Department of Agriculture and Food
GOVERNMENT OF WESTERN AUSTRALIA

GRDC Grains Research & Development Corporation
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Sclerotinia – Strategies for 2014

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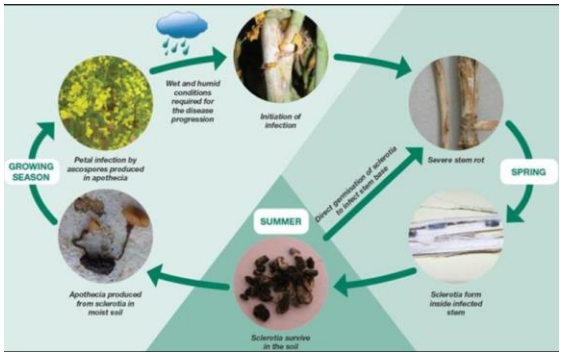
CROP updates

Strategies for 2014

- Rotation – High production areas Wheat / Canola still the most profitable
- Spores last in the ground for up to 7 years
- Understanding environment and canopy management will have more influence than a longer rotation
- Paddocks / environments with more production variability will not be sown due to higher cost
- Canola becoming higher risk due to increased costs



CROP updates

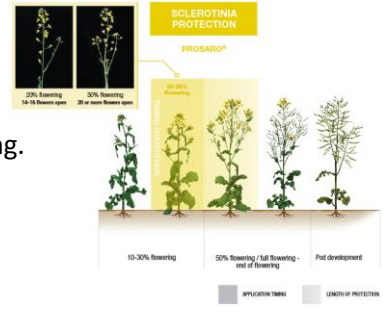
Canopy Management

- Plant Density – less plants / m² required with Hybrid varieties
  - New work suggests Hybrid RR – 20 plants/m² - (M Seymour 2014)
- Sowing Rate - Match to Soil Type / Conditions (Seed Size, establishment efficiency)
- Canopy Density - Dense canopy's produces higher yield but also higher disease risk
- Timing of Nitrogen – Larger % of N at or after bolting, multiple applications.
- Row Spacing – Conflicting research on Row spacing – (old work old varieties)
- – Reduces canopy wetness and Humidity levels
- 18 – 36cm row spacing?? – (Little work on hybrid RR varieties)

- **Do Hybrid varieties react differently with wider rows??**

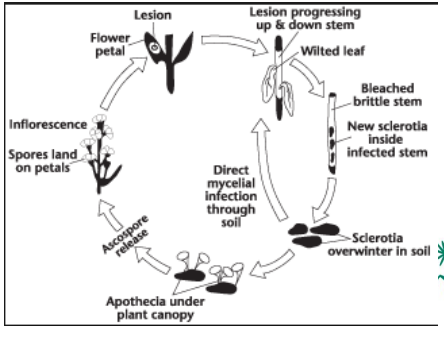
CROP updates

Canopy Development and Environment = key to Future Management



- Canopy development and crop vigor have more influence than soil type
- **(no Apothecia = No Spores = no Spray)** Soil temp and soil wetness better indicator of spray timing.
- Have the conditions been conducive to disease development
  - Rainfall – (No of rainy days)
  - Soil temp – soil temp 15°C
  - Soil wetness – Must be saturated
  - Canopy development – (leaf wetness / Humidity / Stage of Flowering)
  - Timing of nitrogen application- (periods of rapid growth, with conducive conditions need protection)
- High nitrogen rates = (higher disease risk but also higher yield)
- Air & Soil Temp as important as flowering stage
  - Optimal temp 20 - 25°C
  - 24 – 36 hours of continuous leaf wetness

Apply Fungicide according to conditions not just Flowering stage



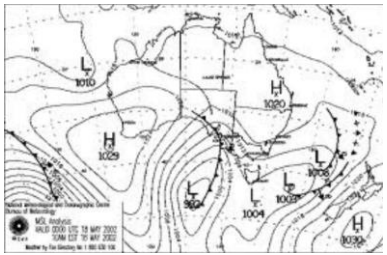
CROP updates

Fungicide Usage

- Once conditions have been met to warrant the use of a fungicide consider:
  - Product & Rate - Prosaro 375ml or 450ml = Length of protection required
  - Multiple applications? - Stage of flowering - early applications = greater canopy growth = faster dilution of fungicide = shorter protection period
  - Later Fungicide applications will see longer protection period (375ml @ 60%flower ~ 4 weeks)
  - Earlier timings shorter protection – (375ml @ 30% Flower ~ 2 – 3 weeks)
  - Warm , Wet, Humid environments with larger canopy's = higher rate
  - Coverage

Sclerotinia 2014

- Check for presence of Apothecia
- Environmental condition more important that % flowering
- Canopy management
- Understand conditions that are conducive to disease development



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Questions?

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