

# 2023 Irrigated Silage Corn Hybrid Performance Trial at Rocky Ford

Hybrid	Brand	Insect and Herbicide Technology Traits <sup>b</sup>	Yield				Forage Quality <sup>a</sup>														
			Dry		Yield	Moisture	Relative Maturity <sup>d</sup>	Plant Population	Plant Height	CP	aNDFom	Lignin	Starch	Ash	Fat	NDFD			NEL	Milk/Ton	Beef/Ton
			Silage <sup>c</sup>	Matter												30hr	240hr	TDN			
tons/ac	% of test avg.	% at harvest	plants/ac	in	percent													Mcal/cwt	lb/ton	lb/ton	
11591	CHS Allegiant	TRE, RR2	<b>36.2</b>	<b>13.1</b>	111%	61.5	115	40,157	112	7.6	35.2	3.2	40.4	3.6	2.3	49.9	66.6	73.3	76.2	3211	246
D54SS34	Dyna-Gro Seed	STX, LL, RR2	<b>35.7</b>	<b>12.9</b>	109%	63.1	114	38,047	112	8.0	35.6	2.4	39.1	4.9	2.1	50.7	66.0	71.4	74.1	3081	230
8595 AML	Hoegemeyer Hybrids	AML, LL, RR2	34.3	12.4	105%	63.8	115	37,843	109	8.0	39.8	3.4	33.1	4.8	1.9	56.7	70.9	71.2	73.9	3115	244
PB8580	Revolution Seed	AVP3111, LL, RR2	33.7	12.2	103%	62.9	115	38,115	118	8.6	39.4	3.0	32.4	5.3	1.8	50.1	66.7	69.8	72.4	2938	206
11171	CHS Allegiant	VT2P, RR2	33.5	12.1	102%	61.0	114	37,979	105	7.5	34.5	3.4	41.0	3.8	2.0	48.4	67.0	73.8	76.8	3156	240
D58SS65	Dyna-Gro Seed	STX, LL, RR2	32.6	11.8	100%	64.4	118	37,094	101	8.2	38.8	3.0	35.2	4.6	2.0	50.5	67.9	70.4	73.0	3034	222
D53SS13	Dyna-Gro Seed	STX, LL, RR2	32.0	11.6	98%	62.2	113	38,523	110	8.1	35.6	2.5	38.5	4.5	2.2	49.1	65.2	71.9	74.7	3100	228
D51SS61	Dyna-Gro Seed	STX, LL, RR2	31.9	11.6	98%	65.1	111	39,204	108	8.4	36.5	2.7	36.9	4.8	1.9	48.5	65.5	71.4	74.2	3014	217
7917 Q	Hoegemeyer Hybrids	Q, LL, RR2	31.7	11.4	97%	63.5	109	37,639	111	8.5	35.5	3.2	38.7	3.9	2.2	52.8	71.1	73.6	76.5	3238	258
8397 Q	Hoegemeyer Hybrids	Q, LL, RR2	30.2	10.9	92%	63.2	113	38,523	109	8.3	38.7	3.4	34.3	4.6	1.7	48.8	67.9	71.3	74.0	2970	214
PB7311	Revolution Seed	AD5122, RR2	27.8	10.1	85%	56.4	103	37,502	107	7.2	36.8	2.5	40.2	4.4	1.9	49.7	65.5	70.9	73.6	3049	223
<b>Average</b>			<b>32.7</b>	<b>11.8</b>	<b>100%</b>	<b>62.5</b>	<b>113</b>	<b>38,239</b>	<b>109</b>	<b>8.0</b>	<b>36.9</b>	<b>3.0</b>	<b>37.3</b>	<b>4.5</b>	<b>2.0</b>	<b>50.5</b>	<b>67.3</b>	<b>71.7</b>	<b>74.5</b>	<b>3082</b>	<b>230</b>
°LSD (0.30)			1.5	0.5																	
°LSD (0.05)			2.9	1.0																	
Coefficient of Variation (%)			7.3																		

<sup>a</sup>All 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.

<sup>b</sup>Technology trait designations: AD5122=D Refuge Renew, formerly Agrisure 5122; AML=AcreMax Leptra; AVP3111=Agrisure Viptera 3111; LL=LibertyLink; Q=QROME; RR2=Roundup Ready 2; STX=SmartStax; TRE=Trecepta; VT2P=VecTran Double Protection.

<sup>c</sup>Silage yield adjusted to 65% moisture content based on dried samples. Hybrid yields in bold are in the top LSD group for the trial (0.30).

<sup>d</sup>Relative maturity is provided by the respective companies and is the approximate time from planting to harvest maturity. The method of calculation of the relative maturity ratings may vary among companies.

<sup>e</sup>Farmers selecting a hybrid based on yield should use the LSD (.30) to protect themselves from false negative conclusions (concluding hybrids are the same when they are actually different). Companies or researchers may be interested in the LSD (.05) to avoid false positive conclusions (concluding hybrids are different when they are actually the same).

### Site Information

Collaborator: CSU Arkansas Valley Research Center (Kevin Tanabe)

Planting Date: May 8, 2023

Harvest Date: September 7, 2023

Herbicide: Mad Dog Plus at 1 qt/ac, Status at 10 oz/ac, and Outlook at 11 oz/ac applied on May 26

Soil Type: Rocky Ford silty clay loam

GPS Coordinates: 38.0389, -103.6933

Trial Comments: Excellent stands and good early growth. The trial was cultivated twice and minimal weed pressure was present through the season. The trial received 7.8 inches of rain from planting to harvest (in addition to irrigation), and 14.3 inches since January 1st, which was 115% of the ten-year average (year-to-date).

*The data included in this table may not be republished without permission. Contact Sally Jones-Diamond at sally.jones@colostate.edu or Kevin Tanabe at kevin.tanabe@colostate.edu.*