IOWA STATE UNIVERSITY

Digital Repository

Iowa State Research Farm Progress Reports

2014

Elite 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 Sciences Commons</u>

Recommended Citation

Scholbrock, Kevin O., "Elite Soybean Test—North" (2014). *Iowa State Research Farm Progress Reports*. 2057. http://lib.dr.iastate.edu/farms_reports/2057

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.

Elite Soybean Test—North

Abstract

The purpose of this test was to evaluate the experimental elite soybean lines adapted to northern Iowa. The 2013 Elite Test for comparison of agronomic traits included SCN resistant, general use, large seed and high protein, large seed, and lipoxygenase-free varieties released by Iowa State University. These varieties are used in the production of soy foods.

Keywords

Agronomy

Disciplines

Agricultural Science | Agriculture | Agronomy and Crop Sciences

Elite Soybean Test—North

RFR-A1394

Kevin Scholbrock, agricultural specialist Department of Agronomy

Introduction

The purpose of this test was to evaluate the experimental elite soybean lines adapted to northern Iowa. The 2013 Elite Test for comparison of agronomic traits included SCN resistant, general use, large seed and high protein, large seed, and lipoxygenase-free varieties released by Iowa State University. These varieties are used in the production of soy foods.

Materials and Methods

The elite soybean test for the northern district was planted at four Iowa locations including Ames, Charles City, 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/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 and Discussion

The test results of the general use varieties, the large seed and high protein varieties, and the lipoxygenase-free varieties including the new variety IA2109 are summarized in Table 1. The data obtained from the test helped determine that IA2109 should be released to interested growers.

Acknowledgements

Thank you David Rueber, former farm superintendent, and Micah Smidt, current farm superintendent, for helping select the plot site, applying the pre-plant herbicide, preparing the seed bed, and harvesting the border rows.

The soybean varieties developed by Iowa State University were made possible through the financial support of the Iowa Soybean Association and the United Soybean Board.