

AGRONOMY PROGRESS REPORT

2009 CALIFORNIA ALFALFA VARIETY TRIAL YIELD RESULTS, INCLUDING ROUND-UP READY VARIETIES

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ABSTRACT

This publication details alfalfa yield trial data for single harvest, single year, and multiple-year summaries for the year 2009. Both conventional and Roundup-Ready (RR) lines have been tested (under regulation). Yield trials were conducted in 6 regions in California: the Intermountain area (2 locations), the Sacramento Valley (1 locations), the San Joaquin Valley (2 locations) and the Low Desert (1 location). The alfalfa variety trial data from the University of California is placed online; often well in advance of this published report (<http://alfalfa.ucdavis.edu/>).

INTRODUCTION

These UC trials provide unbiased data from a wide range of environments related to variety performance of alfalfa. In California, alfalfa is grown from the Oregon border to the Mexican border, and throughout the Great Central Valley, which consists of the Sacramento and San Joaquin Valleys (Figure 1). These sites represent 3-4 cut systems (dormant varieties) in the **Intermountain Region**, 6-8 cut systems (dormant, semi-dormant, or non-dormant 90% varieties) in the **Northern Central Valley**, and 7-8 cut systems (semi-dormant to non-dormant varieties) in the **Southern Central Valley** and 8-11 cut systems (non-dormant varieties) in the **Low Desert Environment** in the south. The **High Desert environment** generally is a 5-6 cut system.

California Alfalfa Acreages by Section

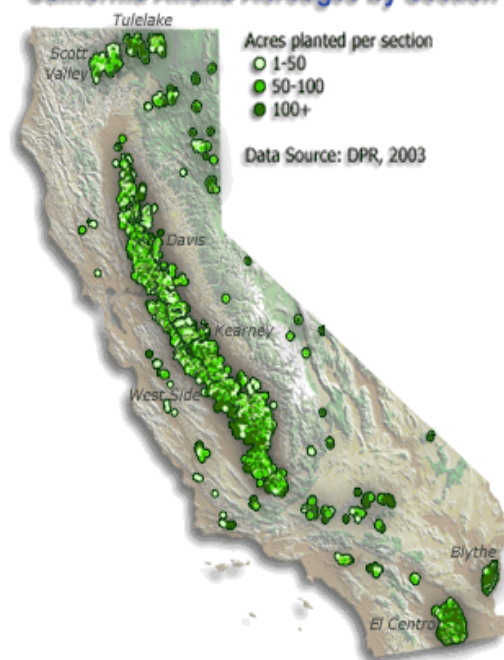


Figure 1. California alfalfa acreage. The Intermountain region is represented by Tulelake and Scott Valley, Sacramento Valley by Davis, San Joaquin Valley by Kearney and West Side Locations, high desert by the Lancaster trial, and Low Desert by the El Centro trial.

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Choosing superior varieties of alfalfa is a significant economic factor for alfalfa growers. A large number of commercial varieties are currently available, enabling a wide range of options for producers. Both private and public varieties and experimental lines are tested. These data are frequently used by growers to choose varieties, and by breeders to help guide further selection.

2009 ALFALFA PRODUCTION YEAR

The 2009 production season was generally characterized by a much drier-than-normal winter season followed by a mild spring and summer season. California was still experiencing a 3-year drought, with water limitations in many regions due to low water supplies for irrigation. The remainder of the season (August-September) was normal to milder than typical. Winter rainfall was light into the spring months allowing the first cuts to occur at a timely basis. This was followed by seasonal temperatures in June, followed by more moderate temperatures in July. The moderate and dry fall months allowed for excellent late production (high yields and high quality) for many growers in the Central Valley. Intermountain areas had a very late, wet spring conditions.

Record prices occurred in 2008 and were well above the 10-year average, rising to over \$260/ton in some of the key dairy areas of Central California. but in late 2008, prices fell suddenly, and remained low during most of 2009. However, it could hardly be described as switching to a buyer's market, since so few were buying. Dairies were losing money and just couldn't afford hay. There were huge reductions in the price of hay during this period, often of more than \$100/ton. This situation has continued through the summer and fall of 2009. However, with less availability, the price of alfalfa has risen in the fall and winter months. Currently, hay stocks are down, demand is high and hay prices are starting to increase slowly, a condition which is expected to continue into 2010. New plantings of alfalfa are down, partly due to price, partly due to water limitations.

TESTING ALFALFA VARIETIES - METHODS

Yield Trials. The California Alfalfa Cultivar Yield, Fall Dormancy, and Forage Quality Trials are open to any certified alfalfa cultivar, which is sold or is likely to be sold in California. Blends or brands (unless they are certified blends) are not included in these trials. Experimental cultivars with a high likelihood of release within the next few years are tested as space permits. Eight alfalfa variety yield trials were harvested from Tulelake (2), Scott Valley, Davis (2 trials), Parlier, West Side Field Station and El Centro, CA in 2009.

Two new trials (UC Davis and UC Desert Research and Extension Center, El Centro) were established in the fall of 2008. Two new trials were established in the fall of 2009 (Westside Research and Extension Center, Five Points and Lancaster, CA). Specific planting dates for each trial are given on the results table for that trial. The plantings were at approximately 25 lbs/acre live seed. Plots were 3' to 4' wide and 13 to 20 feet long, depending upon location and specific layout. Four to six replicates of each cultivar were planted at each location, depending upon the expected variation at that site. Experimental design was a randomized complete block design. Harvests for yield estimation were obtained from approximately a 3' x 18' area per plot using a flail-type or cutter-bar type forage harvester, and dry matter yield determined by oven-drying sub samples to a constant weight. A representative group of 5-6 varieties were taken at each harvest, and the average dry matter used for yield determination. Three to four harvests were taken in the

intermountain region, while up to ten cuttings were taken in the Imperial Valley. Cutting schedules were determined by the most common practice in that region and are the same for all varieties within a trial. The data is obtained from each of the locations and analyzed and summarized at the UC Davis campus.

Note on Statistical Inference: In 2006, we elected to analyze and report significance of variety testing data (calculation of F-test and LSD Values) based upon a probability value of 10% vs. the traditional 5%. In doing so, we are accepting a 90% confidence level vs. a 95% confidence level. This is due to the fact that growers routinely base decisions based upon degrees of confidence that are far lower than 95% confidence levels we have routinely used. A 10% probability level (the probability that the declared difference is based solely upon chance) is sufficiently conservative to prevent choosing varieties based upon false differences—such decisions are always a compromise between practical factors and statistical vigor. The practical implication of this decision: it does not change the rankings or yield averages, but it makes the groups that are considered similar (those that share the same letter A,B,C designations based upon LSD values) smaller in number. To put this in non-technical language: We report that variety X is significantly different than variety Y, and have accepted a 10% chance that the apparent difference is due to random variation, not due to the variety. We feel a 90% confidence level is sufficient for making decisions on alfalfa varieties.

2009 YIELD RESULTS

Intermountain Region

2007 UC Tulelake Yield Trial – The 2009 season was relatively normal in rainfall and temperature. Four cuttings were conducted during the season with the first cutting taking place on June 17, 2009. Single year results from the four harvests are provided in Table 1 and the over-the-years data provided in Table 2. The difference between high and low yield entries was 2 tons/acre, while the Fall Dormancy (FD) ranges were from 3-8. The average yield across all varieties was 7.7 tons/acre. The across-the-years yield differences from two harvests from highest to lowest yielding variety were approximately 1.8 tons/acre. Yields averaged over the two years were almost 8.0 tons/acre. The CVs were relatively low; indicating control of varieties was stable over each cut in this trial. Note: It is a misuse of University data to choose alfalfa varieties based upon a single year trial.

2004 UC Tulelake Yield Trial – This will be the sixth year's production for this Tulelake Variety Trial. Four cuttings were conducted during the season with the first cutting taking place on June 17, 2009. Single year results from the four harvests are provided in Table 3 and the over-the-years data provided in Table 4. The difference between high and low yield entries was 1.4 tons/acre, while the FD ranges were from 3-6. The average yield across all varieties was 7.7 tons/acre. The across-the-years yield differences from two harvests from highest to lowest-yielding variety were approximately 1.0 ton/acre. Yields averaged over the six years were over 7.5 tons/acre. The CVs again were relatively low; indicating control of varieties was stable over each cut in this trial. Over the last four years the yields have been similar at about 7.5 tons/acre.

2006 UC Scott Valley Trial – The Scott Valley is now in its sixth year. The trial was originally established with 32 entries May, 2006 on a grower's field in Scott Valley, CA. Single year

results from three 2009 harvests are provided in Table 5 and the over-the-years data provided in Table 6. Yield differences from three harvests from highest to lowest-yielding variety were approximately 2.7 tons/acre. The average yield across all varieties was 7.7 tons/acre. Yields averaged over the three years were a little over 7.0 tons/acre (Table 6). The across-the-years yield average between high and low varieties was 1.6 tons/acre. The CVs were relatively low; indicating control of varieties was stable over each cut in this trial.

Sacramento Valley

2008 UC Davis Yield Trial– A new trial was established September 25, 2008 with 45 entries at the UC Davis Agronomy Research Farm. Seven cuttings were conducted during the season with the first cutting on April 17, 2009. Single year results from the seven harvests are provided in Table 7. The yield across all varieties was about 11.5 tons/acre. The yearly yield average between high and low varieties was almost 4.0 tons/acre difference, and CVs were moderate, indicating average control of variation in this trial.

2007 UC Davis RR and Conventional Trial – A new trial of 45 entries was established on February 7, 2007, which included a block of Roundup-Ready alfalfa varieties and a block of conventional varieties, grown under conventional herbicides and Roundup-treated herbicides. These lines have been developed by Forage Genetics International, and compared with ‘check varieties’. These plots were grown under de-regulation until regulation occurred again in May 2007. Single year results from the six 2009 harvests are provided in Table 8 and the over-the-years data provided in Table 9. The yield across all varieties was about 8.7 tons/acre. The difference between high and low yield entries was about 3.4 tons/acre, while the FD ranges were from 4-9. The Fall Dormancy scores reported are those estimated by the company, not those measured in independent tests. For this third year, the yields of the non-RR check varieties were generally higher than the RR varieties. Seven of the top ten yielding varieties were non-RR. Yields averaged over the three years were increase to 8.1 tons/acre (Table 9). The yearly yield average between high and low varieties was about 2.6 tons/acre difference averaged over the three years.

San Joaquin Valley

2006 UC West Side yield Trial – A new trial with 42 varieties was planted fall, 2006 at the West Side Field Station in Five Points, CA. Seven cuttings were conducted during the 2009 season with the first cutting taking place on April 22, 2008. Single year results from the 2008 harvests are provided in Table 6. The average yield across all varieties was 10.2 tons/acre which was high given this was the third year cut. The yearly yield average between high and low varieties was almost 7 tons/acre difference, and CVs were relatively high, indicating control of varieties was variable in this trial. Yields averaged over the three years were 10.8 tons/acre (Table 11). The difference between high and low yield entries was over 5 tons/acre, while the FD ranges were from 4-10.

2007 UC Kearney Yield Trial -- A new trial with 67 varieties was planted September 13, 2007 at the UC Kearney Research Center, Parlier, CA. Seven cuttings were conducted during the 2009 season with the first cutting taking place on April 22, 2009. Single year results from the 2009 harvests are provided in Table 12. The average yield across all varieties was 10.7 tons/acre

which was very high given this was the second year cut. The yearly yield average between high and low varieties was about 3.3 tons/acre difference, and CVs were relatively moderate, indicating control of varieties was variable in this trial. Yields averaged over the three years were 11.6 tons/acre (Table 13). The difference between high and low yield entries was nearly 4 tons/acre, while the FD ranges were from 6-10.

Low Desert

2008 UC Imperial Yield Trial – A new trial was planted with 39 entries October 13, 2008 at the UC Desert Research and Extension Center, El Centro. The first production year data is provided in Table 14. Nine cuttings were conducted during the season with the first cutting taking place on Feb 25, 2007. The yearly yield average between high and low varieties was 3.0 tons/acre difference with CV's remaining very high. The average yield across all varieties was about 8.6 tons/acre. Yields averaged over the three years were 6.6 tons/acre (Table 10). The yearly yield average between high and low varieties was about 1.3 tons/acre difference averaged over the three years (Table 10).

High Desert

2009 Lancaster Yield Trial – A new variety trial was establish in Lancaster with 27 entries on September 15, 2009 in a growers field. The first production year will begin in the spring of 2010.

INTERPRETING YIELD TRIAL RESULTS

We suggest the following procedure for selecting varieties:

1. **Select a group of high-yielding varieties** for your region (generally the top ¼ to 1/3 of a trial which is closest to your area) from Tables 1-10 over-the years summaries (or from our website). Since this report contains single-year summaries, we recommend that you see the over-the years summaries from the relevant locations which is on our website: <http://alfalfa.ucdavis.edu>
2. **Determine the Pest Resistance and Fall Dormancy needs** for your region. The FD scores are provided on these tables and in the Alfalfa Alliance Website (see #3).
3. **Consider the Fall Dormancy and Pest resistance Ratings** of individual varieties – available at the Alfalfa Alliance Website (www.alfalfa.org).
4. **Choose those high yielding varieties** with the best Pest Resistance package for your region.
5. **Consider evidence for high quality** if available (such information is not always widely available, but generally more dormant varieties tend to be higher in quality).
6. **Consider Biotech Traits** such as the Glyphosate-Resistance that could be available in the near future. This should be compared as a comprehensive weed control strategy, not just a variety.
7. **Test a variety on portions of your farm** to see how it does under your soil conditions.
8. **Consider the price of seed, availability and Service.**

ACKNOWLEDGMENTS

The authors are grateful for the help of Dale Pattigan for help with the field plots at UC Kearney Ag Center, Edwin Scott and crews for help with the field plots at Westside Research and Extension Center, Don Kirby's crew at the Intermountain Research and Extension Center, Paco Maciel's crew at the Desert Research and Extension Center, and Jim Jackson for help on the U.C. Davis plots.

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TABLE 1. 2009 YIELDS, TULELAKE ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 7/27/07

Note: Single year data should not be used to evaluate alfalfa varieties or choose alfalfa cultivars

		Cut 1	Cut 2	Cut 3	Cut 4	YEAR		% of	
	FD	17-Jun	16-Jul	11-Aug	24-Sep	TOTAL		VERNAL	
		Dry t/a							%
Released Varieties									
DKA50-18	5	3.3 (2)	2.0 (5)	1.6 (4)	1.6 (2)	8.5 (1)	A	130.5	
Archer III	5	3.0 (22)	2.0 (1)	1.6 (1)	1.6 (6)	8.3 (2)	A B	127.4	
Integra 8400	4	3.4 (1)	1.9 (12)	1.4 (30)	1.6 (13)	8.3 (3)	A B	127.3	
PGI 459	4	3.1 (15)	2.0 (2)	1.6 (3)	1.6 (14)	8.3 (4)	A B	126.7	
Legendairy	3	3.1 (13)	2.0 (4)	1.5 (15)	1.5 (29)	8.1 (5)	B C	124.1	
WL 357HQ	5	3.2 (6)	1.8 (24)	1.5 (21)	1.6 (16)	8.1 (6)	B C	124.0	
Integra 8300	3	3.2 (5)	1.8 (29)	1.5 (7)	1.5 (35)	8.1 (7)	B C D	123.8	
Rebound 5	4	3.3 (3)	1.8 (32)	1.5 (25)	1.5 (36)	8.0 (8)	B C D E	123.2	
AmeriStand407TQ	4	3.1 (17)	1.9 (15)	1.5 (10)	1.5 (23)	8.0 (9)	B C D E	123.0	
GrandStand	4	3.1 (14)	1.9 (17)	1.5 (18)	1.5 (25)	8.0 (10)	B C D E F	122.5	
PGI 424	4	3.1 (10)	1.8 (31)	1.4 (36)	1.5 (26)	7.9 (13)	C D E F G H	120.8	
CW 500	5	2.9 (34)	1.8 (30)	1.5 (16)	1.6 (5)	7.9 (14)	C D E F G H I	120.6	
Magnum VI	4	3.1 (16)	1.8 (21)	1.4 (46)	1.5 (27)	7.8 (18)	C D E F G H I	120.0	
Dura 512	5	2.9 (32)	1.8 (33)	1.4 (34)	1.6 (8)	7.8 (21)	C D E F G H I J K L	119.1	
FSG 505	5	3.0 (29)	1.8 (27)	1.5 (27)	1.5 (24)	7.7 (25)	C D E F G H I J K L	119.0	
FSG 528SF	5	2.8 (43)	1.8 (39)	1.5 (14)	1.6 (4)	7.7 (26)	C D E F G H I J K L	118.8	
Genoa	4	3.0 (21)	1.8 (28)	1.4 (35)	1.5 (40)	7.7 (27)	C D E F G H I J K L	118.7	
AmeriStand444NT	4	3.1 (18)	1.7 (50)	1.4 (31)	1.5 (22)	7.7 (31)	C D E F G H I J K L	118.6	
WL 325 HQ	4	3.2 (9)	1.7 (44)	1.4 (40)	1.4 (48)	7.7 (32)	C D E F G H I J K L	118.5	
WL 343HQ	4	3.1 (20)	1.8 (34)	1.4 (37)	1.4 (50)	7.7 (34)	E F G H I J K L M	117.8	
MilkMaker ML	5	2.5 (52)	1.9 (10)	1.6 (2)	1.5 (30)	7.6 (37)	H I J K L M N	116.0	
54V09	4	3.1 (11)	1.8 (35)	1.3 (49)	1.3 (55)	7.6 (39)	H I J K L M N	116.0	
Everlast II	4	3.0 (24)	1.7 (52)	1.4 (48)	1.5 (39)	7.5 (43)	H I J K L M N O	115.4	
Xtra-3	4	2.8 (46)	1.7 (42)	1.4 (42)	1.6 (18)	7.5 (45)	J K L M N O	114.4	
MasterPiece	4	2.9 (37)	1.7 (53)	1.3 (50)	1.5 (38)	7.4 (49)	L M N O	113.5	
Mountaineer 2	5	2.9 (42)	1.7 (43)	1.3 (54)	1.4 (43)	7.3 (50)	M N O	112.6	
FSG 408DP	4	2.8 (44)	1.7 (54)	1.4 (38)	1.4 (49)	7.3 (52)	N O	111.9	
Prosementi	ND	2.4 (55)	1.8 (36)	1.4 (29)	1.5 (19)	7.2 (53)	O P	109.8	
Whitney	4	2.7 (48)	1.6 (55)	1.2 (55)	1.4 (54)	6.9 (54)	P Q	105.6	
Vernal	2	2.9 (40)	1.3 (56)	1.1 (56)	1.2 (56)	6.5 (56)	R	100.0	
Experimental Varieties									
R46Bx164	6	2.9 (35)	1.9 (6)	1.6 (6)	1.6 (12)	8.0 (11)	B C D E F	122.5	
R56BD188	ND	3.1 (12)	1.9 (11)	1.4 (28)	1.5 (31)	8.0 (12)	B C D E F G	122.3	
R46Bx218	6	3.0 (23)	1.8 (20)	1.4 (43)	1.6 (11)	7.8 (15)	C D E F G H I	120.3	
R56BD191	ND	3.2 (7)	1.8 (25)	1.4 (41)	1.4 (52)	7.8 (16)	C D E F G H I	120.2	
R46Bx197	8	2.9 (38)	1.9 (9)	1.6 (5)	1.4 (44)	7.8 (17)	C D E F G H I	120.0	
R46BD201	ND	2.9 (33)	1.9 (19)	1.5 (9)	1.5 (32)	7.8 (19)	C D E F G H I J	119.8	
R46Bx165	8.5	2.9 (39)	1.9 (7)	1.5 (19)	1.5 (37)	7.8 (20)	C D E F G H I J K	119.5	
R46Bx160	5	3.0 (27)	1.9 (18)	1.5 (13)	1.4 (46)	7.8 (22)	C D E F G H I J K L	119.1	
R46Bx777	ND	3.2 (4)	1.7 (45)	1.3 (51)	1.4 (42)	7.8 (23)	C D E F G H I J K L	119.0	
R56BD190	ND	2.9 (41)	1.8 (26)	1.5 (8)	1.5 (20)	7.8 (24)	C D E F G H I J K L	119.0	
R46Bx162	8	3.0 (26)	1.9 (13)	1.4 (33)	1.5 (41)	7.7 (28)	C D E F G H I J K L	118.7	
R46Bx167	4	2.9 (31)	2.0 (3)	1.4 (45)	1.4 (53)	7.7 (29)	C D E F G H I J K L	118.6	
R46Bx775	ND	3.2 (8)	1.7 (48)	1.4 (47)	1.5 (33)	7.7 (30)	C D E F G H I J K L	118.6	
R46Bx161	6	3.0 (30)	1.8 (22)	1.5 (17)	1.4 (51)	7.7 (33)	D E F G H I J K L	118.2	
R56BD202	ND	2.8 (45)	1.9 (16)	1.4 (32)	1.6 (15)	7.6 (35)	F G H I J K L M N	117.3	
R46Bx776	ND	3.1 (19)	1.7 (51)	1.3 (53)	1.5 (21)	7.6 (36)	G H I J K L M N	116.8	
R56Bx214	4	2.6 (50)	1.9 (14)	1.5 (11)	1.6 (9)	7.6 (38)	H I J K L M N	116.0	
TS 4028	4	3.0 (28)	1.8 (38)	1.4 (44)	1.4 (45)	7.5 (40)	H I J K L M N	115.8	
R46Bx778	ND	3.0 (25)	1.7 (47)	1.3 (52)	1.5 (28)	7.5 (41)	H I J K L M N	115.7	
R56Bx212	6	2.6 (49)	1.9 (8)	1.5 (22)	1.6 (17)	7.5 (42)	H I J K L M N	115.5	
R46Bx173	5	2.9 (36)	1.8 (37)	1.4 (39)	1.4 (47)	7.5 (44)	I J K L M N O	115.1	
R46Bx217	8	2.5 (53)	1.7 (40)	1.5 (12)	1.7 (1)	7.4 (46)	K L M N O	114.1	
R46BD203	ND	2.6 (51)	1.7 (41)	1.5 (23)	1.6 (3)	7.4 (47)	L M N O	113.7	
R46Bx163	4	2.7 (47)	1.7 (46)	1.5 (24)	1.5 (34)	7.4 (48)	L M N O	113.7	
R46Bx211	4.1	2.4 (54)	1.8 (23)	1.5 (20)	1.6 (10)	7.3 (51)	M N O	112.3	
R66BD108	ND	2.0 (56)	1.7 (49)	1.5 (26)	1.6 (7)	6.8 (55)	Q R	104.1	
MEAN		2.93	1.81	1.44	1.50	7.69			
CV		8.6	6.5	6.7	7.8	4.5			
LSD (0.1)		0.27	0.13	0.10	0.12	0.37			

Trial seeded at 25 lb/acre viable seed at Intermountain Research and Extension Center, Tulelake, CA.

Entries followed by the same letter are not significantly different at the 10% probability level according to Fisher's (protected) LSD.

FD = Fall Dormancy reported by seed companies.

TABLE 2. 2008-2009 YIELDS, TULELAKE ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 07/27/07

		2008	2009	Average		% of
	FD	Yield	Yield			VERNAL
			Dry t/a			%
Released Varieties						
Archer III	5	8.6 (1)	8.3 (2)	8.4 (1)	A	127.5
DKA50-18	5	8.3 (11)	8.5 (1)	8.4 (2)	A B	126.9
PGI 459	4	8.5 (2)	8.3 (4)	8.4 (3)	A B C	126.4
WL 357HQ	5	8.3 (12)	8.1 (6)	8.2 (4)	A B C D	123.6
Integra 8300	3	8.3 (15)	8.1 (7)	8.2 (5)	A B C D E	123.3
Integra 8400	4	8.0 (34)	8.3 (3)	8.2 (6)	A B C D E F	123.1
GrandStand	4	8.2 (20)	8.0 (10)	8.1 (7)	B C D E F G	122.2
PGI 424	4	8.3 (10)	7.9 (13)	8.1 (8)	B C D E F G	122.2
AmeriStand444NT	4	8.4 (4)	7.7 (31)	8.1 (10)	B C D E F G	122.0
Genoa	4	8.4 (6)	7.7 (27)	8.1 (12)	C D E F G H	121.8
AmeriStand407TQ	4	8.1 (30)	8.0 (9)	8.1 (14)	C D E F G H	121.7
FSG 528SF	5	8.4 (7)	7.7 (26)	8.1 (16)	C D E F G H	121.6
Legendairy	3	8.0 (33)	8.1 (5)	8.1 (17)	C D E F G H	121.6
CW 500	5	8.2 (18)	7.9 (14)	8.0 (18)	C D E F G H I	121.4
MilkMaker ML	5	8.4 (3)	7.6 (37)	8.0 (20)	D E F G H I J K	120.8
Rebound 5	4	7.9 (38)	8.0 (8)	8.0 (23)	D E F G H I J K L	120.5
Dura 512	5	8.1 (24)	7.8 (21)	8.0 (24)	D E F G H I J K L M	120.1
Xtra-3	4	8.4 (5)	7.5 (45)	7.9 (27)	D E F G H I J K L M N	119.9
54V09	4	8.1 (29)	7.6 (39)	7.8 (35)	F G H I J K L M N O	118.3
Magnum VI	4	7.8 (47)	7.8 (18)	7.8 (36)	G H I J K L M N O	117.7
FSG 505	5	7.8 (46)	7.7 (25)	7.8 (38)	G H I J K L M N O P	117.2
WL 325 HQ	4	7.8 (48)	7.7 (32)	7.7 (39)	H I J K L M N O P	116.9
MasterPiece	4	8.0 (37)	7.4 (49)	7.7 (44)	K L M N O P Q	115.9
WL 343HQ	4	7.6 (52)	7.7 (34)	7.7 (46)	L M N O P Q	115.7
Mountaineer 2	5	7.9 (39)	7.3 (50)	7.6 (47)	M N O P Q	115.2
Prosementi	ND	8.1 (28)	7.2 (53)	7.6 (48)	M N O P Q	115.2
Everlast II	4	7.7 (51)	7.5 (43)	7.6 (51)	O P Q	114.8
FSG 408DP	4	7.6 (53)	7.3 (52)	7.4 (53)	P Q R	112.5
Whitney	4	7.9 (41)	6.9 (54)	7.4 (54)	Q R	111.7
Vernal	2	6.7 (56)	6.5 (56)	6.6 (56)		100.0
Experimental Varieties						
R46Bx197	8	8.3 (8)	7.8 (17)	8.1 (9)	B C D E F G	122.1
R56BD188	ND	8.2 (22)	8.0 (12)	8.1 (11)	C D E F G	121.9
R56BD191	ND	8.3 (13)	7.8 (16)	8.1 (13)	C D E F G H	121.7
R46Bx164	6	8.1 (26)	8.0 (11)	8.1 (15)	C D E F G H	121.6
R46BD201	ND	8.2 (17)	7.8 (19)	8.0 (19)	D E F G H I J	121.1
R46Bx162	8	8.2 (16)	7.7 (28)	8.0 (21)	D E F G H I J K L	120.6
R56BD190	ND	8.2 (19)	7.8 (24)	8.0 (22)	D E F G H I J K L	120.5
R46Bx218	6	8.1 (31)	7.8 (15)	8.0 (25)	D E F G H I J K L M	120.1
R46Bx167	4	8.2 (23)	7.7 (29)	7.9 (26)	D E F G H I J K L M	120.0
R56Bx214	4	8.3 (9)	7.6 (38)	7.9 (28)	D E F G H I J K L M N	119.8
R46Bx775	ND	8.1 (27)	7.7 (30)	7.9 (29)	D E F G H I J K L M N O	119.5
R46Bx777	ND	8.1 (32)	7.8 (23)	7.9 (30)	D E F G H I J K L M N O	119.4
R46Bx165	8.5	8.0 (36)	7.8 (20)	7.9 (31)	D E F G H I J K L M N O	119.0
R46Bx778	ND	8.2 (21)	7.5 (41)	7.9 (32)	D E F G H I J K L M N O	118.7
R46Bx160	5	7.9 (40)	7.8 (22)	7.8 (33)	E F G H I J K L M N O	118.4
R46BD203	ND	8.3 (14)	7.4 (47)	7.8 (34)	E F G H I J K L M N O	118.4
R46Bx163	4	8.1 (25)	7.4 (48)	7.8 (37)	G H I J K L M N O P	117.3
R56Bx212	6	7.9 (42)	7.5 (42)	7.7 (40)	I J K L M N O P Q	116.6
TS 4028	4	7.9 (43)	7.5 (40)	7.7 (41)	I J K L M N O P Q	116.6
R56BD202	ND	7.8 (45)	7.6 (35)	7.7 (42)	I J K L M N O P Q	116.6
R46Bx217	8	8.0 (35)	7.4 (46)	7.7 (43)	J K L M N O P Q	116.4
R46Bx776	ND	7.7 (49)	7.6 (36)	7.7 (45)	K L M N O P Q	115.9
R46Bx161	6	7.5 (55)	7.7 (33)	7.6 (49)	N O P Q	115.0
R46Bx173	5	7.7 (50)	7.5 (44)	7.6 (50)	N O P Q	115.0
R46Bx211	4.1	7.9 (44)	7.3 (51)	7.6 (52)	O P Q	114.6
R66BD108	ND	7.6 (54)	6.8 (55)	7.2 (55)	R	108.4
MEAN		8.05	7.69	7.87		
CV		5.8	4.5	4.0		
LSD (0.1)		0.49	0.37	0.33		

Trial seeded at 25 lb/acre viable seed at Intermountain Research and Extension Center, Tulelake, CA.

Entries followed by the same letter are not significantly different at the 10% probability level according to Fisher's (protected) LSD.

FD = Fall Dormancy reported by seed companies.

TABLE 3. 2009 YIELDS, TULELAKE ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 05/21/04

Note: Single year data should not be used to evaluate alfalfa varieties or choose alfalfa cultivars

		Cut 1	Cut 2	Cut 3	Cut 4	YEAR		% of
	FD	17-Jun	16-Jul	11-Aug	24-Sep	TOTAL		VERNAL
Released Varieties		Dry t/a						%
Dura 512	5	2.9 (14)	2.2 (1)	1.5 (6)	1.5 (9)	8.1 (1)	A	102.7
Innovator +Z	3	3.2 (2)	2.1 (9)	1.5 (15)	1.3 (30)	8.0 (2)	AB	101.7
54Q25	4	3.1 (3)	2.1 (8)	1.5 (5)	1.3 (32)	8.0 (3)	AB	101.6
Hybriforce-420/Wet	4	3.0 (7)	2.1 (15)	1.5 (3)	1.4 (15)	8.0 (4)	AB	101.5
9429	4	3.1 (5)	2.2 (2)	1.5 (17)	1.3 (31)	8.0 (5)	AB	101.4
Blazer XL	3	3.1 (4)	2.2 (4)	1.4 (23)	1.4 (27)	8.0 (6)	ABC	101.2
Alfa Star II	4	3.0 (8)	2.1 (6)	1.5 (8)	1.4 (24)	8.0 (8)	ABC	101.1
Rebound 5.0	4	3.0 (10)	2.1 (7)	1.5 (12)	1.4 (22)	8.0 (9)	ABC	100.6
Vernal	2	3.3 (1)	2.0 (26)	1.4 (31)	1.2 (35)	7.9 (10)	ABCD	100.0
MasterPiece	4	2.9 (19)	2.1 (16)	1.4 (25)	1.5 (4)	7.9 (11)	ABCDE	99.3
Vitro	3	2.9 (15)	2.1 (5)	1.4 (30)	1.4 (17)	7.8 (12)	ABCDEF	99.2
Xtra-3	4	2.9 (13)	2.1 (13)	1.4 (19)	1.4 (23)	7.8 (13)	ABCDEF	99.1
Reward II	4	2.9 (20)	2.1 (23)	1.5 (16)	1.4 (14)	7.8 (14)	ABCDEFGG	98.5
Mountaineer 2.0 (4M124)	5	3.0 (12)	1.9 (34)	1.5 (11)	1.5 (10)	7.8 (15)	ABCDEFGG	98.4
DS309Hyb	4	2.8 (25)	2.0 (24)	1.5 (1)	1.4 (19)	7.8 (16)	ABCDEFGG	98.3
Plumas	4	2.9 (17)	2.1 (17)	1.4 (29)	1.4 (16)	7.8 (17)	ABCDEFGG	98.0
LegenDairy 5.0	3	3.0 (11)	1.9 (32)	1.5 (2)	1.3 (33)	7.7 (18)	BCDEFG	97.7
DS218	6	2.8 (24)	2.0 (31)	1.5 (4)	1.4 (13)	7.7 (19)	BCDEFGH	97.4
SW435(SW4A135)	4	2.8 (26)	2.1 (14)	1.4 (18)	1.4 (18)	7.7 (20)	BCDEFGH	97.2
C 316 Lot9078	4	2.8 (23)	2.0 (25)	1.5 (13)	1.4 (26)	7.7 (21)	BCDEFGH	97.1
WL325HQ	4	2.9 (16)	2.1 (10)	1.4 (24)	1.3 (34)	7.7 (22)	BCDEFGH	97.1
WL357HQ	5	2.9 (18)	2.0 (28)	1.4 (20)	1.4 (28)	7.7 (23)	BCDEFGH	97.0
Expedition	5	2.8 (22)	2.1 (22)	1.3 (33)	1.5 (11)	7.7 (24)	BCDEFGH	96.9
LM 459 WD	5	2.7 (28)	2.0 (27)	1.5 (14)	1.5 (7)	7.7 (25)	BCDEFGH	96.9
CW5440	4	2.8 (21)	2.1 (21)	1.4 (21)	1.4 (29)	7.7 (26)	BCDEFGH	96.8
Recover	5	2.7 (29)	2.0 (29)	1.4 (22)	1.5 (1)	7.7 (27)	BCDEFGH	96.8
WL319HQ	3	3.0 (9)	2.1 (11)	1.3 (32)	1.2 (36)	7.6 (28)	CDEFGH	96.4
Boulder (4M125)	5	2.6 (32)	2.1 (20)	1.4 (26)	1.5 (8)	7.5 (30)	EF GH	94.6
Magna601	6	2.4 (34)	2.1 (12)	1.5 (7)	1.4 (25)	7.3 (34)	HI	92.7
Experimental Varieties								
CW94023	4	3.1 (6)	2.2 (3)	1.4 (28)	1.4 (20)	8.0 (7)	ABC	101.1
SW5307	5	2.6 (30)	2.1 (19)	1.4 (27)	1.5 (5)	7.6 (29)	DEFGH	95.7
SW5329	5	2.7 (27)	2.1 (18)	1.3 (35)	1.4 (21)	7.5 (31)	EF GH	94.4
CW05009	5	2.6 (31)	1.9 (33)	1.5 (9)	1.5 (12)	7.5 (32)	F GH	94.4
SW4328	4	2.5 (33)	2.0 (30)	1.5 (10)	1.5 (6)	7.4 (33)	GH	94.0
SW4310	4	2.3 (35)	1.8 (35)	1.3 (34)	1.5 (3)	7.0 (35)	I J	88.3
SW6330	6	2.1 (36)	1.8 (36)	1.3 (36)	1.5 (2)	6.7 (36)	J	84.5
MEAN		2.83	2.05	1.43	1.40	7.72		
CV		6.8	7.7	7.5	8.9	4.7		
LSD (0.1)		0.21	0.17	0.11	0.13	0.39		

Trial seeded at 25 lb/acre viable seed at Intermountain Research and Extension Center, Tulelake, CA.

Entries followed by the same letter are not significantly different at the 10% probability level according to Fisher's (protected) LSD.

FD = Fall Dormancy reported by seed companies.

Table 4. 2004-2009 YIELDS. UC TULELAKE ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 5/21/04

		2004	2005	2006	2007	2008	2009	Average		% of
	FD	Yield	Yield	Yield	Yield	Yield	Yield			Vernal
					Dry t/a					%
Released Varieties										
Alfa Star II	4	5.2 (18)	8.9 (8)	9.2 (4)	7.7 (9)	7.8 (1)	8.0 (8)	7.8 (1)	A	108.6
Rebound 5.0	4	5.2 (16)	8.9 (7)	9.3 (2)	7.5 (17)	7.7 (5)	8.0 (9)	7.8 (2)	AB	108.3
Xtra-3	4	5.1 (23)	9.2 (1)	9.4 (1)	7.4 (22)	7.8 (2)	7.8 (13)	7.8 (3)	AB	108.2
DS309Hyb	4	5.2 (10)	8.8 (16)	9.1 (9)	7.9 (3)	7.8 (3)	7.8 (16)	7.8 (4)	AB	107.9
WL357HQ	5	4.9 (30)	8.9 (6)	9.2 (3)	8.0 (1)	7.6 (10)	7.7 (23)	7.7 (5)	ABC	107.5
Dura 512	5	5.0 (29)	8.6 (19)	8.9 (19)	7.9 (4)	7.7 (4)	8.1 (1)	7.7 (7)	ABCD	107.1
MasterPiece	4	5.2 (12)	8.8 (15)	9.1 (8)	7.6 (13)	7.6 (8)	7.9 (11)	7.7 (8)	ABCD	107.0
Expedition	5	5.3 (6)	9.1 (2)	9.1 (10)	7.8 (5)	7.1 (31)	7.7 (24)	7.7 (9)	ABCDE	106.7
Recover	5	5.2 (9)	8.8 (12)	8.9 (20)	7.7 (8)	7.6 (7)	7.7 (27)	7.7 (10)	ABCDE	106.4
WL325HQ	4	5.3 (7)	9.0 (5)	9.2 (5)	7.3 (26)	7.5 (12)	7.7 (22)	7.7 (11)	ABCDEF	106.4
Vitro	3	5.2 (13)	8.7 (17)	9.1 (7)	7.5 (15)	7.4 (17)	7.8 (12)	7.6 (12)	ABCDEF	106.2
Mountaineer 2.0 (4M124)	5	5.4 (1)	8.8 (13)	8.9 (17)	7.4 (23)	7.5 (13)	7.8 (15)	7.6 (13)	ABCDEF	106.2
LegenDairy 5.0	3	4.9 (32)	8.9 (11)	9.0 (12)	7.7 (7)	7.5 (11)	7.7 (18)	7.6 (14)	ABCDEF	106.0
WL319HQ	3	5.1 (25)	8.9 (9)	9.0 (11)	7.8 (6)	7.2 (26)	7.6 (28)	7.6 (15)	ABCDEF	105.7
54Q25	4	5.1 (21)	8.5 (21)	9.0 (15)	7.5 (21)	7.4 (14)	8.0 (3)	7.6 (16)	ABCDEF	105.7
C 316 Lot9078	4	4.9 (31)	9.0 (4)	9.1 (6)	7.5 (18)	7.2 (23)	7.7 (21)	7.6 (17)	ABCDEF	105.5
Hybriforce-420/Wet	4	5.2 (15)	8.6 (18)	8.8 (22)	7.5 (19)	7.3 (20)	8.0 (4)	7.6 (18)	ABCDEF	105.5
Blazer XL	3	5.0 (28)	8.3 (28)	8.7 (26)	8.0 (2)	7.4 (15)	8.0 (6)	7.6 (19)	ABCDEF	105.4
Boulder (4M125)	5	5.0 (27)	8.9 (10)	8.9 (18)	7.6 (10)	7.4 (16)	7.5 (30)	7.6 (20)	BCDEF	105.1
9429	4	4.8 (34)	8.3 (30)	8.9 (16)	7.5 (20)	7.6 (9)	8.0 (5)	7.5 (21)	CDEF	104.4
SW435(SW4A135)	4	5.2 (17)	8.6 (20)	8.5 (32)	7.3 (27)	7.4 (18)	7.7 (20)	7.5 (23)	EF	103.7
LM 459 WD	5	5.1 (20)	8.4 (24)	8.7 (27)	7.6 (11)	7.1 (28)	7.7 (25)	7.4 (24)	FG	103.5
CW5440	4	5.1 (24)	8.4 (25)	8.7 (24)	7.5 (16)	7.2 (24)	7.7 (26)	7.4 (25)	F	103.4
Reward II	4	5.0 (26)	8.3 (27)	8.8 (21)	7.3 (29)	7.2 (25)	7.8 (14)	7.4 (26)	G	103.1
DS218	6	5.2 (14)	8.5 (22)	8.7 (25)	7.4 (25)	6.9 (34)	7.7 (19)	7.4 (27)	H	102.9
Plumas	4	4.8 (33)	8.1 (33)	8.6 (30)	7.6 (12)	7.3 (21)	7.8 (17)	7.4 (28)	I	102.4
Magna601	6	5.3 (5)	8.4 (26)	8.6 (29)	6.9 (35)	7.3 (22)	7.3 (34)	7.3 (32)	J	101.7
Innovator +Z	3	4.8 (35)	8.3 (29)	8.4 (35)	7.3 (28)	7.0 (32)	8.0 (2)	7.3 (33)	K	101.6
Vernal	2	4.7 (36)	8.0 (35)	8.4 (33)	7.3 (31)	6.9 (35)	7.9 (10)	7.2 (34)	L	100.0
Experimental Varieties										
CW94023	4	5.2 (19)	9.0 (3)	9.0 (13)	7.6 (14)	7.6 (6)	8.0 (7)	7.7 (6)	ABC	107.4
CW05009	5	5.1 (22)	8.8 (14)	9.0 (14)	7.4 (24)	7.1 (27)	7.5 (32)	7.5 (22)	DE	104.0
SW5307	5	5.4 (2)	8.2 (31)	8.8 (23)	7.0 (34)	7.1 (29)	7.6 (29)	7.3 (29)	JK	102.0
SW5329	5	5.2 (11)	8.4 (23)	8.5 (31)	7.3 (30)	7.0 (33)	7.5 (31)	7.3 (30)	L	101.9
SW4328	4	5.2 (8)	8.0 (34)	8.7 (28)	7.1 (32)	7.4 (19)	7.4 (33)	7.3 (31)	JK	101.8
SW4310	4	5.4 (3)	8.1 (32)	8.4 (34)	7.1 (33)	7.1 (30)	7.0 (35)	7.2 (35)	M	99.8
SW6330	6	5.3 (4)	7.8 (36)	8.0 (36)	6.7 (36)	6.6 (36)	6.7 (36)	6.8 (36)		95.3
MEAN		5.12	8.59	8.85	7.47	7.35	7.72	7.52		
CV		5.4	4.9	4.6	5.8	6.3	4.7	2.9		
LSD (0.1)		0.29	0.45	0.44	0.46	0.49	0.39	0.23		

Trial seeded at 25 lb/acre viable seed at Intermountain Research and Extension Center, Tulelake, CA.

Entries followed by the same letter are not significantly different at the 10% probability level according to Fisher's (protected) LSD.

FD = Fall Dormancy reported by seed companies.

Table 5. 2009 YIELDS, UC SCOTT VALLEY ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 5/04/2006

Note: Single year data should not be used to evaluate alfalfa varieties or choose alfalfa cultivars

		Cut 1 24-Jun	Cut 2 5-Aug	Cut 3 23-Sep	YEAR TOTAL		% of VERNAL
	FD	Dry t/a					%
Integra 8400	4	3.6 (3)	2.5 (1)	2.8 (1)	8.9 (1)	A	135.7
GrandStand	4	3.9 (1)	2.3 (4)	2.6 (4)	8.8 (2)	A B	134.4
PGI 459	4	3.5 (5)	2.4 (2)	2.6 (2)	8.5 (3)	A B C	129.6
Xtra-3	4	3.7 (2)	2.2 (8)	2.5 (8)	8.4 (4)	A B C D	127.6
Rebound 5.0	4	3.5 (9)	2.3 (3)	2.6 (3)	8.4 (5)	A B C D E	127.3
Boulder	5	3.5 (8)	2.3 (5)	2.5 (5)	8.2 (6)	B C D E F	125.3
FSG 505	5	3.4 (10)	2.2 (7)	2.5 (7)	8.1 (7)	C D E F G	123.3
WL 357HQ	5	3.3 (15)	2.2 (9)	2.5 (9)	7.9 (8)	C D E F G H	120.4
DS417	4	3.5 (6)	2.1 (18)	2.3 (18)	7.9 (9)	C D E F G H I	120.3
Masterpiece	4	3.5 (4)	2.1 (20)	2.3 (20)	7.9 (10)	C D E F G H I	119.9
AmeriStand 407TQ	4	3.1 (25)	2.3 (6)	2.5 (6)	7.9 (11)	C D E F G H I	119.5
RRALF 4R200	4	3.3 (14)	2.2 (12)	2.4 (12)	7.8 (12)	C D E F G H I	119.4
MasterPiece	4	3.4 (11)	2.1 (16)	2.4 (16)	7.8 (13)	D E F G H I	119.0
WL 343HQ	4	3.3 (12)	2.1 (14)	2.4 (14)	7.8 (14)	D E F G H I J	118.9
DKA50-18	5	3.2 (18)	2.2 (11)	2.4 (11)	7.8 (15)	D E F G H I J	118.3
Expedition	5	3.1 (24)	2.2 (10)	2.4 (10)	7.7 (16)	D E F G H I J	117.7
Dura 512	5	3.2 (20)	2.1 (13)	2.4 (13)	7.7 (17)	D E F G H I J	117.4
WL 319HQ	3	3.5 (7)	2.0 (24)	2.2 (24)	7.7 (18)	E F G H I J K	116.9
Whitney	4	3.3 (13)	2.0 (21)	2.3 (21)	7.6 (19)	F G H I J K L	115.5
DKA41-18RR	4	3.2 (21)	2.1 (19)	2.3 (19)	7.6 (20)	F G H I J K L	114.9
Mountaineer 2.0	5	3.2 (16)	2.0 (22)	2.3 (22)	7.5 (21)	G H I J K L	114.5
Power 4.2 (PI + Alleg)	4	3.2 (17)	2.0 (23)	2.3 (23)	7.5 (22)	G H I J K L	113.8
Power 4.2 (Coated)	4	3.0 (30)	2.1 (15)	2.4 (15)	7.5 (23)	G H I J K L	113.4
WL 355RR	4	3.0 (29)	2.1 (17)	2.3 (17)	7.4 (24)	G H I J K L	113.2
PGI 424	4	3.2 (19)	2.0 (27)	2.2 (27)	7.3 (25)	H I J K L	111.5
WL 325HQ	4	3.2 (22)	2.0 (26)	2.2 (26)	7.3 (26)	H I J K L	111.4
HybriForce620	6	3.1 (23)	1.9 (28)	2.2 (28)	7.2 (27)	I J K L M	110.0
CW 500	5	3.0 (31)	2.0 (25)	2.2 (25)	7.1 (28)	J K L M	108.6
Mariner III	4	3.1 (28)	1.9 (29)	2.1 (29)	7.0 (29)	K L M	106.8
HybriForce420/wet	4	3.1 (26)	1.8 (30)	2.0 (30)	7.0 (30)	L M	105.9
Vernal	2	3.1 (27)	1.7 (31)	1.8 (31)	6.6 (31)	M N	100.0
FSG 408DP	4	2.8 (32)	1.6 (32)	1.8 (32)	6.2 (32)	N	94.4
MEAN		3.27	2.09	2.33	7.69		
CV		7.3	9.8	9.8	7.4		
LSD (0.1)		0.29	0.25	0.27	0.69		

Trial seeded at 25 lb/acre viable seed at Scott Valley, CA.

Entries followed by the same letter are not significantly different at the 10% probability level according to Fisher's (protected) LSD.

FD = Fall Dormancy reported by seed companies.

Note: Cut 1 was analyzed using a missing values technique, due to several missing plots.

TABLE 6. 2006-2009 YIELDS, UC SCOTT VALLEY ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 5/04/06

		2006	2007	2008	2009	Average		% of
	FD	Yield	Yield	Yield	Yield			Vernal
				Dry t/a				%
Integra 8400	4	4.6 (21)	9.1 (1)	8.8 (1)	8.9 (1)	7.8 (1)	A	127.0
Xtra-3	4	5.5 (1)	8.7 (2)	8.0 (13)	8.4 (4)	7.7 (2)	AB	124.1
PGI 459	4	4.7 (15)	8.4 (6)	8.7 (2)	8.5 (3)	7.6 (3)	ABC	123.1
Rebound 5.0	4	4.8 (12)	8.4 (7)	8.7 (4)	8.4 (5)	7.6 (4)	ABCD	122.4
GrandStand	4	4.2 (30)	8.4 (9)	8.6 (5)	8.8 (2)	7.5 (5)	ABCDE	121.6
Dura 512	5	4.9 (6)	8.4 (11)	8.7 (3)	7.7 (17)	7.4 (6)	BCDEF	120.3
FSG 505	5	4.6 (19)	8.6 (3)	8.3 (7)	8.1 (7)	7.4 (7)	BCDEFG	120.1
DS417	4	5.3 (2)	8.4 (8)	8.0 (17)	7.9 (9)	7.4 (8)	BCDEFG	120.0
MasterPiece	4	4.8 (11)	8.6 (4)	8.0 (14)	7.8 (13)	7.3 (9)	CDEFGH	118.5
Masterpiece	4	4.7 (17)	8.3 (14)	8.3 (6)	7.9 (10)	7.3 (10)	CDEFGH	118.2
Boulder	5	4.6 (22)	8.4 (13)	7.9 (20)	8.2 (6)	7.3 (11)	CDEFGHI	117.8
WL 357HQ	5	4.9 (5)	8.2 (21)	7.8 (24)	7.9 (8)	7.2 (12)	DEFGHIJ	117.0
AmeriStand 407TQ	4	4.4 (27)	8.3 (17)	8.2 (8)	7.9 (11)	7.2 (13)	EFGHIJK	116.3
Mountaineer 2.0	5	4.8 (10)	8.4 (12)	8.0 (16)	7.5 (21)	7.2 (14)	EFGHIJK	116.3
Power 4.2 (PI + Alleg)	4	4.6 (23)	8.6 (5)	8.0 (19)	7.5 (22)	7.2 (15)	FGHIJKL	115.9
DKA50-18	5	4.5 (25)	8.3 (16)	8.0 (15)	7.8 (15)	7.1 (16)	FGHIJKL	115.5
WL 319HQ	3	4.5 (26)	8.1 (25)	8.2 (9)	7.7 (18)	7.1 (17)	FGHIJKL	115.1
Whitney	4	4.6 (18)	8.3 (18)	7.9 (21)	7.6 (19)	7.1 (18)	FGHIJKLM	115.0
Power 4.2 (Coated)	4	4.7 (16)	8.3 (15)	7.8 (23)	7.5 (23)	7.1 (19)	GHIJKLM	114.7
WL 325HQ	4	4.6 (20)	8.3 (19)	8.1 (11)	7.3 (26)	7.1 (20)	GHIJKLM	114.7
Expedition	5	4.5 (24)	8.1 (26)	8.0 (18)	7.7 (16)	7.1 (21)	HJKLM	114.4
CW 500	5	4.8 (8)	8.2 (23)	8.1 (12)	7.1 (28)	7.1 (22)	HJKLM	114.2
PGI 424	4	4.9 (7)	8.4 (10)	7.5 (28)	7.3 (25)	7.0 (23)	HJKLMN	113.8
HybriForce620	6	5.1 (4)	8.2 (22)	7.5 (26)	7.2 (27)	7.0 (24)	HJKLMN	113.7
RRALF 4R200	4	4.0 (32)	7.8 (28)	8.1 (10)	7.8 (12)	7.0 (25)	IJKLMN	112.5
WL 343HQ	4	4.1 (31)	7.9 (27)	7.8 (22)	7.8 (14)	6.9 (26)	JKLMN	112.1
WL 355RR	4	4.8 (13)	7.8 (29)	7.5 (27)	7.4 (24)	6.9 (27)	KLMN	111.4
Mariner III	4	4.8 (9)	8.2 (20)	7.2 (29)	7.0 (29)	6.8 (28)	LMN	110.4
DKA41-18RR	4	4.3 (29)	7.5 (31)	7.7 (25)	7.6 (20)	6.8 (29)	MN	109.6
HybriForce420/wet	4	5.2 (3)	8.1 (24)	6.5 (31)	7.0 (30)	6.7 (30)	NO	108.4
FSG 408DP	4	4.7 (14)	7.8 (30)	6.8 (30)	6.2 (32)	6.4 (31)	OP	103.3
Vernal	2	4.4 (28)	7.5 (32)	6.2 (32)	6.6 (31)	6.2 (32)	P	100.0
MEAN		4.69	8.26	7.91	7.69	7.14		
CV		8.5	4.0	6.1	7.4	4.0		
LSD (0.1)		0.48	0.40	0.58	0.69	0.34		

Trial seeded at 25 lb/acre viable seed at Scott Valley, CA.

Entries followed by the same letter are not significantly different at the 10% probability level according to Fisher's (protected) LSD.

FD = Fall Dormancy reported by seed companies.

TABLE 7. 2009 Yields, UC Davis Alfalfa Cultivar Trial. Trial planted 09/25/08

Note: Single year data should not be used to evaluate alfalfa varieties or choose alfalfa cultivars

		Cut 1	Cut 2	Cut 3	Cut 4	Cut 5	Cut 6	Cut 7	YEAR	% of	
	FD	17-Apr	12-May	15-Jun	13-Jul	17-Aug	25-Sep	9-Nov	TOTAL	CUF 101	
		Dry t/a								%	
Released Varieties											
Magna 801 FQ	8	2.0 (7)	1.6 (11)	2.5 (7)	1.9 (11)	2.6 (2)	1.7 (4)	0.9 (10)	13.1 (1)	A	137.6
HybriForce 620	6	2.0 (8)	1.7 (5)	2.5 (3)	1.9 (5)	2.4 (7)	1.6 (12)	0.8 (22)	13.0 (2)	A	136.5
WL 530HQ	8	1.8 (16)	1.7 (2)	2.4 (12)	1.9 (7)	2.2 (14)	1.7 (3)	0.9 (11)	12.7 (3)	AB	133.8
PGI 709	7	1.9 (9)	1.6 (12)	2.3 (25)	1.8 (14)	2.5 (4)	1.6 (10)	0.9 (21)	12.5 (5)	ABCD	132.2
HybriForce 800	8	2.1 (2)	1.5 (15)	2.5 (6)	1.6 (22)	2.4 (8)	1.5 (27)	0.9 (19)	12.4 (7)	ABCDE F	130.8
Arriba II	7	2.1 (3)	1.6 (8)	2.2 (31)	1.3 (41)	2.5 (5)	1.7 (2)	0.9 (5)	12.3 (9)	ABCDEF G	130.1
8R100	8	1.7 (25)	1.5 (19)	2.5 (8)	1.8 (17)	2.4 (6)	1.6 (8)	0.8 (25)	12.3 (10)	ABCDEF G H	129.6
56S82	6	2.1 (3)	1.5 (16)	2.5 (11)	1.8 (15)	2.2 (17)	1.5 (26)	0.7 (32)	12.3 (11)	ABCDEF G H I	129.3
PGI 608	6	1.7 (28)	1.7 (3)	2.4 (13)	1.9 (9)	2.2 (17)	1.4 (32)	0.8 (30)	12.2 (13)	ABCDEF G H I J K	128.2
58R51 RR	8	1.6 (36)	1.4 (22)	2.4 (17)	1.5 (30)	2.7 (1)	1.7 (5)	0.9 (15)	12.1 (16)	ABCDEF G H I J K	127.7
Pacifico	9	1.7 (23)	1.6 (9)	2.3 (26)	1.9 (8)	2.1 (23)	1.5 (17)	0.9 (16)	12.1 (18)	ABCDEF G H I J K	127.3
Conquistador	8	1.7 (31)	1.5 (14)	2.3 (22)	1.6 (25)	2.2 (20)	1.9 (1)	1.0 (3)	12.1 (19)	ABCDEF G H I J K	127.1
Integra 8800	8	1.9 (12)	1.4 (26)	2.4 (14)	1.3 (42)	2.6 (2)	1.6 (9)	0.9 (8)	12.0 (20)	ABCDEF G H I J K L	126.6
Archer III	5	1.8 (22)	1.3 (29)	2.5 (9)	1.9 (6)	2.0 (29)	1.5 (30)	0.7 (36)	11.6 (21)	BCDEF G H I J K L M	122.7
Magna 788	7	1.6 (34)	1.3 (33)	2.2 (32)	1.6 (19)	2.4 (9)	1.5 (16)	0.7 (31)	11.4 (22)	CDEF G H I J K L M N	120.5
Tango		1.8 (20)	1.4 (27)	2.4 (15)	1.5 (26)	2.0 (30)	1.5 (21)	0.8 (29)	11.4 (23)	DEF G H I J K L M N O	120.2
Magna 995	9	1.8 (19)	1.2 (40)	2.1 (41)	1.8 (13)	2.0 (30)	1.5 (22)	0.9 (20)	11.3 (24)	DEF G H I J K L M N O	119.3
GrandSlam	8	1.7 (32)	1.3 (33)	2.0 (44)	2.0 (1)	2.1 (25)	1.5 (25)	0.7 (34)	11.3 (26)	EFGH I J K L M N O P	119.0
Artesian Sunrise	7	1.9 (10)	1.4 (24)	2.5 (5)	1.1 (44)	2.0 (28)	1.4 (31)	0.8 (22)	11.3 (27)	EFGH I J K L M N O P	119.0
Integra 8600	6	1.7 (26)	1.2 (36)	2.4 (16)	1.3 (38)	2.1 (24)	1.6 (6)	0.8 (26)	11.2 (29)	F G H I J K L M N O P	118.4
HybriForce 700	7	1.9 (13)	1.2 (39)	2.2 (30)	1.7 (18)	1.7 (40)	1.5 (19)	0.8 (28)	11.1 (31)	G H I J K L M N O P	117.3
Integra 8801R	8	1.5 (40)	1.2 (38)	2.2 (36)	1.6 (23)	2.1 (21)	1.6 (14)	0.9 (18)	11.0 (33)	I J K L M N O P Q	116.3
Sutter	6	1.7 (29)	1.3 (35)	2.3 (24)	1.3 (37)	2.1 (22)	1.3 (37)	0.9 (17)	10.9 (35)	K L M N O P Q R	115.3
Dura 843	8	1.6 (33)	1.5 (20)	2.4 (18)	1.5 (31)	2.0 (33)	1.4 (36)	0.5 (40)	10.8 (36)	L M N O P Q R	113.7
Cisco	6	1.8 (21)	1.2 (41)	2.5 (9)	1.6 (24)	1.7 (42)	1.3 (42)	0.5 (43)	10.4 (37)	M N O P Q R S	110.0
Lightning IV		1.7 (27)	1.3 (31)	2.2 (34)	1.4 (35)	1.8 (39)	1.3 (40)	0.6 (38)	10.3 (38)	N O P Q R S T	109.0
DKA 50-18	5	1.5 (41)	1.3 (30)	2.3 (29)	1.5 (31)	1.6 (43)	1.6 (7)	0.6 (39)	10.3 (39)	N O P Q R S T	108.1
4R200		1.1 (45)	1.2 (37)	2.2 (40)	1.9 (4)	1.9 (37)	1.3 (39)	0.5 (42)	10.2 (40)	O P Q R S T	107.5
TruTest	6	1.5 (38)	1.1 (44)	2.2 (39)	1.3 (40)	1.9 (34)	1.4 (34)	0.7 (37)	10.1 (41)	P Q R S T	106.2
Integra 8401R	8	1.4 (43)	1.3 (32)	2.2 (35)	1.4 (36)	1.9 (38)	1.2 (44)	0.5 (44)	9.8 (42)	Q R S T	103.5
WL 440HQ	5	1.6 (37)	1.4 (28)	2.2 (37)	1.3 (39)	1.9 (36)	1.1 (45)	0.4 (45)	9.7 (43)	R S T	102.7
Cuf 101	9	1.5 (39)	1.1 (43)	2.0 (45)	1.0 (45)	1.5 (45)	1.3 (38)	0.9 (7)	9.5 (44)	S T	100.0
6R100	6	1.2 (44)	1.2 (42)	2.2 (38)	1.2 (43)	1.6 (44)	1.3 (43)	0.5 (41)	9.2 (45)	T	96.7
Experimental Varieties											
DS 067348	8	2.0 (5)	1.7 (6)	2.4 (18)	1.9 (12)	2.3 (13)	1.6 (13)	0.9 (12)	12.7 (4)	ABC	133.5
SW 9812	9	2.1 (1)	1.8 (1)	2.3 (20)	1.4 (34)	2.3 (12)	1.6 (15)	1.0 (1)	12.5 (6)	ABCDE	131.7
FG 83T048	8	1.8 (15)	1.7 (4)	2.3 (21)	2.0 (3)	2.2 (19)	1.5 (27)	0.9 (9)	12.4 (8)	ABCDEF	130.6
SW 9813	9	1.7 (24)	1.6 (7)	2.5 (4)	1.5 (28)	2.3 (11)	1.6 (10)	1.0 (2)	12.2 (12)	ABCDEF G H I J	128.7
DS 077601	8	2.0 (6)	1.4 (21)	2.6 (2)	1.6 (20)	2.1 (26)	1.5 (18)	0.9 (14)	12.2 (14)	ABCDEF G H I J K	128.1
SW 9803	9	1.6 (35)	1.5 (17)	2.3 (23)	1.9 (10)	2.3 (10)	1.5 (24)	0.9 (4)	12.1 (15)	ABCDEF G H I J K	127.8
DS 071842	6	1.8 (17)	1.6 (10)	2.6 (1)	1.6 (21)	2.2 (15)	1.5 (23)	0.7 (35)	12.1 (17)	ABCDEF G H I J K	127.5
SW 9816	9	1.9 (14)	1.5 (18)	2.1 (43)	1.5 (29)	2.0 (32)	1.5 (29)	0.9 (6)	11.3 (25)	EFGH I J K L M N O P	119.0
CW 26089	6	1.7 (30)	1.1 (45)	2.3 (28)	1.8 (16)	2.2 (16)	1.5 (20)	0.7 (33)	11.3 (28)	EFGH I J K L M N O P	118.7
CW 38065	8	1.8 (18)	1.5 (13)	2.3 (27)	1.4 (33)	1.9 (34)	1.4 (35)	0.9 (13)	11.2 (30)	F G H I J K L M N O P	118.3
CW 27092	7	1.4 (42)	1.4 (23)	2.1 (42)	2.0 (2)	2.0 (27)	1.3 (41)	0.8 (27)	11.1 (32)	H I J K L M N O P	116.7
DS 067092	8	1.9 (11)	1.4 (25)	2.2 (33)	1.5 (27)	1.7 (41)	1.4 (33)	0.8 (24)	11.0 (34)	J K L M N O P Q	116.1
MEAN		1.74	1.42	2.32	1.60	2.11	1.49	0.78	11.47		
CV		16.0	21.8	10.3	25.6	16.2	16.0	14.4	9.1		
LSD (0.1)		0.33	0.37	0.29	0.49	0.41	0.28	0.13	1.24		

Trial seeded at 25 lb/acre viable seed on Yolo clay loam soil at the Univ. of California Agronomy Farm, Davis, CA.
 Entries followed by the same letter are not significantly different at the 10% probability level according to Fishers (protected) LSD.
 FD = Fall Dormancy reported by seed companies.

TABLE 8. 2009 YIELDS, UCD RR and Conventional Variety Trial. Trial planted 02/07/2007

Note: Single year data should not be used to evaluate alfalfa varieties or choose alfalfa cultivars

		Cut 1	Cut 2	Cut 3	Cut 4	Cut 5	Cut 6	YEAR		% of
		21-Apr	14-May	16-Jun	14-Jul	14-Aug	23-Sep	TOTAL		CUF10
	FD	Dry t/a								%
Released Varieties										
CG9	9	1.0 (18)	1.2 (9)	2.2 (5)	1.9 (2)	1.8 (16)	1.9 (2)	9.9 (2)	AB	121.8
GrandSlam	8	1.1 (6)	1.3 (4)	2.0 (22)	1.7 (6)	2.0 (2)	1.6 (16)	9.8 (4)	ABCD	119.7
PGI 801	8	1.0 (16)	1.3 (3)	2.0 (24)	1.6 (12)	1.8 (11)	1.7 (12)	9.4 (6)	ABCD	115.8
Integra 8800	8	1.1 (9)	1.1 (14)	2.1 (9)	1.5 (18)	1.8 (10)	1.7 (10)	9.4 (7)	ABCD	115.7
Magna 801 FQ	8	1.1 (10)	1.4 (2)	2.0 (21)	1.5 (22)	1.9 (7)	1.6 (25)	9.3 (8)	ABCDE	114.7
DKA50-18	5	1.3 (1)	1.0 (26)	2.1 (11)	1.5 (23)	1.8 (14)	1.6 (21)	9.3 (9)	ABCDE F	114.0
Integra 8801RR	8	0.8 (35)	1.1 (18)	2.2 (3)	1.6 (13)	1.8 (13)	1.8 (8)	9.3 (10)	ABCDE F	113.6
DKA84-10RR	8	1.0 (20)	0.9 (32)	2.1 (14)	1.7 (7)	1.9 (5)	1.7 (15)	9.2 (11)	ABCDE F	113.3
Desert Sun 8.10RR	8	1.0 (13)	1.2 (9)	2.1 (17)	1.2 (41)	1.9 (4)	1.8 (7)	9.2 (12)	ABCDEF G	112.9
SW 7410	7	0.8 (30)	1.2 (6)	1.9 (30)	1.5 (25)	2.1 (1)	1.6 (23)	9.1 (13)	ABCDEFGHI	111.1
PGI 447RR	4	0.7 (44)	1.1 (12)	2.3 (1)	1.7 (9)	1.7 (19)	1.5 (29)	9.0 (14)	ABCDEFGHI	110.9
AmeriStand 855RR	8	1.2 (3)	0.9 (33)	2.1 (13)	1.3 (34)	1.7 (22)	1.7 (11)	9.0 (15)	ABCDEFGHI J	110.0
PGI 424	4	1.1 (7)	1.4 (1)	1.8 (37)	1.6 (14)	1.6 (33)	1.5 (31)	9.0 (16)	ABCDEFGHI J	109.8
SW 9720	9	1.1 (11)	1.2 (7)	1.8 (38)	1.6 (15)	1.8 (17)	1.5 (30)	8.9 (17)	ABCDEFGHI J	108.9
Revolution RR	8	0.8 (32)	0.8 (41)	2.1 (15)	1.5 (19)	1.7 (20)	1.8 (4)	8.8 (18)	ABCDEFGHI J	108.3
WL 357HQ	5	1.2 (4)	1.1 (17)	2.2 (4)	1.5 (20)	1.4 (40)	1.3 (41)	8.8 (19)	ABCDEFGHI J	108.0
RRALF 6R100	6	0.9 (25)	1.0 (23)	2.0 (20)	1.4 (26)	1.8 (15)	1.6 (18)	8.8 (20)	ABCDEFGHI J	107.9
WL 550RR	8	0.9 (27)	0.9 (35)	2.1 (18)	1.7 (10)	1.6 (25)	1.6 (17)	8.8 (21)	ABCDEFGHI J	107.8
PGI 447RR(conv)	4	0.8 (37)	1.0 (29)	2.2 (2)	1.6 (11)	1.6 (29)	1.5 (27)	8.8 (22)	ABCDEFGHI J	107.6
Tango	6	1.0 (14)	1.0 (21)	2.1 (19)	1.3 (40)	1.7 (18)	1.6 (22)	8.8 (23)	ABCDEFGHI J	107.5
WL 535HQ	8	1.0 (19)	1.0 (22)	1.9 (34)	1.6 (16)	1.6 (31)	1.8 (8)	8.8 (24)	ABCDEFGHI J	107.4
Desert Sun 8.10RR(conv)	8	1.1 (8)	1.0 (20)	2.0 (28)	1.3 (39)	1.9 (8)	1.5 (28)	8.7 (25)	ABCDEFGHI J	107.4
Integra 8400	4	0.9 (26)	1.0 (25)	2.2 (8)	1.7 (4)	1.6 (28)	1.3 (44)	8.7 (26)	ABCDEFGHI JK	106.7
Integra 8401 RR	4	0.8 (39)	1.1 (16)	2.1 (12)	1.7 (5)	1.5 (36)	1.5 (35)	8.7 (27)	ABCDEFGHI JK	106.3
RRALF 4R200	4	1.1 (12)	1.2 (5)	2.0 (26)	1.5 (24)	1.5 (37)	1.5 (34)	8.6 (28)	CDEFGHI JK	106.1
WL 367RR/HQ	5	1.0 (17)	1.0 (24)	2.1 (16)	1.3 (36)	1.6 (23)	1.5 (26)	8.6 (29)	CDEFGHI JK	105.7
Dura 843	8	0.9 (23)	1.0 (27)	1.8 (36)	1.5 (21)	1.8 (12)	1.6 (24)	8.6 (30)	CDEFGHI JK	105.6
RRALF 8R100	8.5	0.9 (22)	1.1 (19)	1.9 (32)	1.4 (27)	1.5 (34)	1.7 (13)	8.5 (31)	DEFGHI JKL	104.7
CUF101	9	0.8 (40)	0.9 (36)	1.8 (35)	1.7 (8)	1.6 (30)	1.4 (39)	8.1 (32)	EF GHI JKL	100.0
AmeriStand 815TRR	7.5	0.8 (31)	0.8 (42)	2.0 (27)	1.2 (42)	1.7 (21)	1.7 (14)	8.1 (33)	EF GHI JKL	99.4
Revolution RR(conv)	8	0.7 (42)	1.0 (28)	1.7 (42)	1.4 (29)	1.6 (26)	1.6 (19)	8.0 (34)	F GHI JKL	98.6
798	7	0.8 (34)	0.9 (38)	1.7 (41)	1.3 (33)	1.6 (24)	1.6 (20)	8.0 (35)	GHI JKL	97.7
DKA41-18RR	4.1	0.9 (28)	1.1 (15)	1.8 (39)	1.4 (30)	1.5 (39)	1.4 (38)	8.0 (37)	GHI JKL	97.6
TruTest	6	0.8 (33)	0.9 (31)	2.0 (29)	1.3 (37)	1.5 (38)	1.5 (33)	7.9 (38)	GHI JKL	97.5
RRALF 4R200(conv)	4	0.8 (29)	1.1 (11)	2.0 (25)	1.3 (32)	1.3 (43)	1.3 (45)	7.9 (39)	HI JKL	96.5
CW 95026	5	1.0 (15)	0.9 (39)	2.0 (23)	1.1 (43)	1.5 (35)	1.3 (42)	7.8 (40)	I JKL	95.4
DKA65-10RR	6	0.7 (43)	0.6 (45)	1.6 (43)	1.4 (28)	1.6 (32)	1.8 (6)	7.8 (41)	JKL	95.2
RRALF 6R100(conv)	6	0.8 (40)	0.9 (34)	1.9 (33)	1.3 (35)	1.4 (41)	1.4 (37)	7.7 (42)	JKLM	94.9
Sutter	7	0.8 (38)	1.2 (8)	1.6 (44)	1.3 (38)	1.3 (44)	1.4 (40)	7.5 (43)	KLM	91.7
GrandStand	4	0.7 (45)	0.8 (43)	1.7 (40)	1.0 (45)	1.6 (27)	1.5 (32)	7.3 (44)	LM	89.7
DKA65-10RR(conv)	6	0.8 (36)	0.8 (44)	1.4 (45)	1.0 (44)	1.2 (45)	1.3 (43)	6.5 (45)	M	79.5
Experimental Varieties										
DKA Exp 6 RR	6	1.3 (2)	0.9 (37)	2.2 (6)	2.0 (1)	1.8 (9)	1.8 (5)	9.9 (1)	A	122.1
FG1 601RR	6	1.2 (5)	1.1 (13)	2.2 (7)	1.5 (17)	2.0 (3)	1.9 (3)	9.8 (3)	ABC	120.5
ADF 05-801	8	0.9 (24)	0.9 (40)	2.1 (10)	1.8 (3)	1.9 (6)	2.0 (1)	9.6 (5)	ABCD	117.2
FG1 501RR	5	0.9 (21)	1.0 (30)	1.9 (31)	1.4 (31)	1.4 (42)	1.4 (36)	8.0 (36)	GHI JKL	97.7
MEAN		0.94	1.03	1.98	1.47	1.66	1.58	8.66		
CV		32.2	25.6	18.0	23.0	15.6	16.4	12.3		
LSD (0.1)		NS	0.31	NS	0.40	0.31	0.31	1.27		

Trial seeded at 25 lb/acre viable seed on Yolo clay loam soil at the Univ. of California Agronomy Farm, Davis, CA.

Entries followed by the same letter are not significantly different at the 10% probability level according to Fisher's (protected) LSD.

FD = Fall Dormancy reported by seed companies.

TABLE 9. 2007-2009 YIELDS, UCD RR and Conventional Variety Trial. Trial planted 02/07/2007

		2007	2008	2009	Average		% of	
	FD	Yield	Yield	Yield			CUF101	
		Dry t/a						%
Released Varieties								
GrandSlam	8	8.7 (2)	9.5 (2)	9.8 (4)	9.3 (1)	A	124.4	
CG9	9	8.6 (3)	8.6 (15)	9.9 (2)	9.0 (3)	A B C	120.3	
Desert Sun 8.10RR	8	9.1 (1)	8.6 (14)	9.2 (12)	8.9 (4)	A B C D	119.3	
Integra 8800	8	8.4 (6)	8.9 (7)	9.4 (7)	8.9 (5)	A B C D	118.9	
DKA50-18	5	8.1 (13)	9.1 (6)	9.3 (9)	8.8 (7)	A B C D E F	117.8	
Magna 801 FQ	8	8.2 (11)	8.9 (8)	9.3 (8)	8.8 (8)	A B C D E F	117.5	
PGI 801	8	8.1 (12)	8.8 (9)	9.4 (6)	8.8 (10)	A B C D E F	117.4	
SW 7410	7	8.2 (8)	8.8 (10)	9.1 (13)	8.7 (11)	A B C D E F G	115.9	
Desert Sun 8.10RR(conv)	8	7.8 (19)	9.4 (4)	8.7 (25)	8.6 (12)	A B C D E F G H	115.3	
DKA84-10RR	8	8.0 (16)	8.6 (13)	9.2 (11)	8.6 (13)	A B C D E F G H	114.9	
RRALF 8R100	8.5	8.1 (15)	9.2 (5)	8.5 (31)	8.6 (14)	A B C D E F G H	114.8	
SW 9720	9	7.3 (31)	9.5 (1)	8.9 (17)	8.6 (15)	A B C D E F G H I	114.3	
Integra 8801RR	8	7.6 (24)	8.7 (12)	9.3 (10)	8.5 (16)	A B C D E F G H I	113.6	
AmeriStand 855RR	8	8.1 (14)	7.6 (29)	9.0 (15)	8.2 (17)	B C D E F G H I J	109.8	
AmeriStand 815TRR	7.5	8.3 (7)	8.2 (19)	8.1 (33)	8.2 (18)	C D E F G H I J	109.5	
Revolution RR	8	7.6 (25)	8.2 (20)	8.8 (18)	8.2 (19)	C D E F G H I J	109.4	
PGI 424	4	7.9 (18)	7.6 (30)	9.0 (16)	8.1 (20)	C D E F G H I J K	108.7	
Tango	6	7.4 (30)	8.2 (17)	8.8 (23)	8.1 (21)	C D E F G H I J K	108.4	
Dura 843	8	7.7 (22)	8.1 (22)	8.6 (30)	8.1 (22)	C D E F G H I J K	108.3	
Revolution RR(conv)	8	8.2 (10)	8.1 (21)	8.0 (34)	8.1 (23)	C D E F G H I J K	108.2	
WL 535HQ	8	7.2 (32)	7.9 (23)	8.8 (24)	8.0 (24)	C D E F G H I J K L	106.3	
Integra 8401 RR	4	7.4 (28)	7.6 (31)	8.7 (27)	7.9 (25)	D E F G H I J K L	105.3	
WL 367RR/HQ	5	7.6 (23)	7.4 (34)	8.6 (29)	7.9 (26)	D E F G H I J K L	105.3	
DKA65-10RR	6	7.6 (26)	8.2 (18)	7.8 (41)	7.9 (27)	D E F G H I J K L	104.8	
RRALF 4R200	4	7.0 (39)	7.8 (26)	8.6 (28)	7.8 (28)	E F G H I J K L	104.3	
798	7	8.0 (17)	7.5 (33)	8.0 (35)	7.8 (29)	F G H I J K L	104.2	
TruTest	6	7.7 (21)	7.7 (28)	7.9 (38)	7.8 (30)	F G H I J K L M	103.7	
PGI 447RR(conv)	4	7.1 (35)	7.3 (35)	8.8 (22)	7.7 (31)	F G H I J K L M	103.4	
RRALF 6R100	6	7.0 (38)	7.2 (37)	8.8 (20)	7.7 (32)	G H I J K L M	102.4	
WL 357HQ	5	6.3 (43)	7.9 (24)	8.8 (19)	7.7 (33)	G H I J K L M	102.1	
CW 95026	5	7.4 (29)	7.8 (27)	7.8 (40)	7.6 (34)	G H I J K L M	101.9	
DKA41-18RR	4.1	7.8 (20)	7.1 (38)	8.0 (37)	7.6 (35)	G H I J K L M	101.6	
WL 550RR	8	6.4 (42)	7.5 (32)	8.8 (21)	7.6 (36)	H I J K L M	101.2	
CUF101	9	7.1 (36)	7.2 (36)	8.1 (32)	7.5 (37)	I J K L M	100.0	
RRALF 4R200(conv)	4	7.5 (27)	7.1 (39)	7.9 (39)	7.5 (38)	I J K L M	99.8	
Integra 8400	4	6.5 (41)	6.8 (42)	8.7 (26)	7.3 (40)	J K L M	98.0	
RRALF 6R100(conv)	6	7.1 (37)	7.1 (40)	7.7 (42)	7.3 (41)	J K L M	97.3	
PGI 447RR	4	6.0 (44)	6.5 (44)	9.0 (14)	7.2 (42)	J K L M	95.8	
DKA65-10RR(conv)	6	6.9 (40)	7.9 (25)	6.5 (45)	7.1 (43)	K L M	94.3	
GrandStand	4	7.2 (33)	6.1 (45)	7.3 (44)	6.9 (44)	L M	91.9	
Sutter	7	5.9 (45)	6.7 (43)	7.5 (43)	6.7 (45)	M	89.3	
Experimental Varieties								
DKA Exp 6 RR	6	8.5 (4)	9.5 (3)	9.9 (1)	9.3 (2)	A B	124.2	
FG1 601RR	6	8.2 (9)	8.7 (11)	9.8 (3)	8.9 (6)	A B C D E	118.7	
ADF 05-801	8	8.4 (5)	8.5 (16)	9.6 (5)	8.8 (9)	A B C D E F	117.5	
FG1 501RR	5	7.1 (34)	7.0 (41)	8.0 (36)	7.4 (39)	J K L M	98.2	
MEAN		7.61	8.01	8.66	8.09			
CV		15.3	17.8	12.3	11.3			
LSD (0.1)		1.38	1.70	1.27	1.09			

Trial seeded at 25 lb/acre viable seed on Yolo clay loam soil at the Univ. of California Agronomy Fam, Davis, CA.
 Entries followed by the same letter are not significantly different at the 10% probability level according to Fisher's (protected) LSD.
 FD = Fall Dormancy reported by seed companies.

TABLE 10. 2009 YIELDS, WSREC ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 10/13/06

Note: Single year data should not be used to evaluate alfalfa varieties or choose alfalfa cultivars

		Cut 1	Cut 2	Cut 3	Cut 4	Cut 5	Cut 6	Cut 7	YEAR		% of
		25-Mar	30-Apr	2-Jun	30-Jun	31-Jul	10-Sep	6-Oct	TOTAL		CUF10
	FD	Dry t/a									%
Released Varieties											
WL 535HQ	8	1.2 (3)	2.1 (1)	2.6 (2)	2.4 (1)	2.1 (1)	1.5 (1)	1.7 (1)	13.6 (1)	A	132.9
Desert Sun 8. 10RR	8	1.2 (1)	2.1 (4)	2.6 (1)	2.4 (2)	2.0 (2)	1.4 (3)	1.5 (2)	13.2 (2)	AB	129.6
Pacifico	8	1.2 (4)	2.0 (5)	2.4 (4)	2.3 (4)	1.9 (3)	1.4 (4)	1.5 (3)	12.7 (3)	ABC	124.2
Grandslam	8	1.1 (7)	2.1 (2)	2.5 (3)	2.3 (3)	1.9 (4)	1.4 (6)	1.4 (9)	12.6 (4)	ABCD	123.3
CW 1010	10	1.1 (5)	2.0 (7)	2.3 (5)	2.2 (8)	1.9 (5)	1.4 (5)	1.4 (8)	12.3 (5)	ABCDE	120.4
Dura 843	8	1.2 (2)	1.9 (10)	2.2 (7)	2.2 (6)	1.8 (6)	1.3 (8)	1.4 (11)	12.1 (6)	ABCDEF	118.8
AL 999	9	1.0 (12)	2.1 (3)	2.2 (8)	2.2 (5)	1.7 (9)	1.4 (2)	1.5 (4)	12.1 (7)	ABCDEF	118.0
INTEGRA 8900	9	1.1 (6)	2.0 (8)	2.1 (10)	2.2 (7)	1.7 (7)	1.3 (7)	1.4 (7)	11.9 (8)	ABCDEFG	116.3
WL 625HQ	9	0.9 (15)	2.0 (6)	2.1 (11)	2.1 (9)	1.7 (8)	1.3 (9)	1.4 (10)	11.6 (9)	ABCDEFGH	113.1
WL 660RR	9	1.0 (10)	1.9 (13)	2.3 (6)	2.1 (10)	1.7 (10)	1.3 (12)	1.3 (16)	11.5 (10)	ABCDEFGHI	112.1
TriplePlay	9	1.0 (8)	1.9 (9)	2.0 (17)	2.0 (16)	1.5 (20)	1.2 (13)	1.5 (6)	11.0 (12)	ABCDEFGHI	107.7
Magna801FQ	8	1.0 (9)	1.8 (16)	2.0 (14)	2.0 (15)	1.6 (15)	1.2 (15)	1.4 (13)	10.9 (14)	ABCDEFGHIJ	107.1
59N59	9	0.9 (13)	1.8 (15)	2.0 (13)	2.0 (13)	1.6 (12)	1.2 (14)	1.3 (22)	10.9 (16)	BCDEFGHIJ	106.8
AmeriStand 855RR	8	1.0 (11)	1.9 (14)	2.0 (15)	1.9 (17)	1.6 (16)	1.1 (21)	1.3 (15)	10.8 (17)	BCDEFGHIJ	105.7
Impalo WF	9	0.9 (18)	1.7 (21)	1.9 (18)	1.8 (27)	1.5 (19)	1.2 (19)	1.3 (17)	10.4 (19)	CDEFGHIJK	101.7
Revolution	8	0.8 (24)	1.7 (23)	1.9 (20)	1.9 (20)	1.5 (17)	1.2 (20)	1.3 (21)	10.4 (20)	CDEFGHIJK	101.3
CW 909	9	0.9 (16)	1.8 (17)	1.9 (22)	1.8 (22)	1.5 (22)	1.1 (24)	1.3 (24)	10.3 (21)	CDEFGHIJK	101.1
DKA84-10RR	8.4	0.9 (20)	1.7 (24)	1.9 (19)	1.9 (18)	1.4 (25)	1.1 (29)	1.3 (18)	10.3 (22)	CDEFGHIJK	100.7
CUF101	9	0.8 (27)	1.7 (22)	1.8 (26)	1.8 (23)	1.5 (18)	1.2 (18)	1.4 (12)	10.2 (23)	CDEFGHIJK	100.0
WL 550RR	8	0.7 (33)	1.6 (29)	1.9 (21)	1.9 (19)	1.5 (21)	1.1 (22)	1.2 (28)	10.0 (25)	DEFGHIJKLM	97.5
Conquistador	8	0.9 (22)	1.7 (25)	1.8 (24)	1.7 (30)	1.4 (28)	1.1 (28)	1.3 (27)	9.8 (26)	EFGHIJKLM	96.3
CW 801	8	0.8 (25)	1.7 (28)	1.8 (25)	1.8 (26)	1.5 (23)	1.1 (30)	1.2 (31)	9.8 (27)	FGHIJKLM	95.9
RRALF 8R100	8.5	0.8 (29)	1.6 (32)	1.8 (28)	1.8 (29)	1.3 (32)	1.1 (31)	1.2 (29)	9.5 (29)	FGHIJKLMN	93.4
INTEGRA 8801R	8	0.7 (32)	1.7 (27)	1.8 (31)	1.7 (31)	1.3 (33)	1.1 (26)	1.3 (23)	9.5 (30)	FGHIJKLMN	93.4
INTEGRA 8800	8	0.8 (23)	1.6 (30)	1.7 (32)	1.6 (35)	1.3 (35)	1.0 (32)	1.2 (30)	9.4 (31)	GHIJKLMNO	91.5
Highline	9	0.7 (30)	1.6 (33)	1.8 (29)	1.6 (34)	1.4 (31)	1.1 (25)	1.2 (32)	9.3 (32)	GHIJKLMNO	91.5
798 alfalfa	7	0.7 (34)	1.5 (35)	1.8 (27)	1.8 (25)	1.4 (30)	1.0 (36)	1.1 (37)	9.2 (34)	HJKLMNO	90.1
DKA65-10RR	6.5	0.8 (28)	1.5 (36)	1.7 (35)	1.6 (36)	1.3 (34)	1.0 (37)	1.1 (36)	8.8 (35)	IJKLMNO	86.5
Sequoia	8	0.6 (35)	1.5 (34)	1.6 (37)	1.6 (33)	1.3 (36)	1.0 (34)	1.2 (33)	8.8 (36)	IJKLMNO	86.3
Wildcard	8	0.6 (37)	1.4 (37)	1.5 (38)	1.5 (37)	1.2 (37)	1.0 (35)	1.1 (34)	8.3 (37)	JLMNO	81.6
AmeriStand 815TRR	7.5	0.6 (38)	1.3 (39)	1.6 (36)	1.4 (39)	1.1 (39)	0.9 (39)	1.0 (38)	7.8 (38)	KLMNO	76.2
RRALF 6R100	6	0.5 (40)	1.2 (41)	1.4 (40)	1.4 (38)	1.2 (38)	0.9 (38)	0.9 (40)	7.5 (39)	LMNO	73.6
Integra 8400R	4	0.4 (42)	1.1 (42)	1.4 (41)	1.2 (42)	0.9 (42)	0.7 (41)	0.9 (42)	6.7 (42)	O	65.6
Experimental Varieties											
CW 39060	9	0.9 (21)	1.8 (18)	2.1 (9)	2.0 (12)	1.6 (11)	1.3 (11)	1.4 (14)	11.0 (11)	ABCDEFGHI	108.1
CW 048069	8	0.9 (17)	1.9 (11)	2.1 (12)	2.0 (14)	1.6 (13)	1.2 (17)	1.3 (19)	11.0 (13)	ABCDEFGHIJ	107.3
ADF 05-801	8	0.9 (14)	1.9 (12)	1.7 (34)	2.0 (11)	1.6 (14)	1.3 (10)	1.5 (5)	10.9 (15)	ABCDEFGHIJ	106.9
SW 8421	8	0.9 (19)	1.7 (20)	2.0 (16)	1.8 (21)	1.5 (24)	1.2 (16)	1.3 (20)	10.4 (18)	CDEFGHIJK	101.7
FGI 901RR	9	0.8 (26)	1.7 (19)	1.9 (23)	1.8 (24)	1.4 (26)	1.1 (27)	1.3 (26)	10.0 (24)	CDEFGHIJKL	98.2
CW 048065	8	0.7 (31)	1.6 (31)	1.8 (30)	1.8 (28)	1.4 (27)	1.1 (23)	1.3 (25)	9.7 (28)	EFGHIJKLM	94.6
TS-0002	9	0.6 (36)	1.7 (26)	1.7 (33)	1.7 (32)	1.4 (29)	1.0 (33)	1.1 (35)	9.3 (33)	GHIJKLMNO	90.5
TS-8028	8	0.5 (41)	1.3 (38)	1.5 (39)	1.3 (41)	1.0 (40)	0.8 (40)	1.0 (39)	7.4 (40)	MNO	72.0
TS-7002	7	0.5 (39)	1.2 (40)	1.3 (42)	1.3 (40)	1.0 (41)	0.7 (42)	0.9 (41)	7.0 (41)	NO	68.3
MEAN		0.85	1.72	1.91	1.86	1.48	1.14	1.28	10.24		
CV		33.5	17.3	24.0	23.0	25.7	21.3	18.3	21.8		
LSD (0.1)		0.34	0.36	0.55	0.51	0.45	0.29	0.28	2.66		

Trial seeded at 25 lb/acre viable seed at WSREC, Five Points, CA.

Entries followed by the same letter are not significantly different at the 10% probability level according to Fisher's (protected) LSD.

FD = Fall Dormancy reported by seed companies.

TABLE 11. 2007-2009 YIELDS, UC WSREC ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 10/13/06

		2007	2008	2009	Average		% of
	FD	Yield	Yield	Yield			CUF101
			Dry t/a				%
Released Varieties							
WL 535HQ	8	11.9 (9)	13.0 (3)	13.6 (1)	12.8 (1)	A	117.5
Desert Sun 8. 10RR	8	11.6 (18)	13.3 (1)	13.2 (2)	12.7 (2)	A B	116.2
Grandslam	8	12.1 (2)	13.1 (2)	12.6 (4)	12.6 (3)	A B C	115.7
Pacifico	8	12.0 (6)	12.8 (4)	12.7 (3)	12.5 (4)	A B C D	114.4
AL 999	9	11.7 (15)	12.5 (5)	12.1 (7)	12.1 (5)	A B C D E	110.6
CW 1010	10	11.8 (12)	12.0 (8)	12.3 (5)	12.0 (6)	A B C D E F	110.1
INTEGRA 8900	9	11.9 (8)	12.0 (7)	11.9 (8)	11.9 (7)	A B C D E F	109.1
WL 660RR	9	12.0 (3)	11.8 (12)	11.5 (10)	11.7 (8)	A B C D E F G	107.5
Dura 843	8	10.9 (33)	11.9 (9)	12.1 (6)	11.6 (11)	A B C D E F G H	106.7
WL 625HQ	9	12.0 (4)	11.0 (22)	11.6 (9)	11.5 (12)	A B C D E F G H I	105.4
59N59	9	11.8 (11)	11.8 (11)	10.9 (16)	11.5 (13)	A B C D E F G H I	105.3
TriplePlay	9	11.8 (10)	11.4 (14)	11.0 (12)	11.4 (14)	A B C D E F G H I J	104.6
AmeriStand 855RR	8	11.7 (14)	11.7 (13)	10.8 (17)	11.4 (15)	A B C D E F G H I J	104.5
Revolution	8	11.6 (16)	11.4 (16)	10.4 (20)	11.1 (17)	A B C D E F G H I J K	101.7
CW 909	9	11.2 (25)	11.2 (17)	10.3 (21)	10.9 (18)	B C D E F G H I J K L	100.1
CUF101	9	11.5 (21)	11.0 (21)	10.2 (23)	10.9 (19)	B C D E F G H I J K L	100.0
Magna801FQ	8	11.3 (24)	10.5 (26)	10.9 (14)	10.9 (20)	C D E F G H I J K L	99.9
Impalo WF	9	11.6 (19)	10.3 (29)	10.4 (19)	10.8 (22)	D E F G H I J K L	98.6
CW 801	8	11.2 (28)	11.0 (20)	9.8 (27)	10.7 (23)	E F G H I J K L M	97.7
RRALF 8R100	8.5	11.2 (27)	11.1 (18)	9.5 (29)	10.6 (24)	E F G H I J K L M	97.3
798 alfalfa	7	11.6 (20)	11.0 (19)	9.2 (34)	10.6 (25)	E F G H I J K L M	97.1
WL 550RR	8	11.0 (31)	10.6 (23)	10.0 (25)	10.5 (28)	E F G H I J K L M N	96.5
DKA84-10RR	8.4	10.5 (38)	10.3 (30)	10.3 (22)	10.4 (29)	E F G H I J K L M N	94.9
Highline	9	11.2 (26)	10.5 (27)	9.3 (32)	10.4 (30)	E F G H I J K L M N	94.8
INTEGRA 8801R	8	10.9 (32)	10.2 (31)	9.5 (30)	10.2 (31)	F G H I J K L M N	93.8
Conquistador	8	10.6 (36)	9.7 (34)	9.8 (26)	10.0 (32)	G H I J K L M N	92.0
Sequoia	8	11.3 (23)	9.4 (36)	8.8 (36)	9.8 (34)	I J K L M N	90.2
INTEGRA 8800	8	10.7 (34)	9.2 (38)	9.4 (31)	9.7 (35)	I J K L M N	89.3
DKA65-10RR	6.5	10.5 (39)	9.7 (32)	8.8 (35)	9.7 (36)	J K L M N	88.7
Wildcard	8	10.6 (35)	9.3 (37)	8.3 (37)	9.4 (37)	K L M N O	86.4
AmeriStand 815TRR	7.5	11.1 (30)	9.4 (35)	7.8 (38)	9.4 (38)	K L M N O	86.3
RRALF 6R100	6	10.2 (41)	9.1 (39)	7.5 (39)	8.9 (40)	M N O	81.9
Integra 8400R	4	9.4 (42)	7.1 (42)	6.7 (42)	7.7 (42)	O	70.8
Experimental Varieties							
CW 39060	9	12.0 (5)	12.1 (6)	11.0 (11)	11.7 (9)	A B C D E F G	107.3
CW 048069	8	12.2 (1)	11.8 (10)	11.0 (13)	11.7 (10)	A B C D E F G H	106.8
ADF 05-801	8	11.5 (22)	11.4 (15)	10.9 (15)	11.3 (16)	A B C D E F G H I J	103.3
SW 8421	8	11.6 (17)	10.6 (24)	10.4 (18)	10.9 (21)	C D E F G H I J K L	99.5
FGI 901RR	9	11.1 (29)	10.5 (25)	10.0 (24)	10.6 (26)	E F G H I J K L M	96.8
TS-0002	9	12.0 (7)	10.4 (28)	9.3 (33)	10.5 (27)	E F G H I J K L M N	96.6
CW 048065	8	10.4 (40)	9.7 (33)	9.7 (28)	9.9 (33)	H I J K L M N	90.9
TS-8028	8	11.7 (13)	8.6 (41)	7.4 (40)	9.2 (39)	L M N O	84.5
TS-7002	7	10.6 (37)	8.7 (40)	7.0 (41)	8.8 (41)	N O	80.3
MEAN		11.32	10.82	10.24	10.79		
CV		6.1	18.0	21.8	13.9		
LSD (0.1)		0.82	2.32	2.66	1.78		

Trial seeded at 25 lb/acre viable seed at WSREC, Five Points, CA.

Entries followed by the same letter are not significantly different at the 10% probability level according to Fisher's (protected) LSD.

FD = Fall Dormancy reported by seed companies.

TABLE 12. 2009 YIELDS, UC KEARNEY ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 9/13/07

Note: Single year data should not be used to evaluate alfalfa varieties or choose alfalfa cultivars

		Cut 1	Cut 2	Cut 3	Cut 4	Cut 5	Cut 6	Cut 7	YEAR		% of
	FD	22-Apr	20-May	17-Jun	15-Jul	12-Aug	9-Sep	7-Oct	TOTAL		CUF101
		Dry/t/a									%
Released Varieties											
AL 999	9	1.5 (27)	1.7 (3)	2.1 (4)	2.1 (2)	2.0 (3)	1.5 (6)	1.4 (2)	12.1 (1)	A	122.1
HybriForce-800	8	1.8 (1)	1.8 (1)	2.1 (2)	2.0 (3)	1.8 (10)	1.3 (18)	1.3 (17)	12.1 (2)	A	122.0
Pacifico	9	1.6 (12)	1.7 (4)	2.0 (8)	2.0 (6)	2.0 (2)	1.5 (5)	1.4 (4)	12.1 (5)	AB	121.6
Tripleplay	9	1.7 (5)	1.7 (5)	2.1 (5)	1.9 (12)	1.8 (11)	1.4 (8)	1.4 (11)	11.8 (7)	ABCD	119.0
Saltana(SW9332)	9	1.4 (42)	1.6 (16)	2.0 (7)	1.9 (7)	1.9 (6)	1.5 (3)	1.4 (6)	11.7 (8)	ABCDE	118.1
WL 625HQ	9	1.5 (24)	1.6 (6)	1.9 (30)	1.8 (17)	1.7 (20)	1.3 (22)	1.4 (9)	11.3 (14)	ABCDEFGHI	113.2
Integra 8800	8	1.5 (15)	1.6 (12)	2.0 (15)	1.8 (28)	1.7 (19)	1.4 (13)	1.2 (26)	11.2 (16)	ABCDEF GHI J	112.9
Daytona	8	1.5 (21)	1.6 (15)	2.0 (19)	1.8 (22)	1.8 (15)	1.3 (20)	1.3 (21)	11.2 (17)	ABCDEF GHI J	112.9
SP 806	8	1.5 (25)	1.6 (20)	1.9 (33)	1.9 (8)	1.8 (17)	1.3 (26)	1.3 (19)	11.2 (18)	ABCDEF GHI J	112.5
Magna 801FQ	8	1.5 (13)	1.5 (36)	2.0 (13)	1.8 (26)	1.7 (23)	1.4 (9)	1.2 (30)	11.1 (21)	ABCDEF GHI J K	112.0
WL 535HQ	8	1.6 (7)	1.5 (31)	2.0 (18)	1.8 (16)	1.6 (31)	1.2 (31)	1.3 (20)	11.0 (23)	ABCDEF GHI J K L	110.8
Magna 995	9	1.8 (4)	1.6 (23)	1.8 (43)	1.6 (39)	1.6 (32)	1.3 (17)	1.2 (27)	10.9 (26)	ABCDEF GHI J K L	109.8
Integra 8900	9	1.3 (45)	1.6 (24)	2.0 (14)	1.8 (25)	1.7 (24)	1.3 (25)	1.2 (25)	10.9 (28)	ABCDEF GHI J K L M	109.6
Magna 801FQ+Optimize	8	1.3 (47)	1.5 (40)	2.0 (17)	1.8 (23)	1.8 (18)	1.3 (24)	1.2 (33)	10.8 (30)	CDEF GHI J K L M N	108.6
UC Impalo	9	1.2 (57)	1.4 (47)	1.8 (40)	1.7 (30)	1.8 (13)	1.4 (15)	1.3 (18)	10.6 (32)	DEFGHI J K L M N O	106.6
Desert Sun 8.10RR	8	1.4 (34)	1.5 (28)	1.9 (36)	1.7 (32)	1.6 (28)	1.2 (30)	1.2 (28)	10.6 (33)	DEFGHI J K L M N O	106.1
Pinal 9 RR	9	1.3 (44)	1.5 (29)	1.8 (48)	1.9 (10)	1.6 (28)	1.2 (33)	1.2 (36)	10.5 (34)	EFGHI J K L M N O P	105.5
Grandslam	8	1.5 (26)	1.6 (17)	1.9 (24)	1.7 (38)	1.5 (38)	1.1 (36)	1.1 (38)	10.5 (36)	EFGHI J K L M N O P	105.3
HybriForce-620	6	1.8 (3)	1.5 (35)	1.8 (51)	1.6 (44)	1.5 (45)	1.1 (35)	1.2 (35)	10.4 (37)	F GHI J K L M N O P	105.0
DKA84-10 RR	8	1.3 (52)	1.5 (39)	1.9 (26)	1.6 (40)	1.6 (33)	1.1 (37)	1.1 (42)	10.1 (40)	HI J K L M N O P Q R	101.9
CUF101	9	1.5 (20)	1.4 (53)	1.9 (35)	1.5 (47)	1.4 (49)	1.2 (33)	1.1 (46)	9.9 (43)	J K L M N O P Q R S	100.0
CG9	9	1.3 (46)	1.5 (44)	1.8 (42)	1.6 (41)	1.5 (46)	1.1 (42)	1.1 (44)	9.9 (44)	K L M N O P Q R S	99.2
AR-21	9	1.4 (35)	1.4 (49)	1.8 (49)	1.5 (52)	1.6 (37)	1.1 (44)	1.1 (48)	9.8 (47)	L M N O P Q R S	98.3
Integra 8801R RR	8	1.4 (43)	1.5 (43)	1.8 (46)	1.5 (45)	1.5 (43)	1.0 (49)	1.1 (49)	9.8 (48)	L M N O P Q R S	98.1
AR-2	9	1.5 (16)	1.4 (54)	1.6 (55)	1.5 (49)	1.4 (50)	1.1 (46)	1.1 (47)	9.6 (50)	N O P Q R S	96.6
RRALF-8R100	8	1.3 (49)	1.5 (46)	1.8 (47)	1.5 (50)	1.4 (52)	1.0 (54)	1.0 (54)	9.4 (52)	O P Q R S	94.2
59N59	9	1.3 (53)	1.4 (52)	1.7 (52)	1.4 (56)	1.3 (56)	0.9 (56)	1.0 (52)	9.0 (54)	Q R S	90.3
Ameristand 855 RR	8	1.3 (51)	1.4 (50)	1.7 (53)	1.4 (54)	1.3 (57)	0.9 (57)	1.0 (53)	9.0 (55)	Q R S	90.2
AR-9	9	1.4 (39)	1.3 (57)	1.6 (54)	1.3 (57)	1.3 (55)	1.0 (51)	0.9 (57)	8.9 (56)	R S	89.3
Revolution RR	8	1.2 (56)	1.3 (56)	1.6 (56)	1.4 (53)	1.3 (54)	1.0 (55)	1.0 (55)	8.8 (57)	S	88.8
Experimental Varieties											
FG-95T284	9	1.5 (18)	1.7 (2)	2.0 (9)	2.0 (4)	1.9 (5)	1.5 (4)	1.5 (1)	12.1 (3)	A	122.0
SW8421	8	1.4 (37)	1.6 (7)	2.0 (11)	2.1 (1)	2.0 (1)	1.5 (1)	1.4 (7)	12.1 (4)	A	121.9
9102	9	1.4 (30)	1.6 (13)	2.1 (1)	2.0 (5)	2.0 (4)	1.5 (2)	1.4 (8)	12.0 (6)	ABC	120.2
Chema 1	9	1.6 (8)	1.6 (19)	2.1 (3)	1.8 (14)	1.7 (21)	1.4 (10)	1.3 (13)	11.5 (9)	ABCDEF	115.8
DS736	8	1.6 (11)	1.6 (8)	1.9 (25)	1.9 (11)	1.9 (8)	1.4 (14)	1.3 (23)	11.5 (10)	ABCDEF G	115.2
9101	9	1.4 (31)	1.6 (26)	1.9 (21)	1.8 (13)	1.8 (9)	1.4 (7)	1.4 (10)	11.4 (11)	ABCDEF G H	114.2
FG-95T284+Optimize	9	1.4 (41)	1.6 (10)	1.9 (23)	1.8 (18)	1.8 (12)	1.4 (12)	1.4 (4)	11.3 (12)	ABCDEF G H	113.9
CW 39087	9	1.4 (40)	1.6 (14)	2.0 (6)	1.8 (21)	1.8 (16)	1.3 (21)	1.4 (3)	11.3 (13)	ABCDEF G H	113.9
R95BD104 RR	9	1.5 (14)	1.6 (22)	1.9 (22)	1.8 (26)	1.8 (14)	1.4 (11)	1.3 (16)	11.2 (15)	ABCDEF G H I	113.1
DS732	8	1.8 (2)	1.6 (25)	1.9 (29)	1.7 (37)	1.6 (35)	1.3 (19)	1.3 (14)	11.2 (19)	ABCDEF G H I J	112.3
PGI 1007 BA	10	1.5 (23)	1.6 (10)	2.0 (16)	1.8 (24)	1.7 (25)	1.2 (28)	1.3 (12)	11.1 (20)	ABCDEF G H I J K	112.0
R96BD105 RR	9	1.3 (48)	1.5 (31)	1.9 (31)	1.9 (9)	1.9 (7)	1.3 (23)	1.3 (22)	11.0 (22)	ABCDEF G H I J K L	111.1
DS733	9	1.7 (6)	1.6 (20)	2.0 (10)	1.7 (35)	1.6 (30)	1.2 (29)	1.2 (33)	11.0 (24)	ABCDEF G H I J K L	110.3
CW 39060	9	1.4 (38)	1.6 (18)	1.8 (37)	1.8 (15)	1.7 (22)	1.3 (27)	1.3 (15)	10.9 (25)	ABCDEF G H I J K L	109.8
CW 36106	7	1.6 (10)	1.5 (30)	1.9 (28)	1.7 (34)	1.6 (26)	1.3 (16)	1.2 (31)	10.9 (27)	ABCDEF G H I J K L	109.8
FG-85M282	8	1.5 (17)	1.6 (9)	2.0 (20)	1.8 (19)	1.6 (34)	1.2 (32)	1.2 (37)	10.8 (29)	B C D E F G H I J K L M N	108.9
CW 19065	8	1.4 (32)	1.5 (33)	2.0 (12)	1.7 (33)	1.6 (27)	1.1 (40)	1.2 (29)	10.6 (31)	DEFGHI J K L M N O	106.8
SW115	9	1.4 (33)	1.6 (27)	1.9 (27)	1.7 (31)	1.5 (40)	1.1 (39)	1.3 (24)	10.5 (35)	EFGHI J K L M N O P	105.3
DS0571-Optimize	7	1.5 (19)	1.5 (37)	1.8 (38)	1.8 (20)	1.5 (44)	1.0 (48)	1.1 (39)	10.3 (38)	F G H I J K L M N O P	103.9
R95BD106 RR	9	1.3 (54)	1.5 (41)	1.9 (32)	1.7 (29)	1.6 (36)	1.1 (41)	1.2 (32)	10.2 (39)	G H I J K L M N O P Q	102.8
FG-85M282+Optimize	8	1.4 (36)	1.5 (38)	1.9 (33)	1.7 (36)	1.5 (41)	1.1 (45)	1.1 (41)	10.1 (41)	H I J K L M N O P Q R	101.8
DS735	7	1.5 (22)	1.5 (42)	1.8 (45)	1.6 (43)	1.5 (39)	1.1 (38)	1.0 (51)	10.0 (42)	I J K L M N O P Q R S	100.8
DS734	7	1.4 (28)	1.5 (34)	1.8 (41)	1.6 (42)	1.5 (48)	1.0 (52)	1.0 (50)	9.9 (45)	K L M N O P Q R S	99.1
DS0571	7	1.4 (29)	1.5 (45)	1.8 (44)	1.5 (51)	1.5 (42)	1.0 (47)	1.1 (45)	9.8 (46)	L M N O P Q R S	98.5
SW120	9	1.2 (55)	1.4 (48)	1.8 (39)	1.5 (46)	1.5 (47)	1.1 (43)	1.1 (43)	9.6 (49)	M N O P Q R S	96.7
PGI 801	8	1.3 (50)	1.4 (51)	1.8 (50)	1.5 (47)	1.4 (51)	1.0 (50)	1.1 (40)	9.5 (51)	O P Q R S	95.5
MEAN		1.45	1.53	1.90	1.72	1.64	1.22	1.20	10.66		
CV		18.6	6.7	7.8	14.8	17.2	20.3	14.3	10.2		
LSD (0.1)		NS	0.12	0.17	0.30	0.33	0.29	0.20	1.29		

Trial seeded at 25 lb/acre viable seed on Hanford fine sandy loam soil at the Univ. of Calif. Kearney Agricultural Center, Parlier, CA.

Entries followed by the same letter are not significantly different at the 10% probability level according to Fisher's (protected) LSD.

FD = Fall Dormancy reported by seed companies.

TABLE 13. 2008-2009 YIELDS, UC KEARNEY ALFALFA CULTIVAR TRIAL. Trial planted 09/13/2007

		2008	2009	Average		% of
	FD	Yield	Yield			CUF101
			Dry t/a			%
Released Varieties						
HybriForce-800	8	13.8 (5)	12.1 (2)	12.9 (2)	AB	122.1
AL 999	9	13.6 (8)	12.1 (1)	12.8 (3)	ABC	121.1
Pacifico	9	13.1 (17)	12.1 (5)	12.6 (6)	ABCDE	118.6
WL 625HQ	9	13.8 (4)	11.3 (14)	12.5 (8)	ABCDEF	118.0
Tripleplay	9	13.1 (15)	11.8 (7)	12.5 (9)	ABCDEF	117.6
SP 806	8	13.5 (10)	11.2 (18)	12.3 (14)	ABCDEFG	116.4
Daytona	8	13.4 (12)	11.2 (17)	12.3 (15)	ABCDEFG	116.1
Magna 995	9	12.7 (25)	10.9 (26)	11.8 (25)	BCDEFGHIJ	111.3
Integra 8900	9	12.7 (24)	10.9 (28)	11.8 (26)	BCDEFGHIJ	111.2
Integra 8800	8	12.1 (41)	11.2 (16)	11.6 (28)	BCDEFGHIJKL	109.7
Magna 801FQ	8	12.1 (40)	11.1 (21)	11.6 (29)	BCDEFGHIJKL	109.6
Desert Sun 8.10RR	8	12.7 (23)	10.6 (33)	11.6 (30)	BCDEFGHIJKL	109.6
UC Impalo	9	12.5 (32)	10.6 (32)	11.6 (31)	CDEFGHIJKLM	108.9
HybriForce-620	6	12.6 (29)	10.4 (37)	11.5 (32)	CDEFGHIJKLMN	108.7
Grandslam	8	12.4 (33)	10.5 (36)	11.5 (34)	DEFGHIJKLMNO	108.0
WL 535HQ	8	11.9 (42)	11.0 (23)	11.4 (35)	DEFGHIJKLMNO	107.9
Pinal 9 RR	9	12.3 (35)	10.5 (34)	11.4 (37)	DEFGHIJKLMNOP	107.5
Magna 801FQ+Optimize	8	11.6 (44)	10.8 (30)	11.2 (40)	FGHIJKLMNOPQ	105.8
CG9	9	12.4 (34)	9.9 (44)	11.1 (41)	GHIJKLMNOPQ	104.8
DKA84-10 RR	8	11.5 (49)	10.1 (40)	10.8 (44)	H I J K L M N O P Q R	102.0
AR-21	9	11.7 (43)	9.8 (47)	10.8 (45)	H I J K L M N O P Q R	101.4
CUF101	9	11.3 (50)	9.9 (43)	10.6 (47)	I J K L M N O P Q R	100.0
AR-2	9	11.6 (47)	9.6 (50)	10.6 (48)	I J K L M N O P Q R	99.8
Ameristand 855 RR	8	12.1 (38)	9.0 (55)	10.6 (49)	J K L M N O P Q R	99.5
RRALF-8R100	8	11.5 (48)	9.4 (52)	10.4 (50)	K L M N O P Q R	98.4
Integra 8801R RR	8	10.7 (56)	9.8 (48)	10.2 (52)	M N O P Q R	96.4
59N59	9	11.3 (51)	9.0 (54)	10.1 (54)	O P Q R	95.4
AR-9	9	11.1 (52)	8.9 (56)	10.0 (56)	Q R	94.0
Revolution RR	8	10.6 (57)	8.8 (57)	9.7 (57)	R	91.7
Experimental Varieties						
FG-95T284	9	14.7 (1)	12.1 (3)	13.4 (1)	A	126.3
SW8421	8	13.2 (13)	12.1 (4)	12.7 (4)	ABCD	119.4
FG-95T284+Optimize	9	13.9 (2)	11.3 (12)	12.6 (5)	ABCDE	118.9
R95BD104 RR	9	13.9 (3)	11.2 (15)	12.6 (7)	ABCDEF	118.4
PGI 1007 BA	10	13.8 (6)	11.1 (20)	12.4 (10)	ABCDEFG	117.3
CW 39087	9	13.5 (11)	11.3 (13)	12.4 (11)	ABCDEFG	116.9
SW9332	9	13.1 (18)	11.7 (8)	12.4 (12)	ABCDEFG	116.9
R96BD105 RR	9	13.7 (7)	11.0 (22)	12.4 (13)	ABCDEFG	116.6
9102	9	12.6 (28)	12.0 (6)	12.3 (16)	ABCDEFG	115.9
DS736	8	13.1 (16)	11.5 (10)	12.3 (17)	ABCDEFG	115.7
CW 39060	9	13.6 (9)	10.9 (25)	12.2 (18)	ABCDEFG	115.3
Chema 1	9	12.7 (26)	11.5 (9)	12.1 (19)	ABCDEFGH	114.0
9101	9	12.5 (31)	11.4 (11)	11.9 (20)	BCDEFGHI	112.5
CW 36106	7	12.9 (19)	10.9 (27)	11.9 (21)	BCDEFGHIJ	112.2
DS732	8	12.6 (27)	11.2 (19)	11.9 (22)	BCDEFGHIJ	112.2
CW 19065	8	13.2 (14)	10.6 (31)	11.9 (23)	BCDEFGHIJ	112.1
FG-85M282	8	12.9 (20)	10.8 (29)	11.8 (24)	BCDEFGHIJ	111.6
DS733	9	12.5 (30)	11.0 (24)	11.7 (27)	BCDEFGHIJK	110.7
DS0571-Optimize	7	12.7 (22)	10.3 (38)	11.5 (33)	CDEFGHIJKLMN	108.6
FG-85M282+Optimize	8	12.8 (21)	10.1 (41)	11.4 (36)	DEFGHIJKLMNO	107.9
SW115	9	12.2 (37)	10.5 (35)	11.3 (38)	DEFGHIJKLMNOP	106.8
R95BD106 RR	9	12.3 (36)	10.2 (39)	11.3 (39)	EFGHIJKLMNOPQ	106.2
PGI 801	8	12.1 (39)	9.5 (51)	10.8 (42)	H I J K L M N O P Q R	102.0
DS735	7	11.6 (45)	10.0 (42)	10.8 (43)	H I J K L M N O P Q R	102.0
DS0571	7	11.6 (46)	9.8 (46)	10.7 (46)	I J K L M N O P Q R	100.9
DS734	7	10.9 (54)	9.9 (45)	10.4 (51)	L M N O P Q R	97.9
SW120	9	10.8 (55)	9.6 (49)	10.2 (53)	N O P Q R	96.1
MEAN		12.49	10.66	11.57		
CV		11.6	10.2	9.9		
LSD (0.1)		1.72	1.29	1.36		

Trial seeded at 25 lb/acre viable seed on on Hanford fine sandy loam soil at the Univ. of Calif. Kearney Agricultural Center, Parlier, CA. Entries followed by the same letter are not significantly different at the 10% probability level according to Fisher's (protected) LSD.

FD = Fall Dormancy reported by seed companies.

Table 15. 2009 UC ALFALFA FALL DORMANCY TRIAL RESULTS.

The three-location trial represents Desert (Imperial Valley), Mediterranean (Davis), and Intermountain (Tulelake) environments.

Fall Dormancy Class ¹	Multi-year FDR ²	Name	Imperial Valley ³			Davis ³			Tulelake ³			Across locations			2009 FDR ⁵
			Score	NPH ⁴	Rank	Score	NPH ⁴	Rank	Score	NPH ⁴	Rank	Score	NPH ⁴	Rank	
11	11.2	UC-1465	9.82	3.09	A	Gale Force Winds on October 26 and 27 Damaged Plants Precliding Taking Meaningful Data in 2009	Gale Force Winds on September 29 Damaged Plants Precliding Taking Meaningful Data in 2009							10.18	
		UC-1465-14	9.56	3.07	AB			10.09							
10	9.9	UC-1887	8.88	2.96	ABC										9.65
		SW9816	8.67	2.91	ABCD			9.47							
9	8.9	CUF101	8.15	2.86	ABCDE										9.27
		CUF101-12	7.91	2.81	ABCDEF			9.06							
		UC-2693	7.90	2.78	BCDEFG			8.93							
		SW9813	7.81	2.76	CDEFG			8.84							
		UC-2705	7.78	2.76	CDEFG			8.84							
		UC-2671	7.78	2.75	CDEFG			8.83							
		UC-5002	7.63	2.72	CDEFGH	8.71									
		Highline	7.62	2.72	CDEFGH	8.71									
		Arabian II	7.60	2.72	CDEFGH	8.70									
		Chema 2	7.44	2.70	CDEFGHI	8.60									
8	7.8	Pierce	7.43	2.69	CDEFGHI	8.57									
		SW9812	7.29	2.66	CDEFGHI	8.47									
		ND7-9 II(2)	7.11	2.63	DEFGHI	8.33									
		UC-2609	7.10	2.63	DEFGHI	8.33									
		Impalo	6.86	2.56	EFGHI	8.07									
		DS385	6.41	2.56	FGHI	8.05									
		DS593	6.68	2.55	FGHI	8.04									
		SW9803	6.58	2.53	FGHI	8.00									
		DS598	6.44	2.50	GHI	7.93									
		DS598	6.44	2.50	GHI	7.81									
7	6.7	Dona Ana	5.96	2.43	HIJ	7.55									
		UC-5001	5.94	2.39	IJ	7.39									
6	6.3	ABI 700	4.88	2.19	JK	6.59									
		DS077661	4.79	2.09	K	6.16									
5	5.3	Archer	2.65	1.57	L	4.10									
		NY0553	2.65	1.57	L	4.03									
		NY0465	2.39	1.49	LM	3.76									
		NY0231	2.40	1.48	LM	3.74									
		NY0334	2.34	1.47	LM	3.67									
4	3.8	Legend	2.30	1.46	LM	3.63									
		Legend(Pio)	2.28	1.41	LM	3.46									
		Legend(Pio)	2.00	1.33	MN	3.14									
3	3.4	5246	1.82	1.25	MN	2.79									
2	2.0	Vernal	1.60	1.17	MN	2.48									
1	0.8	Maverick	1.12	1.06	N	2.05									
		LSD _{0.05} ⁶		0.30											
		CV(%)		9.38											

¹=Number corresponds to Fall Dormancy Class of 11 check cultivars (in Bold Print) used by the Certified Alfalfa Seed Council.
²=Actual 4-year Fall Dormancy Rating of check cultivars using the Univ. of California regression equation (NAAIC, August 1998).
³=Location: Planted-cut-scored: Tulelake:5/4 - 9/8- 9/30; Davis: 5/15 - 10/7 - 11/2; Imperial: 4/27 - 10/23 - 11/27/2009.
⁴= Plant Height Score is transformed in to Natural Plant Height (NPH) using square root to remove heterogeneity of variance.
⁵=Suggested single year fall dormancy rating based on three location single year regression (FDR=4.00592(NPH)-2.20168).
⁶=Fishers protected Least Significant Difference for comparison of NPH means within locations.
⁷=Fishers protected Least Significant Difference for comparison of NPH means among locations.

SUGGESTED FALL DORMANCY RANGE AND MINIMUM ALFALFA CULTIVAR PEST RESISTANCE RATINGS FOR SIX CALIFORNIA CLIMATE ZONES. Growers selecting varieties from different regions should emphasize the pests that are most important for their area.

Production Zone	Rating Factor										
	FD	SAA	PA	BAA	PRR	BW	FW	An	Stn	RKN	VW
Intermountain	2--4	S	R	MR	R	R	HR	R	R	R	R
Sacramento Valley	4--8	MR	HR	HR	HR	MR	HR	R	R	R	R
San Joaquin Valley	7--9	R	HR	HR	HR	MR	HR	R	HR	HR	R
Coastal	5--7	MR	HR	HR	HR	MR	HR	R	HR	HR	R
High Desert	4--7	R	R	R	R	MR	HR	MR	HR	HR	R
Low Desert	8--9	HR	HR	HR	HR	S	HR	HR	R	HR	S

NOTE: These pest resistance recommendations were originally developed by Dr. Vern Marble, Extension Agronomist, UC Davis, based upon decades of experience with alfalfa varieties in various locations in California. Zones correspond to the principle regions of alfalfa production in California.

EXPLANATION OF PEST RESISTANCE. Alfalfa varieties consist of a population of plants which have varying degrees of resistance to an insect or disease. Since alfalfa fields can sustain considerable loss of individual plants without reducing productivity, alfalfa varieties with 51% or over are considered to be highly resistant, since resistant plants will make up for losses from other plants.

Resistance Level	Abbreviation	Percent resistance ¹
Highly Resistant	HR	>51%
Resistant	R	31-50%
Moderately Resistant	MR	15-30%
Low Resistance	LOW	6-14%
Susceptible	S	<5%
Tolerant	T	(see definition)

¹ Percent of plants in a population resistant to a given pest

Definitions

I - Immune -- Not subject to attack for a specified pest. Immunity is absolute, and seldom occurs in alfalfa.

R - Resistant -- The ability of plants to withstand pest attack. Resistance is not absolute but varies by degree. Even highly resistant varieties will have some plants that are susceptible (see above percentages). NOTE: Very high insect populations or very severe disease conditions can overwhelm pest resistance in alfalfa.

S - Susceptible -- Damage commonly occurs when in the presence of a specified pest. Inability of a variety to withstand adverse disease or insect conditions.

T - Tolerant -- Ability of plants to sustain yields when confronted with a pest attack or environmental condition (e.g. salt or grazing). Tolerant varieties are affected by the condition, but still maintain yields at high levels relative to less tolerant varieties.

LISTING OF COMPANY CONTACTS FOR FURTHER INFORMATION ON VARIETIES.

Company	Name	Address	City & State	Zip	Phone	FAX	Email
Advanced Forages	Mark Brady	3330 W. Victor Ct.	Visalia, CA	93277	559-471-9363	559-625-8756	seedsmn4u@sbcglobal.net
Allied Seed	Ron Schmidt	1917 E. Fargo Ave.	Nampa, ID	83687	208-466-9218	208-467-9953	rschmidt@allied.com
America's Alfalfa	Joe Machado	1041 Jackson Ave.	Los Banos, CA	93635	209-826-9442	209-826-8842	machado@americasalfalfa.com
Cal/West Seeds	Jon Reich	38001 Country Road 27	Woodland, CA	95695	530-666-3331	530-666-1464	j.reich@Calwestseeds.com
Croplan Genetics	Dennis Gehler	1080 County Road F West	St. Paul, MN	98425	651-765-5710	651-765-5727	djgehler@landolakes.com
Dairyland Seed Co.	Dan Gardner	13147 Jackson Hwy.	Sloughouse, CA	95683	916-682-3215	916-682-8435	dgardner@dairylandseed.com
Desert Sun Marketing Co.	Mike Malin	P. O. Box 50817	Phoenix, AZ	85076	480-940-4431	480-940-4507	mike@desertsunmarketing.com
Eureka/SeedTec	Craig Sharp	P.O. Box 1866	Woodland, CA	95776	530-661-6995	530-661-1575	csharp@eurekaseeds.com
Farm Valley Seeds	Mike Reed/James Scallin	624 E Service Rd	Modesto, CA	95358	209-541-3144	209-541-3191	jscallin@aol.com /
Forage Genetics Intrnl.	Peter Reisen	P.O. Box 339	Nampa, ID	83653	208-250-6334	208-466-3684	preisen@foragegenetics.com
W-L Research	Doug Elkins	1917 E. Fargo Ave.	Nampa, ID	83687	208-250-7551	208-467-9953	delkins@foragegenetics.com
W-L Research	Cory Ritz	903 W. 500 South	Farmington, UT	84025	801-971-5359	801-451-9699	critz@wresearch.com
Great Plains Research	Thad Busbice	3624 Kildaire Farm Rd	Cary NC.	27518	919-362-1583	919-387-7918	alfalfa@greatplainsresearch.com
Kamprath Seed Co.	Alan Steigerwald	205 Stockton St.	Manteca, CA	95337	209-823-6242	209-823-2582	alan@kamprathseed.com
Lockhart Seeds, Inc.	Ian Lockhart	3 N. Wilson Way	Stockton, CA	95201	209-466-4401	209-466-9766	lockhartstd@aol.com
Monsanto Golbal Seed Group	Bill Cox	2401 S.E. Cottonwood Cir	Visalia, CA	93277	559-909-0668	559-627-0742	bill.cox@monsanto.com
Monsanto Golbal Seed Group	Barbara Kutzner	1428 N. Locan Ave	Fresno, CA	93727	559-453-0740	559-453-0771	barbara.u.kutzner@monsanto.com
Novartis Seeds Inc.	Don Barcellos	11939A Sugarmill Rd.	Longmont,CO	80501	800-521-7021	303-682-2482	don.barcellos@seeds.novartis.com
Pgi Alfalfa Inc.	Dean Teslow	409 North St.	Decorah, IA	52101	563-382-3390	563-382-2433	dean.teslow@seminis.com
Pioneer Hi-Bred	Mark Smith	1040 Settler Rd.	Connell, WA	99326	509-234-9046	509-234-0648	mark.a.smith@pioneer.com
Pioneer Hi-Bred	Roger Vinande	3605 Beyer Park Rd.	Modesto, CA	95355	(209) 552-9428	209-527-3336	Roger.Vinande@pioneer.com
Producer's Choice/PGI	Marty Crum	17282 Avenue 324	Visalia, CA	93292	559-798-0156	559-798-6533	m.crum@producerschoiceseed.com
Royal Seeds	Ken May	27630 Llewellyn Rd.	Corvallis, OR	97333	1-800-228-4119	1-541-758-5305	kmay@forage-genetics.com
S & W Seeds	Bob Sheesley	P.O. Box 235	Five Points, CA	93624	559-884-2535	559-884-2750	swseedco@pacbell.net
Simplot Growers Solutions	Mike Benson	624 Catalina Cir.	Tulare, CA	93274	559-779-5611		Mbenson@Simplot.com
Simplot Growers Solutions	Lorell Skogsberg	P.O. Box 70013	Boise, ID	83707	208-672-2813		Lorell.Skogsberg@simplot.com
Syngenta Seeds	Terry Hobson	1525 Airport Rd.	Ames, IA	50010	800-258-0498	515-239-3536	terry.hobson@syngenta.com
NK Brand/Syngenta Seeds	Joe Waldo	1116 Elm Avenue West	Menomonie, WI	54751	(715) 235-4405	715-235-4406	joe.waldo@syngenta.com
Producers Choice Seed	Don Miller	Longbranch Station, Suite	Nampa, ID	83651	208-250-0376	208-722-6646	d.miller@producerschoiceseed.com
Union Seed	Jess W. Bice	P.O. Box 339	Nampa, ID	86387	208-250-2383	208-467-9953	jbice@foragegenetics.com
WL Research	Mike Peterson	P. O. Box 8112	Madison, WI	53708	800-406-7662	608-240-0411	mpeterson@wresearch.com
Western Farm Service	Steve Ford	P.O. Box 1168	Fresno, CA	93715	559-285-6292	559-436-5949	sford@agriumretail.com
Wilbur Ellis Company	Derek Winn	P. O. Box 15289	Sacramento, CA	95851	916-991-9833	916-991-1837	dwinn@wilburellis.com
UAP/United Agri Products	Walter Bryant	4914 HWY 20/26	Caldwell, ID	83605	208-454-0475	208-454-0495	walter.bryant@uap.com