# Effect of Ascend on Soybean Grain Yield

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## Objective

To evaluate yield response of soybeans to the growth regulator Ascend

## Background

Crop Year: 2014
Location: OSU Unger Farm
County/Town: Crawford/Bucyrus
Soil Type: Blount/Pewamo
Drainage: Systematic
Previous Crop: Corn
Tillage: No – tillage
Soil Test: pH 6.5, P 63 ppm, K 197 ppm

Soybean Planting Date: May 11, 2014
Soybean Variety: Pioneer P93Y05
Herbicide: 3.5 oz Canopy, 1 quart glyphosate
Post: 1 quart glyphosate
Treatment Date: July 17, 2014
Soybean Seeding Rate: 160,000 seeds/acre
Date of Harvest: October 2, 2014
Rainfall: 12.5 inches (from 5/11-9/1)

## Methods

Pioneer P93Y05 soybeans containing SCN resistance PI88788 were planted at a rate of 168,000 seeds per acre on May 11th with a Great Plains 2010P, 10 inch row spacing precision drill.

The following burndown and pre-emergent herbicides were applied on May 1: Canopy at a rate of 3.5 oz/acre with 1 quart/acre glyphosate. Post-emergence weed control was accomplished with one application of 1 quart of glyphosate/acre, applied on July 2. Treatments were Ascend (cytokinin, indolebutyric acid and gibberellic acid), applied at 6 ounces/A and an untreated control. Treatments were applied on July 16. Each plot was sprayed with a $CO_2$ small plot sprayer calibrated to deliver 15 gallons per acre at 40 PSI with nozzle XR11015.

This study was arranged in a randomized complete block design replicated four times. Each plot was 10 feet wide and 45 feet long. Plots were trimmed to 40 feet in length. Plots were harvested on October 2nd using a Kincaid 8 XP small plot combine harvesting seven and a half feet (9 rows) of the plot and the entire 40 foot length.

Treatments:

1) Ascend
2) Control

## Results

Table 1. Soybean yield adjusted to 13.5 % moisture

| Treatment | Mean yield (bu/acre) |
|---|---|
| Ascend | 70.2 |
| Control | 70.8 |

P>F=.767, NS; STD=4.37; CV=6.31

## Summary

There were no significant differences observed in yield.

## Acknowledgement

The authors express appreciation to Chuck Smith for his cooperation and aid in the planting and harvest of this trial. Also to the OSU soybean performance team for harvesting the trials.

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