Diseases in Carinata

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Diseases in Carinata

- Face same disease risk as other field crops.
- Wet mild winter weather patterns.
- Host range of potentially damaging diseases overlaps with other crops and weeds
  - Bridge hosts for *Sclerotinia sclerotiorum*
    * Peanut
    * Soybean
  - Foliar leaf spot and rachis blight diseases
    * Wild radish, canola, and Cole vegetables.
  - Turnip Mosaic
    * Wild radish, canola, and Cole vegetables.
Sclerotinia Stem rot

- *Sclerotinia sclerotiorum*
- Hosts include most wild, oilseed, forage, vegetable brassica.
- Host range – 75 families in 278 genera and 408+ species.
- Frequent showers and mild temperatures favor stem rot onset and development.
- 40% incidence with 15% yield reduction in FL carinata trial.
- In Canada, 80 to 90% incidence and 11 to 15% yield loss in canola.
Control Measures

- Resistant varieties.
- Rotation with non-host crops.
  - avoid *S. sclerotiorum*
  - sclerotia viable for 5 years, so rotation value limited.
- Deep tillage.
- Fungicides.
Alternaria Black Spot and Leaf Spot

- *Alternaria brassicae*

- **Hosts** - oilseed, forage, vegetable brassica along with wild and weedy crucifers.

- Significant yield loss in canola, rape, and mustard.

- Minor issues in carinata.

- **Control**
  - resistance
  - rotation
**Black Leg**

- *Phoma ligam*
- Hosts – canola, rape, turnip, cabbage
- B genome carinata, leaf and black mustard are resistant.
- Control
  - resistant varieties
  - deep tillage
  - fungicides
Turnip Mosaic in Carinata

Wild Radish

F. Iriarte, University of Florida
Other Potential Disease Issues

White Leaf Spot, Wild Radish

Cercospora Spot, Canola

Black Rot, Canola
Summary

• Sclerotinia stem rot is a threat to carinata profitability.
• Control measures for stem rot will help manage other diseases.
• There will be surprises.