Vital Earth Resources

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2003 Crop Results

Vitazyme on Roses

<u>Researcher</u>: Ing. Grace Vimos <u>Variety</u>: "Latin Lady" Location: Florecal, Cayambe, Pichincha, Ecuador

<u>Soil type</u>: unknown

Treatment initiation: February 26, 2003, during active production

Experimental design: Vitazyme was applied to beds of roses in a production greenhouse to evaluate the product's ability to decrease the number of "blind" (nonflowering) stems on the plants. The total test area was 8 beds of 30 m^2 each, or a total of 240 m². The treated and control areas were each half of this total, or 4 beds of 30 m^2 each.

1. Control

2. Vitazyme

Fertilizer treatment: unknown

<u>*Vitazyme application*</u> : 1.55 ml per bed of 30 m² each week

<u>*Growth results*</u>: The numbers of productive and "blind", nonflowering stems were counted after 8 weeks of Vitazyme application. Four areas of beds for each treatment were counted, and the results were tallied to give the percentage of "blind" stems.

Treatment	Area	Total stems	Productive stems	"Blind" stems	Proportion of "Blind" stems
			number		%
Control	1	54	22	32	59
	2	55	20	35	64
	3	59	24	35	59
	4	48	18	30	63
	Average				61
Vitazyme	1	84	68	16	19
	2	89	62	27	30
	3	66	44	22	33
	4	61	21	40	66
	Average				-37-



Reduction in unproductive rose stems with Vitazyme: 24 percentage points <u>Observations on root mass</u>: Examination of the roots of the respective treatments revealed a decided advantage for the Vitazyme treated rose plants. **Roots were heavier with more root hairs** for treated plants.

<u>Observations on growth</u>: Visual examination of the various blocks of treated and untreated roses showed that Vitazyme caused an **increase in the number of productive stems**, and these stems were **more vigorous and uniform** than the untreated controls.

<u>Conclusions</u>: In this study of rose production (variety Latin Lady) in Ecuador, the objective of reducing the number of "blind", unproductive flower stems was achieved using Vitazyme biostimulant. Using weekly applications of 1.55 ml per 30 m² of bed, the treated plants were more growthy, developed more root mass, and had 24 percentage points fewer unproductive stems than the untreated controls. The results show that Vitazyme is a powerful tool for increasing the flowering potential of roses, especially for the varieties that have difficulty producing blossoms on some stems.