Fungicide Control of Sclerotinia in Canola

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Key messages

4Farmers Procymidone 500 SC fungicide could offer more cost control of Sclerotinia in Canola compared to Prosaro®.

Aims

Explore fungicide control alternatives for Sclerotinia in Canola.

Method

Trial location was conducted by an independent entity Planfarm in the Geraldton region of Western Australia. Treatments had 3 replicate of each being 5m*20m plots. Crop was seeded on the 1st May 2014 and had one single fungicide treatment sprayed on the 23rd July 2014. Water rate of spraying was 100L/ha. Crop stage at time of single fungicide treatment was 30% flowering on most advanced plants. There was significant number of plants in green bud stage.

Results

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Infections per 20m row</th>
<th>Crop Yield kg/ha</th>
<th>Yield increase over control kg/ha</th>
<th>Extra Grain value $/ha @ $500/t</th>
<th>Cost of fungicide $/ha</th>
<th>Net Value $/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>23</td>
<td>1878</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Prosaro® 0.45L/ha</td>
<td>7</td>
<td>2073</td>
<td>195</td>
<td>$96</td>
<td>$31.50</td>
<td>$66.00</td>
</tr>
<tr>
<td>Procymidone 1L/ha</td>
<td>7</td>
<td>1953</td>
<td>75</td>
<td>$38</td>
<td>$20.00</td>
<td>$17.50</td>
</tr>
<tr>
<td>Procymidone 1L/ha + Speedy Spray 1%</td>
<td>13</td>
<td>2002</td>
<td>124</td>
<td>$62</td>
<td>$24.50</td>
<td>$37.50</td>
</tr>
<tr>
<td>4Farmers Product X</td>
<td>8</td>
<td>2110</td>
<td>232</td>
<td>$116</td>
<td>$26.60</td>
<td>$89.40</td>
</tr>
<tr>
<td>LSD 5%</td>
<td>7.7 count</td>
<td>134kg/ha</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

![Graph showing the yield and infection rates for different treatments](image-url)
The rate of infections was significantly lower with all treatments. The rate of infection did generally correlate well with improved final yield.

An unregistered 4Farmers product X proved the highest yielding treatment and significantly more than the control. Treatments of 4Farmers Procymidone 500 SC with and without adjuvant did not yield significantly different to the Prosaro® treatment although not significantly different to the control.

Only 9.6mm of rain fell after application on the 23rd July up until the 17th August. Of the 23 days in this period only 6 registered rainfall. Thus while Sclerotinia was present at spraying the relatively dry conditions since were not conducive to significantly further infection.

**Conclusion**

Fungicide treatments with 4Farmers Procymidone 500 SC potentially offer another effective control of Sclerotinia. 4Farmers also has chemistry it is developing which also offers good potential.

Sclerotinia infection was equally controlled by treatments of Procymidone and Prosaro®. All treatments controlled Sclerotinia significantly better than the control.

Infection control illustrates the potential for Procymidone to offer comparable yield response to Prosaro®

Treatment with 4Farmers Procymidone 500SC is up to around two thirds the cost of Prosaro® or saving over $10/ha. This can significantly reduce the outlay and risk for Sclerotinia control as well as potentially offer more cost effective results.

**Key words**

Sclerotinia, Canola, Procymidone

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