



## Sclerotinia stem rot - Canola

### Occurrence and management:

- Present across Prairies affecting broad-leaved crops/weeds
- Yield loss is largely related to the extent of disease development in lower stem and main branch tissues
- Difficult to manage and to forecast risk and fungicide need.
  - Use available risk assessment tools



### Symptoms occur on:

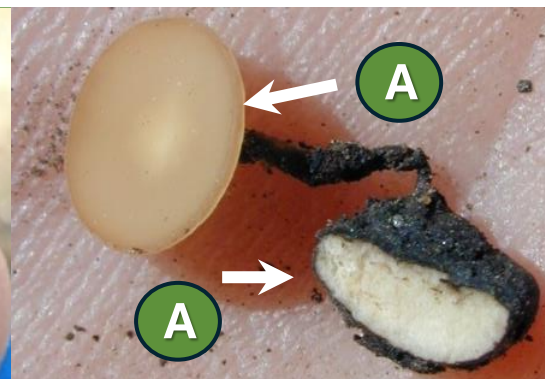
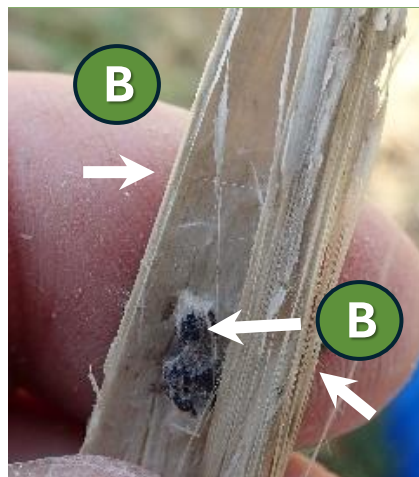
- Leaves, leaf axils/bases/petioles, stems, branches, & pods
- Infection requires petals as a food source

### Initial symptoms:

- Occur after flowering starts
- Start out as water-soaked areas where infected petals had adhered to leaf and associated tissues

### Mature Symptoms:

- Bleached whitish/light grey areas that dry and become brittle and shred/shatter easily (B-C)
- Pith tissue is destroyed, leaving affected stems hollow (D)
- Eventually hard black structures (sclerotia) form within or on infected tissues. Apothecia (golf tee shaped structures) produced from sclerotia (A, B, C)
- Will cause increased lodging



Infected (L)  
Healthy (R)



## Sclerotinia stem rot of canola: Management strategies

## Thank you to the PCDMN Phase 2 Funders

Rotation to non-host for => 2 years

Barley

Wheat

Canola

"Resistant" varieties\*

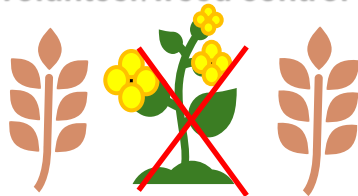
\*Continual improvements are being made, but current varieties listed as "R" may still need a fungicide when stem rot risk is moderate to high

Foliar fungicide\*\*

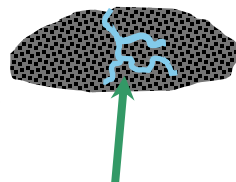
\*\*Use risk assessment tools to determine the need to spray and the most appropriate timing

Canopy during flowering

Broad-leaved volunteer/weed control



Soil application of the Contans® biocontrol fungus that attacks sclerotia\*\*\*



Contans® fungus attacking a sclerotial body (sclerotia)

\*\*\*Limited use currently. May need more widespread adoption to manage spores coming from sclerotia/apothecia in adjacent fields

