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 2006 Modified Oil Soybean Test included 1% linolenic, 2.5% linolenic, and low saturates, and for comparison of agronomic traits, commercially grown varieties released by Iowa State University. Oil from 1% linolenic, 2.5% 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

This northern research and demonstration farm is available at Iowa State University Digital Repository: http://lib.dr.iastate.edu/farms_reports/938
Modified Oil Soybean Test—North

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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, 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 lines A05-114010 and A05-114019, the low saturates experimental line A04-641024, and the commodity varieties IA1021 and IA2068 are summarized in Table 1. The data obtained from the test helped determine that A05-114010, A05-114019, and A04-641024 should be released as IA2077, IA2078, and IA2092.

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