

## Research and Development

2009 Excel Test HS122

Crop: Wheat

**Test Plot Location:** 

Deport, TX

**Soil Type:** Black Soil

**Planting Methods:** 

No-Till

**Agronomists, Crop Scouts, Facilitators or Witnesses:** 

Mr. John Minoletti Mr. G.W. Sharp

#### Objective:

The objective of this result demonstration was to measure the yield and quality of the wheat when Grasshopper Excel is applied.

## **Materials and Methods:**

Materials and methods used for this experiment were as follows; The test location consisted of a 230 acre field of wheat. The field was then separated and marked into 3 sections. Section 1, 100 acre field sprayed with Grasshopper Excel at a rate of 10 ounces per acre and 8.3 lbs per acre of Grasshopper 44-0-0. The fertilizer used in the application contained micronutrients (Boron .02, Copper .05, Iron .10, Manganese .05, Molybdenum .001 and Zinc .05). Section 2, 100 acre section fertilized with 100 lbs per acre of Urea. Section 3, 30 acres not fertilized. Both applications were made on January 22nd. The wheat was approximately 3 inches tall at the time of application.

**Table I.** Fertilizer and Rates Used in Study

Fertilizer	Applied Rate	Cost per acre	Bushels per acre	Increase	Increase in Revenue per acre	Return
Section 1 Grasshopper Excel 44-0-0	10 oz per acre 8.3 lbs per acre	\$4.68 \$6.60 Total \$11.28	38	10	\$62	449%
Section 2 Urea (46%)	100	\$18	32	4	\$24.8	38%
Section 3 Control	0	0	28	0	0	0

#### **Results and Discussion:**

1<sup>st</sup> analysis: On February 9th, all 3 sections were analyzed. The wheat in Section 1 (Grasshopper Fertilizer) was thicker, greener and 6-8 inches taller than Section 2 (Urea) and 8-10 inches taller than Section 3.

2<sup>nd</sup> analysis: On May 3rd, all sections were harvested. The wheat in section 1 (Grasshopper) yielded 38 bushels per acre. The wheat in section 2 (Urea) yielded 32 bushels per acre. The wheat in section 3 yielded 28 bushels per acre. The net increase in revenue for section 1 was \$50.72 per acre = **449% Return**. The net increase in revenue for section 2 was \$6.8 = 38% Return.

### Conclusion:

Fertilizers and crop supplements have been proven to play an important role in crop production. Although many commercial fertilizers and supplements have been shown to increase yields, many of these products are unable to generate a yield increase large enough to cover the input cost of the fertilizer application. Grasshopper Excel and Advanced Liquid Fertilizer is the exception. On average, Grasshopper has generated a revenue increase per acre that is 2-3 times greater than the input cost of the application. By increasing root development and supplying nutrients directly to the plant, Grasshopper Fertilizer helps the plant achieve maximum growth throughout a variety of adverse growing conditions.

Our Research and Development Department will continue testing wheat and grass in addition to corn, wheat, cotton, milo, rice, alfalfa, canola, etc. We will also be working with a number of Universities and Agriculture Departments who will be participating in these tests.

# Images



