Vital Earth Resources

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

2010 Crop Results

Vitazyme on Chinese Mustard

<u>Researcher</u>: unknown <u>Location</u>: Hoc Mon District, Ho Chi Minh City, Viet Nam

<u>Variety</u>: Chinese mustard (*Brassica juncea*) <u>Planting date</u>: July 25, 2010

Preseeding treatment: seeds mixed with dry soil

<u>Experimental design</u>: A field of Chinese mustard was divided into the usual farmer practice and a Vitazyme treated area. The test had three replications, with 30m² per plot, in an effort to evaluate the effect of this product on crop growth..

1. Control (farmer normal practice)

2. Vitazyme

Fertilization: For 30 m², 48 kg of chicken manure, 2 kg of "thermophosphate", and 2 kg of organic fertilizer mixed with N-P₂O₅-K₂O fertilizer.

<u>Vitazyme application</u>: (1) Seeds were mixed with a 10% Vitazyme solution until wet, then dried, and repeated twice more; (2) soil and leaf spray of 3 ml of Vitazyme in 3 liters of water for 30 m², seven days after planting; (3) leaf spray of 3 ml of Vitazyme in 3 liters of water for 30 m², 14 days after planting.

<u>Time to harvest results</u>: The Vitazyme treated mustard was harvested two days earlier than the untreated plots.

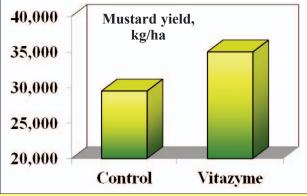
Treatment	Harvest date	Days after planting
Control	August 22,2010	28 days
Vitazyme	August 20,2010	26 days

Reduced time to harvest with Vitazyme: 2 days

Yield results:

Tr	eatment	Yield	Yield	Change
		$kg/30m^2$	kg/ha	kg/ha
1.	Control	88.5	29,500	
2.	Vitazyme	105.0	35,000	5,500 (+19%)

Yield increase with Vitazyme: 19%



<u>Conclusion</u>: This Chinese mustard trial in VietNam proved that Vitazyme, applied on the seeds and two times later during growth, reduced the time to harvest by two days and increased mustard yield by 19%. This improvement in crop maturity and yield is highly attractive for increasing productivity and profits for Vietnamese farmers.

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<u>Researcher</u>: unknown <u>Location</u>: Hoc Mon District, Ho Chi Minh City, Viet Nam

<u>Variety</u>: Chinese mustard (*Brassica juncea*) <u>Planting date</u>: December, 2009

<u>Preseeding treatment</u>: seeds mixed with dry soil

<u>Experimental design</u>: A field of Chinese mustard was divided into the usual farmer practice and a Vitazyme treated area. The test had three replications, with 30m² per plot, in an effort to evaluate the effect of this product on crop growth..

1. Control (farmer normal practice)

2. Vitazyme

Fertilization: For 30 m², 48 kg of chicken manure, 2 kg of "thermophosphate", and 2 kg of organic fertilizer mixed with N-P₂O₅-K₂O fertilizer.

<u>Vitazyme application</u>: (1) A spray of Vitazyme on the soil and leaves at 3 ml in 3 liters of water, at 7 days after planting; (2) foliar spray of 3 ml in 3 liters of water, at 21 days after planting.

<u>Time to harvest results</u>: The Vitazyme treated mustard was harvested 1 to 3 days earlier than the untreated plots.

Reduced time to harvest with Vitazyme: 1 to 3 days

Yield results: The original plot data was lost, but the increase in yield was 7,000 kg/ha.

Yield increase with Vitazyme: 7,000 kg/ha

<u>Conclusion</u>: This Viet Nam test with Vitazyme, during the wet season, revealed that the product, when applied three times during the growth cycle, increased yield by 7,000 kg/ha. The farmers who observed this study also noted the following:

- Vitazyme treated plants had more chlorophyll in the leaves.
- Vitazyme treated plants were stronger.
- Treated plants matured 1 to 3 days before the control plants.
- The product may have been more effective during the wet season than the dry season, making fertilizer more effective while some of the fertilizer was lost due to leaching or denitrification.