

Western Colorado Alfalfa Variety Performance Test at Fruita 2005

The 2005 results of Colorado State University's alfalfa variety performance test at Fruita are presented in this report. Plots were planted Fall 2004 and the 2005 data are for the first year of a three-year testing period. Results for 2005 are presented in Table 1. Alfalfa stands are excellent and plots were weed-free during the growing season. The field was furrow-irrigated using gated pipe. Summer 2005 in western Colorado was moderate and alfalfa yields were good.

In 2005, there were 10 ten days during the summer when temperatures reached 100°F. In 2004, there were only two days when temperatures were at or above 100°F, but in 2003 there were 27 days when temperatures reached 100°F. The average growing season for Fruita is 181 days. The 2005 growing season was 199 days.

Table 1. Forage yields of 11 alfalfa varieties at the Western Colorado Research Center at Fruita in 2005.¹

Variety	Brand/Source	1 st Cut	2 nd Cut	3 rd Cut	4 th Cut	2005
		May 26	July 6	Aug 19	Oct 6	Total ²
		----- tons/acre ³ -----				
FSG 351	Allied Seed, L.L.C.	3.20	2.54	2.66	1.43	9.84
Mountaineer 2.0	Croplan Genetics	3.25	2.22	2.60	1.57	9.64
4S42	Forage Genetics International	3.02	2.28	2.79	1.56	9.64
FSG 505	Allied Seed, L.L.C.	3.15	2.42	2.52	1.51	9.60
CW13014	CalWest Seeds	3.32	2.24	2.56	1.45	9.56
CW15030	CalWest Seeds	3.02	2.33	2.60	1.52	9.47
FSG 406	Allied Seed, L.L.C.	3.06	2.44	2.43	1.48	9.40
WL 357 HQ	W-L Research	3.14	2.35	2.42	1.46	9.37
FSG 408DP	Allied Seed, L.L.C.	3.02	2.35	2.42	1.46	9.26
Garst 6530	Garst	3.07	2.19	2.46	1.50	9.22
Bullseye	Target Seed	2.91	2.00	2.34	1.53	8.78
Average		3.11	2.31	2.53	1.50	9.44
CV(%)		7.04	10.69	10.76	4.27	4.30
LSD _(0.30)		NS	0.1837	NS	0.0477	0.3027
LSD _(0.05)		NS	NS	NS	NS	NS

¹Seeded 26 August 2004 at 15 lbs/acre.

²Table is arranged by decreasing 2005 total yield.

³Yields were calculated on an air-dry basis.

Last spring frost – April 21, 2005; first fall frost – November 6, 2005. Frost-free days for 2005 - 199 days (28 F base). Fertilizer: 276 lbs P₂O₅/acre and 108 lbs N/acre broadcast as 18-46-0 on August 16, 2004 and plowed down prior to planting. Applied Raptor at 6 oz/acre (plus 2.5 gallons of UAN + 1 qt Activator 90 in 100 gallons of water) in 19 gals water/acre at 25 psi for weed control on 9 Mar 2005.

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