

Corn Planting Date by Maturity Trial

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Objective

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

Materials and Methods

Northern Research and Demonstration Farm, Kanawha | Crop Year—2022

Soil type	Canisteo
Previous crop	Soybean
Hybrid/variety	P0075AM, P0421Q, P0963AM
Planting date	May 15, May 24, June 3, June 14
Row spacing	30 in.
Seeding rate	35,000 seeds/acre
Tillage	Spring field cultivation, May 15
Fertilizer	None, soil test Melich 3 P = 22 ppm, soil test Ammonium-Acetate K = 130 ppm
Nitrogen	Broadcast UAN 32% at 184 lb. N/acre, May 10
Harvest date	October 28
Experimental design	Randomized complete block design
Replications	4
Treatments	Four dates of planting and three varieties

Results

Table 1. Corn grain yields for date of planting and hybrid main and interaction effects.^a

		Planting Date				Hybrid Mean
		May 15	May 24	June 3	June 14	
		corn grain yield (bushels/acre)				
Hybrid	P0075AM	251.0	249.5	246.0	189.4	234.0
	P0421Q	245.5	245.5	245.0	179.8	229.0
	P0963AM	246.1	237.5	227.2	181.6	223.1
		P = 0.9447				P = 0.2423
Planting date mean		247.5a	244.2a	239.4a	183.6b	
		P < 0.0001				

^aP-values within boxes are used to compare yields of the main effects or interaction effects within each box. Yields that are significantly different at P < 0.05 have different letters following the yield values within each box.

Key Takeaways

- There was no hybrid by date of planting interaction effect; therefore, individual main effects are used.
- Corn yields were lowest for the June 14 date of planting. While the yield trend was decreasing from early to late date of planting, May and early June planting dates were statistically similar.
- There was no hybrid corn yield difference.

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