

221. HACKELOCHLOA Kuntze, Revis. Gen. Pl. 2: 776. 1891.

球穗草属 qiu sui cao shu

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Annual. Leaf blades flat, linear or linear-lanceolate; ligule a short ciliate membrane. Inflorescence of single axillary racemes aggregated into a spathate compound panicle, peduncle enclosed within spatheole; racemes flattened, dorsiventral, bearing paired spikelets, fragile, obliquely articulated; rachis internodes stoutly oblong, adnate to adjacent pedicel, together forming a cavity, base obliquely truncate with central peg. Sessile spikelet much broader than internode; lower glume brittle, hemispherical, rugose, pitted to honeycombed, wingless, narrowed into a stipelike base; upper glume shorter and narrower, sunk into cavity of rachis; lower floret barren, without a palea; upper floret with entire awnless lemma. Pedicelled spikelet readily disarticulating, narrowly ovate, herbaceous, smooth, narrowly winged; pedicel oblong, adnate to adjacent rachis internode, junction with internode marked by a line. $x = 7$.

Two species: one pantropical, the other confined to Asia; two species in China.

This genus is readily recognizable by its unique, globose, reticulately wrinkled sessile spikelets. The caryopsis is unusual, as the embryo extends along its whole length. It is placed in *Mnesithea* by some authors, but differs from that genus also by its annual habit and different basic chromosome number.

- 1a. Sessile spikelets 1–1.5 mm, shallowly pitted, ribs between pits broad, rounded; racemes to 1.5 cm 1. *H. granularis*
1b. Sessile spikelets 2–2.5 mm, deeply honeycombed, ribs between pits narrow, sharp; racemes more than 2 cm 2. *H. porifera*

1. Hackelochloa granularis (Linnaeus) Kuntze, Revis. Gen. Pl. 2: 776. 1891.

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Cenchrus granularis Linnaeus, Mant. Pl. 2: 575. 1771; *Manisuris granularis* (Linnaeus) Linnaeus f.; *Mnesithea granularis* (Linnaeus) de Koning & Sosef; *Rottboellia granularis* (Linnaeus) Roberty.

Annual. Culms tufted, erect, up to 60 cm tall, branched from base. Leaf sheaths loose, slightly inflated, keeled; leaf blades linear-lanceolate, 5–20 × 0.4–1 cm, coarsely hispid, base subamplexicaul, apex subacute; ligule ca. 1 mm. Racemes 0.7–1.5(–2) cm; peduncle often pubescent; rachis internodes 1–1.5(–2) mm. Sessile spikelet 1–1.5 mm, usually cream-colored at maturity; lower glume hemispherical, coarsely reticulate-rugose, pits shallow and separated by broad rounded ribs, the whole surface finely granular; upper glume hyaline below, thickening upward toward the crested apex; lower lemma hyaline; upper lemma hyaline, ca. 1.1 mm, upper palea as long. Pedicelled spikelet 1.5–2.5 mm, glumes with prominent green veins and whitish wings. Fl. and fr. Jun–Oct. $2n = 14$.

Arable land, open grassy places; 100–1000 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Sichuan, Taiwan, Yunnan, Zhejiang [throughout the tropics].

2. Hackelochloa porifera (Hackel) D. Rhind, Grasses Burma, 77. 1945.

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Manisuris porifera Hackel, Oesterr. Bot. Z. 41: 48. 1891.

Annual. Culms erect, 0.6–1.5 m tall, sparsely branched, often stilt-rooted. Leaf sheaths with rather rigid tubercle-based hairs; leaf blades linear-lanceolate, 5–25 × 0.5–1.5 cm, tuberculate-hispid on both surfaces; ligule 1–2 mm. Racemes 2–3 cm; peduncle glabrous or sparingly puberulent; rachis internodes ca. 2 mm. Sessile spikelets 2–2.5 mm, brown at maturity; lower glume obovate, ridged or honeycombed, upper part deeply honeycombed with sharp, narrow ribs, smooth and slightly narrowed toward base; upper glume papery. Pedicelled spikelet 3 mm or more, glumes winged. Fl. and fr. Jul–Nov.

Disturbed places; 100–800 m. S Yunnan [India, Myanmar, Vietnam].

Flora of China 22: 646–647. 2006.