

2017

# Long Season Corn Silage Performance Trial Summary

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## 2017 Corn Silage Performance Trials Summary

Conducted by Dr. Heather Darby and the University of Vermont Northwest Crops and Soils Program

Long season corn (96-110 day relative maturity) silage hybrids in Alburgh, VT

Planting Date: 5/17/2017

Harvest Date: 9/26/2017



Company	Variety	Traits*	RM	DM %	Yield 35% DM tons ac <sup>-1</sup>	Starch % DM	Starch Digestibility 7 hr, 4mm	CP % DM	Lignin % DM	Ash % DM	NDF % DM	30 hr NDFD %NDF	Harvest Population plants ac <sup>-1</sup>
King Fisher	KF 49C60	Conventional	99	36.9	28.3	39.5	61.2	7.23	2.90	3.99	38.3	56.5	31180
Hubner Seed	H6124RCSS	GENSS RIB	96	36.7	33.7	36.8	63.5	7.57	3.24	3.79	40.0	53.2	32403
DEKALB	DKC46-20RIB	GENVT3P RIB	96	35.7	30.8	39.7	64.2	7.37	3.20	3.54	38.0	52.0	30263
DEKALB	DKC48-57RIB	GENVT2P RIB	98	35.7	33.1	34.5	62.0	7.37	3.20	4.25	41.1	54.2	30416
Pioneer	P9789AMXT	AMXT,LL,RR2	98	34.5	28.2	39.3	63.1	7.37	3.20	3.93	38.1	51.6	29346
Mycogen Seeds	TMF2Q419	Smartstax Refuge	96	34.5	24.9	33.1	61.6	6.57	3.33	3.70	43.5	52.5	30568
Augusta Seed Corporation	3750	Agrisure Viptera 3111	100	34.3	30.6	36.3	60.9	7.23	3.32	4.00	40.5	52.2	30874
Augusta Seed Corporation	2847	Agrisure Viptera 3110	97	34.1	29.1	42.0	62.3	7.57	2.95	3.89	34.5	52.4	31027
Masters Choice	MCT4934	Agrisure Viptera 3111	99	33.7	30.9	33.2	62.0	6.67	3.58	4.15	42.1	48.7	30568
Masters Choice	MCT4632	Agrisure Viptera 3110	96	33.4	27.6	37.9	60.5	7.80	3.03	4.18	37.4	53.2	29804
Channel Bio, LLC Bio, LLC	199-72STXRIB	GENSS RIB	99	33.1	27.5	35.3	65.2	6.83	3.43	3.93	40.5	51.4	28734
Mycogen Seeds	TMF99Q47	Smartstax Refuge	99	33.0	27.7	35.9	61.6	6.90	3.23	3.39	40.8	52.6	30263
Doebler's PA Hybrids, Inc.	3916GRQ	Agrisure 3011A	99	32.8	28.8	33.6	64.3	7.07	3.41	3.58	42.2	51.2	29499
Channel Bio, LLC	198-98STXRIB	GENSS RIB	98	32.8	25.0	33.3	64.5	7.13	3.59	4.14	41.4	49.5	30110
Hubner Seed	H6157RCSS	GENSS RIB	94	31.6	28.4	39.8	66.4	6.63	3.00	3.41	37.4	53.4	29651
Hubner Seed	H6191RCSS	GENSS RIB	99	31.5	25.6	36.3	62.8	7.37	3.41	3.93	39.7	50.5	31027
Growmark FS, LLC, LLC	49R79SS	GENSS RIB, DAIRYSELECT	99	30.5	25.0	32.7	63.2	8.03	3.48	4.47	41.8	51.7	30874
Mycogen Seeds	BMR97B37	Smartstax	97	29.6	26.8	32.7	63.3	7.67	2.94	3.83	40.1	59.0	31027
Mycogen Seeds	F2F499	Smartstax Refuge	99	28.3	27.2	30.2	61.9	7.17	2.72	4.09	42.2	63.4	31027
		94-100 day means	98	33.3	28.4	35.9	62.9	7.24	3.22	3.90	40.0	53.1	30456
NK	NK0199	Agrisure 3011A	101	36.5	27.5	36.1	64.7	7.53	3.28	3.59	39.4	51.5	30626
Channel Bio, LLC	202-20STXRIB	GENSS RIB	102	35.0	32.5	34.4	62.9	7.50	3.54	4.35	41.0	51.0	31027
Growmark FS, LLC, LLC	53R41SS	GENSS RIB, DAIRYSELECT	103	34.8	26.6	37.8	65.1	7.30	3.41	3.53	39.2	50.4	29346
Hubner Seed	H6257RCSS	GENSS RIB	104	34.4	30.4	34.5	62.9	7.57	3.20	4.07	39.5	53.0	29651
DEKALB	DKC52-30RIB	GENSS RIB	102	34.4	25.6	37.9	65.4	6.93	3.18	3.12	39.0	52.1	31485
Doebler's PA Hybrids, Inc.	RPM4115AMXT	RW/HXX/YGCB/LL/RR2	101	33.4	29.4	35.6	62.1	6.80	3.32	3.90	41.1	52.5	30721
DEKALB	DKC55-21RIB	GENVT2P RIB	105	33.3	25.1	38.7	61.8	6.90	3.22	3.61	39.1	51.5	32097
Seedway, LLC	SW5430GenSS	GENSS RIB	105	33.0	24.8	33.1	63.3	6.63	3.59	3.73	42.0	49.8	30263
Doebler's PA Hybrids, Inc.	RPM4318AMXT	RW/HXX/YGCB/LL/RR2	103	32.9	28.9	37.6	65.0	7.20	3.12	3.81	38.8	53.0	30874
NK	NK0142	Agrisure 3122 E-Z	101	32.8	25.8	39.4	62.2	7.17	3.26	3.68	37.7	49.7	30263
NK	NK0519	Agrisure 3122 E-Z	105	32.8	24.3	35.7	64.6	6.73	3.41	3.21	40.2	51.0	31791
DEKALB	DKC54-40RIB	GENVT2P RIB	104	32.8	27.5	34.2	62.8	7.37	3.33	3.78	40.3	52.0	31485
Channel Bio, LLC	203-01STXRIB	GENSS RIB	103	32.6	29.1	31.9	62.4	7.23	3.34	4.57	42.0	52.7	31638
King Fisher	KF 52C20	Conventional	102	32.4	28.2	37.2	64.6	7.17	3.44	3.81	39.4	49.7	31333
Masters Choice	MCT5371	Agrisure GT	103	32.2	29.8	33.2	63.9	6.90	3.34	4.16	41.3	51.7	31485
Hubner Seed	H6225RCSS	GENSS RIB	102	31.9	25.8	36.1	64.4	6.93	3.00	3.64	40.5	56.4	32708
Wolf River Valley Seeds	3805FLRR	Floury Leafy, RR	103	31.5	28.2	32.1	63.4	7.47	3.62	3.74	42.4	49.7	30110
Pioneer	P0242AMXT	AMXT,LL,RR2	104	30.9	26.7	36.7	66.3	7.13	3.32	4.02	39.5	50.5	29651
		101-105 day means	103	33.2	27.6	35.7	63.8	7.14	3.33	3.80	40.1	51.6	30920

Company	Variety	Traits*	RM	DM	Yield	Starch	Starch	CP	Lignin	Ash	NDF	30 hr NDFD	Harvest
					35% DM		Digestibility						Population
				%	tons ac <sup>-1</sup>	% DM	7 hr, 4mm	% DM	% DM	% DM	% DM	%NDF	plants ac <sup>-1</sup>
Masters Choice	MCT5661	Agrisure GT	106	32.9	32.9	34.9	65.6	6.90	3.42	3.47	40.4	51.0	30568
DEKALB	DKC57-77RIB	DG GENVT2 RIB	107	31.9	28.6	35.7	65.8	6.40	3.50	3.42	41.8	51.3	30110
King Fisher	KF 58C80	Conventional	108	31.9	33.3	34.8	63.4	7.63	3.07	4.17	39.8	55.2	31944
Channel Bio, LLC	207-27STXRIB	GENSS RIB	107	31.5	32.4	35.2	62.8	7.10	3.18	4.43	40.0	53.8	30110
Doebler's PA Hybrids, Inc.	RPM4717AMX	HXX/YGCB/LL/RR2	107	31.5	29.6	36.9	65.1	7.50	3.59	3.59	40.2	49.0	30263
Augusta Seed Corporation	4759	Agrisure Viptera 3110	109	31.0	24.2	32.4	62.7	7.03	3.60	3.99	42.1	49.1	30568
Dyna-Gro/CPS	D49VC39	GENVT2P	109	30.9	31.3	30.4	62.3	7.70	3.59	4.04	44.1	51.7	29957
Seedway, LLC	SW6630GenSS	GENSS RIB	110	30.6	26.1	37.5	62.0	7.20	3.09	4.08	38.2	53.4	30263
Dairyland Seed	HiDF-3407RA	Smartstax Refuge	107	30.3	31.4	30.6	64.8	7.10	3.88	3.87	44.6	47.6	30874
Channel Bio, LLC	209-15STXRIB	GENSS RIB	109	30.0	31.8	35.3	63.9	7.23	3.37	3.63	40.0	51.9	31333
Seedway, LLC	SW5559GTRW	Agrisure GT/RW	106	29.9	26.5	32.7	66.1	6.70	3.49	3.72	43.2	51.6	31333
Pioneer	P0921AMXT	AMXT,LL,RR2	110	29.5	30.2	30.1	64.6	7.80	3.54	4.51	42.1	51.3	30110
		106 -110 day means	108	31.0	29.8	33.9	64.1	7.19	3.44	3.91	41.4	51.4	30619
		LSD (0.10)		2.41	3.96	4.57	NS <sup>†</sup>	NS	0.420	0.621	NS	3.45	N/A <sup>‡</sup>
		Overall Mean		32.7	28.4	35.3	63.5	7.19	3.31	3.87	40.4	52.1	30666

Values in **bold** indicate the top performer for that measure

<sup>†</sup>Not significant

<sup>‡</sup>Statistical analysis was not performed on this parameter

KEY	
<b>RM:</b>	Relative maturity
<b>DM:</b>	Dry matter content
<b>CP:</b>	Crude protein
<b>NDF:</b>	Neutral detergent fiber content
<b>30 hr NDFD:</b>	Digestible NDF after 30 hrs
<b>RFC Fill Ratio:</b>	Rumen fermentable carbohydrate/fill ratio

\*Traits

Agrisure 3011A	Agrisure Artesian drought tolerance with protection from European corn borer, Southern corn borer, corn earworm, fall armyworm, stalk borer, and corn rootworm and resistance to glyphosate and glufosinate herbicides
Agrisure 3122 E-Z Refuge	protection from black cutworm, European corn borer, Fall armyworm, stalk borer, Southern corn borer, Western bean cutworm, corn earworm, and rootworm with resistance to glyphosate herbicides and 5% refuge in the bag
Agrisure GT	resistance to glyphosate herbicides
Agrisure Viptera 3110	protection from European corn borer, southwestern corn borer, southern cornstalk borer, corn earworm, fall armyworm, dingy cutworm, beet armyworm, black cutworm, western bean cutworm, sugarcane borer, common stalk borer; resistance to glyphosate and glufosinate herbicides
Agrisure Viptera 3111	protection from black cutworm, corn earworm, European corn borer, fall armyworm, stalk borer, Southern corn borer, true armyworm, Western bean cutworm, and corn rootworm with resistance to glyphosate and glufosinate herbicides
AMXT	AcreMax XTreme protection from black cutworm, European corn borer, fall armyworm, stalk borer, Southern corn borer, Western bean cutworm, corn earworm, and corn rootworm with resistance to glufosinate and glyphosate herbicides

DAIRYSELECT	leading tonnage, digestibility and milk per acre
DG	Genuity® DroughtGuard®
Floury Leafy	increased fiber digestibility and 25% of kernels produced have no hard starch
GENSS RIB	Genuity® SmartStax® RIB Complete® provides broad spectrum protection against corn earworm and other ear-feeding insects as well as fall armyworm, European corn borer, and corn earworm with multiple modes of action; glyphosate herbicide tolerance ((Roundup Ready®, Touchdown®) and glufosinate-ammonium (LibertyLink®)) with 5% refuge seed in the bag
GENVT2P	Genuity® VT Double PRO™ provides protection against corn earworm and other ear-feeding insects as well as fall armyworm, European corn borer, and corn earworm
GENVT2P RIB	Genuity® VT Double PRO™ RIB Complete protection against corn earworm and other ear-feeding insects as well as fall armyworm, European corn borer, and corn earworm with 5% refuge seed in the bag
GENVT3P RIB	Genuity® VT Triple PRO™ RIB Complete same as above with addition of rootworm trait and 10% refuge seed in the bag
HXX	Herculex® XTRA contains the Herculex I and Herculex RW genes (HX1 + protection from western corn rootworm, northern corn rootworm and Mexican corn rootworm)
LL	LibertyLink® resistance to Liberty® herbicide
RR	Roundup Ready®
RR2	Roundup Ready® Corn 2 glyphosate resistance
RW	Agrisure® RW protection from corn rootworm
Smartstax	protection from black cutworm, corn earworm, European corn borer, fall armyworm, stalk borer, Southern corn borer, Western bean cutworm, and corn rootworm with resistance to glyphosate and glufosinate herbicides
Smartstax Refuge Advanced	protection from black cutworm, corn earworm, European corn borer, fall armyworm, stalk borer, Southern corn borer, Western bean cutworm, and corn rootworm with resistance to glyphosate and glufosinate herbicides with 5% refuge seed in the bag
YGCB	YieldGard® Corn Borer protection from European corn borer, southwestern corn borer, southern cornstalk borer, corn earworm and common stalk borer, and fall armyworm.