



Glyphosate resistance on the increase in vineyards

Ten new populations of glyphosate resistant annual ryegrass have been recorded in 2006, more than twice the number reported all of last year. The majority of these new populations are in vineyards in South Australia.

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 sound serve as a reminder for growers to adopt practices that minimise the risk of developing glyphosate resistance.

The 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 under the vine row. In both situations glyphosate is often the only method of weed control used, but alternatives do exist."

There are now 11 vineyards with known glyphosate resistant annual ryegrass populations.

"This is 20% of all the glyphosate resistance we know about. Glyphosate resistance could become a serious problem in vineyards unless steps are taken to better manage glyphosate use."

In vineyards the strategic use of alternative knockdown groups, residual herbicides and herbicide mixtures, cultivation and mulching are all weed control strategies that can be used to help reduce the risk of developing glyphosate resistant weeds. Farm hygiene to prevent the movement of resistant seeds between areas of the vineyard or between properties is also important.

"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/) 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.

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