

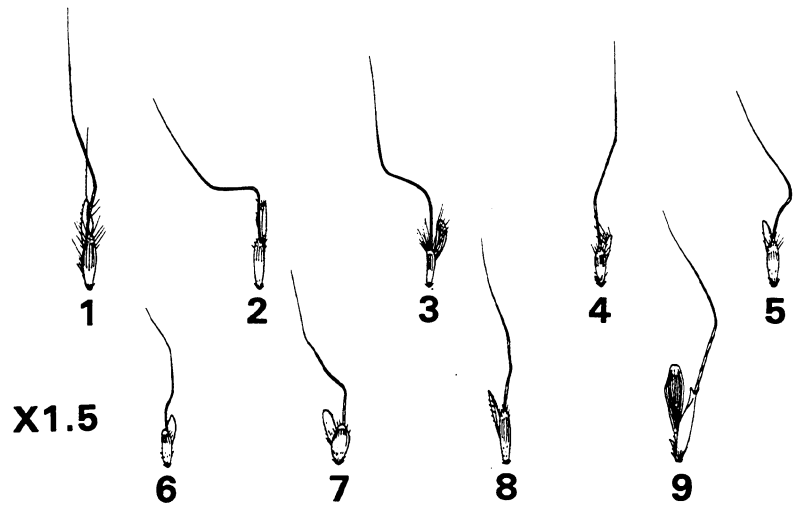
DICHANTHIUM SERICEUM

Queensland Bluegrass

A tufted, erect perennial, 30–80 cm tall, generally rather slender. *Culms* erect, slender, densely branched at the base, often from the upper nodes also, smooth and hairless. Nodes bearing a ring of erect, long white hairs. *Leaves* well distributed. *Leaf sheaths* round, close, at maturity almost as long as the internodes, usually hairless, but in some forms densely covered in white hairs. *Ligule* short and membranous, ragged. *Leaf blades* flat, 8–15 cm long, 2–4 mm wide, often bluish-purple, typically without hairs, but densely covered with white hairs in some forms and then the sheaths likewise, pointed from near the tip.

Inflorescence of 2–4 stalkless, erect racemes, 4–7 cm long, arranged digitately, at maturity usually borne free of the upper leaf sheath. *Spikelets* (S_1 , S_2) numerous, dissimilar, paired, the pairs crowded in 2 ranks along the racemes, one of each pair sessile, the other pedicellate; in the lower part of the raceme there are a variable number of barren pairs reduced to their glumes only, the upper pairs with a fertile sessile spikelet and a sterile pedicellate one, all densely hairy, giving a silky-hairy appearance to the inflorescence, which breaks up at maturity into the separate joints, with the spikelets falling entire. *Florets* 2 in the sessile spikelet, the lower neuter and reduced to a lemma, the upper bisexual; floret none, or 1 in the pedicellate spikelet, which is usually neuter and often reduced to the glumes only, sometimes with a lemma present. *Sessile spikelet* (S_1) fertile, about 4 mm long and 1.25 mm wide, the callused based densely tufted on either side with longish white hairs. *Glumes* (G_1 , G_2) dissimilar, about the same length; the lower glume (G_1) the length of the spikelet, rounded on the sides and tip, slightly keeled on the margins in the upper half, nerves about 11, 6–8 between the keels, up to 8 mm long, shortly hairy on the lower half with a subapical fringe of long, erect, tubercle-based hairs on the back; the upper (G_2) 3-nerved, 3-keeled, rather more membranous, pointed, without hairs, but rough on the keels in the upper part. *Lemma* (L_1) of the lower sterile floret about $\frac{1}{2}$ the length of the spikelet, membranous and translucent. *Palea* absent. *Lemma* (L_2) of the upper sterile floret a strap-like base with a brownish, twisted, hygroscopic awn, about 2.5 cm long. *Palea* absent. *Anthers* 2, about 0.75 mm. *Pedicellate spikelet* (S_2) the same length as the sessile one, the pedicel with longish white hairs. *Glumes* (G_1 , G_2) somewhat dissimilar; the lower glume (G_1) 4 mm, very slightly keeled near the margin, 8-or-more-nerved, scattered, long, tubercle-based hairs along the margins; the upper (G_2) about 3 mm, 3-nerved, membranous and translucent. *Lemmas* and *paleas* generally absent, although occasionally there may be a lower lemma (L), in which case it is similar to L_1 of the sessile spikelet.

This is a very important and widespread native grass throughout northeastern Australia. In the black soil grasslands of the drier western areas, it may become locally dominant, but it is scattered also through much of the woodland of the sub-



coastal area. It is readily eaten by stock and is considered one of the most palatable and productive of the natives grasses.

In the vegetative state, it may be distinguished from pitted bluegrass (*Bothriochloa decipiens*), which it may otherwise resemble, by the prominent ring of hairs at the nodes. The foliage also may be densely hairy, which is never the case in *B. decipiens*.

REFERENCES

Bailey (1902),¹ p. 1863 (as *Andropogon* spp.); Blake (1944b),² pp. 50-55; Gardner (1952),³ pp. 324-33; Vickery (1961),⁴ pp. 45-49; Blake (1969a),⁵ pp. 65-69; Burbidge and Gray (1970),⁶ p. 72; Lazarides (1970),⁷ pp. 70-74; Willis (1970),⁸ p. 211; Beadle *et al.* (1972),⁹ p. 676; Black (1978),¹⁰ pp. 242-43; Humphreys (1980),¹¹ p. 24; Jacobsen (1981),¹² Jessop (1981),¹³ pp. 487-88; Simon (1982),¹⁴ p. 6.

KEY TO SPECIES

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|---|---|
| 1. Pedicellate spikelets mostly bisexual and awned (curly bluegrass)
Pedicellate spikelets always male or neuter. | <i>D. fecundum</i> (1)* ^{2,3,7,12,13}
2 |
| 2. Lower glume of sessile spikelet with a distinct subapical fringe of long hairs on back.
Lower glume of sessile spikelet without a distinct subapical fringe of long hairs on back. | 3
6 |
| 3. Sessile spikelet 3-4.5 mm long, pedicellate spikelet usually neuter.
Sessile spikelet 4.5-6 mm long, pedicellate spikelet usually male, racemes 1-3. | 4
<i>D. setosum</i> (2) ^{2,4,12} |
| 4. Racemes usually more than 10, densely hairy. Plants robust, up to 1 m tall (tassel bluegrass)

Racemes 1-6, plants not robust, usually less than 70 cm. | <i>D. tenuiculum</i> (3) ^{3,5,7,12,13}
(<i>superciliatum</i>)
5 |
| 5. Racemes 4-7 cm long, lower glume of sessile spikelet 6-8-nerved between the keels with distinct subapical fringe of hairs. Nodes with a ring of annular hairs (Queensland bluegrass)
Racemes usually 2-4 cm long, lower glume always 5-nerved between keels with subapical fringe of hairs less obvious. Slender plants (slender bluegrass) | <i>D. sericeum</i> (4) ^{1,2,3,4,5,6,7,8,9,10,12,13}

<i>D. affine</i> (5) ^{1,2,3,4,5,7,10,12,13}
(<i>humilius</i>) |
| 6. Racemes usually 2 or more, distinctly stalked.
Racemes single, or if paired, then without stalks. | 7
8 |
| 7. Stalks of racemes hairy (Angleton grass)
Stalks of racemes without hairs (Sheda grass) | <i>D. aristatum</i> (6) ^{2,5,11}
<i>D. annulatum</i> (7) ^{1,3,5} |
| 8. Racemes up to 6 cm long, sessile spikelets 3-4 mm long (small bluegrass)
Racemes 6-12 cm long, sessile spikelets 6-8 mm long. | <i>D. tenue</i> (8) ^{4,12}
<i>D. queenslandicum</i> (9) ¹⁴ |

* Numbers in parentheses refer to spikelet illustrations opposite