

Pea Fungicide Trial

Trial ID: 2022-PF01 – R.M. of Grassland

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

Summary: The pre-spray check (V14) did not indicate an application of fungicide was necessary. Foliar ascochyta and white mould were prevalent throughout the trial a day before the fungicide application. There was a significant yield increase of 12.5 bu/ac for peas with a single application of Dyax. This yield increase was more than enough to pay for the cost/ac from a single application of fungicide.

Trial Information

Treatment	Dyax
Application Timing	R2
Application Date	July 7
Application Rate	60 ac/jug
Application Method	Broadcast
Soil Texture	Loam
Previous Crop	Wheat
Tillage	Zero Till
Seeding Date	May 16
Variety	CDC Inca
Seeding Rate	192 lbs/ac
Row Spacing	12"
Plant Stand @ R3	224,000 plants/ac
Harvest Date	August 27

Precipitation (mm)

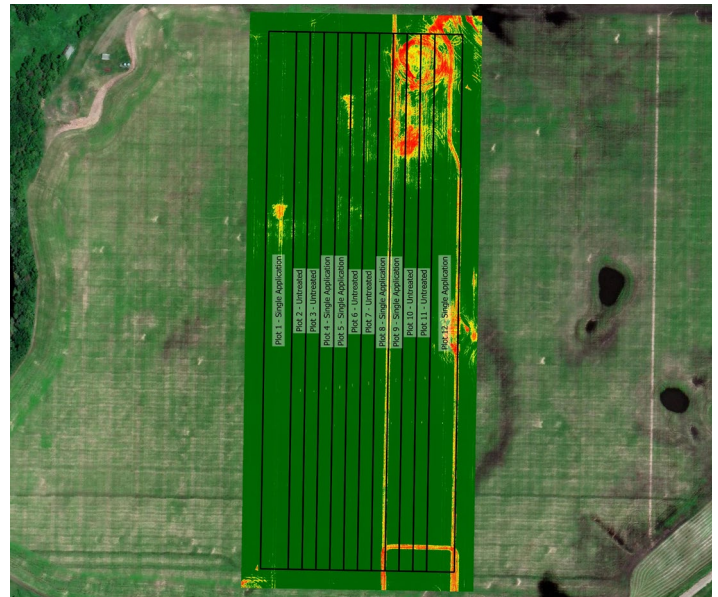
	May	Jun	Jul	Aug	Total
Rainfall	101.3	91.4	76.2	25.3	294.2
Normal	46.9	83.7	65.2	57.6	253.4
% Normal	216%	109%	117%	44%	116%

Summary of Disease Rating (R4) †

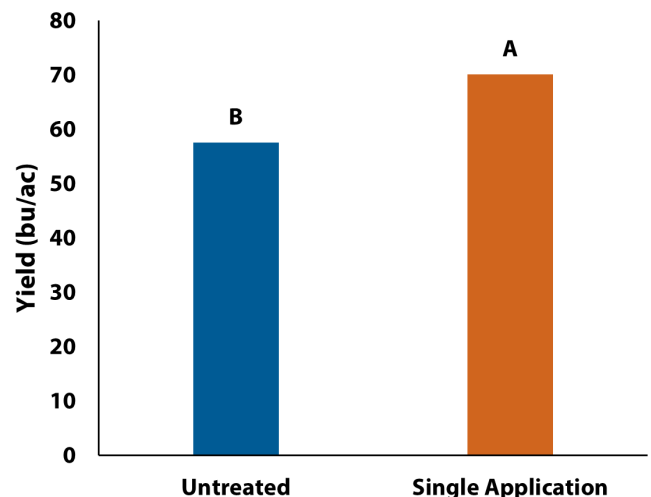
	Foliar Ascochyta		Stem Ascochyta		White Mould	
	UN	SGL	UN	SGL	UN	SGL
Incidence	100%	88%	0%	0%	80%	43%
Severity	2.5	1.9	1.0	1.0	1.3	0.6

† UN = untreated, SGL = single application; Foliar and stem ascochyta are rated on a scale of 1 (no symptoms) to 7 (stunted/dead plants); White mould is rated on a scale from 0 (no symptoms) to 5 (dead plants).

NDVI Field Image July 26



Yield by Treatment





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Overall Yield & Economics

	Mean (bu/ac)	Cost †	Change in Profit/ac ^{††}	
			Long-Term Average (\$5.33-\$11.47/bu)	Current Conditions (\$11-\$13/bu)
Single Application	70.1	\$18.50/ac	\$48-125/ac	\$119-\$144/ac
Untreated	57.6			
Yield Difference	12.5			
P-Value	0.0016			
CV	11.5%			
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).