PRAIRIE CROP DISEASE MONITORING NETWORK

Fusarium head blight of barley

Occurrence and management:

- Historically an issue in the central-eastern Prairies
- Over the past 5-20 years *Fusarium graminearum* has occurred with increasing frequency and impact in central & western regions
- An integration of host resistance, rotation & timely fungicide app. are critical to improve FHB suppression, & reduce grain contamination with deoxynivalenol (DON) & downgrading due to kernel discolouration

Symptoms Occur On:

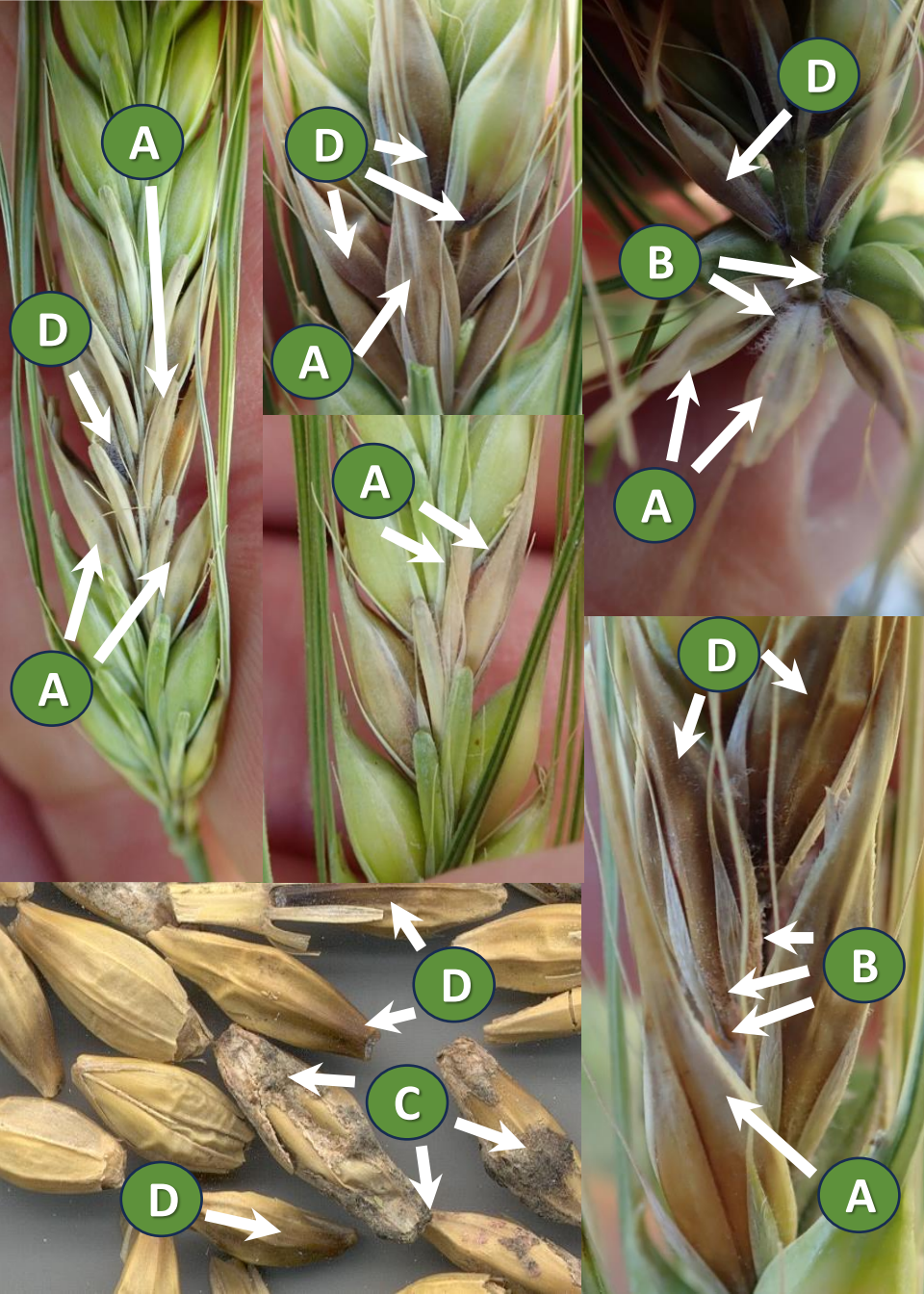
- Spikelet, spike (aka head) & grain tissues (A-D)

Initial symptoms:

- Premature ripening of affected head tissues (A)

Mature Symptoms:

- Premature ripening and bleaching (A)
- Pinkish to salmon coloured sporulation/hyphal growth (B) or brown-black perithecia (C) may occur (absent if conditions become drier following initial infection)
- Brownish discolouration of kernels and grain can be confused with spot blotch/kernel smudge infection (D)
- Grain may be contaminated with DON
  - Note laboratory test needed to confirm *Fusarium* spp. and DON


A
D
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PRAIRIE CROP DISEASE MONITORING NETWORK

Fusarium Head Blight of barley: Key Management Strategies

Rotation to non-host for => 2 years

Barley → Canola → Field peas

Resistant varieties*

*Resistance is not complete, and varieties will experience damage when FHB risk is high, although impact is less versus susceptible varieties

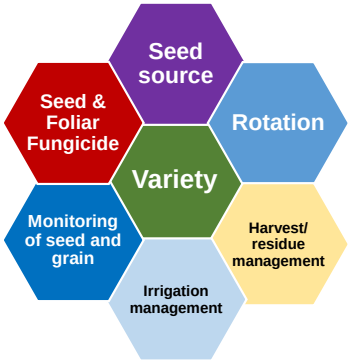
**If *Fusarium graminearum* is a limited issue in your area then caution regarding seed is recommended. Where it is established, avoiding seed with high levels of infection and compromised germination is recommended

***Primarily to improve germination and stand establishment when infected seed is used

Volunteer control

Foliar fungicide
(angled dual nozzle set up)

Head tissues
(after full head emergence)



Use an integrated approach for FHB with multiple strategies

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Thank you to the PCDMN Phase 2 Funders

WGRF

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