

Effect of Planting Date on Modified Relay Intercrop Soybeans in Wheat

Eric A. Richer, Ohio State University Extension Educator, Fulton County

Objective

To evaluate the effect two soybean planting dates on soybean grain yield in a Modified Relay Intercrop (MRI) system.

Background

Crop Year: 2013
Location: Wauseon, OH
County: Fulton County
Soil Type: Mermill, Nappanee, Hoytville
Drainage: Old clay, non-systematic
Previous Crop: Wheat
Tillage: No-till, intercropped into wheat
Soil Test: pH 6.3, P 34 ppm, K 137 ppm

Planting Date: May 15, 2013 and May 30, 2013
Fertilizer: Wheat starter in fall, 1.5 g soy foliar
Seeding Rate: 165,000 seeds/acre, 15" rows
Herbicide: Harmony Extra in wheat – April
1.5 pt glyphosate - August 10
Insecticide: 4 oz Endigo - August 10
Fungicide: 10 oz Quilt - August 10
Harvest Date: October 26, 2013

Methods

This study was designed with two treatments replicated four times in a randomized complete block design. Treatment plots were roughly 55 feet wide by 300 feet long. Treatments were no-till planted with an eleven row planter (15" spacing) on May 15 and May 30. Seed used was Pioneer 93Y22 in all treatments. Plots were harvested with a commercial combine. Yield measurements were taken with a weigh wagon for increased accuracy and shrunk to 13% moisture.

Treatments

- 1) Interseeded soybeans planted May 15
- 2) Interseeded soybeans planted May 30

Results

Table 1. MRI Soybean Yield (bu/ac) Response to Planting Date

| Planting Date | Harvest Moisture | Yield (bu/ac) |
|---------------|------------------|---------------|
| May 15 | 14.1% | 37.7 |
| May 30 | 14.0% | 40.5 |

LSD (0.05) 9.14, CV 10.4 – No significant difference between treatments

Summary

There was no statistically significant difference in grain yield between the May 15th and May 30th plant dates. Abnormal rainfall in June and wheat staygreen delayed wheat harvest until July 13. Further data in the form of multi-year replications will add to the validity of these results.

Acknowledgement

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THE OHIO STATE UNIVERSITY

For more information, contact:
Eric Richer
OSU Extension – Fulton County
8770 State Route 108
Wauseon, OH 43567
Richer.5@osu.edu