1. **Hypolytrum** Persoon, Syn. Pl. 1: 70. 1805.

割鸡芒属 ge ji mang shu

Dai Lunkai (戴伦凯); David A. Simpson, Gordon C. Tucker

Herbs, perennial, moderately robust to robust, rhizomatous [or stoloniferous]. Roots coarse. Culms central or lateral, if lateral then with cataphylls at base. Leaves 3-ranked, basal or cauline, ligulate; basal leaf sheath folded, adaxially open, cauline leaf sheath tubular; leaf blade leathery, glabrous. Involucral bracts leaflike or glumelike, basal bract usually longest. Inflorescence usually an open compound panicle or capitulate, with 1 to many spikes. Spikes comprising many spirally imbricate glumelike bracts and subtending a bisexual spikelet with a much reduced axis (pseudospikelet). Pseudospikelets comprising a naked apparently terminal female flower and 2 (or 3) glumes subtending a male flower comprising 1 stamen; basal 2 glumes opposite, keeled. Perianth bristles absent. Stigmas 2 or 3. Nutlet with a sculptured hard outer surface, apex often conically rostrate or sometimes mucronate.

About 60 species: tropical and subtropical regions; four species (two endemic) in China.

1a. Culms central; inflorescences paniculate with many spikes; basalmost involucral bract 15–30 × 0.7–1.7 cm, much longer than inflorescence ........................................................................................................................................ 1. *H. nemorum*

1b. Culms lateral; inflorescences capitulate, with 1 to many spikes; basalmost involucral bract 1.5–5 × ca. 5 cm, shorter to slightly longer than inflorescence.

2a. Culms 30–45 cm; leaf blade 2–6 mm wide; spike 1 (or 2) ..................................................................................... 4. *H. shurenii*

2b. Culms 5–40 cm; leaf blade 1–2 cm wide; spikes few to many.

3a. Culms 5–10 cm tall; spikes few; nutlet olivaceous, subglobose, ca. 2 mm, apex mucronate ........  2. *H. paucistrobiliferum*

3b. Culms 30–40 cm tall; spikes many; nutlet brown, obovoid to ovoid, ca. 3 mm, apex conically rostrate .......................................................... 3. *H. hainanense*


割鸡芒 ge ji mang

*Schoenus nemorum* Vahl, Symb. Bot. 3: 8. 1794; *Hypolytrum formosanum* Ohwi; *H. latifolium* Persoon.

Roots few, hard, fibrous. Rhizomes short, slightly thick, woody, with dense reddish scales. Culms central, 30–90 cm tall, 3–4 mm thick, 3-angled, stiff. Leaves basal and 1 or 2 cauline, longer than culm; basal leaf sheath brownish, 5–15 cm, margin thickly membranous, basal leaf bladeless; leaf blade 35–120 × 0.8–2.6 cm or longer, flat, stiff, subleathery, base folded, margin scabrous near apex. Involucral bracts 3–5, leaflike, at base of inflorescence and branches, basalmost much longer than inflorescence, not sheathing. Inflorescences paniculate, ovoid-globose to subglobose, 3–7 × 4.5–6 cm, with many spikes; rachis and rachilla angles scabrous. Spikes obovoid, becoming globose when mature, 3–7 × 3–6 mm, with many glumelike bracts. Glumelike bracts brown, spirally and imbricately arranged, obovate, ca. 2 mm, mid-veined, each subtending a pseudospikelet, apex rounded and mucronate. Pseudospikelets ca. 1.5 mm, with 2 glumes, 2 male flowers, and 1 female flower; glumes brown, lateral and opposite, cymbiform, ca. 1.2 mm, membranous, keeled, connate on adaxial side, fissilose on keel, each with a male flower. Filaments slender; anthers narrowly oblong. Stigmas 2. Nutlet dark grayish brown, subglobose, 2–2.5 mm (including rostrum), compressed, longitudinally rugose, apex conically rostrate. Fl. and fr. Apr–Aug.

Wet places in forests or scrub; valleys; 100–1200 m. Fujian, Guangdong, Guangxi, Hainan, Taiwan, Yunnan [Bhutan, Cambodia, India, Indonesia, Laos, Malaysia, Myanmar, Papua New Guinea, Philippines, Sri Lanka, Thailand, Vietnam; tropical Africa and America, NE Australia, Indian Ocean islands, Pacific islands].


少穗割鸡芒 shao sui ge ji mang

Roots few, thick, hard, fibrous. Rhizomes ± thick, woody. Culms purple, lateral, 5–10 cm tall, with several cataphylls toward base. Leaves basal, distichous; leaf sheath 1–1.8 cm, smooth, not closed, margin narrowly thickly membranous; leaf blade 55–105 × 1.5–2 cm, apically gradually narrowed, flat, papery, smooth, margin and abaxial midvein apically serrulate and scabrous. Involucral bracts 3–5, leaflike, 2–5 cm, basalmost bract equaling inflorescence, basalmost closed into sheath. Inflorescence a corymbose panicle congested into a head, with few spikes. Spikes with many glumelike bracts, each subtending a pseudospikelet. Pseudospikelets ca. 2 mm, with 2 glumes, 2 male flowers, and 1 female flower; glumes lateral and opposite, cymbiform, membranous, keeled, connate on adaxial side, hispidulous on keel, each with a male flower, margin hyaline. Another linear; connective apex slightly prominent beyond anther. Stigmas 2, longer than style. Nutlet olivaceous, slightly stipitate, subglobose, ca. 2 mm, both lateral sides angular, abaxial and adaxial surfaces irregularly longitudinally rugose, apex mucronate. Fl. and fr. Aug–Sep.

Dry places on hills; ca. 100 m. Hainan (Lingshui).


海南割鸡芒 hai nan ge ji mang


Roots fibrous. Rhizomes stout, woody. Culms lateral, 30–40 cm tall, 3-angled, basally with several scales and bladeless sheaths. Basal scales broadly ovate. Bladeless sheaths dark grayish brown, densely spirally arranged. Leaves basal, tufted;
leaf sheath reddish, to 14 cm, not closed, slightly folded, smooth, margin thickly membranous; leaf blade flat, ca. 1 m × 1–1.8 cm, apically gradually narrowed, papery, glabrous, margins and abaxial midvein serrulate. Involucral bracts 2 or 3, leaf-like, 1.5–5 cm, slightly longer than inflorescence; basalmost bract sheathing. Inflorescence a corymbose panicle congested into a head, 1.3–2 × 1.5–2.5 cm, with many spikes. Spikes narrowly ellipsoid, becoming globose in fruit, 5–6 mm in diam., with many glumelike bracts and pseudospikelets. Glumelike bracts yellowish brown, spirally and imbricately arranged, oblong-ovoblate, 2.5–3 mm, leathery, punctate, keeled, each subtending a pseudospikelet. Pseudospikelets ca. 2 mm, with 2 glumes, 2 male flowers, and 1 female flower; glumes dark grayish brown, lateral and opposite, narrowly elliptic and cymbiform, ca. 2.5 mm, keeled, membranous, connate on adaxial side, spinulose on keel, each with a male flower. Anther linear, ca. 0.7 mm; connective apex slightly prolonged beyond anther. Style ca. 0.5 mm; stigmas 2. Nutlet light brown, stipitate, ellipsoid-ovoid (widest at mid-length), ca. 2.3 × 1.1 mm, rounded 3-sided, irregularly longitudinally rugose, apex with a conic beak. Fl. and fr. Dec–Jul.

- Open woods, clearings; 900–1400 m. Hainan.


树仁割鸡芒 shu ren ge ji mang

Type: China. Hainan: Changjiang, 10 Dec 1933, Liang Xiangri 66046 (holotype, MO!).

Haec species Hypolytro humili Boeckeler affinis, sed ab eo culmis capillaribus, foliis 2–6 mm latis ad apicem caudatis, spicis 1 vel 2 atque nucula ellipsoideo-ovoidea differt.

Paratypes: Hainan: Ledong Li Autonomous County, 3 Jul 1936, Liu Xinqi 27397 (MO); Dongfang City, 10 Dec 1955, Hainan Station 237 (MO); Qiongzhong County, 11 Dec 1956, Anonymous 3677 (MO); Baisha County, 24 Feb 1936, Liu Xinqi 25437 (MO); Ya County (now Sanya), 28 Jul 1933, Huang Zhi 33414 (MO).

Perennials, 30–45 cm tall. Roots fibrous. Rhizomes to 1 cm thick, hardened, oblique to horizontal, covered with tough fibrous remnants of leaf sheaths. Culms lateral/axillary, (5–)10–20 cm tall, delicate, flexuose, smooth or scabridulous but scabrous on winged angles, basally flattened, apically becoming roundly 3-angled. Leaves basal, tufted; leaf sheath reddish, to 14 cm, not closed, slightly folded, smooth, margin thickly membranous; leaf blade linear, 15–30 cm × 2–6 mm, flat or slightly plicate, leathery, glabrous, margin and abaxial midvein serrulate, apex with a slender 3–6 mm cauda. Involucral bracts 2(or 3), deltate, 2–3 mm, shorter than spike; basalmost bract with tubular or amplexicaul sheath to 1 mm. Inflorescences of 1 or 2 spikes (if 2 then proximal one stalked, subtended by a bladeless sheath up to 6 mm). Spikes ovoid, 4–5 mm, with 10–20 glumelike bracts and pseudospikelets. Glumelike bracts yellowish brown, spirally arranged and imbricate, ovate-deltate, 2.5–3 mm, leathery, ca. 7-veined, keeled, margin white membranous, apex rounded; basal 3 bracts sterile, apical ones each with a pseudospikelet. Pseudospikelets with 2 glumes, 3 male flowers,