



ECHINOCHLOA COLONUM

Awnless Barnyard Grass

A robust annual, prostrate to more or less erect, up to 60 cm tall. *Culms* usually kneed towards the base, smooth and hairless, striate, often branched. *Nodes* obvious, usually brown, hairless. *Leaves* fairly well distributed. *Leaf sheaths* rather loose, generally shorter than the internodes, striate, hairless. *Ligule* absent, but some long hairs are found about the margins of the ligule position. *Leaf blades* 3–8 mm broad, flat, smooth and hairless, up to 20 cm long, pointed.

Inflorescence a panicle of racemes that are spread out along the 10 cm or so axis; the racemes 2–3 cm long, at first more or less erect on the axis, but later slightly spreading. *Spikelets* (S) 2.5–3 mm in length, numerous, crowded and almost sessile along the raceme, more or less arranged in 3–4 rows on one side of the rachis, ovoid, often tinged with purple and falling entire and free from the very short pedicels at maturity. *Florets* 2, the lower male or neuter, the upper bisexual. *Glumes* (G_1 , G_2) very unequal, covered on their backs with short, stiff hairs, the backs of the nerves (particularly the central ones) with a row of spines, somewhat leathery; the lower glume (G_1) short (1.5 mm), very broad at the base and partly enclosing the upper glume, coming to a slightly produced point, 3-nerved; the upper (G_2) the length of the spikelet, 5-nerved, the tip slightly produced into a point. *Lemma* (L_1) of the lower sterile or neuter floret similar to G_2 , but slightly shorter, with fewer hairs and spines on the back, particularly in the lower part, 5-nerved, broadly 2-keeled and flat to slightly concave between the keels. *Palea* (P_1) present, about $\frac{3}{4}$ the length of L_1 , membranous, nerveless, flat, except for the flaps near the base, slightly hairy along the upper margin; usually without anthers. *Lemma* (L_2) of the upper fertile floret the length of the spikelet, deeply rounded on the back, hard, shining, straw-coloured, faintly 5-nerved, the margins slightly clasping the enclosed palea. *Palea* (P_2) 2-keeled, equal to L_2 , flat on the back, hardened and straw-coloured. *Anthers* 3, 0.3 mm long.

This is an introduced weed grass, particularly of cultivation on rich soils where the ground is periodically wet. It is of little economic value for grazing. Two species (*E. utilis* and *E. frumentacea*) are grown as fodder crops.

REFERENCES

- Bailey (1902),¹ p. 1825 (as *Panicum* spp.); Blake (1952),² pp. 91-92; Gardner (1952),³ pp. 253-54; Barnard (1969),⁴ pp. 35-37; Burbidge and Gray (1970),⁵ p. 64; Lazarides (1970),⁶ p. 113; Willis (1970),⁷ pp. 193-94; Beadle *et al.* (1972),⁸ p. 671; Vickery (1975),⁹ pp. 189-211; Jessop (1981),¹⁰ pp. 476-77.

KEY TO SPECIES

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| 1. Spikelets less than 3.5 mm long, excluding awn. | 2 |
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| 2. Lower lemma awns more than 15 mm (up to 50 mm long
(swamp barnyard grass) | <i>E. telmatophila</i> ^{2,9}
(<i>walteri</i>) |
| Lower lemma awns less than 15 mm long. | 3 |
| 3. Inflorescence drooping, with flexuous branches, lower
panicle branched, with racemes borne on primary
branches (South American barnyard grass) | <i>E. crus-pavonis</i> ⁹ |
| Inflorescence erect, branches not flexuous; racemes borne
along primary axis. | 4 |
| 4. Inflorescence narrow, up to 1.5 cm wide, racemes erect;
spikelets arranged in 4 irregular rows (awnless barn-
yard grass) | <i>E. colonum</i> ^{1,2,3,6,7,8,9,10} |
| Inflorescence more than 2.0 cm wide, lower racemes some-
what spreading; spikelets not arranged in 4 rows (barn-
yard grass) | <i>E. crus-galli</i> ^{1,2,3,5,7,8,9,10} |
| 5. Lower lemma deeply furrowed about mid-vein. | 6 |
| Lower lemma not furrowed. | 7 |
| 6. Inflorescence dense, more than 3 cm wide, racemes rather
crowded (marsh millet) | <i>E. inundata</i> ^{9,10} |
| Inflorescence less dense, usually less than 2 cm wide,
racemes usually less crowded (Channel millet) | <i>E. turnerana</i> ² |
| 7. Spikelets pale in colour, grain whitish (Siberian millet) | <i>E. frumentacea</i> ^{2,4,9} |
| Spikelets dark coloured, grain brown (Japanese millet) | <i>E. utilis</i> ^{5,9} |

