

# SPOROBOLUS ELONGATUS

## Slender Rat's-tail Grass

A tufted perennial, up to 1 m tall. *Culms* unbranched, erect, smooth and hairless. *Nodes* 3-4, hairless. *Leaves* mostly basal. *Leaf sheaths* round, striate, smooth and hairless, shorter than the internodes at maturity. *Ligule* reduced to a ring of short hairs with longer, silky hairs at each margin. *Leaf blades* narrow, flat or rolled, striate, pointed, flexuous, 3 mm wide at the base and up to 50 cm long, hairless, except for a few silky hairs towards the base.

*Inflorescence* a spike-like panicle with its branches strongly contracted and closely adpressed to the axis to give a rat's tail effect, brownish-green in colour, the secondary branches also contracted and interrupted along the axis, particularly in the lower part, the almost sessile and numerous spikelets densely clustered. *Spikelets* (S) all alike, many per panicle branch, 1.5-2 mm long, breaking up at maturity with the small, round, shiny seeds falling separately from the more or less persistent glumes, lemma and palea. *Floret* 1, bisexual. *Glumes* ( $G_1$ ,  $G_2$ ) delicate and translucent  $\frac{1}{2}$  to  $\frac{2}{3}$  the length of the spikelet, unequal, without nerves, truncate; the lower glume ( $G_1$ ) less than 1 mm in length, lanceolate, blunt; the upper ( $G_2$ ) 1 mm in length, broad, with a ragged or uneven tip. *Lemma* (L) 2 mm long, 1-nerved, pointed, membranous, but thicker than the glumes. *Palea* (P) similar, slightly shorter than the lemma (1.5 mm), 2-nerved. *Anthers* 2, 0.5 mm long.

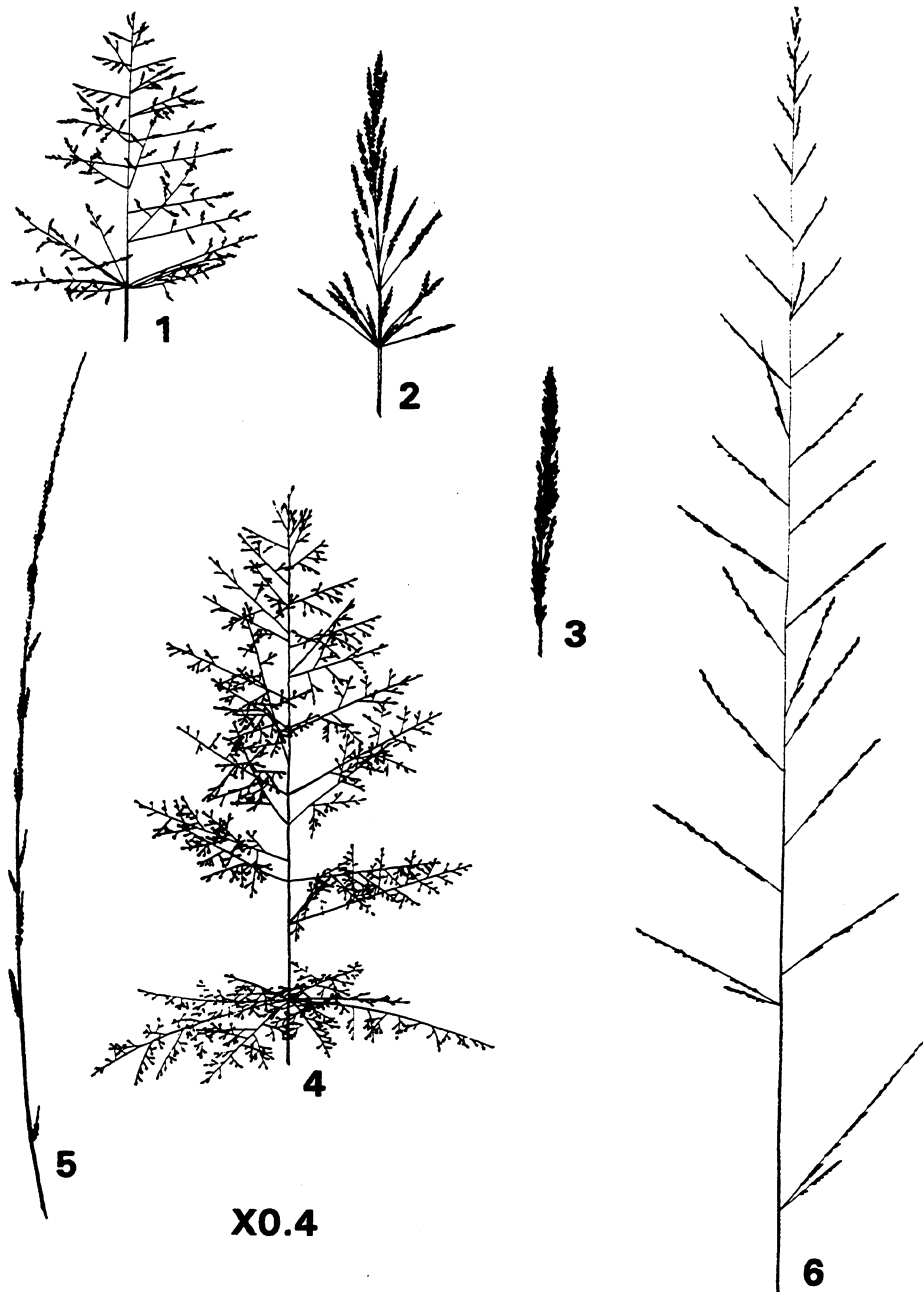
This is a widespread grass in eastern Queensland, particularly the open, grassy forest, where it grows over a wide spectrum of soils. It is palatable to stock, particularly when young, and on poor soils is a useful component of the animals' diet.

### REFERENCES

Bailey (1902),<sup>1</sup> pp. 1879-82; Blake (1941a),<sup>2</sup> pp. 3-12; Gardner (1952),<sup>3</sup> pp. 159-63; Clayton (1965);<sup>4</sup> Burbidge and Gray (1970),<sup>5</sup> p. 52; Lazarides (1970),<sup>6</sup> pp. 230-35; Willis (1970),<sup>7</sup> pp. 165-67; Beadle *et al.* (1972),<sup>8</sup> p. 645; De Nardi (1973);<sup>9</sup> Black (1978),<sup>10</sup> pp. 208-10; Jessop (1981),<sup>11</sup> pp. 467-69; Simon (1982).<sup>12</sup>

### KEY TO SPECIES

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| 1. Inflorescence a more or less spike-like panicle.  | 2  |
| Inflorescence an open panicle.   | 9  |
| 2. Inflorescence less than 12 cm long. Plants rhizomatous or stoloniferous. Lower glume more than $\frac{1}{2}$ spikelet length. | 3  |
| Inflorescence usually much exceeding 12 cm. Plants tufted.   | 4  |
| Lower glume up to $\frac{1}{3}$ spikelet length.   |  |
| 3. Coastal sand-dune and saline swamp grass. Rhizomatous (sand couch)  | <i>S. virginicus</i> (3)* <sup>1,2,3,7,8,10,11</sup> |
| Western grass. Often stoloniferous, but not rhizomatous (swamp rat's-tail grass)   | <i>S. mitchellii</i> (3) <sup>1,2,3,6,7,10,11</sup>  |



Inflorescences of *Sporobolus* spp. Numbers correspond to those in parentheses following the species names in the key.

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| 4. Spikelets usually not or barely overlapped along primary panicle branches, which are loosely adpressed to rhachis; upper glume blunt, less than ½ spikelet length.<br>Spikelets, strongly overlapping along primary panicle branches, which are closely adpressed to rhachis; upper glume acute, ½ spikelet length or more.             | <i>S. jaquemontii</i> (5) <sup>4</sup>  |
| 5. Robust plants with broad, somewhat flattened tiller bases and 3 stamens per spikelet. Inflorescence dense; if interrupted, then only at base.<br>More slender plants, with narrow, rounded tiller bases and 2 stamens per spikelet. Inflorescence interrupted in lower half; spikelets in dense clusters on adpressed primary branches. | 5<br>6<br>8   |
| 6. Spikelets 2.1–2.5 mm long (Parramatta or rat's-tail grass)<br>Spikelets 1.7–2.0 mm long.  | <i>S. africanus</i> (5)** <sup>4,5,7,8,10</sup>   |
| 7. Grain at maturity almost as long as palea.<br>Grain at maturity ½ to ⅔ as long as palea.  | 7<br><i>S. indicus</i> (5)** <sup>1,2,4</sup><br><i>S. fertilis</i> (5)** <sup>4</sup>              |
| 8. Spikelets 1.25–1.75 mm long, densely crowded on panicle branches.<br>Spikelets 1.65–2.30 mm long, loosely arranged on panicle branches (slender rat's-tail grass)   | <i>S. creber</i> (5) <sup>9,11</sup><br><i>S. elongatus</i> (5) <sup>2,5,8,10,11</sup>              |
| 9. Lower branches of panicle not whorled, panicle narrowly pyramidal.<br>Lower branches of panicle distinctly whorled.   | 10<br>11  |
| 10. Branches of inflorescence bearing spikelets to base; stamens 2 (tussocky sporobolus)<br>Branches of inflorescence naked at base for 1–2 cm; stamens 3.   | <i>S. diander</i> (6) <sup>1</sup><br><i>S. laxis</i> (6) <sup>12</sup>                             |
| 11. Spikelet separated in an open, feathery panicle.<br>Spikelets more or less clustered on panicle branches.  | 12<br>13  |
| 12. Primary branches of inflorescence mostly in whorls (Australian dropseed)<br>Primary branches of inflorescence whorled only at basal node (hairy or Yakka grass)  | <i>S. australasicus</i> (4) <sup>2,3,6,10,11</sup><br><i>S. caroli</i> (4) <sup>2,3,6,7,10,11</sup> |
| 13. Each of primary branches consisting of a single dense, false spike for ½ to ⅔ of its length. Western grass (Katoora or ray grass)<br>Primary branches not spike-like, small clusters of spikelets on secondary branches.   | <i>S. actinocladus</i> (2) <sup>1,2,3,6,10,11</sup><br>14   |
| 14. Culms and main axis of panicle rough.<br>Culms and main axis of panicle smooth.  | <i>S. scabridus</i> (1) <sup>2,11</sup><br><i>S. contiguus</i> (1) <sup>2,11</sup>                  |

\* Numbers in parentheses refer to inflorescence illustrations opposite.

\*\* *S. africanus*, *S. indicus* and *S. fertilis* are difficult to distinguish (Clayton, 1965), but are relatively uncommon in southern Queensland.