



# GETTING THE MOST OUT OF ROUNDUP READY® CANOLA

## Paddock selection

As with all types of herbicide tolerant canola systems, the Roundup Ready canola system has its benefits and drawbacks. When deciding whether to grow Roundup Ready canola in your paddock, it's important to understand the weed spectrum, level of weed pressure and herbicide resistance status of the weed population in the paddock. If a grower and their Technology Service Provider feel the risk of developing glyphosate resistance in a specific paddock is too high, it may be inappropriate to grow Roundup Ready canola.

The grower must also consider whether canola is the appropriate crop for the paddock or if, for example, the ryegrass population is too high and the paddock should potentially be cut for hay or grazed for one year prior to growing a canola crop (refer to image 1).



Image 1 – Paddock unsuitable for canola planting due to high ryegrass population.

## Sowing rate

Sowing rates for Roundup Ready canola should be sufficient to provide good crop competition with weeds as part of an Integrated Weed Management strategy (refer to Image 2 for example of a paddock with an inadequate sowing rate).

The aim should be for the crop to reach canopy closure as close as possible to the six to eight leaf growth stage to maximise crop competition. To determine sowing rate the grower must have a targeted plant density and take into account the number of seeds per kg, the germination and establishment percentage.

When used correctly the Roundup Ready system can provide excellent weed control – annual ryegrass populations in particular.

Refer to Image 3 illustrating excellent ryegrass control relative to Triazine Tolerant canola. See Figure 1 for trial data showing excellent ryegrass control using Roundup Ready canola.



Image 2 – Canola paddock with inadequate sowing rate.



Image 3 – Ryegrass control in Calingiri, WA 2013 in Roundup Ready canola (left) and Triazine Tolerant canola (right).

## Legume and grass weed control

Volunteer legumes are common weeds of many canola growing regions throughout Australia. Archer® and Lontrel™ are very good for controlling volunteer grain and pasture legumes, whilst Roundup Ready Herbicide with PLANTSHIELD by Monsanto alone will not always provide high levels of control of these weeds. Archer can be tank-mixed with Roundup Ready Herbicide with PLANTSHIELD by Monsanto.

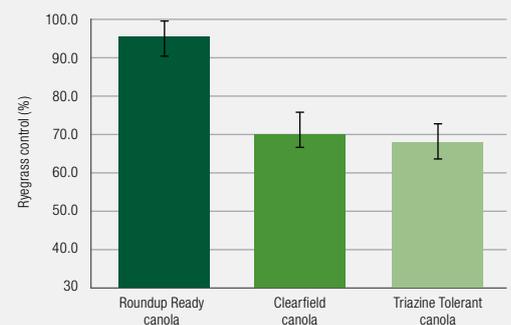


Figure 1 – Annual ryegrass control – Calingiri WA 2013.



## Legume and grass weed control (continued)

Where resistance to Group A chemistry is not an issue, a range of products are registered for post-emergent grass control in canola, eg: Select® Herbicide. The use of Group A chemistry can provide a ryegrass control option where ryegrass germination is past the six leaf stage of the Roundup Ready canola crop.

## Pre-emergent weed control

Pre-emergent weed control is an extremely important part of the overall Roundup Ready canola system. Getting on top of weeds early helps to maximise yields and reduces the selection pressure for glyphosate resistance in the Roundup Ready system.

The choice of pre-emergent herbicides will depend on herbicide rotations, weed spectrum and density and the herbicide resistance status.

A range of pre-emergent herbicides are registered in canola, including:

- Avadex® Xtra
- TriflurX®
- Rustler®

Avadex Xtra, TriflurX and Rustler will reduce ryegrass density early in the crops life; so long as the plants are not resistant to these herbicides (refer to image 4).

Reducing ryegrass numbers can benefit growers through maximised yield potential and as a resistance management tool. The other key weed controlled by TriflurX is wireweed which can be difficult to control post-emergence in winter.

The Avadex Xtra/TriflurX mix can control or suppress 19 weed species, with Avadex Xtra providing control on the key weed – wild oats.

Toadrush can be a problem weed in canola as it often grows in high density and competes strongly with the canola crop. Rustler is registered for toadrush control in canola. It's residual activity and ability to perform well in wet soil conditions means it is well suited for use in canola.

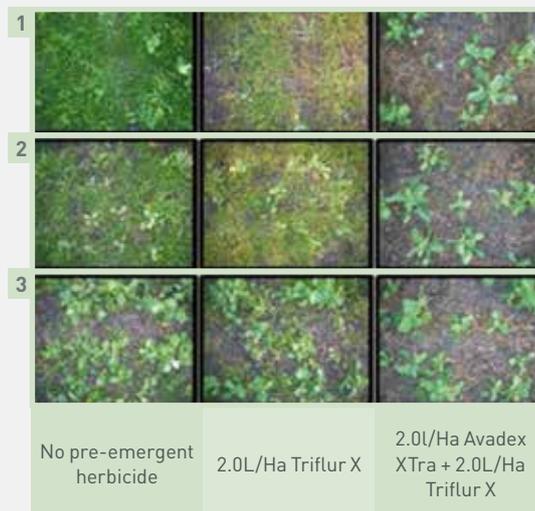


Image 4 – Pre-emergent weed control – herbicides and rates

1. No Roundup Ready Herbicide with PLANTSHIELD by Monsanto
2. 1 x Roundup Ready Herbicide with PLANTSHIELD by Monsanto @ 0.9kg/Ha
3. 2 x Roundup Ready Herbicide with PLANTSHIELD by Monsanto @ 0.9kg/Ha

## SUMMARY

- To determine whether it is appropriate to grow Roundup Ready canola in a certain paddock it is important to understand the weed species present, weed density and herbicide resistance status of that paddock.
- Maintain trifluralin usage where appropriate.
- Adequate sowing rates of Roundup Ready canola are critical to provide good crop competition as part of an integrated weed management strategy.
- Apply Archer® to control volunteer legumes.

For further information on Roundup Ready canola, or to find your local Technology Service Provider (TSP) visit [www.roundupreadycanola.com.au](http://www.roundupreadycanola.com.au)

