

## Vital Earth Resources

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# 2005 Crop Results

## Vitazyme on Guava

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**Location:** "Carlos Balino" Organic Estate, Santo Domingo, Villa Clara Province, Cuba

**Soil type:** Cambisol (Eutropept)

**Cultivar:** dwarf variety

**Transplanting date:** September 2, 2004

**Experimental design:** A 6-month-old guava plantation was divided into treated and untreated areas to evaluate the effect of Vitazyme on tree growth, fruit number, and yield at 9 months after transplanting. Three application regimes were used.

1. Control (no Vitazyme)
2. Vitazyme at 30 days after transplanting
3. Vitazyme at 30 and 60 days after transplanting
4. Vitazyme at 30, 60, and 90 days after transplanting

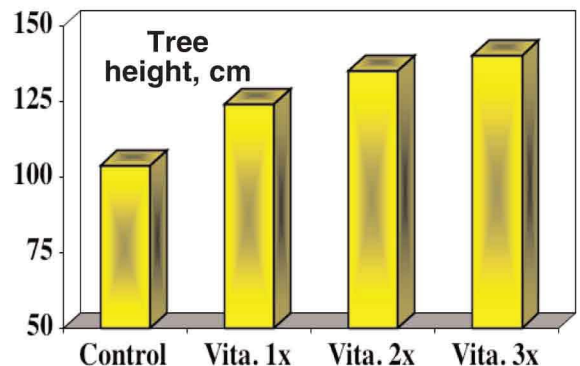
**Fertilization:** unknown

**Vitazyme application:** A 0.5% solution was applied by backpack sprayer on the tree leaves and the soil over the root zone at 30, 30 and 60, and 30, 60, and 90 days after transplanting for the three treatments.

**Tree growth:** At 9 months after transplanting the height of the trees was measured to give means for each treatment.

Treatment	Tree height cm	Change cm
1. Control	104	—
2. Vitazyme once	124	20 (+19%)
3. Vitazyme twice	135	31 (+30%)
4. Vitazyme three times	140	36 (+35%)

**Tree height increase with  
Vitazyme: +19 to 35%**



It was also noticed that there were more leaves and larger leaves per tree for the Vitazyme treatment versus the untreated control trees.

**Yield results:** Mean, fruit number and yield were determined for each treatment.

Treatment	Fruit per tree	Change in fruit number	Fruit yield total kg	Fruit per tree kg/tree	Change fruit yield kg/tree
1. Control	10	—	153	0.77	—
2. Vitazyme once	28	18 (+180%)	625	1.56	0.79 (+103%)
3. Vitazyme twice	24	14 (+140%)	882	2.21	1.44 (+187%)
4. Vitazyme three times	36	26 (+260%)	620	2.07	1.30 (+169%)

### **Increase in fruit number**

<b>Vitazyme once</b> .....	<b>180%</b>
<b>Vitazyme twice</b> .....	<b>140%</b>
<b>Vitazyme three times</b> .....	<b>260%</b>

### **Increase in fruit yield**

<b>Vitazyme once</b> .....	<b>103%</b>
<b>Vitazyme twice</b> .....	<b>187%</b>
<b>Vitazyme three times</b> .....	<b>169%</b>

Conclusions: In the words of the Cuban researchers,

- “1. Vitazyme in 1, 2 and 3 applications of a 0.5% concentration benefited a dwarf variety guava plant growth as compared to the untreated control.
2. Guava ripe fruit yield was greater with two Vitazyme applications (at 30, 60, and 90 days from transplanting), followed by three and one Vitazyme applications at 30, 60, and 90 days and only at 30 days . . . with 1.44, 1.30, and 0.79 kg/plant increases, respectively.”