IOWA STATE UNIVERSITY Digital Repository

Iowa State Research Farm Progress Reports

2008

Modified Oil Soybean Test—North

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

Follow this and additional works at: http://lib.dr.iastate.edu/farms_reports Part of the <u>Agricultural Science Commons</u>, <u>Agriculture Commons</u>, and the <u>Agronomy and Crop</u> <u>Sciences Commons</u>

Recommended Citation

Scholbrock, Kevin O., "Modified Oil Soybean Test—North" (2008). *Iowa State Research Farm Progress Reports*. 765. http://lib.dr.iastate.edu/farms_reports/765

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 for comparison of agronomic traits. The 2007 Modified Oil Test included 1% linolenic and low saturates of new and 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

Agronomy

Disciplines

Agricultural Science | Agriculture | Agronomy and Crop Sciences

Modified Oil Soybean Test-North

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 for comparison of agronomic traits. The 2007 Modified Oil Test included 1% linolenic and low saturates of new and 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.

Materials and Methods

The modified oil soybean test for the northern district was planted at five Iowa locations— Ames, Charles City, Curlew, Eldora, and Kanawha. 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/foot. 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 and Discussion

The test results of the 1% linolenic experimental line A05-213034, the low saturates experimental line A05-215007, and the commodity variety IA2068 are summarized in Table 1. The data obtained from the test helped determine that A05-213034 and A05-215007 should be released.

Acknowledgements

Thanks to 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.