



HETEROPOGON CONTORTUS

Black or Bunch Speargrass

A tufted perennial, up to 1 or 1.5 m tall, rather variable in habit. *Culms* erect or kneeled at the base, rarely prostrate, often branched above, particularly at flowering, flattened towards the base. *Nodes* smooth, hairless. *Leaves* green or bluish, basal and on the culm. *Leaf sheaths* smooth, compressed, keeled, striate, sometimes with a few hairs near the ligule. *Ligule* a short membranous rim. *Leaf blades* folded in the lower part, becoming flat, slightly rough to the touch with a few long hairs, particularly towards the base, 3–7 mm broad, blades up to 30 cm long, coming to a blunt, almost canoe-shaped tip.

Inflorescence a simple raceme of spikelet pairs arranged in 2 rows, 3–7 cm long (excluding the awns), the pedicellate spikelets of each pair outermost, overlapping and enclosing the inner sessile spikelets; at the base of the raceme, the lowermost 1 to several pairs similar, awnless, and male or neuter, the remainder of the raceme consisting of dissimilar pairs of bisexual awned, sessile spikelets with male or neuter pedicellate spikelets; at maturity, the fertile awned spikelets tangling together with those of other inflorescences to form a knot or band of prickly "seed", the pedicellate male or neuter spikelets falling separately or persistent. *Spikelets* (S_1 , S_2) dissimilar in form and sex, at maturity disarticulating below the glumes and falling entire or together with joints and pedicels. *Florets* 2, the lower reduced to an empty lemma in both spikelets, the upper male or bisexual in the sessile spikelets, male or neuter in the pedicellate spikelets. *Fertile sessile spikelet* (S_1) enclosed by the narrow, almost cylindrical, tough glumes, dark brown, 5–7 mm long (excluding the awn), the base with a pronounced callus, which is strongly bearded; at maturity, the disarticulation very oblique, thus giving a very sharp, barbed point. *Glumes* (G_1 , G_2) almost equal but dissimilar, the length of the spikelet, tough; the lower glume (G_1) obscurely 5-nerved, more or less enclosing the spikelet, the margins inrolled and clasping those of G_2 ; the upper (G_2) 3-nerved, not as tough with membranous margins clasped by G_1 . *Lemma* (L_1) of the lower sterile floret, membranous, nerveless and about $\frac{1}{2}$ the length of the spikelet. *Lemma* (L_2) of the upper fertile floret narrow and strap-like at the base and continued into a stout, brown, twisted and bent awn covered with short bristles in the lower part. *Palea* (P_2) small and inconspicuous, if present. *Anthers* 3, 2.5–3 mm long. *Pedicellate male or neuter spikelet* (S_2) unawned, slightly twisted and asymmetrical, 6–10 mm long, flattened on the back. *Glumes* (G_1 , G_2) about equal, but slightly dissimilar, membranous; the lower glume (G_1) somewhat toughened, many-nerved, 2-keeled, asymmetrical, more or less covered on its back by bristles growing out at right angles to the surface; the upper (G_2) membranous, 3–5-nerved, hairy along the margin of the upper part. *Lemmas* (L_1 , L_2) membranous, 1-nerved, hairy along the margin of the upper part. *Palea* absent. *Anthers* 3, 3 mm long.

A widespread grass of the open forest and woodland; it is, in its vegetative condition, readily eaten by stock and an important component of the diet of rangeland

cattle. It is disliked intensely by sheepmen due to the ability of the seed to lodge in the wool, working into and penetrating the skin, eventually to become fatal. Cattle are less susceptible, but the seed can cause eye disorders. Like most other native forage grasses, spear grass decreases in quality as a feed following flowering and maturation.

REFERENCES

Bailey (1902),¹ p. 1861; Gardner (1952),² p. 341; Vickery (1961),³ pp. 57-58; Jessop (1981),⁴ p. 494.

KEY TO SPECIES

Moderately tall grass (usually < 1 m). Racemes < 6 cm long.

Fertile spikelets 6-8 mm long (black or bunch speargrass)

H. contortus^{1,2,3,4}

Very tall grass (usually > 1 m). Racemes > 9 cm long. Fertile

spikelets 12-14 mm long (giant speargrass)

*H. triticeus*¹
(*insignis*)