

Pea Fungicide Trial

Trial ID: 2022-PF04 - R.M. of Woodlands

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

Summary: Though the disease rating taken 8 days after the fungicide application determined a low presence of foliar and stem ascochyta, there was a significant yield increase of 2.3 bu/ac for peas with a single application of Zolera ODX compared to peas with no fungicide applied. This increase was more than enough to pay for the cost/ac from a single application of fungicide at all market prices listed, except the lowest range of the long-term average.

Trial Information

Treatment	Zolera ODX
Application Timing	R2
Application Date	July 13
Application Rate	25 ac/jug
Application Method	Broadcast
Soil Texture	Clay Loam
Previous Crop	Wheat
Tillage	Zero Till
Seeding Date	May 30
Variety	AAC Profit
Seeding Rate	175 lbs/ac
Row Spacing	10"
Plant Stand @ R3	244,000 plants/ac
Harvest Date	September 7

Precipitation (mm)

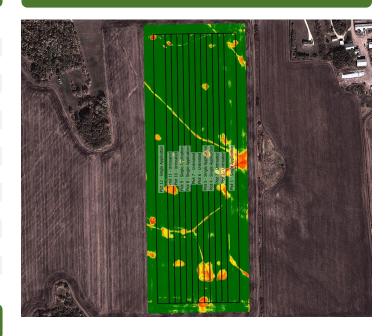
	May	Jun	Jul	Aug	Total
Rainfall	97.9	76.9	124.5	50.2	349.5
Normal	53.8	92	66.4	63.3	275.5
% Normal	182%	84%	188%	79%	127%

Summary of Disease Rating (R3)[†]

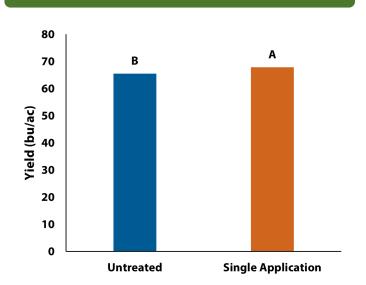
	Foliar Ascochtya		Stem Ascochyta		
	Untreated	Single	Untreated	Single	
Incidence	7%	5%	0%	0%	
Severity	1.1	1.1	1.0	1.0	

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

NDVI Field Image July 25



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)	
Single Application	67.9	\$18.50/ac	-\$6/ac to \$9/ac	\$8/ac to \$13/ac	
Untreated	65.5				
Yield Difference	2.4				
P-Value	0.0126				
CV	2.5%				
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).

⁺⁺⁺ Economic at the higher range of long-term average prices.