

**Utah State University and Southern Utah University Irrigated Alfalfa Trial, Cedar City 2007**

Rev. 02/22/08. D. Winward (SUU) and C. Reid and T. Griggs (USU Extension).

Entries ranked by 2-year (2006 + 2007) total dry matter (DM) production from all cuttings.

Seeded Aug. 23-24, 2005. Wales loam, 0-2% slope, sprinkle-irrigated, 5515 ft elevation.

Cultivar	Fall	Winter	Specialty traits <sup>d</sup>	2007 DM production by harvest date					Total 2006	2-yr total <sup>e</sup> 2006-07
	dormancy rating <sup>b</sup>	Survival Index <sup>c</sup>		June 7	July 11	Aug. 14	Sept. 20	Total		
				----- Tons DM/ac -----						
WinterGold	4	2	ML	2.70	2.18	1.77	1.23	7.88	5.23	<b>13.11</b>
Boulder	4	-	-	2.50	2.20	1.68	1.30	7.68	5.39	<b>13.07</b>
Vernema (cert.)	4	-	-	2.43	2.13	1.76	1.22	7.53	5.25	<b>13.05</b>
WL 357 HQ <sup>a</sup>	5	2	ML	2.43	2.21	1.76	1.39	7.79	5.18	<b>12.96</b>
Blazer XL	3	-	-	2.68	2.10	1.74	1.21	7.73	5.01	<b>12.89</b>
DKA41-18	4	1.8	RR	2.48	2.19	1.62	1.28	7.57	4.95	<b>12.84</b>
Archer II	5	-	-	2.26	2.21	1.65	1.26	7.37	5.36	<b>12.73</b>
DKA42-15	4	1	-	2.76	2.25	1.57	1.21	7.80	4.84	<b>12.64</b>
HybriForce-420/Wet	4	2	-	2.28	2.13	1.81	1.28	7.50	5.14	<b>12.63</b>
CW 25006	5	2	ML	2.34	2.24	1.66	1.24	7.48	5.14	<b>12.62</b>
CW 83021	4	2	ML	2.47	2.08	1.69	1.29	7.54	4.95	<b>12.49</b>
AmeriStand 407TQ	4	2	-	2.28	2.10	1.74	1.28	7.39	5.06	<b>12.46</b>
WL 342	4	1	-	2.68	1.90	1.53	1.21	7.32	5.12	<b>12.44</b>
DKA50-18	5	1.8	-	2.24	2.15	1.73	1.37	7.49	4.96	<b>12.44</b>
SpringGold	5	2	ML	2.42	2.05	1.70	1.25	7.42	5.00	<b>12.42</b>
AmeriStand 403T	4	2	-	2.29	1.99	1.71	1.17	7.15	4.94	<b>12.40</b>
CW 500	5	3	ML	2.04	2.21	1.83	1.25	7.33	5.08	<b>12.40</b>
SummerGold	4	2	ML	2.45	2.07	1.64	1.18	7.35	5.02	<b>12.37</b>
Supreme	3	2	ML	2.47	1.89	1.68	1.24	7.27	5.02	<b>12.29</b>
FG 41W206	-	-	-	2.23	2.08	1.70	1.28	7.29	4.84	<b>12.14</b>
WL 357 HQ + Optimize Gold <sup>a</sup>	5	2	ML	2.22	2.09	1.60	1.28	7.19	4.88	<b>12.07</b>
Rralf-601	-	-	RR	2.15	1.87	1.66	1.26	6.93	4.87	<b>11.81</b>
<u>Supplemental seeding rate study</u>										
Blazer XL, 12 lb bulk seed/ac				2.35	1.96	1.57	1.19	7.07	5.06	<b>12.29</b>
Blazer XL, 18 lb bulk seed/ac (from above)				2.68	2.10	1.74	1.21	7.73	5.01	<b>12.89</b>
Blazer XL, 24 lb bulk seed/ac				2.42	2.03	1.61	1.22	7.29	5.11	<b>12.68</b>
Blazer XL, 36 lb bulk seed/ac				2.61	2.01	1.61	1.17	7.40	4.87	<b>12.27</b>
Mean of 25 entries (including seeding rate study)				<b>2.41</b>	<b>2.09</b>	<b>1.68</b>	<b>1.25</b>	<b>7.43</b>	<b>5.05</b>	<b>12.52</b>
Significance of F test (P)				0.04	0.16	0.40	0.25	0.56	0.47	0.33
LSD (0.05)				0.39	NS <sup>f</sup>	NS	NS	NS	NS	NS
LSD (0.30)				0.21	NS	NS	NS	NS	NS	NS
CV (%)				13.0	10.2	9.8	8.8	7.2	6.6	5.4

<sup>a</sup>WL 357 HQ tested with and without Optimize Gold, a legume growth promoter seed treatment (Nitragin, Inc.).

<sup>b</sup>Regrowth height following a late summer cutting, relative to heights of standard check cultivars, ranging from 1 (extremely dormant) to 11 (extremely non-dormant).

<sup>c</sup>Winter Survival Index: 1=superior, 2=very good, 3=good, 4=moderate, 5=low, 6=no survival. Many cultivars are not yet rated.

<sup>d</sup>ML=multifoliolate; RR=Roundup Ready<sup>®</sup>.

<sup>e</sup>Least squares means from analysis of variance may vary slightly from sums of 2006 and 2007 tabular values.

<sup>f</sup>No significant (P>0.05) differences among cultivars within a column.

Seeded at 18 lb bulk seed/ac in 5-row plots at 6-in row spacing x 20 ft long. All seed inoculated 1 day before seeding. Randomized complete block design with 5 replicates.

All harvests to 3-in stubble height. First three harvests at late bud-early bloom stage and fourth harvest at late bud stage.

See 'Winter Survival, Fall Dormancy & Pest Resistance Ratings for Alfalfa Varieties' leaflet at <http://www.alfalfa.org/>

for pest and disease resistance ratings and marketer contact information.

For other USU Extension crop trial results, see <http://extension.usu.edu/html/publications/by=category/category=87>

**See next page for seed source or marketer.**

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Cultivar	Seed source or marketer
WinterGold	Tri-West Seed
Boulder	NK/Syngenta
Vernema (cert.)	Public (Wheatland Seed)
WL 357 HQ	W-L Research (Univ. WI <sup>a</sup> )
Blazer XL	CROPLAN GENETICS/IFA
DKA41-18	Monsanto
Archer II	Forage Genetics Int'l.
DKA42-15	Monsanto (Univ. WI)
HybriForce-420/Wet	Dairyland Seed
CW 25006	Cal/West Seeds
CW 83021	Cal/West Seeds
AmeriStand 407TQ	Forage Genetics Int'l.
WL 342	Forage Genetics Int'l.
DKA50-18	Monsanto
SpringGold	Tri-West Seed
AmeriStand 403T	Forage Genetics Int'l.
CW 500	Producer's Choice
SummerGold	Tri-West Seed
Supreme	Cal/West Seeds
FG 41W206	Forage Genetics Int'l.
WL 357 HQ + Optimize Gold	W-L Research (Univ. WI)
Rralf-601	Forage Genetics Int'l.

<sup>a</sup>Obtained from the Univ. of Wisconsin Commercial Seed Distribution Program.