

Fungicide use for Blackleg control in Canola

March, 2004

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**Canola Association
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Blackleg is the most damaging disease of Canola worldwide. In Australia, varietal resistance normally controls this fungal pathogen but if crops are sown under high disease pressure, yield losses will still occur.



Figure 1. Blackleg fruiting bodies on stubble that produce wind-borne spores.

Growers are therefore recommended to:

1. Determine which varieties are best suited to their farming system, and then choose the variety with the highest possible blackleg rating (see www.canolaaustralia.com for current blackleg resistance ratings).
A minimum rating of 6 is recommended for medium to high rainfall areas while a rating of 4 is sufficient for low rainfall regions.
2. Isolate current canola crops minimum 500m from last year's canola stubble. Nearly all blackleg spores originate from canola stubble from the previous year's crop. Stubble aged 2 to 4 years produces very few spores.
3. If blackleg is still a problem after using a variety with high resistance and isolating crops from the previous year's stubble, then consider using a fungicide in future years. There are two fungicides registered for use against blackleg in Australia, Impact-in-furrow® and Jockey®.

Research results over two years and 33 trials have found that the use of fungicides on canola will only give an economic return to growers in the following circumstances:

1. If a variety with low blackleg resistance is sown into an environment that is favourable for blackleg.
2. If moderately resistant varieties are sown under very high disease pressure.

Growers are recommended to monitor the amount of disease in current canola crops to determine if yield loss is occurring and then determine likely benefits of using a fungicide in future years (see Australian Blackleg Management Guide available at www.canolaaustralia.com).

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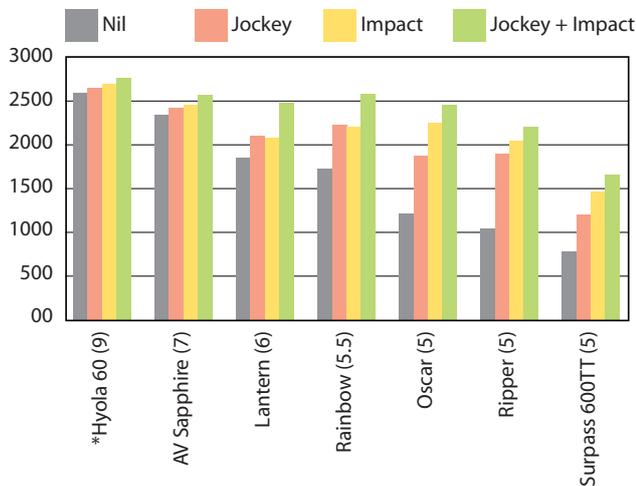


Figure 1. Effect of Jockey® and Impact® on the yield of Canola under very high disease pressure. Brackets contain the CAA Blackleg Rating 2004. Average 2 trials in SA (2003).

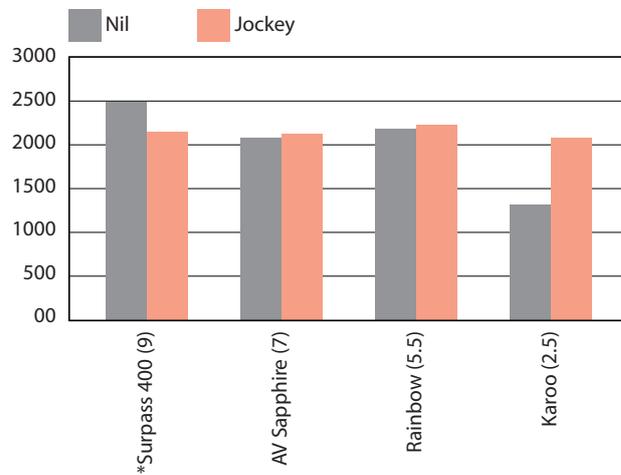


Figure 2. Effect of Jockey® on the yield of Canola under very high disease pressure. Brackets contain the CAA Blackleg Rating. Average 2 trials in Vic (2002 and 2003).

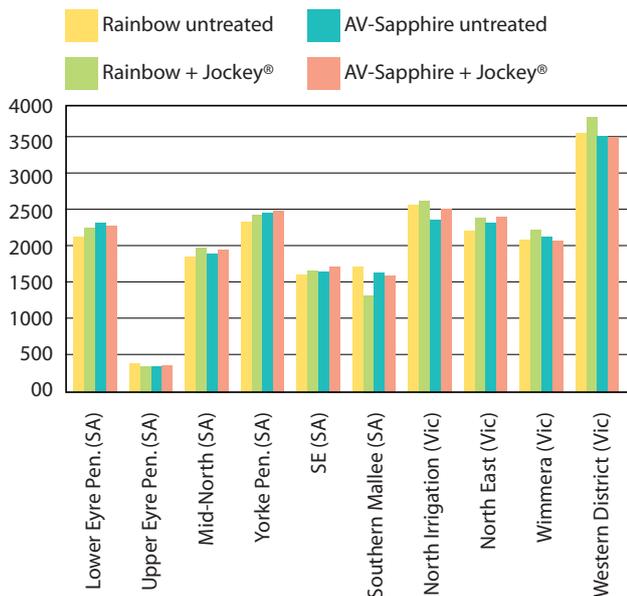


Figure 3. Effect of Jockey® on the yield of Canola under normal disease pressure. Average 27 trials in SA & Vic (2002 & 2003).

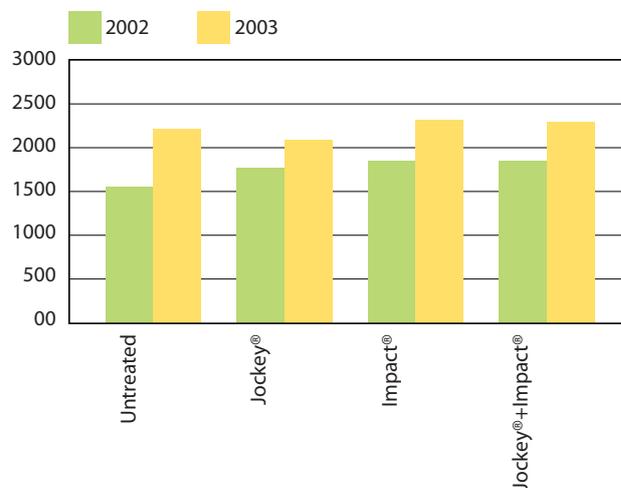


Figure 4. Effect of Jockey®, Maxim XL® and Impact® on the yield of Rainbow in Galong, NSW. A total of 27 trials across NSW produced a significant yield increase with the use of a fungicide.

Acknowledgements:
SARDI Field Crops, DPI Crop Evaluation, DPI canola breeding program, Horsham. Farmlink, NSW.

*These varieties derive the majority or all of their blackleg resistance from *Brassica rapa* subspecies *sylvestris*. In many areas this resistance is now not effective, and these varieties are likely to be very susceptible to blackleg (with a blackleg resistance rating of approximately 1 to 2) and may experience severe to almost complete yield loss.