

Elite Soybean Test—North

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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.

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