

Western Colorado Alfalfa Variety Performance Test at Fruita 2008

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Summary

The 2008 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 2008 are for the first year of a three-year testing period. Alfalfa stands are excellent and plots were weed-free throughout the 2008 growing season. The field is furrow-irrigated using gated pipe.

Table 1. Forage yields of 16 alfalfa varieties at the Western Colorado Research Center at Fruita in 2008.¹

Variety	Source/Brand	1 st Cut	2 nd Cut	3 rd Cut	4 th Cut	2008
		May 21	June 30	Aug 6	Sept 26	Total ²
		tons/acre ³				
Mountaineer 2.0	Croplan Genetics	2.69	1.88	2.21	1.60	8.38
AmeriStand 444NT	America's Alfalfa	2.47	2.01	2.13	1.48	8.10
Masterpiece	JR Simplot Co	2.55	1.99	2.15	1.39	8.08
TS4028	Target Seed	2.56	1.92	2.17	1.36	8.00
Medalist	Intermountain Farmers Assoc.	2.43	1.93	2.17	1.47	7.99
Garst 6552	Garst Seed	2.51	1.97	2.10	1.34	7.92
WL 363HQ	W-L Research	2.37	1.96	2.14	1.38	7.85
PGI 424	Producer's Choice	2.42	1.88	2.16	1.36	7.81
AmeriStand 407TQ	America's Alfalfa	2.37	1.83	2.14	1.44	7.78
WL 343HQ	W-L Research	2.40	1.78	2.09	1.49	7.76
FSG 5285F	Allied Seed	2.44	1.70	2.10	1.41	7.66
TS4002	Target Seed	2.40	1.68	2.08	1.50	7.66
Garst 6415	Garst Seed	2.40	1.72	2.16	1.37	7.65
Archer III	America's Alfalfa	2.26	1.84	2.08	1.37	7.55
EXP6452	Garst Seed	2.58	1.70	2.02	1.26	7.55
Lariat	JR Simplot Co	2.21	1.76	2.11	1.30	7.39
Ave.		2.44	1.85	2.13	1.41	7.82
CV (%)		7.6	9.9	4.7	9.9	4.9
LSD (0.05)		NS	NS	NS	NS	NS

¹Seeded 20 August 2007 at 15 lbs/acre.

²Table is arranged by decreasing 2008 total yield.

³Yields were calculated on an air-dry basis.

Last spring frost – May 2, 2008; first fall frost – October 13, 2008. Frost-free days for 2008 - 164 days (28EF base). Fertilizer: 140 lbs P₂O₅/acre and 30 lbs N/acre broadcast as 11-52-0 on August 16, 2007. Applied Raptor at 6.0 oz/acre plus clethodium at 1 pt/acre (1 qt/acre crop oil concentrate and 1 gal. of URAN fertilizer in 100 gallons of water) using 21 gals water/acre at 30 psi for weed control on 20 Mar 2008.

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Arkansas Valley, Colorado, Alfalfa Variety Performance Test at Rocky Ford - 2008

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Summary

The 2008 results of Colorado State University's alfalfa variety test at Rocky Ford are presented below in Table 1. Plots were planted on August 10, 2007 and data for 2008 are for the first year of a three-year testing period. The field is furrow irrigated and appropriate measures were taken to maintain the plots in a pest-free condition. The summer of 2008 was initially much cooler than normal and as a result, harvests were delayed. Normally, alfalfa is cut four times during the season in the Arkansas Valley. However, due to the lateness of the crop, a fourth cutting was not warranted in 2008.

Table 1. Forage yields of 15 alfalfa varieties at the Arkansas Valley Research Center in Rocky Ford in 2008.

Variety	Source	1 st	2 nd	3 rd	Total 2008
		Cutting 6-12-08	Cutting 7-22-08	Cutting 9-2-08	
----- tons per acre -----					
FSG 5285F	Allied Seed	2.58	2.41	1.80	6.80
5454	Pioneer	2.47	2.27	1.85	6.61
Magnum VI	Dairyland Seed Co., Inc.	2.20	2.48	1.80	6.49
Masterpiece	JR Simplot Co	2.02	2.57	1.84	6.44
Medalist	Intermountain Farmers Assoc.	2.17	2.46	1.78	6.41
LegenDairy 5.0	Croplan Genetics	2.33	2.33	1.71	6.37
PGI 424	Producer's Choice	2.15	2.33	1.85	6.34
Oneida	Cornell University	2.23	2.32	1.78	6.34
WL 363HQ	W-L Research	2.16	2.34	1.83	6.34
Lariat	JR Simplot Co	2.11	2.24	1.87	6.22
Ameristand 407TQ	America's Alfalfa	2.31	2.20	1.80	6.22
Integra 8400	Wilbur-Ellis Company	2.17	2.29	1.75	6.22
CW 500	Producer's Choice	2.05	2.29	1.82	6.17
Vernal	USDA-WI AES	2.14	2.18	1.77	6.10
WL 343 HQ	W-L Research	2.15	2.21	1.67	6.03
Average		2.22	2.33	1.79	6.34
CV (%)		14.48	6.61	7.36	6.85
LSD (0.1)		0.38	0.18	0.15	0.51

Yields were calculated on an air-dry basis.

Site Information:

Elevation 4178 ft
 Soil: Rocky Ford Silty Clay Loam
 Precipitation - April 1, 2008 to Sept 30, 2008 = 7.92 inches
 Last Spring Frost - May 4, 2008 / First Fall Frost - October 19, 2008

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San Luis Valley, Colorado, Alfalfa Variety Performance Test at Center, 2008

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Summary

The 2008 results of Colorado State University's alfalfa variety performance test at Center are presented below in Table 1. Plots were planted in July 2006 and the data for 2007-8 are the first two years of a three-year testing period. Alfalfa stands are excellent and plots were fairly well weed-free both years. The field had insecticide applied for alfalfa weevil prior to second cutting this year. The field is center-pivot irrigated as needed.

Summer in 2007 was warmer than normal. The first harvest was excellent; the second cutting was rained on, and the third cutting yield was disappointing. The summer of 2008 started cool with first harvest later than normal. The summer remained cool which slowed growth. There was rain in July again, but it caused less problems than last year.

Table 1. Forage yields of 16 alfalfa varieties at Center, CO (San Luis Valley)^{2/} in 2007-8.

Variety	Source	2008	2008	2008	Total	Total	2-Year
		6/16	7/22	9/16	2008	2007	Average
-----tons/acre-----							
FSG 406	Allied Seed	2.68	2.13	1.33	6.13*	5.56*	5.85*
L 447 HD	Legacy Seeds	2.51	2.02	1.29	5.81*	5.74*	5.77*
Lariat 120	JR Simplot Co	2.55	2.03	1.26	5.84*	5.64*	5.74*
Ameristand 407TQ	America's Alfalfa	2.48	2.09	1.26	5.82*	5.58*	5.70*
Genoa	NK/Syngenta	2.33	2.05	1.20	5.58*	5.69*	5.63*
WL 357 HQ	WL Research	2.39	2.04	1.21	5.65*	5.61*	5.63*
Mountaineer 2.0	Croplan Genetics	2.35	2.09	1.34	5.78*	5.44	5.61*
FSG 351	Allied Seed	2.27	1.96	1.16	5.39	5.82*	5.61*
Ranger	USDA-NE AES	2.27	1.93	1.18	5.38	5.65*	5.51*
54V09	Pioneer	2.31	2.05	1.22	5.58*	5.42	5.50*
Whitney	Eureka Seeds	2.20	1.92	1.20	5.32	5.56*	5.44
FSG 408 DP	Allied Seed	2.26	1.89	1.24	5.39	5.44	5.42
Vernal	USDA-WI AES	2.22	1.88	1.17	5.27	5.43	5.35
WL 355 RR	WL Research	2.33	1.95	1.14	5.43	5.03	5.23
Medalist	Int. Farmers Assoc.	2.41	1.98	1.05	4.88	5.50	5.19
FSG 425 RR	Allied Seed	2.32	1.86	1.12	4.71	5.14	4.93
Average		2.37	1.99	1.21	5.50	5.52	5.51
CV (%)		7.15	8.44	10.0	10.4	4.49	6.22
LSD (0 .10)^{4/}		0.20	0.20	N.S.	0.68	0.29	0.41

^{2/} Trial conducted on the Richard Ramstetter Farm, Saguache County Road 44 & Road B; seeded 7/20/06 at 20 lbs/acre.

^{3/} Yields calculated on oven-dry basis.

^{4/} Least Significant Difference: Yield differences less than LSD are not statistically different.

* The top yield group (LSD 10%) is designated with an asterisk.

Site Information:

Elevation = 7700 ft.

Average annual precipitation = 6.92 inches.

Average frost-free days = 88days (32⁰F).

Average last spring frost - June 10; average first fall frost - September 6.

Soil Series: Platoro Loam / Norte gravelly sandy loam.

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