# Fungicide resistance strategies and

# New fungicide modes of action

Canola Pathology Workshop, Melbourne 2020



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Classification: PUBLIC

# **Resistance management strategies – CropLife Australia and FRMRG**

## **Objective**

- Extend life of active ingredients by limiting the development of fungicide resistance
- Limit crop failure to growers in the case of fungicide resistance

#### Output

- Canola blackleg strategy
- Canola sclerotinia strategy

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# Stewardship First



Accepting responsibility to safeguard the industry through the responsible management of a product from its inception to ultimate use







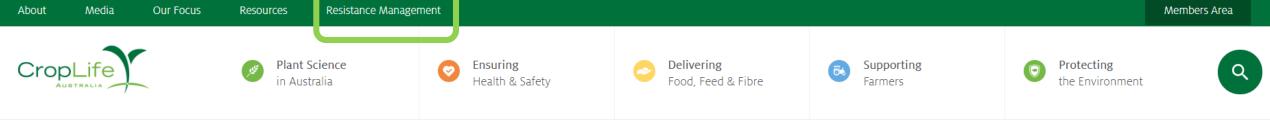
# Resistance Management Strategies INSECTICIDES | FUNGICIDES | HERBICIDES



https://www.croplife.org.au/resources/programs/resistance-management/







Home > Resources > Resistance Management > Resistance Management

# Strategy Search

Keyword SearchQCropPestFungicideHerbicideInsecticide







# Strategy Search

Keyword Search Q	FIND BY CROP	FIND BY PEST Pest	FIND BY Fungici	
36 results found for: Agent: Fungicide X				
Almonds – Blossom Blight, Brown Rot				Related Fungicide Documents
Almonds – Rust				Fact sheet – Fungicide Resistance
Apples, Pears – Apple and Pear Scab				Fungicide Resistance Management Strategies
Banana – Yellow sigatoka				Fungicide Activity Group Table
Barley – Powdery Mildew				Fungicide Further Information
Barley – Scald and Net blotch				

Broccoli/Cauliflower - Downy Mildew



- Fungicide FRAC group number mandatory
- All labels have resistance management strategy statements

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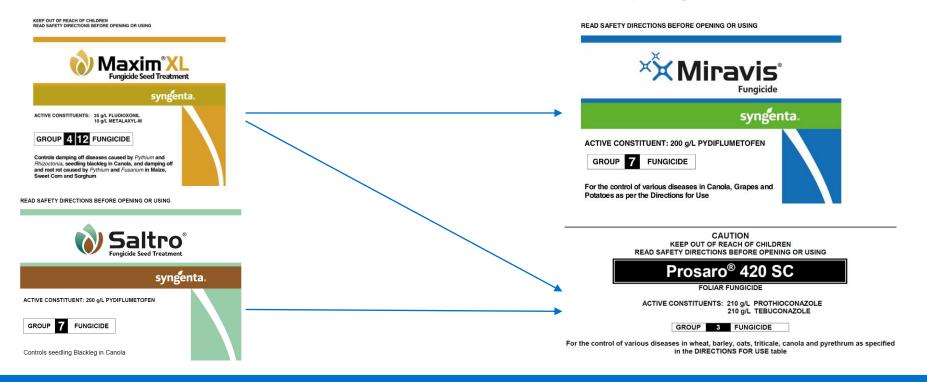
croplife.org.au

READ SAFETY DIRECTIONS BEFORE OPENING OR USING	
<b>Saltro</b> <sup>®</sup> Fungicide Seed Treatment	
synge	nta.
ACTIVE CONSTITUENT: 200 g/L PYDIFLUMETOFEN	
GROUP 7 FUNGICIDE	
Controls seedling Blackleg in Canola	

# **Blackleg strategy**

### Simple and straight forward

- If you use a Group 7 seed treatment, you should not use a spray containing a group 7 fungicide spray at 4-6 leaf stage
- Group 7's are also called carboxamides or succinate dehydrogenase inhibitors (SDHIs)





# **Canola fungicide modes of action**

- Medium risk 1. Triazoles -demethylation inhibitors (DMIs) Jockey, Prosaro
- High risk 2. Dicarboximide Sumisclex, Rovral
- Medium-high risk 3. Carboxamides succinate dehydrogenase inhibitors (SDHIs): Saltro, Miravis, Aviator Xpro
- High risk 4. Strobulurins quinone outside inhibitors (Qols): Veritas (Sclerotinia only)

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#### New mixture, new foliar active ingredient, new mode of action

- Contains pydiflumetofen and fludioxonil
- Proven performance of Miravis (pydiflumetofen) with strong mixture partner
- Fludioxonil low resistance risk member of the phenypyrroles class (group 12)
- Crop safe and rainfast





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### Summary

#### Disease control in canola



svnge

- Broad spectrum disease control Blackleg, Sclerotinia, White leaf spot, Alternaria and Powdery mildew. Under high disease pressure outperforms Aviator Xpro, Prosaro and Miravis
- Wide window of application
- Miravis Star provides a new mode of action for foliar disease control in canola

#### Registration in canola

- Large area trials will be conducted under permit this season
- Registration date expected June 2021

Please contact <u>Angus.Rutherford@syngenta.com</u> if you are interested in obtaining a sample for testing



**Miravis<sup>®</sup> fungicide:** Unique combination of features for unprecedented performance on the farm



**Power:** Delivers unique potency and intrinsic activity that form the foundation of consistent performance in the field

Spectrum: Broadens the reach of the SDHI mode of action to include the most difficult-to-control diseases and deliver unique crop enhancement benefits

Stamina: Gets to work fast, adapts to the growing crop and withstands the unexpected to remain effective longer

Miravis enables more consistent, complete and lasting disease protection and plant health benefits across more crops, opening up new possibilities for growers

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Bringing plant potential to life.

Performance evaluations are based on internal trials, field observations and/or public information. Data from multiple locations and years should be consulted whenever possible. Individual results may vary depending on local growing, soil and weather conditions. Always read and follow label directions.

Always read and follow label directions. Miravis® Ace is a foliar application of Miravis fungicide and A6097 fungicide. Registration of Miravis Ace as a pre-mix is anticipated in January 2020. Elatus® is a co-pack of Elatus A fungicide and Elatus B fungicide. ADEPIDYN®, Agral®, AMISTAR®, Bringing plant potential to life®, Elatus®, Mefenoxam™, Miravis®, Orondis®, Quilt®, Solatenol®, the Alliance Frame, the Purpose Icon and the Syngenta logo are trademarks of a Syngenta Group Company. Other trademarks are property of their respective owners. © 2019 Syngenta.



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