



# ASTREBLA LAPPACEA

## Curly Mitchell Grass

A strongly tufted perennial, 30–80 cm tall at maturity, erect or kneeled at the base. *Culms* smooth, without hairs, often branched profusely at the nodes, arising from scaly, almost bulbous bases. *Nodes* without hairs. *Leaves* well distributed. *Leaf sheaths* mostly tight, smooth, without hairs. *Ligule* reduced to narrow rim. *Leaf blades* 4–5 mm broad, up to 20 cm long, flat, bluish-green, without hairs, slightly rough along the margins.

*Inflorescence* a spike-like raceme, 5–30 cm long, 5–13 mm wide, solitary or paired straight or slightly curved. *Spikelets* (S) all very shortly pedicelled, arranged alternately on either side of a flattened, zig-zag raceme, close and somewhat overlapping in the upper part, more distant in the lower, 7–13 mm long, excluding the short awns, at maturity not falling entire but disarticulating above the more or less persistent glumes but not between the florets. *Florets* 4–6, similar, except that the upper ones are often reduced, all except the uppermost bisexual. *Glumes* ( $G_1$ ,  $G_2$ ) enclosing the florets, slightly unequal; the lower glume ( $G_1$ ) keeled, 1–5-nerved, narrow,  $\frac{2}{3}$  the length of the upper ( $G_2$ ), which is 7–13-nerved, 7–13 mm long, broadly enclosing much of the spikelet. *Lemmas* (L) 3-nerved, the central portion between the lateral nerves densely furry on the back, the margins produced upwards into 2 wing-like tips, and the central nerve produced into a straight bristle-like awn 4–4 mm long. *Paleas* (P) 5 mm long, strongly 2-keeled, the keels with dense, short hairs. *Anthers* 3, 2 mm long.

This and the other Mitchell grasses are very important native forage grasses of the black-soil plains and western areas. Although present on the Darling Downs of southeast Queensland, they are not prominent. They are very drought-tolerant, persistent, and provide valuable standby feed in dry times. Curly Mitchell grass is a broad-leaved species, which shoots rapidly after rain. In many areas, there is a cyclic oscillation between Mitchell grass dominance and Queensland bluegrass (*Dichanthium sericeum*) dominance, according to the particular sequence of wet or dry seasons.

### REFERENCES

Bailey (1902),<sup>1</sup> p. 1897; Hubbard (1928),<sup>2</sup> p. 263; Gardner (1952),<sup>3</sup> pp. 201-5; Jozwik (1969),<sup>4</sup> (Key to Australian species); Lazarides (1970),<sup>5</sup> pp. 14-16; Black (1978),<sup>6</sup> pp. 114-15; Jessop (1981),<sup>7</sup> pp. 447-48.

### KEY TO SPECIES

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| 1. Racemes dense, 8–20 mm broad; spikelets overlapping, 2–9-flowered.  | 2  |
| Racemes slender, 2–3 mm broad; spikelets distant or loosely overlapping, 2–4-flowered (hoop Mitchell grass)            | <i>A. elymoides</i> <sup>1,2,3,4,5,7</sup>   |
| 2. Lemmas with 3 bristle-like points, sometimes hooked; spikelets alternate along axis (tall Mitchell grass)           | <i>A. squarrosa</i> <sup>1,2,3,4,7</sup>     |
| Lemmas with a single bristle-like point, not hooked; spikelets not distinctly alternate along axis.                    | 3  |
| 3. Spikelets very densely overlapping, often on one side of axis; glumes shorter than spikelet (barley Mitchell grass) | <i>A. pectinata</i> <sup>1,2,3,4,5,6,7</sup> |
| Spikelets rather loosely overlapping and opposite along axis; glumes as long as spikelet (curly Mitchell grass)        | <i>A. lappacea</i> <sup>1,2,3,4,5,6,7</sup>  |