

TRIAL SUMMARY



Crop Type: Corn Silage – Local Moisture Test Version

Year: 2020

Location: South Island Farms Ltd, Scott Maclean, Bow Island, AB

Management Type: Irrigated

CANTERRA SEEDS Contact: Page Newton

Planting Date: May 4, 2020

Harvest Date: September 25, 2020

Trial Type: Field Scale

Row Width: 22 inches

PRIDE Seed Contact: Sara Meidlinger

COMPANY	VARIETY	CHU	RM	Moisture %	DM %	TONS/AC AT 65%	TONS/AC ACTUAL	Protein %	ADF %	NDF %	STARCH %	TDN %	NE/l	NE/g	MILK LB/AC	MILK RANK	BEEF LB/AC	BEEF RANK
Pioneer	P7958AM	2300	79	69.4	29.89	25.95	30.39	7.5	25.5	42.1	28.9	62	1.48	0.76	26615	6	1877	3
Pioneer	P8234AM	2400	82	67.8	27.78	22.80	28.73	8.2	24.1	42.7	27.8	62	1.49	0.78	24909	10	1649	12
Pioneer	P8352AM	2425	83	67.8	27.56	24.28	30.83	7.3	25.7	43.9	25.3	60	1.41	0.69	24912	11	1699	10
Pioneer	P8407AM	2450	84	68.7	30.11	27.22	31.64	7.4	26.4	43.9	25.1	59	1.39	0.66	26970	4	1874	4
Pioneer	P7861AM	2250	78	68.1	29.10	24.01	28.88	7.7	24.9	42.5	27.0	61	1.46	0.74	25364	8	1709	9
PRIDE	A4705HMRR	2300	75	63.7	31.32	26.52	29.64	7.5	24.6	41.5	28.3	63	1.53	0.82	28555	2	1949	1
PRIDE	A4646G2	2300	78	69.0	28.89	24.25	29.38	7.8	24.5	41.4	28.6	60	1.45	0.72	25234	9	1698	11
PRIDE	A4939G2	2400	81	65.9	28.49	23.34	28.67	7.9	23.8	41.3	31.8	64	1.54	0.83	25966	7	1743	8
PRIDE	AS1027RR EDF	2375	80	65.9	29.03	26.74	32.24	7.7	24.6	42.6	25.8	60	1.43	0.71	28031	3	1872	5
PRIDE	AS1047RR EDF	2400	81	64.9	26.23	25.02	33.39	7.8	24.0	42.4	25.3	61	1.47	0.76	26958	5	1781	7
Dekalb	DKC34-57	2575	84	67.6	27.07	26.09	33.73	8.1	25.9	43.5	24.4	59	1.39	0.66	25502	8	1796	6
Dekalb	DKC33-78	2400	83	70.5	28.65	26.22	32.03	7.8	21.3	38.1	32.9	63	1.55	0.82	29686	1	1927	2
Dekalb	DKC29-89	2275	79	66.8	30.61	22.76	26.02	8.3	24.0	41.7	28.3	62	1.48	0.76	24810	12	1646	13

Nutrient	Target Value	Definitions	Reasoning
Dry Matter (DM)	30-40%	The percentage of forage that is not water	Excessive moisture content can cause spoilage and decrease silage quality. Too dry is usually associated with reduced digestibility and energy content.
Crude Protein (CP)	7-9%	Total amount of nitrogen (N) in a forage.	High protein is desirable. Low protein may be caused by under fertilization, nitrogen competition, or improper harvesting and/or storage.
Acid Detergent Fiber (ADF)	20-33%	Percent of highly indigestible material in a forage. Comprised of cellulose, lignin, cutin, silica, pectin, and unavailable protein.	High ADF content is an issue for the same reasons as high NDF content. ADF is negatively correlated to digestibility and energy
Neutral Detergent Fiber (NDF)	35-55%	Partially available to animals. Percent of cell wall material in a forage; cellulose, hemicelluloses, Lignin, cutin, and unavailable protein.	NDF values will generally increase with low grain silage, stress, or immaturity. NDF is an inverse predictor of intake. (higher NDF equals lower intake and visa versa)
Starch	>28%	Form of carbohydrates stored in plants. It is the specific polysaccharide of many glucose subunits.	Usually higher content is better. If starch levels are <28% this usually indicates the silage was cut early or the crop was stressed.
Total Digestible Nutrients (TDN)	67-74%	Sum of all digestible organic nutrients that are available to the animal, as a % or DM.	Could be used to express the energy value of the corn silage.
Net Energy for Lactation (NEl)	>0.64 Mcal/lb	An estimate of the energy value of a feed used for milk production	Mega calories of energy for lactation. Higher values usually indicate a better-quality corn silage.
Net Energy for Gain (NEg)	0.4-0.5 Mcal/lb	An estimate of the energy for weight gain. Energy above maintenance.	Mega calories of energy for gain.