

## Western Colorado Alfalfa Variety Performance Test at Fruita 2013

Calvin H. Pearson\*

### Summary

This is the 2013 results in the Colorado State University's alfalfa variety performance test at Fruita (Table 1). Plots were planted on August 30, 2011 and data for 2013 are for the second year of the 3-year testing period. Forage yields during 2013 were excellent. Alfalfa stands are excellent and the field is weed-free. The field is furrow-irrigated using gated pipe.

Table 1. Forage yields of 18 alfalfa varieties at the Western Colorado Research Center at Fruita in 2012-13.<sup>1</sup>

Variety	Source/Brand	1 <sup>st</sup> cut	2 <sup>nd</sup> cut	3 <sup>rd</sup> cut	4 <sup>th</sup> cut	2013 total	2-yr total
		May 20	June 24	Aug 13	Sept 29		
tons/acre <sup>2</sup>							
Archer III	America's Alfalfa	3.62	2.34	2.59	1.62	10.17	18.52
Ameristand 407TQ	America's Alfalfa	3.52	2.18	2.56	1.62	9.88	18.81
Ameristand 445NT	America's Alfalfa	3.87	2.40	2.88	1.81	10.96	20.14
DKA43-13	Monsanto	3.63	2.57	2.72	1.66	10.58	19.26
DKA50-18	Monsanto	3.87	2.38	2.87	1.70	10.82	19.59
Gunner	Croplan Genetics	3.62	2.50	2.51	1.63	10.27	19.50
FGI 48A179	Forage Genetics	3.56	2.44	2.50	1.63	10.14	18.43
FGI 48W201	Forage Genetics	3.43	2.39	2.58	1.46	9.87	18.30
FGI 48W202	Forage Genetics	3.63	2.50	2.54	1.60	10.26	18.91
FGI 48W203	Forage Genetics	3.43	2.42	2.52	1.60	9.96	18.98
FSG 429SN	Allied Seed	3.60	2.22	2.67	1.68	10.17	18.76
FSG 639ST	Allied Seed	3.54	2.06	2.58	1.65	9.83	18.77
Rebound 6.0	Croplan Genetics	3.73	2.34	2.58	1.66	10.31	19.22
6305Q	Nexgrow	3.63	2.22	2.62	1.54	10.02	18.46
6422Q	Nexgrow	3.58	2.34	2.58	1.62	10.13	18.50
6431	Nexgrow	3.40	1.95	2.76	1.65	9.76	18.32
WL354HQ	W-L Research	3.77	2.35	2.87	1.63	10.62	19.45
WL363HQ	W-L Research	3.67	2.30	2.60	1.66	10.22	19.16
Ave.		3.62	2.33	2.64	1.64	10.22	18.95
CV (%)		7.6	6.3	8.6	5.8	4.8	4.2
LSD (0.05)		NS	0.21	NS	0.14	0.70	NS

<sup>1</sup>Seeded 30 August 2011 at 15 lbs/acre.

<sup>2</sup>Yields were calculated on an air-dry basis from samples that were air-dried for approximately one week inside on a drying rack. The cut forage was green chopped and within 2-3 days after harvest the alfalfa was irrigated.

Fertilizer: 300 lbs P<sub>2</sub>O<sub>5</sub>/acre and 63 lbs N/acre broadcast as 11-52-0 on August 10, 2011. No herbicides were applied in spring 2013.

\*Contact information: Colorado State University  
Agricultural Experiment Station, Western Colorado  
Research Center – Fruita, 1910 L Road, Fruita, CO  
81521. Ph. 970-858-3629; Fax 970-858-0461; cell 970-  
261-0444 email: [calvin.pearson@colostate.edu](mailto:calvin.pearson@colostate.edu)

## Alfalfa Variety Performance Test at Rocky Ford—2013

Jeffery W. Davidson, Michael E. Bartolo, and Kevin Tanabe

### Summary

The 2013 results of Colorado State University's alfalfa variety test at Rocky Ford are presented in Table 1 below. This is the third and final year of a three-year testing period. The plots were furrow irrigated and efforts were taken to maintain a pest-free environment. During the 2013 growing season, five total cuttings were taken off the plots.

Table 1. Forage yields of 12 alfalfa varieties at the Arkansas Valley Research Center in Rocky Ford in 2013.<sup>1</sup>

Variety	Source	1 <sup>st</sup> Cutting 04-Jun-13	2 <sup>nd</sup> Cutting 01-Jul-13	3 <sup>rd</sup> Cutting 29-Jul-13	4 <sup>th</sup> Cutting 26-Aug-13	5 <sup>th</sup> Cutting 08-Oct-13	Total Yield tons/acre 2013	3-yr Total <sup>2</sup> tons/acre
		----- tons/acre <sup>3</sup> -----						
6422Q	Forage Genetics	2.70	1.60	1.87	1.21	1.22	8.59	29.14
Archer III	America's	2.26	1.73	1.83	1.23	1.14	8.19	28.24
FSG 6395T	Allied Seed	2.30	1.31	1.82	1.13	1.12	7.67	28.23
HybriForce-2400	Dairyland Seed	2.21	1.35	1.82	1.16	1.29	7.82	28.09
6305Q	Forage Genetics	2.53	1.56	1.84	1.18	1.26	8.37	27.99
DKA50-18	Dekalb	2.20	1.47	1.76	1.21	1.20	7.84	27.81
Hybri + Jade	Dairyland Seed (Channel Bio)	2.30	1.31	1.71	1.19	1.21	7.73	27.76
Rebound 6.0	Croplan	2.50	1.52	1.83	1.20	1.11	8.14	27.72
WL 363HQ	W-L Research	2.24	1.36	1.92	1.09	1.18	7.79	27.46
FSG 4295N	Allied Seed	2.17	1.43	1.82	1.08	1.19	7.68	27.43
DKA43-13	Dekalb	2.08	1.57	1.90	1.30	1.23	8.07	26.46
6431	Forage Genetics	2.13	1.22	1.60	1.05	1.09	7.07	26.35
Average		2.30	1.45	1.81	1.17	1.19	7.91	27.72
CV (%)		16.4	13.0	9.2	9.6	11.7	8.0	6.7
LSD (0.05)		0.54	0.27	0.24	0.16	0.20	0.91	2.66

<sup>1</sup>Plots were seeded August 20, 2010 at 20 lbs. per acre.

<sup>2</sup>Table is arranged by decreasing 3-yr total yield.

<sup>3</sup>Yields were calculated on an air-dry basis.

**Site Information:**

Elevation: 4178 ft.

Soil: Rocky Ford Silty Clay Loam

Precipitation: April 1, 2013 to September 30, 2013 = 3.87 inches

Last Spring Frost: May 5, 2013 (28.5°F)

First Fall Frost: October 5, 2013 (25°F)

Fertilizer: 150 lbs. /ac 18-46-0 applied March 7, 2013

Herbicide: None applied

Insecticide: Warhawk 8 oz. /acre and Lambda-Cy EC 1.92 oz. /ac applied on  
May 21, 2013 to control alfalfa weevil

**Contact Information:**

Colorado State University

Arkansas Valley Research Center

27901 Rd. 21

Rocky Ford, CO 81067

Phone and Fax (719) 254-6312

Email: [jeffery.davidson@colostate.edu](mailto:jeffery.davidson@colostate.edu)