

210. ANDROPOGON Linnaeus, Sp. Pl. 2: 1045. 1753.

须芒草属 *xu mang cao shu*

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Annual or perennial. Leaf blades linear, not aromatic; ligule scarious or reduced to a line of hairs. Inflorescence simple or compound; racemes fragile, usually paired, occasionally digitate or single, terminal on the culm or axillary and gathered into a spathate compound panicle; spikelets of a pair dissimilar; raceme bases not deflexed, without homogamous spikelets (present in *A. munroi*); rachis internodes filiform to linear or clavate, sometimes inflated, ciliate on margins. Sessile spikelet usually dorsally compressed; callus short, obtuse, shortly bearded, inserted into internode apex; lower glume membranous to leathery, 2-keeled, lanceolate, flat to concave with lateral keels, these sometimes narrowly winged, with or without intercarinal veins, or linear with dorsal keels and a deep veinless median groove; upper glume awned or awnless; lower floret reduced to a hyaline lemma; upper lemma hyaline, 2-lobed, awned from sinus; awn geniculate, column glabrous or puberulous. Stamens 1–3. Pedicelled spikelet variable, large to much reduced, male or barren. $x = 10$.

About 100 species: tropical and warm-temperate regions of both hemispheres, especially Africa and America; two species in China.

- 1a. Upper glume awned; pedicelled spikelet 2-awned 1. *A. chinensis*
1b. Upper glume awnless; pedicelled spikelet awnless 2. *A. munroi*

1. *Andropogon chinensis* (Nees) Merrill, Philipp. J. Sci. 12: 101. 1917.

华须芒草 *hua xu mang cao*

Homoeatherum chinense Nees in Lindley, Nat. Syst. Bot., ed. 2., 448. 1836; *Andropogon apricus* Trinius var. *chinensis* (Nees) Hackel; *A. ascinodis* C. B. Clarke.

Perennial. Culms tufted, 40–100 cm tall. Leaf sheaths glabrous or pilose; leaf blades linear, flat or involute when dry, 8–25 × 0.2–0.3 cm, both surfaces pilose or abaxial surface glabrous; ligule 1–2.5 mm. Inflorescence a scanty spathate compound panicle; spatheoles linear; racemes paired, 1.5–3(–5) cm, exerted from spatheole; peduncle puberulous; rachis internodes and pedicels cuneate, margins ciliate with 1–3 mm hairs, tips cupular, obliquely toothed. Sessile spikelet linear, ca. 5 mm; lower glume deeply concave between dorsal keels, glabrous, apex acute or 2-toothed; upper glume awned, awn 6–10 mm; upper lemma 2-lobed; awn 2–3 cm. Anthers ca. 3 mm. Pedicelled spikelet oblong-lanceolate, 3.5–4.5 mm, 2-awned; awn of lower glume 4–10 mm, awn of upper glume much shorter. Fl. and fr. Aug–Dec.

Open grassy hillsides; below 800 m. Guangdong, Guangxi, Hainan, Sichuan, Yunnan [Cambodia, India, Laos, Myanmar, Thailand, Vietnam; Africa, SW Asia (Yemen)].

2. *Andropogon munroi* C. B. Clarke, J. Linn. Soc., Bot. 25: 87. 1889.

西藏须芒草 *xi zang xu mang cao*

Andropogon gyirongensis L. Liu; *A. hookeri* Munro ex Hackel; *A. tristis* Nees ex Hackel; *A. yunnanensis* Hackel; *Cymbopogon hookeri* (Munro ex Hackel) Stapf ex Bor; *C. tibeticus* Bor.

Perennial from tough rootstock, rhizomatous; basal sheaths crowded, pale yellow, papery, strongly keeled. Culms tufted, 30–100 cm tall. Leaf sheaths glabrous; leaf blades narrowly linear, flat or folded, tough, 15–25 × 0.2–0.4 cm, scaberulous, often with scattered long tubercle-based hairs especially on

adaxial surface, midrib white, apex finely acuminate; ligule 1.5–4 mm. Inflorescence a sparse spathate panicle, spathate clusters few, often purplish; spatheoles very slender, terete, 2.5–4 cm; racemes paired or frequently branching, then subdigitate along a short axis, 2–4 cm, finally reflexing, lowest spikelet pair homogamous; peduncle glabrous or pilose; rachis internodes and pedicels slender, ciliate, tips cupular, irregularly toothed. Sessile spikelet narrowly oblong, 4.5–6.5 mm; lower glume leathery, deeply to shallowly concave, keels rounded below middle, sharp and scabrid above, glabrous or puberulous in groove, veinless or 1-veined above groove, apex 2-toothed; upper glume awnless; upper lemma 2-lobed, lobes filiform; awn 1–1.6 cm. Pedicelled spikelet 4.5–6 mm, awnless. Fl. and fr. Jun–Nov.

Mountainsides, dry open places in scrub; 2000–4500 m. Sichuan, S Xizang, Yunnan (Yongsheng, Ninglang) [Bhutan, N India, Nepal, Pakistan].

This species lies on the boundary between *Andropogon* and *Cymbopogon* and is sometimes placed in the latter genus on account of its reflexing racemes and homogamous spikelets. However, the slender, unequal raceme bases and frequently subdigitate, longer racemes are typical of *Andropogon*. As far as is known, the leaf blades do not contain aromatic oils. The yellowish, strongly keeled basal sheaths are characteristic of this species.

Robust specimens, often with several racemes per spathe, a hairy peduncle, and shallowly grooved sessile spikelets, have been separated as *Andropogon tristis*. However, there are many intermediates, which make a division into two species impracticable.

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