



**on-farm network**  
PARTICIPATORY • PRECISE • PROACTIVE

# Pea Seed Treatment Trial

Trial ID: 2024-PST01 – R.M. of Morris

**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 and untreated seed. While there was a 12% decrease in root rot rating incidence for treated seed, the root rot severity remained low (<1 on a 0-9 scale). The untreated strips resulted in a significantly higher plant count than the Rancona Trio strips. 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 application cost.

## Trial Information

Treatments	Rancona Trio vs Untreated
Soil Texture	Clay
Previous Crop	Wheat
Tillage	Zero Till
Seeding Equipment	60ft Disc Drill
Seeding Date	April 24
Variety	AAC Delhi
Row Spacing	10"
Harvest Date	August 7

## Precipitation (mm)

	May	June	July	Aug	Total
Rainfall	125.8	99.7	73.4	96.4	395.3
Normal	53.6	86.4	71.9	65.4	277.3
% Norm	235%	115%	102%	147%	143%

## Germination † and Plant Population

	Germination	Population (plants/ac)
Rancona Trio	84%	203,000 B
Untreated	85%	261,000 A

† Germination testing was conducted on seed sampled after treatments were applied, but before moving through seeding equipment.

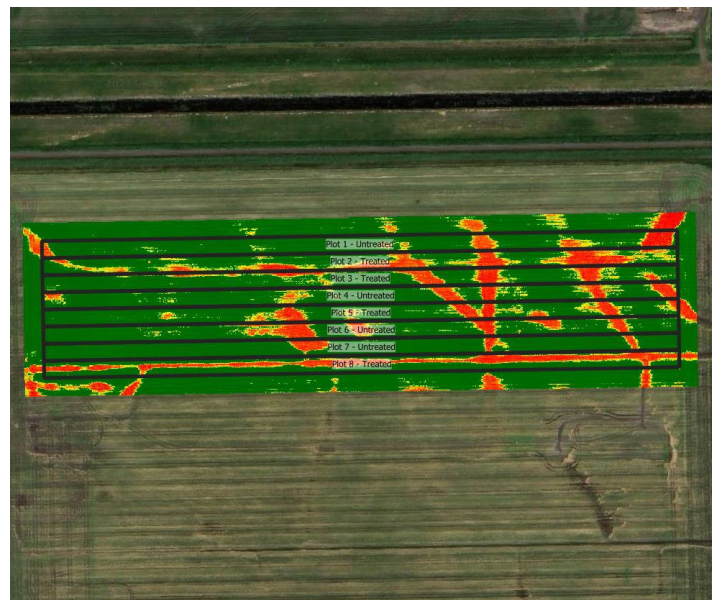
## Summary of Root Rot Rating at V6 †

	Incidence	Severity
Rancona Trio	38%	0.4
Untreated	50%	0.6

† Severity 0-9 rating scale; Incidence= Percent of plants infected.

Spring Aphanomyces soil test negative: no oospores found in high-risk areas of the field.

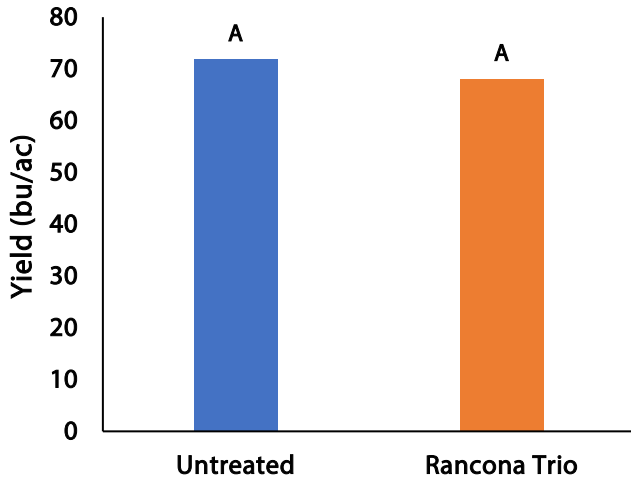
## NDVI Field Image July 15



Root rot ratings (L to R): 0= healthy plant, 1= infection at t of seed attachment, 2=5-10% infection



## Yield by Treatment



## Overall Yield & Economics

	Mean (bu/ac)	Cost †	Change in Profit ††
Rancona Trio	68.1	\$17/ac	-\$17/ac
Untreated	71.9		
Difference	-3.8		
P-Value	0.410		
CV	8.1%		
Significance	No	Economic	No

† Based on the estimated cost of pea seed fungicide treatments; product only, does not include cost of application

†† 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 cost