

# 2021 Cotton Variety Trial Report



## Two Location Yield Summary

This page provides the yield summaries for both locations. The organic soil trial was conducted at IMPACT Agronomics' research farm in Pantego, NC. The mineral soil trial was conducted at the site of the 2021 Blackland Farm Managers Tour at Manning Farms. The organic site was a Hyde loam and the mineral site was an Arapahoe Fear fine sandy loam. More details for each trial and location can be found on the following page.

### Two Location Averages (Lint Yield lbs/A)

	Variety	Mineral	Organic	Average
1	NG 3195 B3XF	1210	1454	1332
2	PHY 360 W3FE	1067	1515	1291
3	PHY 400 W3FE	1024	1510	1267
4	NG 4190 B3XF	979	1465	1222
5	ST 5091 B3XF	1099	1265	1182
6	ST 4990 B3XF	972	1342	1157
7	PHY 443 W3FE	869	1428	1148
8	ST 4550 GLTP	916	1304	1110
9	A 9371 B3XF	827	1362	1095
10	NG 4936 B3XF	796	1261	1029

Means shaded in green do not significantly differ from the highest yield.

## Seed Company Information

We would like to thank all the seed companies that sponsored varieties in these two trials this year. We look forward to continuing and expanding our variety testing next year.

### Armor

Gardner Smith  
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### Phytogen

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### Stoneville

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# Individual Trial Data

## Organic Soil Site Description

This trial was planted at IMPACT Agronomics' Pike Road Farm. The soil type for this location is a Hyde loam classified as an organic soil by NCDA. This trial was planted on May 6 and harvested on October 20. The plots were 2 rows by 40 feet long, with 36-inch row spacing and replicated four times. It was planted at a rate of 43,500 plants/A.

This trial received no fertilizer pre-plant. 2x2 starter application was 12 gal/A 18-10-0-3S. Layby application was 26 gal/A 30% nitrogen + 5 gal/A 8-0-0-9S.

## Mineral Soil Site Description

This trial was planted at the site of the 2021 Blackland Farm Managers Tour at Manning Farms. The soil type for this location is an Arapahoe Fine Sandy Loam classified as a mineral soil by NCDA. This trial was planted on May 13 and harvested on October 21. The plots were 4 rows by 40 feet long, with 36-inch row spacing and replicated four times. It was planted at a rate of 43,500 plants/A.

This trial received 20 gallons 30% pre-plant. This was applied in early April as the site was originally planned for corn. 2x2 starter application was 12 gal/A 18-10-0-3S. Layby application was 10 gal/A 30% nitrogen + 5 gal/A 8-0-0-9S.

**2021 Cotton Variety Trial Data (Lint Yield lbs/A)**

Mineral			Organic		
NG 3195 B3XF	1210	a	PHY 360 W3FE	1515	a
ST 5091 B3XF	1099	ab	PHY 400 W3FE	1510	a
PHY 360 W3FE	1067	abc	NG 4190 B3XF	1465	ab
PHY 400 W3FE	1024	bcd	NG 3195 B3XF	1454	ab
NG 4190 B3XF	979	b-e	PHY 443 W3FE	1428	abc
ST 4990 B3XF	972	b-e	A 9371 B3XF	1362	bcd
ST 4550 GLTP	916	c-f	ST 4990 B3XF	1342	bcd
PHY 443 W3FE	869	def	ST 4550 GLTP	1304	cd
A 9371 B3XF	827	ef	ST 5091 B3XF	1265	d
NG 4936 B3XF	796	f	NG 4936 B3XF	1261	d
LSD P=.15	167.45		LSD P=.15	137.26	
Standard Deviation	159.82		Standard Deviation	124.49	
CV	16.38		CV	8.95	

Means shaded in green do not significantly differ from the highest yield.

Means followed by same letter or symbol do not significantly differ (P=.15, LSD).