



FACT SHEET

Control of Volunteer Roundup Ready[®] Canola on Roadsides

Roundup Ready[®] canola has been genetically modified to be tolerant to the herbicide glyphosate. It has been grown commercially in New South Wales and Victoria since 2008 and commercial-scale cultivation commenced in Western Australia in 2010.

Harvested canola seed occasionally spills during transport (as can happen with the transportation of all grain, regardless of commodity). This may result in volunteer populations of canola occurring alongside transport routes such as roadsides and railways. Many weed managers rely on glyphosate application for the control of roadside weeds. Roundup Ready[®] canola volunteers are the same in all respects to conventional canola volunteers except that they cannot be controlled by application of glyphosate. Roundup Ready[®] canola volunteers can be effectively managed and controlled using alternative herbicides and other (non-chemical) weed control practices that can be applied to conventional canola.

This Fact Sheet has been prepared to provide information to assist weed managers whose operations may include control of volunteer canola plants on roadsides, rights-of-way and other non-agricultural settings.

GM canola varieties approved for commercial release in Australia

Dealings involving the intentional release (DIR) of a genetically modified organism (GMO) into the environment are illegal in Australia unless conducted pursuant to a licence from the Gene Technology Regulator (the Regulator) under the *Gene Technology Act 2000* (Cth) (the Act). The Regulator must not issue a licence to deal with a GMO unless satisfied that any risks posed by the dealing are able to be managed in such a way as to protect the health and safety of people and the environment.

In 2003, the Regulator issued two licences for the commercial release of GM canola:

- Roundup Ready[®] canola—licence DIR 020/2002, genetically modified to be tolerant to the herbicide glyphosate
- InVigor[®] hybrid canola—licence DIR 021/2002, genetically modified to contain a hybrid breeding system and be tolerant to the herbicide glufosinate ammonium.

In issuing these licences, the Regulator concluded on the basis of comprehensive Risk Assessment and Risk Management Plans (RARMPs) that these GM canola varieties were as safe for human health and the environment as conventional canola and not likely to be either more invasive or more persistent.

These GM canola varieties have also been approved for use in foods and food ingredients by Food Standards Australia New Zealand (FSANZ).

Roadside canola volunteers

Volunteer canola populations are more likely to occur close to the edge of the road, on curves, bridges and near railway receival points, as these are areas where spills are more likely to occur.

Volunteer canola is a poor competitor with perennial grasses and other perennial vegetation and will rarely establish or persist on roadsides in Australia. While it is possible that volunteer canola may complete its lifecycle on the roadside and set seed, studies indicate that many roadside populations are short-lived and are perpetuated by new spills each year.

Managing roadside Roundup Ready® volunteers

Roundup Ready® canola is only tolerant to glyphosate and its susceptibility to other herbicides is no different to conventional canola. Therefore, Roundup Ready® canola can be effectively managed and controlled using alternative herbicides and other (non-chemical) weed control practices that can be applied to conventional canola.

For example, weed control authorities may need to consider applying either a knockdown herbicide other than glyphosate and/or mechanical control, such as mowing, slashing or chipping, to kill weeds and volunteer Roundup Ready® canola. Alternatively, authorities may consider using glyphosate as the knockdown with an appropriate tank-mix partner herbicide that controls brassica weeds, provided this is consistent with an approved use of the herbicide registered by the Australian Pesticides and Veterinary Medicines Authority (APVMA).

Care should always be taken with herbicide choice to ensure the herbicide will control brassica weeds and is appropriate for the location. It is also important to note that reliance on glyphosate as the sole weed management option may contribute to the development of glyphosate resistant weeds. Monitoring of control activities and adopting Integrated Weed Management (IWM) practices, such as herbicide rotation and mechanical weed control, are important strategies in managing both roadside canola volunteers and other weeds. Survivors of herbicide treatment should be controlled by an alternative method: physical, mechanical or an alternative herbicide.

Where to go for more information?

The APVMA is responsible for registering herbicides for use in Australia. Herbicides should be used in accordance with the label instructions, including any conditions to minimise development of herbicide resistant weeds. See the APVMA website www.apvma.gov.au or call (02) 6210 4700 for further information.

CropLife Australia is the peak industry body for the oversight of Resistance Management Strategies included on crop protection product labels. See the CropLife Australia website www.croplifeaustralia.org.au or call (02) 6230 6399 for further information.

The licence and full RARMP for Roundup Ready® canola is available on the Office of the Gene Technology Regulator website or by calling 1800 181 030 www.ogtr.gov.au/internet/ogtr/publishing.nsf/Content/dir020-2002 .

The Australian Glyphosate Sustainability Working Group website has information on managing herbicide resistance and IWM <http://glyphosateresistance.org.au/> .

Disclaimer This fact sheet is provided for the information of roadside weed control authorities to assist them in making choices to control roadside canola volunteers as part of their routine control operations. Before relying on this information, users should carefully evaluate its currency, completeness and relevance for their purposes, and should obtain any appropriate professional advice relevant to their particular circumstances.