

157. HYMENACHNE P. Beauvois, Ess. Agrostogr. 48. 1812.

膜稈草屬 mo fu cao shu

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Aquatic perennials. Culms long, decumbent, spongy, rooting at lower nodes, internodes solid, filled with aerenchyma. Leaf blades linear or broadly linear. Inflorescence usually a cylindrical spikelike panicle, rarely with spreading primary branches. Spikelets lanceolate, dorsally compressed, veins prominent, florets 2; lower glume usually about 1/3 spikelet length, base clasping; upper glume shorter than or subequaling spikelet, 5-veined; lower lemma as long as spikelet, 5-veined, apex acute to shortly awned; lower palea absent or much reduced; upper lemma membranous, rarely thinly cartilaginous, smooth, margins hyaline, gripping edges of palea below but free toward apex, apex acute.

Five species: tropics of the Old World and New World; three species (one endemic) in China.

*Hymenachne* is a genus of swamp grasses similar to *Sacciolepis*, and both are segregates from the large genus *Panicum*. The culms of *Sacciolepis* are hollow, but in *Hymenachne* they are filled with aerenchyma.

- 1a. Panicle open, up to 9 cm wide; spikelets loose; culm nodes villous ..... 1. *H. patens*  
1b. Panicle spikelike, 1–2 cm wide; spikelets dense; culm nodes glabrous.  
2a. Spikelets 4–6 mm; upper glume and lower lemma cuspidate-acuminate or extended into mucro up to 2 mm ..... 2. *H. amplexicaulis*  
2b. Spikelets 2–3.2 mm; upper glume and lower lemma acute to acuminate.  
3a. Spikelets 3–3.2 mm, lanceolate, acuminate ..... 3. *H. assamica*  
3b. Spikelets 2–2.5 mm, ovate-lanceolate, acute ..... 10. *Panicum auritum* (see p. 507)

1. **Hymenachne patens** L. Liu, Bot. Res. Acad. Sin. 4: 35. 1989.

展穗膜稈草 zhan sui mo fu cao

Culms decumbent, ascending to ca. 50 cm, nodes 4 or 5, villous. Leaf blades linear-lanceolate, 10–20 × 0.5–1 cm, glabrous on both surfaces, base rounded and clasping, apex acuminate. Panicle 15–20 × 4–9 cm, open; branches 5–12 cm, distant, laxly ascending, spikelets on side branchlets, 2 or 3 per node; pedicels 1–2 mm, smooth. Spikelets green or brownish green, 3.2–4 × ca. 1 mm, acute; lower glume 1/3–1/2 as long as spikelet, 3–5-veined; upper glume subequal to spikelet, herbaceous with membranous margins, 5-veined, acute; lower lemma similar to upper glume but slightly longer; upper lemma slightly shorter than spikelet, thinly cartilaginous, smooth, margins flat below middle, apex acute. Anthers ca. 1 mm. Fl. and fr. Jun–Oct.

- Wet field margins; ca. 100 m. Anhui, Fujian, Jiangxi.

The open panicle and villous nodes are very unusual in *Hymenachne*, but the spikelets are typical of the genus.

2. **Hymenachne amplexicaulis** (Rudge) Nees, Fl. Bras. Enum. Pl. 2: 276. 1829.

膜稈草 mo fu cao

*Panicum amplexicaule* Rudge, Pl. Guian. 1: 21. 1805; *Hymenachne acutigluma* (Steudel) Gilliland; *H. pseudointerrupta* C. Mueller; *Panicum acutiglumum* Steudel.

Culms decumbent, up to 1 m tall, 6–10 mm in diam.; nodes many, brown, glabrous. Leaf blades broadly linear, thick, 30–40 × ca. 2 cm, glabrous on the adaxial surface and margins loosely tuberculate-hairy, base rounded and slightly clasping,

apex acuminate. Ligule membranous, 1–2 mm. Panicle 20–40 × 1–2 cm; spikelike, branches 0.5–2 cm, erect, appressed; rachis winged; pedicels scabrous. Spikelets narrowly lanceolate, 4.5–6 × ca. 1 mm, veins smooth at base, otherwise scabrous; both glumes and lower lemma separated by a short stipe; lower glume ovate, ca. 1.2 mm, 1-veined, acuminate; upper glume and lower lemma lanceolate, 3–4 mm, apex with 0.5–2 mm awn; upper lemma ca. 3 mm, margins flat, apex acuminate. Anthers 0.75–1 mm. Caryopsis ca. 1.5 mm, apex rounded. Fl. and fr. summer to autumn.

Streams in shallow water, ricefields; below 1000 m. Hainan, Taiwan, Yunnan [India, Malaysia, Myanmar, Philippines, Thailand, Vietnam].

3. **Hymenachne assamica** (J. D. Hooker) Hitchcock, Lingnan Sci. J. 7: 222. 1931 [“1929”].

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*Panicum assamicum* J. D. Hooker, Fl. Brit. India 7: 40. 1896 [“1897”].

Culms decumbent, 50–70 cm tall, ca. 5 mm in diam., nodes many, brown, glabrous. Leaf sheaths with one margin tuberculate-ciliate; leaf blades linear-lanceolate, 10–20 × 0.4–1.2 cm, a few setae at base above ligule, base rounded, apex acuminate; ligule 0.3–0.5 mm. Panicle narrow, dense, pale green, 8–18 × 1–3 cm; branches 1–4 cm, appressed to rachis with tightly clustered spikelets; rachis scabrous, narrowly winged; pedicels 0.2–0.8 mm, scabrous. Spikelets lanceolate, 3–3.2 × ca. 1 mm, veins scabrous toward apex, otherwise smooth, glumes and lower lemma not separated; lower glume broadly ovate, 1/3 spikelet length, 1–5-veined, acute; upper glume slightly shorter or as long as lower lemma, 5-veined,

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nearly smooth, sharply acute; lower lemma as long as spikelet, sharply acute; upper lemma ca. 2.5 mm, margins flat for most of their length or only toward apex, apex acute. Fl. and fr. Jul–Oct.

Streams. Guangdong, Guangxi, Hainan, Yunnan [NE India, Thailand].

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