

TRIAL SUMMARY

Crop Type: Corn Silage

Year: 2020

Location: Joey Stadnicki, Brooks, AB

CANTERRA SEEDS Contact: Page Newton

Planting Date: May 12, 2020

Harvest Date: October 6, 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 | MILK RANK |
|--------------|---------------------|-------------|-----------|-------------|-------------|----------------|----------------|------------|-------------|-------------|-------------|-----------|-------------|-------------|--------------|-----------|-------------|-----------|
| Pioneer | P7861AM | 2250 | 78 | 55.4 | 44.6 | 24.41 | 19.16 | 6.2 | 25 | 44.7 | 31.0 | 64 | 1.49 | 0.84 | 27599 | 5 | 1823 | 5 |
| Pride | AS1017RR EDF | 2150 | 73 | 52.7 | 47.3 | 19.94 | 14.76 | 6.9 | 19.5 | 36.6 | 37.3 | 67 | 1.66 | 0.94 | 24150 | 7 | 1559 | 7 |
| Pickseed | PS2320RR | 2200 | 76 | 57.2 | 42.8 | 19.64 | 16.06 | 7.0 | 23.7 | 41.8 | 31.2 | 64 | 1.56 | 0.85 | 22143 | 9 | 1466 | 9 |
| Pickseed | P2333RR | 2275 | 77 | 57.5 | 42.5 | 19.13 | 15.76 | 6.9 | 22.6 | 41.0 | 34.4 | 67 | 1.64 | 0.95 | 23096 | 8 | 1496 | 8 |
| Pride | A4646G2RIB | 2300 | 78 | 59.9 | 40.1 | 25.22 | 22.01 | 7.6 | 18.4 | 36.5 | 39.4 | 66 | 1.64 | 0.9 | 29699 | 3 | 1942 | 3 |
| DeKalb | DKC29-89RIB | 2275 | 79 | 60.2 | 39.8 | 18.88 | 16.61 | 7.8 | 22.8 | 41.2 | 31.0 | 63 | 1.52 | 0.8 | 20417 | 10 | 1388 | 10 |
| Pickseed | PS2444VT2P RIB | 2350 | 79 | 65.2 | 34.8 | 28.60 | 28.76 | 7.1 | 20.5 | 37.4 | 33.4 | 62 | 1.52 | 0.77 | 30698 | 2 | 2069 | 2 |
| Pride | AS1027RR EDF | 2375 | 80 | 61.3 | 38.7 | 26.82 | 24.26 | 6.2 | 24.6 | 45.1 | 28.8 | 61 | 1.43 | 0.71 | 28185 | 4 | 1909 | 4 |
| DeKalb | DKC33-37RIB | 2400 | 83 | 65 | 35 | 23.46 | 23.46 | 7.0 | 22.6 | 40.8 | 32.3 | 64 | 1.54 | 0.83 | 26283 | 6 | 1752 | 6 |
| DeKalb | DKC34-57RIB | 2575 | 85 | 65.4 | 34.6 | 30.51 | 30.86 | 7.0 | 22.4 | 40.0 | 33.7 | 63 | 1.54 | 0.81 | 32794 | 1 | 2243 | 1 |

| 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. |