

TRIAL SUMMARY

Crop Type: Corn Silage

Year: 2021

Location: Anderson, Souris, MB

CANTERRA SEEDS Contact: Katharyn Houston

Planting Date: May 8, 2021

Harvest Date: Sept 7, 2021

Trial Type: Field Scale

Row Width: 30 inches

PRIDE Seed Contact: Sara Meidlinger



| COMPANY | VARIETY | CHU | RM | Moisture % | DM % | Protein % | ADF % | NDF % | STARCH % | TDN % | NE/g | NE/l | TONS/AC ACTUAL | TONS/AC AT 65% | DRY Yield RANK | MILK LB/AC | MILK RANK | BEEF LB/AC | BEEF RANK |
|--------------|---------------------|-------------|-----------|-------------|-------------|------------|-------------|-------------|-------------|-----------|-------------|-------------|----------------|----------------|----------------|--------------|-----------|-------------|-----------|
| Dekalb | DKC31-85 | 2425 | 81 | 65.2 | 34.8 | 7.3 | 23.6 | 40.8 | 31.4 | 63 | 0.8 | 1.52 | 20.2 | 20.06 | 3 | 21615 | 2 | 1475 | 2 |
| Syngenta | NK8005 | 2400 | 80 | 70.9 | 29.1 | 7.7 | 22.4 | 39.3 | 29.2 | 59 | 0.67 | 1.42 | 24.8 | 20.63 | 2 | 21559 | 3 | 1420 | 3 |
| Northstar | 932S | 2400 | 89 | 73.5 | 26.5 | 7.5 | 26.6 | 46.8 | 23.3 | 60 | 0.68 | 1.38 | 28.9 | 21.88 | 1 | 22877 | 1 | 1531 | 1 |
| Northstar | 917S | 2200 | 77 | 71.9 | 28.1 | 7.8 | 25.8 | 45.6 | 22.6 | 59 | 0.67 | 1.38 | 22.5 | 18.06 | 6 | 18692 | 6 | 1243 | 7 |
| Northstar | 913S | 2150 | 75 | 70.8 | 29.2 | 8.2 | 28.3 | 50.4 | 16.9 | 57 | 0.59 | 1.28 | 22.5 | 18.77 | 5 | 18353 | 7 | 1248 | 6 |
| Northstar | 271 | 2050 | 71 | 67.9 | 32.1 | 8 | 24 | 42.4 | 27.2 | 62 | 0.76 | 1.47 | 16.6 | 15.22 | 13 | 16533 | 11 | 1101 | 12 |
| Horizon | 2220 | 2400 | 79 | 68.9 | 31.1 | 7.6 | 24.6 | 44.2 | 26.1 | 61 | 0.72 | 1.43 | 18.9 | 16.76 | 9 | 17625 | 8 | 1193 | 8 |
| Horizon | 675 | 2350 | 78 | 74.2 | 25.8 | 8.3 | 23.5 | 43.1 | 23.1 | 58 | 0.63 | 1.37 | 16.9 | 12.44 | 16 | 12460 | 16 | 842 | 16 |
| Horizon | 1912 | 2375 | 79 | 70.7 | 29.3 | 7.9 | 23.3 | 41 | 25.1 | 57 | 0.63 | 1.38 | 18.7 | 15.70 | 11 | 15679 | 14 | 1044 | 14 |
| Horizon | 1710 | 2300 | 77 | 72.8 | 27.2 | 8.4 | 25.6 | 44.6 | 22.3 | 58 | 0.64 | 1.36 | 21.6 | 16.80 | 8 | 16809 | 9 | 1137 | 9 |
| Horizon | 1398 | | | 67.7 | 32.3 | 7.3 | 25.4 | 45.4 | 28.5 | 63 | 0.78 | 1.47 | 18.9 | 17.40 | 7 | 19426 | 5 | 1279 | 5 |
| PRIDE | A3979G2 RIB | 2025 | 71 | 66.7 | 33.3 | 7.2 | 24.9 | 44.4 | 27.3 | 62 | 0.75 | 1.45 | 16.4 | 15.63 | 12 | 16560 | 10 | 1131 | 10 |
| PRIDE | A4939G2 RIB | 2400 | 81 | 69.5 | 30.5 | 8.2 | 24.5 | 43 | 23.7 | 58 | 0.64 | 1.38 | 21.9 | 19.12 | 4 | 19558 | 4 | 1294 | 4 |
| PRIDE | AS1047RR EDF | 2450 | 81 | 73.5 | 26.5 | 8.8 | 24 | 44.6 | 16.8 | 54 | 0.52 | 1.27 | 19.3 | 14.61 | 15 | 13538 | 15 | 921 | 15 |
| PRIDE | AS1027RR EDF | 2425 | 80 | 68.7 | 31.3 | 8.2 | 24.9 | 45.4 | 20.6 | 57 | 0.62 | 1.34 | 18.5 | 16.57 | 10 | 16385 | 12 | 1102 | 11 |
| Pioneer | P7417AM | 2125 | 74 | 66 | 34 | 7.4 | 23.7 | 42 | 29.3 | 62 | 0.75 | 1.47 | 15.4 | 15.00 | 14 | 15753 | 13 | 1085 | 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. |