

# Wheat Fusarium Head Blight Fungicide Timing

Trial ID: 2018-WFHB01 – R.M. of Morris

**Objective:** Quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmers normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later.

## TRIAL INFORMATION

<b>Treatment</b>	Rec'd timing vs. 3-5 days later vs. Untreated
<b>Rural Municipality</b>	Morris
<b>Previous Crop</b>	Soybean
<b>Soil Texture</b>	Clay
<b>Tillage</b>	Conventional
<b>Seeding Date</b>	April 26, 2018
<b>Variety</b>	Rowyn
<b>Row Spacing</b>	7.5"
<b>Seeding Rate</b>	175 lbs/ac
<b>Fungicide Product</b>	Caramba
<b>Rec'd App Date</b>	June 25, 2018
<b>Rec'd App Timing</b>	20% flower
<b>3-5 Day Later App Date</b>	June 27, 2018
<b>Harvest Date</b>	August 10, 2018

## PRECIPITATION†

	May	June	July	Aug
<b>Rainfall</b>	28	85	38	27
<b>Normal</b>	54	86	72	65

† Growing season precipitation (mm)

## WHEAT QUALITY

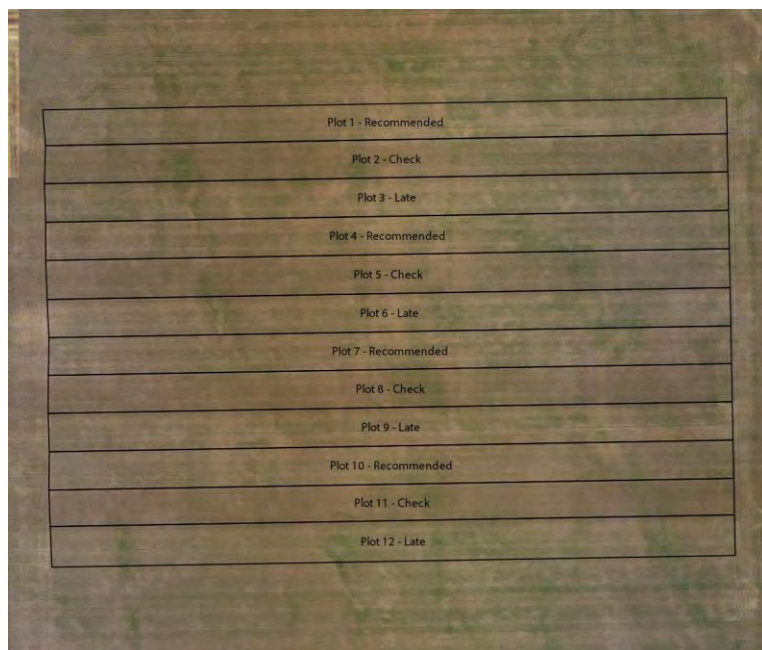
	Protein	Don	Test Weight	Falling Number
<b>Rec'd Timing</b>	14.4	<0.3	404	>360
<b>3-5 Days Later</b>	14.5	<0.3	406	>360
<b>Untreated</b>	14.5	<0.3	403	>360

## OVERALL YIELD

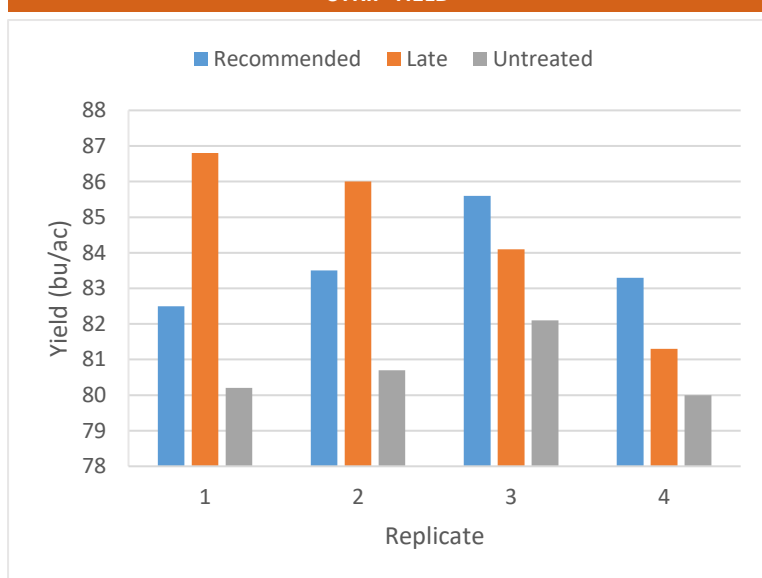
	Mean (bu/ac)
<b>Rec'd Timing</b>	83.7 ab*
<b>3-5 Days Later</b>	84.6 a
<b>Untreated</b>	80.8 b
<b>P-Value</b>	0.0382
<b>CV</b>	2.8%
<b>Significance</b>	Yes

\* Means followed by the same letter are not significantly different at P=0.05

## FIELD IMAGE – JULY 28, 2018



## STRIP YIELD



**Summary:** There was a significant yield difference between a single application of fungicide at the late timing compared to an untreated check; however, there was no significant yield difference between the recommended application timing and the late and untreated check. Wheat quality was consistent between all treatments receiving a #1 grade for CPSR.

# Wheat Fusarium Head Blight Fungicide Timing

Trial ID: 2018-WFHB02 – R.M. of Louise

**Objective:** Quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmers normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later.

## TRIAL INFORMATION

Treatment	Rec'd timing vs. 3-5 days later vs. Untreated
Rural Municipality	Louise
Previous Crop	Canola
Soil Texture	Clay Loam
Tillage	Reduced
Seeding Date	May 1, 2018
Variety	Brandon
Row Spacing	7.5"
Seeding Rate	146 lbs/ac
Fungicide Product	Prosaro XTR
Rec'd App Date	June 27, 2018
Rec'd App Timing	First flower
3-5 Day Later App Date	June 30, 2018
Harvest Date	August 16, 2018

## PRECIPITATION†

	May	June	July	Aug
Rainfall	54	99	31	37
Normal	61	90	68	72

† Growing season precipitation (mm)

## WHEAT QUALITY

	Protein	Don	Test Weight	Falling Number
Rec'd Timing	14.4	<0.3	412	>360
3-5 Days Later	14.3	<0.3	412	>360
Untreated	14.7	<0.3	412	>360

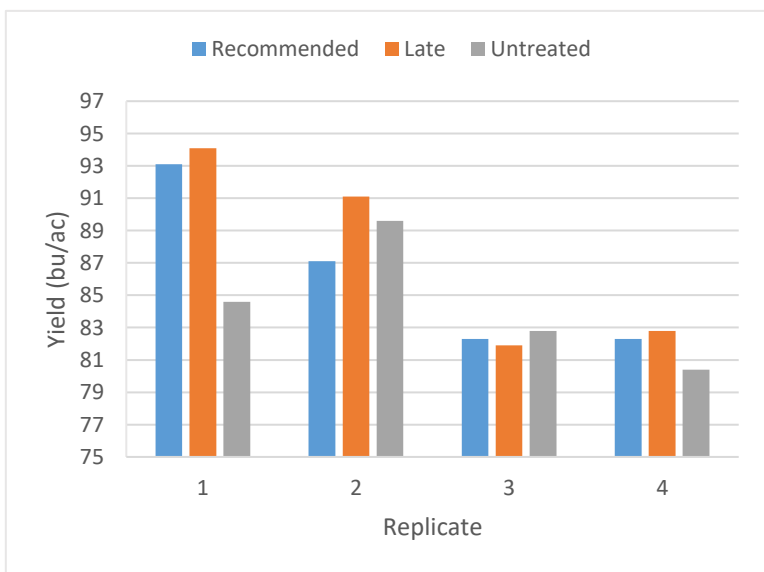
## OVERALL YIELD

	Mean (bu/ac)
Rec'd Timing	86.2
3-5 Days Later	87.5
Untreated	84.4
P-Value	0.3459
CV	5.6%
Significance	No

## FIELD IMAGE – JULY 25, 2018



## STRIP YIELD



**Summary:** There was no significant yield difference between the recommended timing, late timing, and untreated check for fusarium head blight fungicide applications. Wheat quality was consistent for all treatments, receiving a #1 grade for CWRS. Rainfall was near normal for June, but below normal for the remainder of the growing season.

# Wheat Fusarium Head Blight Fungicide Timing

Trial ID: 2018-WFHB03 – R.M. of Dufferin

**Objective:** Quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmers normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later.

## TRIAL INFORMATION

Treatment	Rec'd timing vs. 3-5 days later
Rural Municipality	Dufferin
Previous Crop	Soybean
Soil Texture	Clay
Tillage	Conventional
Seeding Date	May 2, 2018
Variety	Brandon
Row Spacing	9"
Seeding Rate	135 lbs/ac
Fungicide Product	Caramba
Rec'd App Date	June 28, 2018
Rec'd App Timing	20% flower
3-5 Day Later App Date	July 2, 2018
Harvest Date	August 9, 2018

## PRECIPITATION†

	May	June	July	Aug
Rainfall	29	70	41	22
Normal	54	81	66	71

† Growing season precipitation (mm)

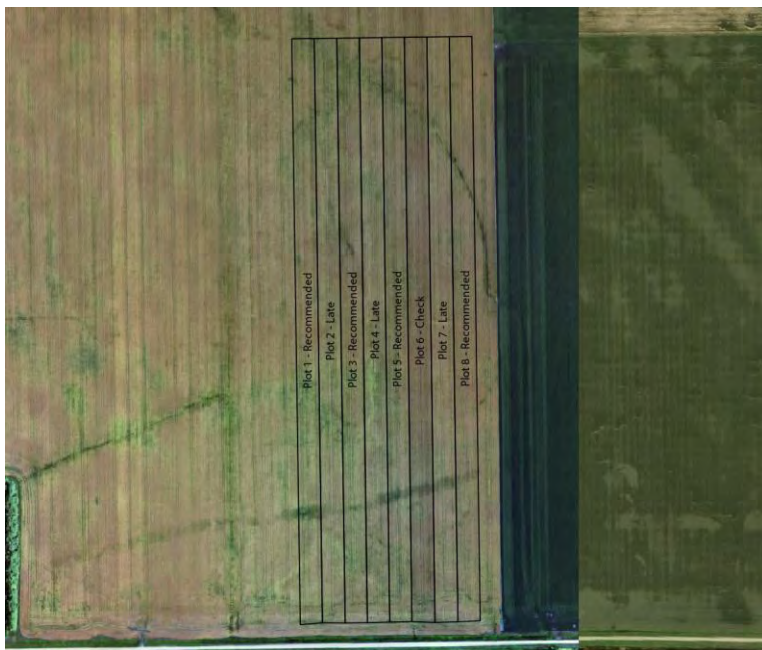
## WHEAT QUALITY

	Protein	Don	Test Weight	Falling Number
Rec'd Timing	16.2	<0.3	411	>360
3-5 Days Later	15.8	<0.3	412	>360

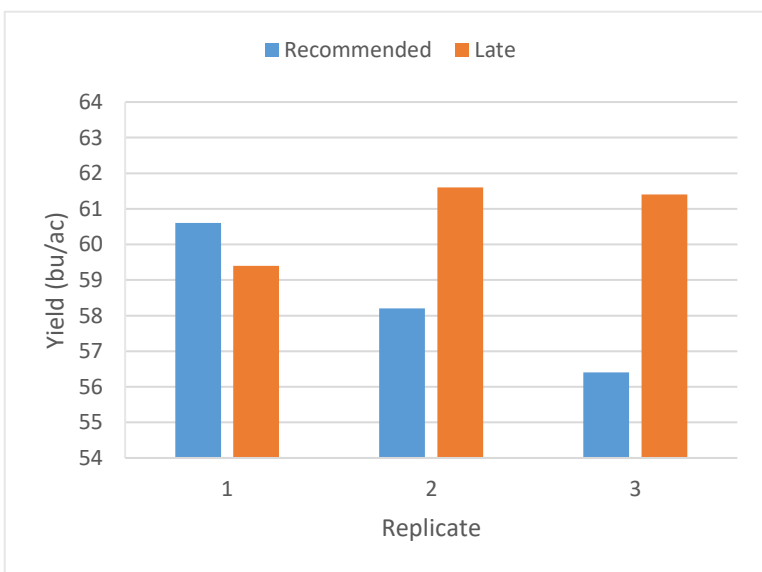
## OVERALL YIELD

	Mean (bu/ac)
Rec'd Timing	58.4
3-5 Days Later	60.8
Yield Difference	2.4
P-Value	0.1627
CV	3.4%
Significance	No

## FIELD IMAGE – JULY 28, 2018



## STRIP YIELD



**Summary:** There was no significant yield difference between the recommended and late fungicide application timings for fusarium head blight. Wheat quality was consistent for both treatments, receiving a #1 grade for CWRS. Rainfall was below normal for the entire growing season at this site. There was no replicated untreated check strip in this trial..

# Wheat Fusarium Head Blight Fungicide Timing

Trial ID: 2018-WFHB04 – R.M. of Grey

**Objective:** Quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmers normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later.

## TRIAL INFORMATION

<b>Treatment</b>	Rec'd timing vs. 3-5 days later vs. Untreated
<b>Rural Municipality</b>	Grey
<b>Previous Crop</b>	Soybean
<b>Soil Texture</b>	Clay
<b>Tillage</b>	Conventional
<b>Seeding Date</b>	May 1, 2018
<b>Variety</b>	Brandon
<b>Row Spacing</b>	7.5"
<b>Seeding Rate</b>	135 lb/ac
<b>Fungicide Product</b>	Folicur
<b>Rec'd App Date</b>	June 25, 2018
<b>Rec'd App Timing</b>	First flower
<b>3-5 Day Later App Date</b>	June 29, 2018
<b>Harvest Date</b>	August 15, 2018

## PRECIPITATION†

	May	June	July	Aug
<b>Rainfall</b>	29	70	41	22
<b>Normal</b>	54	81	66	71

† Growing season precipitation (mm)

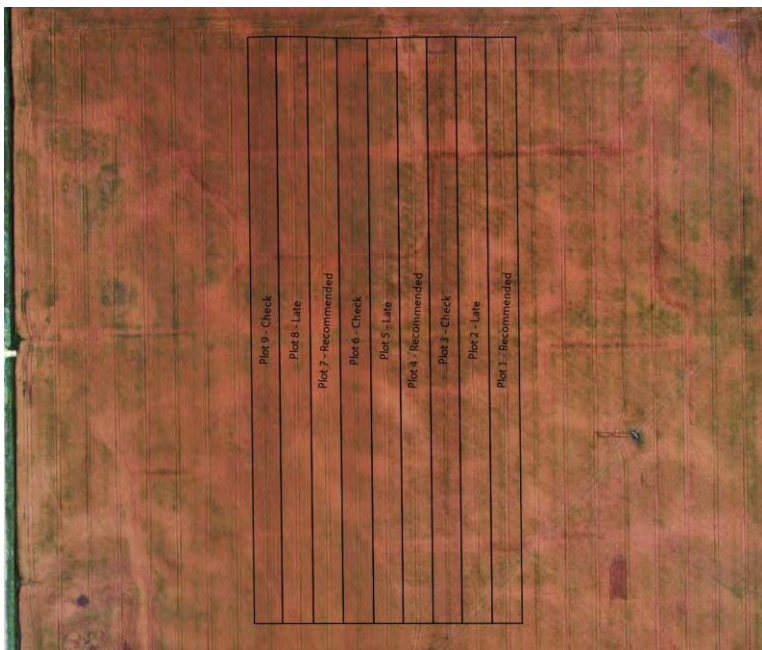
## WHEAT QUALITY

	Protein	Don	Test Weight	Falling Number
<b>Rec'd Timing</b>	15.4	<0.3	403	>360
<b>3-5 Days Later</b>	15.5	<0.3	404	>360
<b>Untreated</b>	15.7	0.3	403	>360

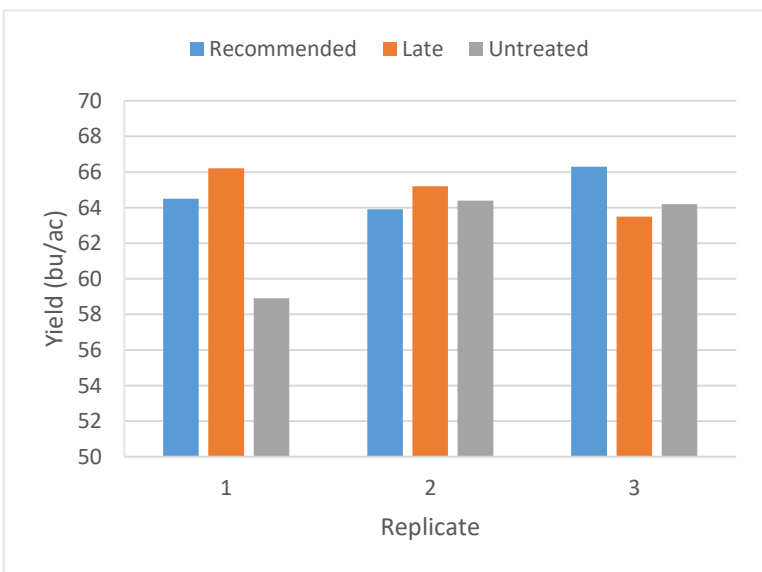
## OVERALL YIELD

	Mean (bu/ac)
<b>Rec'd Timing</b>	64.9
<b>3-5 Days Later</b>	65.0
<b>Untreated</b>	62.5
<b>P-Value</b>	0.3277
<b>CV</b>	3.4%
<b>Significance</b>	No

## FIELD IMAGE – JULY 28, 2018



## STRIP YIELD



**Summary:** There was no significant yield difference between the recommended timing, late timing, and untreated check for fusarium head blight fungicide applications. Wheat quality was consistent for all treatments, receiving a #1 grade for CWRs. Rainfall was near normal for June, but below normal for the remainder of the growing season.

## Wheat Fusarium Head Blight Fungicide Timing

Trial ID: 2019-WFHB01 — R.M. of Westlake-Gladstone

**Objective:** The purpose of this project is to quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmer's normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later

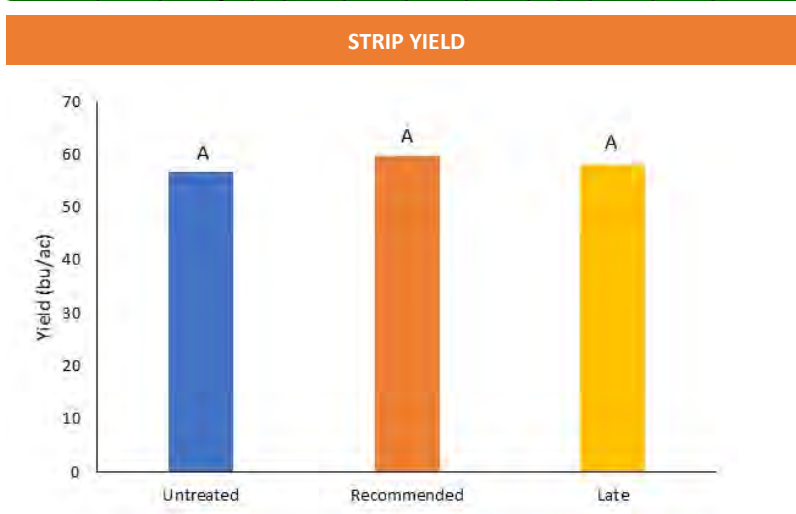
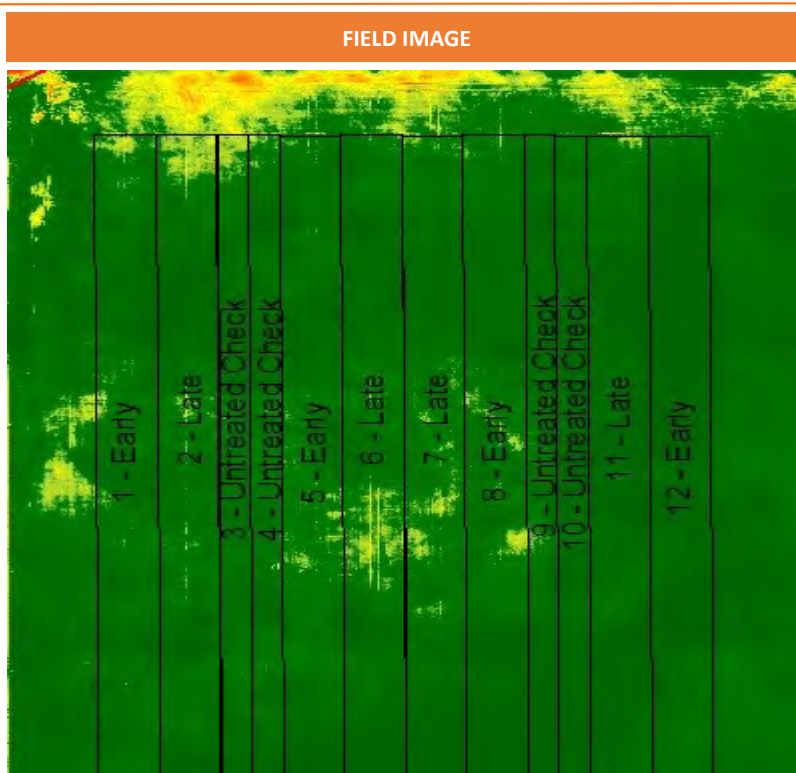
TRIAL INFORMATION	
Location	Gladstone
Previous Crop	Navy Bean
Soil Texture	Loam
Tillage	Conventional
Planting Date	May 04, 2019
Variety	AAC Brandon
Row Spacing	10"
Seeding Rate	138 lbs/ac
Fungicide Product	Caramba
Rec'd App Date	July 02, 2019
Rec'd App Timing	Early Flower
3-5 Days Later	July 07, 2019
Harvest Date	August 19, 2019

PRECIPITATION†					
	May	June	July	Aug	Total
Rainfall	13	40	55	64	174
Normal	45	74	78	69	267

†Growing season precipitation (mm)

WHEAT QUALITY				
	Protein	DON	TWT (lb/bu)	Falling Number
Rec'd Timing	14.8	0.5	33.8	351
Late Timing	15.0	0	66.5	344
Untreated	14.8	0	66.5	320

OVERALL YIELD	
	Mean (bu/ac)
Rec'd Timing	59.5
Late Timing	57.9
Untreated	56.5
P-Value	0.1461
CV	5.1%
Significance	No



**Summary:** There was no significant yield difference between the recommended timing, late timing, and untreated check for fusarium head blight fungicide timing applications. Wheat quality was consistent for all the treatments, receiving a #1 grade for CWSR. Rainfall was below normal for the entire growing season.

## Wheat Fusarium Head Blight Fungicide Timing

Trial ID: 2019-WFHB02 — R.M. of St. Francois Xavier

**Objective:** The purpose of this project is to quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmer's normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later

TRIAL INFORMATION	
Location	Marquette
Previous Crop	Soybeans
Soil Texture	Clay
Tillage	Conventional Tillage
Planting Date	April 29, 2019
Variety	AAC Brandon
Row Spacing	10"
Seeding Rate	120 lbs/ac
Fungicide Product	Prosaro XTR
Rec'd App Date	July 03, 2019
Rec'd App Timing	Flowering
3-5 Days Later	July 06, 2019
Harvest Date	August 23, 2019

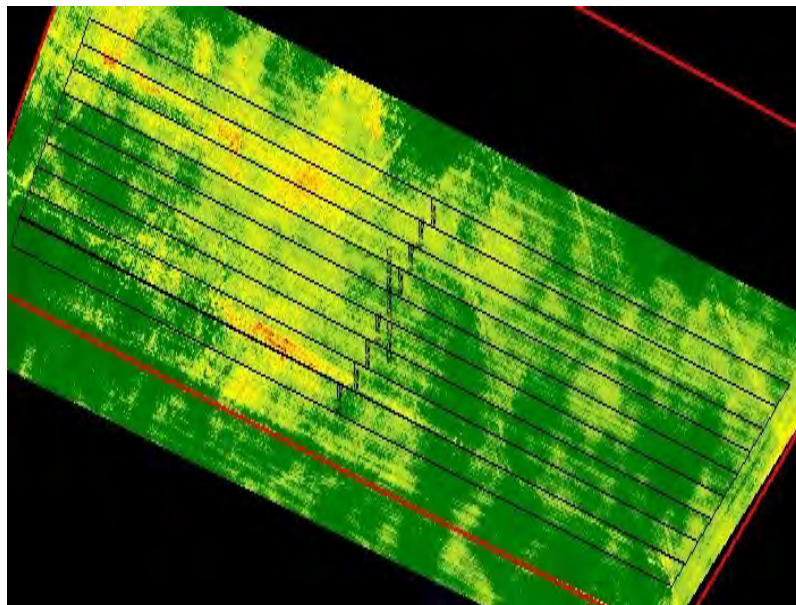
PRECIPITATION†					
	May	June	July	Aug	Total
Rainfall	19	65	64	1	151
Normal	68	85	71	17	243

†Growing season precipitation (mm)

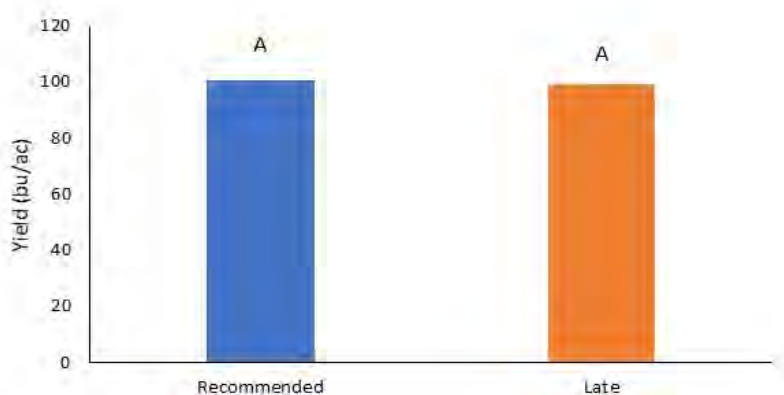
WHEAT QUALITY				
	Protein	DON	TWT (lb/bu)	Falling Number
Rec'd Timing	15.5	0	65.8	325
Late Timing	15.2	0	65.3	285
Untreated	15.3	0	64.0	345

OVERALL YIELD	
	Mean (bu/ac)
Rec'd Timing	100.5
Late Timing	98.9
P-Value	0.6582
CV	4.5%
Significance	No
Reference Check Strip	104.0 bu/ac

### FIELD IMAGE



### STRIP YIELD



**Summary:** There was no significant yield difference between the recommended timing and late timing for fusarium head blight fungicide timing applications. Wheat quality was consistent for all the treatments, receiving a #1 grade for CNHR. Rainfall was below normal for the entire growing season.

## Wheat Fusarium Head Blight Fungicide Timing

Trial ID: 2019-WFHB03 — R.M. of MacDonald

**Objective:** The purpose of this project is to quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmer's normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later

TRIAL INFORMATION	
Location	Starbuck
Previous Crop	Canola
Soil Texture	Clay
Tillage	Conventional
Planting Date	May 07, 2019
Variety	AAC Brandon
Row Spacing	9"
Seeding Rate	110 lbs/ac
Fungicide Product	Prosaro 250 EC
Rec'd App Date	July 03, 2019
Rec'd App Timing	Early Flower
3-5 Days Later	July 08, 2019
Harvest Date	September 06, 2019

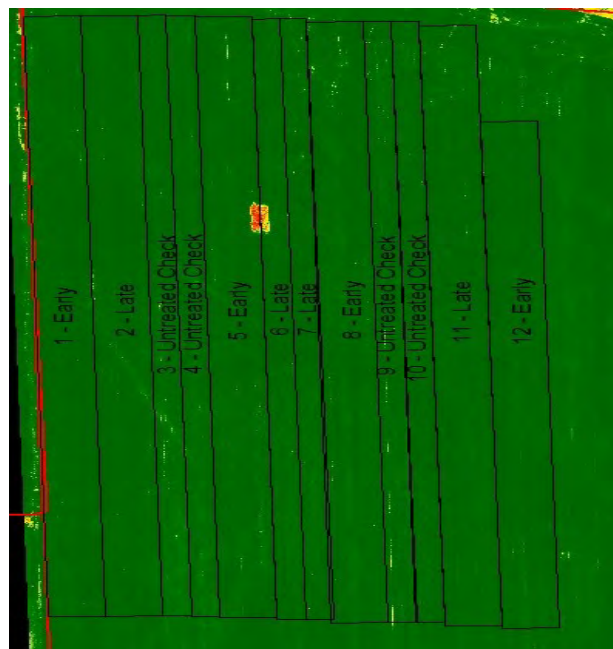
PRECIPITATION†					
	May	June	July	Aug	Total
Rainfall	24	40	71	63	199
Normal	50	85	71	74	281

†Growing season precipitation (mm)

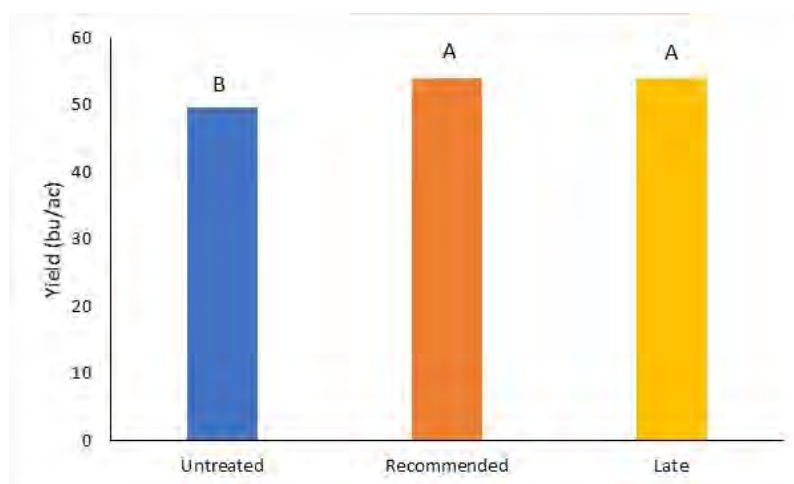
WHEAT QUALITY				
	Protein	DON	TWT (lb/bu)	Falling Number
Rec'd Timing	14.5	0	63.0	287
Late Timing	14.7	0	62.8	294
Untreated	14.6	0	62.5	286

OVERALL YIELD	
	Mean (bu/ac)
Rec'd Timing	53.9
Late Timing	54.0
Untreated	49.7
P-Value	0.0025
CV	7.3%
Significance	Yes

### FIELD IMAGE



### STRIP YIELD



**Summary:** Yield of the untreated check was significantly lower than the recommended and late timing for fusarium head blight fungicide applications. Wheat quality was a #2 grade for CWRS because of sprout damage. Rainfall was normal for July, but below normal for the remainder of the growing season.

## Wheat Fusarium Head Blight Fungicide Timing

Trial ID: 2019-WFHB04 — R.M. of St. Clements

**Objective:** The purpose of this project is to quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmer's normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later

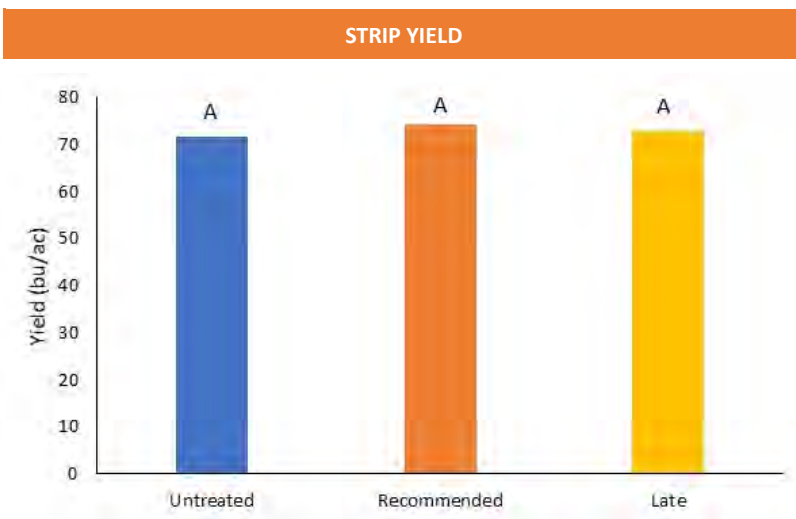
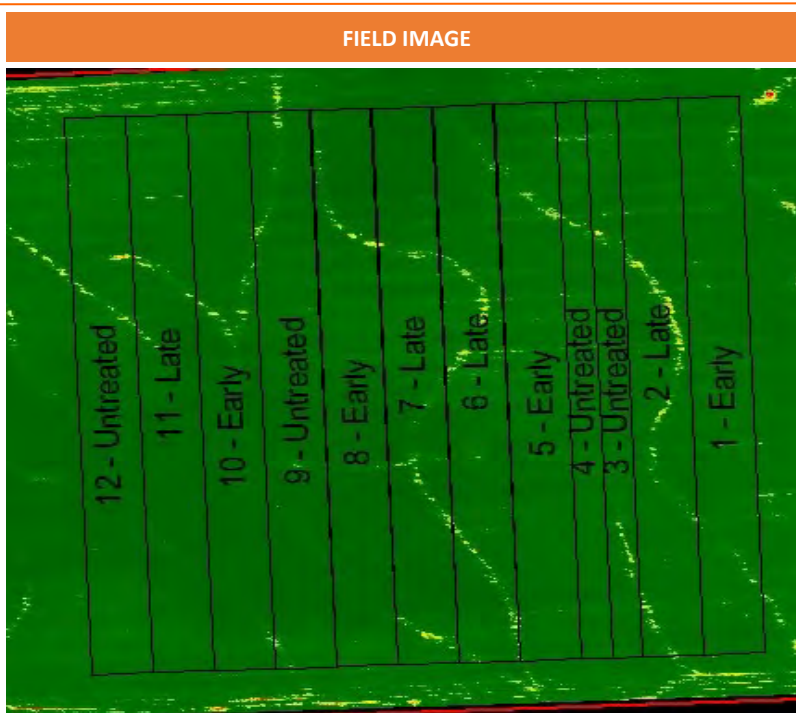
TRIAL INFORMATION	
Location	Beausejour
Previous Crop	Soybeans
Soil Texture	Clay
Tillage	Conventional
Planting Date	May 09, 2019
Variety	SY Rowyn
Row Spacing	10"
Seeding Rate	110 lbs/ac
Fungicide Product	Folicur 250EW
Rec'd App Date	July 05, 2019
Rec'd App Timing	Z65
3-5 Days Later	July 08, 2019
Harvest Date	September 17, 2019

PRECIPITATION†					
	May	June	July	Aug	Total
Rainfall	17	45	66	111	239
Normal	58	88	87	76	309

†Growing season precipitation (mm)

WHEAT QUALITY				
	Protein	DON	TWT (lb/bu)	Falling Number
Rec'd Timing	12.4	0	63	295
Late Timing	12.4	0	63	269
Untreated	12.5	0	63	284

OVERALL YIELD	
	Mean (bu/ac)
Rec'd Timing	74.4
Late Timing	72.9
Untreated	71.5
P-Value	0.0886
CV	4.0%
Significance	No



**Summary:** There was no significant yield difference between the recommended timing, late timing, and untreated check for fusarium head blight fungicide timing applications. Wheat quality was a #2 grade for CPSR because of sprout damage. Rainfall was below normal until August when rainfall was 146% of normal.

## Wheat Fusarium Head Blight Fungicide Timing

Trial ID: 2019-WFHB05 — R.M. of Dauphin

**Objective:** The purpose of this project is to quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmer's normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later

TRIAL INFORMATION	
Location	Keld
Previous Crop	Canola
Soil Texture	Clay
Tillage	Zero Tillage
Planting Date	May 11, 2019
Variety	AAC Viewfield
Row Spacing	10"
Seeding Rate	120 lbs/ac
Fungicide Product	Prosaro XTR
Rec'd App Date	July 07, 2019
Rec'd App Timing	Z65
3-5 Days Later	July 10, 2019
Harvest Date	September 08, 2019

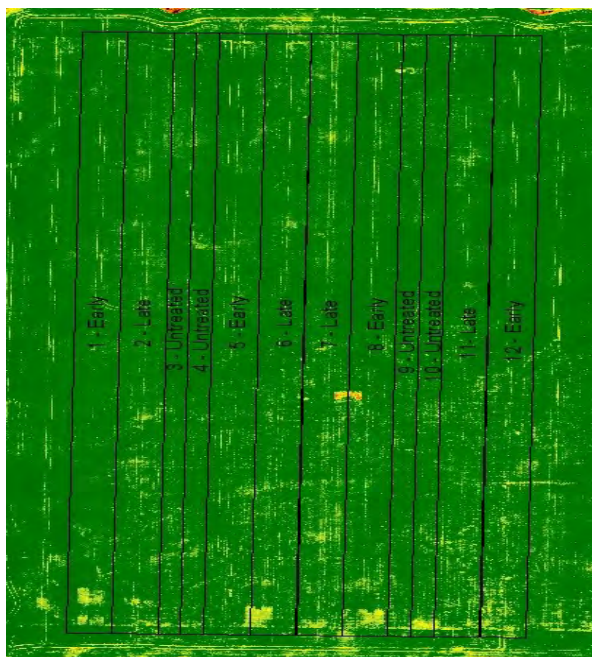
PRECIPITATION†					
	May	June	July	Aug	Total
Rainfall	4	60	65	45	176
Normal	36	77	70	62	247

†Growing season precipitation (mm)

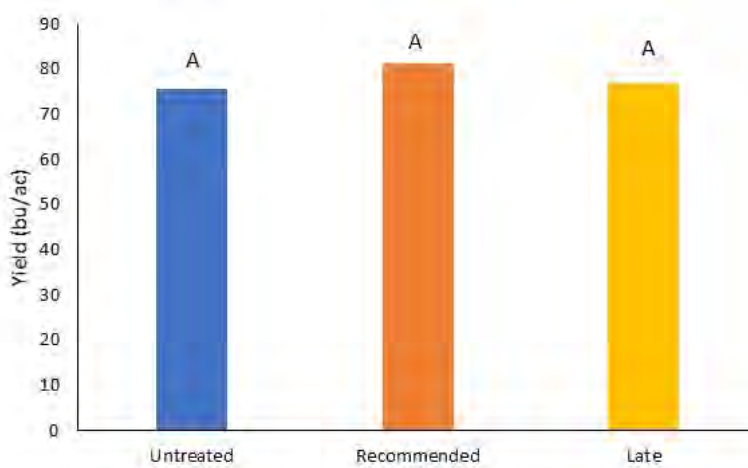
WHEAT QUALITY				
	Protein	DON	TWT (lb/bu)	Falling Number
Rec'd Timing	12.2	0	65	338
Late Timing	12.2	0	65	336
Untreated	12.2	0	65	337

OVERALL YIELD	
	Mean (bu/ac)
Rec'd Timing	81.3
Late Timing	76.9
Untreated	75.6
P-Value	0.0874
CV	6.2%
Significance	No

### FIELD IMAGE



### STRIP YIELD



**Summary:** There was no significant yield difference between the recommended timing, late timing, and untreated check for fusarium head blight fungicide timing applications. Wheat quality was #1 grade for CWRS with one sample down graded to #2 for sawfly midge damage. Rainfall was below normal for the entire growing season.

## Wheat Fusarium Head Blight Fungicide Timing

Trial ID: 2019-WFHB06 — R.M. of Wallace-Woodworth

**Objective:** The purpose of this project is to quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmer's normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later

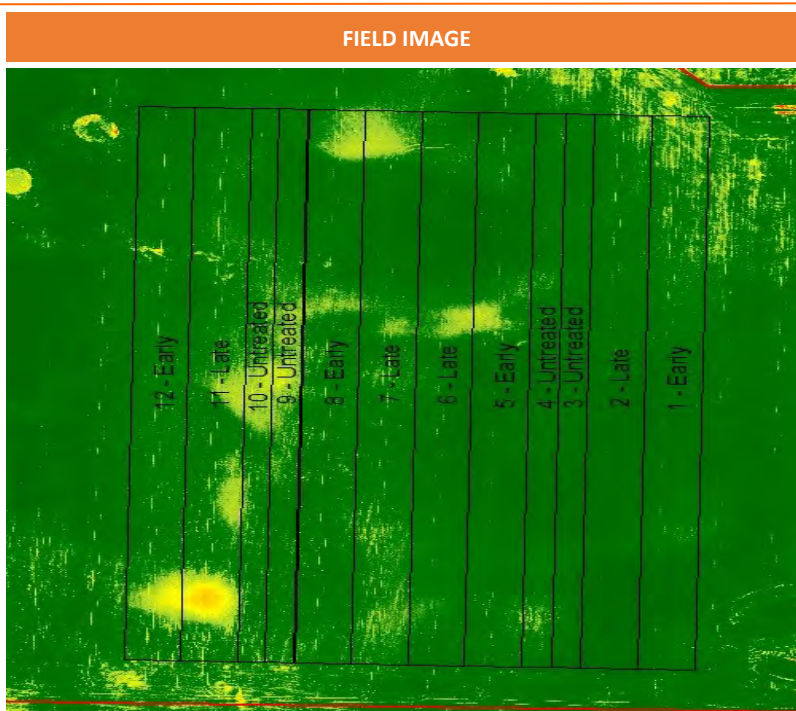
TRIAL INFORMATION	
Location	Viriden
Previous Crop	Soybeans
Soil Texture	Loam
Tillage	Zero Tillage
Planting Date	May 03, 2019
Variety	AAC Brandon
Row Spacing	12"
Seeding Rate	126 lbs/ac
Fungicide Product	Caramba
Rec'd App Date	July 08, 2019
Rec'd App Timing	Early Flower
3-5 Days Later	July 11, 2019
Harvest Date	September 07, 2019

PRECIPITATION†					
	May	June	July	Aug	Total
Rainfall	26	66	40	68	201
Normal	45	68	62	64	242

†Growing season precipitation (mm)

WHEAT QUALITY				
	Protein	DON	TWT (lb/bu)	Falling Number
Rec'd Timing	13.7	0	63.5	317
Late Timing	13.6	0.03	63.8	309
Untreated	13.8	0.03	63.3	291

OVERALL YIELD	
	Mean (bu/ac)
Rec'd Timing	79.6
Late Timing	80.3
Untreated	78.0
P-Value	0.1138
CV	2.2%
Significance	No



**Summary:** There was no significant yield difference between the recommended timing, late timing, and untreated check for fusarium head blight fungicide timing applications. Wheat quality was #2 grade for CWRS with some variability in quality from sprout damage and severe sprout damage. Rainfall was below normal for May and July and near normal in June and August.

## Wheat Fusarium Head Blight Fungicide Timing

Trial ID: 2019-WFHB07 — R.M. of Pembina

**Objective:** The purpose of this project is to quantify the impact of fusarium head blight on the quality of harvested grain by comparing the farmer's normal fungicide application at recommended rate and timing to a fungicide application 3 to 5 days later

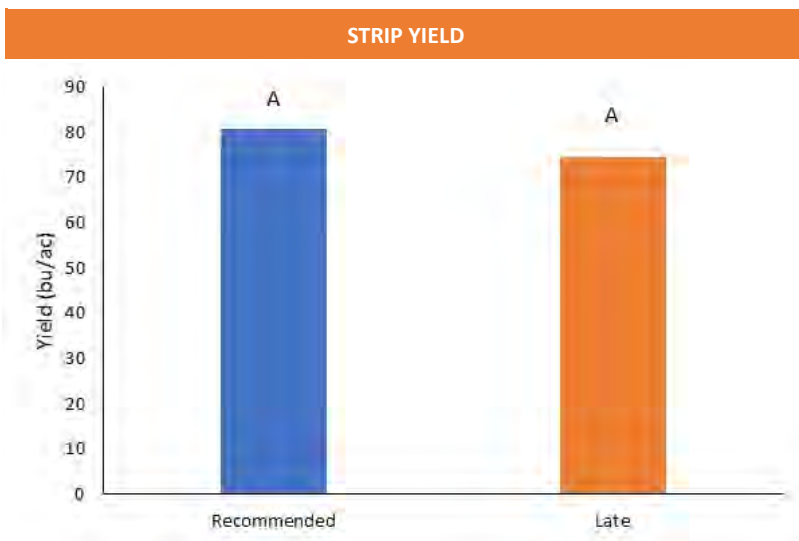
TRIAL INFORMATION	
Location	Manitou
Previous Crop	Canola
Soil Texture	Clay Loam
Tillage	Conventional
Planting Date	May 08, 2019
Variety	AAC Brandon
Row Spacing	8"
Seeding Rate	130 lbs/ac
Fungicide Product	Caramba
Rec'd App Date	July 11, 2019
Rec'd App Timing	Z60
3-5 Days Later	July 15, 2019
Harvest Date	September 09, 2019

PRECIPITATION†					
	May	June	July	Aug	Total
Rainfall	25	78	52	95	250
Normal	68	98	82	73	321

†Growing season precipitation (mm)

WHEAT QUALITY				
	Protein	DON	TWT (lb/bu)	Falling Number
Rec'd Timing	13.0	0.3	60.5	225
Late Timing	12.9	0.3	60.3	239
Untreated	11.8	0.4	59.0	233

OVERALL YIELD	
	Mean (bu/ac)
Rec'd Timing	80.7
Late Timing	74.7
P-Value	0.1478
CV	7.0%
Significance	No
Reference Check Strip	70.1 bu/ac



**Summary:** There was no significant yield difference between the recommended timing and late timing for fusarium head blight fungicide timing applications. Wheat quality was #2 grade for CWRS with reduction in quality from FDK and DON. Rainfall was below normal for May, June and July and above normal in August.