

Vital Earth Resources

706 East Broadway, Gladewater, Texas 75647
(903) 845-2163 FAX: (903) 845-2262

2014 Crop Results

Vitazyme on Red Beans

Researchers: F. Lucas, L. Saint Jean, and R. Estime

Research organization: CRDD, Bas Boen, Haiti

Trial location: farm of Bas Boen CRDD, Haiti

Variety: Jose Beta

Planting date: December 15, 2012

Experimental design: A red bean field received treatments of four biological products to determine their effects on bean yield and growth characteristics.

1. Control 2. Agronomax 3. Vitazyme 4. SOS + LPN 5. Angre Mevey

Fertilization: unknown

Agronomax: a product containing Cu (0.05%), Mn (0.05%), Mo (0.05%), and humic acid, used for seed and foliar treatments

Vitazyme: applications unknown

SOS + LPN: product and applications unknown

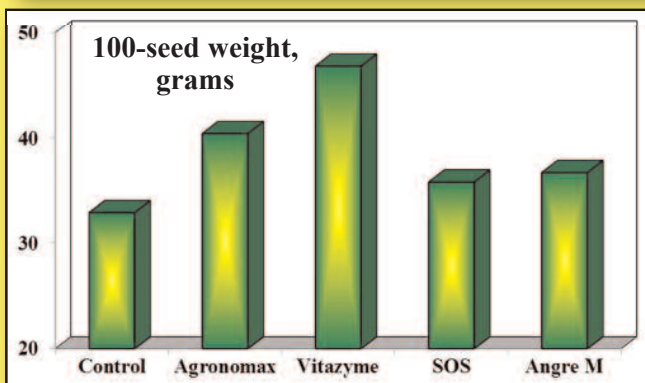
Angre Mevey: product and applications unknown

Harvest date: The crop was harvested March 7, 2013

Growth and yield results:

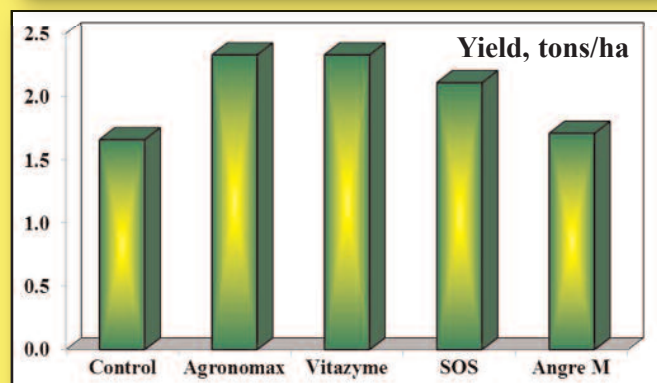
Treatment	Control	Agronomax	Vitazyme	SOS + LPN	Angre Mevey
Plant density, plants/ha	193,339	196,482	202,502	219,620	197,762
Viral disease infection	None	None	None	None	None
Pods/Foot	10	13	13	10	7
Seeds/Pod	3	3	3	4	3
100-seed weight, grams	32.9	40.4	46.8	35.8	36.7
Bean yield, tons/ha	1.66	2.33	2.33	2.11	1.71

100-Seed Weight



Of all treatments, Vitazyme produced the heaviest seeds, followed by Agronomax.

Bean Yield



Both Vitazyme and Agronomax yield 2.33 tons/ha, followed by SOS + LPN and Angre Mevey.

Increase in 100-seed weight

Vitazyme	42%
Agronomax	23%
Angre Mevey	12%
SOS + LPN	9%

Increase in bean yield

Vitazyme	40%
Agronomax	40%
SOS + LPN	27%
Angre Mevey	3%

Conclusions: This red bean trial in Haiti, which compared four biological agents to an untreated control, revealed that all four products improved bean size and yield to some degree, with Vitazyme increasing bean weight by 42%, and yield by 40%. Agronomax produced a 23% bean weight increase, and the same yield as Vitazyme. SOS + LPN and Angre Mevey caused lesser increases in seed weight and yield. This study suffered from a lack of ideal comparisons of products because they were not all of the same nature. For example, Agronomax contains nutrients plus humic acid, while Vitazyme contains biostimulant compounds. Even so, Vitazyme and Agronomax proved to be highly beneficial adjuncts for red bean production in Haiti.