Sclerotinia and timing of fungicide application for this season

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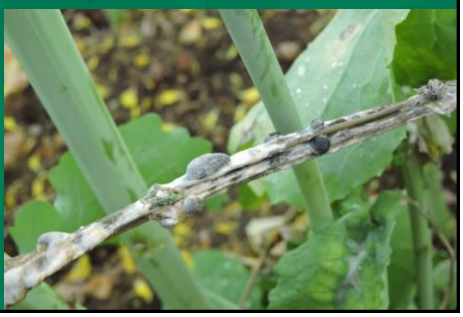

Supporting your success

Outline

- Economic importance
- Fungicide timing trials
- Ground infections
- Environment and disease
- Key messages

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Production losses to Sclerotinia in Oilseeds and Pulses

Canola

- Canada (15%)
- Australia ($40m annually, Murray & Brennan)
- WA ($23 - $59m annually)
- US (5-13%)

Mustard

- India 50-75%

Pulses

- Variable but can be as high as up to 50% in some pulse crops

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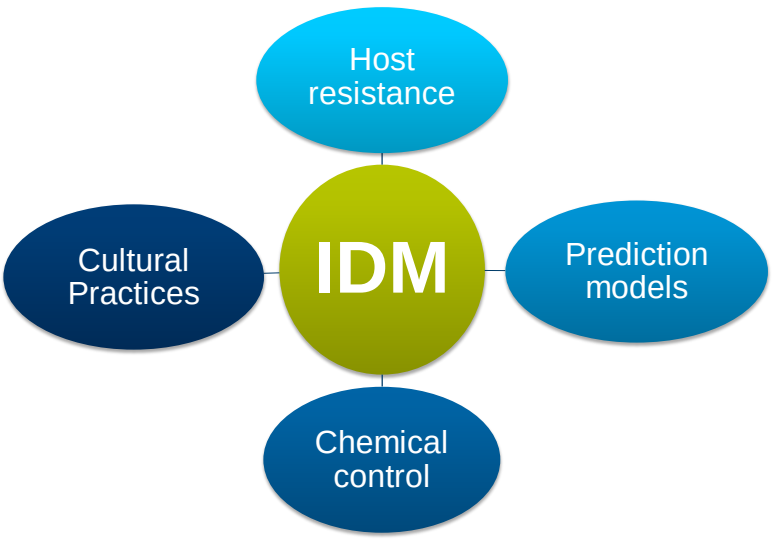
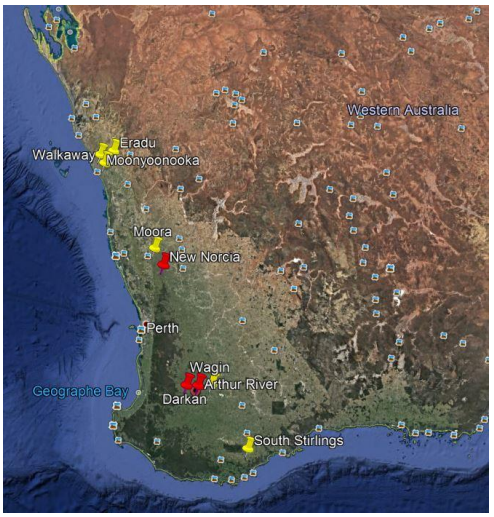
Integrated Disease Management (IDM) System



Optimise fungicide timing to manage SSR in canola

- Fungicide efficacy and timing trials

❖Northern region (2010-2016)
❖Central region (2014, 2016)
❖Southern region (2014, 2015)



How to identify bloom stages in canola

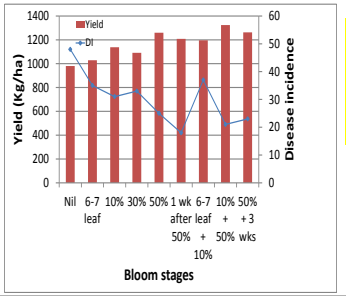
Percent bloom	No. of flowers open on the main stem
5 %	<5
10%	10
20%	11-14
30%	15-20
50%	>20

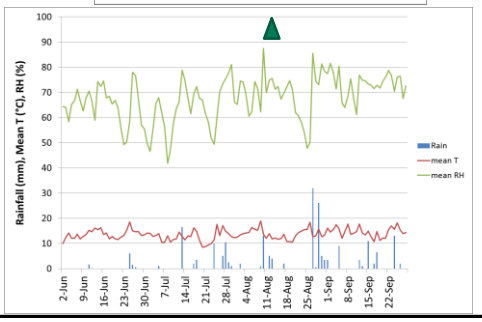
Source: Canola bloom stage guide (Bayer Crop Science)

Fungicide Research – Northern Region

Product
Product Y
Product Z
Fortress
Prosaro (lower rate)
Prosaro (higher rate)
Rovral

2011 –Early spore release, early spray applications effective





2013 - late spore release
Late applications effective

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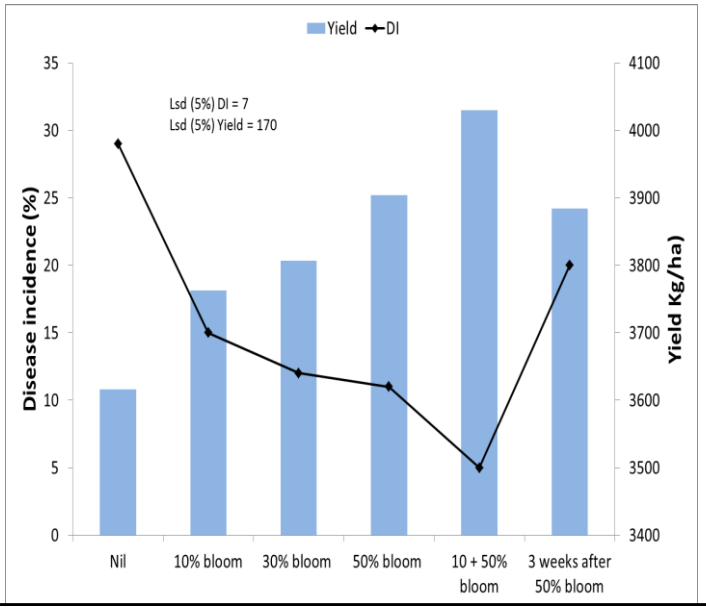
Fungicide timing for SSR-Moonyoonooka 2016 (Prolonged season)



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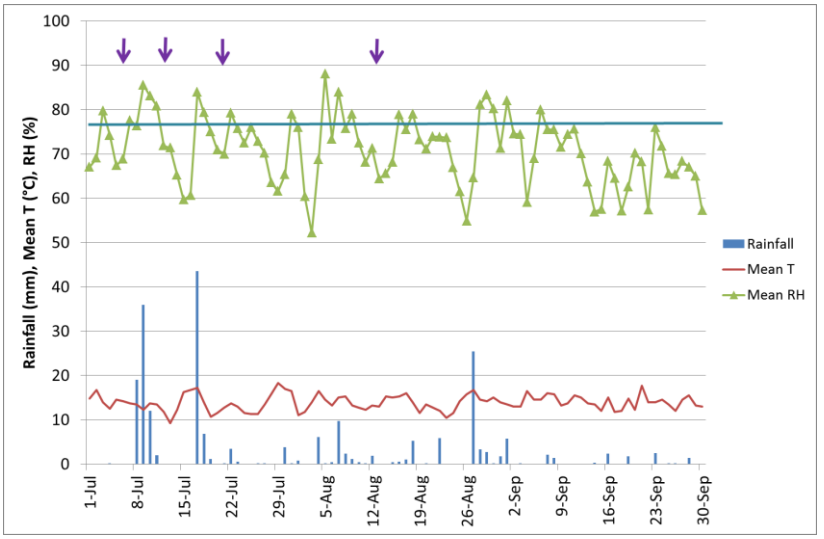
Weather conditions in Moonyoonooka-2016 (Prolonged season)



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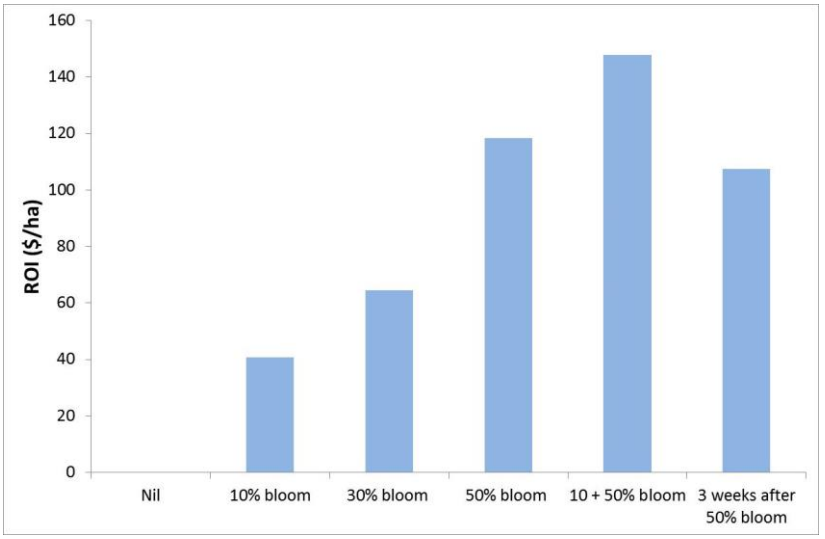
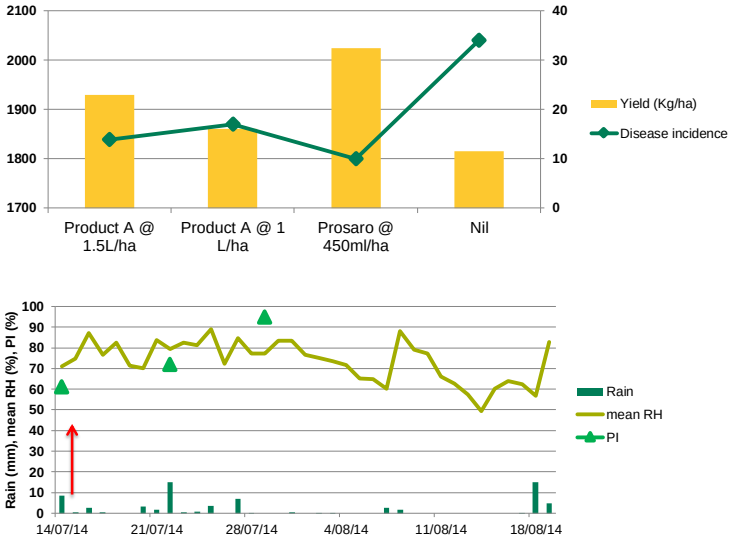
Economics of fungicide timings – net returns ($) 2016 north

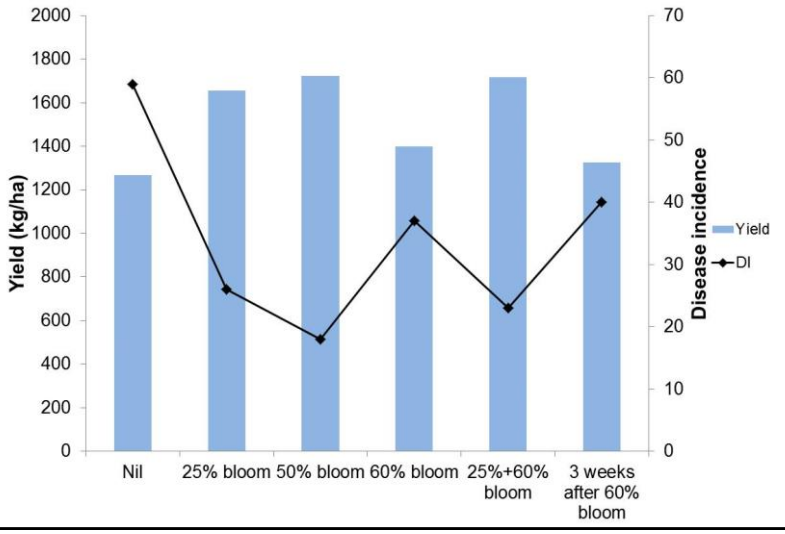


Fungicide Timing (Moora) – Early epidemics (short season)



Fungicide timings 2015 (South Stirlings) Southern region (short season)

lsd (DI) = 10 : Yield = 199



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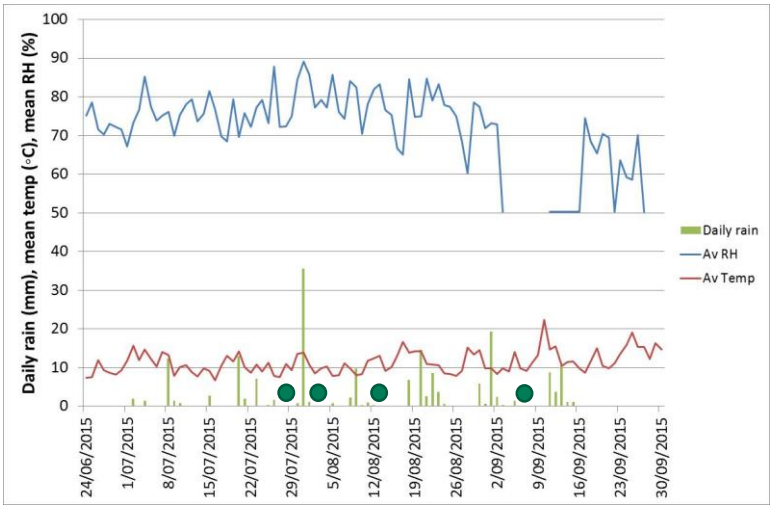
Weather conditions at SS during flowering Southern region (short season)



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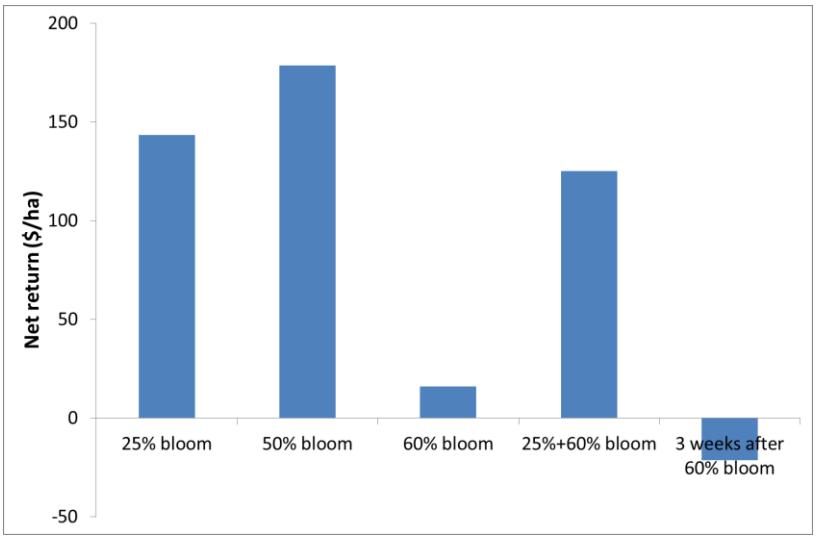
Sclerotinia spray timings– net return



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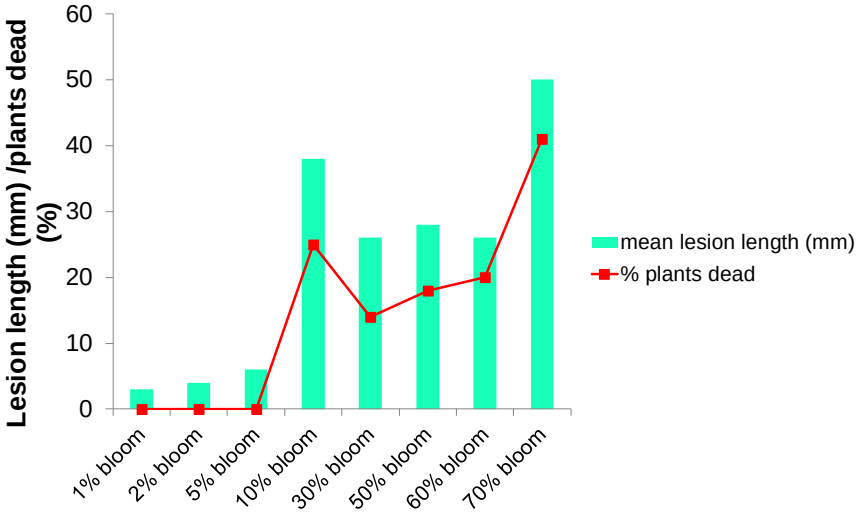
At what GS canola plants are more susceptible?



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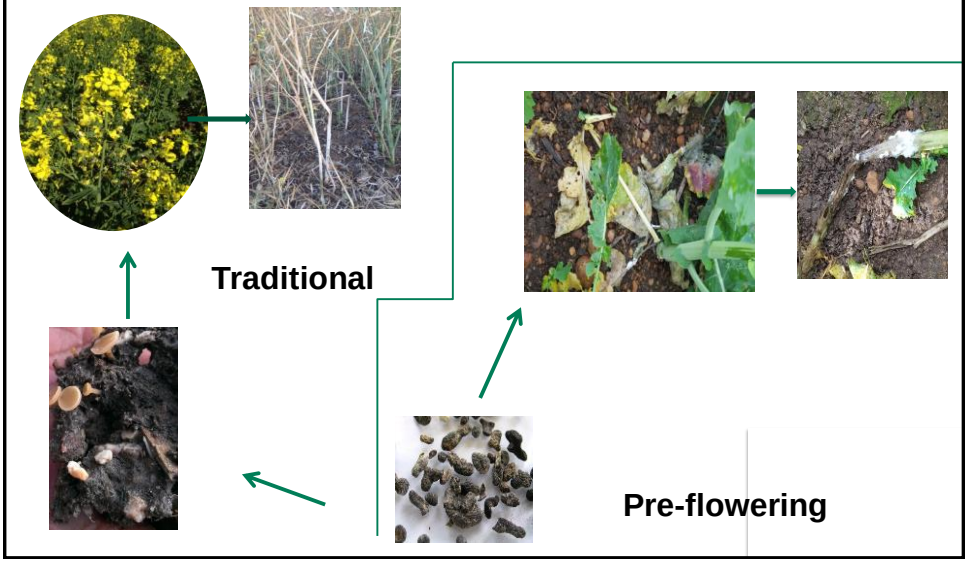
Sclerotinia ground (basal) infection



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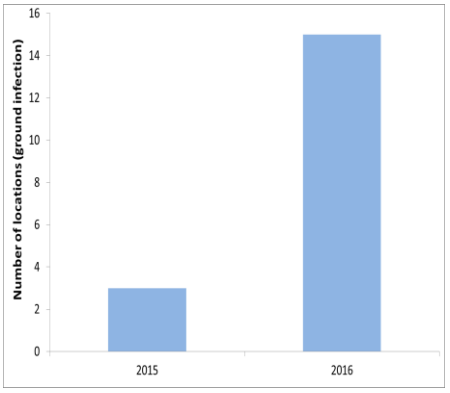
Prevalence of basal or ground infections

- Humid and wet conditions
- High sclerote pressure



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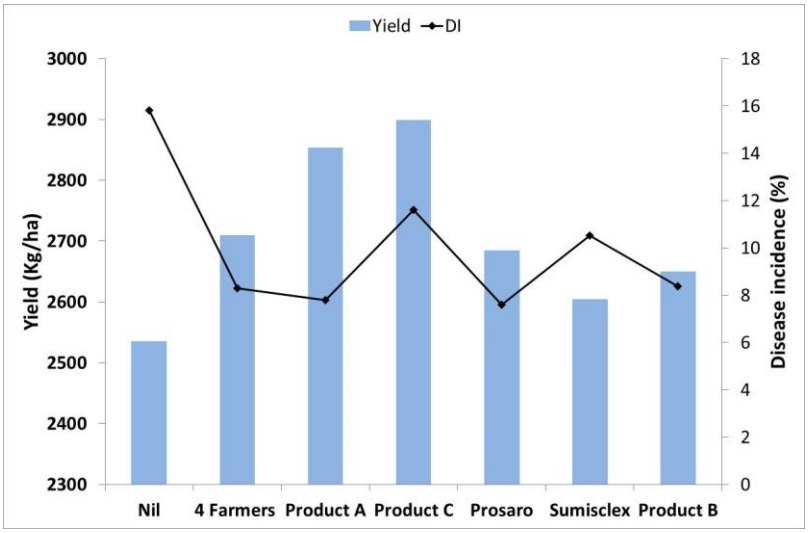
Ground infection-fungicides (Darkan)



Lsd DI (5%) = 3

Lsd Yield (5%) = 321
Lsd Yield (10%) = 262

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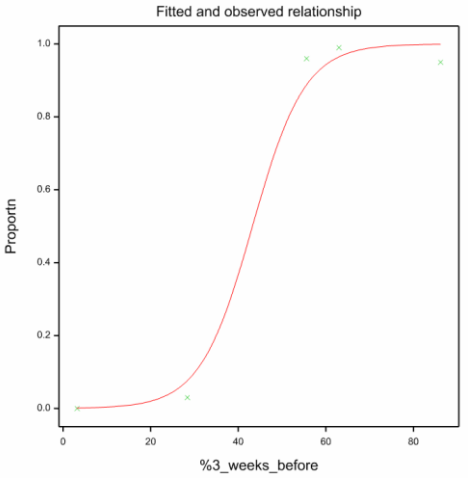
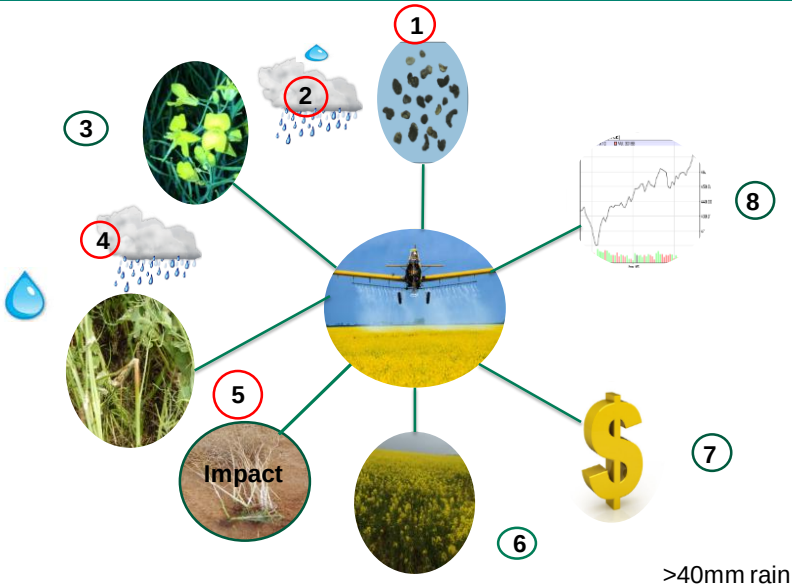
Rainfall – Petal infection (2010-2014)



Key risk factors (Decision to spray)



>40mm rain, >75% RH

Key messages

- Disease outbreaks favoured by continuous wet and humid conditions
- Cultural practices provide limited or no benefit, fungicide application is the only tool for in-season disease management
  - Well timed single spray (ROI $50-$200/ha)
  - Two sprays-extended season ($40-$125/ha)
  - Very late spray (-$21/ha)
- Timing is crucial
  - Northern region
    - ➢Early epidemics (15-30% bloom)
    - ➢Late epidemics (50% and beyond)
  - Southern region (25-50%)

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Thank You