



# PHALARIS AQUATICA

## Phalaris

Tufted, erect, rather stout perennial. *Culms* 30–100 cm tall, more or less swollen at the basal internodes or forming hard, woody stocks. *Nodes* obvious, slightly concave, pigmented. *Leaves* well distributed, densely leafy at the base, bluish-green. *Leaf sheaths* smooth, hairless, striate, rather loose, persisting and becoming fibrous at the base, mostly slightly shorter than the internodes. *Ligule* a papery-membranous flap 3–5 mm long, bluntly triangular. *Leaf blades* up to 50 cm long and 12 mm wide, flat, with a prominent mid-nerve, striate, rounded at the base and slightly clasping the culm, with short ears, smooth and hairless, tapering gradually to a fine point.

*Inflorescence* a dense, cylindrical, spike-like panicle, 5–12 cm long and up to 2 cm broad, but becoming narrower towards the tip, the primary and secondary panicle branches very contracted with numerous shortly pedicelled spikelets. *Spikelets* (S) 5.5–6.5 mm long, laterally flattened, all similar, at maturity not falling entire but disarticulating above the persistent glumes. *Florets* 3, only the uppermost fertile, the lower 2 reduced to sterile lemmas. *Glumes* ( $G_1$ ,  $G_2$ ) almost equal, membranous, the length of the spikelet and enclosing it, 3-nerved, strongly keeled along the mid-nerve with a row of short spines on the back in the upper half, the lateral nerves also prominent, green, the margins papery and white. *Lemmas* ( $L_1$ ,  $L_2$ ,  $L_3$ ) dissimilar, the lower two ( $L_1$ ,  $L_2$ ) similar, reduced, narrow, pointed, curved and hairy, about 1.5 mm long, not supporting paleas, sterile; the upper lemma ( $L_3$ ) 5-nerved, rounded and fairly densely hairy on the back, becoming shiny at maturity, about  $\frac{3}{4}$  the length of the glumes. *Palea* ( $P_3$ ) faintly 2-nerved, the nerves close together along the mid-line, hairy in the upper half on the back between the nerves. *Anthers* 3, 2.5 mm long.

This grass is widely cultivated in the southern states as a pasture species and it is grown to a limited extent in the southern border uplands of southeast Queensland. Of Mediterranean origin, it was originally introduced by the Toowoomba Botanic Gardens from the United States, whence its use spread southwards. *P. canariensis*, an annual, is grown for bird-seed production. A *P. aquatica* x *P. arundinacea* sterile hybrid, known as Ronpha grass (Grof, 1967), has been grown successfully as a winter-growing pasture grass in moist areas or under irrigation in southern Queensland.

### REFERENCES

- Gardner (1952),<sup>1</sup> pp. 22–26; Vose (1959);<sup>2</sup> C.S.I.R.O. Australia (1967),<sup>3</sup> pp. 25–29; Burbidge and Gray (1970),<sup>4</sup> p. 60; Willis (1970),<sup>5</sup> pp. 134–36; Beadle *et al.* (1972),<sup>6</sup> pp. 660–61; Vickery (1975),<sup>7</sup> pp. 283–93; Black (1978),<sup>8</sup> pp. 169–70.

### KEY TO SPECIES

1. Cultivated perennial, usually with contracted rhizomes  
(phalaris) *P. aquatica*<sup>1,2,3,4,5,6,7,8</sup>  
(*tuberosa*)  
Annuals without rhizomes. 2
2. Spikelets in clusters of 6-7, 1 bisexual and 6 sterile, all  
falling entire (paradoxa grass) *P. paradoxa*<sup>1,5,6,7,8</sup>  
Spikelets all alike, not in clusters falling entire. 3
3. Lower sterile lemma reduced to a minute scale, upper about  
 $\frac{1}{2}$  spikelet length (lesser canary grass) *P. minor*<sup>1,4,5,6,7,8</sup>  
Sterile lemmas both present and approximately equal in  
length. 4
4. Glumes more than 7 mm long. Panicle oblong, up to 6 cm  
long (canary grass) *P. canariensis*<sup>1,6,7,8</sup>  
Glumes less than 5 mm long. Panicle long and narrow, up  
to 15 cm long. *P. angusta*<sup>1,6,7</sup>