



## *Glyphosate resistance sitting on the fenceline*

---

Ten new populations of glyphosate resistant annual ryegrass have been recorded in 2006, more than twice the number reported all of last year. Three of these new populations were identified on fencelines in SA and Victoria. The national Glyphosate Sustainability Working Group (GSWG) reports that the incidence of glyphosate resistance in annual ryegrass is still proportionally low but such jumps in the number of resistant populations should serve as a reminder for growers and remind them to adopt practices that minimise the risk of developing glyphosate resistance.

The national Glyphosate Sustainability Working Group (GSWG) was initiated by the GRDC and consists of researchers and industry representatives. It is charged with the task of minimising the development of glyphosate resistance and maximising the effective life of this key herbicide. Dr Chris Preston, University of Adelaide, is a member of the GSWG and maintains the register of incidences of glyphosate resistance in Australia.

“All these new cases are from locations where glyphosate has been used intensively to control annual ryegrass; this follows the general pattern with 18 out of the 35 current annual ryegrass glyphosate resistant populations recorded where chemical fallow is practiced,” reported Dr Preston.

“Three of the new cases are from fencelines, while five are from vineyards. In both situations glyphosate is often the only method of weed control used, but alternatives do exist.”

In broadacre agriculture, glyphosate resistance in annual ryegrass on fencelines is a particular problem as the resistance can be moved into the cropped area by farm equipment. Farm hygiene to prevent the movement of resistance seeds will be important.

If resistance on fencelines is suspected it is important to take action early and stop the resistant weeds from setting seed.

The use of the double knock, effective in-crop weed control, use of alternative herbicides, crop topping and non-herbicide weed control techniques, such as hay and weed seed collection, are all strategies that can be used to help reduce the risk of developing glyphosate resistant weeds in broadacre cropping.

“Continuous use of glyphosate and allowing weed numbers to increase are both situations that amplify the risk of glyphosate resistance occurring and should be avoided if possible.”

Growers sometimes suggest that as glyphosate resistance increases a new replacement herbicide will become available, but this is simply not the likely to be the case. Currently no glyphosate equivalent in development and even if one were found today, it would take approximately 10 years before registration would be completed.

Therefore, it is essential that growers use glyphosate responsibly if they are to prevent the development of glyphosate resistant weeds, especially annual ryegrass.

With assistance from the CRC for Weed Management, the GRDC and the industry body CropLife Australia, the GSWG has developed a website ([www.weeds.crc.org.au/glyphosate/](http://www.weeds.crc.org.au/glyphosate/)) containing useful information and resources about weed management techniques to minimise the risk of glyphosate resistance. There are answers to frequently asked questions, fact sheets, information on identification and testing for glyphosate resistance and a database of

glyphosate resistant weed populations. Growers and agronomists are encouraged to visit the site and use and share the information as widely as possible.

If herbicide resistance is suspected samples should be tested to help with future weed control decisions. Information about testing is also found on the website.

ENDS

For more information contact Dr Chris Preston, (08) 8303-7237,  
Christopher.Preston@adelaide.edu.au