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Virginia Corn Silage Hybrid Trials in 2020

Authored by N. Lawton, Research Specialist Senior, School of Plant and Environmental Sciences, Virginia Tech; E. Rucker, Research Associate, School of Plant and Environmental Sciences, Virginia Tech; W. Thomason, Extension Agronomist, Grains, School of Plant and Environmental Sciences, Virginia Tech

Other contributors: David Yutzy, owner, Windcrest Holsteins; Doug Horn, Extension Agent, ANR, Crop and Soil Sciences, Rockingham County; Greg Lillard, Farm Manager, Northern Piedmont Center, School of Plant and Environmental Sciences; Ned Jones, Farm Manager, Southern Piedmont Agricultural Research and Extension Center; Phil Blevins, Extension Agent, ANR, Crop and Soil Sciences, Washington County

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Introduction

This report contains the results for performance trials from commercial corn hybrids produced for silage at four locations in Virginia in 2020 as well as two- and three-year average performance, when available. In order to avoid problems with comparisons over sites and years, multi-year yields are presented as a percentage of the total called relative yield at that particular site-year combination. All locations were planted with a Wintersteiger PlotKing 2600 planter and harvested with commercial silage equipment. Yields are presented on a dry matter and 35% dry matter basis for comparison. Quality analysis was performed using a Foss NIR XDS Rapid Content Analyzer. All hybrids entered in the Virginia trials were submitted for testing by commercial companies. The locations at which particular hybrids were entered were specified by the company. Companies entering hybrids were charged a fee for each hybrid per location to support the Virginia Corn Silage Performance Trials.

Yield Differences

Experimental plots vary in yield and other measurements due to location in the field and other factors which cannot be controlled. Statistics given in the tables are intended to help the reader make valid comparisons between hybrids. The magnitude of difference due to uncontrollable variation has been computed for the data and is listed at the bottom of columns as the LSD (.10) (least significant difference with 90% confidence). Differences less than the LSD are assumed not to be real differences with 90% confidence.

Hybrid Selection

Multi-year results are more reliable than single-year results.

When making hybrid selections it is important to realize that hybrids differ in their performance under differing environments. Some hybrids are more adapted to a wide range of environments. Hybrid performance may differ with year and location variations of rainfall, temperature, pests and other environmental variables. In these experiments, many hybrids have essentially the same yield, and great care should be taken in interpreting the results of a single year's tests, especially at only one location.

For these reasons it is important, whenever possible, to also look at a hybrid's average yield across locations when making selections. Multi-year averages give greater confidence to hybrid performance decisions. Relative yield tables compare the yield of a hybrid to the average yield of all hybrids in the test. These tables are an excellent summary of yield potential compared to other hybrids.

Understanding Relative Yield

Companies entering silage hybrids decide which hybrids are planted at which locations. In 2020, some hybrids were planted at all four locations and others at only one or two sites.

Combining and comparing absolute yield and other results from multiple sites is inappropriate when not all hybrids are planted at all locations. For example, one hybrid might have an unfair advantage in such a comparison because it was tested only at sites with ideal growing conditions. Another hybrid tested at sites with less-than-ideal growing conditions would have yields that tended to be lower. In this example, it would be difficult to determine whether yield differences were because of differences in genetic yield potential or simply because of differences in the environmental conditions under which they were tested. The solution is to compare hybrids based on relative yields rather than absolute yields.

To calculate relative yield, the yield for each hybrid at each site is divided by the average yield for all hybrids tested at that same site and multiplied by 100. Once each hybrid at each site has been assigned a relative yield, comparisons can be made between hybrids tested at the same site or different sites. For hybrids tested at multiple sites, we can also calculate a multi-site relative yield average.

Relative yields of 100 indicate hybrids that were average performers. Relative yields greater than 100 indicate yields above-average. Relative yields less than 100 indicate yields below-average. The magnitude of the relative yield numbers indicates how far above or below average a hybrid performed. For example, a hybrid with a relative yield of 110 yielded 10% above the average yield for all hybrids at that site.

Selecting hybrids for both yield and quality

Milk2006 is used to condense multiple corn silage quality and digestibility factors into one easy-to-compare "milk per ton" number. This system also generates a "milk per acre" rating for each hybrid, calculated by multiplying yield (tons per acre) by quality (pounds of milk per ton). The same problem described above for multi-site yield comparisons exists for yield by quality comparisons: not all hybrids were tested at all sites. Therefore, relative quality and relative yield x quality ratings were calculated.

Milk2006 is a system developed by University of Wisconsin researchers to simplify quality comparisons between corn silage samples. Included in the analysis are variety identification, kernel processing, dry matter, crude protein, NDF, in-vitro NDF digestibility, starch percent and yield per acre. Compared to Milk2000, Milk2006 values more accurately address the effects of fiber digestibility on silage quality. Milk2006 has proven to more accurately reflect actual milk production than earlier versions of the program.

Milk2006 was designed solely as an index to be used when making quality comparisons between silage samples or hybrids. Milk per ton or milk per acre numbers should not be used to predict actual milk production on your farm. Milk per ton is more accurate at predicting cow performance since it includes quality factors that affect milk production. Milk per acre allows consideration of yield as well as quality factors.

Use other information

Consider as much other information as possible from other independent sources before selecting hybrids. Look for agronomic as well as silage quality data.

Companies Participating in the 2020 Virginia Tech Corn Silage Hybrid Trials

Company	Brand	Address
AgReliant Genetics, LLC	LG Seeds	1122 E. 169th St., Westfield, IN 46074
Augusta Seed	Augusta Seed	PO Box 899, Verona, VA 24482
Caverndale Farms Brand Seed	Caverndale Farms	1921 Bluegrass Pike, Danville, KY 40422
Corteva Agriscience Ag. Division Dow/Dupont	Pioneer	7200 NW 62nd Ave., Johnston, IA 50131
Erwin-Keith, Inc.	Progeny Ag Products	1529 Hwy 193, Wynne, AR 72396
Mid-Atlantic Seeds	Mid-Atlantic	204 St. Charles Way #163, York, PA 17402
Nutrien Ag Solutions	Dyna-Gro	396 Washington St., Boydton, VA 23917
Seed Consultants, Inc.	Seed Consultants	648 Miami Trace Rd., Washington Court House, OH 43160
Syngenta Seeds	NK Brand	4013 Fairmount Pike, Signal Mountain, TN 37377

2020 Virginia Tech Corn Silage Hybrid Trials Plot Information

(Rates are on a per acre basis.)

Blackstone (Southern Piedmont Agricultural Research & Extension Center)

Planted: April 17, 2020 conventional tillage
Harvested: August 5, 2020
Pesticide: 1 pt Brawl + 1 qt atrazine April 17, 2020; 5 lb Force 3G® at planting
Fertilizer: 1000 lb 10-10-10 pre-plant incorporated April 3, 2020; 17 gal 15-15-0-2S-.13B-.25Zn at planting; 80 lb N top-dressed using UAN May 21, 2020
Population: 29,882 ppa
Plot Size: 2 rows 25' x 30" 4 replications
Soil Type: Appling sandy loam
Cooperator: Ned Jones

Orange (Northern Piedmont Center)

Planted: April 22, 2020 no-till
Harvested: August 20, 2020
Pesticide: 1.5 qt Acuron® + 2 qt glyphosate + 1 pt atrazine April 17, 2020 pre-plant; 5 lb Force 3G® at planting
Fertilizer: 40-100-60 April 21, 2020; 70 lb N side-dressed June 15, 2020
Population: 28,262 ppa
Plot Size: 2 rows 25' x 30" 4 replications
Soil Type: Davidson clay
Cooperator: Greg Lillard

Shenandoah Valley (Timberville - Thanks to David Yutzy and Windcrest Holsteins)

Planted: May 15, 2020 no-till after rye silage
Harvested: September 15, 2020
Pesticide: 2 qt glyphosate preplant; 5 lb Force 3G® at planting; 2 qt Halex® + 5 oz Status® + 1 qt atrazine + crop oil when plants were 1-2’ in height
Fertilizer: 43 lb sulfur + 53 lb potash in January; 10,000 gallons dairy manure injected preplant; 17 gal 15-15-0-2S-.13B-.25Zn at planting; 90 lb N from urea side-dressed
Population: 31,643 ppa
Cooperators: Doug Horn and David Yutzy

Washington County (Southwest Virginia Agricultural Research & Extension Center)

Planted: May 12, 2020 no-till
Harvested: September 14, 2020
Pesticide: 28 oz atrazine + 3 qt Acuron® + 1 qt glyphosate pre-plant; 5 lb Force 3G® at planting
Fertilizer: 140-60-80-25S preplant; 17 gal 15-15-0-2S-.13B-.25Zn at planting; 100 lb N side-dressed V6
Plot Size: 2 rows 35' x 30" 4 replications
Soil Type: Wyrick-Marbie silt loam
Cooperator: Phil Blevins

Table 1. List of hybrids in the 2020 Virginia Tech Corn Silage Hybrid Test.

Company	Brand	Hybrid	DTM[1]	Insecticidal Seed Treatment	Genetic Trait Package	OBS[2]
Augusta Seed	Augusta	A5262	112	Cruiser Maxx® 1250	Agrisure 3000GT	1
Augusta Seed	Augusta	A5663-3000GT	113	Cruiser Maxx® 1250	Agrisure 3000GT	1
Augusta Seed	Augusta	A4463	113	Cruiser Maxx® 1250	VT Double PRO	2
Augusta Seed	Augusta	A1367	117	Cruiser Maxx® 1250	Agrisure Viptera 3220 E-Z Refuge	2
Augusta Seed	Augusta	A9967	117	Cruiser Maxx® 1250	Agrisure 3000GT	2
Augusta Seed	Augusta	A7768	118	Cruiser Maxx® 250	Agrisure Viptera 3110	1
Caverndale Farms	Caverndale Farms	CF 753 GTCBLL	107	Cruiser Maxx® 250 + Vibrance®	Agrisure 3010	1
Caverndale Farms	Caverndale Farms	CF 794 VIP 3111	109	Cruiser Maxx® 250 + Vibrance®	Agrisure Viptera 3111	1
Caverndale Farms	Caverndale Farms	CF 814 3000GT	112	Avicta® 500 + Vibrance®	Agrisure 3000GT	1
Caverndale Farms	Caverndale Farms	CF 859 VIP 3111	114	Cruiser Maxx® 250 + Vibrance®	Agrisure Viptera 3111	1
Caverndale Farms	Caverndale Farms	CF 889 VIP 3111	117	Avicta® 500 + Vibrance®	Agrisure Viptera 3111	1
Nutrien Ag Solutions	Dyna-Gro	D53VC33	113	Acceleron® 500/Poncho® 500/VOTiVO®500 EDC	VT Double PRO	1
Nutrien Ag Solutions	Dyna-Gro	D55VC80	115	Acceleron® 500/Poncho® 500/VOTiVO®500 EDC	VT Double PRO	1
Nutrien Ag Solutions	Dyna-Gro	D57VC17	117	Acceleron® 500/Poncho® 500/VOTiVO®500 EDC	VT Double PRO	1
Nutrien Ag Solutions	Dyna-Gro	D58VC65	118	Acceleron® 500/Poncho® 500/VOTiVO®500 EDC	VT Double PRO	1
AgReliant Genetics	LG Seeds	LG62C35VT2RIB	112	Poncho® 500/VOTiVO® EDC	VT Double PRO RIB Complete	2
AgReliant Genetics	LG Seeds	LG66C32VT2RIB	116	Poncho® 500/VOTiVO® EDC	VT Double PRO RIB Complete	2
Mid-Atlantic Seeds	Mid-Atlantic	MA8141DGVT2P	114	Acceleron® 250	VT Double PRO	1
Mid-Atlantic Seeds	Mid-Atlantic	MA8158SS	115	Acceleron® 250	SmartStax	1
Mid-Atlantic Seeds	Mid-Atlantic	MA5166GT3VIP	116	Cruiser Maxx® 250	Agrisure Viptera 3111	1
Mid-Atlantic Seeds	Mid-Atlantic	MA5161VIP3220EZ	116	Cruiser Maxx® 250	Agrisure Viptera 3220 E-Z Refuge	1
Mid-Atlantic Seeds	Mid-Atlantic	MA5165GT3	116	Cruiser Maxx® 250	Agrisure 3000GT	1
Syngenta Seeds	NK Brand	NK1677-3110	116	Avicta® 1250 + Vibrance®	Agrisure Viptera 3110	2
Syngenta Seeds	NK Brand	NK1748-3110	117	Avicta® 1250 + Vibrance®	Agrisure Viptera 3110	2
Corteva Agriscience	Pioneer Brand	P1197AMXT	111	Poncho® 250	AcreMax Xtreme	4
Corteva Agriscience	Pioneer Brand	P1380Q	113	Poncho® 250	QROME	4
Corteva Agriscience	Pioneer Brand	P1415Q	114	Poncho® 250	QROME	4
Corteva Agriscience	Pioneer Brand	P1847AMXT	118	Poncho® 250	AcreMax Xtreme	4
Erwin-Keith Inc	Progeny Ag Products	PGY 9117VT2P	117	Poncho® 500/VOTiVO®500 EDC/B360	VT Double PRO	4
Erwin-Keith Inc	Progeny Ag Products	PGY 7118VT2P	118	Poncho® 500/VOTiVO®500 EDC/B360	VT Double PRO	4
Seed Consultants	Seed Consultants	SCS 1111Q™	111	Poncho® 1250/VOTiVO®	QROME	4
Seed Consultants	Seed Consultants	SC 1121AM™	112	Poncho® 1250/VOTiVO®	AcreMax	4
Seed Consultants	Seed Consultants	SCS 1141AM™	114	Poncho® 1250/VOTiVO®	AcreMax	4
Seed Consultants	Seed Consultants	SCS 1158AM™	115	Poncho® 500/VOTiVO®	AcreMax	4
Seed Consultants	Seed Consultants	SCS 1168AM™	116	Poncho® 500/VOTiVO®	AcreMax	4
Seed Consultants	Seed Consultants	SCS 1170AM™	117	Poncho® 1250/VOTiVO®	AcreMax	4
Seed Consultants	Seed Consultants	SCS 1188AM™	118	Poncho® 500/VOTiVO®	AcreMax	4

[1] Days to maturity (DTM) provided by company; differences in maturity rating methods may exist.
[2] Number of observations hybrid occurred; the greater the observations, the more reliable the data. Note: Shaded hybrids indicate hybrids entered in less than 3 locations. Hybrids are sorted by Brand, then DTM.

Table 2. The Handy Bt Trait Table for U.S. corn production, updated February 2020 (thanks to Chris DiFonzo, Michigan State University, difonzo@msu.edu)

Trait packages in alphabetical order (acronym that may be used)	**Bt protein(s) in the trait package**	**Marketed for control of:**										**Resistance confirmed to the combination of Bts in package** (check local situation)	**Herbicide trait**			**Non-Bt Refuge % (cornbelt)**
		BCW	CEW	ECB	FAW	SB	SCB	SWB	TAW	WBC	CR		GR	LL	E	
AcreMax (AM)	Cry1Ab Cry1F	x	x	x	x	x	x	x				CEW FAW WBC	x	x		5% in bag
AcreMax CRW (AMRW)	Cry34/35Ab1										x	NCR WCR	x	x		10% in bag
AcreMax1 (AM1)	Cry1F Cry34/35Ab1	x		x	x	x	x	x			x	ECB FAW SWB WBC NCR WCR	x	x		10% in bag 20% ECB
AcreMax Leptra (AML)	Cry1Ab Cry1F Vip3A	x	x	x	x	x	x	x	x	x			x	x		5% in bag
AcreMax TRIsect (AMT)	Cry1Ab Cry1F mCry3A	x	x	x	x	x	x	x			x	CEW FAW WBC WCR	x	x		10% in bag
AcreMax Xtra (AMX)	Cry1Ab Cry1F Cry34/35Ab1	x	x	x	x	x	x	x			x	CEW FAW WBC NCR WCR	x	x		10% in bag
AcreMax Xtreme (AMXT)	Cry1Ab Cry1F mCry3A Cry34/35Ab1	x	x	x	x	x	x	x			x	CEW FAW WBC WCR	x	x		5% in bag
Agrisure 3010 (BR)	Cry1Ab		x	x			x	x				CEW	x	x		20%
Agrisure 3000GT & 3011A	Cry1Ab mCry3A		x	x			x	x			x	CEW WCR	x	x		20%
Agrisure Viptera 3110 (VR)	Cry1Ab Vip3A	x	x	x	x	x	x	x	x	x			x	x		20%
Agrisure Viptera 3111 (A4)	Cry1Ab Vip3A mCry3A	x	x	x	x	x	x	x	x	x	x	WCR	x	x		20%
Agrisure 3120 E-Z Refuge (BZ)	Cry1Ab Cry1F	x	x	x	x	x	x	x				CEW FAW WBC	x	See bag tag. EZ0 = no EZ1 = yes		5% in bag
Agrisure 3122 E-Z Refuge	Cry1Ab Cry1F mCry3A Cry34/35Ab1	x	x	x	x	x	x	x			x	CEW FAW WBC WCR	x			5% in bag
Agrisure Viptera 3220 E-Z (VZ)	Cry1Ab Cry1F Vip3A	x	x	x	x	x	x	x	x	x			x			5% in bag
Agrisure Viptera 3330 E-Z	Cry1Ab Vip3A Cry1A.105/Cry2Ab2	x	x	x	x	x	x	x	x	x			x			5% in bag
Agrisure Duracade 5122 E-Z (D1)	Cry1Ab Cry1F mCry3A eCry3.1Ab	x	x	x	x	x	x	x			x	CEW FAW WBC WCR	x			5% in bag
Agrisure Duracade 5222 E-Z (D2)	Cry1Ab Cry1F Vip3A mCry3A eCry3.1Ab	x	x	x	x	x	x	x	x	x	x	WCR	x			5% in bag
Herculex I (HXI)	Cry1F	x		x	x	x	x	x				ECB FAW SWB WBC	x	x		20%
Herculex RW (HXRW)	Cry34/35Ab1										x	NCR WCR	x	x		20%
Herculex XTRA (HXX)	Cry1F Cry34/35Ab1	x		x	x	x	x	x			x	ECB FAW SWB WBC NCR WCR	x	x		20%
Intrasect (YHR)	Cry1Ab Cry1F	x	x	x	x	x	x	x				CEW FAW WBC	x	x		5%
Intrasect TRIsect (CYHR)	Cry1Ab Cry1F mCry3A	x	x	x	x	x	x	x			x	CEW FAW WBC WCR	x	x		20%
Intrasect Xtra (YXR)	Cry1Ab Cry1F Cry34/35Ab1	x	x	x	x	x	x	x			x	CEW FAW WBC NCR WCR	x	x		20%
Intrasect Xtreme (CYXR)	Cry1Ab Cry1F mCry3A Cry34/35Ab1	x	x	x	x	x	x	x			x	CEW FAW WBC WCR	x	x		5%
Leptra (VYHR)	Cry1Ab Cry1F Vip3A	x	x	x	x	x	x	x	x	x			x	x		5%
Powercore [a] (PW) PW Refuge Advanced [b] (PWRA)	Cry1A.105/Cry2Ab2 Cry1F	x	x	x	x	x	x	x				CEW WBC	x	x		[a] 5% [b] 5% in bag
Powercore Enlist (PWE)	Same as Powercore	x	x	x	x	x	x	x				Same as Powercore	x	x	x	5% in bag
QROME (Q)	Cry1Ab Cry1F mCry3A Cry34/35Ab1	x	x	x	x	x	x	x			x	CEW FAW WBC WCR	x	x		5% in bag
SmartStax [a] (SX,STX or SS) STX Refuge Advanced [b] (SXRA) STX RIB Complete [b] (STXRIB)	Cry1A.105/Cry2Ab2 Cry1F Cry3Bb1 Cry34/35Ab1	x	x	x	x	x	x	x			x	CEW WBC NCR WCR	x	x		[a] 5% [b] 5% in bag
SmartStax Enlist (SXE)	Same as SmartStax	x	x	x	x	x	x	x			x	Same as SmartStax	x	x	x	5% in bag
Trecepta [a] (TRE) Trecepta RIB Complete [b] (TRERIB)	Cry1A.105/Cry2Ab2 Vip3A	x	x	x	x	x	x	x	x	x			x			[a] 5% [b] 5% in bag
TRIsect (CHR)	Cry1F mCry3A	x		x	x	x	x	x			x	ECB FAW SWB WBC WCR	x	x		20%

VT DoublePRO [a] (VT2P) VT2P RIB Complete[b] (VT2PRIB)	Cry1A.105/Cry2Ab2		x	x	x	x	x	x				CEW	x			[a]5% [b]5% in bag
VT TriplePRO [c] (VT3P) VT3P RIB Complete [d] (VT3PRIB)	Cry1A.105/Cry2Ab2 Cry3Bb1		x	x	x	x	x	x			x	CEW NCR WCR	x			[c]20% [D]10% in bag
Yieldgard Corn Borer (YGCB)	Cry1Ab		x	x			x	x				CEW	x			20%
Yieldgard Rootworm (YGRW)	Cry3Bb1										x	NCR WCR	x			20%
Yieldgard VT Triple (VT3)	Cry1Ab Cry3Bb1		x	x			x	x			x	CEW NCR WCR	x			20%

Table 3. Multi-year, multi-site relative ton per acre (yield).

Brand	Hybrid	DTM per Co.[1]	Shenandoah Valley		Northern Piedmont		Southern Piedmont		Southwest / Mountain		Multi-Site Average	Number of Obs.[2]
			2020	2019	2020	2019	2020	2019	2020	2019		
			Relative Ton per Acre[3]									
Mid-Atlantic	MA8141DGVT2P	114	129 *	112 *	---	---	---	---	---	---	120	2
Pioneer Brand	P1380Q	113	145 *	---	120 *	---	104	---	91	---	115	4
Seed Consultants	SCS 1158AM™	115	124 *	120 *	113 *	111 *	111 *	105 *	132 *	102 *	115	8
Caverndale Farms	CF 859 VIP 3111	114	---	---	---	---	---	---	107	119 *	113	2
NK Brand	NK1748-3110	117	103	---	---	---	122 *	---	---	---	113	2
Mid-Atlantic	MA5166GT3VIP	116	98	125 *	---	---	---	---	---	---	111	2
Augusta	A1367	117	120	128 *	---	---	---	---	83	---	110	3
NK Brand	NK1677-3110	116	112	---	---	---	101	---	---	---	106	2
Dyna-Gro	D57VC17	117	---	---	---	---	102	109 *	---	---	106	2
Augusta	A9967	117	---	95	101	110 *	---	99	113 *	112 *	105	6
Dyna-Gro	D55VC80	115	---	---	106 *	103	---	---	---	---	105	2
Augusta	A5663-3000GT	113	87	122 *	---	---	---	---	---	---	105	2
Seed Consultants	SCS 1188AM™	118	94	97	109 *	99	101	108 *	102	115 *	103	8
Seed Consultants	SCS 1168AM™	116	106	94	96	105	96	104	109	114 *	103	8
Pioneer Brand	P1415Q	114	104	---	101	---	111 *	---	94	---	103	4
Seed Consultants	SC 1121AM™	112	92	---	95	---	111 *	---	112 *	---	103	4
Seed Consultants	SCS 1111Q™	111	113	---	108 *	---	85	---	100	---	102	4
Mid-Atlantic	MA5165GT3	116	101	---	---	---	---	---	---	---	101	1
Seed Consultants	SCS 1141AM™	114	112	---	106 *	---	81	---	100	---	100	4
Mid-Atlantic	MA8158SS	115	100	---	---	---	---	---	---	---	100	1
Dyna-Gro	D58VC65	118	---	---	---	---	103	94	---	---	99	2
Caverndale Farms	CF 753 GTCBLL	107	---	---	---	---	---	---	98	99 *	98	2
Progeny Ag Products	PGY 9117VT2P	117	94	---	86	---	97	---	114 *	---	98	4
Augusta	A5262	112	86	107 *	---	---	---	---	---	98 *	97	3
Augusta	A7768	118	---	---	---	---	---	---	95	97	96	2
Seed Consultants	SCS 1170AM™	117	93	---	93	---	102	---	95	---	96	4

Progeny Ag Products	PGY 7118VT2P	118	76		86	100		103	91	106	*	104	96	95	8
Mid-Atlantic	MA5161VIP3220EZ	116	95		---	---		---	---	---		---	---	95	1
Pioneer Brand	P1197AMXT	111	135	*	59	104	*	100	84	95		92	82	94	8
Caverndale Farms	CF 814 3000GT	112	---		---	---		---	---	---		99	88	94	2
Augusta	A4463	113	81		---	104	*	---	---	---		---	---	93	2
Caverndale Farms	CF 889 VIP 3111	117	---		---	---		---	---	---		92	---	92	1
Pioneer Brand	P1847AMXT	118	87		---	88		---	103	---		88	---	92	4
LG Seeds	LG66C32VT2RIB	116	79		---	104		---	---	---		---	---	91	2
Caverndale Farms	CF 794 VIP 3111	109	---		---	---		---	---	---		88	---	88	1
Dyna-Gro	D53VC33	113	---		---	84		---	---	---		---	---	84	1
LG Seeds	LG62C35VT2RIB	112	80		---	82		---	---	---		---	---	81	2

[1] Days to maturity provided by company; differences in maturity rating methods may exist between companies.
[2] Hybrids tested over more site/year combinations provide a better estimate of hybrid performance than those tested only in a single site/year location.
[3] Relative Ton per Acre (yield) calculated by dividing Ton per Acre for each hybrid at each site/year by the average Ton per Acre for that site/year.
Note: Numbers over 100 indicate above-average yield, 100 indicates average yield, numbers under 100 indicate below-average yield.
* Indicates numbers similar to the highest value in that column (i.e. within one LSD of the top performer.)
Note: Shading indicates hybrids that were in the highest yielding group in at least three site years.

Table 4. Multi-year, multi-site relative milk per ton (quality).

Brand	Hybrid	DTM per Co.[1]	Shenandoah Valley		Northern Piedmont		Southern Piedmont		Southwest / Mountain		Multi-Site Average	Number of Obs.[2]
			2020	2019	2020	2019	2020	2019	2020	2019		
			Relative Milk per Ton[3]									
NK Brand	NK1748-3110	117	105 *	---	---	---	108 *	---	---	---	106	2
Augusta	A7768	118	---	---	---	---	---	---	96	114 *	105	2
Mid-Atlantic	MA5165GT3	116	105 *	---	---	---	---	---	---	---	105	1
NK Brand	NK1677-3110	116	110 *	---	---	---	99	---	---	---	105	2
Caverndale Farms	CF 889 VIP 3111	117	---	---	---	---	---	---	104 *	---	104	1
Mid-Atlantic	MA5161VIP3220EZ	116	104 *	---	---	---	---	---	---	---	104	1
Augusta	A5262	112	108 *	100	---	---	---	---	---	101	103	3
Pioneer Brand	P1415Q	114	107 *	---	99	---	106 *	---	100 *	---	103	4
Progeny Ag Products	PGY 9117VT2P	117	107 *	---	104 *	---	98	---	103 *	---	103	4
Caverndale Farms	CF 814 3000GT	112	---	---	---	---	---	---	97	108 *	103	2
Augusta	A1367	117	105 *	101	---	---	---	---	101 *	---	102	3
Mid-Atlantic	MA5166GT3VIP	116	101 *	103 *	---	---	---	---	---	---	102	2
Dyna-Gro	D57VC17	117	---	---	---	---	101 *	102 *	---	---	102	2
Seed Consultants	SCS 1170AM™	117	99 *	---	103 *	---	104 *	---	99 *	---	101	4
Caverndale Farms	CF 794 VIP 3111	109	---	---	---	---	---	---	101 *	---	101	1
Seed Consultants	SCS 1168AM™	116	99 *	101	100 *	102	103 *	99	97	107 *	101	8
Mid-Atlantic	MA8141DGVT2P	114	98	104 *	---	---	---	---	---	---	101	2
LG Seeds	LG62C35VT2RIB	112	100 *	---	101 *	---	---	---	---	---	100	2
Mid-Atlantic	MA8158SS	115	100 *	---	---	---	---	---	---	---	100	1
Pioneer Brand	P1380Q	113	95	---	100	---	98	---	106 *	---	100	4
Caverndale Farms	CF 753 GTCBLL	107	---	---	---	---	---	---	102 *	97	100	2
Pioneer Brand	P1847AMXT	118	100 *	---	100	---	99	---	99 *	---	100	4
Seed Consultants	SC 1121AM™	112	94	---	100 *	---	100 *	---	103 *	---	99	4
Progeny Ag Products	PGY 7118VT2P	118	105 *	101	98	98	92	101 *	95	105 *	99	8
Seed Consultants	SCS 1141AM™	114	96	---	106 *	---	90	---	105 *	---	99	4
Seed Consultants	SCS 1111Q™	111	92	---	92	---	103 *	---	109 *	---	99	4

Seed Consultants	SCS 1188AM™	118	101	*	100	103	*	98	101	*	100	98	92	99	8
Dyna-Gro	D53VC33	113	---		---	98		---	---		---	---	---	98	1
Augusta	A9967	117	---		99	102	*	101	---		98	93	96	98	6
Dyna-Gro	D58VC65	118	---		---	---		---	98		97	---	---	98	2
Caverndale Farms	CF 859 VIP 3111	114	---		---	---		---	---		---	96	99	98	2
Pioneer Brand	P1197AMXT	111	84		104	* 98		99	102	*	99	98	* 97	98	8
LG Seeds	LG66C32VT2RIB	116	98		---	98		---	---		---	---	---	98	2
Dyna-Gro	D55VC80	115	---		---	100		95	---		---	---	---	98	2
Augusta	A4463	113	96		---	98		---	---		---	---	---	97	2
Seed Consultants	SCS 1158AM™	115	96		99	99		89	99		98	92	96	96	8
Augusta	A5663-3000GT	113	91		98	---		---	---		---	---	---	94	2

[1] Days to maturity provided by company; differences in maturity rating methods may exist between companies.
[2] Hybrids tested over more site/year combinations provide a better estimate of hybrid performance than those tested only in a single site/year location.
[3] Relative Milk per Ton (quality) calculated by dividing Milk per Ton for each hybrid at each site/year by the average Milk per Ton for that site/year.
Note: Numbers over 100 indicate above-average quality, 100 indicates average quality, numbers under 100 indicate below-average quality.
* Indicates numbers similar to the highest value in that column (i.e. within one LSD of the top performer.)
Note: Shading indicates hybrids that were in the highest quality group in at least three site years.

Table 5. Multi-year, multi-site relative milk per acre (yield X quality).

Brand	Hybrid	DTM per Co.[1]	Shenandoah Valley		Northern Piedmont		Southern Piedmont		Southwest / Mountain		Multi-Site Average	Number of Obs.[2]
			2020	2019	2020	2019	2020	2019	2020	2019		
			Relative Milk per Acre[3]									
Mid-Atlantic	MA8141DGVT2P	114	126 *	116 *	---	---	---	---	---	---	121	2
NK Brand	NK1748-3110	117	110	---	---	---	131 *	---	---	---	121	2
Pioneer Brand	P1380Q	113	139 *	---	121 *	---	102	---	97	---	115	4
Mid-Atlantic	MA5166GT3VIP	116	99	130 *	---	---	---	---	---	---	114	2
Augusta	A1367	117	126 *	129 *	---	---	---	---	85	---	113	3
Caverndale Farms	CF 859 VIP 3111	114	---	---	---	---	---	---	104 *	119 *	111	2
NK Brand	NK1677-3110	116	124 *	---	---	---	99	---	---	---	111	2
Seed Consultants	SCS 1158AM™	115	119 *	119 *	113 *	97	109	103	120 *	99 *	110	8
Dyna-Gro	D57VC17	117	---	---	---	---	103	112 *	---	---	107	2
Pioneer Brand	P1415Q	114	112	---	101	---	117 *	---	96	---	107	4
Mid-Atlantic	MA5165GT3	116	106	---	---	---	---	---	---	---	106	1
Seed Consultants	SCS 1168AM™	116	105	95	96	106	97	103	106 *	121 *	104	8
Augusta	A9967	117	---	93	103	111	---	97	104 *	108 *	103	6
Dyna-Gro	D55VC80	115	---	---	106	99	---	---	---	---	102	2
Seed Consultants	SC 1121AM™	112	84	---	96	---	112 *	---	117 *	---	102	4
Seed Consultants	SCS 1188AM™	118	95	97	112 *	96	101	107	99	107 *	102	8
Augusta	A7768	118	---	---	---	---	---	---	91	110 *	101	2
Progeny Ag Products	PGY 9117VT2P	117	101	---	89	---	95	---	117 *	---	101	4
Augusta	A5663-3000GT	113	82	119 *	---	---	---	---	---	---	100	2
Augusta	A5262	112	94	108 *	---	---	---	---	---	99 *	100	3
Seed Consultants	SCS 1111Q™	111	105	---	95	---	88	---	109 *	---	99	4
Mid-Atlantic	MA8158SS	115	99	---	---	---	---	---	---	---	99	1
Mid-Atlantic	MA5161VIP3220EZ	116	99	---	---	---	---	---	---	---	99	1
Seed Consultants	SCS 1141AM™	114	104	---	112 *	---	73	---	105 *	---	98	4
Seed Consultants	SCS 1170AM™	117	95	---	97	---	106	---	94	---	98	4

Caverndale Farms	CF 753 GTCBLL	107	---	---	---	---	---	---	100	96		98	2
Caverndale Farms	CF 889 VIP 3111	117	---	---	---	---	---	---	96	---		96	1
Dyna-Gro	D58VC65	118	---	---	---	---	101	92	---	---		96	2
Caverndale Farms	CF 814 3000GT	112	---	---	---	---	---	---	97	95		96	2
Progeny Ag Products	PGY 7118VT2P	118	81	86	98	101	84	107	99	100	*	94	8
Pioneer Brand	P1847AMXT	118	88	---	88	---	102	---	88	---		91	4
Augusta	A4463	113	80	---	103	---	---	---	---	---		91	2
Pioneer Brand	P1197AMXT	111	109	62	103	98	85	94	90	76		90	8
LG Seeds	LG66C32VT2RIB	116	77	---	101	---	---	---	---	---		89	2
Caverndale Farms	CF 794 VIP 3111	109	---	---	---	---	---	---	89	---		89	1
Dyna-Gro	D53VC33	113	---	---	82	---	---	---	---	---		82	1
LG Seeds	LG62C35VT2RIB	112	78	---	83	---	---	---	---	---		80	2

[1] Days to maturity provided by company; differences in maturity rating methods may exist between companies.
[2] Hybrids tested over more site/year combinations provide a better estimate of hybrid performance than those tested in a single site/year location.
[3] Relative Milk per Acre (yield x quality) calculated by dividing Milk per Acre for each hybrid at each site/year by the average Milk per Acre for that site/year.
Note: Numbers over 100 indicate above-average yield*quality, 100 indicates average yield*quality, numbers under 100 indicate below-average yield*quality.
* Indicates numbers similar to the highest value in that column (i.e. within one LSD of the top performer.)
Note: Shading indicates hybrids that were in the highest yield*quality group in at least three site years.

Table 6. Corn silage test results at the Shenandoah Valley site in 2020.

Brand	Hybrid	DTM[1]	DM at Harvest		Yield at 35% DM		Crude Protein		ADF		NDF		NDF Digest		NE_L		TDN		Milk2006		
		Days	%		ton /acre		%		%		%		%		Mcal /lb		%		lb milk/ ton		lb milk/ acre	
Pioneer Brand	P1380Q	113	37.6		35.3	*	9.9	*	24.8	*	47.7	*	60.3		0.60		62.9		2621		32534	*
Augusta	A1367	117	35.2		29.1		9.2	*	25.7	*	44.3	*	55.8	*	0.65	*	65.9	*	2912	*	29552	*
Mid-Atlantic	MA8141DGVT2P	114	38.1		31.4	*	8.7		25.5	*	45.6	*	57.6	*	0.61		63.7	*	2709		29520	*
NK Brand	NK1677-3110	116	34.4		27.2		8.4		26.6		43.8	*	56.3	*	0.67	*	67.7	*	3049	*	28944	*
Seed Consultants	SCS 1158AM™	115	39.1	*	30.1	*	9.2	*	26.3	*	46.4	*	59.6		0.60		63.2		2656		27883	*
Pioneer Brand	P1415Q	114	36.9		25.3		8.7		25.7	*	44.2	*	59.7		0.65	*	67.2	*	2965	*	26267	
NK Brand	NK1748-3110	117	36.7		25.0		8.4		26.0	*	44.2	*	57.0	*	0.65	*	66.1	*	2914	*	25828	
Pioneer Brand	P1197AMXT	111	40.3	*	32.8	*	8.8		26.4		49.6		56.1	*	0.56		58.7		2330		25434	
Mid-Atlantic	MA5165GT3	116	36.7		24.6		8.5		26.5		44.6	*	58.7		0.64	*	66.2	*	2904	*	24785	
Seed Consultants	SCS 1168AM™	116	38.1		25.8		9.4	*	25.4	*	46.4	*	61.5		0.61		64.5	*	2738	*	24704	
Seed Consultants	SCS 1111Q™	111	39.2	*	27.5		9.4	*	25.4	*	46.0	*	56.3	*	0.59		61.7		2561		24646	
Seed Consultants	SCS 1141AM™	114	38.4	*	27.3		8.9		25.8	*	46.1	*	59.4		0.60		63.3		2662		24358	
Progeny Ag Products	PGY 9117VT2P	117	37.5		22.9		8.6		25.5	*	43.7	*	59.6		0.65	*	67.0	*	2958	*	23662	
Mid-Atlantic	MA8158SS	115	38.2	*	24.2		8.7		26.3		46.8	*	58.5		0.62	*	64.4	*	2767	*	23207	
Mid-Atlantic	MA5166GT3VIP	116	36.8		23.7		9.1		26.0	*	45.0	*	55.4	*	0.63	*	64.4	*	2790	*	23137	
Mid-Atlantic	MA5161VIP3220 EZ	116	36.1		23.1		9.1	*	25.8	*	44.9	*	57.6	*	0.64	*	65.7	*	2876	*	23135	
Seed Consultants	SCS 1188AM™	118	36.6		22.8		9.3	*	25.9	*	46.4	*	60.1		0.62	*	65.1	*	2795	*	22261	
Seed Consultants	SCS 1170AM™	117	38.0		22.6		8.8		25.5	*	44.5	*	57.7		0.62	*	64.2	*	2751	*	22168	
Augusta	A5262	112	37.2		20.9		8.1		25.9	*	43.7	*	58.6		0.66	*	67.3	*	2994	*	21936	
Pioneer Brand	P1847AMXT	118	37.0		21.2		9.6	*	24.9	*	45.6	*	58.4		0.62	*	64.6	*	2776	*	20595	
Seed Consultants	SC 1121AM™	112	38.7	*	22.3		9.4	*	25.2	*	47.2	*	59.7		0.59		62.6		2602		19702	
Augusta	A5663-3000GT	113	39.6	*	21.2		8.9		25.9	*	47.3	*	56.5	*	0.59		61.3		2531		19117	
Progeny Ag Products	PGY 7118VT2P	118	36.1		18.6		9.0		25.9	*	46.4	*	60.5		0.64	*	66.4	*	2899	*	18922	
Augusta	A4463	113	40.6	*	19.8		8.8		24.9	*	44.5	*	60.4		0.61		63.6	*	2674		18620	
LG Seeds	LG62C35VT2RIB	112	38.7	*	19.3		8.6		26.1	*	46.4	*	58.6		0.62	*	64.4	*	2761	*	18277	
LG Seeds	LG66C32VT2RIB	116	37.4		19.2		8.6		27.1		48.3		58.3		0.61		63.7	*	2708		18094	

Site Average	37.7	24.7	8.9	25.8	45.8	58.4	0.62	64.5	2765	23742
LSD (0.10)	2.5	5.9	0.8	1.5	4.2	3.8	0.05	4.1	324	6000
C.V.	4.9	17.9	6.2	4.4	6.8	4.8	5.98	4.7	9	19

[1]Days to maturity provided by company; differences in maturity rating methods may exist between companies.
*Indicates numbers not significantly different from the highest (or lowest for ADF and NDF) value in that column, i.e. within one LSD of the top performer.
Note: Hybrids are listed in descending order of lb milk/acre.

Table 7. Two-year corn silage test results (2019 and 2020) at the Shenandoah Valley site.

Brand	Hybrid	DTM[1]	DM at Harvest		Yield at 35% DM		Crude Protein		ADF		NDF		NDF Digest		NE_L		TDN		Milk2006		
		Days	%		ton /acre		%		%		%		%		Mcal /lb		%		lb milk/ ton		lb milk/ acre	
Augusta	A1367	117	40.46		28.07	*	8.30	*	28.66	*	49.25	*	62.07		0.59	*	62.54	*	2599	*	25555	*
Seed Consultants	SCS 1158AM™	115	42.46	*	27.86	*	8.29	*	29.04	*	50.76	*	62.49	*	0.58	*	61.26		2491	*	24358	*
Mid-Atlantic	MA8141DGVT2P	114	40.89		27.10	*	7.91		28.62	*	49.68	*	61.91		0.59	*	61.85	*	2549	*	24242	*
Mid-Atlantic	MA5166GT3VIP	116	39.95		25.26	*	8.16	*	28.33	*	49.15	*	60.29		0.60	*	62.37	*	2604	*	22929	*
Augusta	A5262	112	41.30		21.89		7.54		30.05	*	49.86	*	62.83	*	0.60	*	63.60	*	2670	*	20426	
Seed Consultants	SCS 1168AM™	116	44.54	*	22.55		8.45	*	28.44	*	49.87	*	64.37	*	0.58	*	61.81	*	2517	*	20077	
Augusta	A5663-3000GT	113	43.43	*	23.66		8.10	*	29.04	*	51.84	*	60.65		0.57		59.98		2408		20003	
Seed Consultants	SCS 1188AM™	118	40.19		21.57		8.23	*	31.73		53.69		64.01	*	0.58	*	62.12	*	2539	*	19240	
Progeny Ag Products	PGY 7118VT2P	118	39.11		18.45		8.11	*	29.70	*	51.65	*	62.20		0.60	*	62.93	*	2630	*	17022	
Pioneer Brand	P1197AMXT	111	40.64		20.73		8.13	*	31.72		54.54		63.39	*	0.56		60.18		2395		16667	
	Site Average		41.30		23.71		8.12		29.53		51.03		62.42		0.59		61.86		2540		21052	
	LSD (0.10)		2.21		4.02		0.52		2.66		3.77		2.02		0.03		2.28		183		3740	
	C.V.		5.66		17.91		6.82		9.57		7.85		3.43		5.19		3.91		8		19	

[1]Days to maturity provided by company; differences in maturity rating methods may exist between companies.
*Indicates numbers not significantly different from the highest (or lowest for ADF and NDF) value in that column, i.e. within one LSD of the top performer.
Note: Hybrids are listed in descending order of lb milk/acre.

Table 8. Corn silage test results at the Northern Piedmont site in 2020.

Brand	Hybrid	DTM[1]	DM at Harvest		Yield at 35% DM		Crude Protein		ADF		NDF		NDF Digest		NE_L		TDN		Milk2006		
		Days	%		ton /acre		%		%		%		%		Mcal /lb		%		lb milk/ ton		lb milk/ acre	
Pioneer Brand	P1380Q	113	33.48		21.70	*	6.55		29.32	*	47.62	*	63.84	*	0.68		69.36		3133		23814	*
Seed Consultants	SCS 1158AM™	115	33.88		20.48	*	6.17		30.59		50.17		65.74	*	0.67		69.43		3113		22272	*
Seed Consultants	SCS 1141AM™	114	33.09		19.06	*	6.65		28.31	*	43.81	*	63.64		0.71	*	71.64	*	3322	*	22156	*
Seed Consultants	SCS 1188AM™	118	34.24		19.64	*	6.20		30.56		47.86		66.58	*	0.69	*	70.82	*	3221	*	22137	*
Dyna-Gro	D55VC80	115	34.21		19.17	*	6.29		29.47	*	47.42	*	62.83		0.68		69.17		3129		20987	
Pioneer Brand	P1197AMXT	111	30.91		18.84	*	7.12	*	28.74	*	48.60		60.99		0.67		68.39		3088		20375	
Augusta	A9967	117	32.70		18.24		6.41		30.05		47.79		63.84		0.68	*	70.01	*	3183	*	20306	
Augusta	A4463	113	37.10	*	18.82	*	6.51		28.14	*	43.74	*	62.32		0.67		68.46		3076		20259	
LG Seeds	LG66C32VT2RIB	116	33.58		18.71		6.83	*	29.12	*	48.95		62.66		0.67		68.28		3058		19980	
Pioneer Brand	P1415Q	114	33.28		18.26		6.69	*	29.45	*	48.78		63.82		0.67		69.14		3115		19940	
Progeny Ag Products	PGY 7118VT2P	118	32.85		18.09		6.58		29.73	*	50.26		63.07		0.67		68.54		3076		19435	
Seed Consultants	SCS 1170AM™	117	32.11		16.86		7.07	*	28.60	*	45.64	*	63.24		0.69	*	70.61	*	3240	*	19153	
Seed Consultants	SCS 1168AM™	116	32.59		17.25		5.93		31.34		51.56		66.23	*	0.68		69.88	*	3144		18995	
Seed Consultants	SC 1121AM™	112	33.24		17.22		6.62		29.65	*	48.94		65.37	*	0.68		69.86	*	3150		18978	
Seed Consultants	SCS 1111Q™	111	37.14	*	19.44	*	6.44		30.84		50.95		64.81	*	0.63		66.32		2873		18795	
Progeny Ag Products	PGY 9117VT2P	117	32.48		15.54		6.86	*	28.94	*	46.09	*	63.37		0.69	*	70.75	*	3250	*	17655	
Pioneer Brand	P1847AMXT	118	32.71		15.90		6.43		29.56	*	49.60		63.60		0.68		69.32		3131		17402	
LG Seeds	LG62C35VT2RIB	112	33.45		14.73		6.69	*	28.98	*	46.57	*	62.82		0.68	*	69.69	*	3172	*	16383	
Dyna-Gro	D53VC33	113	34.54		15.10		6.48		30.02		48.24		62.31		0.67		68.52		3080		16295	
	Site Average		33.56		18.05		6.55		29.55		48.03		63.74		0.68		69.38		3134		19754	
	LSD (0.10)		2.53		2.89		0.62		1.82		4.03		2.74		0.02		2.05		157		2811	
	C.V.		5.95		12.64		7.42		4.84		6.60		3.39		2.81		2.33		4		11	

[1]Days to maturity provided by company; differences in maturity rating methods may exist between companies.
*Indicates numbers not significantly different from the highest (or lowest for ADF and NDF) value in that column, i.e. within one LSD of the top performer.
Note: Hybrids are listed in descending order of lb milk/acre.

Table 9. Two-year corn silage test results (2019 and 2020) at the Northern Piedmont site.

Brand	Hybrid	DTM[1]	DM at Harvest	Yield at 35% DM	Crude Protein	ADF	NDF	NDF Digest	NE_L	TDN	Milk2006	
		Days	%	ton /acre	%	%	%	%	Mcal /lb	%	lb milk/ ton	lb milk/ acre
Augusta	A9967	117	37.28	28.00 *	6.59	31.30	51.94 *	62.37	0.62 *	65.83 *	2817 *	26333 *
Seed Consultants	SCS 1188AM™	118	40.39 *	27.78 *	6.90	30.29 *	50.57 *	63.10 *	0.61 *	64.96 *	2739 *	25519 *
Seed Consultants	SCS 1158AM™	115	38.92 *	29.23 *	6.94	30.00 *	51.89 *	60.62	0.60	63.21	2634	25363 *
Pioneer Brand	P1197AMXT	111	36.63	27.67 *	7.48 *	29.34 *	51.65 *	59.31	0.61 *	63.92	2702 *	25124 *
Seed Consultants	SCS 1168AM™	116	37.88	26.61	6.43	31.38	53.31	64.66 *	0.62 *	66.08 *	2807 *	25045 *
Dyna-Gro	D55VC80	115	39.00 *	27.33	6.95	28.84 *	49.57 *	60.15	0.61 *	64.25 *	2724 *	24893 *
Progeny Ag Products	PGY 7118VT2P	118	37.23	26.71	6.94	30.33 *	52.88	60.39	0.61 *	64.29 *	2725 *	24402
	Site Average		38.19	27.62	6.89	30.21	51.69	61.51	0.61	64.65	2735	25240
	LSD (0.10)		1.61	1.78	0.50	1.74	2.96	2.03	0.02	2.07	153	1928
	C.V.		4.88	7.49	8.36	6.69	6.65	3.82	4.35	3.71	6	9

[1]Days to maturity provided by company; differences in maturity rating methods may exist between companies.
*Indicates numbers not significantly different from the highest (or lowest for ADF and NDF) value in that column, i.e. within one LSD of the top performer.
Note: Hybrids are listed in descending order of lb milk/acre.

Table 10. Three-year corn silage test results (2018, 2019, and 2020) at the Northern Piedmont site.

Brand	Hybrid	DTM[1]	DM at Harvest		Yield at 35% DM		Crude Protein		ADF		NDF		NDF Digest		NE_L		TDN		Milk2006			
		Days	%		ton /acre		%		%		%		%		Mcal /lb		%		lb milk/ ton		lb milk/ acre	
Progeny Ag Products	PGY 7118VT2P	118	37.73		26.71	*	7.17	*	29.75	*	52.30	*	60.30		0.61	*	64.02	*	2707	*	24356	*
Seed Consultants	SCS 1158AM™	115	39.16	*	26.90	*	7.33	*	29.20	*	50.44	*	60.33		0.60	*	63.33	*	2651	*	23792	*
Seed Consultants	SCS 1168AM™	116	38.37	*	25.04		6.48		31.62		53.96		63.71	*	0.61	*	64.47	*	2696	*	23013	*
	Site Average		38.42		26.22		6.99		30.19		52.23		61.45		0.61		63.94		2685		23720	
	LSD (0.10)		1.31		1.57		0.61		1.88		2.86		1.57		0.02		1.38		104		1580	
	C.V.		4.64		8.15		11.59		8.31		7.29		3.40		3.48		2.87		5		9	

[1]Days to maturity provided by company; differences in maturity rating methods may exist between companies.
*Indicates numbers not significantly different from the highest (or lowest for ADF and NDF) value in that column, i.e. within one LSD of the top performer.
Note: Hybrids are listed in descending order of lb milk/acre.

Table 11. Corn silage test results at the Southern Piedmont site in 2020.

Brand	Hybrid	DTM[1]	DM at Harvest		Yield at 35% DM		Crude Protein		ADF		NDF		NDF Digest		NE_L		TDN		Milk2006		
		Days	%		ton /acre		%		%		%		%		Mcal /lb		%		lb milk/ ton		lb milk/ acre	
NK Brand	NK1748-3110	117	26.06		14.14	*	9.10		36.62	*	59.22		67.54	*	0.62	*	65.75	*	2784	*	13800	*
Pioneer Brand	P1415Q	114	26.69		12.82	*	9.63		37.28	*	59.46		68.64	*	0.61	*	65.45	*	2740	*	12302	*
Seed Consultants	SC 1121AM™	112	26.10		12.81	*	9.52		36.74	*	58.81	*	63.49		0.59	*	62.57	*	2584	*	11808	*
Seed Consultants	SCS 1158AM™	115	28.30	*	12.84	*	8.86		38.70		61.73		61.85		0.59	*	61.92		2558	*	11453	
Seed Consultants	SCS 1170AM™	117	24.76		11.76		9.67	*	37.00	*	60.17		65.22	*	0.60	*	64.01	*	2677	*	11148	
Dyna-Gro	D57VC17	117	29.54	*	11.76		9.99	*	34.93	*	58.22	*	59.78		0.60	*	62.34	*	2624	*	10806	
Pioneer Brand	P1380Q	113	26.85		12.02		10.06	*	35.47	*	57.82	*	57.18		0.59	*	60.69		2528		10758	
Pioneer Brand	P1847AMXT	118	27.79	*	11.93		9.75	*	36.81	*	60.77		61.46		0.59	*	61.82		2557	*	10678	
Seed Consultants	SCS 1188AM™	118	27.21	*	11.65		10.57	*	34.84	*	55.69	*	59.09		0.60	*	62.13	*	2611	*	10664	
Dyna-Gro	D58VC65	118	24.98		11.95		10.30	*	37.73		60.52		60.20		0.59	*	61.41		2541		10626	
NK Brand	NK1677-3110	116	22.84		11.64		10.27	*	37.90		63.03		67.95	*	0.58		63.16	*	2560	*	10404	
Seed Consultants	SCS 1168AM™	116	24.78		11.05		10.11	*	37.63		60.73		66.05	*	0.60	*	63.95	*	2658	*	10216	
Progeny Ag Products	PGY 9117VT2P	117	26.53		11.16		9.81	*	36.66	*	60.17		60.20		0.59	*	61.35		2538		9967	
Seed Consultants	SCS 1111Q™	111	26.58		9.88		9.96	*	36.77	*	58.74	*	62.34		0.60	*	63.40	*	2667	*	9207	
Pioneer Brand	P1197AMXT	111	24.90		9.67		10.29	*	36.48	*	58.68	*	60.61		0.60	*	62.73	*	2640	*	8985	
Progeny Ag Products	PGY 7118VT2P	118	23.91		10.53		10.40	*	40.78		64.17		59.76		0.56		59.30		2380		8817	
Seed Consultants	SCS 1141AM™	114	25.70		9.42		10.84	*	35.66	*	60.32		53.80		0.56		57.63		2334		7670	
	Site Average		26.09		11.59		9.95		36.94		59.90		62.07		0.59		62.33		2587		10548	
	LSD (0.10)		2.33		1.92		1.20		2.59		3.35		5.11		0.03		3.77		239		2324	
	C.V.		6.94		12.85		9.30		5.42		4.32		6.36		4.39		4.68		7		17	

[1]Days to maturity provided by company; differences in maturity rating methods may exist between companies.
*Indicates numbers not significantly different from the highest (or lowest for ADF and NDF) value in that column, i.e. within one LSD of the top performer.
Note: Hybrids are listed in descending order of lb milk/acre.

Table 12. Two-year corn silage test results (2019 and 2020) at the Southern Piedmont site.

Brand	Hybrid	DTM[1]	DM at Harvest		Yield at 35% DM		Crude Protein		ADF		NDF		NDF Digest		NE_L		TDN		Milk2006			
		Days	%		ton /acre		%		%		%		%		Mcal /lb		%		lb milk/ ton		lb milk/ acre	
Dyna-Gro	D57VC17	117	45.05	*	16.02	*	8.30		35.29	*	59.36		62.50	*	0.57	*	61.99	*	2483	*	13787	*
Seed Consultants	SCS 1188AM™	118	38.85		15.81	*	9.05	*	33.78	*	56.35		61.07		0.57	*	61.18	*	2449	*	13380	*
Seed Consultants	SCS 1158AM™	115	38.29		15.62	*	8.13		37.60		61.65		62.80	*	0.56	*	61.22	*	2427	*	13141	*
Seed Consultants	SCS 1168AM™	116	34.76		14.70		8.69	*	36.65		60.44		64.23	*	0.57	*	62.11	*	2482	*	12507	
Progeny Ag Products	PGY 7118VT2P	118	33.65		14.57		9.08	*	37.55		61.20		60.29		0.56	*	59.92	*	2369	*	12081	
Dyna-Gro	D58VC65	118	35.25		14.24		8.95	*	36.41		60.00		60.21		0.56	*	60.41	*	2409	*	11882	
Pioneer Brand	P1197AMXT	111	37.02		13.68		8.92	*	35.56	*	59.04		62.01	*	0.57	*	61.43	*	2451	*	11541	
	Site Average		37.55		14.95		8.73		36.12		59.72		61.87		0.57		61.18		2439		12617	
	LSD (0.10)		2.10		1.18		0.56		2.14		3.43		3.11		0.02		2.30		149		1161	
	C.V.		6.29		8.87		7.22		6.64		6.43		5.63		4.22		4.21		7		10	

[1]Days to maturity provided by company; differences in maturity rating methods may exist between companies.
*Indicates numbers not significantly different from the highest (or lowest for ADF and NDF) value in that column, i.e. within one LSD of the top performer.
Note: Hybrids are listed in descending order of lb milk/acre.

Table 13. Three-year corn silage test results (2018, 2019, and 2020) at the Southern Piedmont site.

Brand	Hybrid	DTM[1]	DM at Harvest	Yield at 35% DM	Crude Protein	ADF	NDF	NDF Digest	NE_L	TDN	Milk2006	
		Days	%	ton /acre	%	%	%	%	Mcal /lb	%	lb milk/ ton	lb milk/ acre
Seed Consultants	SCS 1168AM™	116	35.68	16.93 *	8.04 *	35.46 *	58.68 *	63.00 *	0.58 *	62.58 *	2540 *	14941 *
Seed Consultants	SCS 1158AM™	115	38.92 *	16.73 *	7.73 *	35.02 *	56.81 *	61.53 *	0.58 *	62.24 *	2532 *	14782 *
Progeny Ag Products	PGY 7118VT2P	118	35.27	15.97 *	8.11 *	36.16 *	58.95 *	59.86	0.57 *	60.91 *	2455 *	13792
	Site Average		36.62	16.55	7.96	35.54	58.15	61.46	0.58	61.91	2509	14505
	LSD (0.10)		1.76	1.29	0.41	1.56	2.45	2.59	0.02	2.01	134	1113
	C.V.		6.56	10.58	6.99	5.97	5.72	5.73	4.54	4.42	7	10

[1]Days to maturity provided by company; differences in maturity rating methods may exist between companies.
*Indicates numbers not significantly different from the highest (or lowest for ADF and NDF) value in that column, i.e. within one LSD of the top performer.
Note: Hybrids are listed in descending order of lb milk/acre.

Table 14. Corn silage test results at the Southwest Virginia site in 2020.

Brand	Hybrid	DTM[1]	DM at Harvest		Yield at 35% DM		Crude Protein		ADF		NDF		NDF Digest		NE_L		TDN		Milk2006		
		Days	%		ton /acre		%		%		%		%		Mcal /lb		%		lb milk/ ton		lb milk/ acre	
Seed Consultants	SCS 1158AM™	115	42.13	*	44.74	*	8.02	*	26.52	*	45.83	*	62.32	*	0.59		62.99		2605		40176	*
Progeny Ag Products	PGY 9117VT2P	117	38.76		38.76	*	8.74	*	26.24	*	45.80	*	64.66	*	0.64	*	67.15	*	2914	*	39125	*
Seed Consultants	SC 1121AM™	112	37.99		38.15	*	8.44	*	26.63	*	45.96	*	63.66	*	0.64	*	67.06	*	2919	*	39043	*
Seed Consultants	SCS 1111Q™	111	34.21		33.82		8.54	*	28.19	*	48.89	*	65.10	*	0.66	*	69.32	*	3082	*	36514	*
Seed Consultants	SCS 1168AM™	116	39.47		37.03		8.48	*	26.81	*	47.32	*	63.12	*	0.61		64.91	*	2747		35422	*
Seed Consultants	SCS 1141AM™	114	37.03		33.86		8.57	*	26.59	*	45.59	*	63.81	*	0.65	*	67.55	*	2957	*	34956	*
Augusta	A9967	117	46.50	*	38.23	*	8.15	*	25.94	*	43.57	*	62.54	*	0.60		63.28		2630		34774	*
Caverndale Farms	CF 859 VIP 3111	114	41.46	*	36.34		8.77	*	25.57	*	44.23	*	61.01		0.61		64.26		2723		34670	*
Caverndale Farms	CF 753 GTCBLL	107	38.39		33.38		8.09	*	27.85	*	47.39	*	63.60	*	0.64	*	66.71	*	2887	*	33337	
Seed Consultants	SCS 1188AM™	118	38.65		34.61		8.04	*	26.65	*	47.32	*	60.77		0.62	*	64.83		2767		33115	
Progeny Ag Products	PGY 7118VT2P	118	41.91	*	35.39		8.44	*	25.66	*	43.82	*	59.65		0.61		63.69		2690		32988	
Pioneer Brand	P1380Q	113	37.24		30.85		8.43	*	27.35	*	47.14	*	65.77	*	0.65	*	68.34	*	3001	*	32432	
Caverndale Farms	CF 814 3000GT	112	41.26	*	33.64		8.09	*	26.31	*	44.85	*	62.04	*	0.62		64.87		2758		32410	
Caverndale Farms	CF 889 VIP 3111	117	37.05		31.21		7.76		28.88	*	49.62		66.02	*	0.64	*	67.70	*	2940	*	32212	
Pioneer Brand	P1415Q	114	38.75		31.99		8.29	*	27.11	*	45.85	*	63.38	*	0.63	*	65.82	*	2822	*	32143	
Seed Consultants	SCS 1170AM™	117	38.64		32.20		7.97	*	28.01	*	48.65	*	64.40	*	0.62	*	65.97	*	2813	*	31378	
Augusta	A7768	118	40.53		32.30		8.05	*	26.41	*	45.46	*	60.16		0.61		64.14		2719		30456	
Pioneer Brand	P1197AMXT	111	36.93		31.18		7.67		29.67		51.96		63.64	*	0.62	*	65.47	*	2779	*	30215	
Caverndale Farms	CF 794 VIP 3111	109	40.82	*	29.92		8.16	*	26.34	*	44.16	*	64.04	*	0.63	*	66.41	*	2866	*	29777	
Pioneer Brand	P1847AMXT	118	38.07		29.97		8.37	*	26.56	*	47.88	*	61.36		0.62	*	65.33	*	2806	*	29466	
Augusta	A1367	117	36.12		28.26		8.31	*	28.68	*	50.04		65.60	*	0.63	*	66.80	*	2860	*	28340	
	Site Average		39.14		34.09		8.26		27.05		46.73		63.17		0.63		65.84		2823		33474	
	LSD (0.10)		5.86		6.69		0.79		3.37		5.34		4.97		0.05		4.43		315		5551	
	C.V.		11.78		15.35		7.54		9.76		8.95		6.17		5.74		5.26		9		13	

[1]Days to maturity provided by company; differences in maturity rating methods may exist between companies.
*Indicates numbers not significantly different from the highest (or lowest for ADF and NDF) value in that column, i.e. within one LSD of the top performer.
Note: Hybrids are listed in descending order of lb milk/acre.

Table 15. Two-year corn silage test results (2019 and 2020) at the Southwest Virginia site.

Brand	Hybrid	DTM[1]	DM at Harvest		Yield at 35% DM		Crude Protein		ADF		NDF		NDF Digest		NE_L		TDN		Milk2006			
		Days	%		ton /acre		%		%		%		%		Mcal /lb		%		lb milk/ ton		lb milk/ acre	
Seed Consultants	SCS 1168AM™	116	40.96		36.83	*	7.86	*	28.70	*	50.82	*	65.16	*	0.59	*	63.61	*	2624	*	33694	*
Caverndale Farms	CF 859 VIP 3111	114	44.44	*	37.37	*	8.29	*	27.33	*	48.32	*	63.71	*	0.58	*	62.10	*	2521	*	33004	*
Seed Consultants	SCS 1158AM™	115	43.12		37.99	*	8.00	*	27.65	*	49.20	*	61.87	*	0.56		60.29		2403		32101	*
Augusta	A9967	117	47.86	*	36.97	*	7.72	*	26.82	*	47.71	*	61.42	*	0.56		60.34		2414		31161	*
Seed Consultants	SCS 1188AM™	118	42.49		35.93	*	7.73	*	28.62	*	50.50	*	60.63		0.57		60.80		2454		30670	*
Caverndale Farms	CF 753 GTCBLL	107	43.12		32.70	*	7.99	*	28.23	*	49.13	*	62.82	*	0.60	*	63.22	*	2622	*	29838	*
Augusta	A7768	118	40.06		31.65		8.16	*	27.10	*	48.56	*	64.54	*	0.60	*	64.18	*	2681	*	29671	*
Progeny Ag Products	PGY 7118VT2P	118	41.43		33.13	*	7.89	*	27.94	*	48.57	*	60.06		0.59	*	62.11	*	2566	*	29667	*
Caverndale Farms	CF 814 3000GT	112	41.91		31.40		7.77	*	26.77	*	47.12	*	62.87	*	0.60	*	63.62	*	2655	*	29208	*
Pioneer Brand	P1197AMXT	111	39.41		28.78		8.14	*	29.01	*	52.02		61.94	*	0.58	*	61.79	*	2517	*	25165	
	Site Average		42.48		34.27		7.95		27.82		49.19		62.50		0.58		62.21		2546		30418	
	LSD (0.10)		3.54		6.09		0.79		2.91		3.80		3.77		0.03		3.04		212		4795	
	C.V.		9.02		19.27		10.74		11.36		8.37		6.54		5.66		5.28		9		17	

[1]Days to maturity provided by company; differences in maturity rating methods may exist between companies.
*Indicates numbers not significantly different from the highest (or lowest for ADF and NDF) value in that column, i.e. within one LSD of the top performer.
Note: Hybrids are listed in descending order of lb milk/acre.

Table 16. Three-year corn silage test results (2018, 2019, and 2020) at the Southwest Virginia site.

Brand	Hybrid	DTM[1]	DM at Harvest		Yield at 35% DM		Crude Protein		ADF		NDF		NDF Digest		NE_L		TDN		Milk2006			
		Days	%		ton /acre		%		%		%		%		Mcal /lb		%		lb milk/ ton		lb milk/ acre	
Seed Consultants	SCS 1168AM™	116	38.39		36.94	*	7.98	*	28.49	*	50.80		64.15	*	0.61	*	64.65	*	2721	*	35142	*
Seed Consultants	SCS 1158AM™	115	41.86	*	40.08	*	7.99	*	27.49	*	48.97	*	61.02		0.57		61.04		2471		34912	*
Caverndale Farms	CF 814 3000GT	112	39.97	*	32.92		7.81	*	26.95	*	47.53	*	62.15	*	0.61	*	64.53	*	2737	*	31606	*
Augusta	A7768	118	37.61		31.79		8.24	*	27.35	*	49.11	*	63.77	*	0.62	*	65.21	*	2774	*	30849	
Progeny Ag Products	PGY 7118VT2P	118	39.36		32.91		7.86	*	28.15	*	49.35	*	60.15		0.60	*	62.92		2632		30295	
	Site Average		39.44		34.93		7.97		27.69		49.15		62.25		0.60		63.67		2667		32561	
	LSD (0.10)		2.38		4.01		0.54		1.55		2.25		2.42		0.02		1.91		135		3840	
	C.V.		8.15		15.55		9.14		7.55		6.18		5.26		4.40		4.05		7		16	

[1]Days to maturity provided by company; differences in maturity rating methods may exist between companies.
*Indicates numbers not significantly different from the highest (or lowest for ADF and NDF) value in that column, i.e. within one LSD of the top performer.
Note: Hybrids are listed in descending order of lb milk/acre.

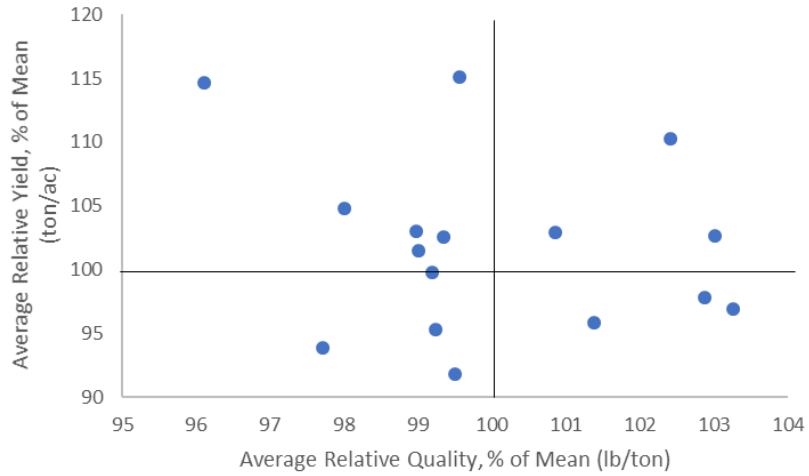

Figure 1. Average relative yield versus quality across sites, 2020

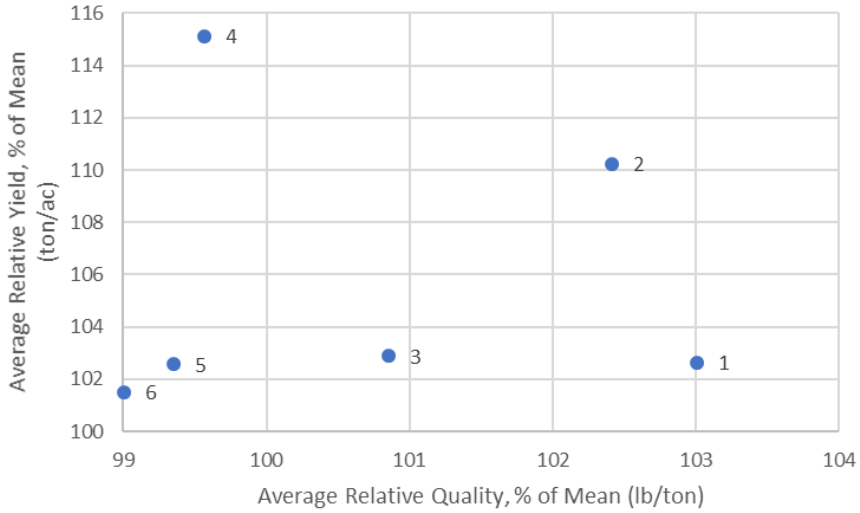

Figure 2. High-yielding and high-quality hybrids in at least 3 site/year combinations in 2020

1	Pioneer Brand	P1415Q
2	Augusta	A1367
3	Seed Consultants	SCS 1168AM™
4	Pioneer Brand	P1380Q
5	Seed Consultants	SC 1121AM™
6	Seed Consultants	SCS 1111Q™

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