

TRIAL SUMMARY

Crop Type: Corn Silage

Year: 2020

Location: Scotford Colony, Josephburg, AB

CANTERRA SEEDS Contact: Duane Briand

Planting Date: May 15, 2020

Harvest Date: September 24, 2020

Trial Type: Field Scale

Row Width: 30 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 |
|----------|-------------|------|----|------------|------|----------------|----------------|-----------|-------|-------|----------|-------|------|------|------------|-----------|------------|-----------|
| PRIDE | XP20071RR | 2000 | 72 | 61.8 | 38.2 | 25.67 | 23.52 | 8.8 | 16.8 | 35.4 | 39.2 | 66 | 1.64 | 0.90 | 28895 | 1 | 1977 | 1 |
| PRIDE | A3993G2 RIB | 2025 | 73 | 71 | 29 | 19.07 | 23.02 | 8.1 | 27.4 | 49.5 | 22.6 | 61 | 1.39 | 0.72 | 17324 | 2 | 1357 | 2 |
| Pickseed | PS2501RR | | | 75.5 | 24.5 | 17.87 | 25.53 | 8.2 | 30.6 | 55.3 | 14.9 | 57 | 1.22 | 0.57 | 15024 | 3 | 1188 | 3 |

| 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. |