

## **Pea Seed Treatment Trial**

Trial ID: 2025-PST02 - R.M. of Dauphin

**Objective:** Quantify the agronomic and economic impacts of seed treatments in field peas compared to bare seed.

**Summary:** There was no significant yield difference between seed treated with Rancona® Trio + Belmont<sup>™</sup> and untreated seed. The root rot severity rating for treated peas was significantly lower than untreated peas, however, root rot severity remained low (<1.6 on a 0-9 scale) due to dry spring conditions. The average root rot incidence (% of plants infected) for both treatments was 91%. Due to the lack of yield response with the seed treatment compared to untreated, there was a decrease in profit equivalent to the increase in seed treatment product cost. A soil test for Aphanomyces was negative.

#### **Trial Information**

Treatment	Rancona® Trio + Belmont™ vs. Untreated
Soil Texture	Silty Loam
Previous Crop	Ryegrass
Tillage	Conventional Tillage
Seeding Equipment	70 ft Air Drill
<b>Seeding Date</b>	5/13/2025
Variety	CDC Lewochko
Row Spacing	10 in.
Harvest Date	9/1/2025

### Summary of Root Rot Rating at V9<sup>+</sup>

	Incidence	Severity
Rancona Trio	98%	1.2 A
Untreated	85%	1.5 B

 $\dagger$  Severity 0-9 rating scale; Incidence= Percent of plants infected. Averages followed by different letters are significantly different at  $\alpha$  =0.05.

Spring Aphanomyces soil test negative: no Aphanomyces detected in high- or low-risk areas.

### Precipitation (mm)

	May	June	July	Aug	Total
Rainfall	25.1	47.6	30	83.4	186.1
Normal	56.19	92.66	79.88	66.25	294.98
% Norm	45%	51%	38%	126%	63%

### **Germination** <sup>†</sup> and Plant Population

	Germination	Population (plants/ac)
Rancona® Trio	76%	260,000
+ Belmont™		
Untreated	75%	251,375

<sup>+</sup> Germination testing was conducted on seed sampled after treatments were applied, but before moving through seeding equipment.

# NDVI Field Image July 15

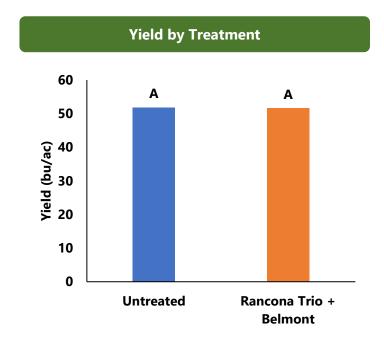


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Root rot severity rating 1 = small lesion at point of seed attachment.



#### **Overall Yield & Economics**

	Mean (bu/ac)	Cost +	Change in Profit ††
Rancona® Trio +	51.6	\$21.00/ac	-\$21.00/ac
Belmont™ Untreated	51.8		
Yield Difference	-0.2		
P-Value	0.9190		
CV	5.4%		
Significance	No	Economic	No

<sup>+</sup> Based on the estimated cost of pea seed fungicide treatment; product only, does not include cost of application

<sup>++</sup> Change in profit is calculated as the difference in cost between seed treatments. Because yields were not significantly different, there is no increased income to offset the increase in seed treatment cost