# Effects of VersaMax and VersaMax plus Bioforge on Soybean Grain Yield

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## **Objective**

To determine if there is an economic response to Versa Max or Versa Max plus Bioforge when added to glyphosate herbicide application in soybeans.

## **Background**

Crop Year: 2013

Location: Dave Williams Farm Tillage: No-till

County/Town: Ross/Bainbridge Soil Test: P – 48, K – 213, pH – 6.7

Soil Type: Gessie-Eldean-Ross Planting Date: 05/12/2013
Drainage: Well drained Seeding Rate: 180,000 ppa
Previous Crop: Corn Harvest Date: 10/01/2013

#### **Methods**

This was a randomized complete block design with three replications. Treatments were glyphosate with one quart per acre Versa Max Soybean, glyphosate with one quart per acre Versa Max Soybean plus 0.5 pint per acre Bioforge, and a control with only glyphosate applied. application was made with 15 gallons of water on April 13, 2013 when the soybeans were in the V4 stage.

#### **Results**

Soybean grain yield are not significantly different (P > 0.05) on this farm.

#### Yield (bu/A) response to treatments

Treatment	Yield (bu/A)
Versa Max Soybean + glyphosate	68.0
Versa Max Soybean + Bioforge + glyphosate	67.0
Control (glyphosate)	66.2

Not Significant (0.05) LSD 4.35 CV = 2.86

# **Summary**

Agronomy suppliers in the Chillicothe area are promoting the use of Versa Max Soybean and Bioforge as yield enhancers to increase soybean production. Some dealers are claiming a 6 bushel increase with VersaMax Soybean and a 9 bushel increase when used in conjunction with Bioforge. Versa Max is a mixture of macro and micronutrients recommended for foliar application. Bio-Forge® is a patented formulation of N,N' diformyl urea, classified as an antioxidant, and shown to significantly improve growth in a variety of agricultural crops by working on the genetic level.

The control plots were sprayed first with glyphosate. Next the Versa Max was added to the tank and thoroughly agitated. The plots requiring that treatment were sprayed. Finally the Bioforge was added to the tank and thoroughly agitated before spraying the final plots in the field.

The plots were harvested using the full 35 foot width of the combine head through the middle of the plot. The harvested area of each plot represented 0.33 acres. The yields from each plot were measured using a weigh wagon and a sample was taken from each plot. The samples were tested for moisture and yields adjusted accordingly.

Although there was a 1.8 and 0.8 bushel difference in soybean yields, this could not be attributed to the application of these products in this research plot for the 2013 growing season. Given different growing season, the results may vary.

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