



SETARIA PUMILA

Pale Pigeon Grass

An erect annual, pale green in colour, 50–75 cm tall. *Culms* erect, striate, smooth, except slightly rough below the inflorescence, unbranched, internodes exceeding the leaf sheaths. *Nodes* usually pigmented, without hairs. *Leaf sheaths* loose, striate, smooth and hairless, the lower ones slightly keeled. *Ligule* a short rim of hairs with some longer hairs at either margin. *Leaf blades* rough down the margins with a few long hairs on the margins and upper surface near the base, otherwise without hairs, up to 30 cm long, 4–10 mm wide, flat, finely pointed.

Inflorescence a dense, bristly, spike-like panicle 1–14 cm long, 4–8 mm wide (excluding bristles), the panicle branches very contracted, up to 1 mm long, bearing a single spikelet beneath which are 5–10 bristles that are fine, minutely rough, straight or wavy, pale yellow or reddish in colour and up to 10 mm long. *Spikelets* (S) almost sessile on very contracted panicle branches, borne in 2 rows on one side of and adpressed to the axis, about 3 mm long, rounded on the back, falling entire with the glumes at maturity. *Florets* 2, the lower male, the upper bisexual. *Glumes* (G_1 , G_2) unequal, thinly membranous; the lower glume (G_1) about $\frac{1}{3}$ the length of the spikelet, 3-nerved, broad at the base; the upper (G_2) about $\frac{3}{4}$ the length of the spikelet, 5-nerved, rounded on the back. *Lemma* (L_1) of the lower male floret similar to G_2 , 5–7-nerved, the length of the spikelet. *Palea* (P_1) almost as long as L_1 , but much narrower, strongly 2-keeled, slightly notched at the tip, finely membranous. *Anthers* 3, 0.5 mm long. *Lemma* (L_2) of the upper fertile floret at first membranous, but becoming tough and rigid at maturity, horizontally wrinkled, rounded on the back, indistinctly 5-nerved. *Palea* (P_2) similar in length, also broad, flat to slightly concave on the back between the 2 distinct keels, 2-nerved, the margins produced into 2 membranous flaps enclosing the flower. *Anthers* 3, 1 mm long.

This is a common weed throughout southeast Queensland, the subtropics and warmer temperate regions of the world. It is ephemeral, but appears to be fairly readily eaten by stock. When abundant it can produce good early-season feed, but it soon declines with maturity.

S. sphacelata (*S. anceps*) (cultivars Nandi, Narok and Kazungula) are valuable pasture grasses cultivated in the moister parts of eastern Queensland.

REFERENCES

- Bailey (1902),¹ p. 1839; Domin (1915),² pp. 330–31; Gardner (1952),³ pp. 264–68; Bor (1960),⁴ p. 360; C.S.I.R.O. Australia (1967),⁵ pp. 55–58; Barnard (1969),⁶ pp. 65–67, supplement; Blake (1969b),⁷ p. 24; Hacker and Jones (1969);⁸ Burbidge and Gray (1970),⁹ pp. 67–68; Lazarides (1970),¹⁰ p. 224; Willis (1970),¹¹ pp. 199–201; Beadle *et al.* (1972),¹² pp. 671–72; Vickery (1975),¹³ pp. 225–41; Black (1978),¹⁴ pp. 231–33; Luck (1979);¹⁵ Jessop (1981),¹⁶ pp. 480–81.

KEY TO SPECIES

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| 1. Inflorescence open with extended primary branches bearing many spikelets. Leaves folded fanwise between veins. | 2 |
| inflorescence a spike-like panicle or with strongly contracted primary branches bearing few spikelets. Leaves not folded fanwise between veins. | 3 |
| 2. Robust perennial. Ornamental (palm grass) | <i>S. palmifolia</i> ^{3,12,13} |
| Decumbent annual. Rare. | <i>S. barbata</i> ⁴ |
| 3. Annual. Fertile florets falling at maturity, leaving glumes and lower lemma attached to inflorescence (Italian or foxtail millet) | <i>S. italica</i> ^{1,3,6,9,11,12,13,14} |
| Annuals or perennials. Spikelets falling entire at maturity. | 4 |
| 4. Spikelets with 1 or 2 bristles, rarely more; upper glume usually 7-nerved. | 5 |
| Spikelets with many bristles; upper glume 5-nerved. | 8 |
| 5. Inflorescence a tightly contracted false spike; bristles up to 4 times length of spikelet. | 6 |
| Inflorescence not tightly contracted, often interrupted; bristles usually more than 4 times length of spikelet. | 7 |
| 6. Bristles upwardly rough (whorled pigeon grass) | <i>S. verticillata</i> ^{9,11,12,13,14} |
| Bristles not upwardly rough (green pigeon grass) | (<i>adhaerens</i>)
<i>S. viridis</i> ^{9,11,12,13,14,16} |
| 7. Perennial (scrub pigeon grass) | <i>S. australiensis</i> ^{1,13} |
| Annual (Diels pigeon grass) | <i>S. dielsii</i> ^{10,14,16} |
| 8. Perennials. | 9 |
| Annuals. | 10 |
| 9. Vigorous, robust perennial, up to 2 m high; vegetative culm bases distinctly flattened. Inflorescence 6–8 mm wide (excluding bristles). Cultivated grass (Nandi, Narok, and Kazungula setarias) | <i>S. sphacelata</i> ^{3,5,6,8,13,15} |
| Rather slender perennial, up to 60 cm high, with short, knotty rhizomes; culm bases not distinctly flattened. Inflorescence about 4 mm wide (excluding bristles) | (<i>anceps</i>) |
| Naturalized grass (slender pigeon grass) | <i>S. gracilis</i> ^{3,11,12,13,14} |
| 10. Upper glume ½ spikelet length. | 11 |
| Upper glume ¾ spikelet length or longer. | 12 |
| 11. Spikelets less than 2.5 mm long, fairly narrow, bristles gingerish (Queensland pigeon grass) | <i>S. pallidifusca</i> ¹² |
| Spikelets 3 mm long, plump, bristles brownish to straw-coloured (pale pigeon grass) | <i>S. pumila</i> ^{1,9,11,12,13,14} |
| 12. Spikelets 3.5–4 mm long, 2–2.5 mm wide. | (<i>glauca</i>) |
| Spikelets less than 3.5 mm long and less than 2 mm wide. | <i>S. queenslandica</i> ² |
| 13. Upper glume ¾ spikelet length. Widespread. | 13 |
| Upper glume almost as long as spikelet. Northern. | <i>S. surgens</i> ^{3,7,10,13,16} |
| | <i>S. apiculata</i> ¹⁶ |