# Foliar fungicides in 2016

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## What happened in 2016?



## Common disease severity in June 2016

## Grower scenario at end of June 2016

- I am growing Group A rating MR
- I have grown group A for a number of years
- I used Jockey / Impact-in-Furrow
- My crop is at 8-10 leaf.
- I have high yield potential



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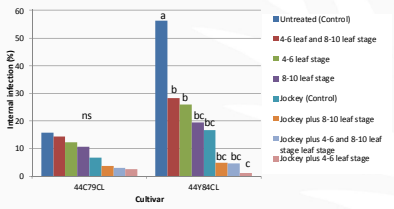
## Prosaro –yield site



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## Our advice in 2016

- R-MR and R will not get crown canker.
- MR is normally OK but will get increased crown canker as disease severity increases.
- If growing MR and below, you have lots of leaf lesions and high yield potential then spray foliar fungicide up to 10th leaf.



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- Anecdotal grower returns from spraying have been in 2016 were 0.3-0.8t/ha ($150-$400 / ha).
- Western District of Vic additional 1.0 -1.5t/ha on Group A, 0.5t/ha on other Groups.

Prosaro advice- In ñnormalògrowing season if you follow the Blackleg Management guide Prosaro is not required.

Based on 2016 observations if you have potential yields above 2.5t/ha Prosaro is a good option.

Agronomist 1 òGlad we didnôt spray Prosaro our growers got 3t/haò

Agronomist 2 ñGlad we sprayed, it only went 3t/ha in the unsprayed stripsò

Agronomist 3 ñGlad we listened to you, we sprayed Prosaro for the first time in 2016 (6500ha) and made an additional 2.5m.



# 2017 Advice

- More canola = more disease risk
- Some popular Group A cultivars have fallen to MR-MS
- But blackleg will be driven by season conditions.
- Monitor disease levels donô just spray because it worked in 2016.

**2017 advice**

1. Blackleg rating
2. 500m isolation
3. Seed / fertiliser treatment
4. Change groups if required
5. Make decision on foliar fungicides during the season

**If your Group A has become a MR-MS**

1. Change groups
2. Same group but higher rating
3. Jockey+Impact
4. Increase isolation
5. Foliar fungicides



# When to spray?

Crown canker

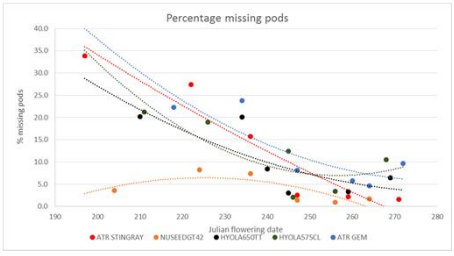
- Not required normally.
- 4-6 leaf is recommendation, use if doing something naughty.
- Up to 10th leaf is good and gives agronomists time to measure in-season blackleg severity and get a idea on potential yields ï strategic.

Upper Canopy Infection

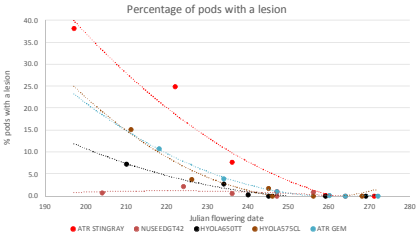
- Best advice is to plan flowering time.
- Best spraying time = 30% flower??? (need more data)
  - ï enables penetration into canopy, protects stems and branches.
  - ï Protect early flowers which are most vulnerable, later flowers are further past the most dangerous infection time.
  - ï Already registered for sclero ï 2 diseases for the price on one.
  - ï We need a lot more data to verify spraying decisions for Upper Canopy Infection.



| Cultivar & spray timing | Main stem infection 0-4 | | Branch infection 0-4 | | % Missing pods | | % of pods with a lesion | | % of plants with a Sclerotinia lesion | | Yield % of untreated | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ATR STINGRAY | | | | | | | | | | | | |
| Untreated | 0.13 | a | 0.25 | | 25.8 | a | 22.5 | | 25 | a | 100 | c |
| 4-6 Leaf | 0.03 | a | 0.58 | | 19.8 | ab | 22.5 | | 22 | a | 128 | bc |
| 10 cm elongation | 0.08 | a | 0.25 | | 18.8 | b | 17.5 | | 27 | a | 132 | b |
| 20cm elongation | 0.05 | a | 0.08 | | 4.0 | d | 19.0 | | 30 | a | 137 | b |
| 1st flower | 0.10 | a | 0.20 | | 7.8 | c | 17.0 | | 13 | ab | 135 | b |
| 30% flower | 0.08 | a | 0.50 | | 7.8 | c | 26.5 | | 5 | b | 152 | ab |
| All sprays | 0.05 | a | 0.30 | | 8.5 | c | 20.5 | | 8 | b | 167 | a |
| ATR GEM | | | | | | | | | | | | |
| Untreated | 0.35 | a | 0.60 | | 18.3 | a | 2.0 | | 38 | a | 100 | b |
| 4-6 Leaf | 0.30 | ab | 0.38 | | 14.6 | a | 5.0 | | 28 | a | 141 | ab |
| 10 cm elongation | 0.13 | b | 0.33 | | 13.6 | a | 4.0 | | 25 | a | 127 | b |
| 20cm elongation | 0.25 | ab | 0.43 | | 13.8 | a | 3.0 | | 33 | a | 165 | ab |
| 1st flower | 0.33 | ab | 0.33 | | 3.5 | c | 3.0 | | 22 | ab | 147 | ab |
| 30% flower | 0.28 | ab | 0.28 | | 6.7 | b | 1.0 | | 8 | b | 139 | ab |
| All sprays | 0.03 | b | 0.15 | | 6.4 | b | 2.0 | | 3 | b | 177 | a |
| ATR WAHOO | | | | | | | | | | | | |
| Untreated | 0.20 | ab | 0.18 | | 16.3 | ab | 1.5 | | 25 | a | 100 | b |
| 4-6 Leaf | 0.15 | b | 0.25 | | 10.6 | b | 1.5 | | 15 | ab | 127 | b |
| 10 cm elongation | 0.08 | b | 0.30 | | 19.8 | a | 1.5 | | 18 | ab | 108 | b |
| 20cm elongation | 0.05 | b | 0.33 | | 11.8 | b | 0.0 | | 22 | a | 161 | ab |
| 1st flower | 0.33 | a | 0.20 | | 19.0 | a | 0.5 | | 7 | b | 128 | b |
| 30% flower | 0.15 | b | 0.28 | | 5.7 | c | 3.0 | | 7 | b | 168 | a |
| All sprays | 0.00 | b | 0.08 | | 2.4 | d | 1.0 | | 3 | b | 175 | a |





## Spraying to control pod infection??

| Time of sowing | Treatments – All ATR Stingray | | | | | |
|---|---|---|---|---|---|---|
| | Untreated | 20-30% flower | End Flower | 50% flower, end flower, mid pod | With rain during flowering | with rain during podding |
| 13 Apr | 55b | 39c | 8f | 0h | 71a | - |
| 27 Apr | 40c | 42c | 17e | 10f | 56b | - |
| 11 May | 16e | 11e | 9f | 0h | - | 25d |
| 25 May | 4g | 8f | 1g | 0h | - | 5fg |



2014 /2015

2016

## 2016 Kaniva field plots ï Images are one month post harvest ï at harvest not visible difference between treatments

**ATR Stingray Multiple spray applications**

Yield = 167% of untreated

**ATR Stingray Untreated**



## Why was Upper Canopy Infection less severe in 2016? ie more severe in 2014 & 2015?

| | Windrowing | 1 month post harvest | Windrowing | 1 month post harvest | Windrowing | 1 month post harvest |
|---|---|---|---|---|---|---|
| | % Crown canker Internal infection | % Crown canker Internal infection | Branch Infection 0-4 | Branch Infection 0-4 | Stem Infection 0-4 | Stem Infection 0-4 |
| untreated | 5.59 | 11.82 | 0.38 | 2.18 | 0.06 | 0.73 |



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