

# **Pea Biological Trial**

#### Trial ID: 2022PB02 – R.M. of Souris-Glenwood

**Objective:** Quantify the agronomic and economic impacts of biological products for field pea production.

**Summary:** There was no significant yield difference between field peas treated with Envita<sup>®</sup> and those without. Due to the lack of yield response, there was a decrease in profit/ac equivalent to the cost of product application.

#### **Trial Information<sup>+</sup>**

Treatment	Envita ®			
Application Timing	V6			
Application Date	June 24			
Application Rate	40 ac/jug			
Application Method	Broadcast			
Soil Texture	Loam			
Previous Crop	Soybeans			
Tillage	Conventional			
Seeding Date	May 24			
Variety <sup>++</sup>	AAC Carver			
Seeding Rate	180 lbs/ac			
Row Spacing	12″			
Plant Stand @ V2	283,000 plants/ac			
Harvest Date	September 1			
Envita® is a biological product intended to enable plant foliage and				

+Envita® is a biological product intended to enable plant foliage and roots to fix their own nitrogen.

++ Lignijoule™ ST is a biological product intended to enable the plant to photosynthesize more.

### Precipitation (mm)

	May	Jun	Jul	Aug	Total
Rainfall	116.9	140.1	133.1	35.4	425.5
Normal	51.2	72.8	74.4	67.5	265.9
% Normal	228%	192%	179%	52%	160%

## NDVI Field Image July 26





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

	Mean (bu/ac)	Cost <sup>+</sup>	Change in Profit/ac <sup>++</sup>
Envita®	66.4	\$14.50/ac	-\$14.50/ac
Untreated	68.0		
Yield Difference	-1.6		
P-Value	0.4347		
CV	4.6%		
Significance	No	Economic	Νο

+ Based on an estimated cost of \$14.50/ac for biological products; does not include application costs.

++ Yields were not significantly different, therefore profit/ac decreased by the cost/ac of the biological treatment.

