158. SACCIOLEPIS Nash, Man. Fl. N. States 89. 1901.

囊颖草属 nang ying cao shu

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Annuals or perennials. Leaf blades linear to convolute; ligule membranous. Inflorescence a narrowly cylindrical, densely spike-like panicle. Spikelets asymmetrical, lanceolate-oblong to ovate, usually laterally or rarely dorsally compressed, plump, florets 2; glumes prominently ribbed, lower glume 1/4–3/4 spikelet length, broad, loose and slightly inflated, upper glume equaling spikelet, deeply concave and gibbous on the back; lower lemma resembling upper glume but less gibbous, staminate or neuter, its palea often much reduced; upper floret readily deciduous, the lemma dorsally compressed, often much shorter than spikelet, thinly coriaceous to cartilaginous, smooth, shiny, margins inrolled or flat but never hyaline. x = 9.

About 30 species: tropics, predominantly in Africa; three species in China.

This is a genus of aquatic and marshland grasses, recognized by the spikelike panicle of asymmetrical, ribbed spikelets.

- 1b. Annuals with firm stems, not floating; spikelets laterally compressed, 1.5–2.8 mm.
 - 2a. Spikelets 2–2.8 mm, lanceolate 2. S. indica

1. Sacciolepis interrupta (Willdenow) Stapf in Prain, Fl. Trop. Africa 9: 757. 1920.

间序囊颖草 jian xu nang ying cao

Panicum interruptum Willdenow, Sp. Pl., ed. 4, 1: 341. 1797; Hymenachne interrupta (Willdenow) Buse; Panicum inundatum Kunth, nom. illeg. superfl.; Sacciolepis simaoensis Y. Y. Qian.

Vigorous aquatic perennial. Culms rooting and floating in water, spongy, succulent, hollow, smooth, glabrous, 20–50 cm tall or more, up to 1 cm in diam. Leaf sheaths loose, papery; leaf blades linear, flat, soft, 4– 12×0.3 –0.6 cm, base abruptly rounded, apex acuminate; ligule truncate. Panicle spikelike, 10–30 cm. Spikelets light green, asymmetrically oblong, lightly dorsally compressed, 3.3–5 mm, glabrous, acute to subacute; lower glume broadly ovate, 1/4–1/3 spikelet length, 3–5-veined; upper glume ovate, slightly gibbous, 9-veined, acute; lower floret neuter or infrequently staminate, lemma as long as upper glume, ovate, 7-veined; lower palea present, often much reduced; upper lemma yellowish, narrowly ovate, 2/3–3/4 spikelet length, acute. Fl. and fr. Jun–Dec. 2n = 18.

Swamps, shallow water, rice fields. SW Yunnan [India, Indonesia, Myanmar, Nepal, Sri Lanka, Thailand, Vietnam; Africa].

Sacciolepis interrupta has a mainly Asian distribution. Sacciolepis africana C. E. Hubbard & Snowden is its counterpart in Africa, but has on average somewhat shorter (2.5–4 mm), more obtuse spikelets. However, the division between the two species is not clear-cut, and there is some overlap in individual characters.

2. Sacciolepis indica (Linnaeus) Chase, Proc. Biol. Soc. Washington 21: 8. 1908.

囊颖草 nang ying cao

Aira indica Linnaeus, Sp. Pl. 1: 63 ["spicata"], errata [1231, "indicum"]. 1753; Panicum angustum Trinius; Sacciolepis angusta (Trinius) Stapf; S. spicata Honda ex Masamune, nom. illeg. superfl.

Annual. Culms slender, weakly ascending from a branching, decumbent base, 20–100 cm tall. Leaf sheaths slightly keeled; leaf blades linear, flat to loosely involute, $5-20 \times 0.2-0.5$ cm, apex acute; ligule 0.2-0.5 mm. Panicle spikelike, $11-16 \times 0.3-0.5$ cm, axis glabrous. Spikelets green or purplish green, lanceolate, laterally compressed, 2-2.8 mm, glabrous or papillose-hispid, obtuse; glumes ovate, herbaceous with broad hyaline margins and apex, lower glume 1/3-1/2 spikelet length, 3-7-veined; upper glume 7-11-veined; lower lemma as long as upper glume; palea small and hyaline; upper lemma yellowish, narrowly ovate, 1/2 spikelet length. Fl. and fr. Jul–Nov. 2n=18

Moist places, valleys, streams. Anhui, Fujian, Guangdong, Guizhou, Hainan, Heilongjiang, Henan, Hubei, Jiangxi, Shandong, Sichuan, Taiwan, Yunnan, Zhejiang [Bhutan, India, Japan, Myanmar, Nepal, Thailand, Vietnam; Africa, Australia, Pacific Islands].

The name *Aira indica* was originally given as "*Aira spicata*," but this was corrected by Linnaeus in the errata on the final page [1231] of *Species Plantarum*.

The combination "Sacciolepis indica var. angusta (Trinius) Keng" (Fl. Ill. Pl. Prim. Sin. Gram. 662. 1959) was not validly published because a full and direct reference to the basionym was not provided.

3. Sacciolepis myosuroides (R. Brown) Chase ex E. G. Camus & A. Camus in Lecomte, Fl. Indo-Chine 7: 460. 1922.

鼠尾囊颖草 shu wei nang ying cao

Annual. Culms slender, tufted, erect or slightly decumbent at the base, $15{\text -}100$ cm tall. Leaf sheaths smooth; leaf blades linear, flat, $3{\text -}20 \times 0.1{\text -}0.5$ cm, adaxial surface papillose, apex acuminate; ligule ca. 0.5 mm. Panicle very slender, densely spikelike, $2{\text -}20 \times 0.2{\text -}0.5$ cm, axis glabrous. Spikelets purple, ovate-elliptic, slightly curved, laterally compressed, $1.5{\text -}2$ mm, glabrous or pilose, acute or subobtuse; lower glume $1/2{\text -}2/3$ spikelet length, $3{\text -}5{\text -}\text{veined}$; upper glume $7{\text -}9{\text -}\text{veined}$; lower lemma with a small palea; upper lemma slightly shorter than spikelet. Fl. and fr. winter. 2n = 36.

Moist places and shallow water, rice fields. Fujian, Guangdong, Guangxi, Guizhou, Hainan, Xizang, Yunnan [India, Indonesia, Laos,

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Malaysia, Myanmar, Nepal, New Guinea, Philippines, Sri Lanka, Thailand, Vietnam; Africa, Australia, Pacific Islands].

- 3a. Sacciolepis myosuroides var. myosuroides

鼠尾囊颖草(原变种) shu wei nang ying cao (yuan bian zhong)

Panicum myosuroides R. Brown, Prodr. 189. 1810; Hymenachne myosuroides (R. Brown) Balansa; Panicum spiciforme Hochstetter ex A. Richard; Sacciolepis myosuroides var. spiciformis (Hochstetter ex A. Richard) Engler; S. spiciformis (Hochstetter ex A. Richard) Stapf.

Culms erect from a decumbent base, rooting at the lower nodes, 30-100 cm tall. Leaf blades $10-20 \times 0.2-0.5$ cm. Panicle $6-20 \times 0.2-0.5$ cm. Fl. and fr. winter. 2n = 36.

Moist places, shallow water and rice fields. Guangdong, Guizhou, Hainan, Yunnan, Xizang [India, Indonesia, Laos, Malaysia, Myanmar, Nepal, New Guinea, Philippines, Sri Lanka, Thailand, Vietnam; Africa, Australia, Pacific Islands].

3b. Sacciolepis myosuroides var. nana S. L. Chen & T. D. Zhuang, Bull. Bot. Res., Harbin 4: 124. 1984.

矮小囊颖草 ai xiao nang ying cao

Culms 15–30 cm tall. Leaf blades 3–5 \times 0.1–0.3 cm. Panicle 2–4 \times ca. 0.3 cm.

• Shallow water along streams. Guangdong, Guangxi, S Yunnan.

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