Virginia Cooperative Extension
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Virginia On-Farm Corn Research

2025

A summary of replicated research and demonstration plots conducted by Virginia Cooperative Extension in cooperation with local producers and agribusinesses

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The research and demonstration plots discussed in this publication are a cooperative effort by Virginia Cooperative Extension employees, Virginia Tech and Virginia State University, numerous producers, and many members of the Virginia agribusiness community. The fieldwork and printing of this publication are mainly supported by the Virginia Corn Check-Off Fund through the Virginia Corn Board. This is the forty-second year of this multi-county cooperative project. Further work is planned for 2026. Anyone who would like a physical copy of this publication should contact their local extension office, who can request a copy from the VCE Northumberland County Office.

Producers interested in becoming involved with on-farm plot work, and those with research topic ideas that they would like to have investigated in future on-farm publications should contact their local extension office for further information.

The authors wish to thank the many producers, agribusinesses, and Virginia Cooperative Extension Agents that participated in these research and demonstration plots. This publication is made possible through their continued support and cooperation.

If you are a person with a disability and desire assistance or accommodation interpreting this publication, or would like to request a fully accessible copy of this publication, please contact Trent Jones at the Northumberland County VCE Office at 804-580-5694 or jonesrt@vt.edu.

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General Summary

These demonstrations and replicated studies provide information that can be used by Virginia corn growers to make better management decisions on their farm. These results should be used along with data from other replicated studies when making decisions. Refer to individual location results for additional detail.

Hybrid Comparisons

Corn hybrid selection remains a challenge for Virginia producers. With numerous competitive seed companies and multiple GMO options and seed treatment packages hybrid selection can be a difficult decision. We evaluated early maturity hybrids (107 day RM or less) at four locations, mid maturity hybrids (108-112 day RM) at six locations, and full season hybrids (113 day RM or more) at nine locations. Hybrids from all three maturity groups were planted at the 2025 Virginia Ag Expo site located in Orange County as well as the Gloucester County and City of Chesapeake locations. Farmers should use the results compiled from these studies to assist with future hybrid selection; however, they should continue to plant hybrids of multiple maturities to help spread production risk.

Return on Investment of Variable Rate Technology

While variable rate fertilizer application has the potential to reduce input costs, enhance nutrient-use efficiency, and improve yields, its profitability can vary widely across fields, crops, and management systems. Evaluating return on investment helps determine when and where variable rate application provides measurable financial

Early Maturity Hybrid Comparisons

Early Maturity Hybrid Entries

107 Day Relative Maturity or Less

Table 1. Corn hybrids and respective relative maturity, seed treatments, and genetic traits of each hybrid entered in the early maturity group of the Virginia On-Farm Corn Hybrid Comparison plots

Brand	Hybrid	Relative Maturity	Seed Treatments	Genetic Traits
Dekalb	DKC56-26 RIB	106	Poncho 500	Trecepta
Channel	205-08TRERIB	105	Poncho 500	Trecepta
Innvictis Seeds	0743PWE RA	107	Cruiser 500 + Vibrance	PowerCore
Dyna Gro	D45TC55RIB	105	Poncho 500 + Votivo	Tecepta
Augusta Seed	A2355	105	C250	PWE
Pioneer Hi-Bred	P0487PCE	104	Lumisure 1250	LL, RR2, ENL
Chemgro Seeds	6535RDD	105	Acceleron 500	DroughtGard, Double Pro, RIB Complete
[a]RedTail	RT 57T66	107	C250	Powercore

a Hybrid was only entered at the Virginia Ag Expo location

Yield Summary of Early Maturity Hybrid Comparisons

107 Day Relative Maturity or Less

Table 2. A summary of yield results at 15.5% moisture from corn hybrids entered in the early maturity group by plot location sorted by hybrid average

Brand	Hybrid	Virginia Ag Expo	Chesapeake	Gloucester	Lancaster	Hybrid Average
Dekalb	DKC56-26 RIB	251.2	169.7	[b]	216.8	**212.6**
Dyna Gro	D45TC55RIB	208.5	194.5	144.3	212.8	**190.0**
Channel	205-08TRERIB	251.0	151.8	121.4	214.2	**184.6**
Innvictis Seeds	0743PWE RA	232.0	154.0	128.5	214.4	**182.2**
Augusta Seed	A2355	203.1	170.1	136.0	219.5	**182.2**
Pioneer Hi-Bred	P0487PCE	195.7	182.2	111.0	199.5	**172.1**
Chemgro Seeds	6535RDD	184.9	166.0	111.5	174.9	**159.3**
[a]RedTail	RT 57T66	249.5				
	Location Average	**222.0**	**169.8**	**125.5**	**207.4**	

[a] Hybrid was only entered at the Virginia Ag Expo location
[b] Yield data was not collected – The absence of this data influences the overall hybrid average

Virginia Ag Expo (Orange County) Early Maturity Corn Hybrid Comparison

Cooperators

Producer: Garrett Chambers, Brooke Farms

Extension: Greg Lillard, VCE - Madison County

Trent Jones, VCE - Northumberland and Lancaster Counties

Caleb Bishop, Virginia Tech - Corn and Small Grains Research Specialist

Dr. Carrie Ortel, Virginia Tech - Soybean Agronomist

Dr. Hunter Frame, Virginia Tech - Field Crops Agronomist

Crop Management

Previous Crop: Soybeans

Soil Type: Buffstat Silt Loam

Tillage: No-Till

Planting Date: April 17, 2025

Planting Equipment: SRES Step 4 Plot Planter

Seeding Rate: 32,000 seed / acre

Preplant Fertilizer: 6 Tons bed pack cow manure

Sidedress Fertilizer: 3 Gal. N-Pact

Crop Protection: RoundUp, Sharpen, MSO, Corvus, Atrazine

Harvest Date: September 8, 2025

Harvest Equipment: John Deere S770

Virginia Ag Expo (Orange County) Early Maturity Corn Hybrid Comparison

Table 3. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the early maturity group planted at the Virginia Ag Expo Orange County location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
RedTail	RT57T66	107	15.1	58.1	249.5
Innvictis Seeds	0743PWE RA	107	14.8	63.7	232.0
Dekalb	DKC56-26 RIB	106	14.8	62.3	251.2
Dyna Gro	D45TC55RIB	105	13.5	64.6	208.5
Channel	205-08TRERIB	105	12.9	65.6	251.0
Chemgro Seeds	6535RDD	105	12.9	65.0	184.9
Augusta Seed	A2355	105	12.8	66.0	203.1
Pioneer Hi-Bred	P0487PCE	104	14.1	60.0	195.7

Chesapeake Early Maturity Corn Hybrid Comparison

Cooperators

Producer: C. Frank Brickhouse Jr.

Extension: Roy D. Flanagan III, VCE – City of Virginia Beach
Dr. Nathan Sedghi, VCE – City of Chesapeake

Crop Management

Previous Crop: Soybeans

Soil Type: Acredale Silt Loam

Tillage: Conventional Tillage

Planting Date: May 12, 2025

Planting Equipment: John Deere 1780 JD Maxi Merge Vacuum Planter 8 row

Seeding Rate: 30,000 seeds / acre

Preplant Fertilizer: 600lbs. of 14-14-14 and 30 gal. of 32-0-0 w/ Serpentine 1qt./100gal.

Post Emergence Crop Protection: RoundUp- 1 quart, Laudus- 3oz.

Harvest Date: October 10, 2025

Harvest Equipment: John Deere 9870, 1293 corn head

Chesapeake Early Maturity Corn Hybrid Comparison

Table 5. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the early maturity group planted at the Chesapeake location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Dyna Gro	D45TC55RIB	105	15.7	59	194.5
Pioneer Hi-Bred	P0487PCE	104	18.4	62	182.2
Augusta Seed	A23355	105	15.6	59	170.1
Dekalb	DKC56-26 RIB	106	15.9	61	169.7
Chemgro Seeds	6535RDD	105	15.8	58	166.0
Innvictis Seeds	0743PWE RA	107	15.9	60	154.0
Channel	205-08TRERIB	105	15.7	59	151.8

Gloucester Early Maturity Corn Hybrid Comparison

Cooperators

Producer: Tanner Hearst, Hearst Farms

Extension: Frank Long, VCE - Middlesex, Mathews, and Gloucester Counties

Robbie Longest, VCE – Essex County

Trent Jones, VCE – Northumberland and Lancaster Counties

Makenzie VanLandingham, VCE Summer Intern – Northumberland and Lancaster Counties

Industry: Participating Seed Companies

Blair Hasty, Meherrin Ag.

Crop Management

Previous Crop: Soybeans

Soil Type: Suffolk fine sandy loam

Tillage: No-Till

Planting Date: May 19, 2025

Planting Equipment: 36-inch Massey Ferguson/White 8000 unit, 8-row planter

Seeding Rate: 22,500 seed / acre

Preplant Fertilizer: 150-0-0-30S per acre

Sidedress Fertilizer: 150# N, 50# S

Preplant Crop Protection: None

Post Emergence Crop Protection: Resist + Valor

Harvest Date: November 14, 2025

Harvest Equipment: Claas 485R w/ 8-row corn header

Gloucester Early Maturity Corn Hybrid Comparison

Table 4. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the early maturity group planted at the Gloucester location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Channel	205-08TRERIB	105	14.2	55.2	121.4
Innvictis Seeds	0743PWE RA	107	13.5	58.3	128.5
Dyna Gro	D45TC55RIB	105	14.6	55.4	144.3
Augusta Seed	A2355	105	13.9	54.3	136.0
Pioneer Hi-Bred	P0487PCE	104	13.9	55.7	111.0
Chemgro Seeds	6535RDD	105	13.5	59.3	111.5
Check (Revere)	1137	113	14.5	55.9	115.2

Discussion: All three maturity groups were planted at this location. Early Maturity groups seem to yield better, while mid and full maturity groups seem to struggle. This might have been due to dry planting conditions and no moisture around the middle to high end of the plot during a dry spell during planting. First hybrid (Dekalb DKC 56-26 RIB) in the plot was cut prior to harvest, so no data was entered for that entry. Revere 1137 was used as a check throughout the field. Stand counts were taken on June 11, 2025, and averages in plants per acre were as follows: Channel 205-08 TRERIB – 33,000; Innvictis 0743PWE RA – 27,000; Dyna Gro D45TC55RIB – 26,500; Augusta A2355 – 29,000; Pioneer P0487PCE – 25,500; Chemgro 6535RDD – 27,500; Check: Revere 1137 – 25,500

Lancaster County Early Maturity Corn Hybrid Comparison

Cooperators

Producer: Ridgefield Farm, Jock Chilton, Jonathan Chilton, Wayne George, George Sandy

Extension: Trent Jones, VCE – Northumberland and Lancaster Counties

Industry: Spencer Moody, Helena Agri-Enterprises, LLC

Crop Management

Previous Crop: Soybeans , Rye Cover Crop

Soil Type: Sassafrass Fine Sandy Loam

Tillage: No-Till

Planting Date: April 22, 2025

Planting Equipment: 16 Row John Deere 1770 NT MaxEmerge 5e Upgraded Planter

Seeding Rate: 32,000 seed / acre

Preplant Fertilizer: Variable rate P and K. 15 GPA 28-0-0-5S with burndown. 20 GPA 15-15-0 2x2 starter.

Sidedress Fertilizer: 100-0-0-15S

Preplant Crop Protection: 24 oz./acre Empyros. 32 oz./acre Atrazine.

Post Emergence Crop Protection: 3.6 pints/acre Halex GT. 32 oz./acre Atrazine. 1 pint/acre Megafol.

Harvest Date: September 22, 2025

Harvest Equipment: John Deere S760, Weigh Wagon

Lancaster County Early Maturity Corn Hybrid Comparison

Table 6. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the early maturity group planted at the Lancaster County location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
(Check) Channel	205-08TRERIB	105	15.9	[a]	216.4
Dekalb	DKC56-26 RIB	106	14.5	58.4	216.8
Pioneer Hi-Bred	P0487PCE	104	14.8	59.5	199.5
Innvictis Seeds	0743PWE RA	107	15.7	60.8	214.4
Chemgro Seeds	6535RDD	105	15.1	57	174.9
Dyna Gro	D45TC55RIB	105	14.8	60.4	212.8
Augusta Seed	A2355	105	15.6	58.8	219.5
(Check) Channel	205-08TRERIB	105	15.5	58.1	212.0

[a]Data was not collected

Discussion: The field that this plot was placed in had very little soil or topographic variability though there was some variance in the checks placed at either end of the plot. Overall yields were high with the plots site averaging 208 Bu./A. Rainfall and temperature fluctuated throughout the growing season, enduring very little rainfall in June and August and very high temperatures during pollination.

Mid Maturity Hybrid Comparisons

Mid Maturity Hybrid Entries

108 – 112 Day Relative Maturity

Table 7. Corn hybrids and respective relative maturity, seed treatments, and genetic traits of each hybrid entered in the mid maturity group of the Virginia On-Farm Corn Hybrid Comparison plots

Brand	Hybrid	Relative Maturity	Seed Treatments	Genetic Traits
Dekalb	DKC111-35	111	Poncho 500	VT2P
Revere	0918 VT2P	109	Radius Premium 1250	YGCB
Channel	209-70TRERIB	109	Poncho 500	Trecepta
Innvictis Seeds	1254RIB	112	Acceleron / Poncho 500	Trecepta
Dyna Gro	D52PN76RIB	112	Poncho 500 / Votivo	Powercore Enlist
FS InVISION	FS 5947T RIB	109	Poncho + Votivo 500	Trecepta
Augusta Seed	A2060	110	C250	PWE
Pioneer Hi-Bred	P0995AM	109	Lumisure 1250	LL, RR2
Chemgro Seeds	7255RDP	112	Acceleron 500	VTDouble Pro RIB Complete
Agrigold	642-32VT2RIB	112	Acceleron 500	VT2RIB
[a]NK Seeds	NK1056-V	110	CruiserMaxx 500 + Vayantis	Viptera, RR, LL
[a]Seed Consultants	SC1116PCE	111	Lumisure 1250	PowerCore Enlist
[a]RedTail	RT 61T99	111	C250	Duracade

[a] Hybrid was only entered at the Virginia Ag Expo location

Yield Summary of Mid Maturity Hybrid Comparisons

108 – 112 Day Relative Maturity

Table 8. A summary of yield results at 15.5% moisture from corn hybrids entered in the mid maturity group by plot location sorted by hybrid average

Brand	Hybrid	Virginia Ag Expo	Chesapeake	Gloucester	Westmoreland	Middlesex	Suffolk	Hybrid Average
Dyna Gro	D52PN76RIB	283.1	173.1	140.0	244.1	175.2	217.0	**205.4**
Innvictis Seeds	1254RIB	251.0	177.7	140.5	222.0	160.2	223.4	**195.8**
FS InVISION	FS 5947T RIB	263.3	175.4	125.1	228.4	178.6	198.1	**194.8**
Channel	209-70TRERIB	245.2	180.9	113.0	230.3	166.6	225.7	**193.6**
Pioneer Hi-Bred	P0995AM	252.5	198.7	96.6	226.1	149.9	224.7	**191.4**
Dekalb	DKC111-35	276.6	158.8	133.6	246.7	115.3	206.0	**189.5**
Revere	0918 VT2P	288.8	172.3	99.1	230.2	127.6	212.9	**188.5**
Augusta Seed	A2060	247.9	173.3	100.8	238.2	157.5	201.0	**186.5**
Agrigold	642-32VT2RIB	260.6	190.8	95.9	[b]	160.3	198.3	**181.2**
Chemgro Seeds	7255RDP	251.0	163.0	107.6	213.1	131.8	205.2	**178.6**
[a]NK Seeds	NK1056-V	236.0						
[a]Seed Consultants	SC1116PCE	267.3						
[a]RedTail	RT 61T99	238.5						
	Location Average	**258.6**	**176.4**	**115.2**	**231.0**	**152.3**	**211.2**	

[a] Hybrid was only entered at the Virginia Ag Expo location
[b] Yield data was not collected – The absence of this data influences the overall hybrid average

Virginia Ag Expo (Orange County) Mid Maturity Corn Hybrid Comparison

Cooperators

Producer: Garrett Chambers, Brooke Farms

Extension: Greg Lillard, VCE - Madison County

Trent Jones, VCE - Northumberland and Lancaster Counties

Caleb Bishop Virginia Tech - Corn and Small Grains Research Specialist

Dr. Carrie Ortel, Virginia Tech - Soybean Agronomist

Dr. Hunter Frame, Virginia Tech - Field Crops Agronomist

Crop Management

Previous Crop: Soybeans

Soil Type: Buffstat Silt Loam

Tillage: No-Till

Planting Date: April 17, 2025

Planting Equipment: SRES Step 4 Plot Planter

Seeding Rate: 32,000 seed / acre

Preplant Fertilizer: 6 Tons bed pack cow manure

Sidedress Fertilizer: 3 Gal. N-Pact

Crop Protection: RoundUp, Sharpen, MSO, Corvus, Atrazine

Harvest Date: September 8, 2025

Harvest Equipment: John Deere S770

Virginia Ag Expo (Orange County) Mid Maturity Corn Hybrid Comparison

Table 9. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the mid maturity group planted at the Virginia Ag Expo Orange County location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Innvictis Seeds	1254RIB	112	17.6	58.5	251.0
Dyna Gro	D52PN76RIB	112	18.3	56.9	283.1
Chemgro Seeds	7255RDP	112	17.2	66.7	251.0
Agrigold	642-32VT2RIB	112	19.1	56.6	260.6
NK Seeds	NK1056-V	110	17.2	60.3	236.0
Seed Consultants	SC1116PCE	111	17	62.8	267.3
RedTail	RT 61T99	111	16.8	61.9	238.5
Dekalb	DKC111-35	111	18.6	52.2	276.6
Augusta Seed	A2060	110	14.8	67.1	247.9
Revere	0918 VT2P	109	16.3	58.3	288.8
Pioneer Hi-Bred	P0995AM	109	16.6	57.4	252.5
FS InVISION	FS 5947T RIB	109	15.8	63.0	263.3
Channel	209-70TRERIB	109	17.9	53.7	245.2

Chesapeake Mid Maturity Corn Hybrid Comparison

Cooperators

Producer: C. Frank Brickhouse Jr.

Extension: Roy D. Flanagan III, VCE – City of Virginia Beach

Dr. Nathan Sedghi, VCE – City of Chesapeake

Crop Management

Previous Crop: Soybeans

Soil Type: Acredale Silt Loam

Tillage: Conventional Tillage

Planting Date: May 12, 2025

Planting Equipment: John Deere 1780 JD Maxi Merge Vacuum Planter 8 row

Seeding Rate: 30,000 seeds / acre

Preplant Fertilizer: 600lbs. of 14-14-14 and 30 gal. of 32-0-0 w/ Serpentine 1qt./100gal.

Post Emergence Crop Protection: RoundUp- 1 quart, Laudus- 3oz.

Harvest Date: October 10, 2025

Harvest Equipment: John Deere 9870, 1293 corn head

Chesapeake Mid Maturity Corn Hybrid Comparison

Table 11. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the mid maturity group planted at the Chesapeake location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Pioneer Hi-Bred	P0995AM	109	16.7	59	198.7
AgriGold	642-32VT2RIB	112	16.9	61	190.8
Channel	209-70TRERIB	109	17	60	180.9
Innvictis Seeds	1254RIB	112	16.4	60	177.7
FS InVISION	FS 5947T RIB	109	15.8	58	175.4
Augusta Seed	A2060	110	17.5	61	173.3
Dyna Gro	D52PN76RIB	112	15.9	58	173.1
Revere	0918 VT2P	109	16.3	59	172.3
ChemGro Seeds	7255RDP	112	15.7	59	163
Dekalb	DKC111-35	111	16.2	59	158.8

Gloucester Mid Maturity Corn Hybrid Comparison

Cooperators

Producer: Tanner Hearst, Hearst Farms

Extension: Frank Long, VCE - Middlesex, Mathews, and Gloucester Counties

Robbie Longest, VCE – Essex County

Trent Jones, VCE – Northumberland and Lancaster Counties

Makenzie VanLandingham, VCE Summer Intern – Northumberland and Lancaster Counties

Industry: Participating Seed Companies

Blair Hasty, Meherrin Ag.

Crop Management

Previous Crop: Soybeans

Soil Type: Suffolk fine sandy loam

Tillage: No-Till

Planting Date: May 19, 2025

Planting Equipment: 36-inch Massey Ferguson/White 8000 unit, 8-row planter

Seeding Rate: 22,500 seed / acre

Preplant Fertilizer: 150-0-0-30S per acre

Sidedress Fertilizer: 150# N, 50# S

Preplant Crop Protection: None

Post Emergence Crop Protection: Resist + Valor

Harvest Date: November 14, 2025

Harvest Equipment: Claas 485R w/ 8-row corn header

Gloucester Mid Maturity Corn Hybrid Comparison

Table 10. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the mid maturity group planted at the Gloucester location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Check (Revere)	1137	113	14.5	55.9	115.2
Dekalb	111-35	111	14.2	54.4	133.6
Revere	0918 VT2P	109	13.9	55.1	99.1
Channel	209-70TREBRIB	109	14.1	55.7	113.0
Innvictis Seeds	1254RIB	112	13.1	56.3	140.5
Dyna Gro	D52PN76RIB	112	14.6	52.7	140.0
FS InVISION	FS 5947T RIB	109	14.2	56.2	125.1
Augusta Seed	A2060	110	13.5	55.1	100.8
Pioneer Hi-Bred	P0995AM	109	14.1	55.7	96.6
Chemgro Seeds	7255RDP	112	13.9	55.1	107.6
Agrigold	642-32VT2RIB	112	14.4	57.9	95.9
Check (Revere)	1137	113	14.1	56.1	92.5

Westmoreland County Mid-Maturity Corn Hybrid Comparison

Cooperators

Producer: Louis Chandler and F.F. Chandler, Jr.

Extension: Stephanie Romelczyk, VCE-Westmoreland County

Trent Jones, VCE – Northumberland and Lancaster Counties

Crop Management

Previous Crop: Soybean

Soil Type: Kempsville loam

Tillage: No-Till

Planting Date: April 28, 2025

Planting Equipment: Case IH 950 Cyclo Planter

Seeding Rate: 32,000 seeds / acre

Preplant Fertilizer: 45-30-100-10S, 40-20-0 starter

Sidedress Fertilizer: 110 lbs. N w/ 2.5 gal. Reax sulfur

Preplant Crop Protection: Bicep 1.5 qt. + Princep 1.5 pt. + Explorer 3 oz. + Tombstone 1.5 oz. + RoundUp 40 oz.

Post Emergence Crop Protection: RoundUp 28 oz. + Storen 1.2 qt.

Harvest Date: October 7, 2025

Harvest Equipment: CAT Challenger 670 with 6-row corn header

Westmoreland Mid-Maturity Corn Hybrid Comparison

Table 12. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the mid-maturity group planted at the Westmoreland County location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Augusta	A2060	110	15.5	57.9	238.2
FS InVISION	FS 5947T RIB	109	14.5	61.5	228.4
Dekalb	DKC111-35	111	15	61.1	246.7
Dyna-Gro	D52PN76RIB	112	16.5	58	244.1
Pioneer	P0995AM	109	14.9	59.1	226.1
Channel	209-70TRERIB	109	14.7	59.1	230.3
Revere	0918 VT2P	109	13.6	60.5	230.2
Innvictis Seeds	1254RIB	112	14.8	60.1	222.0
Chemgro Seeds	7255RDP	112	14.7	60.9	213.1

Discussion: Excellent yielding corn variety trial. The Agrigold 642-32VT2RIB was planted, but results are not included as there was an issue with the planter and the seed did not plant or emerge properly. There were also planting issues with Innvictis Seeds 1254RIB on the first pass, but yields were still very good. Rainfall collected nearby at the AT Johnson Building (approximately 2 miles away) indicated just over 25 inches of rain from the planting date to harvest date (April: 0.04 in, May: 7.07 in, June: 4.05 in, July: 8.37 in, August: 1.98 in, September: 3.53 in, October: 0 in).

Middlesex Mid Maturity Corn Hybrid Comparison

Cooperators

Producer: Wayne Burch, Crazy Clover Farm

Extension: Frank Long, VCE – Middlesex County

Robbie Longest, VCE – Essex County

Industry: Participating seed companies

Jason Dawson and JT Elliott, Chemgro Seeds

Ginny Barnes and Chuck Unser, Coastal Agrobusiness

Wade Reiter and Jerry Becker, Red Tail Seed

Crop Management

Previous Crop: Soybeans followed by oat hay

Soil Type: Emporia loam

Tillage: No-Till

Planting Date: April 30, 2025

Planting Equipment: John Deere 12 row No-Till planter

Seeding Rate: 30,000 seeds / acre

Preplant Fertilizer: 50-52-50-12S per acre broadcast

Sidedress Fertilizer: 90# N, 12# S + Excellis Max

Preplant Crop Protection: RoundUp PowerMax 3 + Medal II EC + Rifle

Post Emergence Crop Protection: Halex GT + Atrazine 4L + LI700

Harvest Date: October 17, 2025

Harvest Equipment: Case IH 2588 w/ 6 row header

Middlesex Mid Maturity Corn Hybrid Comparison

Table 13. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the mid maturity group planted at the Middlesex location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Dekalb	DKC 111-35	111	15.4	58.9	115.3
Revere	0918VT2P	109	15.5	57.5	127.6
Channel	209-70TRERIB	109	16.1	57.5	166.6
Innvictis Seeds	1254RIB	112	16.1	57.6	160.2
Dyna Gro	D52PN76RIB	112	15.8	57.2	175.2
FS InVISION	FS 5947T RIB	109	16.1	58.6	178.6
Augusta Seed	A2060	110	16.8	55.4	157.5
Pioneer Hi-Bred	P0995AM	109	16.2	57.1	149.9
Chemgro Seeds	7255RDP	112	16.0	59.0	131.8
Agrigold	642-32VT2RIB	112	15.9	59.2	160.3
Check – FS InVISION	FS 5947T RIB	109	16.1	59.1	176.6

Discussion: Overall good yields in this plot location. The first hybrid in the plot (Dekalb DKC 111-35) was closest to the wood edge and this may have impacted yield compared to the rest of the plot. FS InVISION 5947T RIB was used as a check in the plot. Stand counts were taken on June 11, 2025 and averages in plants per acre were as follows: Dekalb DKC 111-35 – 29,000; Revere 0918 VT2P – 26,000; Channel 209-70 TRERIB – 31,000; Innvictis Seeds 1254RIB – 28,000; Dyna Gro D52PN76RIB – 29,000; FS InVISION FS 5947T RIB – 27,000; Augusta Seed A2060 – 27,000; Pioneer Hi-Bred P0995 – 28,000; Chemgro Seeds 7255RDP – 27,000; Agrigold 642-32VT2RIB – 28,000; Check – 27,000.

Suffolk Mid Maturity Corn Hybrid Comparison

Cooperators

Producer: Matthew Wilkins, MBM Farms Inc.

Extension: Andrea Slye, VCE – City of Suffolk

Crop Management

Previous Crop: Cotton

Soil Type: Lynchburg fine sandy loam

Tillage: No-Till

Planting Date: April 18, 2025

Planting Equipment: John Deere 1720

Seeding Rate: 28,000 seeds / acre

Preplant Fertilizer: 11-8-34 @353 lbs, 24-0-0-3 @ 20 gal. / acre

Sidedress Fertilizer: 28-0-0-5 @ 30 gal. / acre

Preplant Crop Protection: RoundUp 1qt, 2,4-D 1qt, Bicep Magnum 40 oz.

Post Emergence Crop Protection: Halex GT 3.6 pt.

Harvest Date: September 21, 2025

Harvest Equipment: John Deere 9500

Suffolk Mid Maturity Corn Hybrid Comparison

Table 14. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the mid maturity group planted at the Suffolk location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Revere	0918 VT2P	109	15.5	58.2	212.9
Augusta Seed	A2060	110	15.4	59.2	201.0
Innvictis Seeds	1254RIB	112	14.7	57.4	223.4
FS InVISION	FS 5947T RIB	109	16.0	56.2	198.1
Agrigold	642-32VT2RIB	112	15.5	57.8	198.3
Channel	209-70TRERIB	109	15.6	59.4	225.7
Chemgro Seeds	7255RDP	112	15.8	58.6	205.2
Dekalb	DKC111-35	111	16.2	58.2	206.0
Pioneer Hi-Bred	P0995AM	109	15.5	57.6	224.7
Dyna Gro	D52PN76RIB	112	16.0	56.4	217.0

Full Maturity Hybrid Comparisons

Full Maturity Hybrid Entries

113 Day Relative Maturity or More

Table 15. Corn hybrids and respective relative maturity, seed treatments, and genetic traits of each hybrid entered in the full maturity group of the Virginia On-Farm Corn Hybrid Comparison plots

Brand	Hybrid	Relative Maturity	Seed Treatments	Genetic Traits
Dekalb	DKC68-35	118	PV1250	VT2P
Revere	1307 TC	113	Radius Premium 1250	Trecepta
Channel	215-70TRERIB	115	Poncho 500	Trecepta
Innvictis Seeds	1993T	119	Acceleron / Poncho 500	Trecepta
Dyna Gro	D60TC45RIB	115	Poncho 500 + Votivo	Trecepta
FS InVISION	FS 6306T RIB	113	Poncho / Votivo 500	Trecepta
Augusta Seed	A4863	113	C250	PWE
Pioneer Hi-Bred	P17677AM	117	Lumisure 1250	LL, RR2
Chemgro Seeds	7525RDP	115	Acceleron 500	VTDouble Pro RIB Complete
Agrigold	644-64VT2RIB	114	Acceleron 500	VT2RIB
[a]NK Seeds	NK1307-DV	113	CruiserMaxx 500 + Vayantis	Duricade Viptera, RR, LL
[a]Seed Consultants	SC1166PCUE	116	Lumisure 1250	PowerCore Ultra Enlist
[a]RedTail	RT 64T39	114	C250	Duracade

[a] Hybrid was only entered at the Virginia Ag Expo location

Yield Summary of Full Maturity Hybrid Comparisons

113 Day Relative Maturity or More

Table 16. A summary of yield results at 15.5% moisture from corn hybrids entered in the full maturity group by plot location sorted by hybrid average

Brand	Hybrid	Virginia Ag Expo	Chesapeake	Gloucester	Essex	Prince George	Lunenburg	Charlotte	Appomattox	Suffolk	Hybrid Average
Channel	215-70TRERIB	262.3	217.1	75.8	218.5	196.8	206.4	192.5	218.6	227.7	**201.7**
Augusta Seed	A4863	275.8	191.0	116.6	211.4	206.6	192.7	189.2	204.6	217.3	**200.6**
Dekalb	DKC68-35	269.3	208.2	110.5	208.7	200.8	187.9	182.8	205.3	220.3	**199.3**
Dyna Gro	D60TC45RIB	270.1	162.1	108.5	224.2	203.5	181.1	197.2	223.2	222.5	**199.2**
Chemgro Seeds	7525RDP	260.7	178.5	118.5	210.1	193.1	198.2	188.5	207.7	178.0	**192.6**
Innvictis Seeds	1993T	269.3	177.7	68.9	207.0	196.2	185.6	189.3	217.7	217.9	**192.2**
Revere	Revere 1307 TC	265.7	163.3	94.6	204.4	174.4	182.9	189.7	208.7	200.8	**187.2**
Agrigold	644-64VT2RIB	246.3	183.8	105.4	211.0	196.3	160.6	174.9	213.3	187.6	**186.6**
Pioneer Hi-Bred	P17677AM	227.9	170.7	83.9	215.2	191.5	182.3	176.5	203.9	215.7	**185.3**
FS InVISION	FS 6306T RIB	249.1	173.6	76.3	203.2	166.1	206.0	172.2	213.3	200.7	**184.5**
[a]NK Seeds	NK1307-DV	260.1									
[a]Seed Consultants	SC1166PCUE	238.1									
[a]RedTail	RT 64T39	257.7									
	Location Average	**257.9**	**182.6**	**95.9**	**211.4**	**192.5**	**188.4**	**185.3**	**211.6**	**208.9**	

[a] Hybrid was only entered at the Virginia Ag Expo location

Virginia Ag Expo (Orange County) Full Maturity Corn Hybrid Comparison

Cooperators

Producer: Garrett Chambers, Brooke Farms

Extension: Greg Lillard, VCE - Madison County

Trent Jones, VCE - Northumberland and Lancaster Counties

Caleb Bishop, Virginia Tech - Corn and Small Grains Research Specialist

Dr. Carrie Ortel, Virginia Tech - Soybean Agronomist

Dr. Hunter Frame, Virginia Tech - Field Crops Agronomist

Crop Management

Previous Crop: Soybeans

Soil Type: Buffstat Silt Loam

Tillage: No-Till

Planting Date: April 17, 2025

Planting Equipment: SRES Step 4 Plot Planter

Seeding Rate: 32,000 seed / acre

Preplant Fertilizer: 6 Tons bed pack cow manure

Sidedress Fertilizer: 3 Gal. N-Pact

Crop Protection: RoundUp, Sharpen, MSO, Corvus, Atrazine

Harvest Date: September 8, 2025

Harvest Equipment: John Deere S770

Virginia Ag Expo (Orange County) Full Maturity Corn Hybrid Comparison

Table 17. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the full maturity group planted at the Virginia Ag Expo Orange County location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Innvictis Seeds	1993T	119	19.9	64.8	269.3
Dekalb	DKC68-35	118	23.8	46.8	269.3
Pioneer Hi-Bred	P17677AM	117	21.8	48	227.9
Seed Consultants	SC1166PCUE	116	19.1	57	238.1
NK Seeds	NK1307-DV	113	18.5	57.4	260.1
Dyna Gro	D60TC45RIB	115	21.4	52.8	270.1
Chemgro Seeds	7525RDP	115	22.9	56.2	260.7
Channel	215-70TRERIB	115	20.5	62.5	262.3
RedTail	RT 64T39	114	21.4	53.6	257.7
Agrigold	644-64VT2RIB	114	22.6	48.5	246.3
Revere	1307 TC	113	18.1	58.3	265.7
FS InVISION	FS 6306T RIB	113	20.4	49.1	249.1
Augusta Seed	A4863	113	19.1	58.1	275.8

Chesapeake Full Maturity Corn Hybrid Comparison

Cooperators

Producer: C. Frank Brickhouse Jr.

Extension: Roy D. Flanagan III, City of Virginia Beach

Dr. Nathan Sedghi, City of Chesapeake

Crop Management

Previous Crop: Soybeans

Soil Type: Acredale Silt Loam

Tillage: Conventional Tillage

Planting Date: May 12, 2025

Planting Equipment: John Deere 1780 JD Maxi Merge Vacuum Planter 8 row

Seeding Rate: 30,000 seeds / acre

Preplant Fertilizer: 600lbs. of 14-14-14 and 30 gal. of 32-0-0 w/ Serpentine 1qt./100gal.

Post Emergence Crop Protection: RoundUp- 1 quart, Laudus- 3oz.

Harvest Date: October 10, 2025

Harvest Equipment: John Deere 9870, 1293 corn head

Chesapeake Full Maturity Corn Hybrid Comparison

Table 19. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the full maturity group planted at the Chesapeake location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Channel	215-70TRERIB	115	18.7	58	217.1
Dekalb	DKC68-35	118	16.7	61	208.2
Augusta Seed	A4863	113	18.3	61	191
AgriGold	644-64VT2RIB	114	16.7	60	183.8
ChemGro Seeds	7525RDP	115	16.2	61	178.5
Innvictis Seeds	1993T	119	16.8	59	177.7
FS InVISION	FS 6306T RIB	113	16.6	60	173.6
Pioneer HI-Bred	P17677AM	117	16.9	61	170.7
Revere	Revere 1307 TC	113	17.5	60	163.3
Dyna Gro	D60TC45RIB	119	17.1	60	162.1

Gloucester Full Maturity Corn Hybrid Comparison

Cooperators

Producer: Tanner Hearst, Hearst Farms

Extension: Frank Long, VCE - Middlesex, Mathews, and Gloucester Counties

Robbie Longest, VCE – Essex County

Trent Jones, VCE – Northumberland and Lancaster Counties

Makenzie VanLandingham, VCE Summer Intern – Northumberland and Lancaster Counties

Industry: Participating Seed Companies

Blair Hasty, Meherrin Ag.

Crop Management

Previous Crop: Soybeans

Soil Type: Suffolk fine sandy loam

Tillage: No-Till

Planting Date: May 19, 2025

Planting Equipment: 36-inch Massey Ferguson/White 8000 unit, 8-row planter

Seeding Rate: 22,500 seed / acre

Preplant Fertilizer: 150-0-0-30S per acre

Sidedress Fertilizer: 150# N, 50# S

Preplant Crop Protection: None

Post Emergence Crop Protection: Resist + Valor

Harvest Date: November 14, 2025

Harvest Equipment: Claas 485R w/ 8-row corn header

Gloucester Full Maturity Corn Hybrid Comparison

Table 18. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the full maturity group planted at the Gloucester location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Check (Revere)	1137	113	14.1	56.1	92.5
Dekalb	DKC68-35	118	14.5	56.9	110.5
Revere	1307 TC	113	14.5	53.4	94.6
Channel	215-70TRERIB	115	14.3	58.1	75.8
Innvictis Seeds	1993T	119	14.5	55.6	68.9
Dyna Gro	D60TC45RIB	115	14.6	56.6	108.5
FS InVISION	FS 6306T RIB	113	13.9	55.4	76.3
Augusta Seed	A4863	113	14.2	59.3	116.6
Pioneer Hi-Bred	P17677AM	117	14.1	57.3	83.9
Chemgro Seeds	7525RDP	115	14.5	57.6	118.5
Agrigold	644-64VT2RIB	114	14.2	55.1	105.4
Check (Revere)	1137	113	14.0	55.3	82.8

Discussion: All three maturity groups were entered at this location. Early Maturity groups seem to yield better, while mid and full maturity groups seem to struggle. This might have been due to dry planting conditions and no moisture around the middle to high end of the plot during a dry spell during planting. First hybrid (Dekalb DKC 56-26 RIB) in the plot was cut prior to harvest, so no data was entered for that entry. Revere 1137 was used as a check throughout the field. Stand counts were taken on June 11, 2025, and averages in plants per acre were as follows: Check: Revere 1137 – 24,500; Dekalb DKC68-35 – 19,000; Revere 1307 TC – 18,500; Channel 215-70TRERIB – 19,500; Innvictis 1993T – 19,000; Dyna Gro D60TC45RIB – 19,500; InVISION FS 6306T RIB – 15,000; Augusta A4863 – 26,000; Pioneer P17677AM – 26,000; Chemgro 7525RDP – 25,500; Agrigold 644-64VT2RIB – 29,500; Check: Revere 1137 – 25,500.

Essex Full Maturity Corn Hybrid Comparison

Cooperators

Producer: Brandon Farms – The Waring Family

Extension: Robbie Longest, VCE – Essex County

Industry: Participating seed companies

Crop Management

Previous Crop: Soybeans followed by hairy vetch cover crop

Soil Type: Pamunkey loam

Tillage: No-Till

Planting Date: April 30, 2025

Planting Equipment: Kinze 3600 12-row planter

Seeding Rate: 32,000 seeds / acre

Preplant Fertilizer: 0-52-60 applied to vetch in spring, 20# N applied with burndown as 28-0-0-5S

Sidedress Fertilizer: 100# N + 24# S dry as a urea + AMS blend

Preplant Crop Protection: water (7 gal./acre) + 28-0-0-5S (7 gal./acre) + Envy 6 Max (1 qt./acre) + Havoc (12 oz./acre) + Adversary (1 qt./ 100 gals.)

Post Emergence Crop Protection: Halex GT (3.6 pt./ acre) + Infantry (1 qt./acre) + Max Supreme (24 oz./ acre)

Harvest Date: October 7, 2025

Harvest Equipment: John Deere S670 with 12-row header

Essex Full Maturity Corn Hybrid Comparison

Table 20. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the full maturity group planted at the Essex location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Check - Revere	114-P35	114	15.8	60.2	195.1
Dekalb	DKC68-35	118	16.5	59.7	208.7
Chemgro Seeds	7525RDP	115	16.9	60.9	210.1
Pioneer Hi-Bred	P17677AM	117	17.1	59.6	215.2
Dyna Gro	D60TC45RIB	115	17.1	58.0	224.2
Innvictis Seeds	1993T	119	17.0	58.1	207.0
Augusta Seed	A4863	113	16.8	59.2	211.4
Channel	215-70TRERIB	115	16.0	59.0	218.5
Revere	1307 TC	113	15.5	60.1	204.4
FS InVISION	FS 6306T RIB	113	15.0	59.3	203.2
Agrigold	644-64VT2RIB	114	15.3	59.0	211.0
Check - Revere	114-P35	114	15.7	58.4	196.2

Discussion: Very good yields at this location considering the heat stress experienced early in the growing season. The grower used Revere 114-P35 as the check hybrid. This location was planted green following a hairy vetch cover crop that was rolled. The vetch was drilled on Oct. 21, 2024 at a seeding rate of 20 pounds per acre. It was fertilized with 0-52-60 in the early spring to promote biomass growth and supply the needed phosphorus and potassium for the following corn crop. The vetch was allowed to grow and produce biomass until the day of planting, and biomass estimates collected just prior to planting showed around 4,140 lbs. / acre dry biomass. Documented research has shown the ability of hairy vetch to recycle subsoil potassium and other nutrients, while also fixing substantial amounts of plant available nitrogen as a legume. This location only applied 120# N fertilizer through burndown and sidedress, and the plot average yield was 208.7 bushels / acre. It is estimated that the vetch cover supplied 80-100 lbs. N to the corn crop.

Prince George Full Maturity Corn Hybrid Comparison

Cooperators

Producer: Calvin Clements

Extension: Scott Reiter, VCE - Prince George

Crop Management

Previous Crop: Soybeans

Soil Type: Catpoint fine sand

Tillage: Subsoil under row strip tillage

Planting Date: April 21, 2025

Planting Equipment: John Deere Max-Emerge XP

Seeding Rate: 26,500 seed /acre (30,000 seed / acre in high population plot)

Preplant Fertilizer:	Dry Broadcast	20-40-120-15S-0.03B-0.27Zn-12Ca-0.07Cu-1.1Mn
	Starter	25-25-0-3S-0.75Zn-0.5B + 8 oz. Asset
	Liquid Broadcast	48-0-0
Sidedress Fertilizer:	Liquid Dribble	93-0-0 + Excellis Maxx

Preplant Crop Protection: 1.6 pints Gramoxone 3SL + 2 quarts Bicep II Magnum

Post Emergence Crop Protection: None

Harvest Date: September 8, 2025

Harvest Equipment: John Deere S760 + weigh wagon

Prince George Full Maturity Corn Hybrid Comparison

Table 21. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the full maturity group planted at the Prince George location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
CHECK - Axis	64H70 RIB TRE	114	17.3	60.7	181.7
Chemgro Seeds	7525RDP	115	17.4	61.1	193.1
FS InVISION	FS 6306T RIB	113	16.6	58.2	166.1
Channel	215-70TRERIB	115	17.8	58.6	196.8
Revere	1307 TC	113	16.5	58.9	174.4
Pioneer Hi-Bred	P13841PCUE	113	16.6	58.2	186.2
Pioneer Hi-Bred	P17677AM	117	18.3	59.8	191.5
DeKalb	DKC68-35	118	18.6	59.1	200.8
Dyna Gro	D60TC45RIB	115	18.4	58.4	203.5
Augusta Seed	A4863	113	18.1	56.6	206.6
Agrigold	A644-64VT2RIB	114	18.7	57.7	196.3
Innvictis Seeds	1993T	119	18.1	57.8	196.2
Axis	64H70 (Hi Pop)	114	17.8	59.1	198.1
CHECK - Axis	64H70 RIB TRE	114	18.1	57.8	188.1

Discussion: This was a great yielding site with a 191-bushel average. The weather this season had some wide swings from a wet May, drier and hot June, a very wet July, and dry August. Some notes from the combine cab – FS 6306T and Revere 1307 had noticeable down or broken stalks; P17677AM had the most staygreen and was the tallest hybrid. We included a 30,000 seed/acre strip with the check variety that yielded more than the grower standard of 26,500 seed/acre. Be sure to use multi-location data when selecting your 2026 hybrids.

Lunenburg Full Maturity Corn Hybrid Comparison

Cooperators

Producer: Eli Parrish

Extension: Taylor Clarke, VCE – Mecklenburg County

Industry: Caleb Hinkle, Field Agronomist – Pioneer / Phytogen at Corteva Agriscience

Crop Management

Previous Crop: Soybeans

Soil Type: Appling Sandy Loam

Tillage: No-Till into Rye Cover

Planting Date: April 18, 2025

Planting Equipment: JD 1780 6-row 30” vacuum planter

Seeding Rate: 28,500 seed / acre

Preplant Fertilizer: 50-60-150-10S

Sidedress Fertilizer: 24-0-0-3S at 40 gal./acre dribbled with y-drops

Preplant Crop Protection: Burndown- 1qt. RoundUp PowerMax 3, 2qt./ acre Bicep, 1qt./acre Atrazine, 1 pt./acre 2-4D, 4oz./acre adjuvant

Post Emergence Crop Protection: 1qt./acre RoundUp PowerMax 3, 3oz./acre Laudis, 4oz./acre adjuvant

Harvest Date: November 4, 2025

Harvest Equipment: JD 9500 with JD 643 6-row 30” head (6 row plots)

Lunenburg Full Maturity Corn Hybrid Comparison

Table 22. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the full maturity group planted at the Lunenburg location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Agrigold	644-64VT2RIB	114	13.9	62.5	160.6
Chemgro Seeds	7525RDP	115	14.0	62.2	198.2
Pioneer Hi-Bred	P17677AM	117	13.1	60.7	182.3
Revere	Revere 1307 TC	113	14.3	58.4	182.9
(Check) Pioneer	P13841PWUE	113	13.4	60.1	182.8
FS InVISION	FS 6306T RIB	113	13.3	60.3	206.0
Augusta Seed	A4863	113	13.8	60	192.7
Dekalb	DKC68-35	118	14.4	59.5	187.9
Dyna Gro	D60TC45RIB	115	14.0	59.4	181.1
Innvictis Seeds	1993T	119	13.4	59.6	185.6
Channel	215-70TRERIB	115	12.7	60.0	206.4

Discussion: Plot escaped problems with pollination due to high temperatures that affected some corn in the area resulting in excellent yields for the area.

Charlotte Full Maturity Corn Hybrid Comparison

Cooperators

Producer: Grind- N-Stone Farm; The Poindexter Family

Extension: Joanne Jones, VCE - Charlotte

Bruce Jones, VCE - Appomattox

Crop Management

Previous Crop: Soybeans

Soil Type: Cecil Fine Sandy Loam

Tillage: No-Till

Planting Date: April 18, 2025

Planting Equipment: Kinze 2500 planter

Seeding Rate: 32,000 seed / acre

Preplant Fertilizer: 2 tons litter per acre: 30 lbs. liquid nitrogen with stabilizer when planting

Side dress Fertilizer: June 9th - 80 lbs. liquid Nitrogen with drop nozzles

Preplant Crop Protection: 32 oz. glyphosate, 1 oz. Sharpen, 32 oz. Atrazine

Post Emergence Crop Protection: 24 oz. Powermax, 32 oz. Atrazine, 3 oz. Capreno. 10 oz. Veltyma with drone at brown silk

Harvest Date: October 7, 2025

Harvest Equipment: R 55 Gleaner

Charlotte Full Maturity Corn Hybrid Comparison

Table 23. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the full maturity group planted at the Charlotte location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Dekalb	DKC68-35	118	16.3	60.1	182.8
Revere	1307 TC	113	14.6	60.8	189.7
Channel	215-70TRERIB	115	14.8	60.3	192.5
Innvictis Seeds	1993T	119	16.4	59.5	189.3
Dyna Gro	D60TC45RIB	115	15.1	61.7	197.2
Augusta Seed	A4863	113	16.2	58.8	189.2
Pioneer Hi-Bred	P17677AM	117	15.3	60.3	176.5
Chemgro Seeds	7525RDP	115	15.3	62.1	188.5
FS InVISION	FS6306T RIB	113	15.3	61.2	172.2
Agrigold	644-64VT2RIB	114	16.1	59	174.9

Appomattox Full Maturity Corn Hybrid Comparison

Cooperators

Producer: Ben Cole

Extension: Bruce Jones, VCE - Appomattox County

Joanne Jones, VCE - Charlotte County

Crop Management

Previous Crop: Soybeans

Soil Type: Appling Fine Sandy Loam

Tillage: No-Till

Planting Date: May19, 2025

Planting Equipment: Kinze 8 row planter

Seeding Rate: 28,000 seed / acre, 30 inch rows

Preplant Fertilizer: Variable rate P&K, 10 gallon/ acre 28-0-0-5

Sidedress Fertilizer: 150 units Amidas Nitrogen with Boron

Preplant Crop Protection: Burndown: 36 oz. Powermax, 1 oz. Sharpen, 3 oz. Zidua

Post Emergence Crop Protection: 26 oz. Powermax, 3 oz. Capreno, 32 oz. Atrazine

V10 drone application: 7.5 oz. Veltyma, 12.8 oz. Megafol

Harvest Date: October 24, 2025

Harvest Equipment: John Deere 9770 STS

Appomattox Full Maturity Corn Hybrid Comparison

Table 24. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the full maturity group planted at the Appomattox location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Dekalb	DKC68-35	118	15.1	60.7	205.3
Revere	1307 TC	113	14.8	60.3	208.7
Channel	215-70TRERIB	115	14.6	59.5	218.6
Innvictis Seeds	1993T	119	15.4	58.0	217.7
Dyna Gro	D60TC45RIB	115	16.0	60.7	223.2
FS InVISION	FS 6306T RIB	113	15.2	59.4	213.3
Augusta Seed	A4863	113	16.4	55.8	204.6
Pioneer Hi-Bred	P17677AM	117	16.8	57.5	203.9
Chemgro Seeds	7525RDP	115	16.2	60.9	207.7
Agrigold	644-64VT2RIB	114	15.7	59.6	213.3

Suffolk Full Maturity Corn Hybrid Comparison

Cooperators

Producer: Matthew Wilkins, MBM Farms Inc.

Extension: Andrea Slye, VCE – City of Suffolk

Crop Management

Previous Crop: Cotton

Soil Type: Lynchburg fine sandy loam

Tillage: No-Till

Planting Date: April 18, 2025

Planting Equipment: John Deere 1720

Seeding Rate: 28,000 seeds / acre

Preplant Fertilizer: 11-8-34 @353 lbs. 24-0-0-3 @ 20 gal. / acre

Sidedress Fertilizer: 28-0-0-5 @ 30 gal. / acre

Preplant Crop Protection: RoundUp 1qt, 2,4-D 1qt, Bicep Magnum 40 oz.

Post Emergence Crop Protection: Halex GT 3.6 pt.

Harvest Date: September 21, 2025

Harvest Equipment: John Deere 9500

Suffolk Full Maturity Corn Hybrid Comparison

Table 25. The relative maturity, moisture percentage, test weight, and yield of hybrids entered in the full maturity group planted at the Suffolk location

Brand	Hybrid	Relative Maturity	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Dekalb	DKC68-35	118	15.6	59.2	220.3
Channel	215-70TRERIB	115	15.2	58.8	227.7
Revere	1307 TC	113	16.3	57.9	200.8
Agrigold	644-64VT2RIB	114	16.2	59.9	187.6
Pioneer Hi-Bred	P17677AM	117	16.4	58.4	215.7
Augusta Seed	A4863	113	15.7	59.2	217.3
Innvictis Seeds	1993T	119	16.4	56.4	217.9
Dyna Gro	D60TC45RIB	115	15.5	58.6	222.5
FS InVISION	FS 6306T RIB	113	15.3	59.4	200.7
Chemgro Seeds	7525 RDP	115	16.2	57.2	178.0

Return on Investment of Variable Rate Technology

Cooperators

Producer: Scott Mundie – WST Farms

Extension: Joseph Oakes, Superintendent - Eastern Virginia AREC
Carrie Ortel, Extension Soybean Agronomist - Tidewater AREC
Robbie Longest, VCE – Essex County

Crop Management

Crop: Corn

Planting Date: May 19, 2025

Seeding Rate: 31,400 seeds / acre

Harvest Date: October 9, 2025

Goal: To evaluate the return on investment when implementing variable rate fertilizer applications of pre-plant dry products (lime, potassium, phosphorous) on a Virginia grain farm.

Methods: Uniform rate of pre-plant fertility was applied adjacent to variable rate in the same field based on soil test report. Soil test did not recommend pre-plant lime or phosphorous; therefore, only potassium was applied as shown below and in Figure 1.

Uniform Rate: 174 lb/ac 0-0-60

Variable Rate: 162 lb/ac 0-0-60 average

Figure 1. Map of field showing rates of pre-plant potassium applied

Return on Investment of Variable Rate Technology

Table 26. Potassium levels from tissue testing throughout growing season. All potassium levels were sufficient.

Treatment	Potassium % 6/18/25	Aerial NDVI 7/15/25
Variable	3.34	0.96
Uniform	2.95	0.96

Cost to apply pre-plant potassium:

Uniform Rate: 174 lb 0-0-60/A x $0.185/lb = $32/acre

Variable Rate: 162 lb 0-0-60/A x $0.185/lb = $30/acre

Yield Data and Return:

Table 27. Comparison of yield, dollars per bushel, dollars per acre, fertility cost per acre, and return per acre of variable rate and uniform rate treatments

Treatment	Yield	$/bushel	$/acre	Fertility cost/ac	Return/ac (just preplant fertilizer costs)
Variable Rate	213.5	$4.12	$879.62	30	$849.62
Uniform Rate	215.5	$4.12	$887.86	32	$855.86

Discussion: The uniform rate of 174 lb/ac of 0-0-60 cost $2 more per acre than the variable rate that averaged 162 lb/ac of 0-0-60. While the uniform rate did cost $2 more per acre, it yielded 2 bushels per acre higher than the variable rate plots. At the current corn price of $4.12, the plots that had the uniform rate of 0-0-60 applied had a $6.24 higher return per acre than the plots that had variable rate 0-0-60 applied. Note this is just one location in one growing season. More locations are planned for the 2026 growing season.

Acknowledgements: This project was funded with an integrated internal competitive grant from the College of Agriculture and Life Sciences at Virginia Tech.

King and Queen Closing Wheel Comparison

Cooperators

Producer: Longest Family Farm

Extension: Robbie Longest, VCE – Essex County

Trent Jones, VCE – Northumberland and Lancaster Counties

Turner Minx, VCE – King William and King and Queen Counties

Crop Management

Previous Crop: Soybeans

Soil Type: Emporia sandy loam

Tillage: No-Till

Planting Date: May 1, 2025

Planting Equipment: John Deere 1750 Max Emerge 6-row planter

Seeding Rate: 27,500 seeds / acre

Hybrid: Dyna Gro 54VC34RIB

Preplant Fertilizer: 28# N + 3.5# S applied with burndown, 0-0-80 broadcast + 20 gal./acre 2X2 starter (15-15-0-2S + B + Zn)

Sidedress Fertilizer: 110# N + 13# S (24-0-0-3) + Borosol (1qt./acre)

Preplant Crop Protection: Gramoxone SL 3.0 + Bicep II Magnum FC + Salvo + Liberate

Post Emergence Crop Protection: Halex GT + Atrazine + LI700 + Radiate + EZ Mix

Harvest Date: October 22, 2025

Harvest Equipment: Gleaner R42 w/ 6 row header

King and Queen Closing Wheel Comparison

Table 28. The stand counts, moisture percentage, test weight, and yields by replication for the three different closing wheel styles

Treatment	Replication	Stand Estimate	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Metal	1	26,600	14.3	60.9	191.4
Smooth Poly/Rubber	1	26,300	13.7	61.2	186.2
Metal	2	24,000	14.4	59.6	190.2
Smooth Poly/Rubber	2	26,600	14.2	59.3	185.3
Metal	3	25,000	14.2	60.4	194.7
Smooth Poly/Rubber	3	25,600	14.6	59.1	189.3
Metal	4	25,300	14.5	60	198.1
Smooth Poly/Rubber	4,1	27,000	14.6	58.7	193.5
Yetter Twister	1	26,000	14.4	59.2	198.4
Smooth Poly/Rubber	2	24,600	14.4	59.4	197.6
Yetter Twister	2	28,000	14.2	60.5	200.2
Smooth Poly/Rubber	3	25,600	13.9	60.9	181.0
Yetter Twister	3	27,000	14.2	60.8	195.4
Smooth Poly/Rubber	4	25,600	14.3	60.4	185.6
Yetter Twister	4	27,300	14.4	60.1	188.9

King and Queen Closing Wheel Comparison

Table 29. Treatment averages for stand estimates, % moisture, test weight, and yield for the cast iron, smooth plastic, and spiked closing wheels.

Treatment AVERAGE	Stand Estimate	% Moisture	Test Weight	Yield (Bu./A at 15.5%)
Cast Iron	25,225	14.4	60.2	193.6
Smooth Poly/Rubber (1)	26,375	14.3	59.6	188.6
Yetter Twister	27,075	14.3	60.2	195.7
Smooth Poly/Rubber (2)	25,700	14.3	59.9	189.4

Discussion: The purpose of this test was to evaluate different styles of closing wheels on a corn planter for their impact on emergence and stand (population), and grain yield. There are many different styles of closing wheel systems available for producers to select from. This test evaluated the standard OEM John Deere smooth rubber/poly closing wheels compared to cast iron and Yetter Twister Poly closing wheels. The same style wheels were placed on the left and right side of the row unit to compare. Each style was replicated 4 times in 6 row plots, with the first comparison being between the cast iron and smooth poly/rubber style, and the second comparison being between the smooth poly/rubber and the Yetter Twister Poly style. Stand counts were taken and averaged on May 16, 2025. The cast iron plots had the lowest average stand estimate, and the Yetter Twister style had the highest average stand. The average yield for the cast iron replications was 5 bushels per acre higher than the average yield for the smooth poly/rubber adjacent treatments. The Yetter Twister average replication yield was observed to be 5.3 bushels higher than the adjacent smooth poly/rubber treatment. Soil texture and field conditions including terrain play a major role in the success and purpose of the different closing wheels. This data is from one site location in one year. More research is planned for the 2026 growing season to evaluate this subject further with additional cooperators.

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