

# Effect of Re-NforceK on Soybean Yield

Steve Prochaska, Ohio State University Field Specialist, Agronomic Crops

## Objective

To evaluate soybean response to the application of Re-NforceK over yield.

## Background

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Crop Year: 2011

Location: OSU Unger Farm

County/Town: Crawford

Soil Type: Blount

Drainage: Systematic

Previous Crop: corn

Tillage: No – tillage

Soil Test: pH 6.8, P 23 ppm, K 124 ppm

Soybean Planting Date: May 31, 2011

Soybean Variety: Pioneer 93M43

Row width; 10 inches

Fertilizer: 18-46-60 per acre

Soybean Seeding Rate 165,000 seeds/acre

Soybean Harvest Date: October 17, 2011

## Methods

Pioneer 93M43 soybeans were planted May 31, 2011 in 10 inch rows with a Great Plains drill at a rate of 165,000 seeds per acre. Re-NforceK (RK) was applied to soybeans in 15 gallons of water at a rate of 2 quarts to the acre to soybean in reproductive stages 1 to 2. RK as applied (2 quarts to the acre) contained .29 lbs of nitrogen, 1.17 lbs of potash and .76 lbs of sulfur. This study used a randomized complete block design with two treatments replicated 4 times to compare soybean yield over RK and a control. Plot size was 100 by 120 feet. A combine with a 20 foot header was used to harvest plots on Nov. 18, 2011. Two measurements from each plot were made with a weigh wagon and averaged for each single observation.

### Treatments

- 1) RK application to soybean @ 2 qts/acre
- 2) Control

## Results

Table 1. Moisture and Yield of 93M43 Soybeans

Treatment	Ave. Moisture	Ave. Yield (bu/A)
RK on beans	10.6	55
Control	10.7	53
LSD (P=0.05)		NS
CV(%)		3

## Summary

There was not a significant difference in yield between soybeans treated with RK and the control. This study represented data from one year; a better conclusion of the efficacy of RK may be obtained by repeating the study over additional years and sites.

## Acknowledgement

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For more information, contact:

Name: Steve Prochaska

Address: 222 West Center St.

Marion, Ohio 43302

prochaska.1@osu.edu

