



BIOst® VPH 100 is a Bio-Stimulant seed treatment from a unique vegetal protein hydrolysate source that is hydrolyzed using a proprietary enzymatic process. **BIOst® VPH 100** is comprised of a unique & consistent ratio of peptides & amino acids that promote enhance healthy seedling.



BIOst® VPH 100 Promotes:



Bio-Stimulant Response

- ✓ Enhance seedling emergence
- ✓ Root hair promoting peptides
- ✓ Precursors to Phytohormones
Cytokinins, Auxins etc.



Nutritional Response

- ✓ Instant useable nitrogen source
- ✓ Natural chelating agent to enhance nutrient uptake
- ✓ Enhances rhizosphere microbes



Abiotic Stress Reduction

- ✓ Reduces effects from climate stress
- ✓ Induces disease & insect tolerance
- ✓ Triggers plant metabolism

Contact Your Seed Dealer or Ag Retailer for more information

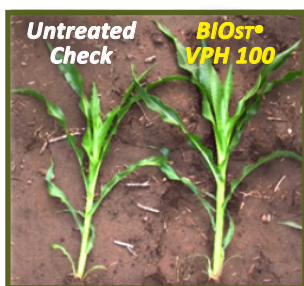
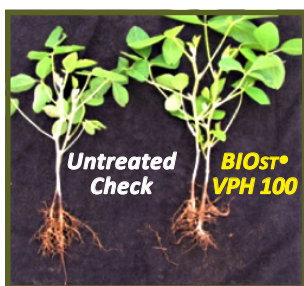


Not All Amino Acids products are created the same...

The BIOst® VPH 100 formulation is focused on using only plant derived amino acids in a rate and ratio that is beneficial when applied to all crops.

Importance and Functions of Amino Acids

- Glutamic Acid - Stimulates plant growth and increases resistance to adverse climate conditions. It's necessary in large quantities as a precursor of new and other amino acids.
- Serine and Valine - Improves the resistance mechanisms of plants to adverse situations.
- Lysine and Arginine - Active and essential in the stimulation of Photosynthesis.
- Aspartic Acid - Important for it's intervention in many metabolic processes.
- Methionine - Increases yield and quality.
- Tryptophan - Precursor for the synthesis of auxins.



Average Yield Response from BIOst® VPH 100:

- **Corn 9.26 bu/A (3 year avg)**
- **Soybeans 2.48 bu/acre (3 year avg)**
- **Wheat 1.5 bu/A**

COMPOSITION

Nitrogen 7%
Vegetal free amino acids 30.0%

AMINOGRAM

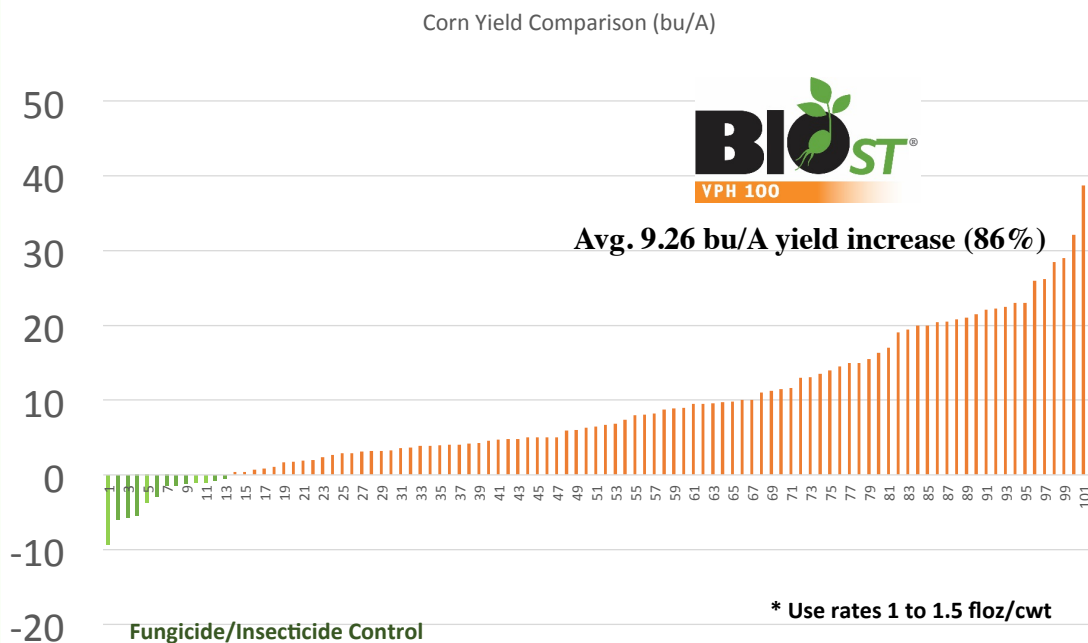
Alanine	4.6%	Lysine	6.0%
Arginine	7.0%	Methionine	1.5%
Aspartic acid	11.7%	Phenylalanine	5.2%
Cysteine	1.0%	Proline	5.1%
Glutamic acid	18.0%	Serina	5.5%
Glycine	4.5%	Threonine	4.1%
Histidine	2.8%	Tryptophan	1.2%
Isoleucine	4.8%	Tyrosine	3.9%
Leucine	8.0%	Valine	5.1%

BIOst® VPH 100 Use Rates:

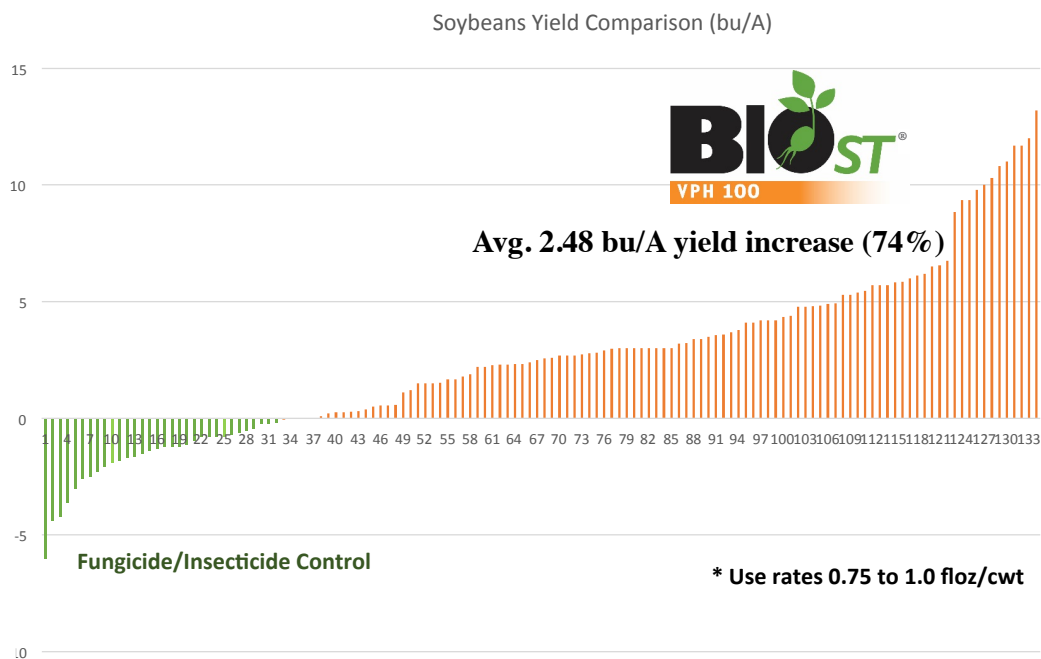
Corn - 1.0 to 2.0 fl oz/cwt
Soybeans - 0.75 to 1.0 fl oz/cwt
Wheat, Barley & Oats - 0.50 to 1.0 fl oz/cwt
Rice - 1.0 to 2.0 fl oz/cwt
Dry Beans, Peas, Lentils & Chickpeas - 0.50 to 1.0 fl oz/cwt
Cotton - 0.50 to 1.00 fl oz/cwt
Canola & Sunflowers - 1.0 to 2.0 fl oz/cwt
Sugarbeets - 1.0 to 2.0 fl oz/cwt
Sorghum - 1.0 to 2.0 fl oz/cwt



Corn 3 Year Summary: BIOst® vs F&I Control



Soybeans 3 Year Summary: BIOst® vs F&I Control

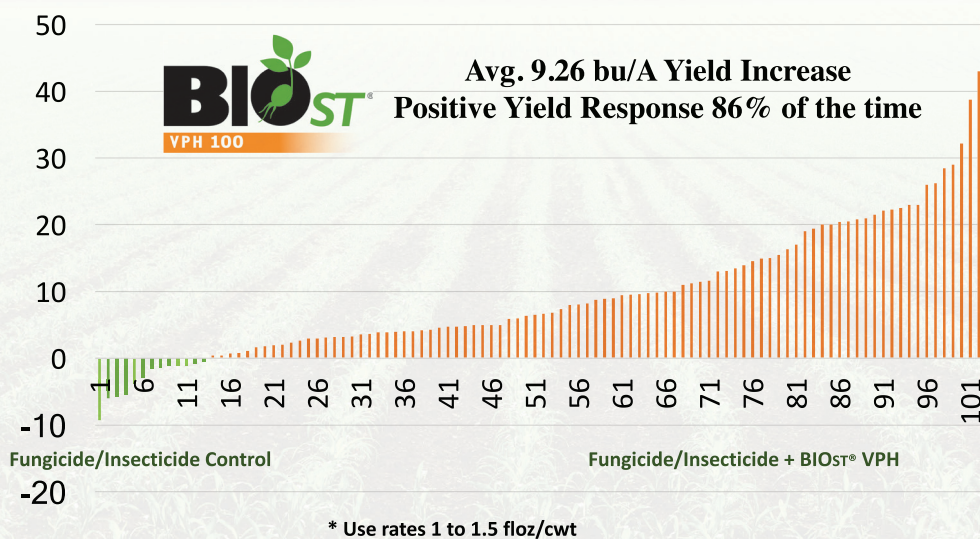




BIOst® VPH SEED ENHANCEMENT DELIVERS PROVEN PERFORMANCE ON CORN

Consistent performance, field data from Three-years demonstrates increased yields and profits 86% of the time.

3 Year Summary: BIOst® VPH vs F&I Control Corn Yield Comparison (Bu/Ac)



BIOst® VPH 100 Seed Treatment Delivers:

1. BIOst® VPH provides a Bio-stimulant Response, Enhanced Nutritional Response & Abiotic Stress Reduction
2. Faster and stronger emerging corn seedlings
3. A positive yield increase over the fungicide and insecticide alone over 88% of the time
4. A average yield increase of 9.26 bu/ac over using a fungicide and insecticide alone



For more information on the BIOst® VPH 100 contact a member of the Albaugh Seed Treatment Technology Team. Jay Stroh @ Jays@albaughllc.com, David Winston @ Davidw@albaughllc.com or Lee Stewart @ Lees@albaughllc.com

Refer to the product label for complete directions and instructions. BIOst® is a trademark of Albaugh, LLC.