



**X8.4**



## PASPALIDIUM DISTANS

A short, rather slender, erect, tufted perennial. *Culms* smooth, erect, hairless, unbranched, up to 70 or sometimes 100 cm tall. *Nodes* smooth, hairless. *Leaves* basal and on the culm. *Leaf sheaths* round, closely fitting the stem, hairless, mostly shorter than the internodes, striate, particularly the lower, older ones. *Ligule* a short rim of hairs. *Leaf blades* flat, up to 4 mm broad and up to 10 cm long, tapering gradually from the base to a point, smooth and hairless.

*Inflorescence* a slender, spike-like panicle of racemes, 15 cm long, the racemes borne erect and distinctly separate along the single axis, mostly simple with the spikelets borne alternately in 2 regular rows along one side, often with one or a few short branches bearing 2 or 3 spikelets near the base, which makes the lower part of the raceme somewhat irregular. *Spikelets* (S) all alike, about 2 mm long and 1 mm wide, concave-convex, many of the spikelets subtended by a short bristle, the raceme axis continued into a short bristle beyond the terminal spikelet, disarticulating below the glumes and falling entire from their short pedicels at maturity. *Florets* 2, the lower neuter and reduced to a lemma only, the upper bisexual. *Glumes* (G<sub>1</sub>, G<sub>2</sub>) very dissimilar, both membranous and purplish; the lower glume (G<sub>1</sub>) about 1/3 the length of the spikelet, broad and clasping the spikelet at the base, 3-nerved; the upper (G<sub>2</sub>) 3/4 the length of the spikelet, 5-nerved, rounded on the back. *Lemma* (L<sub>1</sub>) of the lower sterile floret the length of the spikelet, similar to G<sub>2</sub>, 5-nerved, flat to slightly concave on the back, purplish. *Palea* absent. *Lemma* (L<sub>2</sub>) of the upper fertile floret 5-nerved, hardened, smooth, finely ridged with numerous horizontal ridges, rounded on the back, straw-coloured. *Palea* (P<sub>2</sub>) similar to L<sub>2</sub>, 2-nerved and 2-keeled, the margins extended into 2 irregular flaps, which more or less enclose the flower, flat on the back. *Anthers* 3, 1 mm long.

This species is found in the damper forests of the coastal ranges. However, the genus as a whole is very widespread. *P. gracile* is very similar, but with very irregularly arranged spikelets. It is very widespread, ranging from poor sandstone to fair forest soils.

### REFERENCES

Bailey (1902),<sup>1</sup> p. 1823 (as *Panicum* spp.); Hughes (1923),<sup>2</sup> pp. 316-18; Hubbard (1934b),<sup>3</sup> p. 447; Vickery (1950b),<sup>4</sup> pp. 331-34; Blake (1952),<sup>5</sup> pp. 92-99; Gardner (1952),<sup>6</sup> pp. 246-50; Lazarides (1970),<sup>7</sup> p. 194; Willis (1970),<sup>8</sup> pp. 192-93; Beadle *et al.* (1972),<sup>9</sup> pp. 666-67; Blake (1973),<sup>10</sup> pp. 65-70; Vickery (1975),<sup>11</sup> pp. 138-55; Black (1978),<sup>12</sup> pp. 225-27; Jessop (1981),<sup>13</sup> pp. 478-79; Simon (1982),<sup>14</sup>

### KEY TO SPECIES

1. Plant with elongated rhizomes, spikelets 3.5-4.5 mm.  
Rare, southeastern.  
Not as above.

*P. grandispiculatum*<sup>14</sup>  
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| 2. Leaves rough along margins. Rare, northern brigalow.<br>Leaves smooth along margins.                                                                                                                                                     | <i>P. scabrifolium</i> <sup>10</sup><br>3                                            |
| 3. Leaves densely covered with long, white hairs.<br>Leaves not covered with long, white hairs.                                                                                                                                             | <i>P. albivillosum</i> <sup>9,11</sup><br>4                                          |
| 4. Racemes reduced to one or occasionally two spikelets.<br>Annual.<br>Lower racemes with several spikelets. Annuals or<br>perennials.                                                                                                      | <i>P. rarum</i> <sup>1,2,6,7,11,13</sup><br>5                                        |
| 5. Spikelets arranged irregularly on raceme axis.<br>Spikelets arranged regularly on raceme axis.                                                                                                                                           | 6<br>10                                                                              |
| 6. Annuals. Culms compressible between fingers. Northern<br>and far western.<br>Perennials. Culms not compressible.                                                                                                                         | 7<br>8                                                                               |
| 7. Spikelets less than 2.4 mm long.<br>Spikelets more than 2.75 mm long.                                                                                                                                                                    | <i>P. clementii</i> <sup>7,11,12,13</sup><br><i>P. basicladum</i> <sup>2,12,13</sup> |
| 8. Fertile lemma coarsely ridged in the lower $\frac{2}{3}$ ; spikelets<br>2.25–3.5 mm long (knottybutt grass)<br>Fertile lemmas more or less finely ridged in lower $\frac{2}{3}$ ;<br>spikelets 2–2.75 mm long.                           | <i>P. constrictum</i> <sup>3,7,9,11,12,13</sup><br>9                                 |
| 9. Spikelets up to 1 mm wide. Leaves fine, inrolled. Eastern.<br>Spikelets more than 1 mm wide. Leaves narrow, flat or<br>sometimes inrolled. Widespread (slender panic)                                                                    | <i>P. criniforme</i> <sup>11</sup><br><i>P. gracile</i> <sup>1,2,4,5,6,8,11</sup>    |
| 10. Lower lemma about twice length of upper glume.<br>Lower lemma not greatly exceeding length of upper glume.                                                                                                                              | <i>P. inaequale</i> <sup>2</sup><br>11                                               |
| 11. Spikelets 3.5–4.5 mm long, almost globose when mature.<br>Clay soils (shot or sago grass)<br>Spikelets up to 3 mm long.                                                                                                                 | <i>P. globoideum</i> <sup>2,5,11</sup><br>12                                         |
| 12. Spikelets 2.5–3 mm long.<br>Spikelets less than 2.4 mm long.                                                                                                                                                                            | 13<br>16                                                                             |
| 13. Spikelets closely adpressed to raceme axis; lower racemes as<br>long as proximate internodes, or almost so (Warrego<br>grass)<br>Spikelets diverging from raceme axis; lower racemes usually<br>much shorter than proximate internodes. | <i>P. jubiflorum</i> <sup>1,2,5,6,8,11,12,13</sup><br>14                             |
| 14. Spikelets convexly curved above lower glume; nerves<br>indistinct. Annual.<br>Spikelets flat or concavely curved above lower glume;<br>nerves distinct. Perennials.                                                                     | <i>P. flavidum</i> <sup>1,5</sup><br>15                                              |
| 15. Plants rigid, wiry, often with a well-developed knotty<br>rhizome.<br>Plants lax, decumbent and rather slender, without a well-<br>developed rhizome.                                                                                   | <i>P. gausum</i> <sup>10,11</sup><br><i>P. aversum</i> <sup>4,9,11</sup>             |
| 16. Leaf blades narrow, rolled (brigalow grass)<br>Leaf blades flat, up to 4 mm wide.                                                                                                                                                       | <i>P. caespitosum</i> <sup>3,11</sup><br>17                                          |
| 17. Fertile floret with coarse, transverse ridging.<br>Fertile floret with fine ridging; smooth in appearance.<br>Plants compactly tufted.                                                                                                  | 18*<br>19*                                                                           |

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| 18. | New tillers emerging from leaf sheaths at ligule.<br>New tillers breaking through leaf sheaths at base; culms with 3–4 nodes. Plant not compactly tufted.                                                                             | <i>P. breviflorum</i> <sup>11</sup><br><i>P. disjunctum</i> <sup>10</sup>   |
| 19. | Leaf sheaths distinctly keeled. Racemes usually overlapping. Culms with 2–4 nodes.<br>Leaf sheaths rounded. Racemes usually clearly separated from each other. Culm leaves distinctly longer than basal leaves; culms with 2–3 nodes. | <i>P. radiatum</i> <sup>4,9,11</sup><br><i>P. distans</i> <sup>2,5,10</sup> |

\* The last four species in the key are very difficult to distinguish from one another and further study is necessary before the taxonomic status of this group is adequately established.