

191. PSEUDOPOGONATHERUM A. Camus, Ann. Soc. Linn. Lyon, n.s., 68: 204. 1921.

假金发草属 *jia jin fa cao shu*

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Eulalia sect. *Pseudopogonatherum* (A. Camus) Pilger; *Puliculum* Stapf ex Haines.

Annual. Culms solitary or tufted, slender, glabrous. Leaf blades narrowly linear, often inrolled; ligule a narrow membranous rim, margin densely ciliate. Inflorescence terminal, composed of several to many subdigitate racemes in a dense brushlike cluster; racemes tough or fragile, spikelets of a pair similar, usually both pedicelled on unequal pedicels (one sessile and the other pedicelled in *P. koretrostachys*), both fertile; rachis internodes and pedicels linear, hairy along angles. Spikelets lanceolate or lanceolate-oblong; callus obtuse to acuminate, shortly bearded; glumes membranous or papery; lower glume slightly convex, flanks rounded, 2-keeled upward, back usually hairy, veinless between keels, keels ciliate toward apex, apex truncate or bidentate; upper glume boat-shaped, apex mucronate or awned; lower floret reduced to an oblong hyaline lemma or absent; upper lemma stipelike, entire or 2-toothed, awned; awn well developed, geniculate, column dark brown, hairy, limb pallid; palea usually absent. Stamens 1–3.

Three to five species: NE India and Myanmar through SE Asia to the Philippines, Australia, and the Pacific Islands; three species (one endemic) in China.

This genus has been included in *Eulalia*, but is distinguished by its delicate, annual habit, pedicelled spikelets on tough or only tardily fracturing racemes, and very narrow intercostal long cells in the leaf epidermis.

Pseudopogonatherum irritans (R. Brown) A. Camus is likely to occur in SE China. It is found from Myanmar, Thailand, Vietnam, and the Philippines through Indonesia to Australia.

- 1a. Spikelets of a pair with one sessile and the other pedicelled 3. *P. koretrostachys*
- 1b. Spikelets of a pair both pedicelled.
 - 2a. Spikelets 3.5–4 mm; anthers ca. 1 mm *P. irritans* (see note above)
 - 2b. Spikelets 2–3 mm; anthers ca. 0.5 mm.
 - 3b. Awn of upper lemma 1.5–3 cm, clearly geniculate, pilose 1. *P. contortum*
 - 3a. Awn of upper lemma 0.6–0.7 cm, not geniculate, glabrous 2. *P. filifolium*

1. *Pseudopogonatherum contortum* (Brongniart) A. Camus, Ann. Soc. Linn. Lyon, n.s., 68: 205. 1921.

笔草 *bi cao*

Pogonatherum contortum Brongniart in Duperrey, Voy. Monde 2(2): 90. 1831; *Erianthus contortus* (Brongniart) Kuntze.

Culms erect, 25–50 cm tall. Leaf sheaths glabrous; leaf blades becoming involute, 10–30 × 0.1–0.2 cm, abaxial surface glabrous, adaxial surface thinly pilose; ligule ca. 0.2 mm. Racemes 1–20, subdigitate, 3–6 cm, white hairy, tough, all spikelets pedicelled, disarticulating from pedicels at maturity; pedicels usually unequal, as long as or shorter than internode, villous. Spikelets 1.8–3 mm, brown, glossy; callus hairs up to 1/2 spikelet length; lower glume narrowly oblong or lanceolate-oblong, pubescent to villous except near apex, or sometimes glabrous, upper flanks pilose, apex 2-toothed; upper glume with mucro or awn 0.5–4(–12) mm; lower lemma ca. 1 mm; upper lemma entire or minutely toothed; awn 1.5–3 cm, column pilose, hairs ca. 1 mm. Anthers 1–3, ca. 0.5 mm.

Grassy places on mountain slopes, open and disturbed grassy hillsides, sometimes gregarious; 700–1700 m. Fujian, Guangdong, Guangxi, Hainan, Jiangxi, Sichuan, Yunnan [Bhutan, India, Indonesia, Myanmar, Nepal, Thailand, Vietnam; Australia, Pacific Islands].

This widespread, annual species comprises a variable complex of many intergrading forms, some of which have been accorded separate status, either at specific or infraspecific rank. Two varieties have been recognized in China; var. *contortum*, with callus hairs less than 1/2 the

spikelet length and pedicels of the spikelet pairs unequal, occurs in Indonesia and Australia.

- 1a. Pedicels of spikelet pair unequal; upper glume with awn up to 4 mm 1a. var. *linearifolium*
- 1b. Pedicels of spikelet pair equal, as long as rachis internode; upper glume with 0.5–1 mm mucro 1b. var. *sinense*

1a. *Pseudopogonatherum contortum* var. *linearifolium* Keng ex S. L. Chen, Acta Phytotax. Sin. 18: 489. 1980.

线叶笔草 *xian ye bi cao*

Spikelet pair with unequal pedicels; callus hairs 1/2 spikelet length; upper glume with up to 4 mm awn. Fl. and fr. autumn.

• Grassy places on mountain slopes; 1100–1700 m. Guangxi, Sichuan, W Yunnan.

The name "*Eulalia contorta* var. *linearifolia* Keng" (Claves Gen. Sp. Gram. Prim. Sin. 237. 1957) belongs here, but was not validly published because no Latin description was provided.

1b. *Pseudopogonatherum contortum* var. *sinense* Keng & S. L. Chen, Fl. Hainan. 4: 540. 1977.

中华笔草 *zhong hua bi cao*

Spikelet pair with equal pedicels, rachis internode equaling pedicels; callus 0.2–0.3 mm, obtuse; upper glume with 0.5–1 mm mucro. Fl. and fr. autumn.

• Hill slopes; ca. 700 m. Fujian, Guangdong, Guangxi, Hainan, Jiangxi.

This is probably the same taxon as *Pseudopogonatherum collinum* (Balansa) A. Camus, from N Vietnam, which is often included within *P. contortum*.

The name "*Eulalia contorta* var. *sinensis* Keng" (Claves Gen. Sp. Gram. Prim. Sin. 237. 1957) belongs here, but was not validly published because no Latin description was provided.

2. *Pseudopogonatherum filifolium* (S. L. Chen) H. Yu, Y. F. Deng & N. X. Zhao, Novon 14: 242. 2004.

假金发草 jia jin fa cao

Eulalia filifolia S. L. Chen, Gram. Orient. Sin. 249. 1962; *Pseudopogonatherum capilliphyllum* S. L. Chen, nom. illeg. superfl.

Culms slender, 17–30 cm tall, 3–4-noded, glabrous. Leaf sheaths glabrous; leaf blades usually involute, 5–17 × ca. 0.1 cm, abaxial surface glabrous, adaxial surface puberulous and pilose; ligule ca. 0.1 mm. Racemes 1–3, 2–4.5 cm, white hairy, tough, all spikelets pedicelled, disarticulating from pedicels at maturity; rachis internodes ca. 1.3 mm, ciliate; pedicels of a pair equal. Spikelets ca. 2 mm, yellowish brown; callus hairs 0.3–1.7 mm; lower glume pilose on back, obtuse; upper glume boat-shaped, mucronate, mucro 0.1–1 mm; lower lemma ovate-oblong, ca. 1 × 0.5 mm; upper lemma entire; awn 6–7 mm, weakly geniculate, column glabrous. Anthers 3, ca. 0.7 mm. Fl. and fr. Sep–Dec.

• Grassy hillsides. Anhui.

3. *Pseudopogonatherum koretrostachys* (Trinius) Henrard, Blumea 4: 521. 1941.

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Andropogon koretrostachys Trinius, Mém. Acad. Imp. Sci. St.-Pétersbourg, Sér. 6, Sci. Math. 2: 273. 1833; *A. asthenostachys* Steudel; *Eulalia setifolia* (Nees) Pilger; *Pollinia setifolia* Nees; *Pseudopogonatherum setifolium* (Nees) A. Camus.

Culms erect or geniculately ascending, 30–60 cm tall. Leaf sheaths glabrous; leaf blades usually involute, 5–20 × 0.1–0.2 cm, glabrous or adaxial surface pilose; ligule ca. 0.5 mm. Racemes (1–)7–25 or more, subdigitate, 2–8 cm, white hairy, tardily fragile, one spikelet of a pair sessile, the other pedicelled;

rachis internodes and pedicels 1/2 spikelet length, villous. Spikelets 2–3 mm, brown; callus hairs 1/5–1/4 spikelet length; lower glume narrowly lanceolate-oblong, villous except near apex, sometimes sparsely so or glabrous, upper flanks villous, apex 2-toothed or truncate and minutely 2-mucronate; upper glume with 3–6 mm awn; lower lemma ca. 1 mm; upper lemma shortly 2-toothed; awn 1.5–2 cm, column shortly ciliate, hairs ca. 0.25 mm. Anthers 3, 0.5–0.7 mm. Pedicelled spikelet easily deciduous, maturing before sessile spikelet. Fl. and fr. Sep–Nov.

Hill slopes, roadsides. Anhui (Tai Hu), Fujian, Guangdong, Guangxi, Hainan, Jiangxi, SE Yunnan, Zhejiang [Indonesia, Laos, Malaysia, Philippines, Thailand].

This is a variant from the *Pseudopogonatherum contortum* complex with one spikelet of the pair sessile. It also has short hairs on the column of the awn.

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