

Manitoba Crop Alliance (MCA) – On Farm Trials (OFT)

Fusarium Head Blight Fungicide in Barley

Replicated Strip Trial



MANITOBA
CROP
ALLIANCE

PROJECT: FUNGICIDE TIMING FOR MANAGEMENT OF FUSARIUM HEAD BLIGHT (FHB) IN BARLEY

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.

BRIEF SUMMARY:

- The grower will plant a variety of barley with a FHB rating of either Intermediate (I) or Moderately Resistant (MR), as per the ratings found in “Seed Manitoba.”
- The grower will manage the crop as per their normal best management practices.
- The grower should check with the grain buyer to ensure the fungicide to be applied has grain market acceptability
- The grower can layout the applications **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.
- Strips should be full length of the field (minimum 1000 ft.) and width 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.

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

GROWER REQUIREMENTS:

- Accurately record variety, previous crop, tillage practices, fertilizer rates and application timing.
- Check with grain merchants to ensure market acceptability of fungicide to be used.
- Accurately record where all treatments are applied including time of application and flag strips.
- 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 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.

FT COACHES:

- Project coordinator will work with local OFT coaches to collect field observations and harvest.
- OFT coaches may be local Manitoba Agriculture staff, retail or independent agronomists.
- Some compensation will be offered to agronomists that assist with ensuring untreated areas and harvest measurements.

BENEFITS TO GROWERS:

- 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.

To sign up for a trial or for questions, please contact:

Daryl Rex

204.745.6661

Daryl@mbcropalliance.ca

Jordan Karpinchick

204.433.7189

jordankarpinchick@toneag.ca