AGRONOMY SCIENCES

RESEARCH UPDATE

Intensive Soybean Management Demonstration 2013

Objective

- Compare soybean yield performance using a system of aggressive soil fertility and pest management practices with a more conventional, low-input system.

Soybean plants in intensive management system (left) were taller and had earlier canopy closure than the soybeans in the conventional management system (right); July 7, 2013.

Study Description

Planting Date: June 3, 2013

Location: Johnston, IA

Plot Layout: Four 10 x 17.4 ft plots per entry

Factors:

Pioneer® Varieties[1]: P28T33R (RR), P29T98R (RR)

Seeding Rate: 125,000 and 175,000 seeds/acre

Management System:

Intensive Management System

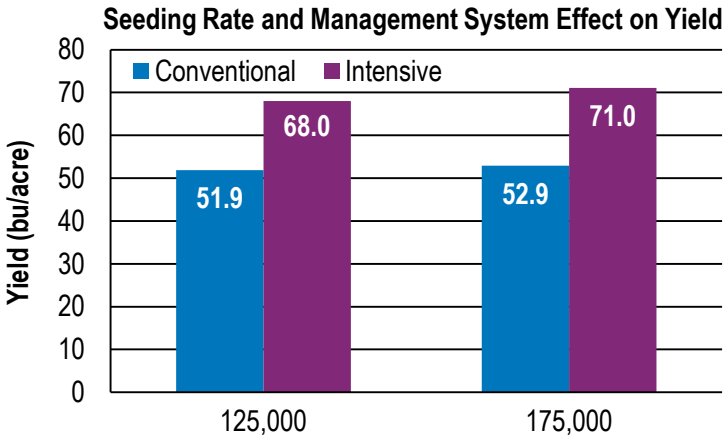
- Nitrogen: 100 lb/acre sidedress N applied at R2 stage
- Seed Treatment: PPST (FST+IST)
- Foliar Fungicide/Insecticide Application: Aproach® (9.0 oz/acre) + Asana® XL (9 oz/acre)

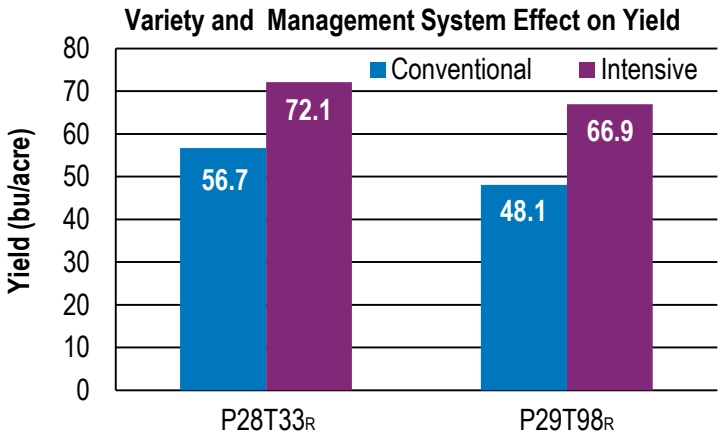
Conventional Management System

- Non-treated seed

Results

- The Johnston farm experienced a wet spring and early season flooding, which delayed soybean planting until June 3.
- Intensive management practices increased average soybean yield by 17 bu/acre compared to conventional management practices.
- The yield increase associated with intensive management was relatively consistent across varieties and seeding rates.
- Yield of P28T33R was similar between seeding rates; however, yield of P29T98R was 5 bu/acre greater at the higher seeding rate (data not shown).
- There was no single management practice within the intensive system to which the yield increase can be clearly attributed. It is likely that there was an additive effect from multiple management practices.





[1]All Pioneer products are varieties unless designated with LL, in which case some are brands.
RR - Contains the Roundup Ready® gene. Roundup Ready® is a registered trademark used under license from Monsanto Company. Pioneer® brand products are provided subject to the terms and conditions of purchase which are part of the labeling and purchase documents. 2013 data are based on average of all comparisons made in one location through Dec. 4, 2013. Multi-year and multi-location is a better predictor of future performance. Do not use these or any other data from a limited number of trials as a significant factor in product selection. Product responses are variable and subject to a variety of environmental, disease, and pest pressures. Individual results may vary.