# IOWA STATE UNIVERSITY Digital Repository

Iowa State Research Farm Progress Reports

2010

## Modified Oil Soybean Test—North

Kevin O. Scholbrock *Iowa State University*, kscholbr@iastate.edu

Follow this and additional works at: <a href="http://lib.dr.iastate.edu/farms\_reports">http://lib.dr.iastate.edu/farms\_reports</a>

Part of the <u>Agricultural Science Commons</u>, <u>Agriculture Commons</u>, and the <u>Agronomy and Crop Sciences Commons</u>

### Recommended Citation

Scholbrock, Kevin O., "Modified Oil Soybean Test—North" (2010). *Iowa State Research Farm Progress Reports*. 406. http://lib.dr.iastate.edu/farms\_reports/406

This report is brought to you for free and open access by Iowa State University Digital Repository. It has been accepted for inclusion in Iowa State Research Farm Progress Reports by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.

### Modified Oil Soybean Test—North

### **Abstract**

The purpose of this test was to evaluate the experimental modified oil soybean lines adapted to northern Iowa. The 2009 Modified Oil Soybean Test included 1% linolenic and low saturates, and for comparison of agronomic traits, commercially grown varieties released by Iowa State University. Oil from 1% linolenic and low saturates soybean varieties grown in Iowa is used in the frying oil market. This oil is healthier for the consumer.

### Keywords

RRFR A9098, Agronomy

### Disciplines

Agricultural Science | Agriculture | Agronomy and Crop Sciences

### Modified Oil Soybean Test—North

### **RFR-A9098**

Kevin Scholbrock, agricultural specialist Department of Agronomy

### Introduction

The purpose of this test was to evaluate the experimental modified oil soybean lines adapted to northern Iowa. The 2009 Modified Oil Soybean Test included 1% linolenic and low saturates, and for comparison of agronomic traits, commercially grown varieties released by Iowa State University. Oil from 1% linolenic and low saturates soybean varieties grown in Iowa is used in the frying oil market. This oil is healthier for the consumer.

#### Methods

The modified oil soybean test for the northern district was planted at four Iowa locations— Ames, Charles City, Kanawha, and Wallingford. At each location, three replications of four-row plots were planted. The plots were 13 ft long with row spacing of 27 in. The seeding rate was nine seeds/ft. Agronomic characteristics evaluated at Kanawha included plant height and lodging susceptibility. The center two rows were harvested using a self-propelled research plot combine. The moisture and weight of each plot were measured on the combine during harvest. The harvested seed was brought to Ames for seed weight calculation, oil and protein analysis, and fatty acid analysis.

### Results

The test results of the commodity varieties IA1022 and IA2094, the 1% linolenic varieties, the low saturates varieties and experimental lines A07-421002, A07-421013, and A07-521023, are summarized in Table 1. The data obtained from the test helped determine that A07-421002 (now IA1025), A07-421013, and A07-521023 (now IA2099) should be released to interested growers.

### Acknowledgements

Thank you David Rueber, Northern Research Farm superintendent, for helping select the plot site, applying the pre-plant herbicide, preparing the seed bed, and harvesting the border rows.