

Effect of Radiate Growth Regulator on Soybean Yield

Mike Gastier, Ohio State University Extension ANR Educator

Steve Prochaska, Ohio State University Extension Field Specialist, Agronomic Crops

Objective

To evaluate yield response of soybean to Radiate growth regulator when applied with glyphosate and insecticide at soybean growth stage R1.

Background

Crop Year:	2012	Soil Test:	pH 6.7, P 25 ppm, K 125 ppm
Location:	Gastier farm, Erie County	Soy Planting Date:	April 29, 2012
County/Town:	Erie	Soy Variety:	Pioneer 92Y50
Soil Type:	Kibbie Silt Loam	Row width:	15 inches
Drainage:	Systematic	Fertilizer:	None
Previous Crop:	Corn	Soy Seeding Rate:	160,000 seeds/acre
Tillage:	Minimum-till chisel	Soy Harvest Date:	September 11, 2012

Methods

Pioneer 92Y50 was planted on April 29, 2012 in 15 inch rows with a Kinze planter at a rate of 160,000 seeds per acre. Radiate, a growth regulating product of Loveland containing IBA and Kinetin, was applied at a rate of 2 oz./acre with glyphosate at 40 oz. /acre and Delta Gold Insecticide at 2 oz. /acre on 6/23/2012 at growth stage R1. Control was the above minus Radiate.

This study used a completely randomized design with two treatments replicated 4 times to compare the yield of soybeans treated with Radiate to a control. A John Deere combine with a 30 foot header was used to harvest plots by making one round through middle of each plot on Sept. 11, 2012. Plots were 90 feet wide and ranged from 217 to 227 feet in length (about 0.33 acre per plot).

Treatments

- 1) Radiate applied at 2 oz. / acre + glyphosate at 40 oz. /acre + Delta Gold at 2 oz. /acre
- 2) Glyphosate at 40 oz. /acre + Delta Gold at 2 oz. /acre

Results

Table 1. Moisture and Yield of Soybean

Treatment	Ave. Moisture	Ave. Yield (bu/A) @ 13%
Radiate @ 2 ounces/acre	12.0	79
Control	12.0	79.8

F=0.61; Not significant. CV =1.76 LSD (P<0.05)

Summary

There was not a significant difference in yield between soybeans treated with Radiate and the control.

Acknowledgement

The author expresses appreciation to Ted Gastier for his cooperation and aid in the planting of this trial.

For more information, contact:

Name: Steve Prochaska

Address: 222 W. Center St.

Marion, Ohio 43302

prochaska.1@osu.edu

