J. H. Schultes in Roemer & Schultes, Syst. Veg. 7: 1153. 1830.

蓝耳草 lan er cao

Tradescantia vaga Loureiro, Fl. Cochinch. 1: 193. 1790; *Cyanotis barbata* D. Don; *C. bulbosa* H. Léveillé; *C. nobilis* Hasskarl.

Herbs perennial, bulbiferous. Bulbs globose. Stems amply branched usually from base, or distally, or few branched, 10–60 cm. Leaves all cauline; leaf blade linear to lanceolate, 5–10 (–15) cm × 3–10 (–15) mm, abaxially glabrous or sparsely pubescent. Cincinni solitary, rarely terminal and also with flowers in axillary heads; peduncle present or absent; bracts 5–10 mm. Sepals connate at base, oblong-lanceolate, ca. 5 mm, abaxially white hirsute. Petals purple or blue-purple, 6–8 mm. Filaments blue lanate. Capsule obovoid, trigonous, ca. 2.5 mm, hirsutulous at apex. Seeds gray-brown, striate and finely reticulate. Fl. Jul–Sep, fr. Oct.

Forests or grassy slopes; near sea level to 3300 m. Guangdong (Guangzhou Shi), Guizhou, W Hainan (Dongfang Xian), S Sichuan, Taiwan, S Xizang, Yunnan [Bhutan, India, Laos, Myanmar, Nepal, Sikkim, Thailand, Vietnam].

2. *Cyanotis arachnoidea* C. B. Clarke in A. de Candolle & C. de Candolle, Monogr. Phan. 3: 250. 1881.

蛛丝毛蓝耳草 zhu si mao lan er cao

Cyanotis bodinieri H. Léveillé & Vaniot; *C. labordei* H. Léveillé & Vaniot.

Herbs perennial; roots fibrous. Main stem undeveloped, short; fertile stems arising from beneath leaf rosette, diffuse, creeping, 20–80 cm. Leaves in a basal rosette and cauline; rosulate leaf blade linear, 8–35 × 0.5–1.5 cm; cauline leaf blade on

fertile stems much shorter, to 7 cm, abaxially rather densely arachnoid. Cincinni often several, forming both terminal and axillary heads, sessile or on peduncle to 4 cm; bracts 7–8 mm. Sepals connate at base, linear-lanceolate, ca. 5 mm, abaxially arachnoid. Petals blue-purple, blue, or white, ca. 6 mm. Filaments blue arachnoid. Capsule broadly oblong, trigonous, ca. 2.5 mm, densely hirsutulous at apex. Seeds gray-brown, pitted. Fl. Jun–Sep, fr. Oct.

By streams, humid ravines and rocks; near sea level to 2700 m. Fujian, Guangdong, Guangxi, SW Guizhou, Hainan (Baoting Xian, Chengmai Xian), SW Jiangxi (Longnan Xian), Taiwan, C and S Yunnan [India, Laos, Myanmar, Sri Lanka, Thailand, Vietnam].

The roots are used as medicine for stimulating blood circulation, as a muscle and joint relaxant, and for relieving rheumatoid arthritis.

3. *Cyanotis cristata* (Linnaeus) D. Don, Prodr. Fl. Nepal. 46. 1825.

四孔草 si kong cao

Commelina cristata Linnaeus, Sp. Pl. 1: 42. 1753; *Cyanotis cavaleriei* H. Léveillé & Vaniot; *C. racemosa* C. B. Clarke.

Herbs annual; roots fibrous. Stems creeping, often branched, 10–35 cm. Leaves all cauline; leaf blade oblong, lanceolate, ovate-lanceolate, or narrowly elliptic, 2–8 × 0.8–2 cm, abaxially glabrous or sparsely arachnoid. Cincinni often solitary, terminal or also axillary if 2 together; peduncle absent or to 9 cm; bracts 1–1.5 cm. Sepals connate at base, linear-lanceolate or oblanceolate, ca. 5 mm, abaxially hirsute along midvein and at margin. Petals blue or purple, 4–5 mm. Filaments blue lanate. Capsule columnar, trigonous, ca. 2.5 mm, hirsutulous at apex. Seeds gray-brown, pitted. Fl. Jul–Aug, fr. Sep–Oct.

By streams in ravines or open humid places; near sea level to 2000 m. W Guangdong (Xinxing Xian), Guangxi, SW Guizhou, Hainan,

Yunnan [Bhutan, Cambodia, India, Indonesia, Laos, Malaysia, Myanmar, Philippines, Sikkim, Sri Lanka, Thailand, Vietnam].

The root is used as a medicine for the relief of swelling and snakebite.

4. *Cyanotis loureiroana* (Schultes & J. H. Schultes) Merrill, Lingnaam Agric. Rev. 1: 61. 1923.

沙地蓝耳草 sha di lan er cao

Tradescantia loureiroana Schultes & J. H. Schultes in Roemer & Schultes, Syst. Veg. 7: 1178. 1830, based on *T. geniculata* Loureiro, Fl. Cochinch. 1: 193. 1790, not Jacquin (1760); *Cyanotis geniculata* C. B. Clarke.

Herbs annual; roots fibrous. Stems branched and twisting, red. Leaves all cauline; leaf blade linear-lanceolate or lanceolate, abaxially glabrous or sparsely pubescent. Cincinni solitary, terminal; peduncle 2.5–6 cm; bracts 5–13 mm. Sepals connate at base, lanceolate, 5–6 mm, abaxially lanate. Petals blue or blue-purple, 6–8 mm. Filaments blue lanate. Capsule trigonous, ca. 2 mm, hirsutulous at apex. Seeds gray-brown, finely reticulate. Fl. winter.

Open places. SW Guangdong (Xuwen Xian), Hainan [Vietnam].

The concept of *Cyanotis loureiroana* has not been well understood, and Clarke (in A. de Candolle & C. de Candolle, Monogr. Phan. 3: 250. 1881) treated it as a doubtful species. It is similar in appearance to *C. papilionacea*, in which the rosulate, basal leaves are smaller or absent, but to *C. cristata* in capsule features.

5. *Cyanotis axillaris* (Linnaeus) D. Don ex Sweet, Hort. Brit. 430. 1826.

鞘苞花 qiao bao hua

Commelina axillaris Linnaeus, Sp. Pl. 1: 42. 1753; *Amis-chophacelus axillaris* (Linnaeus) R. S. Rao & Kammathy.

Herbs annual; roots fibrous. Stems erect or creeping, branched, 30–40 cm. Leaves all cauline; leaf blade linear, 20–80 × 5–8 mm, abaxially glabrous or sparsely pubescent. Cincinni reduced, in axillary fascicles of 3–6 flowers; peduncle absent; bracts ca. 10 mm. Sepals free, linear-spatulate, 6–9 mm, abaxially hirsute. Petals blue, ca. 12 mm. Filaments blue lanate. Capsule oblong, trigonous, 4–5 mm, hispid at apex, with 6 horned projections. Seeds gray-black or gray-brown, pitted. Fl. spring, autumn.

Humid sandy places. W Hainan (Changjiang Xian), Hong Kong [Cambodia, India, Indonesia, Laos, Malaysia, Myanmar, Philippines, Sri Lanka, Thailand, Vietnam; Oceania].

