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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

Short season corn (80-97 day relative maturity) silage hybrids in Alburgh, VT

Planting Date: 5/18/2017 Harvest Date: 9/20/2017



Company	Variety	Traits*	RM	DM	Yield, 35% DM	Starch	Starch Digestibility	СР	Lignin	Ash	NDF	30 hr NDFD	Harvest Population
				%	tons ac ⁻¹	% DM	7 hr, 4mm	% DM	% DM	% DM	% DM	%NDF	plants ac ⁻¹
Masters Choice	MCT3891	Agrisure GT	88	35.2	31.5	35.9	65.7	7.23	3.36	3.77	39.8	51.5	32555
Doebler's PA Hybrids, Inc.	RPM2918AM	HX1/YGCB/LL/RR2	89	33.1	28.1	36.4	68.5	7.17	3.40	4.22	38.3	50.2	33167
DEKALB	DKC36-28RIB	GENSS RIB	86	33.0	25.2	36.5	66.4	7.93	3.22	4.25	37.9	53.5	33167
DEKALB	DKC41-99RIB	GENVT2P RIB	91	32.8	24.4	35.3	69.7	7.03	3.36	4.05	40.0	52.5	32861
Hubner Seed	H4046RC2P	GENVT2P RIB	88	32.6	27.8	35.2	69.1	7.33	3.35	4.02	39.8	53.2	34389
King Fisher	KF 35C10	Conventional	85	31.9	24.7	36.1	68.3	7.37	3.19	3.71	38.7	52.7	33931
NK	NK8920-3010	Agrisure 3010	89	31.7	31.9	34.1	67.0	7.70	3.44	3.70	39.6	51.5	33625
Growmark FS, LLC	40R27SS	GENSS RIB	90	31.7	24.8	33.6	69.8	7.33	3.44	4.13	40.7	51.9	33472
Schlessman/Gold Star Feed													
& Grain, LLC	916RR	RR	91	30.7	28.6	33.1	69.8	7.60	3.23	4.15	39.2	54.2	33167
Seedway, LLC	SW3654RR	RR	91	30.5	28.3	30.8	71.1	7.63	3.53	3.99	42.6	53.2	32708
		85-91 day means	89	32.3	27.5	34.7	68.5	7.43	3.35	4.00	39.7	52.4	33304
Dyna-Gro/CPS	D34VC54	GENVT2P	94	32.8	28.7	34.6	71.0	7.43	3.19	3.98	38.6	53.9	34084
Growmark FS, LLC	46R77SS	GENSS RIB	95	32.6	27.1	37.0	70.2	7.37	3.12	3.68	38.1	54.3	34848
NK	NK9535-3110	Agrisure Viptera 3110	95	32.3	34.9	36.3	68.7	7.47	3.24	3.92	36.8	51.8	32555
Seedway, LLC	SW3768GenSS	GENSS RIB	95	32.0	27.0	34.6	68.8	7.67	3.37	4.42	40.2	52.3	32097
DEKALB	DKC45-07RIB	GENSS RIB	95	31.7	27.7	32.9	68.9	7.83	3.16	4.31	39.9	55.8	33625
Wolf River Valley Seeds	2693RR	RR	93	31.5	24.1	32.8	70.7	7.23	3.17	3.95	39.9	55.4	35001
NK	NK9227-3110A	Agrisure Viptera 3110A	92	31.2	29.0	35.4	66.4	7.70	3.33	3.68	36.8	51.0	33625
DEKALB	DKC43-48RIB	GENVT3P RIB	93	31.2	26.9	32.9	70.5	7.10	3.57	4.15	42.2	50.9	35307
Seedway, LLC	SW3600GenSS	GENSS RIB	93	31.2	26.1	34.2	67.9	7.40	3.30	4.25	39.4	52.3	34848
Masters Choice	MCT4572	Agrisure Viptera 3110	95	30.5	29.1	34.6	66.6	7.77	3.29	3.78	37.6	51.5	33472
Doebler's PA Hybrids, Inc.	RPM3618AMXT	RW/HXX/YGCB/LL/RR2	96	30.5	26.3	33.1	67.3	7.40	3.30	4.24	40.9	53.8	33320
King Fisher	KF 43C40	Conventional	93	30.5	24.6	32.5	67.9	7.37	3.64	4.01	41.9	50.5	31485
Augusta Seed Corporation	2843	Agrisure Viptera 3110	93	30.0	26.3	32.2	67.0	7.97	3.33	3.96	39.3	52.4	29957
		92-96 day means	94	31.4	27.5	34.1	68.6	7.52	3.31	4.03	39.4	52.8	33402
		LSD (0.10)		1.75	4.13	NS [†]	2.26	NS	NS	0.34	3.27	2.84	N/A [‡]
		Overall Mean		31.8	27.5	34.4	68.6	7.48	3.33	4.01	39.5	52.6	33359

Top performing varieties are indicated in **bold**

[†]Not significant

[‡]Statistical analysis was not performed for this parameter

KEY

RM: Relative maturity
DM: Dry matter content
CP: Crude protein

NDF: Neutral detergent fiber content 30 hr NDFD: Digestible NDF after 30 hrs

RFC Fill Ratio: Rumen fermentable carbohydrate : fill ratio

*Traits:

Agrisure 3010	protection from European corn borer; resistance to glyphosate and glufosinate herbicides
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 3110A	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 Artesian drought tolerance
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 provides 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 PROTM RIB Complete same as above with addition of rootworm trait and 10% refuge seed in the bag
HX1	Herculex® I- protection against European corn borer, southwestern corn borer, black cutworm, fall armyworm, western bean cutworm, lesser corn stalk borer, southern corn stalk borer, sugarcane borer and corn earworm.
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® resistance to glyphosate herbicide
RR2	Roundup Ready® Corn 2 resistance to glyphosate herbicide
RW	Agrisure® RW protection from corn rootworm
YGCB	YieldGard® Corn Borer protection from European corn borer, southwestern corn borer, southern cornstalk borer, corn earworm and common stalk borer, and fall armyworm.