

Pea Fungicide Trial

Trial ID: 2021-PF09 – R.M. of Swan Valley West

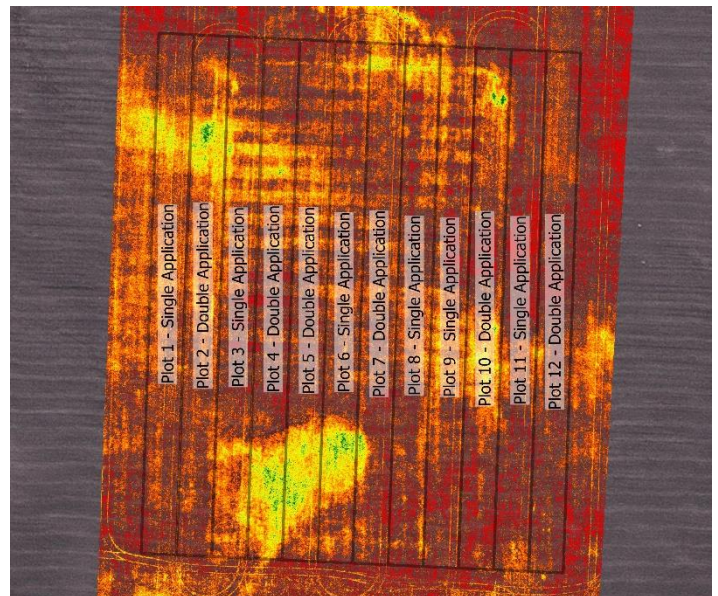
Objective: Quantify the agronomic and economic impacts of a double vs. single foliar fungicide application in field peas

Summary: The pre-spray check did not indicate the need for fungicide application. Foliar ascochyta was prevalent throughout the trial at R3, but at relatively low severity. There was no significant yield difference between peas with a double application, compared to those with a single application. As a result, profit/ac decreased by the increased cost of the double application.

Trial Information

Treatment	Delaro / Zolera
Application Timing	Early flower/Full flower
Application Date	June 28 / July 8
Application Rate	356ml/ac / 550 ml/ha
Application Method	Broadcast
Soil Texture	Very Fine Sandy Loam
Previous Crop	Canola
Tillage	Conventional
Seeding Date	May 5
Variety	Lewochko
Seeding Rate	3.6 bu/ac
Row Spacing	12"
Plant Stand @ R4	247 000 plants/ac
Harvest Date	August 11

NDVI Field Image July 28[†]



[†] Imagery captured ~2 weeks later than optimal timing; the crop was quite advanced, leading to the red/yellow colouration of the trial image

Precipitation (mm)

	May	Jun	Jul	Aug	Total
Rainfall	38.5	64.1	56.8	73.7	233.1
Normal	45.4	84.2	85.6	68.3	283.5
% Normal	85%	76%	66%	108%	82%

Results from the Pre-Spray Check (V10)

Category	Average Rating [†]	Explanation
Crop Canopy	11.6	Moderate to Normal (~8 plants/ft ²)
Leaf Wetness/Humidity @ 12 pm	0	No leaf wetness
5-Day Weather Forecast	10	Unpredictable
Ascochyta Symptoms on Peas	0	No visible symptoms
Total Score	21.6	No application recommended

[†] Ratings taken at six locations in the field and average together to assess overall field risk

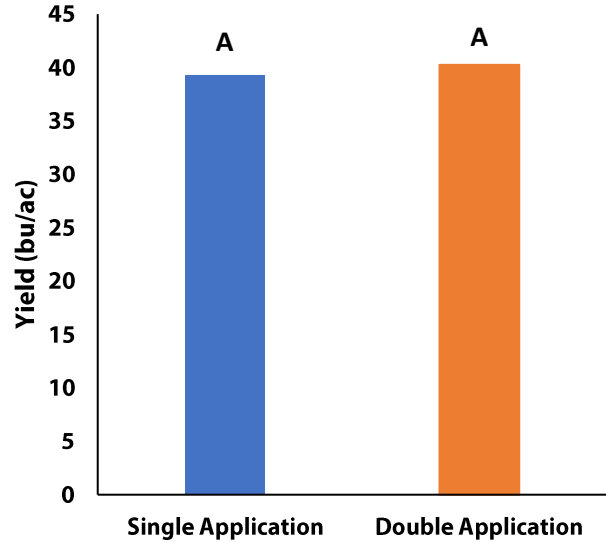


Summary of Disease Rating (R3)[†]

	Foliar Ascochyta		Stem Ascochyta	
	SGL	DBL	SGL	DBL
Incidence	82%	100%	0%	2%
Severity	1.8	2.3	1.0	1.0

[†] SGL=Single application, DBL=double application; Foliar ascochyta 1 – 7 rating scale, stem ascochyta 1-7 rating scale

Yield by Treatment



Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
Double Application	40.3	\$34/ac	-\$17/ac
Single Application	39.3	\$17/ac	
Yield Difference	1.0		
P-Value	0.3557		
CV	7.4%		
Significance	No	Economic	No

[†] Estimated cost; represents product only, does not include application cost

^{††} Because yields were not significantly different, there is no increased income to offset the cost of the second application. Profit/ac declines by the increased cost as a result.