

Evolved resistance to glyphosate in barley grass (*Hordeum* spp.) in South Australia

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Summary The barley grasses (*Hordeum* spp.) are problematic weeds in South Australian agricultural systems. Recently barley grass suspected of resistance to glyphosate was reported from a fence line on the Yorke Peninsula in South Australia and a vineyard in the Barossa Valley in situations where glyphosate had been used extensively to control weeds. Preliminary dose response experiment conducted on samples col-

lected showed 4.8-fold resistance greater than the susceptible populations. The barley grasses have already evolved resistance to paraquat, the Group A herbicides and the Group B herbicides in South Australia and the evolution of glyphosate resistance further limits control options for this species.

Keywords Glyphosate, resistance, barley grass, *Hordeum* spp.