Diseases in Carinata

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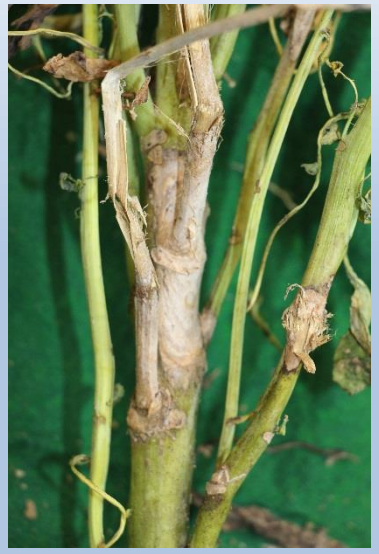
Diseases in Carinata

- 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.



Sclerotinia Stem rot

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

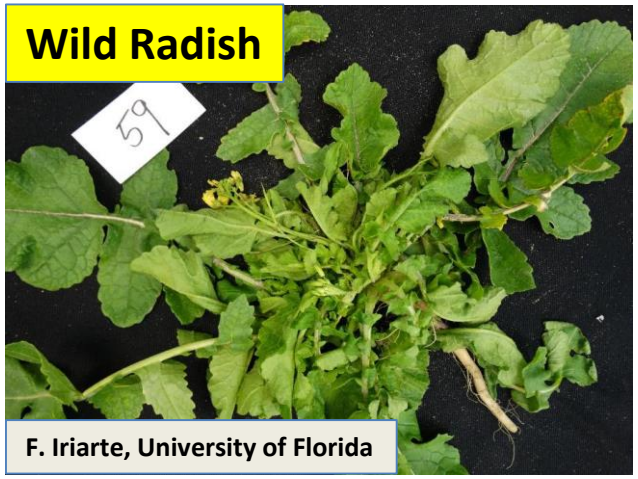
  - resistant varieties

  - deep tillage

  - fungicides

Turnip Mosaic in Carinata

F. Iriarte, University of Florida



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Other Potential Disease Issues

Cercospora Spot, Canola

White Leaf Spot, Wild Radish

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.

Black Rot on Canola