



2021 Irrigated Corn Silage Hybrid Performance Trial at Rocky Ford

| Hybrid | Brand | Insect and Herbicide Technology Traits ^b | Yield | | | | Relative Maturity ^d | Plant Population | Plant Height | Forage Quality ^a | | | | | | | | | | | |
|----------------------------------|--------------------|---|---------------------|----------------|--------------|-------------|--------------------------------|------------------|--------------|-----------------------------|-------------|------------|-------------|------------|------------|-------------|-------------|-------------|-------------|--------------|------------|
| | | | Silage ^c | Dry Matter | Yield | Moisture | | | | CP | aNDFom | Lignin | Starch | Ash | Fat | NDFD 30hr | NDFD 240hr | TDN | NEL | Milk/Ton | Beef/Ton |
| | | | tons/ac | % of test avg. | % at harvest | | | | percent | | | | | | | | | | | | |
| 114-118 Relative Maturity | | | | | | | | | | | | | | | | | | | | | |
| D58QC72 | Dyna-Gro Seed | 3110, LL, RR2 | 36.6 | 13.2 | 110 | 66.2 | 118 | 35,200 | 116 | 8.0 | 42.3 | 4.5 | 31.6 | 4.6 | 2.0 | 55.1 | 67.8 | 68.9 | 71.3 | 3,041 | 228 |
| D55VC80 | Dyna-Gro Seed | VT2P, RR2 | 34.8 | 12.9 | 105 | 60.2 | 115 | 36,000 | 106 | 6.9 | 37.4 | 3.7 | 39.3 | 4.2 | 2.2 | 57.2 | 69.9 | 71.5 | 74.2 | 3,247 | 258 |
| 8750 AML | Hoegemeyer Hybrids | AML, LL, RR2 | 34.5 | 12.3 | 104 | 63.4 | 117 | 34,500 | 111 | 7.8 | 31.0 | 3.3 | 46.3 | 3.9 | 2.7 | 54.0 | 70.3 | 74.7 | 77.8 | 3,393 | 282 |
| D58VC90 | Dyna-Gro Seed | VT2P, RR2 | 34.2 | 12.6 | 103 | 65.6 | 118 | 34,500 | 108 | 8.2 | 39.3 | 4.5 | 36.1 | 4.5 | 2.1 | 50.8 | 66.3 | 70.1 | 72.7 | 3,021 | 221 |
| 8637 Q | Hoegemeyer Hybrids | Q, LL, RR2 | 33.0 | 12.0 | 99 | 64.4 | 116 | 33,600 | 105 | 8.1 | 37.2 | 4.2 | 38.3 | 4.9 | 2.1 | 56.4 | 68.6 | 71.0 | 73.7 | 3,166 | 244 |
| D57VC17 | Dyna-Gro Seed | VT2P, RR2 | 32.1 | 11.7 | 96 | 62.3 | 117 | 36,800 | 107 | 7.2 | 36.7 | 3.5 | 40.9 | 4.0 | 2.2 | 54.4 | 69.9 | 71.7 | 74.5 | 3,208 | 256 |
| 8707 AM | Hoegemeyer Hybrids | AM, LL, RR2 | 31.8 | 11.4 | 95 | 64.1 | 117 | 32,800 | 109 | 7.5 | 37.6 | 3.5 | 37.0 | 4.2 | 2.3 | 58.5 | 72.5 | 72.0 | 74.8 | 3,291 | 268 |
| NK1460 | NK Seed | 5222, RR2 | 31.5 | 11.4 | 95 | 63.1 | 114 | 33,900 | 109 | 7.3 | 37.9 | 3.4 | 39.1 | 4.2 | 2.0 | 56.8 | 72.1 | 71.7 | 74.5 | 3,213 | 258 |
| 108-113 Relative Maturity | | | | | | | | | | | | | | | | | | | | | |
| D52DC82 | Dyna-Gro Seed | VT2PRIB, RR2 | 35.4 | 12.9 | 106 | 64.4 | 112 | 35,600 | 107 | 7.6 | 34.7 | 3.5 | 40.4 | 4.8 | 2.1 | 57.5 | 70.7 | 72.5 | 75.4 | 3,276 | 262 |
| 11395 | Allegiant | STX, LL, RR2 | 34.5 | 12.3 | 104 | 59.1 | 113 | 35,400 | 108 | 7.6 | 39.1 | 3.9 | 37.4 | 4.2 | 2.2 | 55.0 | 69.7 | 70.8 | 73.5 | 3,163 | 248 |
| NK1239 | NK Seed | 5122, RR2 | 34.5 | 12.3 | 104 | 62.1 | 112 | 34,600 | 114 | 7.7 | 36.9 | 3.8 | 40.7 | 4.1 | 2.1 | 51.8 | 67.2 | 71.8 | 74.6 | 3,137 | 238 |
| 8371 AML | Hoegemeyer Hybrids | AML, LL, RR2 | 33.6 | 12.3 | 101 | 64.6 | 113 | 35,200 | 108 | 7.9 | 35.4 | 3.8 | 40.5 | 4.5 | 2.0 | 52.7 | 68.8 | 72.2 | 75.0 | 3,175 | 244 |
| NK1082 | NK Seed | 5222, RR2 | 33.3 | 12.3 | 100 | 65.3 | 110 | 35,300 | 108 | 7.2 | 40.9 | 3.5 | 33.6 | 4.7 | 1.9 | 57.7 | 73.6 | 70.6 | 73.3 | 3,136 | 248 |
| 8188 Q | Hoegemeyer Hybrids | STX, LL, RR2 | 32.4 | 11.7 | 97 | 64.0 | 111 | 34,300 | 103 | 8.5 | 39.9 | 4.2 | 33.7 | 5.2 | 1.9 | 57.2 | 72.2 | 69.6 | 72.1 | 3,096 | 242 |
| NK0821 | NK Seed | 5122, RR2 | 30.9 | 11.1 | 93 | 66.5 | 108 | 33,200 | 102 | 7.6 | 36.4 | 3.4 | 39.0 | 4.3 | 2.3 | 59.2 | 73.9 | 72.6 | 75.5 | 3,337 | 275 |
| 11286 | Allegiant | STX, LL, RR2 | 29.7 | 10.5 | 89 | 62.0 | 112 | 33,100 | 101 | 8.0 | 39.0 | 4.3 | 37.4 | 4.5 | 2.0 | 53.1 | 69.1 | 70.8 | 73.4 | 3,088 | 233 |
| Average | | | 33.3 | 12.1 | | 63.6 | 114 | 34,600 | 107 | 7.7 | 37.6 | 3.8 | 38.2 | 4.4 | 2.1 | 55.4 | 70.2 | 71.4 | 74.1 | 3,187 | 250 |
| ¹ LSD (0.30) | | | 1.3 | | | | | | | | | | | | | | | | | | |
| ² LSD (0.05) | | | 2.5 | | | | | | | | | | | | | | | | | | |

^aAll forage quality analyses results are dry basis values. CP=crude protein; aNDFom=ash free neutral detergent fiber; NDFD=neutral detergent fiber digestibility; TDN=total digestible nutrients; NEL=net energy for lactation; Milk/ton=predicted amount of milk produced per ton of silage dry matter calculated using MILK2006; Beef/ton=predicted amount of beef produced per ton of silage dry matter calculated using ISU Beef.

^bTechnology trait designations: 3110=Agrisure Viptera 3110; 5122=Agrisure Duracade 5122 E-Z Refuge; 5222=Agrisure Duracade 5222 E-Z Refuge; AM=AcreMax; AML=AcreMax Leptra; LL=LibertyLink; RR2=Roundup Ready 2; Q=QROME; STX=SmartStax; VT2P=VecTran Double Protection; VT2PRIB=VecTran Double Protection Refuge in the Bag Complete. For a list of specific pests controlled by each trait, please click [here](#).

^cSilage yield adjusted to 65% moisture content based on dried samples. Hybrids are grouped by relative maturity and then ranked by yield (highest to lowest). Hybrid yields in bold are in the top LSD group for the trial (0.30).

^dRelative maturities are provided by the companies. Comparative relative maturities.

^eIf the difference between two variety yields equals or exceeds the LSD value, the difference is significant. Farmers selecting a variety based on yield should use the LSD (0.30) to protect from false negative decisions. Companies or researchers may be interested in the LSD (0.05) to avoid false positive conclusions.

Site Information

Collaborator: CSU Arkansas Valley Research Center (Kevin Tanabe, Lane Simmons, and Mike Bartolo)
 Planting Date: May 14, 2021
 Harvest Date: September 10, 2021
 Herbicide: Status at 7 oz/ac and Mad Dog Plus at 32 oz/ac applied on 6/14/2021
 Fertilizer: N at 160, P at 40, K at 22, S at 28, and Zn at 2 lb/ac
 Soil Type: Rocky Ford silty clay loam
 Trial Coordinates: 38.0389, -103.6933