



# COIX LACRYMA-JOBI

## Job's Tears

A robust annual of variable height, but usually 90–120 cm. *Culms* erect, smooth, hairless, branching freely from the upper nodes, the roots strong and bracing the base from the lowest nodes. *Nodes* several, smooth, hairless, enlarged above by the base of the sheath. *Leaves* mainly on the culms, smooth, hairless, green. *Leaf sheaths* rather loose, more or less exceeding the internodes, slightly striate. *Ligule* membranous, 1–1.5 mm long, fringed with short hairs. *Leaf blades* very variable in length, up to 5 cm wide, expanded near the base and clasping the stem, narrowing from near the base to the pointed tip, the surface and margins more or less undulate.

*Inflorescence* a leafy panicle, consisting of clusters of racemes on long, stiff peduncles arising from the axils of one or several of the upper leaves, each raceme bearing distally a tuft of several male spikelets on a slender pedicel at the base of which is a hard, bead-like structure, which is a modified sheathing bract, coloured pearly-white or greyish-blue, containing the single female spikelet. At maturity, the tuft of male spikelets breaks off and falls entire, the bead containing the female spikelet ripens to become very hard, shining and persistent, eventually falling entire. *Spikelets* male ( $S_1$ ) and female ( $S_2$ ), very dissimilar. *Male spikelets* ( $S_1$ ) in 2's or 3's, overlapping along the rhachilla, the two lateral ones sessile, the third, when present, pedicellate, 7–12 mm long, all similar. *Florets* 2, both male, or sometimes one sterile. *Glumes* ( $G_1$ ,  $G_2$ ) the length of the spikelet, dissimilar; the lower glume ( $G_1$ ) broad, many-nerved, several lateral nerves together forming a thickened winged keel, which clasps the margins of  $G_2$ , the margins in the upper part finely rough and often wing-like; the upper ( $G_2$ ) narrower, slightly shorter and more membranous than  $G_1$ , 9–13-nerved, the central nerve prominent, slightly keeled down the midline of the back, the margins slightly infolded to clasp the lemma. *Lemmas* ( $L_1$ ,  $L_2$ ) thinly membranous, slightly shorter than  $L_1$ , 3-nerved. *Paleas* ( $P_1$ ,  $P_2$ ) delicately membranous, dissimilar;  $P_1$  4-nerved, keeled along the 2 lateral nerves with broad marginal flaps infolded to enclose the anthers, about the length of  $L_1$ ;  $P_2$  2-nerved, not keeled or with infolded margins. *Anthers* 3, 3–4 mm long, yellow. *Female spikelet* ( $S_2$ ) solitary, 8–10 mm long, but accompanied by two rudimentary sterile spikelets or pedicels completely contained within the bead-like sheathing bract. *Florets* 2, the lower sterile, the upper fertile. *Glumes* ( $G_1$ ,  $G_2$ ) very dissimilar, thin, the length of the spikelet; the lower glume ( $G_1$ ) very broad and balloon-like, constricted at the apex to a beak that protrudes slightly from the orifice of the bead, 13-nerved; the upper ( $G_2$ ) much narrower and only slightly inflated, beaked, strongly 3-nerved down the centre and slightly keeled on the nerves, faintly 3–4 nerved towards the margins. *Lemmas* ( $L_1$ ,  $L_2$ ) thinly membranous, faintly 3-nerved, unequal;  $L_1$  beaked, about the length of the glumes;  $L_2$  slightly shorter than  $L_1$ , the beak truncated. *Palea* ( $P_2$ ) shorter than  $L_2$ , delicately membranous, 2-nerved, slightly beaked.

The grass is largely grown as a curiosity or for ornamental purposes, although it has escaped from cultivation in some coastal areas. The beads can be used for jewellery. It has been used as a fodder crop in some countries.

### REFERENCES

Bailey (1902), p. 1848; Gardner (1952), p. 358; Henty (1969), pp. 53–54.

### KEY TO SPECIES

Only one species occurs in Australia.