

2021 Corn Variety Trial Report

Summary



Two Location Yield Summary

This page provides the yield summaries for both locations. The trials were conducted at IMPACT Agronomics' research farm in Pantego, NC. The organic site was a Hyde loam and the mineral site was a Cape Fear fine sandy loam. More details, including planting information, fertility, moisture, test weight and lodging, for each trial and location can be found on the following pages.

Two Location Yield Summary

Hybrid	Mineral	Organic	Average
Armor A1447 PRO2	147.3	207.0	177.2
AgriGold A647-42TRC	127.8	212.8	170.3
Pioneer 1870 YHR	144.0	195.1	169.5
AgriGold A645-80GT	144.7	190.5	167.6
Dekalb DKC 67-44 VT2P	141.4	193.3	167.4
Dekalb DKC 68-69 VT2P	132.5	194.3	163.4
Armor A1575 PRO2	133.9	183.8	158.8
Pioneer 1197 YHR	126.0	189.4	157.7
AgriGold A6572VT2RIB	138.2	172.1	155.1
AgriGold A646-12VT2RIB	109.0	196.4	152.7
AgriGold A639-70STXRIB	100.3	156.0	128.1

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 hybrids in these two trials this year. We would also like to thank the growers who donated some seed to use as the competitor varieties. We look forward to continuing and expanding our hybrid testing next year.

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Organic Soil – Site Description

This trial was planted at IMPACT's Pike Road farm in Pantego, NC. The soil type for this location is a Hyde Loam with approximately 22% organic matter and is classified as an organic soil by NCDA. This trial was planted on April 22 and harvested on September 14. 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 30,000 plants/A.

This trial received 100 lb/A 0-0-60 pre-plant. At planting broadcast application was 20 gal/A 8-0-0-9S + 15 gal/A 30% nitrogen. 2x2 starter application was 12 gal/A 18-10-0-3S. Layby application was 26 gal/A 30% nitrogen + 5 gal/A 11-37-0.

The trial received 1 qt/A Atrazine + 3 pt/A Warrant as a pre-emergence application. Post emergence herbicide was 26 oz/A Roundup + 3 oz/A Laudis. 1 qt/A Brandt Smart Trio was added to this herbicide application.

Organic Soil - Yield Data

Hybrid	% Moisture		Test Weight		Dry Yield (15.5%)
	Value	Symbol	Value	Symbol	Value
AgriGold A647-42TRC	14.3	d	52.6	c	212.8 a
Armor A1447 PRO2	14.5	c	53.7	b	207.0 ab
AgriGold A646-12VT2RIB	14.5	c	53.9	ab	196.4 bc
Pioneer 1870 YHR	15.1	a	54.3	a	195.1 bc
Dekalb DKC 68-69 VT2P	14.8	b	53.6	b	194.3 bc
Dekalb DKC 67-44 VT2P	14.5	c	53.8	ab	193.3 c
AgriGold A645-80GT	14.3	cd	52.4	cde	190.5 c
Pioneer 1197 YHR	13.8	e	51.9	e	189.4 c
Armor A1575 PRO2	14.5	c	52.0	de	183.8 cd
AgriGold A6572VT2RIB	14.4	cd	54.0	ab	172.1 d
AgriGold A639-70STXRIB	13.3	f	49.2	f	156.0 e
LSD P=.15	0.23		0.539		12.762
Standard Deviation	0.219		0.514		12.18
CV	1.53		0.97		6.34

Means shaded in green do not significantly differ from the highest yield or test weight

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

Mineral Soil – Site Description

This trial was planted at IMPACT’s Shop farm in Pantego, NC. The soil type for this location is a Cape Fear Fine Sandy Loam with approximately 8% organic matter and is classified as a mineral soil by NCDA. This trial was planted on April 8 and harvested on September 9. 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 30,000 plants/A.

This trial received no fertilizer pre-plant. At planting broadcast application was 20 gal/A 8-0-0-9S + 15 gal/A 30% nitrogen. 2x2 starter application was 12 gal/A 18-10-0-3S. Layby application was 26 gal/A 30% nitrogen + 5 gal/A 11-37-0.

The trial received 1 qt/A Atrazine + 3 pt/A Warrant as a pre-emergence application. Post emergence herbicide was 26 oz/A Roundup + 3 oz/A Laudis. 1 qt/A Brandt Smart Trio was added to this herbicide application.

Mineral Soil - Yield Data

Hybrid	% Moisture	Test Weight	Dry Yield (15.5%)
Armor A1447 PRO2	15.1 cd	55.2 a	147.3 ab
AgriGold A645-80GT	15.9 ab	54.1 cde	144.7 bc
Pioneer 1870 YHR	16.3 a	55.0 ab	144.0 bc
Dekalb DKC 67-44 VT2P	14.8 cde	54.7 a-d	141.4 bc
AgriGold A6572VT2RIB	14.8 cde	55.3 a	138.2 bcd
Armor A1575 PRO2	14.5 de	52.9 f	133.9 cd
Dekalb DKC 68-69 VT2P	16.1 ab	55.5 a	132.5 cd
AgriGold A647-42TRC	14.6 de	54.2 b-e	127.8 d
Pioneer 1197 YHR	14.4 de	53.4 ef	126.0 d
AgriGold A646-12VT2RIB	15.5 bc	54.9 abc	109.0 e
AgriGold A639-70STXRIB	14.2 e	51.7 g	100.3 e
LSD P=.15	0.759	0.87	12.818
Standard Deviation	0.726	0.832	12.259
CV	4.82	1.53	9.18

Means shaded in green do not significantly differ from the highest yield or test weight