

Name of research project:

Weed management strategies for farming systems with herbicide tolerant cotton

Research organisation(s):

Department of Employment Economic Development and Innovation

Cotton Research and Development Corporation

Cotton Catchment Communities CRC

Monsanto Australia Ltd.

GRDC Project cod:

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Project objectives:

1. To identify weeds at risk of evolving glyphosate resistance and favoured (species shift)
2. To devise management tactics for identified glyphosate resistant and tolerant weeds
3. To predict the impact of current management practices on glyphosate resistance evolution and species shift to glyphosate tolerant weeds
4. To devise and deliver management strategies for farming systems with herbicide tolerant cotton that will prevent glyphosate resistance evolution and species shift to glyphosate tolerant weeds

Project period: Start and finish dates

July 2008- June 2011

Project outcomes and status:

- List of weed species that have increased and have the potential to increase in prevalence in systems dominated with glyphosate tolerant cotton have been developed
- A web based risk assessment tool with ranking of relative importance for factors influencing development of glyphosate resistance in farming systems with and without glyphosate tolerant cotton is being developed
- An adapted and expanded model for simulating glyphosate resistance evolution in key weeds in cotton systems is being developed
- Management strategies to minimise the risk of weeds developing glyphosate resistance and species shift, to be applied across the whole farming system

Links:

www.dpi.qld.gov.au