Effect of Quadris on Soybean Gain Yield

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Objective

To evaluate yield response of soybeans to Quadris (azoxystrobin) when applied at soybean growth stage R3/R4.

Background

Crop Year: 2013 Soybean Planting Date: May 16, 2013
Location: OSU Unger Farm Soybean Variety: Pioneer P93Y06
County: Crawford Herbicide: 3.5 oz Canopy, 1 qt

Soil Type: Blount/Pewamo glyphosate

Drainage: Systematic Herbicide (Post): 1 qt glyphosate 2 times

Previous Crop:CornTreatment Date:July 25 2013Tillage:No – tillageSoybean Seeding rate:168,000 seeds/acreSoil Test:pH 5.9, P 34 ppm, K 146 ppmDate of Harvest:October 2, 2013

SCN Count 1: 0 eggs per 100cc (drained) Rain fall: 25.57 inches (5/16-10/2)

Methods

Pioneer P93Y06 soybeans containing SCN resistance PI88788 were planted at a rate of 168,000 seeds per acre on May 16th with a Great Plains 2010P, 10 inch precision drill. The following herbicides were applied on April 24: Canopy at a rate of 3.5 oz/acre with 1 quart/acre glyphosate. Postemergence weed control was accomplished with two applications of 1 quart of glyphosate/acre, applied on June 18 and July 22. SCN samples were taken in October.

This study used a randomized complete block design with 4 replications. Quadris applied at 6 oz/acre at growth stage R3 was compared to an untreated control. Each plot was sprayed with a CO₂ small plot sprayer calibrated to deliver 15 gallons per acre at 40 PSI on July 25. Plots were 10 feet wide and 40 feet long but were trimmed to 35 feet in length. Plots were harvested on October 2nd using a Hege 140 small plot combine harvesting the center five feet of the plot and the entire 35 foot length.

Treatments

- 1) Quadris 6 oz/acre
- 2) Control (no fungicide application)

Results

Table 1. Soybean yield adjusted to 13.5 % moisture

Treatment	Mean yield (bu/acre)
Quadris 6 oz/acre	55.7
Control	54.4
F=.14, P>F=.72, NS: CV =9.0, S=4.62	

There was no significant difference in yield between the two treatments. Quadris cost \$15.70 per acre for the product and another \$10.00/acre for application and adjuvants for a total cost of \$25.70 per acre. Soybeans were \$12.23/bushel at harvest. Thus, it would have taken 2.1 bushels per acre to cover costs of material and application resulting in a net loss from this practice without disease pressure present.

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