How Do Planting Date, Fungicide, and Insecticide Impact Soybean Yield?

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OBJECTIVE

Evaluate a standard soybean production system compared to an enhanced soybean production system.

STUDY DESIGN

This study was organized as a randomized complete block design with three replications of treatments. Treatments included:

- **Enhanced Production System**
  - Soybeans planted late April to mid-May
  - Seeding rate of 130,000 seeds per acre
  - Foliar fungicide and insecticide applied at R3
- **Standard Production System**
  - Soybeans planted mid-to- late May
  - Seeding rates of 160,000 seeds per acre
  - Foliar fungicide and insecticide applied at R3

STUDY RESULTS BY LOCATION

COSHOCTON COUNTY

Treatments	Ave. Plants/Ac.	Yield
Enhanced	107,000	60 bu./ac. (a)
Standard	132,967	56 bu./ac. (a)

MADISON COUNTY

Treatments	Ave. Plants/Ac.	Yield
Enhanced	131,111	54 bu./ac. (a)
Standard	104,000	50 bu./ac. (b)

PICKAWAY COUNTY

Treatments	Ave. Plants/Ac.	Yield
Enhanced	99,000	57 bu./ac. (a)
Standard	156,000	48 bu./ac. (b)

TUSCARAWAS COUNTY

Treatments	Ave. Plants/Ac.	Yield
Enhanced	118,300	62 bu./ac. (b)
Standard	149,000	67 bu./ac. (a)

Note: Treatment means with the same letter are not significantly different according to Fisher's Protected LSD test at alpha = 0.1

CONCLUSIONS

- Significant differences in yield were found at 3 of 4 locations (Madison, Pickaway, and Tuscarawas)
- The Enhanced treatment, compared to the Standard treatment, resulted in higher yield at three locations (Coshocton, Madison, and Pickaway)
- Disease and insect pressure were minimal at all study locations
- Full canopy was reached early enough to minimize weed pressure at all locations

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