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Modified Oil Soybean Test—North

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Abstract
The purpose of this test was to evaluate the experimental modified oil soybean lines adapted to northern Iowa. The 2010 Modified Oil Soybean Test included 1 percent linolenic, low saturates, and mid oleic, and for comparison of agronomic traits, commercially grown varieties released by Iowa State University. Oil from 1 percent linolenic, low saturates, and mid oleic soybean varieties grown in Iowa is used in the frying oil market. This oil is healthier for the consumer.

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RFR-A1025

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Introduction

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Materials and Methods

The modified oil soybean test for the northern district was planted at five Iowa locations—Ames, Charles City, Eldora, Kanawha, and Sutherland. 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 Sutherland 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 commodity varieties IA1022 and IA2094, the 1 percent linolenic varieties, the low saturates varieties and mid oleic varieties, are summarized in Table 1. The data obtained from the test helped determine that IA2101 should be released to interested growers.

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