

# Trialling foliar control of blackleg in canola with Prosaro

Alistair Beyer<sup>1</sup> and Annieka Paridaen<sup>2</sup>

<sup>1</sup> Bayer Crop Science

<sup>2</sup> Southern Farming Systems

## Take home messages

- Occurrence of blackleg infection was generally low at Westmere in 2013.
- The 'Rolls Royce' treatment of Jockey seed treatment, Impact on fertiliser and two applications of Prosaro yielded significantly higher than the control (600 kg/ha difference).
- All treatments that received foliar applied Prosaro had significantly less infection at green bud compared to only seed or fertiliser fungicide or nothing.
- Prosaro's ability to control blackleg is clear however yield results in a year with low blackleg burden make it difficult to distinguish between in furrow and foliar fungicide control.

## Background

Prosaro is now registered for the control on blackleg and sclerotinia in Canola. This trial was looking to assess different management strategies for blackleg, while assessing Prosaro as the only foliar in crop option in canola for blackleg management.

## Method

The trials were sown using the SFS cone seeder on 200 mm row spacings and using 25 mm knife points. The trial was managed according to best practices with regards to pests, weeds and disease control.

**Table 1.** Agronomic and management details for Westmere

<b>Site</b>	Westmere	
<b>Previous crop</b>	Wheat 2012	Canola 2011
<b>Soil type</b>	Clay	1.7% Org C
<b>Sowing date</b>	9 May 2013	
<b>Seed Treatment</b>	Jockey Stayer (applied as per treatment list)	
<b>Sowing rate</b>	Aim for 60 plants/m <sup>2</sup>	
<b>Variety</b>	Canola	Crusher TT
<b>Fungicide timings</b>	15 Aug 2013	4-6 leaf, 375 ml/ha
	30 Aug 2013	Green-bud, 375 ml/ha
<b>Harvest date</b>	18 Dec 2013	

## Results

Despite the relatively low disease burden in 2013, significant yield results were seen when a 'Rolls Royce' treatment of Jockey on seed, Impact on fertiliser and two foliar applications of Prosaro compared to the control which received no fungicides throughout the season.

An assessment of the number of infected plants in ten at green bud stage shows that any application of Prosaro significantly reduced blackleg infection compared to fungicide treated seed, fertiliser or doing nothing at all. These results are displayed in Table 2.

**Table 2.** Yield results with corresponding number of blackleg infected plants at green bud

	Yield (t/ha)		Number of infected plants in 10 at green bud	
Jockey & Impact & Prosaro 4-6 leaf and Green Bud	3.73	a	0.5	b
Jockey & Impact & Prosaro 4-6 leaf	3.71	a	0.5	b
Jockey (20 L/t)	3.65	a	8.3	a
Jockey & Impact on MAP	3.57	a	6.5	a
Impact on MAP (400 ml/ha)	3.52	ab	7.5	a
Impact & 1 Prosaro (375 ml/ha at 4-6 leaf)	3.52	ab	0.8	b
Impact & 2 Prosaro (375 ml/ha at 4-6 leaf and green bud)	3.47	ab	2.3	b
Jockey & 2 Prosaro (375 ml/ha at 4-6 leaf and green bud)	3.36	ab	1.0	b
Jockey & 1 Prosaro (375 ml/ha 4-6 leaf)	3.33	ab	1.0	b
Untreated	3.09	b	7.8	a
<b>LSD(p=0.05)</b>	<b>0.43</b>		<b>2.1</b>	

### Discussion

Results show that we are getting a step up in Blackleg control when applying Prosaro in crop after Jockey Stayer as a seed treatment. In a year with a larger disease burden, we may expect to see higher yield benefits through the use of Prosaro when it comes to preventing blackleg, however even in 2013 when blackleg damage was generally low, using fungicides, either in furrow or foliar are better than doing nothing at all, with approximately 600 kg/ha yield response in the 'best' treatment versus the control.

### Conclusion

Still as a grower/consultant you must do everything possible to decrease the risk of Blackleg in Canola, (the biggest single disease affecting Canola)

Some of these things are:

- 500 Buffer zones from previous stubble
- Grow more resistant varieties
- Mix up your planting of resistance genes within varieties
- Use a seed or fertiliser treatment for Blackleg

If all of these things are managed, the use of Prosaro is an additional option for the growers who have not been successful on the above points and/or would like some additional protection on blackleg.

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**Figure 1.** Blackleg canker assessments showing varying levels of infection.