

Project E



Manitoba Crop Alliance WHEAT – FUNGICIDE MANAGEMENT OF FUSARIUM HEAD BLIGHT Replicated Strip Trial Protocol



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Objective:

The purpose of this project is to quantify the impact of fusarium head blight on the quality of harvested grain. Trial will compare producer's normal fungicide application at the recommended rate and timing to a fungicide application 3 to 5 days after the recommended timing – 4* sites (*if conditions prevail for the occurrence of FHB).

Brief Summary:

- The grower will plant a variety of CWRS with a FHB rating of Intermediate (I) or Moderately Resistant (MR), as per ratings found in Seed Manitoba 2023 ([Cereal-Crops.pdf \(seedmb.ca\)](#))
- The grower will manage the crop as per their normal best management practices.
- The grower can choose:
 - Option 1 (as shown on the right):** Application of a foliar fungicide for suppression of FHB at the recommended rate and timing, application of a foliar fungicide 3 to 5 days after the first timing, and finally, no application of a fungicide for FHB suppression (i.e. untreated). Each treatment will be applied on 4 strips in the field in an alternating pattern.
Note: For the 3 to 5 days after treatment, no fungicide will be applied at the recommended timing as to avoid 2 applications.
 - OR**
 - Option 2:** Application of a fungicide for suppression of FHB at the recommended rate and timing alternating with application of a foliar fungicide 3 to 5 days after the first timing and leave 1 untreated strip in the field. **Note:** For the 3 to 5 days after treatment, no fungicide will be applied at the recommended timing as to avoid 2 applications.

Rep 1	Rec'd Timing
	3-5 days after
Rep 2	Untreated
	Untreated
Rep 3	Rec'd Timing
	3-5 days after
Rep 4	Untreated
	Untreated

- Strips should be full length of the field (minimum 1000 ft.) with the width of each strip to allow for a full 'pure' pass with combine header.
- Harvest dates may need to be modified to adhere to preharvest intervals (PHI) of the applied fungicide.

Grower Requirements:

- Accurately record variety, previous crop, tillage practices, fertilizer rates and application timing.
- Accurately record where all treatments are applied including time of application and flag strips and GPS.
- Areas containing waterways and headlands should be avoided. All other factors in the trial area must be treated the same.
- Notify project coordinator prior to fungicide application at head timing so fields can be scouted prior to and after.
- Alert project coordinator of expected harvest date and ensure all treatments are harvested the same day into a weigh wagon/calibrated grain cart and that harvest grain samples can be secured for analysis of fusarium damaged kernel (FDK) and deoxynivalenol (DON).
- Allow MCA to use data for research, educational and information purposes.
- Must be a member in good standing with the MCA.**

MCA and Partners Agree to:

- Be available during fungicide application and harvesting.
- Take various measurements to help explain results – FHB severity visual ratings, etc.
- Provide a report analysing treatment differences.

Benefits to the Grower:

- Access to latest research that can be applied to their farm.
- Determine profitability of the practices.
- Obtain fusarium damaged kernel (FDK) and deoxynivalenol (DON) results.
- Learn accepted on-farm-testing procedures.

If you are interested in doing a trial or have any questions, please contact:

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