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Modified Oil Soybean Test—South

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Abstract
The purpose of this test was to evaluate the experimental modified oil soybean lines adapted to southern Iowa. The 2009 Modified Oil Soybean Test included 1% linolenic, 2.5% linolenic, mid oleic, and low saturates, and for comparison of agronomic traits, commercially grown varieties released by Iowa State University. Oil from 1% linolenic, 2.5% linolenic, mid oleic, and low saturates soybean varieties grown in Iowa is used in the frying oil market. This oil is healthier for the consumer.

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Disciplines
Agricultural Science | Agriculture | Agronomy and Crop Sciences
Modified Oil Soybean Test—South

RFR-A9097

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Introduction
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Methods
The modified oil soybean test for the southern district was planted at five Iowa locations—Ames, Agency, Carlisle, Greenfield, and Osceola. 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 Greenfield 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 IA3023 and IA4004, the 1% linolenic varieties and experimental lines A07-523041, A07-523044, A07-621064, A07-622013, and A07-622070, the 2.5% linolenic variety IA3018, the mid oleic varieties, and the low saturates varieties and experimental lines A06-817038, A07-521017, A07-521030, and A07-521055, are summarized in Table 1. The data obtained from the test helped determine that A06-817038 (now IA3049), A07-521017 (IA2100), A07-521030, A07-521055, A07-523041 (IA2101), A07-523044 (IA3050), A07-621064 (IA3043), A07-622013 (IA4005), and A07-622070 (IA3044) should be released to interested growers.

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