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

2010 Crop Results

Vitazyme on Vetch, Spring

Researcher: V. V. Plotnikov *Research organization*: National Academy of Agrarian Sciences
Location: Vinnytsia State Agricultural Research Station, Vinnytsia, Ukraine (Central Forest and Steppe Region)
Variety: Liliana *Soil type*: gray podzolic (organic matter = 2.2%, hydrolyzed N = 8.4 mg/100 g soil, P = 15.8 mg/100 g soil, exchangeable K = 12.4 mg/100 g soil, pH = 5.5)
Previous crop: spring barley *Planting date*: April 17, 2010 *Planting rate*: 1.8 million seeds/ha
Soil preparation: disking to 6 to 8 cm, tillage to 22 cm, cultivation to 4 to 5 cm
Experimental design: A spring vetch plot area was divided into four replicates with a control and two Vitazyme treatments, with the objective of determining the effects of the product on vetch yield.

1. Control **2. Vitazyme on seeds** **3. Vitazyme on seeds and leaves**

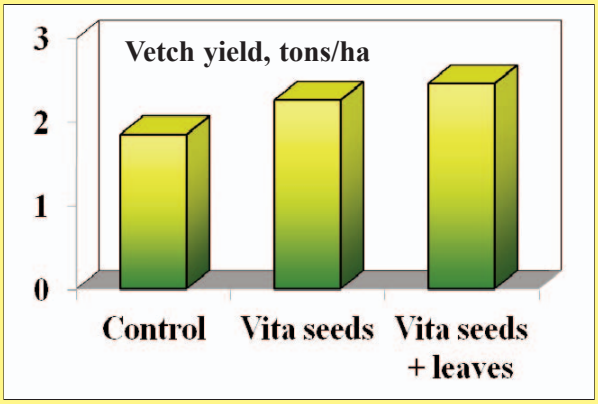
Fertilization: 15-15-15 kg/ha of N-P_2O_5-K_2O, incorporated before planting

Vitazyme application: Treatments 2 and 3, 1 liter/ha on the seeds at planting on April 17; Treatment 3, 1 liter/ha on the leaves and soil at early bloom on June 9

Yield results:

Treatment	Yield	Yield change
	tons/ha	tons/ha
1. Control	1.85	---
2. Vitazyme, seeds	2.26	0.41 (+22%)
3. Vitazyme, seeds + leaves	2.46	0.61 (+33%)

Yield increase with Vitazyme: 22 to 33%



Income results: The single seed treatment produced 1,005 hrn/ha more increase, whereas the seed plus foliar treatment increased yield by 1,305 hrn/ha.

Conclusion: Vitazyme in this replicated Ukranian spring vetch trial produced excellent yield increases using both a seed treatment (22%), and a seed plus foliar treatment (33%). Income increases were commensurate with yield increases: 1,005 and 1,305 hrn/ha, respectively. These results illustrate how effective this biostimulant is to improve the yields and income for vetch in Ukraine.