

# Pea Fungicide Trial

**Trial ID:** 2020-PF09 – R.M. of Minitonas-Bowsman

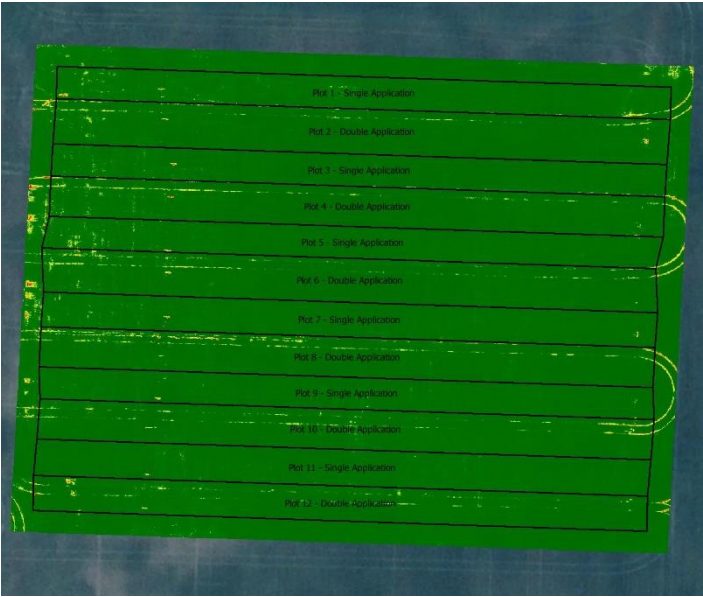
**Objective:** Quantify the agronomic and economic impacts of a single vs. double foliar fungicide application in field peas

**Summary:** Foliar ascochyta, stem ascochyta and white mould were prevalent throughout the trial. Rainfall in July was greater than normal, contributing to disease development. There was a significant yield increase of 7.2 bu/ac for peas with a double application of foliar fungicide compared to peas with a single application. This yield increase was more than enough to pay for the increased cost/ac of fungicide with the double application.

## Trial Information

<b>Treatment</b>	Headline / Cotegra
<b>Application Timing</b>	Early Flower
<b>Application Date</b>	July 6 / July 15
<b>Application Rate</b>	161 ml/ac / 280 ml/ac
<b>Application Method</b>	Broadcast
<b>Soil Texture</b>	Very Fine Sandy Loam
<b>Previous Crop</b>	Wheat
<b>Tillage</b>	Conventional
<b>Seeding Date</b>	May 8
<b>Variety</b>	Inca
<b>Seeding Rate</b>	210 lbs/ac
<b>Row Spacing</b>	10"
<b>Plant Stand @ R3</b>	319 000 plants/ac
<b>Harvest Date</b>	August 20

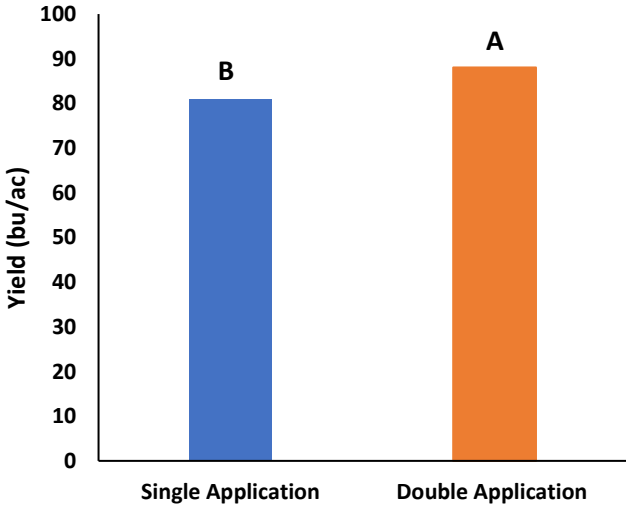
## NDVI Field Image July 29



## Precipitation (mm)

	May	June	July	August
<b>Normal</b>	45.4	84.2	85.6	68.3
<b>Rainfall</b>	12.1	62.9	122.8	43.4

## Yield by Treatment



## Summary of Disease Rating (R3)†

	Foliar Ascochyta		Stem Ascochyta		White Mould	
	SGL	DBL	SGL	DBL	SGL	DBL
<b>Incidence</b>	100%	100%	92%	52%	70%	48%
<b>Severity</b>	3.5	2.3	1.9	1.5	1.2	0.5

† SGL=Single application, DBL=Double application; Foliar ascochyta 1 – 7 rating scale, stem ascochyta 1 – 7 rating scale, white mould 0 – 5 rating scale



### Overall Yield & Economics

	Mean (bu/ac)	Cost <sup>†</sup>	Change in Profit/ac (@ pea price of \$6 - \$8/bu) <sup>††</sup>
<b>Double Application</b>	88.1	\$40/ac	+\$23 to + \$38/ac
<b>Single Application</b>	80.9	\$20/ac	
<b>Yield Difference</b>	7.2		
<b>P-value</b>	0.0051		
<b>CV</b>	5.3%		
<b>Significance</b>	<b>Yes</b>	<b>Economic</b>	<b>Yes</b>

<sup>†</sup> Based on MB Agriculture 2020 Cost of Production Guidelines (\$20/ac for single application); product cost only, does not include application cost

<sup>††</sup> Change in profit is calculated as the difference between the change in income from the significant difference in yield and the difference in cost of the product