

122. STIPAGROSTIS Nees, Linnaea 7: 290. 1832.

针禾属 zhen he shu

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*Aristida* sect. *Stipagrostis* (Nees) Benth. & J. D. Hooker.

Perennial, sometimes suffrutescent, or rarely annual. Culms tufted. Leaf blades mostly rolled, tough, sometimes deciduous from the sheaths. Inflorescence a narrow or open panicle. Spikelets with 1 floret; glumes scarious, unequal or subequal, 1–11-veined; floret callus laterally bearded, pungent; lemma narrowly cylindrical, indurated, glabrous or sparsely hairy; awn 3-branched, articulated at the lemma apex, a twisted column present or not, at least the central awn branch plumose, lateral branches shorter, often capillary. Stamens 3.

About 50 species: Africa to C Asia; two species in China.

This is a genus of grasses adapted to true desert conditions.

- 1a. Spikelets 1.3–1.7 cm; glumes subequal, lower slightly longer; lemma 5–7 mm, apex truncate, ciliolate ..... 1. *S. pennata*  
1b. Spikelets 2.5–3 cm; glumes unequal, lower clearly longer; lemma 8–9 mm, apex slightly 2-lobed, glabrous .... 2. *S. grandiglumis*

1. **Stipagrostis pennata** (Trinius) De Winter, Kirkia 3: 135. 1963.

羽毛针禾 yu mao zhen he

*Aristida pennata* Trinius, Mém. Acad. Imp. Sci. St. Pétersbourg Hist. Acad. 6: 488. 1815; *Aristida pungens* var. *pennata* (Trinius) Trautvetter; *Arthratherum pennatum* (Trinius) Tzvelev.

Perennial with slender rhizomes, roots tomentose. Culms tussocky, 20–60 cm tall, much branched at base. Leaf sheaths smooth or scabrid, longer than internodes; leaf blades involute, 10–30 cm, glaucous, abaxial surface scabrid, adaxial surface puberulent; ligule short, margin with 0.5–1 mm hairs. Panicle lax, open, base usually included in uppermost leaf sheath, 5–20 cm; branches paired, rarely solitary. Spikelets 1.3–1.7 cm, stramineous; glumes narrowly lanceolate, smooth or scabrid, pubescent within, subequal, lower slightly longer than upper, lower glume 3–5-veined, upper glume 3-veined, apex acuminate; callus ca. 1 mm; lemma 5–7 mm, smooth on back, apex truncate, ciliolate; awn with short 0.3–1 mm column, all 3 branches densely plumose throughout, hairs 2–4 mm, central branch 1–1.5 cm, lateral branches a little shorter. Fl. and fr. Jul–Sep.

Fixed dunes; 300–500 m. Xinjiang, Yunnan [Afghanistan, Kazakhstan, Kyrgyzstan, Russia, Turkmenistan, Uzbekistan; SW Asia (Caucasus, Iran)].

This species provides good fodder when young and is also good for binding sand.

2. **Stipagrostis grandiglumis** (Roshevitz) Tzvelev, Zlaki SSSR, 618. 1976.

大颖针禾 da ying zhen he

*Aristida grandiglumis* Roshevitz, Bot. Mater. Gerb. Bot. Inst. Komarova Akad. Nauk SSSR 11: 18. 1949.

Perennial, roots tomentose. Culms densely tufted, 30–65 cm tall, branched at base. Leaf sheaths smooth or scabrid, longer than internodes; leaf blades involute, 10–35 cm, abaxial surface smooth, adaxial surface pubescent; ligule short, ciliate. Panicle lax with few spikelets, 15–30 cm; branches capillary, solitary, 3–10 cm. Spikelets 2.5–3 cm, stramineous or yellowish white; glumes narrowly lanceolate, smooth or scabrid, densely pubescent within upward, unequal, lower glume 2.5–3 cm, 5–7-veined, marginal veins obscure, upper glume 2–2.3 cm, 3-veined, apex acuminate; callus 1–1.5 mm; lemma 8–9 mm, apex slightly 2-lobed, glabrous; awn with short ca. 1 mm column, all 3 branches densely plumose throughout, hairs 4–5 mm, central branch ca. 2.5 cm, lateral branches 2–2.2 cm. Fl. and fr. Jun–Sep.

Desert sands, banks of watercourses; 1100–1500 m. Gansu (Dunhuang), S Xinjiang [Mongolia].

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