# **Bio-Nutritional Foliar Spray Program**

# **Snap Bean**

### **OBJECTIVE**

To evaluate the impact of four cover sprays with Timac Agro USA's bio-nutritional products on snap bean yield.

## **Site Location:**

Baxley, GA

### Researcher:

Josh Lanier, ATC Timac Agro USA

#### STUDY INFORMATION

Planting Date 13-April-2020
Harvest Date 15-June-2020
Variety PV-857
Population 83,000

# **TIMAC AGRO PRODUCTS**



### **KEY FINDINGS**

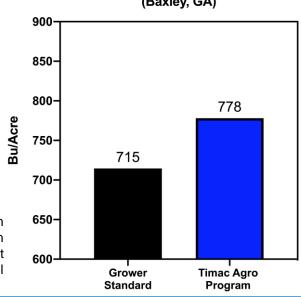
+63 bu/ac
More than Grower Standard

More than Grower Standard

ROI: \$960.00/ac

**Graph:** Timac Agro Bio-Nutritional foliar spray program improved yield 1,880 lbs for machine harvested snap bean crop. The Gross Revenue above was calculated at \$16.00/bushel for for snap beans with Fertileader Gold retail cost of \$48.25/Gallon and Corona K retail cost of \$3.75/lb.

## Timac Agro Program Impact on Snap Bean Yield (Baxley, GA)



# **APPLICATION**

Treatment	Application Rate				
Control	Grower Standard Program				
Timac Agro Program	Fertileader Gold, 1 Qt/Ac, 7 days post-emergence				
	Fertileader Gold, 1 Qt/Ac, 14 days following first application (Pre-bloom)				
	Corona K, 2.5 Lbs/Ac, 7 days following first pod set				
	Corona K, 2.5 Lbs/Ac, 7 days following first Corona K application				



Trial ID: RT-14-SE-SBE-FLGO-CK

#### **MATERIALS AND METHODS**

This study was conducted in an irrigated grower field with conventional tillage practices on a Surrency sand loam soil type. Recommended amounts of P & K fertilizer were applied at planting on April 13 to address soil nutrient levels and 1 gallon of 7-17-3 starter fertilizer solution was placed in-furrow with trace amounts of Zn, Mn, Fe and Cu. The experimental design of the trial was 2 replicated treatment strips in the field with a control strip placed between the 2 areas of treatment. Grower standard IPM measures were used to maintain control of pest pressures throughout the growing season. The Timac Agro foliar program was sprayed with 15 gallons of water per acre at the rates and timings shown on the table on the opposite page. Harvest was conducted on June 15. Four consecutive plants were harvested every 33' from the north edge of the field, four times (16 total plants) on 5 different rows throughout both the treated strips and the control strip (80 plants total for both treatment and control). Plants were stripped of all beans and weighed on precision scales. Total weight beans from control plants equaled 20.6825 lbs while total weight of beans from treated plants totaled 22.5 lbs.

### **RESULTS AND CONCLUSIONS**

The Timac Agro bio-nutritional foliar spray program of Fertileader Gold (2x) and Corona K (2x) improved snap bean yield over grower standard by 1,880 lbs/acre (approx. 63 bu/ac). This resulted in a ROI of \$960.00/Acre.

#### RETURN ON INVESTMENT

Treatment	Yield (lb/ac)	Bushel Ct (30 lbs/bu)	Gross Revenue @ \$16/bu	Change from Control	Added Costs/ac	ROI
Grower Standard	21,463.28	715.44	\$11,447.04	-	\$0.00	-
Timac Agro Bio- Nutritional Program	23,343.75	778.12	\$12,449.92	\$1,002.88	\$42.88	\$960.00

\*Yield based on 80 plant bean weight for treatment and control program off of plant population of 83,000 plants per acre. This does not take into consideration mechanical harvest bean loss; consideration is loss will be equal across treatment and control.

#### **Author:**

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