

Pea Intercrop Double Inoculant Trial

Trial ID: 2022-PI2IN01 – R.M. of Roland

Objective: Quantify the agronomic and economic impacts of seed-applied inoculant (single inoculation) vs. seed-applied plus in-furrow inoculant (double inoculation) in peas intercropped with canola.

Summary: Nodulation ratings were very similar between treatments. There was no significant yield difference between single and double inoculated peas. Due to the lack of yield response, there was a decrease in profit/ac in the double inoculated area of the trial, equivalent to the cost of the in-furrow inoculant application.

Trial Information

Treatment	Nodulator Liquid On-Seed (2.5x) vs Nodulator Liquid On-Seed (2.5x) + Nodulator Granular In-Furrow (5lbs/ac)
Last Pea Crop	> 15yrs
Soil Texture	Loam
Previous Crop	Wheat
Tillage	Conventional
Seeding Date	May 26
Variety	Austrian Winter Pea
Seeding Rate	94 lbs/ac (peas)
Row Spacing	7.5"
Plant Stand plants/ac @ V4	218,000 peas + 119,000 canola
Harvest Date	Loam

NDVI Field Image July 25



Precipitation (mm)

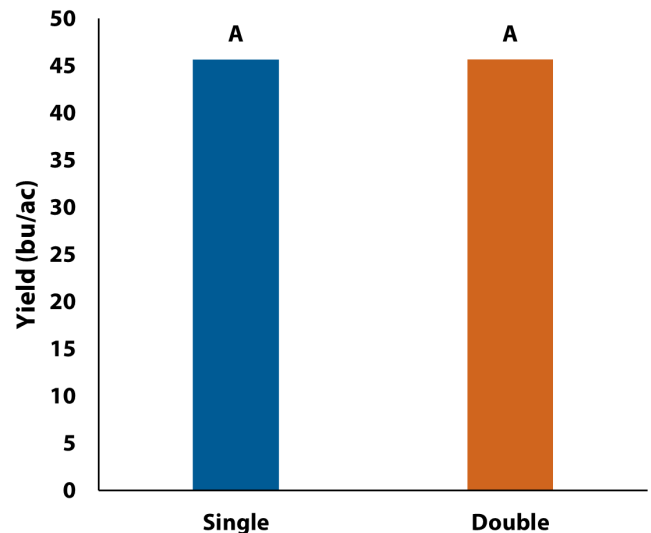
	May	Jun	Jul	Aug	Total
Rainfall	110.6	42.2	84	53.1	289.9
Normal	53.8	80.6	65.7	71	271.1
% Normal	206%	52%	128%	75%	107%

Nodulation (R2)[†]

	Average Nodulation Rating
On-Seed	12.2
On-Seed + In-Furrow x2	12.4

[†] Nodulation is rated on a scale ranging from 1-6 (unsatisfactory), 7-10 (less effective nodulation) and 11-13 (effective nodulation).

Yield by Treatment





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Overall Yield & Economics

	Mean (bu/ac)	Cost [†]	Change in Profit/ac ^{††}
On-Seed + In-Furrow x2	45.7	\$23/ac	-\$23/ac
On-Seed	45.7	\$3/ac	
Yield Difference	0		
P-Value	1		
CV	2.2%		
Significance	No	Economic	No

[†] Based on an estimated cost of \$3/ac for liquid inoculant and \$10/ac for granular inoculant; does not include application cost.

^{††} Yields were not significantly different, therefore profit/ac decreased by the cost/ac of the double inoculation treatment.