

192. **POGONATHERUM** P. Beauvois, Ess. Agrostogr. 56. 1812.

金发草属 jin fa cao shu

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Pogonopsis J. Presl.

Perennials, densely tufted. Culms slender, branching, drooping or trailing, several- to many-noded. Leaf blades linear or linear-lanceolate, lower blades deciduous; ligule a membranous ciliate rim. Inflorescence a single raceme borne on a flexuous peduncle, racemes many, terminating shorter than culm branches; raceme fragile, sessile and pedicelled spikelets of a pair similar, both fertile; rachis internodes and pedicels shorter than spikelets, linear with expanded apex, ciliate. Sessile spikelet oblong, laterally compressed; callus obtuse, bearded with long silky hairs; glumes subequal, membranous or thinly cartilaginous; lower glume strongly convex, 3–5-veined, apex truncate, 2–3-lobed, ciliate; upper glume slightly longer than lower glume, strongly keeled, apex 2-toothed, a long, fine, flexuous awn from sinus; lower floret male with palea or reduced to a hyaline lemma or absent; upper lemma oblong, hyaline, 2-lobed for 1/3–1/2 its length, awned; awn long, very slender, geniculate near base; upper palea subequal to lemma. Stamens 1–2. Pedicelled spikelet often smaller, lacking a lower floret, upper floret bisexual or female.

Four species: India to SE Asia, NE Australia, and Polynesia; three species (one endemic) in China.

- 1a. Sessile spikelet 1.3–2 mm; stamen 1; awn of upper lemma strongly reflexed above base 1. *P. crinitum*
1b. Sessile spikelet 2.3–3 mm; stamens 2; awn of upper lemma slightly bent above base.
2a. Lower glume of pedicelled spikelet awnless; lower floret of sessile spikelet staminate; anthers ca. 1.8 mm 2. *P. paniceum*
2b. Lower glume of pedicelled spikelet awned; lower floret of sessile spikelet absent or reduced to a small lemma; anthers ca. 0.5 mm 3. *P. biaristatum*

1. *Pogonatherum crinitum* (Thunberg) Kunth, Enum. Pl. 1: 478. 1833.

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Andropogon crinitus Thunberg in Murray, Syst. Veg., ed. 14, 903. 1784; *A. monandrus* Roxburgh; *Homoplitis crinita* (Thunberg) Trinius; *Ischaemum crinitum* (Thunberg) Trinius; *Pogonatherum saccharoideum* P. Beauvois var. *crinitum* (Thunberg) F. N. Williams; *P. saccharoideum* var. *monandrum* (Roxburgh) Hackel.

Culms erect or geniculate, sometimes trailing, very slender, 10–30 cm tall, 0.5–0.8 mm in diam., branching from near base. Leaf sheaths glabrous or puberulous, mouth long ciliate; leaf blades 1.5–5 × 0.1–0.4 cm, scaberulous-puberulous, apex acute. Raceme 1.5–3 cm (excluding awns), yellowish; rachis internodes and pedicels 1/3–2/3 spikelet length, hairs silky white. Sessile spikelet 1.3–2 mm, membranous; callus hairs equal to or slightly longer than spikelet; lower glume scabrid on back, apex ciliate with ca. 0.2 mm hairs; upper glume awn 1.5–1.8 cm; lower floret absent or only lemma present; awn of upper lemma 1.8–2.4 cm, strongly geniculate near base, column very short, dark brown, limb fine, diverging at right angle or more from spikelet. Stamen 1, anther ca. 1 mm. Pedicelled spikelet similar to sessile but smaller; lower glume awnless. Fl. and fr. May–Sep.

Mountain slopes, forests, moist places along roadsides and streams; below 2000 m. Anhui, Fujian, Guangdong, Guangxi, Guizhou, Hainan, Hubei, Hunan, Jiangxi, Sichuan, Taiwan, Yunnan, Zhejiang [Bhutan, India, Indonesia, Japan, Malaysia, Nepal, New Guinea, Pakistan, Philippines, Sri Lanka, Thailand, Vietnam; Australia (Queensland)].

This is a more delicate species than *Pogonatherum paniceum*, forming a uniform tuft lacking dense bunches of branchlets, with tiny spikelets and strongly bent lemma awns.

This species is used medicinally.

2. *Pogonatherum paniceum* (Lamarck) Hackel, Allg. Bot. Z. Syst. 12: 178. 1906.

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Saccharum paniceum Lamarck, Encycl. 1: 595. 1785; *Perotis polystachya* Willdenow; *Pogonatherum saccharoideum* P. Beauvois, nom. illeg. superfl.

Culms stiffly erect at base, 30–60 cm tall, 1–2 mm in diam., hard and unbranched in lower part, repeatedly branched forming dense fascicles of very slender branchlets in upper part. Leaf sheaths glabrous or puberulous, mouth long ciliate; leaf blades stiff, 1.5–5.5 × 0.15–0.4 cm, scabrid, apex acuminate. Raceme 1.3–3 cm (excluding awns), yellowish; rachis internodes and pedicels ca. 1/2 spikelet length, hairs silky white. Sessile spikelet 2.3–3 mm, thinly cartilaginous; callus hairs shorter than spikelet; lower glume scabrid or puberulous on back, apex ciliate with 0.5–1 mm hairs; upper glume awn 1.3–2 cm; lower floret staminate, lemma slightly shorter than lower glume, palea subequaling lemma; awn of upper lemma 1.5–1.8 cm, weakly geniculate near base, column not strongly demarcated, limb very fine. Stamens 2, anthers ca. 1.8 mm. Pedicelled spikelet similar to sessile but smaller; lower glume awnless. Fl. and fr. Mar–Oct.

Mountain slopes, roadsides, streams; 100–2300 m. Guangdong, Guangxi, Guizhou, Hubei, Hunan, Sichuan, Taiwan, Yunnan [Afghanistan, Bhutan, India, Indonesia, Laos, Malaysia, Myanmar, Nepal, Pakistan, Thailand, Vietnam; SW Asia (Arabia), Australia (Queensland)].

3. *Pogonatherum biaristatum* S. L. Chen & G. Y. Sheng, Bull. Bot. Res., Harbin 13: 76. 1993.

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Culms 40–60 cm tall, 1–2 mm in diam., hard, unbranched in lower part, branched above; branches ascending. Leaf sheaths glabrous, mouth ciliate; leaf blades stiff, 2–4.5 × 0.1–0.3 cm, scabrid, puberulous at base, apex long acuminate. Raceme 2–3 cm (excluding awns), yellowish; rachis internodes and pedicels shorter than spikelet. Sessile spikelet ca. 3 mm; callus hairs 0.5–3 mm; lower glume scabrid and with scattered soft hairs on back, apex densely ciliate; upper glume awn ca. 1.6 cm; lower floret absent or represented by a small linear-lanceolate lemma; awn of upper lemma ca. 1.7 cm, weakly geniculate near base, column not strongly demarcated, limb very fine. Stamens 2, anthers ca. 0.5 mm. Pedicelled spikelet smaller than sessile; lower glume with straight ca. 1.5 cm awn. Fl. and fr. early summer.

- Forests. Hainan.

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