

Corn Date of Planting by Hybrid Trial

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Objective

Determine the effects of maturity selectin (hybrids) and date of planting on corn yields to define best management practices.

Materials and Methods

Crop Year-2021

order community					
Soil Type: Galva	Nicollet, Canisteo				
Previous Crop	Soybean				
Hybrid	P0075Q, P0220Q, P0421AM, P0595AM, and P1366Q				
Planting Date	April 23, May 7, May 18, and June 4, 2021				
Row Spacing	30-in.				
Seeding Rate	35,000 seeds/acre				
Tillage	Soil Finisher: April 21				
Fertilizer	190 lb. MAP/acre (11–52–0): November 3, 2020 380 lb. potash/acre (0–0–60): November 4, 2020				
Nitrogen	180 lb. N/acre (32–0–0): April 20				
Harvest Date	October 14				
Experimental Design	mized complete block design by corn brand				
Replications	Four				
Treatments Hybrid P0075Q, P0220Q, P0421AM, P0595AM, P1366Q Planting date: April 23, May 7, May 18, June 4					

Results

Table 1. Corn grain yields for date of planting and hybrid main effects in 2021 $^{\rm a}$

	23-Apr	7-May	18-May	4-Jun	Hybrid
Hybrid	soyl	Mean			
P0075Q	124.4	114.2	123.6	93.0	113.8
P0220Q	130.9	127.0	137.7	103.8	124.8
P0421AM	131.3	124.8	130.2	136.9	130.8
P0595AM	120.8	118.7	127.0	129.8	124.1
P1336Q	140.8	138.0	139.3	132.6	137.7
		P = 0.0643			
Planting Date Mean	129.6	124.5	131.5	119.2	

Key Takeaways

- The main interaction of corn hybrid was moderately significant where P0421AM and P1366Q (104 and 113 relative maturity) were higher yielding than P0075Q (100 relative maturity).
- There was no date of planting main effect or date of planting x hybrid interaction effect.
- Yield levels were lower due to drought conditions throughout the early to middle part of the growing season, as well as late season wind-induced lodging.

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