

2024 Field Corn Variety Demonstration Plot Yields at the Jay Research Facility

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This report summarizes the 2024 field corn large plot demonstration trial at West Florida Research and Education Center, Jay, Florida and an on-farm large plot demonstration in Jay, Florida. It shows the yields of 18 varieties in the nonreplicated demonstration trial.

2024 Growing Conditions and Demonstration Design

On 17 April 2024, field corn varieties were planted at 2 seed/ft. (approximately 30,000 seed/A) under conventional tillage. The demonstration plots were planted over an area of Red Bay sandy loam and Orangeburg sandy loam soils that was planted in cotton in the summer of 2023. Prior to planting, any vegetation present was killed with an application of Glyphosate at 1 qt/A. Dual Magnum (1.3pt/A) was applied on 18 April 2024. On 24 April, the plots were irrigated (1 in). Glyphosate (1 qt/A) was applied on 15 May 2024. The fungicide, Miravis (4 oz/A), was applied on 30 May. On 14 June, the plots received another 1 in irrigation. The nonreplicated plots were 4 rows spaced 36 in. apart (12 ft wide) by 340 ft long. The plots were fertilized in 3 split applications. On 19 April, the plots received 134lbs of Phosphorus, 200lbs of Potassium, 39lbs of Sulfur (in accordance to the soil sample results). On 8 May, the plots received 56lbs of Nitrogen. On 17 May, the plots received 224lbs of nitrogen. Yield data was collected from the middle 2 rows of each demonstration plot; plots were harvested on 26 August 2024.

Rainfall in Jay, FL for April and May were close to average while June was above average and July and August were below average.

Table 1. Weather conditions during the 2024 field corn demonstration.

Month	Total Rainfall (average)	Average minimum air temperature (°F)	Average maximum air temperature (°F)
April	4.16in	43.54	86.13
May	9.46in	61.57	92.52
June	5.98in	64.60	94.50
July	7.17in	71.19	95.07
August	4.35	66.81	96.76

2024 Demonstration Summary

Corn yields in the demonstration plots ranged from to bu/A in 2024 (Table 2).

Table 2. 2023-4 field corn demonstration plot yields at the Jay Research Facility.

Company	Variety	Yield (bu/A) 2023	Yield (bu/A) 2024	2 Year Avg
Croplan	CP 5340 vt 2p 113	196.9		
Croplan	CP 5363 tre	-----	202.4	
Croplan	CP B 5497 vt 2p 114	215.3	-----	
Croplan	CP 5550 vt 2p 115	206.7	-----	
Croplan	CP B5678 vt 2p 116	198.4	226.1	212.3
	CP 5682 tre	-----	189.1	
Croplan	CP B5760 tre 117	221.8	193.9	207.9
Croplan	CP B5893 tre 118	180.8	229.4	205.1
Dekalb	DK B66-06 tre 116	184.6	173.7	179.2
Dekalb	DK B68-35 vt 2p 118	218.1	180.5	199.3
Dekalb	DK 68-69 vt 2p 118	172.2	-----	
Dekalb	DK 68-95 ss 118	195.0	185.8	190.4
Dekalb	DK B69-99 tre 119	211.5	189.0	200.3
Dekalb	DK B70-45 ribvt 2p 120	216.5	207.9	212.2
Dekalb	DK117-78 vt2p	-----	190.9	
Syngenta	NK B1677-3110 116	188.3	-----	
Syngenta	NK B1748-3110 117	209.3	-----	
Syngenta	NK 1701-V 117	184.5	-----	
Pioneer	P1289 VYHR 112	211.6	184.9	198.3
Pioneer	P1511 YHR	-----	174.7	
Pioneer	P17677YHR	-----	179.2	
Pioneer	PN 1847 VYHR 118	218.8	-----	
Dyna-Gro	DG D54SS 74	182.2	-----	
Dyna-Gro	DG D58VC65	200.1	-----	
Innvictis	A1548 DGVT2P	-----	181.7	
Innvictis	A1551 VT2P	-----	173.0	