



2021 South Dakota Corn Silage Trial Results Volga

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Location: 1.5 miles south of Volga (57101) in Brookings County, SD
44.298762°, -96.921176°

Cooperator: South Dakota State University Volga Research Farm

Soil Type: Brandt silty clay loam, 0-2% slope

Fertilizer: 90 lb/acre 30-10-10 starter + 180-40-40-8S preplant

Previous crop: soybeans

Tillage: conventional

Row spacing: 30 inches

Seeding Rate: 33,500/acre

Herbicide: Pre: 2.5 pt/acre Surpass NXT (acetochlor)
Post: none

Date seeded: 4/29/21

Date harvested: 8/31/21



Table 1. Corn silage hybrid variety performance results (average of three replications) at Volga, SD (green chop samples).

| Hybrid Information | | | Agonomic & Nutritional Performance | | | | | | | | | | | | |
|----------------------|--------------|-----------------|------------------------------------|------------------------------|---------------------|-----------------------|-----------------------|---------------------------|---------------------------|------------------------|------------------------|-----------------------------|------------------------------|-----------------------------------|-----------------------------------|
| Brand | Hybrid | Maturity Rating | Harvest Population ¹ | Harvested ² (T/A) | DM ³ (%) | DM ⁴ (T/A) | CP ⁵ (%DM) | Starch ⁶ (%DM) | Lignin ⁷ (%DM) | WSC ⁸ (%DM) | NDF ⁹ (%DM) | NDFD30 ¹⁰ (%NDF) | NDFD240 ¹¹ (%NDF) | Milk2006 ¹² (lbs/T DM) | ISU Beef ¹³ (lbs/T DM) |
| Channel | 199-60TRERIB | 99 | 32500 | 12.2 | 41.6 | 5.1 | 7.3 | 30.2 | 4.6 | 4.5 | 48.4 | 56.0 | 69.5 | 3076 | 206 |
| Channel | 202-24STXRIB | 102 | 32200 | 13.8 | 40.1 | 5.5 | 7.9 | 36.0 | 4.1 | 4.5 | 42.6 | 57.9 | 69.6 | 3359 | 247 |
| Check | DKC48-95RIB | 98 | 31100 | 12.9 | 44.3 | 5.8 | 6.9 | 40.8 | 3.6 | 4.7 | 40.2 | 57.5 | 70.5 | 3332 | 261 |
| Dairyland Seed | DS-4329AM | 102 | 28600 | 15.7 | 33.1 | 5.2 | 7.8 | 20.8 | 4.5 | 5.6 | 51.6 | 59.1 | 71.3 | 3113 | 207 |
| Dairyland Seed | HIDF-3522Q | 95 | 32700 | 9.4 | 46.3 | 4.4 | 7.0 | 36.4 | 4.3 | 5.2 | 44.4 | 55.9 | 69.0 | 3083 | 231 |
| Dairyland Seed | HIDF-4545Q | 105 | 31500 | 13.6 | 30.8 | 4.2 | 8.2 | 20.9 | 4.1 | 5.8 | 50.6 | 61.5 | 74.0 | 3227 | 231 |
| Dekalb | DKC51-25RIB | 101 | 31500 | 14.6 | 44.1 | 6.4 | 6.8 | 32.1 | 4.5 | 4.7 | 48.0 | 57.1 | 70.2 | 3084 | 220 |
| Dekalb | DKC51-92RIB | 101 | 29000 | 13.2 | 39.2 | 5.2 | 6.7 | 34.1 | 3.6 | 4.5 | 46.0 | 62.4 | 74.1 | 3436 | 259 |
| Dekalb | DKC55-53RIB | 105 | 27700 | 16.2 | 40.4 | 6.6 | 7.8 | 32.4 | 4.1 | 4.6 | 44.5 | 57.2 | 70.1 | 3273 | 238 |
| Dekalb | DKC57-23RIB | 107 | 32400 | 14.7 | 38.4 | 5.7 | 7.8 | 32.1 | 4.0 | 5.0 | 44.1 | 58.6 | 70.9 | 3364 | 247 |
| Peterson Farms Seed | 14M00 | 100 | 31400 | 11.5 | 42.4 | 4.9 | 6.3 | 31.8 | 4.4 | 4.9 | 48.8 | 57.1 | 70.3 | 3129 | 218 |
| Peterson Farms Seed | 2LF01 | 101 | 33000 | 16.1 | 30.1 | 4.8 | 8.0 | 15.7 | 4.8 | 6.4 | 54.1 | 58.1 | 70.4 | 2909 | 184 |
| Proseed | LFY 101 | 101 | 27400 | 16.0 | 33.3 | 5.4 | 8.1 | 19.9 | 4.5 | 6.1 | 51.3 | 57.8 | 70.6 | 2984 | 200 |
| Trial Average | | | 30800 | 13.8 | 38.8 | 5.3 | 7.4 | 29.5 | 4.2 | 5.1 | 47.3 | 58.2 | 70.8 | 3182 | 227 |
| LSD(0.05)† | | | 2100 | 2.7 | 4.4 | 4.2 | 0.9 | 9.0 | 0.9 | 1.1 | 7.4 | 2.7 | 2.0 | 310 | 45 |

¹⁻¹² Performance statistics are explained on page 3.

† Value required (\geq LSD) to determine if varieties are significantly different from one another.



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¹ Plant population at harvest (plants/acre).

² Tons per acre harvested on an "As Is" or wet basis.

³ Dry matter (DM) percentage of harvested corn silage.

⁴ Tons per acre of dry matter (DM).

⁵ Crude protein (CP), % of dry matter.

⁶ Starch, % of dry matter.

⁷ Lignin, % of dry matter.

⁸ Water Soluble Carbohydrates (WSC), % of dry matter.

⁹ Neutral detergent fiber (NDF), % of dry matter.

¹⁰ 30 hour digestibility of NDF (NDFD30) is the amount of NDF digested in 30 hours as a percentage of NDF.

¹¹ 240 hour digestibility of NDF (NDFD240) is the amount of NDF digested in 240 hours as a percentage of NDF.

¹² Milk2006 is the prediction of the amount of milk produced per ton of corn silage dry matter.

¹³ ISU Beef is the prediction of the amount of beef produced per ton of corn silage dry matter.

Procedure:

Corn was harvested for silage by hand cutting at 6 – 8 inches from the ground.

Material was weighed.

Material was chopped through a chipper/shredder.

Green chop samples were frozen.

Samples submitted to a commercial laboratory for nutrient analyses using calibrated NIR instrumentation.

For Further Information:

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