

Pea Fungicide Trial

Trial ID: 2022-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 and stem ascochyta were present throughout the trial. There was a significant yield increase of 5.2 bu/ac for peas with a double fungicide application compared to peas with a single fungicide application. This yield increase was more than enough to pay for the cost/ac from a double application of fungicide.

Trial Information

Treatment	Headline vs Headline + Cotegra		
Application Timing	First Flower / Full Flower		
Application Date	July 11 / July 25		
Application Rate	280 ml/ac		
Application	Broadcast		
Method			
Soil Texture	Clay Loam		
Previous Crop	Spring Wheat		
Tillage	Conventional		
Seeding Date	May 12		
Variety	Chrome		
Seeding Rate	3.5 bu/ac		
Row Spacing	10"		
Plant Stand @ R4	227,000 plants/ac		
Harvest Date	August 24		

Precipitation (mm)

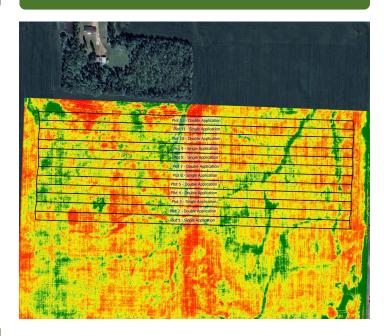
	May	Jun	Jul	Aug	Total
Rainfall	114.1	59.7	42.7	41.9	258.4
Normal	45.4	84.2	85.6	68.3	283.5
% Normal	251%	71%	50%	61%	91%

Summary of Disease Rating (R4)+

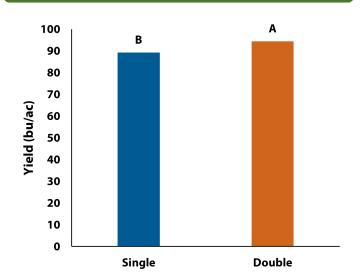
	Foliar Ascochtya		Stem Ascochyta		
	Single	Double	Single	Double	
Incidence	93%	100%	57%	58%	
Severity	2.7	3.0	1.7	1.6	

† Foliar and stem ascochyta are rated on a scale of 1 (no symptoms) to 7 (stunted/dead plants).

NDVI Field Image August 11



Yield by Treatment





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Overall Yield & Economics

			Change in Profit/ac ⁺⁺		
	Mean (bu/ac)	Cost ⁺	Long-Term Average (\$5.33-\$11.47/bu)	Current Conditions (\$11-\$13/bu)	
Double Application	94.4	\$37/ac	\$9-\$41/ac	\$39-\$49/ac	
Single Application	89.2	\$18.50/ac			
Yield Difference	5.2				
P-Value	0.0108				
CV	5.0%				
Significance	Yes	Economic	Yes	Yes	

⁺ Based on MB Agriculture 2022 Cost of Production Guidelines and industry prices; treatment cost only, does not include application cost.

⁺⁺ Change in profit/ac is calculated from profit gained or lost due to yield differences, treatment cost/ac, and market prices; Long-term average prices are based on Manitoba Agriculture's Historical Manitoba Crop Prices (2017-2021).