



# *STIPA VERTICILLATA*

## Slender Bamboo Grass

A stout, tufted, erect perennial, up to 1 m tall. *Culms* developing from scaly buds, forming a densely contracted, rhizomatous base, erect but somewhat weeping at full maturity, often branched at the nodes, where there may even be a fascicle of branches and leafy shoots, rigid and cane-like. *Nodes* prominent, hairless, the internodes longer than the leaf sheaths. *Leaves* mostly on the culms. *Leaf sheaths* loose, particularly towards the base of the plant, round, smooth and hairless. *Ligule* a short, truncate flap 2–3 mm long. *Leaf blades* mostly narrow, up to 2.5 mm wide, varying greatly in length, often short and densely fascicled at the nodes, slightly rough along the margins.

*Inflorescence* a lax, narrow panicle, up to 40 cm long, the numerous branches clustered in whorls, which are clearly separated in the lower part along the axis, erect, but later spreading somewhat, very fine, 1–5 cm long. *Spikelets* (S) borne on slender pedicels of varying length and quite numerous along the primary branches, very small (3 mm), but with a long, fine awn, at maturity disarticulating above the persistent glumes. *Floret* 1, bisexual. *Glumes* (G<sub>1</sub>, G<sub>2</sub>) slightly unequal, narrow, pointed, 3-nerved, membranous; the lower glume (G<sub>1</sub>) about 3 mm long; the upper (G<sub>2</sub>) slightly shorter. *Lemma* (L) dark brown in mature specimens, tough, about the same length as G<sub>1</sub>, covered on the back with hairs, faintly 5-nerved, the tip produced into a long, fine awn, 2–4 cm long, which is covered in short spines. *Palea* (P) membranous, 2-nerved, rounded on the tip, where it is slightly hairy, about ½ the length of the lemma. *Anthers* 3, 1.5 mm long.

This grass is particularly common in the brigalow region. It is browsed by stock, particularly when it has not been allowed to grow coarse and rank. Superficially, it is not easily distinguished from *S. ramosissima*, which, however, is largely a grass of rainforest margins. The other species of *Stipa* are quite different in that they are not cane-like and have longer spikelets.

### REFERENCES

Bailey (1902),<sup>1</sup> pp. 1875–77; Hughes (1921),<sup>2</sup> pp. 1–22; Hughes (1922);<sup>3</sup> Gardner (1952),<sup>4</sup> pp. 172–83; Burbidge and Gray (1970),<sup>5</sup> pp. 52–53; Lazarides (1970),<sup>6</sup> p. 236; Willis (1970),<sup>7</sup> pp. 180–88; Beadle *et al.* (1972),<sup>8</sup> pp. 656–57; Black (1978),<sup>9</sup> pp. 100–12; Jessop (1981),<sup>10</sup> pp. 436–38.

### KEY TO SPECIES

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|--|---|---------------------------------------|
| 1. Glumes about 3 mm long. Culms bamboo-like.                                  | 2 |                                       |
| Glumes longer than 4 mm. Culms not bamboo-like.                                | 3 |                                       |
| 2. Lemma hairy. Usually on black soils (slender bamboo grass)                  |   | <i>S. verticillata</i> <sup>4,8</sup> |
| Lemma without hairs. Usually from softwood/brigalow scrub (stout bamboo grass) |   | <i>S. ramosissima</i> <sup>8</sup>    |

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| 3. Plants with slender culms and hair-like leaves.   | 4   |
| Robust plants, not with hair-like leaves.  | 5   |
| 4. Twisted column of awn about $\frac{1}{2}$ total awn length. Leaves hairless (corkscrew grass)   | <i>S. setacea</i> <sup>1,2,7,8,9,10</sup> |
| Twisted column of awn $\frac{1}{4}$ to $\frac{1}{3}$ total awn length. Basal leaves densely covered with minute hairs (rough speargrass) | <i>S. scabra</i> <sup>2,3,4,6,8,10</sup>  |
| 5. Inflorescence with spikelets densely crowded; awn hairy below knee (hairy speargrass)   | <i>S. densiflora</i> <sup>2,5</sup>       |
| Inflorescence loose with sparsely arranged spikelets; awn without hairs.   | 6   |
| 6. Glumes more than 15 mm long; lemmas more than 9 mm long (tall speargrass)   | <i>S. pubescens</i> <sup>1,2,7,8,9</sup>  |
| Glumes less than 12 mm long; lemma 5–7 mm long (plains grass)  | <i>S. aristiglumis</i> <sup>1,3,7</sup>   |