



TRIODIA MITCHELLII

Buck Spinifex

A coarse, densely tufted perennial, the large tussocks often dead in the middle, leaving a distinct ring of live culms around the outside. *Culms* slightly downwardly rough, very leafy, up to 1 m tall. *Nodes* mostly concealed by the leaf sheaths. *Leaves* mostly confined to the culms. *Leaf sheaths* persistent along the culm, flattened and markedly overlapping, the lower ones persisting without the leaf blades, smooth, usually straw-coloured (except the basal ones), hairless. *Ligule* a short, hairy rim, surrounded, particularly on the margins, by long, silky hairs at the throat. *Leaf blades* narrow, folded or inrolled, about 30 cm long, terminating in a sharp point, largely arranged opposite one another along the culm, becoming coiled when dry.

Inflorescence a narrow panicle, 10–20 cm long, the primary branches slender, more or less erect, with numerous spikelets singly, or a few together along the branches. *Spikelets* (S) 8–12 mm long, all similar, on short pedicels, breaking up at maturity above the more or less persistent glumes. *Florets* 5–6, all more or less similar, except decreasing in size up the axis, mostly all bisexual. *Glumes* (G_1 , G_2) about equal, 5–8 mm long, similar, distinctly 3-nerved, but with up to 3 short nerves between the others, sometimes slightly 3-lobed, smooth or rough on the nerves. *Lemmas* (L) 4–5 mm long in the lower part of the spikelet, shorter towards the tip, distinctly 3-lobed for about $\frac{1}{3}$ their length, rather stiff and hardened, the nerves distinct in the lobes and almost to the base on the body of the lemma, with some subsidiary but incomplete nerves associated with the main 3, the lower portion covered with soft hairs. *Paleas* (P) slightly shorter than the lemmas, 2-nerved, 2-keeled, and shortly hairy along the upper margins. *Anthems* 3, 2 mm long.

The spinifex grasslands are widespread in northern Australia, though mostly confined to the arid and semi arid regions and poor soils. *Triodia* species predominate, but their coarseness and their vigorous habit precludes their use as a consistent grazing resource.

REFERENCES

Gardner (1952),¹ pp. 63–79; Burbidge (1953),² (Key to Australian species); Lazarides (1970),³ pp. 201–20; Willis (1970),⁴ pp. 177–78; Black (1978),⁵ pp. 127–30; Jessop (1981),⁶ pp. 444–46.

KEY TO SPECIES

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| 1. Spikelets 5 mm long or less. | 2 |
| Spikelets 6 mm long or more. | 3 |
| 2. Glumes usually bluntly pointed; lemma terminating in 3 minute teeth equal in length. | <i>T. microstachya</i> ² |
| Glumes finely pointed; lemma terminating in 3 distinct teeth, central one being twice length of outer ones. | <i>T. stenostachya</i> ² |

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| 3. Spikelets sessile or on very short pedicels on primary panicle branches.
Spikelets borne on long pedicels. | 4
5 |
| 4. Leaf sheaths densely but shortly woolly.
Leaf sheaths not woolly (porcupine grass or giant grey spinifex) | <i>T. molesta</i> ^{2,6}
<i>T. longiceps</i> ^{1,2,3,5,6} |
| 5. Lobes of lemma as long as or longer than basal part. Leaf sheaths not resinous (lobed or hard spinifex)
Lobes of lemma much shorter than basal part. If almost as long, then leaf sheaths resinous. | <i>T. basedowii</i> ^{1,2,3,5,6}
6 |
| 6. Lemmas terminating in 2 bluntly pointed lobes, sometimes with a minute central point (porcupine grass)
Lemmas terminating in 3 distinct lobes or points. | <i>T. irritans</i> ^{1,2,3,4,5,6}
7 |
| 7. Leaf sheaths resinous, often sticky and becoming dark golden and polished when dry.
Leaf sheaths not resinous. | 8
<i>T. burkensis</i> ² |
| 8. Palea not or barely extending beyond base of lemma lobes (soft or gummy spinifex)
Palea almost as long as lemma, including lobes. | <i>T. pungens</i> ^{1,2,3,6}
9 |
| 9. Lemmas almost as wide as long, with a broad membranous margin extending from lateral lobes to base. South-western.
Lemmas longer than wide; membranous margins, if present, not extending to base of lemma. Widespread (buck spinifex) | <i>T. marginata</i> ²
<i>T. mitchellii</i> ^{2,6}
(incl. <i>hostilis</i>) |