# **139.** CRYPSIS Aiton, Hort. Kew. 1: 48. 1789, nom. cons.

## 隐花草属 yin hua cao shu

Lu Shenglian (卢生莲); Sylvia M. Phillips

Heleochloa Host ex Roemer.

Annuals, low growing. Culms ascending or prostrate, much branched. Leaf blades short, linear to lanceolate, flat or involute; ligule a line of hairs. Inflorescence a very dense panicle, spicate and cylindrical, or ovoid to capitate and then usually subtended by 1 or 2 inflated spathelike leaf sheaths with a reduced blade. Spikelets with 1 floret, strongly laterally compressed, disarticulating below the floret or rarely falling entire; glumes narrow, slightly shorter than lemmas, unequal to subequal, membranous, 1-veined, scabrid or ciliate along keel, acute or with a short awn-point; lemma lanceolate, membranous, 1-veined, awnless; palea similar to lemma, 1–2-veined, splitting at maturity. Lodicules absent. Stamens 2–3. Grain ellipsoid, pericarp free and sometimes swelling when wet.

Nine to twelve species: centered on the Mediterranean region and SW Asia, but extending to C Africa and from Europe to China; introduced elsewhere; two species in China.

Crypsis species occur mainly on periodically wet, often saline soils in semi-arid areas.

- stamens 2 \_\_\_\_\_\_\_\_ 2. C. aculeata

# **1. Crypsis schoenoides** (Linnaeus) Lamarck, Tabl. Encycl. 1: 166. 1791.

#### 蔺状隐花草 lin zhuang yin hua cao

Phleum schoenoides Linnaeus, Sp. Pl. 1: 60. 1753; Heleochloa schoenoides (Linnaeus) Host.

Culms tufted, prostrate or ascending, 5–20 cm or more tall, 3–5-noded, glabrous. Leaf sheaths loose and enlarged, smooth, glabrous, shorter than internodes; leaf blades demarcated from sheath, involute,  $2-10 \times 0.1-0.4$  cm, adaxial surface puberulent or pilose, abaxial surface glabrous or pilose, apex acicular. Inflorescence often subtended by enlarged inflated uppermost sheath, ellipsoid or ovoid,  $1-3 \times 0.5-1$  cm, rachis distinct. Spikelets greenish or purple, 3-4 mm; glumes unequal, slightly shorter than lemma, ciliate on keel; lower glume 2.2-2.5 mm; upper glume 2.5-2.8 mm; lemma 3-3.6 mm, keel ciliolate, acute; palea slightly shorter than or equaling lemma, 2-veined. Anthers 3, 0.8-1 mm. Grain elliptic, 1-1.5 mm. Fl. and fr. Jun–Sep. 2n = 16, 18, 36.

Sandy soils, grassy roadsides. Anhui, Hebei, Henan, Jiangsu, Nei Mongol, Ningxia, Shandong, Shanxi, Xinjiang [Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan; SW Asia, S Europe, Mediterranean region; introduced in North America and isolated records elsewhere].

*Crypsis vaginiflora* (Forsskål) Opiz is a very similar species found from Africa to India. It occurs in Kashmir and is to be expected in Xizang. It differs by its hairy leaf sheath margins and collar, subequal glumes as long as the lemma, and shorter anthers (0.6–0.7 mm).

Crypsis turkestanica Eig, from C Asia and also reported from Xinjiang, has ovoid panicles usually clearly longer than wide and supported by 2 terminal leaf sheaths, a palea with 1 or 2 inconspicuous veins, 2 or 3 stamens, and anthers 0.6–1.3 mm long.

## 2. Crypsis aculeata (Linnaeus) Aiton, Hort. Kew. 1: 48. 1789.

#### 隐花草 yin hua cao

Schoenus aculeatus Linnaeus, Sp. Pl. 1: 42. 1753.

Culms prostrate or ascendent, glabrous, 5–40 cm tall. Leaf sheaths loose and enlarged, shorter than internodes; leaf blades continuous with sheath, linear-lanceolate, flat or conduplicate,  $2-8 \times 0.1$ –0.5 cm, adaxial surface scabridulous, abaxial surface smooth, margins involute, apex acicular. Inflorescence subtended by enlarged inflated uppermost sheaths, capitate to ovoid, as wide or wider than long, 0.4– $0.9 \times 0.8$ –1.3 cm, rachis obsolete. Spikelets yellowish, 3.5–4.5 mm; glumes unequal, scabrid or ciliate on keel, obtuse; lower glume linear, 2.5–3 mm; upper glume lanceolate, 3–3.5 mm; lemma longer than glumes, 3.5–4.5 mm, acute; palea equaling or slightly longer than lemma, 1-veined or vein obsolete. Anthers 2, 1–1.3 mm. Grain oblong or obovoid, ca. 2 mm. Fl. and fr. May–Sep. 2n = 16, 18, 54.

River banks, ditches, other damp places on saline and alkaline soils. Anhui, Gansu, Hebei, Henan, Jiangsu, Nei Mongol, Ningxia, Shaanxi, Shandong, Shanxi, Xinjiang, Yunnan [Kazakhstan, Kyrgyzstan, Turkmenistan, Uzbekistan; SW Asia, C Europe, Mediterranean region; introduced in S Africa].

This species is an indicator of saline and alkaline soils and is a good fodder plant.

Flora of China 22: 485. 2006.