

## 2023 Field Corn Variety Demonstration Plot Yields at the Jay Research Facility

Jennifer Bearden, Hardeep Singh, Madelyn Grant, James Brown

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This report summarizes the 2023 field corn large plot demonstration trial at West Florida Research and Education Center, Jay, Florida. It shows the yields of 19 varieties in the nonreplicated demonstration trial.

### 2023 Growing Conditions and Demonstration Design

On 4 April 2023, field corn varieties were planted at 2 seed/ft. (approximately 30,000 seed/A) under conventional tillage. The nonreplicated plots were 4 rows spaced 36 in. apart (12 ft wide) by 350 ft long. The demonstration plots were planted over an area of Red Bay sandy loam and Orangeburg sandy loam soils that was planted in peanuts in the summer of 2022. 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 4 April 2023. On 6 April, the plots were irrigated (1 in). Glyphosate (1 qt/A) was applied on 2 May 2023. The fungicide, Priaxor (6 oz/A), was applied on 19 May along with the insecticide, Mustang Maxx (4 oz/A). On 8 June, the plots received another 1 in irrigation. The plots were fertilized in 2 split applications. On 1 May, the plots received 82lbs of Nitrogen, 45lbs of Phosphorus, 59lbs of Potassium, 23lbs of Sulfur, 3.2lbs of Zinc, and 0.6lbs of Boron. On 17 May, they received 150.5lbs of Nitrogen, 59lb of Potassium, and 23lbs of Sulfur. Yield data was collected from harvesting all 4 rows of each demonstration plot; plots were harvested on 29 August 2023.

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

Table 1. Weather conditions during the 2023 field corn demonstration.

Month	Total Rainfall (average)	Average minimum air temperature (°F)	Average maximum air temperature (°F)
April	4.96 in (4.72 in)	43.18	84.43
May	4.24 in (4.19 in)	49.35	93.09
June	9.28 in (7.35 in)	63.99	95.68
July	3.3 in (7.71 in)	69.37	95.97
August	1.64 in (7.18 in)	66.81	100.99

## 2023 Demonstration Summary

Corn yields in the demonstration plots ranged from 172 to 222 bu/A in 2023 (Table 2). The top five varieties are in bold and yielded over 215 bu/A. All plots received a total of 232.5 lbs of Nitrogen, 45 lbs of Phosphorus, 118 lbs of Potassium, 46 lbs of Sulfur, 3.2 lbs of Zinc, and 0.6 lbs of Boron per acre for the growing season.

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

Company	Variety	Moisture at Harvest (%)	Yield (bu/A) at 15% moisture	Test Weight (lb)
Croplan	CP 5340 vt 2p 113	14.8	196.9	55.5
<b>Croplan</b>	<b>CP B 5497 vt 2p 114</b>	<b>15.1</b>	<b>215.3</b>	<b>58</b>
Croplan	CP 5550 vt 2p 115	13.9	206.7	56.6
Croplan	CP B5678 vt 2p 116	14.8	198.4	58.4
<b>Croplan</b>	<b>CP B5760 tre 117</b>	<b>14.41</b>	<b>221.8</b>	<b>58.3</b>
Croplan	CP B5893 tre 118	16.7	180.8	58.8
Dekalb	DK B66-06 tre 116	14.6	184.6	57.2
<b>Dekalb</b>	<b>DK B68-35 vt 2p 118</b>	<b>15.5</b>	<b>218.1</b>	<b>58.5</b>
Dekalb	DK 68-69 vt 2p 118	16.8	172.2	59.1
Dekalb	DK 68-95 ss 118	15.7	195.0	58
Dekalb	DK B69-99 tre 119	16.6	211.5	58.7
<b>Dekalb</b>	<b>DK B70-45 ribvt 2p 120</b>	<b>15.6</b>	<b>216.5</b>	<b>58.5</b>
Syngenta	NK B1677-3110 116	14.3	188.3	57.5
Syngenta	NK B1748-3110 117	13.6	209.3	56.9
Syngenta	NK 1701-V 117	12.6	184.5	55.9
Pioneer	PN B1289 VYHR 112	13.9	211.6	58.8
<b>Pioneer</b>	<b>PN 1847 VYHR 118</b>	<b>14.9</b>	<b>218.8</b>	<b>60.2</b>
Dyna-Gro	DG D54SS 74	13.4	182.2	58
Dyna-Gro	DG D58VC65	14.5	200.1	59.6