

# Evaluating Silage Corn varieties in Interlake region

## Project duration

2020

## Objectives

To evaluate the yield potential of silage corn varieties in Interlake region.

## Collaborators

Daryl Rex, Manitoba Crop Alliance

## Results

Variety trials for silage corn were conducted at Elm Creek, St. Pierre and Arborg sites during 2020. At Arborg site, the tested silage corn varieties differed in their yield potential (see Table 1). The yield varied from 13.3 – 22.3 Mt/acre (at 65% moisture). Among all varieties tested, 932S recorded the highest yield, while variety DKC29-89RIB had the lowest yield. Moisture content at harvest also varied (range: 49.8-61.7%) among corn varieties. Similarly, corn varieties also differed in 50% silking period and the varieties 932S and PV61180RIB took greater number of days (78) to reach this stage. The detailed results on quality analysis are presented in the Table 1.

## Project Findings

Silage corn varieties differed in their yield potential at Arborg site. For more information, please contact Manitoba Crop Alliance.

## Background / References / Additional resources

Now with the short-season corn varieties available, producers have more options to grow silage corn in Manitoba especially in the Interlake region. Manitoba Crop Alliance coordinates varietal evaluation of potential new silage corn varieties in the province. These varietal trials were done at different sites in the province and Arborg was one of the evaluation sites. This trial was conducted to see production potential of different silage corn varieties in the Interlake region.

## Materials and Methods

*Experimental Design* – Randomised block design with three replications

*Treatments* – 30 silage corn varieties (see Table 1)

*Plot size* – 18m<sup>2</sup>

*Plant population* – 32,000 plants/acre

*Data collected* – plant stand, 50% silking, yield

## Agronomic information

*Stubble, soil type* – Corn, Heavy clay

*Fertilizer applied* – N 75 lbs/ acre, P 30 lbs/acre

*Pesticides applied* – Glyphosate@0.67 L/acre on June 30<sup>th</sup>

*Seeding/Harvesting date* – May 25/ Oct 2



Table 1. Evaluating silage corn varieties for yield and quality at Arborg site.

CHU#	Hybrid	Distributor	Yield (Mt/ac)*	Moisture (%)	Days 50% Silk	TDN (%)	ADF (%)	NDF (%)	NE/Gain Mcal/kg	NE/Lact Mcal/kg
2100	DKC24-06RIB	DEKALB	16.7	54.9	74	70.5	26.4	48.1	1.06	1.61
2100	TH6875 VT2P	Thunder Seed	16.8	55.3	73	65.0	31.5	54.7	0.91	1.47
2125	PS 2210VT2P RIB	PICKSEED	17.1	56.0	75	65.8	30.7	50.5	0.93	1.50
2150	AS1017RR EDF	PRIDE Seeds	19.8	51.7	73	66.3	30.2	51.1	0.95	1.51
2150	913S	NorthStar G.	16.7	58.5	76	65.8	30.8	52.9	0.93	1.49
2150	TH4076 HDRR	Thunder Seed	18.1	55.1	75	59.2	36.9	60.1	0.73	1.33
2175	DKC26-40RIB	DEKALB	16.1	54.6	71	69.6	27.2	48.7	1.04	1.59
2175	PV 61276RIB	Proven Seed	16.7	55.4	72	68.0	28.6	49.4	1.00	1.55
2200	PV 61177SRR	Proven Seed	18.9	56.7	74	63.7	32.7	54.8	0.87	1.44
2200	PS 2320RR	PICKSEED	14.8	53.5	72	65.6	31.0	52.8	0.92	1.49
2200	A4323G2 RIB	PRIDE Seeds	15.2	53.1	72	70.4	26.4	49.7	1.06	1.61
2200	HZ 1451	Horizon Seeds	14.2	55.6	73	67.4	29.3	49.4	0.98	1.53
2200	MS 7420 R	Maizex Seeds	16.8	51.6	74	68.0	28.7	51.0	0.99	1.55
2250	A4705HMRR	PRIDE Seeds	19.2	50.3	71	65.6	30.9	51.9	0.93	1.49
2250	HZ 1685	Horizon Seeds	18.0	50.6	75	68.4	28.3	50.9	1.01	1.56
2250	TH4126 RR	Thunder Seed	16.6	52.2	73	62.7	33.7	57.2	0.84	1.42
2250	CP1725RR	CROPLAN	17.9	52.3	75	63.8	32.6	55.8	0.87	1.45
2250	MS 8022 R	Maizex Seeds	18.4	59.3	71	63.7	32.7	55.9	0.87	1.44
2275	DKC29-89RIB	DEKALB	13.3	61.7	74	61.6	34.6	59.1	0.81	1.39
2275	PS 2333RR	PICKSEED	17.6	55.7	73	69.4	27.4	47.7	1.03	1.58
2300	PV 61180RIB	Proven Seed	17.8	57.7	78	68.7	28.1	49.4	1.01	1.57
2300	TH6180 VT2P	Thunder Seed	19.0	53.8	72	63.0	33.3	57.4	0.85	1.43
2300	CP2123VT2P/RIB	CROPLAN	15.9	56.6	76	66.6	30.0	51.5	0.95	1.51
2350	HZ 675	Horizon Seeds	17.8	57.2	76	66.4	30.2	52.3	0.95	1.51
2350	932S	NorthStar G.	22.3	49.8	78	60.0	36.1	61.6	0.76	1.35
2375	HZ 1912	Horizon Seeds	18.0	55.0	74	64.7	31.8	52.7	0.90	1.47
2400	HZ 2220	Horizon Seeds	20.1	52.2	74	65.7	30.8	53.2	0.93	1.49
Site Ave.			17.3	54.6	74					
CV			10.39	7.97	1.66					
Sign Diff			Yes	Yes	Yes					
LSD			2.9	7.2	2					

#CHU – Corn heat units

\*Yield at 65% moisture content.