

Oilseed Outcomes

Oilseed industry and agronomic research updates

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Burning canola stubble may not control blackleg

In a nutshell:

- **Burning canola stubble does not destroy all stubble**
- **Remaining stubble can still release blackleg spores**
- **Resistant varieties, distance from canola stubbles and, where necessary, use of fungicides are the keys to blackleg management.**

Blackleg is the most damaging disease of canola worldwide. In Australia, resistant varieties normally control this fungal pathogen but if crops are sown under high disease pressure, yield losses are still likely. Various management options are available to reduce disease severity. One option is to remove as much stubble from the previous canola crop as possible. However, this may be less effective than once thought.

This information should be used in conjunction with the Australian Blackleg Management Guide available from www.canolaaustralia.com.

Why destroy canola stubble?

The primary source of blackleg infection is spores that are released from blackleg fungal structures called 'fruiting bodies' which are found on canola stubble. So, removing stubble reduces the number of blackleg spores. However, the severity of the disease depends on many additional factors, so just reducing the level of canola stubble in a paddock may not necessarily reduce its severity.

It is not known if a reduction in canola stubble also reduces disease severity in current canola crops.

Burning does not destroy all stubble

Recent studies showed that 80% of stubble was removed during normal soil tillage and sowing operations in an unburnt paddock, and 95% was removed in a burnt paddock, after burning excess stubble in the April before sowing.

But stubble that had been burnt but not destroyed, released a similar number of spores compared to unburnt stubble.

Remaining stubble can still release blackleg spores.



The bush fire on Eyre Peninsula, SA in 2005 burnt all canola stubble in an entire district. Approximately 400kg/ha of canola stubble remained in unburnt paddocks compared to 100kg/ha in the burnt paddocks.

A number of canola varieties were sown with and without fungicide in trial plots within the burnt area and plants were scored for severe internal blackleg infection.

Plants at the bush fire site were infected by blackleg, but only varieties with a rating of less than 6 had severe infection.

It is not known how severe blackleg would have been if the site was not burnt.

EVEN IF YOU BURN CANOLA STUBBLE, YOU MUST STILL MANAGE BLACKLEG.

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Growers are therefore recommended to:

1. Choose the best-suited variety for your farm with the highest possible blackleg rating (see CAA Blackleg Resistance Rating publication or www.canolaassociation.com for current resistance ratings). Use only the current year's ratings as a variety's resistance can change over time.
2. Do not grow the current canola crop adjacent to canola stubble from the previous year's crop as this stubble accounts for up to 95% of blackleg spores.
3. If blackleg is still a problem, then consider using a sowing fungicide in future years. See fact sheet "Fungicide use for blackleg control in canola" available at www.canolaaustralia.com.

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