Vital Earth Resources
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2010 Crop Results

Vitazyme on Buckwheat

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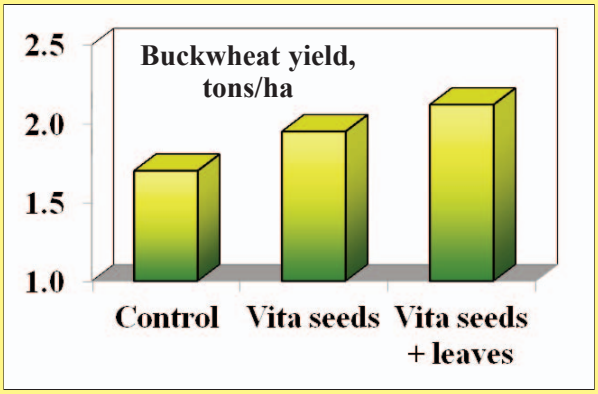
Location: Vinnytsia State Agricultural Research Station, Vinnytsia, Ukraine (Central Forest and steppe Region)
Variety: Ukrainian Super Elite *Soil type*: gray podzolic (organic matter = 2.2%, hydrolyzed N = 8.4 mg/100 g soil, P = 15.8 mg/100 g soil, exchangeable K = 12.4 mg/100 g soil, pH = 5.5)
Previous crop: sugar beets *Planting date*: May 7, 2010 *Planting rate*: 4.5 million seeds/ha
Soil preparation: tillage to 22 cm, harrowing to 3 to 4 cm
Experimental design: A buckwheat 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 yield.

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

Fertilization: 30 kg/ha of N, incorporated before planting
Vitazyme application: Treatments 2 and 3, 1 liter/ha on the seeds at planting on May 7; Treatment 3, 1 liter/ha on the leaves and soil at early bloom on June 7
Yield results:

Treatment	Yield	Yield change
	tons/ha	tons/ha
1. Control	1.70	---
2. Vitazyme, seeds	1.95	0.25 (+15%)
3. Vitazyme, seeds + leaves	2.12	0.42 (+25%)

Yield increase with Vitazyme: 15 to 25%



Income results: Income was increased by 630 hrn/ha for one treatment, and 835 hrn/ha for two treatments.
Conclusions: This Ukrainian trial with buckwheat revealed that Vitazyme, applied either on the seeds or on the seeds plus the leaves, gave an excellent yield response: 15% for the seeds only, and 25% for the seeds plus the leaves. Income increases were from 630 to 855 hrn/ha. This program is an excellent management practice for buckwheat growers in Ukraine.