

Pea Fungicide Trial

Trial ID: 2023-PF07 – R.M. of Rockwood

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

Summary: Ascochyta/Mycosphaerella blight was prevalent throughout the trial. There was no significant yield difference between peas with and without a single application of Dyax. As a result, profit/ac in the treated area of the trial decreased by the cost/ac of fungicide application.

Trial Information

Treatment	Dyax
Application Timing	R1
Application Date	July 5
Application Rate	160mL/ac
Application Method	Broadcast
Soil Texture	Very Fine Sandy Loam
Previous Crop	Wheat
Tillage	Conventional
Seeding Date	May 15
Seeding Date Variety	May 15 AAC Carver
Seeding Date Variety Seeding Rate	May 15 AAC Carver 180 lbs/ac
Seeding Date Variety Seeding Rate Row Spacing	May 15 AAC Carver 180 lbs/ac 10"
Seeding Date Variety Seeding Rate Row Spacing Plant Stand @ R3	May 15 AAC Carver 180 lbs/ac 10" 254 00 plants/ac
Seeding Date Variety Seeding Rate Row Spacing Plant Stand @ R3 Harvest Date	May 15 AAC Carver 180 lbs/ac 10" 254 00 plants/ac August 17

Precipitation (mm)

	May	June	July	Aug	Total
Rainfall	11.8	47.4	47	48.4	154
Normal	53.8	92	66	63.3	276
% Norm	22%	52%	70%	76%	56%

Summary of Disease Rating (R3)⁺

Ten symptomatic plants were randomly selected for resistance testing from untreated areas of the field. 4.8% of the Ascochyta/ Mycosphaerella blight population at this trial was resistant to group 11 fungicides.

	Foliar A/M		Stem A/M	
	UNTRT	SGL	UNTRT	SGL
Incidence	100%	100%	67%	50%
Severity	3.7	3.4	1.7	1.6

+ SGL=Single application; Foliar and stem Ascochyta/ Mycosphaerella (A/M) 1 – 7 rating scale; Incidence= percent of plants infected.

Field Image





Yield by Treatment





Additional On-Farm Network Research Reports



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Pea Fungicide Trial

Results from the Pre-Spray Check (V11)

Category	Average Rating ⁺	Explanation
Crop Canopy	8	Thin- High weed pressure, low yield expected
Leaf Wetness/Humidity @ 12 pm	0	No leaf wetness
5-Day Weather Forecast	0	Dry
Ascochyta Symptoms on Peas	6	Less than 20% of plants showing symptoms
Total Score	14	No application recommended

+ Ratings taken at six locations in the field and average together to assess overall field risk

Overall Yield & Economics			
	Mean (bu/ac)	Cost ⁺	Change in Profit ⁺⁺
Single Application	88.8	\$10-\$23/ac	-\$10-\$23/ac
Untreated	86.7		
Yield Difference	2.1		
P-Value	0.19		
CV	2.7%		
Significance	No	Economic	No

+ Based on an estimated fungicide product cost of \$10-\$23/ac, product cost only, does not include application cost

++ Because yields were not significantly different, there is no increased income to offset the cost of the fungicide. Profit/ac declined by the cost of the fungicide application.

