

Soybean Planting Date by Maturity Trial

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Objective

Evaluate how soybean variety maturity and planting date influence soybean grain yield.

Materials and Methods

Crop Year—2022

Location	Nashua
Soil type	Readlyn, Floyd
Previous crop	Corn
Hybrid/variety	Multiple
Planting date	Multiple
Row spacing	30 in.
Seeding rate	189,417 seeds/acre
Tillage	Spring field cultivation—April 12
Fertilizer	None, soil test Melich 3 P = 34ppm, soil test Melich 3 K = 247ppm
Nitrogen	None
Harvest date	October 4
Experimental design	Randomized complete block design
Replications	4
Treatments	Four dates of planting (April 12, April 27, May 16, June 1) and three varieties (P18A33X, P23A15X untreated, P23A15X treated, P28A51X). P23A15X was treated with Pioneer's PPST with iLevo.

Results

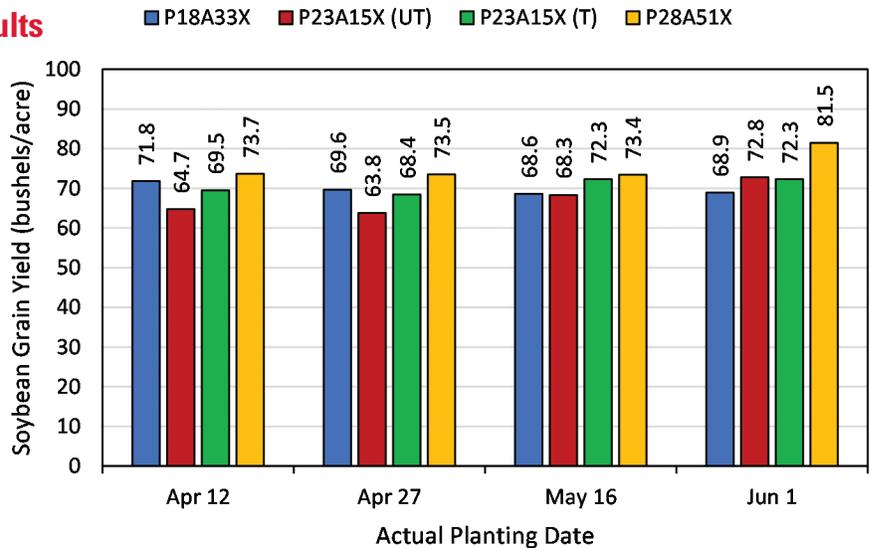


Figure 1. Soybean grain yield at 13% moisture for four varieties and four dates of planting. Soybean variety/maturity and planting are significantly different ($P = 0.0004$ and 0.0428 , respectively), while the variety/maturity by planting date interaction was not significant ($P = 0.4333$).

Key Takeaways

- The P18A33X (1.8MG; 69.7 bushels/acre) and P23A15X (2.3MG; 67.4 and 70.6 bushels/acre) was lower yielding than P28A51X (2.8MG; 75.5 bushels/acre) ($P = 0.0004$).
- April 12 (69.3 bushels/acre), May 16 (71.4 bushels/acre), and June 1 (75.5 bushels/acre) planting dates had statistically nonsignificant yields, however; April 27 (68.6 bushels/acre) was statistically lower than June 1 ($P = 0.0428$).
- There was no interaction between variety/maturity and planting date ($P = 0.4333$).