Virginia Corn Silage Hybrid Trials in 2020

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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. 169 th 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	Pioneer	7200 NW 62 nd Ave., Johnston, IA
Dow/Dupont		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			M	ark	ete	d fo	or c	onti	rol	of:		Resistance confirmed	Н	erbi	ide	
alphabetical order	Bt protein(s) in	В	С	Ε	F		S	S	Т	w		to the combination of		trai	<u>it</u>	Non-Bt
(acronym that may be used)	the trait package	c			A	s						Bts in package	G	ŀц	:	Refuge %
(deronym that may be asea)	and than paramage	W			W							(check local situation)			E	(cornbelt)
AcreMax (AM)	Cry1Ab Cry1F	Х	Х	х	х	Х	Х	Х				CEW FAW WBC	х	Х		5% in bag
AcreMax CRW (AMRW)	Cry34/35Ab1										Х	NCR WCR	Х	Х		10% in bag
AcreMax1 (AM1)	Cry1F Cry34/35Ab1	Х		х	Х	Х	х	х			Х	ECB FAW SWB WBC NCR WCR	х	Х		10% in bag 20% ECB
AcreMax Leptra (AML)	Cry1Ab Cry1F Vip3A	х	Х	Х	Х	х	Х	х	Х	х			Х	х		5% in bag
AcreMax TRIsect (AMT)	Cry1Ab Cry1F mCry3A	х	х	х	х	х	х	х			х	CEW FAW WBC WCR	х	Х		10% in bag
AcreMax Xtra (AMX)	Cry1Ab Cry1F Cry34/35Ab1	х	х	х	х	х	х	х			х	CEW FAW WBC NCR WCR	х	Х		10% in bag
AcreMax Xtreme (AMXT)	Cry1Ab Cry1F mCry3A Cry34/35Ab1	х	х	х	х	х	х	х			х	CEW FAW WBC WCR	х	Х		5% in bag
Agrisure 3010 (BR)	Cry1Ab		х	Х			х	х				CEW	Х	х		20%
Agrisure 3000GT & 3011A	Cry1Ab mCry3A		Х	Х			Х	Х			х	CEW WCR	Х	х		20%
Agrisure Viptera 3110 (VR)	Cry1Ab Vip3A	Х	Х	х	Х	х	Х	Х	х	х			х	х		20%
Agrisure Viptera 3111 (A4)	Cry1Ab Vip3A mCry3A	х	Х	Х	х	Х	Х	Х	Х	Х	х	WCR	х	х	1	20%
Agrisure 3120 E-Z Refuge (BZ)	Cry1Ab Cry1F	х	Х	Х	Х	х	Х	Х				CEW FAW WBC	Х	See	1	5% in bag
Agrisure 3122 E-Z Refuge	Cry1Ab Cry1F mCry3A Cry34/35Ab1	х	х	х	х	х	Х	х			х	CEW FAW WBC WCR	х	bag		5% in bag
Agrisure Viptera 3220 E-Z (VZ)	Cry1Ab Cry1F Vip3A	х	х	Х	Х	х	х	х	Х	х			х	tag. E	Г	5% in bag
Agrisure Viptera 3330 E-Z	Cry1Ab Vip3A Cry1A.105/Cry2Ab2	х	х	х	х	х	х	х	х	х			х	= 02		5% in bag
Agrisure Duracade 5122 E-Z (D1)	Cry1Ab Cry1F mCry3A eCry3.1Ab	х	х	х	х	х	Х	х			х	CEW FAW WBC WCR	х	no EZ1 =		5% in bag
Agrisure Duracade 5222 E-Z (D2)	Cry1Ab Cry1F Vip3A mCry3A eCry3.1Ab	х	х	х	х	х	х	х	х	х	х	WCR	х	yes		5% in bag
Herculex I (HXI)	Cry1F	Х		Х	Х	х	Х	х				ECB FAW SWB WBC	Х	Х	1	20%
Herculex RW (HXRW)	Cry34/35Ab1										Х	NCR WCR	Х	Х		20%
Herculex XTRA (HXX)	Cry1F Cry34/35Ab1	х		х	х	х	х	х			х	ECB FAW SWB WBC NCR WCR	х	Х		20%
Intrasect (YHR)	Cry1Ab Cry1F	Х	Х	Х	Х	Х	Х	Х				CEW FAW WBC	Х	Х		5%
Intrasect TRIsect (CYHR)	Cry1Ab Cry1F mCry3A	х	х	Х	х	х	х	х			Х	CEW FAW WBC WCR	х	х		20%
Intrasect Xtra (YXR)	Cry1Ab Cry1F Cry34/35Ab1	х	х	Х	х	х	х	х			х	CEW FAW WBC NCR WCR	Х	Х		20%
Intrasect Xtreme (CYXR)	Cry1Ab Cry1F mCry3A Cry34/35Ab1	х	х	х	х	х	х	х			х	CEW FAW WBC WCR	х	х		5%
Leptra (VYHR)	Cry1Ab Cry1F Vip3A				Х					Х			Х	Х	<u> </u>	5%
Powercore ^a (PW) PW Refuge Advanced ^b (PWRA)	Cry1A.105/Cry2Ab2 Cry1F	Х	х	Х	х	х	Х	х				CEW WBC	Х	Х		^a 5% ^b 5% in bag
Powercore Enlist (PWE)	Same as Powercore	Х	Х	Х	Х	Х	Х	Х				Same as Powercore	Х	х	х	5% in bag
QROME (Q)	Cry1Ab Cry1F mCry3A Cry34/35Ab1	х	х	Х	Х	х	х	х			х	CEW FAW WBC WCR	х	х		5% in bag
SmartStax ^a (SX,STX or SS) STX Refuge Advanced ^b (SXRA)	Cry1A.105/Cry2Ab2 Cry1F Cry3Bb1	х	Х	Х	х	х	Х	Х			х	CEW WBC NCR WCR	х	х		^a 5% ^b 5% in bag
STX RIB Complete b (STXRIB) SmartStax Enlist (SXE)	Cry34/35Ab1 Same as SmartStax	L.	v	v	х	V	v	v			Х	Same as SmartStax	v	₩	-	5% in bag
Trecepta a (TRE) Trecepta RIB Complete b (TRERIB)	Cry1A.105/Cry2Ab2 Vip3A	+	i —	_	X	-	-	⊢	_	х	-	Jaille as Stild (Stax	X	•	х	^a 5% in bag
TRIsect (CHR)	Cry1F mCry3A	х		х	х	х	х	х			х	ECB FAW SWB WBC WCR	х	х		20%

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

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

Brand	Hybrid	DTM per Co. ¹	Shena	ndoa	ah Vall	еу			hern nont			uthe dmo				:hwes untain			Multi-Site Average	Number of Obs. ²
			2020		2019		2020)	2019)	2020		2019	9	2020	20	019			
							R	elati	ve Ton	oer A	cre 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 *	10	2	*	115	8
Caverndale Farms	CF 859 VIP 3111	114													107	11	9	*	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 *	11	2	*	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	11	5	*	103	8
Seed Consultants	SCS 1168AM™	116	106		94		96		105		96	•	104		109	11	4	*	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 Progeny Ag	CF 753 GTCBLL	107													98	9	9	*	98	2
Products	PGY 9117VT2P	117	94				86				97				114 *	-			98	4
Augusta	A5262	112	86		107	*										9	8	*	97	3
Augusta	A7768	118													95	9	7		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

Days to maturity provided by company; differences in maturity rating methods may exist between companies.

Note: Shading indicates hybrids that were in the highest yielding group in at least three site years.

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.)

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

Brand	Hybrid	DTM per Co. ¹	Shenandoah Valley		Northern Piedmont					nern nont				west / ntain		Multi-Site Average	Numbe of Obs. ²	
			2020		2019	20	20	2019	2020)	201	9	2020)	2019			
							Relat	ive 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										1	04	*			104	1
Mid-Atlantic	MA5161VIP3220EZ	116	104	*													104	1
Augusta	A5262	112	108	*	100										101		103	3
Pioneer Brand Progeny Ag	P1415Q	114	107	*		99			106	*		1	00	*			103	4
Products	PGY 9117VT2P	117	107	*		104	. *		98			1	03	*			103	4
Caverndale Farms	CF 814 3000GT	112											97		108	*	103	2
Augusta	A1367	117	105	*	101							1	01	*			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										1	01	*			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			1	06	*			100	4
Caverndale Farms	CF 753 GTCBLL	107										1	02	*	97		100	2
Pioneer Brand	P1847AMXT	118	100	*		100)		99				99	*			100	4
Seed Consultants Progeny Ag	SC 1121AM™	112	94			100	*		100	*		1	03	*			99	4
Products	PGY 7118VT2P	118	105	*	101	98		98	92		101	*	95		105	*	99	8
Seed Consultants	SCS 1141AM™	114	96			106	*		90			1	05	*			99	4
Seed Consultants	SCS 1111Q™	111	92			92			103	*		1	09	*			99	4

0	000 4400 ANTW	440	404	100	400		404 *	400	00	00	00	0
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	DT M per Co. ¹	Shena	ndoa	ah Valle	еу		orthern edmont	Sout Piedr			uthwo ount			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	10 3	120	*	99	*	110	8
Dyna-Gro	D57VC17	117							103	11 2 *					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	10 3	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	10 7	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 MA5161VIP3220E	115	99												99	1
Mid-Atlantic	Z	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 Progeny Ag	CF 814 3000GT	112						 10	97	95	96	2
Products	PGY 7118VT2P	118	81	86	98	101	84	7	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

Days to maturity provided by company; differences in maturity rating methods may exist between companies.

Note: Shading indicates hybrids that were in the highest yield*quality group in at least three site years.

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.)

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	Milk	2006
		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	SCS 1170AM™	117	20.0	22.6		25.5 *	44.5 *	57.7	0.62 *		2751 *	22460
Consultants	A5262	112	38.0 37.2	20.9	8.8 8.1	25.5 * 25.9 *	44.5 *	58.6	0.62 * 0.66 *	64.2 * 67.3 *	2751 * 2994 *	22168 21936
Augusta Pioneer Brand	P1847AMXT	118	37.0	20.9	9.6 *	24.9 *	45.6 *	58.4	0.62 *	64.6 *	2994	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 Progeny Ag	A5663-3000GT	113	39.6 *	21.2	8.9	25.9 *	47.3 *	56.5 *	0.59	61.3	2531	19117
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

¹Days 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 Harves		Yield at 35% DM		Crud Prote		ADF		NDF		NDF Diges	t	NEL		TDN			Milk	2006	
		Days	%		ton /acr	e	%		%		%		%		Mcal /I	b	%		lb mil ton	k/	lb mill 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™ MA8141DGVT2	115	42.46	*	27.86	*	8.29	*	29.04	*	50.76	*	62.49	*	0.58	*	61.26		2491	*	24358	*
Mid-Atlantic	P	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	

¹Days 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 Diges	t	NE _L		TDN		ı	Vilk	2006
		Days	%	ton /acre	%	%		%		%		Mcal /lb)	%		lb milk ton	t/	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 Seed	SCS 1158AM™	115	33.88	20.48 *	6.17	30.59		50.17		65.74	*	0.67		69.43		3113		22272
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	LG66C32VT2RI B	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 Seed	PGY 7118VT2P	118	32.85	18.09	6.58	29.73	*	50.26		63.07		0.67		68.54		3076		19435
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	LG62C35VT2RI B	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

¹Days 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 Harves		Yield a 35% D		Crude Proteir		ADF		NDF		NDF Diges		NE _L		TDN			Mill	2006	
		Days	%		ton /ac	re	%		%		%		%		Mcal /l	b	%		lb mil ton	k/	lb mill acre	
Augusta	A9967	117	37.28		28.00	*	6.59		31.30		51.94	*	62.37		0.62	*	65.83	*	2817	*	26333	4
Seed Consultants Seed	SCS 1188AM™	118	40.39	*	27.78	*	6.90		30.29	*	50.57	*	63.10	*	0.61	*	64.96	*	2739	*	25519	*
Consultants	SCS 1158AM™	115	38.92	*	29.23	*	6.94		30.00	*	51.89	*	60.62		0.60		63.21		2634		25363	*
Pioneer Brand Seed	P1197AMXT	111	36.63		27.67	*	7.48	*	29.34	*	51.65	*	59.31		0.61	*	63.92		2702	*	25124	*
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	

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			ADF		NDF		NDF Diges	t	NE _L		TDN			Milk	2006	
		Days	%	ton /acre	e %		%		%		%		Mcal /l	b	%		lb mil ton	-	lb mil 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	3
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	

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			Milk	2006
		Days	%	ton /acre	%	%		%		%	Mcal /lb)	%		lb mil ton	k/	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 Seed	SC 1121AM™	112	26.10	12.81 *	9.52	36.74	*	58.81	*	63.49	0.59	*	62.57	*	2584	*	11808 *
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

¹Days 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 Protei		NDF	NDF Digest	NE _L	TDN		Mill	k2006	
		Days	%	ton /acre	%	%	%	%	Mcal /lk	o %	lb mi toı	-	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	

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		NEL		TDN			Milk	2006	
		Days	%	ton /acre	%	%		%		%		Mcal /II	b	%		lb mil ton	-	lb mill 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	Π
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	

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 Harves		Yield at 35% DM	Crud Prote		ADF		NDF		NDF Diges	t	NEL		TDN			Milk	c2006	
		Days	%		ton /acre	%		%		%		%		Mcal /II	b	%		lb mil ton	-	lb mill 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 Seed	SCS 1168AM™	116	39.47		37.03	8.48	*	26.81	*	47.32	*	63.12	*	0.61		64.91	*	2747		35422	
Consultants	SCS 1141AM™	114	37.03		33.86	8.57	*	26.59	*	45.59	*	63.81	*	0.65	*	67.55	*	2957	*	34956	
Augusta Caverndale	A9967 CF 859 VIP	117	46.50	*	38.23 *	8.15	*	25.94	*	43.57	*	02.01	*	0.60		63.28		2630		34774	
Farms Caverndale Farms	3111 CF 753 GTCBLL	114	41.46 38.39		36.34	8.77	*	25.57 27.85	*	44.23 47.39	*	61.01	*	0.61	*	64.26	*	2723 2887	*	34670 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 Caverndale	P1380Q	113	37.24		30.85	8.43	*	27.35	*	47.14	*	65.77	*	0.65	*	68.34	*	3001	*	32432	
Farms Caverndale	CF 814 3000GT CF 889 VIP	112	41.26	*	33.64	8.09	*	26.31	*	44.85	*	62.04	*	0.62		64.87		2758		32410	
Farms	3111	117	37.05		31.21	7.76	*	28.88	*	49.62		66.02	*	0.64	*	67.70	*	2940	*	32212	
Pioneer Brand Seed Consultants	P1415Q SCS 1170AM™	114	38.75		31.99	8.29 7.97	*	27.11	*	45.85 48.65	*	63.38	*	0.63	*	65.82 65.97	*	2822	*	32143	
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	

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 Proteir		ADF		NDF		NDF Diges	t	NE _L		TDN			Milk	2006	
		Days	%	ton /acre	%		%		%		%		Mcal /l	b	%		lb mil ton	-	lb mill acre	-
Seed Consultants	SCS 1168AM™	116	40.96	36.83 *	7.86	* 2	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	* 2	27.33	*	48.32	*	63.71	*	0.58	*	62.10	*	2521	*	33004	*
Seed Consultants	SCS 1158AM™	115	43.12	37.99 *	8.00	* 2	27.65	*	49.20	*	61.87	*	0.56		60.29		2403		32101	*
Augusta Seed	A9967	117	47.86 *	36.97 *	7.72	* 2	26.82	*	47.71	*	61.42	*	0.56		60.34		2414		31161	*
Consultants	SCS 1188AM™	118	42.49	35.93 *	7.73	* 2	28.62	*	50.50	*	60.63		0.57		60.80		2454		30670	*
Caverndale Farms	CF 753 GTCBLL	107	43.12	32.70 *	7.99	* 2	28.23	*	49.13	*	62.82	*	0.60	*	63.22	*	2622	*	29838	*
Augusta	A7768	118	40.06	31.65	8.16	* 2	27.10	*	48.56	*	64.54	*	0.60	*	64.18	*	2681	*	29671	*
Progeny Ag Products	PGY 7118VT2P	118	41.43	33.13 *	7.89	* 2	27.94	*	48.57	*	60.06		0.59	*	62.11	*	2566	*	29667	*
Caverndale Farms	CF 814 3000GT	112	41.91	31.40	7.77	* 2	26.77	*	47.12	*	62.87	*	0.60	*	63.62	*	2655	*	29208	*
Pioneer Brand	P1197AMXT	111	39.41	28.78	8.14	* 2	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	

¹Days to maturity provided by company; differences in maturity rating methods may exist between companies.

¹Days 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.

^{*}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	Crud Protei		ADF		NDF		NDF Digest	t	NE _L		TDN			Milk	2006	
		Days	%	ton /acre	%		%		%		%		Mcal /II	b	%		lb mill ton	k/	lb mill acre	
Seed Consultants	SCS 1168AM™	116	38.39	36.94 *	7.98	* 2	8.49	* 5	50.80		64.15	*	0.61	*	64.65	*	2721	*	35142	*
Seed Consultants	SCS 1158AM™	115	41.86 *	40.08 *	7.99		7.49		18.97	*	61.02		0.57		61.04		2471		34912	*
Caverndale Farms	CF 814 3000GT	112	39.97 *	32.92	7.81	* 2	6.95	* 4	17.53	*	62.15	*	0.61	*	64.53	*	2737	*	31606	*
Augusta	A7768	118	37.61	31.79	8.24	* 2	7.35	* 4	19.11	*	63.77	*	0.62	*	65.21	*	2774	*	30849	
Progeny Ag Products	PGY 7118VT2P	118	39.36	32.91	7.86	* 2	8.15	* 4	19.35	*	60.15		0.60	*	62.92		2632		30295	
	Site Average		39.44	34.93	7.97	2	7.69	4	19.15		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	

¹Days 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.

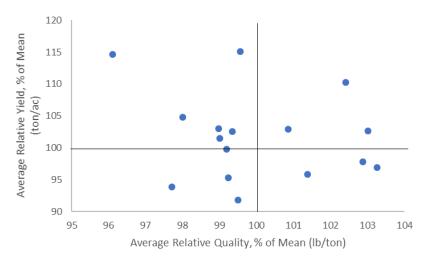


Figure 1. Average relative yield versus quality across sites, 2020

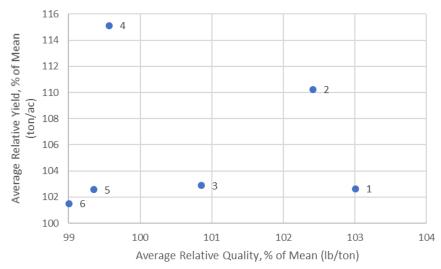


Figure 2. High-yielding and high-quality hybrids in at least 3 site/year combinations in 2020

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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