

2016 Organic Corn Silage Performance Trials Summary

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

Organic Corn (80-108 Relative Maturity) silage hybrids in Alburgh, VT

Planting Date: 5/17/2016

Harvest Dates: 9/15/2016 and 9/30/2016

Company	Varieties	Traits***	RM days	DM %	Silage Yield* tons ac ⁻¹	CP** %	ADF** %	NDF** %	48 hr NDFD %	NE _L Mcal lb ⁻¹	TDN %	Milk lbs ton ⁻¹	Milk lbs ac ⁻¹
Albert Lea Seed	Viking 0.87-80N	None	80	38.7	18.3	7.77	25.1	48.0	69.2	0.62	61.7	2680	17309
Blue River Hybrids	21L90	Leafy Flourey	85	39.7	22.2	7.12	24.9	46.7	70.5	0.64	63.6	2810	21948
Albert Lea Seed	Viking 0.44-86N	None	86	39.9	21.5	7.76	20.8	41.5	71.3	0.65	64.7	2888	21741
Blue River Hybrids	27B16	Leafy Flourey	88	40.9	23.1	7.75	24.4	45.6	69.3	0.62	62.4	2723	22114
Albert Lea Seed	Viking 0.31-92N	None	92	37.9	21.8	7.39	23.5	44.8	70.2	0.64	63.6	2809	21409
Albert Lea Seed	Viking 42-92 UNT	None	92	36.9	24.3	8.43	23.4	44.3	70.6	0.65	65.0	2913	24810
Blue River Hybrids	34C17	Leafy Flourey	93	39.6	19.2	8.80	25.6	48.3	70.8	0.61	61.5	2662	17866
Blue River Hybrids	35M70	None	94	35.2	19.3	8.88	24.3	46.7	70.6	0.64	64.4	2873	19471
Blue River Hybrids	40R73	Leafy Flourey	97	34.3	22.8	9.41	22.2	43.3	68.5	0.61	61.4	2652	20264
Albert Lea Seed	Viking 0.58-98GS	None	98	39.4	18.0	7.44	22.7	43.7	69.4	0.65	64.3	2870	18055
Blue River Hybrids	43L96	Leafy Flourey	98	39.5	29.3	8.58	23.1	44.7	69.4	0.64	63.7	2817	28877
Albert Lea Seed	Viking 0.35-99N	None	99	37.5	21.7	8.16	21.5	41.6	69.0	0.66	65.0	2920	22164
Albert Lea Seed	Viking 0.69-99N	None	99	36.1	21.6	8.97	24.8	46.1	68.6	0.64	63.9	2847	21447
Albert Lea Seed	Viking 0.63-05N	None	105	35.7	23.9	8.31	23.5	43.6	70.0	0.67	66.8	3049	25447
Albert Lea Seed	Viking 0.59-06N	None	106	34.1	26.6	8.74	24.2	45.3	68.7	0.65	65.0	2924	27162
Albert Lea Seed	Viking 0.73-08GS	None	108	34.4	23.8	8.13	23.5	44.8	68.8	0.65	64.9	2913	24343
LSD (0.1)				4.10	6.31	NS	NS	NS	1.60	NS	NS	NS	6018
Trial Mean				37.7	22.3	8.16	23.6	44.9	69.7	0.64	63.9	2834	22152

*Silage yields are compared on a 35% dry matter basis

**CP, ADF, NDF are compared on a dry matter basis

LSD (0.1): Least Significant Differences (LSDs) at the 0.10 level of significance are shown.

NS: No Significant differences detected between varieties.

Top performing varieties are indicated in **bold**

*****Traits:** Leafy Flourey: Leafy, characterized by producing 8 or more leaves above the ear, which produce starch energy.

Flourey, allows corn plant to develop 25 percent of the kernels on every ear to be flourey with no starch.

Key

RM: Relative maturity

DM: Dry matter

CP: Crude protein

ADF: Acid detergent fiber

NDF: Neutral detergent fiber

48hr NDFD: Digestible neutral detergent fiber at 48 hours

NE_L: Net energy from lactation

TDN: Total digestible nutrients

For a full report of the short season corn trial and additional research reports, please visit our

website: <http://www.uvm.edu/extension/cropsoil/>. For more information, contact heather.darby@uvm.edu.