

Vital Earth Resources

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2012 Crop Results

Vitazyme on Pinto Beans

Seed Treatment Results in the Greenhouse

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Location: Vital Earth Resources Research Greenhouse, Gladewater, Texas

Variety: pinto

Planting date: March 14, 2012

Pot size: 1 gallon

Soil type: silt loam

Seeding rate: 12 seeds/pot, thinned to 3 plants/pot

Experimental design: Pinto bean seeds were treated with Vitazyme on January 17, 2012, and planted March 14, 2012, 57 days after treatment, to evaluate the effects of Vitazyme seed treatment over time on plant growth. Four replicates were used in a randomized complete block design.

1. Control

2. Vitazyme seed treatment

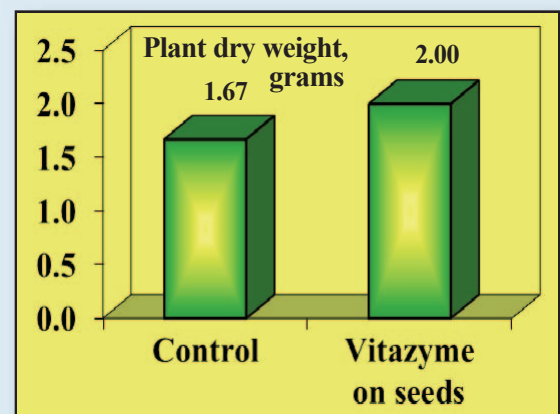
Fertilization: none

Vitazyme treatment: On January 17, pinto bean seeds was soaked in a 10% Vitazyme solution for 6 minutes, then dried on paper towels with a fan blowing across them for rapid drying. These seeds were stored in closed jars at room temperature, and untreated seeds were also placed in a jar to serve as a control.

Harvest date: April 5, 2012, 21 days after planting

Dry weight results: The roots of the beans were washed free of soil, and the plants were placed in a drying oven at 115 °F for 24 hours, then weighed to the nearest 0.01 gram.

Treatment	Dry Weight	Weight change
	g	g
Control	1.67	—
Vitazyme seed trt.	2.00	0.33 (+20%)
Block P	0.1015	
Treatment P	0.0267*	
Model P	0.0581	
CV _{0.10}	6.336	
LSD _{0.10}	0.19 gram	



Increase in dry weight with Vitazyme: 20%

A 20% increase in dry weight was brought about by the Vitazyme seed treatment 57 days before planting.

Conclusions: A greenhouse pot study, evaluating the effects of a Vitazyme seed treatment on pinto beans 57 days before planting, produced a 20% increase in plant dry weight over the test period. This result shows the effectiveness of this simple and inexpensive treatment on plant growth, and its long-term effectiveness after initial treatment.