

## Western Colorado Alfalfa Variety Performance Test at Fruita 2010

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### Summary

The 2010 results of Colorado State University's alfalfa variety performance test at Fruita are presented below in Table 1. Plots were planted during fall 2007 and data for 2010 are for the third year of the 3-year testing period. Alfalfa stands during the 3-year trial period were excellent and the field was weed-free throughout the trial period. The field was furrow-irrigated using gated pipe.

Table 1. Forage yields of 16 alfalfa varieties at the Western Colorado Research Center at Fruita in 2010.<sup>1</sup>

Variety	Source/Brand	1 <sup>st</sup> cut May 26	2 <sup>nd</sup> cut June 29	3 <sup>rd</sup> cut Aug 9	4 <sup>th</sup> cut Sept 29	2010 total	3-yr <sup>2</sup> total
tons/acre <sup>3</sup>							
AmeriStand 444NT	America's Alfalfa	2.38	1.78	2.23	1.70	8.09	27.6
Garst 6552	Garst Seed	2.26	1.82	2.28	1.68	8.04	27.3
Mountaineer 2.0	Croplan Genetics	2.16	1.78	2.23	1.85	8.02	27.2
Masterpiece	JR Simplot Co	2.22	1.71	2.40	1.77	8.10	27.0
Garst 6415	Garst Seed	2.40	1.83	2.32	1.71	8.26	26.9
WL 363HQ	W-L Research	2.29	1.87	2.20	1.66	8.02	26.8
TS4028	Target Seed	2.03	1.75	2.29	1.77	7.84	26.7
Archer III	America's Alfalfa	2.20	1.85	2.31	1.70	8.06	26.4
AmeriStand 407TQ	America's Alfalfa	2.09	1.61	2.09	1.79	7.58	26.3
PGI 424	Producer's Choice	2.00	1.63	2.36	1.68	7.67	26.1
Medalist	Intermountain Farmers Assoc.	2.00	1.59	2.20	1.70	7.49	25.8
WL 343HQ	W-L Research	2.02	1.70	2.08	1.56	7.36	25.4
Lariat	JR Simplot Co	2.20	1.72	2.22	1.66	7.80	25.3
EXP6452	Garst Seed	1.75	1.41	2.12	1.67	6.95	25.1
FSG 5285F	Allied Seed	1.70	1.36	2.20	1.65	6.91	24.6
TS4002	Target Seed	1.58	1.42	2.04	1.68	6.72	24.1
Ave.		2.08	1.68	2.22	1.70	7.68	26.2
CV (%)		8.7	7.2	7.4	7.4	5.7	4.0
LSD (0.05)		0.25	0.17	NS	NS	0.63	1.5

<sup>1</sup>Seeded 20 August 2007 at 15 lbs/acre.

<sup>2</sup>The table is arranged by decreasing 3-year total yield.

<sup>3</sup>Yields were calculated on an air-dry basis. The forage was green chopped and within 2-3 days after harvest the alfalfa was irrigated.

Last spring frost – May 7, 2010; first fall frost – October 26, 2010. Frost-free days for 2010 – 172 (28EF base). Fertilizer: 140 lbs P<sub>2</sub>O<sub>5</sub>/acre and 30 lbs N/acre broadcast as 11-52-0 on August 16, 2007. Applied Raptor at 6.0 oz/acre plus Arrow (clethodium) at 8 oz/acre (plus 1 qt/acre crop oil concentrate and 1 gallon of URAN fertilizer in 100 gallons of water) using 22 gallons water/acre at 25 psi for weed control on 14 April 2010.

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## Alfalfa Variety Performance Test at Rocky Ford—2010

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### Summary

The 2010 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 2008 growing season, only three cuttings were taken off the plots because of cooler than normal spring temperatures.

Table 1. Forage yields of 15 alfalfa varieties at the Arkansas Valley Research Center in Rocky Ford in 2010.<sup>1</sup>

Variety	Source	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	Total 2010	3-yr Total <sup>2</sup>
		Cutting 04-Jun-10	Cutting 14-Jul-10	Cutting 25-Aug-10	Cutting 14-Oct-10		
		----- tons/acre <sup>3</sup> -----					
Medalist	Intermountain Farmers Assoc.	3.24	2.93	2.01	1.50	9.67	26.00
Masterpiece	JR Simplot Co.	3.11	2.89	2.02	1.55	9.56	25.74
Magnum VI	Dairyland Seed Co., Inc.	2.76	2.69	1.97	1.47	8.89	25.34
LegenDairy 5.0	Croplan Genetics	3.03	2.75	1.91	1.47	9.17	25.26
WL 363HQ	W-L Research	2.95	2.75	1.95	1.45	9.11	25.21
Integra 8400	Wilbur-Ellis Co.	3.03	2.77	1.91	1.51	9.22	25.07
5445	Pioneer	2.88	2.60	1.87	1.38	8.71	24.52
Lariat	JR Simplot Co.	2.84	2.58	1.95	1.40	8.78	24.29
CW 500	Producer's Choice	2.72	2.66	1.89	1.48	8.75	24.25
PGI 424	Producer's Choice	2.81	2.66	1.88	1.48	8.82	24.12
Oneida	Cornell University	2.80	2.55	1.71	1.32	8.38	24.12
FSG 5285F	Allied Seed	2.36	2.36	1.85	1.43	7.99	24.06
Ameristand 407TQ	America's Alfalfa	2.60	2.42	1.88	1.38	8.27	23.73
WL 343HQ	W-L Research	2.86	2.58	1.86	1.37	8.67	23.45
Vernal	USDA-WI AES	2.42	2.46	1.68	1.11	7.67	23.42
Average		2.83	2.64	1.89	1.42	8.78	24.57
CV (%)		9.0	7.7	6.5	5.7	5.5	
LSD (0.05)		0.36	0.29	0.18	0.11	0.68	

<sup>1</sup>Seeded August 10, 2007 at 22 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, 2010 to September 30, 2010 = 10.23 inches

Last Spring Frost: April 9, 2010 (25.6°F)

First Fall Frost: October 26, 2010 (28.6°F)

Fertilizer: 200 lbs./acre of 11-52-0 on March 18, 2010

Herbicide: Thunder 4 oz./acre on April 8, 2010

Insecticide: None applied

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