



Speckled leaf blotch - Wheat

Occurrence and management:

- Found across the Prairies
 - Prevalence varies due to moisture, rotation & variety
 - Can occur in drier regions compared with the septoria complex as tan spot 2^o spores (asexual) are wind-dispersed
 - Limited information on varietal susceptibility/resistance
- Use an integrated approach combining host resistance, rotation, fungicide, etc.

Symptoms occur on:

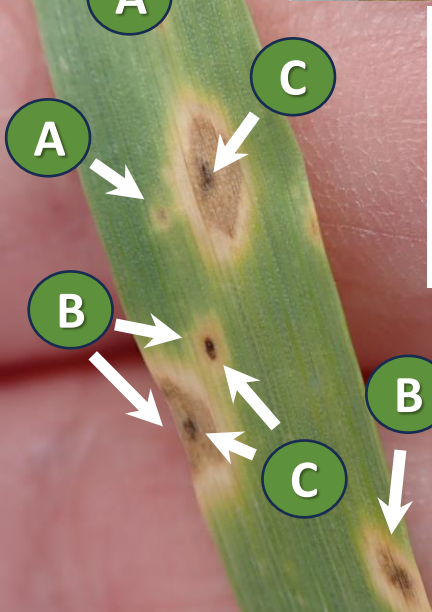
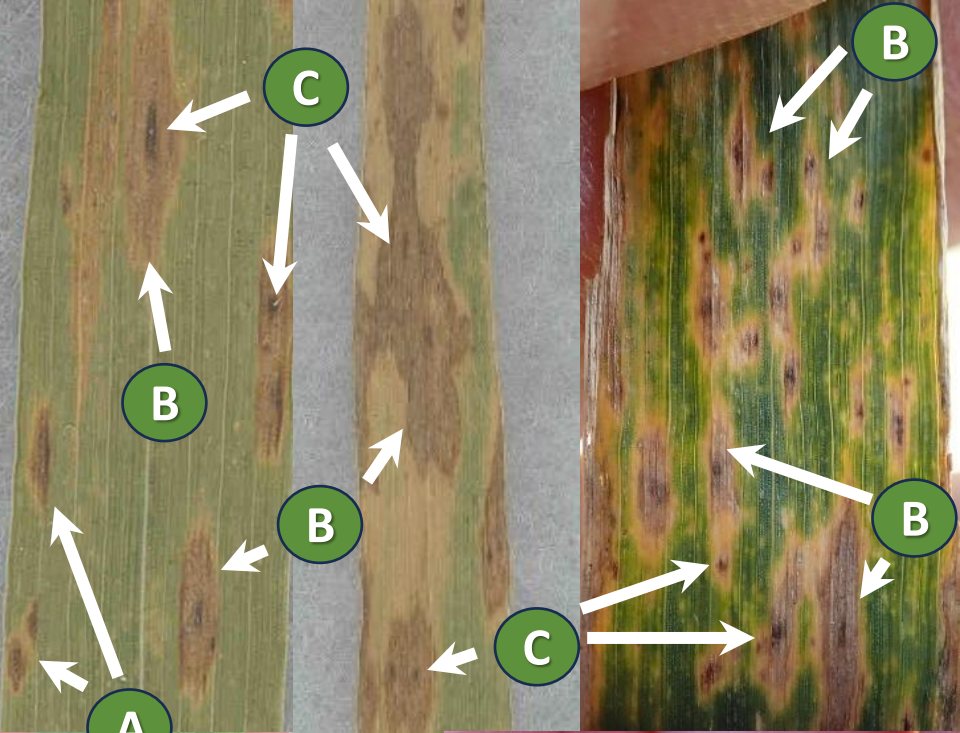
- Leaves, stems, and head and grain tissues (A-E)

Initial symptoms:

- Oval shaped tan or light brown spots/flecks (A)
- Early signs can be confused with the septoria complex and physiological leaf spotting (PLS) symptoms
 - A laboratory test will be required to identify causal agents

Mature symptoms:

- Lesions grow up to 1-1.5 cm in length & will coalesce to make larger irregular areas of dead tissue, yellowing around mature lesions may occur (B)
 - Dark areas in the center of mature lesions maybe observed best when a leaf is held up to the sunlight (C)
- Infected seed is smaller, reddish/pink and maybe shriveled (aka red smudge, D)
- Sexual fruiting bodies may occur on overwintered stems (E)



Small black sexual fruiting structures of the tan spot pathogen on overwintered wheat residue



Red smudge due to the tan spot pathogen (middle diseased, L & R healthy)





Management Strategies

Rotation to non-host for => 2 years



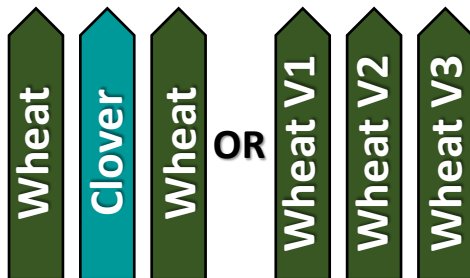
Resistant varieties*

*Limited information is available on Prairie variety susceptibility/resistance levels. Consult breeders and/or seed growers

Volunteer control



Foliar fungicide*



Intercropping or wheat variety mixtures

Upper canopy

(Early season symptoms: ~GS37-39

Mid season symptoms: GS59-61

Early + mid season symptoms:

~GS37-39 + GS59-61)

*Make sure to only use fungicides when needed, and to rotate actives and use products with multiple modes of action. Currently, there are no reports of fungicide resistance in the speckled leaf blotch pathogen on the Prairies. However, fungicide resistance is commonly found in Europe and more recently in Australia



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MONITORING NETWORK**



Thank you to the PCDMN Phase 2 Funders



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