Effect of Quadris Applied on R3 Soybeans in a Modified Relay Intercrop System

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Objective
To evaluate grain yield response of modified relay intercropped soybeans to Quadris (azoxystrobin) fungicide applied at soybean growth stage R3.

Background
Crop Year: 2013
Location: OSU Unger Farm
County/Town: Crawford
Soil Type: Blount/Pewamo
Drainage: Systematic
Previous Crop: Wheat
Tillage: No – tillage
Soil Test: pH 6.2, P 34 ppm, K 152 ppm
SCN Count: (MRI area) 1160 eggs/100cc
Row width: 10 inches
Fertilizer (lbs N-P-K): 95-58-78
Soybean Planting Date: June 5, 2013
Soybean Variety: Pioneer P93Y24
Seeding Rate: 225,000 seeds/acre
Herbicide (Post): 1 qt Glyphosate (7/22)
Treatment Dates: July 26, 2013
Date of Harvest: October 29, 2013
Rain fall: 25.57 inches (5/16-10/2)

Methods
Pioneer P93Y06 soybeans were planted at a rate of 225,000 seeds per acre on June 5, 2013 with a Great Plains 2010P, 10 inch precision drill. Wheat harvest occurred on July 15, 2013.

This study used a randomized complete block design with two treatments replicated 4 times to compare the treatment yield effect of Quadris at 6oz/acre and a control (no fungicide). Plots were treated on July 26, 2013 when soybeans were in the R3 growth stage. Each plot was sprayed with a CO2 small plot sprayer calibrated to deliver 15 gallons per acre at 40 PSI. Plots were trimmed to 44 feet in average length. Plots were harvested on October 29, 2013 using a Kincaid 8-XP small plot combine harvesting the center five feet of each plot.

Treatment 1
1) Quadris at 6 oz/acre
2) Control (no fungicide)
Results

Table 1. MRI soybean yield (adjusted to 13% moisture)

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Mean yield (bu/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quadris</td>
<td>51.3</td>
</tr>
<tr>
<td>Control</td>
<td>56.2</td>
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</tbody>
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F=2.54, NS; Prob>F=.16; CV =7.99

Summary

This study was conducted at OSU Unger Farm in north central Ohio where Modified Relay Intercropping (MRI) is practiced. In 2013 there was not a significant difference in soybean yield between the Quadris application and the control. Quadris cost $15.70 per acre for the product and another $10.00 for application and adjuvants for a total cost of $ 25.70 per acre. Soybeans were $12.87 at harvest; therefore it would take two bushels per acre to cover cost of fungicide and application.

Acknowledgement

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