

**AGRONOMY PROGRESS REPORT**  
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**AGRONOMY PROGRESS REPORT**

**2010 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 2010. 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 location), the San Joaquin Valley (2 locations), the High Desert (1 location) 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**

**California Alfalfa Acreages by Section**

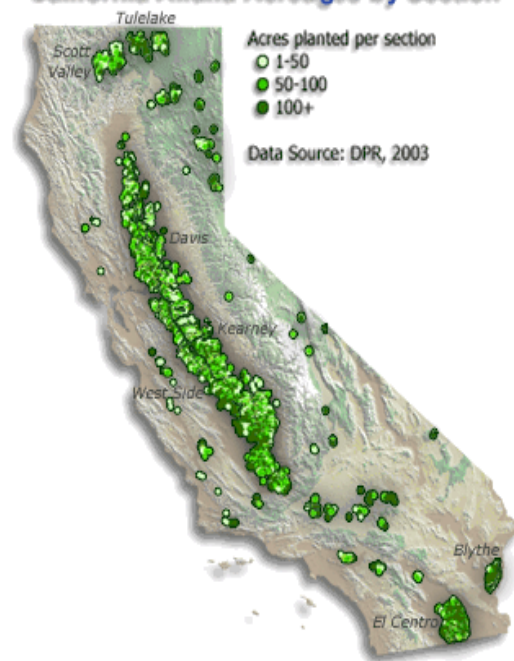


Figure 1. California alfalfa acreage. The Intermountain region is represented by Tulelake and Scott Valley, Sacramento Valley by Davis, San Joaquin Valley by Kearney and West Side Locations, high desert by the Lancaster trial, and Low Desert by the El Centro trial.

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**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.

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.

## **2010 ALFALFA PRODUCTION YEAR**

The 2010 production season was generally characterized by a much more moderate winter season followed by a mild spring and summer season. California was slowly coming out of a 3-year drought, with water limitations in some regions due to low water supplies for irrigation. The remainder of the season (August-September) was much milder than typical. Winter rainfall was normal but precipitation in the spring months prevented us from cutting at a timely basis. This was followed by seasonably cooler temperatures in the summer months. The moderate and dry fall months allowed for excellent late production (high yields and high quality) for many growers in the San Joaquin Valley. Intermountain areas had fairly dry spring conditions.

Though 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, by late 2008, prices fell suddenly, and remained low during most of 2009 and 2010. 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 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. New plantings of alfalfa are down, partly due to price, partly due to water limitations. As we moved into the new year the price of alfalfa has skyrocketed upwards of \$250-300.00/ton.

## **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. Seven alfalfa variety yield trials were harvested from Tulelake, Scott Valley, Davis, Parlier, West Side Field Station, Lancaster, and El Centro, CA in 2010.

Two new trials (Tulelake and Kearney Research and Extension Center) were established in the fall of 2010. In the fall of 2009 two new trials were established (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.

## 2010 YIELD RESULTS

### Intermountain Region

**2007 UC Tulelake Yield Trial** – The 2010 season was relatively normal in rainfall and temperature. Four cuttings were conducted during the season with the first cutting taking place on June 22, 2010. 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 2.2 tons/acre, while the Fall Dormancy (FD) ranges were from 3-8. The average yield across all varieties was 6.9 tons/acre. The across-the-years yield differences from three harvests from highest to lowest yielding variety were approximately 1.9 tons/acre. Yields averaged over the three years were almost 7.55 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.

**2006 UC Scott Valley Trial** – The Scott Valley is now in its fifth 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 2010 harvests are provided in Table 3 and the over-the-years data provided in Table 4. Yield differences from three harvests from highest to lowest-yielding variety were approximately 3.3 tons/acre. The average yield across all varieties was 7.3 tons/acre. Yields averaged over the five years were a little over 7.18 tons/acre (Table 4). The across-the-years

yield average between high and low varieties was almost 2 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. Only five cuttings were conducted during the season with the first cutting on May 13, 2010. Single year results from the seven harvests are provided in Table 5 and the over-the-years data provided in Table 6. The yield across all varieties was about 9.4 tons/acre. The yearly yield average between high and low varieties was 2.7 tons/acre difference, and CVs were moderate, indicating average control of variation in this trial. Yields averaged over the three years were increase to 10.4 tons/acre (Table 6). The yearly yield average between high and low varieties was over 3.0 tons/acre difference averaged over the three years.

### **San Joaquin Valley**

**2010 UC West Side Salinity Trial** – A new salinity trial with 24 varieties and one covariant line was planted fall, 2010 at the West Side Field Station in Five Points, CA. Four harvests were conducted during 2010 season with the first cutting taking place on May 25, 2010.

**2007 UC Kearney Yield Trial** – This is the third year of harvests for the 2007 Kearney Yield Trial. Seven cuttings were conducted during the 2010 season with the first cutting taking place on May 5, 2010. Single year results from the 2010 harvests are provided in Table 7. The average yield across all varieties was 10.64 tons/acre which was very high given this was the third year cut. The yearly yield average between high and low varieties were about 4.2 tons/acre difference, and CVs were relatively high, indicating variability in this trial. Yields averaged over the three years were 11.26 tons/acre (Table 8). 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 second production year data is provided in Table 9. Eight cuttings were conducted during the season with the first cutting taking place on Feb 8, 2010. The yearly yield average between high and low varieties was 3.0 tons/acre difference with CV's remaining very high, especially through the summer months. The average yield across all varieties was about 6.0 tons/acre. Yields averaged over the two years were 7.29 tons/acre (Table 10). The yearly yield average between high and low varieties was nearly 3 tons/acre difference averaged over the three years.

### **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 began 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](http://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, Rafael Solorio 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, Francisco 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. 2010 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	22-Jun	16-Jul	17-Aug	15-Oct	TOTAL		VERNA	
		Dry t/a							%
<b>Released Varieties</b>									
PGI 459	4	2.8 ( 2)	2.0 ( 2)	2.0 ( 1)	1.0 (20)	7.8 ( 1)	A	140.4	
DKA50-18	5	2.7 ( 8)	1.9 ( 7)	1.9 ( 2)	1.1 ( 4)	7.6 ( 2)	AB	136.4	
Archer III	5	2.6 (25)	2.0 ( 1)	1.8 ( 9)	1.1 ( 8)	7.5 ( 3)	ABC	135.2	
Integra 8400	4	2.8 ( 1)	1.8 (27)	1.7 (14)	1.1 ( 6)	7.5 ( 4)	BCD	134.5	
Genoa	4	2.7 ( 5)	1.8 (20)	1.7 (18)	1.1 (16)	7.3 ( 5)	BCDE	131.2	
GrandStand	4	2.8 ( 4)	1.8 (29)	1.7 (20)	1.0 (24)	7.3 ( 6)	BCDEF	131.0	
FSG 505	5	2.7 ( 6)	1.8 (21)	1.7 (16)	1.0 (21)	7.2 ( 7)	CDEFG	130.5	
WL 357HQ	5	2.7 ( 7)	1.8 (17)	1.7 (29)	1.1 (14)	7.2 ( 8)	CDEFG	130.3	
Integra 8300	3	2.6 (16)	1.8 ( 8)	1.8 (10)	1.0 (32)	7.2 ( 9)	CDEFGH	130.2	
Legendairy	3	2.6 (20)	1.7 (36)	1.8 ( 3)	1.1 (17)	7.2 (11)	CDEFGH	130.0	
AmeriStand407TQ	4	2.7 (11)	1.8 (18)	1.7 (11)	1.0 (26)	7.2 (12)	CDEFGH	129.9	
Rebound 5	4	2.8 ( 3)	1.8 (23)	1.6 (42)	1.0 (25)	7.2 (13)	DEFGHI	129.1	
AmeriStand444NT	4	2.6 (24)	1.7 (35)	1.7 (15)	1.1 ( 9)	7.2 (14)	DEFGHI	129.0	
PGI 424	4	2.6 (17)	1.7 (37)	1.6 (37)	1.0 (27)	7.0 (24)	EF GHI JKL	125.9	
WL 343HQ	4	2.5 (32)	1.8 (12)	1.6 (36)	1.0 (34)	6.9 (29)	FGHI JKLMN	125.2	
MilkMaker ML	5	2.2 (52)	1.8 (31)	1.8 ( 8)	1.2 ( 3)	6.9 (31)	GHI JKLMNO	124.8	
FSG 528SF	5	2.4 (45)	1.7 (32)	1.7 (31)	1.1 (12)	6.9 (35)	I JKLMNOP	123.8	
CW 500	5	2.4 (44)	1.7 (44)	1.7 (30)	1.1 (10)	6.8 (38)	I JKLMNOP	123.3	
FSG 408DP	4	2.6 (14)	1.7 (42)	1.6 (51)	0.9 (46)	6.8 (40)	J KLMNOPQ	122.3	
Xtra-3	4	2.5 (37)	1.5 (53)	1.7 (21)	1.0 (18)	6.8 (41)	J KLMNOPQ	122.1	
WL 325 HQ	4	2.6 (27)	1.7 (41)	1.5 (52)	1.0 (41)	6.8 (42)	KLMNOPQ	121.8	
Everlast II	4	2.6 (21)	1.7 (43)	1.5 (54)	1.0 (39)	6.8 (43)	KLMNOPQ	121.7	
Magnum VI	4	2.6 (31)	1.7 (39)	1.6 (48)	0.9 (48)	6.8 (44)	KLMNOPQ	121.7	
MasterPiece	4	2.4 (41)	1.7 (45)	1.6 (43)	1.0 (19)	6.7 (45)	KLMNOPQ	121.1	
54V09	4	2.5 (40)	1.8 (22)	1.6 (46)	0.9 (55)	6.7 (46)	LMNOPQ	120.3	
Dura 512	5	2.5 (39)	1.6 (49)	1.5 (53)	1.0 (33)	6.6 (48)	NOPQ	119.4	
Mountaineer 2	5	2.3 (46)	1.6 (51)	1.6 (34)	1.0 (35)	6.6 (51)	PQRS	118.2	
Whitney	4	2.3 (49)	1.5 (54)	1.6 (45)	0.9 (52)	6.3 (53)	RS	113.5	
Prosementi	ND	2.1 (54)	1.6 (48)	1.6 (50)	1.0 (31)	6.3 (54)	S	112.8	
Vernal	2	2.3 (50)	1.2 (56)	1.4 (56)	0.7 (56)	5.6 (56)	U	100.0	
<b>Experimental Varieties</b>									
R56BD188	ND	2.6 (12)	1.8 (14)	1.8 ( 5)	1.0 (38)	7.2 (10)	CDEFGH	130.0	
R56BD190	ND	2.6 (29)	1.9 ( 5)	1.7 (22)	1.0 (28)	7.2 (15)	DEFGHI	129.0	
R46Bx197	8	2.6 (18)	1.8 ( 9)	1.8 ( 6)	0.9 (50)	7.2 (16)	DEFGHI	128.8	
R56BD191	ND	2.6 (23)	1.9 ( 6)	1.7 (25)	1.0 (36)	7.1 (17)	EF GHI	128.3	
R46Bx777	ND	2.6 (13)	1.7 (38)	1.7 (17)	1.0 (22)	7.1 (18)	EF GHI	128.2	
R56Bx214	4	2.3 (48)	1.9 ( 3)	1.8 ( 7)	1.1 ( 7)	7.1 (19)	EF GHI	128.2	
R46Bx160	5	2.6 (15)	1.8 (28)	1.7 (19)	1.0 (40)	7.1 (20)	EF GHI J	127.7	
R46Bx775	ND	2.7 ( 9)	1.7 (40)	1.7 (28)	1.0 (30)	7.0 (21)	EF GHI JK	126.9	
R46BD201	ND	2.4 (43)	1.9 ( 4)	1.6 (39)	1.1 (13)	7.0 (22)	EF GHI JK	126.6	
R46Bx164	6	2.5 (35)	1.8 (30)	1.7 (12)	1.0 (29)	7.0 (23)	EF GHI JK	126.3	
R46Bx211	4.1	2.2 (53)	1.7 (34)	1.8 ( 4)	1.2 ( 1)	7.0 (25)	EF GHI JKLM	125.7	
TS 4028	4	2.6 (19)	1.6 (46)	1.7 (27)	1.0 (23)	7.0 (26)	EF GHI JKLM	125.6	
R46Bx167	4	2.6 (28)	1.8 (11)	1.6 (38)	1.0 (42)	7.0 (27)	EF GHI JKLM	125.5	
R46Bx162	8	2.6 (26)	1.8 (13)	1.7 (26)	0.9 (54)	7.0 (28)	EF GHI JKLM	125.4	
R46Bx163	4	2.6 (22)	1.8 (15)	1.6 (40)	0.9 (47)	6.9 (30)	GHI JKLMN	125.1	
R46Bx165	8.5	2.5 (38)	1.7 (33)	1.7 (13)	0.9 (43)	6.9 (32)	GHI JKLMNO	124.7	
R46BD203	ND	2.4 (42)	1.8 (24)	1.6 (35)	1.1 (15)	6.9 (33)	HI JKLMNO	124.3	
R46Bx161	6	2.6 (30)	1.8 (19)	1.6 (32)	0.9 (49)	6.9 (34)	HI JKLMNO	124.3	
R46Bx173	5	2.7 (10)	1.8 (25)	1.5 (55)	0.9 (45)	6.9 (36)	I JKLMNOP	123.7	
R56Bx212	6	2.3 (47)	1.8 (16)	1.6 (33)	1.1 (11)	6.8 (37)	I JKLMNOP	123.4	
R46Bx218	6	2.5 (36)	1.8 (10)	1.6 (47)	0.9 (44)	6.8 (39)	I JKLMNOP	123.3	
R46Bx217	8	2.0 (55)	1.8 (26)	1.7 (23)	1.1 ( 5)	6.6 (47)	MNOPQ	119.8	
R46Bx776	ND	2.5 (33)	1.6 (50)	1.6 (44)	0.9 (51)	6.6 (49)	OPQR	119.2	
R46Bx778	ND	2.5 (34)	1.6 (52)	1.6 (49)	1.0 (37)	6.6 (50)	OPQR	119.1	
R56BD202	ND	2.3 (51)	1.6 (47)	1.7 (24)	0.9 (53)	6.5 (52)	QRS	117.2	
R66BD108	ND	1.7 (56)	1.5 (55)	1.6 (41)	1.2 ( 2)	5.9 (55)	T	106.7	
MEAN		2.51	1.74	1.67	1.00	6.93			
CV		6.9	7.4	7.0	9.7	4.5			
LSD (0.1)		0.18	0.14	0.12	0.10	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 2. 2008-2010 YIELDS, TULELAKE ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 07/27/07**

		2008	2009	2010	Average		% of
	FD	Yield	Yield	Yield			VERNAL
		Dry t/a					%
<b>Released Varieties</b>							
PGI 459	4	8.5 ( 2)	8.3 ( 4)	7.8 ( 1)	8.2 ( 1)	A	130.5
Archer III	5	8.6 ( 1)	8.3 ( 2)	7.5 ( 3)	8.1 ( 2)	AB	129.8
DKA50-18	5	8.3 (11)	8.5 ( 1)	7.6 ( 2)	8.1 ( 3)	AB	129.7
Integra 8400	4	8.0 (34)	8.3 ( 3)	7.5 ( 4)	7.9 ( 4)	ABC	126.5
WL 357HQ	5	8.3 (12)	8.1 ( 6)	7.2 ( 8)	7.9 ( 5)	BCD	125.6
Integra 8300	3	8.3 (15)	8.1 ( 7)	7.2 ( 9)	7.8 ( 6)	BCDE	125.3
GrandStand	4	8.2 (20)	8.0 (10)	7.3 ( 6)	7.8 ( 7)	CDEF	124.8
Genoa	4	8.4 ( 6)	7.7 (27)	7.3 ( 5)	7.8 ( 8)	CDEFG	124.6
AmeriStand444NT	4	8.4 ( 4)	7.7 (31)	7.2 (14)	7.8 (10)	CDEFGHI	124.1
AmeriStand407TQ	4	8.1 (30)	8.0 ( 9)	7.2 (12)	7.8 (11)	CDEFGHI	124.1
Legendairy	3	8.0 (33)	8.1 ( 5)	7.2 (11)	7.8 (12)	CDEFGHI	124.1
PGI 424	4	8.3 (10)	7.9 (13)	7.0 (24)	7.7 (15)	CDEFGHIJK	123.3
Rebound 5	4	7.9 (38)	8.0 ( 8)	7.2 (13)	7.7 (16)	CDEFGHIJKL	123.1
FSG 528SF	5	8.4 ( 7)	7.7 (26)	6.9 (35)	7.7 (21)	CDEFGHIJKLMN	122.3
MilkMaker ML	5	8.4 ( 3)	7.6 (37)	6.9 (31)	7.6 (23)	CDEFGHIJKLMNO	122.0
CW 500	5	8.2 (18)	7.9 (14)	6.8 (38)	7.6 (25)	DEFGHIJKLMNO	122.0
FSG 505	5	7.8 (46)	7.7 (25)	7.2 ( 7)	7.6 (29)	DEFGHIJKLMNO PQ	121.1
Xtra-3	4	8.4 ( 5)	7.5 (45)	6.8 (41)	7.6 (32)	FGHIJKLMN OPQR	120.6
Dura 512	5	8.1 (24)	7.8 (21)	6.6 (48)	7.5 (34)	HIJKLMN OPQR	119.9
Magnum VI	4	7.8 (47)	7.8 (18)	6.8 (44)	7.4 (37)	KLMN OPQRST	118.9
54V09	4	8.1 (29)	7.6 (39)	6.7 (46)	7.4 (38)	KLMN OPQRST	118.9
WL 343HQ	4	7.6 (52)	7.7 (34)	6.9 (29)	7.4 (41)	MN OPQRST	118.5
WL 325 HQ	4	7.8 (48)	7.7 (32)	6.8 (42)	7.4 (42)	MN OPQRST	118.4
MasterPiece	4	8.0 (37)	7.4 (49)	6.7 (45)	7.4 (46)	PQRST	117.5
Everlast II	4	7.7 (51)	7.5 (43)	6.8 (43)	7.3 (49)	QRST	116.9
Mountaineer 2	5	7.9 (39)	7.3 (50)	6.6 (51)	7.3 (51)	RSTU	116.1
FSG 408DP	4	7.6 (53)	7.3 (52)	6.8 (40)	7.2 (52)	STU	115.4
Prosementi	ND	8.1 (28)	7.2 (53)	6.3 (54)	7.2 (53)	TU	114.5
Whitney	4	7.9 (41)	6.9 (54)	6.3 (53)	7.0 (54)	UV	112.3
Vernal	2	6.7 (56)	6.5 (56)	5.6 (56)	6.3 (56)		100.0
<b>Experimental Varieties</b>							
R56BD188	ND	8.2 (22)	8.0 (12)	7.2 (10)	7.8 ( 9)	CDEFGH	124.3
R46Bx197	8	8.3 ( 8)	7.8 (17)	7.2 (16)	7.8 (13)	CDEFGHI	124.1
R56BD191	ND	8.3 (13)	7.8 (16)	7.1 (17)	7.7 (14)	CDEFGHIJ	123.6
R56BD190	ND	8.2 (19)	7.8 (24)	7.2 (15)	7.7 (17)	CDEFGHIJKL	123.0
R46Bx164	6	8.1 (26)	8.0 (11)	7.0 (23)	7.7 (18)	CDEFGHIJKL	123.0
R46BD201	ND	8.2 (17)	7.8 (19)	7.0 (22)	7.7 (19)	CDEFGHIJKLM	122.7
R56Bx214	4	8.3 ( 9)	7.6 (38)	7.1 (19)	7.7 (20)	CDEFGHIJKLMN	122.3
R46Bx162	8	8.2 (16)	7.7 (28)	7.0 (28)	7.6 (22)	CDEFGHIJKLMNO	122.0
R46Bx777	ND	8.1 (32)	7.8 (23)	7.1 (18)	7.6 (24)	DEFGHIJKLMNO	122.0
R46Bx775	ND	8.1 (27)	7.7 (30)	7.0 (21)	7.6 (26)	DEFGHIJKLMN OP	121.7
R46Bx167	4	8.2 (23)	7.7 (29)	7.0 (27)	7.6 (27)	DEFGHIJKLMN OP	121.7
R46Bx160	5	7.9 (40)	7.8 (22)	7.1 (20)	7.6 (28)	DEFGHIJKLMN OP Q	121.2
R46Bx218	6	8.1 (31)	7.8 (15)	6.8 (39)	7.6 (30)	EFGHIJKLMN OP Q	121.0
R46Bx165	8.5	8.0 (36)	7.8 (20)	6.9 (32)	7.6 (31)	FGHIJKLMN OP Q	120.7
R46BD203	ND	8.3 (14)	7.4 (47)	6.9 (33)	7.5 (33)	GH IJKLMN OP QR	120.1
R46Bx163	4	8.1 (25)	7.4 (48)	6.9 (30)	7.5 (35)	IJKLMN OP QR S	119.6
TS 4028	4	7.9 (43)	7.5 (40)	7.0 (26)	7.5 (36)	J KLMN OP QR S	119.2
R46Bx778	ND	8.2 (21)	7.5 (41)	6.6 (50)	7.4 (39)	KLMN OP QR ST	118.8
R56Bx212	6	7.9 (42)	7.5 (42)	6.8 (37)	7.4 (40)	LMN OP QR ST	118.6
R46Bx211	4.1	7.9 (44)	7.3 (51)	7.0 (25)	7.4 (43)	N OP QR ST	117.9
R46Bx161	6	7.5 (55)	7.7 (33)	6.9 (34)	7.4 (44)	OP QR ST	117.8
R46Bx173	5	7.7 (50)	7.5 (44)	6.9 (36)	7.4 (45)	OP QR ST	117.5
R46Bx217	8	8.0 (35)	7.4 (46)	6.6 (47)	7.4 (47)	P QR ST	117.4
R46Bx776	ND	7.7 (49)	7.6 (36)	6.6 (49)	7.3 (48)	QR ST	116.9
R56BD202	ND	7.8 (45)	7.6 (35)	6.5 (52)	7.3 (50)	QR ST	116.8
R66BD108	ND	7.6 (54)	6.8 (55)	5.9 (55)	6.8 (55)	V	107.9
MEAN		8.05	7.69	6.93	7.55		
CV		5.8	4.5	4.5	3.5		
LSD (0.1)		0.49	0.37	0.33	0.28		

Trial seeded at 25 lb/acre viable seed at Intermountain Research and Extension Center, Tulalake, 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. 2010 YIELDS, UC SCOTT VALLEY ALFALFA CUTIVAR TRIAL. TRIAL PLANTED 5/04/2006**

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

		Cut 1 22-Jun	Cut 2 30-Jul	Cut 3 24-Sep	YEAR TOTAL		% of VERNAL
	FD	Dry t/a					%
Integra 8400	4	3.7 ( 2)	2.8 ( 2)	1.9 ( 1)	8.5 ( 1)	A	150.5
GrandStand	4	3.8 ( 1)	2.8 ( 3)	1.9 ( 2)	8.5 ( 2)	AB	149.7
PGI 459	4	3.7 ( 4)	2.9 ( 1)	1.8 ( 8)	8.4 ( 3)	ABC	148.4
WL 343HQ	4	3.7 ( 3)	2.8 ( 4)	1.7 (11)	8.2 ( 4)	ABCD	145.5
Xtra-3	4	3.5 ( 6)	2.6 ( 6)	1.8 ( 9)	7.8 ( 5)	ABCDE	138.8
Rebound 5.0	4	3.5 ( 5)	2.5 ( 8)	1.7 (12)	7.8 ( 6)	BCDE	137.6
Masterpiece	4	3.4 ( 9)	2.5 (11)	1.8 ( 5)	7.7 ( 7)	CDE	136.7
Dura 512	5	3.5 ( 7)	2.5 (16)	1.8 ( 7)	7.7 ( 8)	CDEF	136.6
Boulder	5	3.4 (11)	2.5 (10)	1.8 ( 6)	7.7 ( 9)	CDEF	135.9
AmeriStand 407TQ	4	3.4 (12)	2.6 ( 5)	1.7 (16)	7.7 (10)	DEF	135.5
RRALF 4R200	4	3.4 (10)	2.6 ( 7)	1.7 (15)	7.7 (11)	DEF	135.5
MasterPiece	4	3.3 (14)	2.5 ( 9)	1.7 (13)	7.6 (12)	DEF	134.5
DS417	4	3.3 (17)	2.5 (12)	1.8 (10)	7.6 (13)	DEFG	133.8
DKA41-18RR	4	3.3 (16)	2.5 (14)	1.7 (18)	7.5 (14)	EFGH	132.7
WL 319HQ	3	3.4 ( 8)	2.5 (17)	1.6 (22)	7.5 (15)	EFGH	132.3
WL 357HQ	5	3.2 (18)	2.5 (13)	1.7 (14)	7.5 (16)	EFGH	132.2
FSG 505	5	3.1 (24)	2.5 (15)	1.8 ( 3)	7.4 (17)	EFGH	131.2
Mountaineer 2.0	5	3.2 (20)	2.4 (24)	1.8 ( 4)	7.4 (18)	EFGH	131.1
Power 4.2 (PI + Alle	4	3.3 (15)	2.4 (18)	1.6 (24)	7.3 (19)	EFGH	130.0
WL 325HQ	4	3.4 (13)	2.4 (22)	1.6 (23)	7.3 (20)	EFGH	130.0
PGI 424	4	3.2 (19)	2.4 (23)	1.7 (17)	7.3 (21)	EFGH	129.2
DKA50-18	5	3.2 (23)	2.4 (19)	1.6 (19)	7.2 (22)	EFGHI	127.9
Power 4.2 (Coated)	4	3.2 (21)	2.4 (21)	1.6 (25)	7.2 (23)	EFGHI	127.2
Expedition	5	3.2 (22)	2.4 (20)	1.6 (25)	7.2 (24)	EFGHI	127.0
WL 355RR	4	3.1 (25)	2.4 (25)	1.6 (27)	7.0 (25)	FGHI	124.1
HybriForce620	6	3.0 (27)	2.2 (27)	1.6 (21)	6.9 (26)	GHI	121.4
Whitney	4	2.8 (28)	2.4 (26)	1.6 (20)	6.8 (27)	HI	121.1
Mariner III	4	3.1 (26)	2.2 (28)	1.5 (29)	6.8 (28)	HI	120.2
CW 500	5	2.8 (29)	2.2 (29)	1.5 (28)	6.6 (29)	I J	116.2
FSG 408DP	4	2.8 (30)	1.9 (30)	1.4 (30)	6.1 (30)	J K	107.7
Vernal	2	2.6 (31)	1.8 (31)	1.3 (31)	5.6 (31)	K L	100.0
HybriForce420/wet	4	2.3 (32)	1.8 (32)	1.2 (32)	5.2 (32)	L	92.8
MEAN		3.24	2.43	1.66	7.33		
CV		9.3	8.1	8.7	8.1		
LSD (0.1)		0.36	0.24	0.17	0.71		

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 4. 2006-2010 YIELDS, UC SCOTT VALLEY ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 5/04/06**

		2006	2007	2008	2009	2010	Average		% of
		Yield	Yield	Yield	Yield	Yield			Vernal
	FD	Dry t/a							%
Integra 8400	4	4.6 (21)	9.1 ( 1)	8.8 ( 1)	8.9 ( 1)	8.5 ( 1)	8.0 ( 1)	A	131.4
PGI 459	4	4.7 (15)	8.4 ( 6)	8.7 ( 2)	8.5 ( 3)	8.4 ( 3)	7.8 ( 2)	AB	127.8
GrandStand	4	4.2 (30)	8.4 ( 9)	8.6 ( 5)	8.8 ( 2)	8.5 ( 2)	7.7 ( 3)	ABC	126.9
Xtra-3	4	5.5 ( 1)	8.7 ( 2)	8.0 (13)	8.4 ( 4)	7.8 ( 5)	7.7 ( 4)	ABC	126.8
Rebound 5.0	4	4.8 (12)	8.4 ( 7)	8.7 ( 4)	8.4 ( 5)	7.8 ( 6)	7.6 ( 5)	BCD	125.2
Dura 512	5	4.9 ( 6)	8.4 (11)	8.7 ( 3)	7.7 (17)	7.7 ( 8)	7.5 ( 6)	BCDE	123.3
DS417	4	5.3 ( 2)	8.4 ( 8)	8.0 (17)	7.9 ( 9)	7.6 (13)	7.4 ( 7)	BCDEF	122.6
FSG 505	5	4.6 (19)	8.6 ( 3)	8.3 ( 7)	8.1 ( 7)	7.4 (17)	7.4 ( 8)	BCDEFG	122.1
Masterpiece	4	4.7 (17)	8.3 (14)	8.3 ( 6)	7.9 (10)	7.7 ( 7)	7.4 ( 9)	CDEFG	121.6
MasterPiece	4	4.8 (11)	8.6 ( 4)	8.0 (14)	7.8 (13)	7.6 (12)	7.4 (10)	CDEFG	121.5
Boulder	5	4.6 (22)	8.4 (13)	7.9 (20)	8.2 ( 6)	7.7 ( 9)	7.4 (11)	CDEFGH	121.2
AmeriStand 407TQ	4	4.4 (27)	8.3 (17)	8.2 ( 8)	7.9 (11)	7.7 (10)	7.3 (12)	DEFGH I	119.9
WL 357HQ	5	4.9 ( 5)	8.2 (21)	7.8 (24)	7.9 ( 8)	7.5 (16)	7.3 (13)	DEFGH I	119.9
Mountaineer 2.0	5	4.8 (10)	8.4 (12)	8.0 (16)	7.5 (21)	7.4 (18)	7.2 (14)	EFGH I J	119.1
Power 4.2 (PI + Alleg)	4	4.6 (23)	8.6 ( 5)	8.0 (19)	7.5 (22)	7.3 (19)	7.2 (15)	EFGH I J	118.5
WL 319HQ	3	4.5 (26)	8.1 (25)	8.2 ( 9)	7.7 (18)	7.5 (15)	7.2 (16)	EFGH I J K	118.3
WL 343HQ	4	4.1 (31)	7.9 (27)	7.8 (22)	7.8 (14)	8.2 ( 4)	7.2 (17)	EFGH I J K	118.3
DKA50-18	5	4.5 (25)	8.3 (16)	8.0 (15)	7.8 (15)	7.2 (22)	7.2 (18)	EFGH I J K	117.8
WL 325HQ	4	4.6 (20)	8.3 (19)	8.1 (11)	7.3 (26)	7.3 (20)	7.1 (19)	EFGH I J K	117.5
Power 4.2 (Coated)	4	4.7 (16)	8.3 (15)	7.8 (23)	7.5 (23)	7.2 (23)	7.1 (20)	FGH I J K	117.1
RRALF 4R200	4	4.0 (32)	7.8 (28)	8.1 (10)	7.8 (12)	7.7 (11)	7.1 (21)	FGH I J K	116.8
Expedition	5	4.5 (24)	8.1 (26)	8.0 (18)	7.7 (16)	7.2 (24)	7.1 (22)	FGH I J K	116.7
PGI 424	4	4.9 ( 7)	8.4 (10)	7.5 (28)	7.3 (25)	7.3 (21)	7.1 (23)	FGH I J K	116.7
Whitney	4	4.6 (18)	8.3 (18)	7.9 (21)	7.6 (19)	6.8 (27)	7.1 (24)	GH I J K	116.1
HybriForce620	6	5.1 ( 4)	8.2 (22)	7.5 (26)	7.2 (27)	6.9 (26)	7.0 (25)	H I J K	115.1
CW 500	5	4.8 ( 8)	8.2 (23)	8.1 (12)	7.1 (28)	6.6 (29)	7.0 (26)	I J K	114.6
DKA41-18RR	4	4.3 (29)	7.5 (31)	7.7 (25)	7.6 (20)	7.5 (14)	6.9 (27)	I J K	113.9
WL 355RR	4	4.8 (13)	7.8 (29)	7.5 (27)	7.4 (24)	7.0 (25)	6.9 (28)	JK	113.8
Mariner III	4	4.8 ( 9)	8.2 (20)	7.2 (29)	7.0 (29)	6.8 (28)	6.8 (29)	K	112.2
HybriForce420/wet	4	5.2 ( 3)	8.1 (24)	6.5 (31)	7.0 (30)	5.2 (32)	6.4 (30)	L	105.5
FSG 408DP	4	4.7 (14)	7.8 (30)	6.8 (30)	6.2 (32)	6.1 (30)	6.3 (31)	L	104.1
Vernal	2	4.4 (28)	7.5 (32)	6.2 (32)	6.6 (31)	5.6 (31)	6.1 (32)	L	100.0
MEAN		4.69	8.26	7.91	7.69	7.33	7.18		
CV		8.5	4.0	6.1	7.4	8.1	4.3		
LSD (0.1)		0.48	0.40	0.58	0.69	0.71	0.37		

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 5. 2010 Yields, UC Davis Alfalfa Cultivar Trial (Trial planted Sept. 25, 2008)**

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	YEAR		% of
		13-May	14-Jun	16-Jul	21-Aug	21-Sep	TOTAL		CUF 101
FD		Dry t/a							%
<b>Released Varieties</b>									
HybriForce 620	6	2.5 ( 5)	2.7 ( 4)	1.8 (15)	2.2 ( 1)	1.3 (14)	10.5 ( 1)	A	119.2
58R51 RR	8	2.3 (17)	2.4 (15)	1.9 ( 6)	2.1 ( 4)	1.5 ( 2)	10.3 ( 3)	ABC	116.9
Conquistador	8	2.3 (19)	2.5 ( 8)	1.8 (18)	2.1 ( 3)	1.5 ( 3)	10.2 ( 4)	ABCD	115.9
Integra 8800	8	2.5 ( 3)	2.6 ( 5)	1.9 ( 7)	1.9 (13)	1.2 (26)	10.2 ( 5)	ABCDE	115.5
GrandSlam	8	2.6 ( 1)	2.4 (18)	1.9 ( 8)	1.9 (14)	1.3 (19)	10.1 ( 6)	ABCDEF	114.2
HybriForce 700	7	2.4 (14)	2.5 (14)	1.9 ( 9)	2.0 ( 6)	1.3 (12)	10.1 ( 7)	ABCDEF	114.2
PGI 709	7	2.5 ( 6)	2.5 ( 9)	1.9 (12)	1.9 (12)	1.3 (11)	10.1 ( 8)	ABCDEF	114.0
HybriForce 800	8	2.4 (11)	2.5 ( 7)	1.9 (14)	2.0 ( 8)	1.2 (23)	10.0 ( 9)	ABCDEF	113.8
Magna 801 FQ	8	2.2 (28)	2.3 (22)	1.9 ( 4)	2.0 ( 5)	1.4 (10)	9.8 (13)	ABCDEFGH	111.5
Integra 8600	6	2.4 (15)	2.2 (28)	1.9 (13)	2.0 ( 9)	1.4 ( 7)	9.8 (14)	ABCDEFGH	111.3
WL 530HQ	8	2.4 ( 7)	2.4 (19)	1.7 (33)	2.0 ( 7)	1.3 (20)	9.8 (15)	ABCDEFGH	111.1
Magna 788	7	2.1 (38)	2.4 (16)	1.8 (17)	2.0 (11)	1.4 ( 4)	9.7 (18)	ABCDEFGHIJ	109.9
Tango	6	2.2 (29)	2.5 (12)	2.0 ( 2)	1.6 (33)	1.2 (27)	9.5 (19)	BCDEFGHIJK	108.0
Arriba II	7	1.9 (42)	2.2 (29)	2.1 ( 1)	1.9 (18)	1.3 (18)	9.4 (22)	DEFGHIJK	106.0
Pacifico	9	2.1 (37)	2.3 (24)	1.8 (21)	1.9 (21)	1.3 (15)	9.3 (23)	DEFGHIJKL	105.9
Artesian Sunrise	7	2.3 (16)	2.4 (19)	1.8 (19)	1.6 (36)	1.2 (28)	9.3 (24)	EFGHIJKL	105.5
56S82	6	2.5 ( 4)	2.3 (26)	1.7 (36)	1.7 (31)	1.2 (32)	9.3 (25)	FGHIJKL	105.1
Magna 995	9	2.1 (34)	2.1 (36)	1.7 (32)	2.0 (10)	1.3 (13)	9.3 (27)	FGHIJKL	104.9
Sutter	6	2.2 (26)	2.2 (30)	1.7 (30)	1.8 (23)	1.2 (30)	9.2 (28)	FGHIJKL	104.3
TruTest	6	2.4 (10)	2.2 (31)	1.7 (34)	1.6 (39)	1.2 (33)	9.0 (31)	HIJKL	102.2
Archer III	5	2.3 (21)	2.4 (21)	1.7 (39)	1.6 (38)	1.2 (31)	9.0 (32)	HIJKL	102.2
Integra 8801R	8	2.1 (33)	2.3 (23)	1.7 (31)	1.5 (40)	1.4 ( 8)	9.0 (34)	HIJKL	102.0
Dura 843	8	2.1 (32)	2.2 (33)	1.8 (24)	1.7 (30)	1.1 (40)	8.9 (35)	IJKLM	100.6
Cisco	6	2.2 (24)	2.2 (27)	1.7 (34)	1.6 (35)	1.1 (39)	8.9 (36)	JKLM	100.4
PGI 608	6	2.6 ( 2)	2.1 (41)	1.6 (42)	1.5 (41)	1.1 (37)	8.9 (37)	JKLM	100.3
8R100	8	1.9 (43)	2.2 (35)	1.8 (27)	1.8 (25)	1.2 (29)	8.8 (38)	JKLMN	100.0
Cuf 101	9	2.1 (35)	2.1 (40)	1.5 (43)	1.8 (27)	1.4 ( 6)	8.8 (39)	JKLMN	100.0
Lightning IV	4	1.9 (41)	1.9 (45)	1.8 (23)	1.9 (16)	1.1 (34)	8.7 (40)	KLMNO	98.4
WL 440HQ	5	2.4 ( 9)	2.1 (38)	1.7 (40)	1.4 (45)	1.1 (41)	8.7 (41)	KLMNO	98.2
DKA 50-18	5	2.2 (27)	2.1 (37)	1.6 (41)	1.6 (37)	0.9 (45)	8.4 (42)	LMNO	95.7
4R200	4	1.8 (45)	2.0 (43)	1.7 (38)	1.5 (42)	1.0 (42)	8.0 (43)	MNO	90.7
6R100	6	2.1 (39)	2.0 (42)	1.5 (45)	1.5 (44)	0.9 (44)	7.9 (44)	NO	89.9
Integra 8401R	4	2.0 (40)	1.9 (44)	1.5 (44)	1.5 (43)	0.9 (43)	7.8 (45)	O	88.7
<b>Experimental Varieties</b>									
DS 067092	8	2.4 ( 7)	2.8 ( 1)	1.9 (10)	1.9 (12)	1.4 ( 9)	10.4 ( 2)	AB	117.7
DS 067348	8	2.4 (13)	2.7 ( 3)	1.9 (11)	1.7 (28)	1.3 (17)	10.0 (10)	ABCDEFG	113.2
SW 9812	9	2.3 (21)	2.5 (13)	1.8 (16)	1.9 (22)	1.5 ( 1)	9.9 (11)	ABCDEFG	112.7
CW 38065	8	2.4 (12)	2.6 ( 6)	1.8 (20)	1.9 (19)	1.3 (21)	9.9 (12)	ABCDEFGH	112.2
FG 83T048	8	2.2 (30)	2.7 ( 2)	1.8 (26)	1.9 (17)	1.2 (25)	9.8 (16)	ABCDEFGHI	110.8
SW 9813	9	2.2 (25)	2.2 (34)	1.8 (22)	2.2 ( 2)	1.4 ( 5)	9.8 (17)	ABCDEFGHI	110.6
DS 071842	6	2.3 (20)	2.5 (10)	1.9 ( 5)	1.6 (34)	1.1 (35)	9.5 (20)	CDEFGHIJK	107.1
SW 9816	9	2.1 (36)	2.5 (11)	1.9 ( 3)	1.6 (32)	1.3 (16)	9.4 (21)	CDEFGHIJK	107.0
DS 077601	8	2.3 (18)	2.3 (25)	1.7 (28)	1.8 (24)	1.1 (38)	9.3 (26)	FGHIJKL	105.0
CW 27092	7	2.3 (23)	2.1 (39)	1.7 (29)	1.9 (15)	1.1 (36)	9.1 (29)	GHIJKL	103.5
CW 26089	6	1.9 (44)	2.4 (16)	1.8 (24)	1.8 (26)	1.3 (22)	9.1 (30)	GHIJKL	103.4
SW 9803	9	2.2 (31)	2.2 (32)	1.7 (37)	1.7 (29)	1.2 (24)	9.0 (33)	HIJKL	102.1
MEAN		2.24	2.33	1.78	1.80	1.24	9.38		
CV		12.0	11.4	10.6	15.8	17.9	8.1		
LSD (0.1)		0.32	0.32	0.22	0.34	0.26	0.91		

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 6. 2009-2010 YIELDS. UC DAVIS ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 9/25/08**

		2009	2010	Average		% of
	FD	Yield	Yield			CUF101
			Dry t/a			%
<b>Released Varieties</b>						
HybriForce 620	6	13.0 ( 2)	10.5 ( 1)	11.7 ( 1)	A	128.2
Magna 801 FQ	8	13.1 ( 1)	9.8 (13)	11.4 ( 2)	A B	125.0
PGI 709	7	12.5 ( 5)	10.1 ( 8)	11.3 ( 4)	A B C	123.4
WL 530HQ	8	12.7 ( 3)	9.8 (15)	11.2 ( 5)	A B C D	122.9
HybriForce 800	8	12.4 ( 7)	10.0 ( 9)	11.2 ( 6)	A B C D E	122.6
58R51 RR	8	12.1 (16)	10.3 ( 3)	11.2 ( 8)	A B C D E	122.5
Conquistador	8	12.1 (19)	10.2 ( 4)	11.1 ( 9)	A B C D E F	121.7
Integra 8800	8	12.0 (20)	10.2 ( 5)	11.1 (10)	A B C D E F	121.2
Arriba II	7	12.3 ( 9)	9.4 (22)	10.9 (13)	A B C D E F G H I	118.5
56S82	6	12.3 (11)	9.3 (25)	10.8 (15)	B C D E F G H I	117.6
Pacifico	9	12.1 (18)	9.3 (23)	10.7 (17)	B C D E F G H I J	117.0
GrandSlam	8	11.3 (26)	10.1 ( 6)	10.7 (19)	B C D E F G H I J	116.7
HybriForce 700	7	11.1 (31)	10.1 ( 7)	10.6 (20)	B C D E F G H I J	115.8
Magna 788	7	11.4 (22)	9.7 (18)	10.6 (22)	B C D E F G H I J	115.4
8R100	8	12.3 (10)	8.8 (38)	10.6 (24)	B C D E F G H I J	115.3
Integra 8600	6	11.2 (29)	9.8 (14)	10.5 (25)	C D E F G H I J K	114.9
PGI 608	6	12.2 (13)	8.9 (37)	10.5 (26)	C D E F G H I J K	114.7
Tango	6	11.4 (23)	9.5 (19)	10.5 (27)	C D E F G H I J K	114.3
Archer III	5	11.6 (21)	9.0 (32)	10.3 (29)	E F G H I J K L	112.8
Artesian Sunrise	7	11.3 (27)	9.3 (24)	10.3 (30)	F G H I J K L	112.5
Magna 995	9	11.3 (24)	9.3 (27)	10.3 (31)	F G H I J K L	112.3
Sutter	6	10.9 (35)	9.2 (28)	10.1 (34)	I J K L M N	110.0
Integra 8801R	8	11.0 (33)	9.0 (34)	10.0 (35)	I J K L M N O	109.4
Dura 843	8	10.8 (36)	8.9 (35)	9.8 (36)	J K L M N O P	107.4
Cisco	6	10.4 (37)	8.9 (36)	9.6 (37)	K L M N O P Q	105.3
TruTest	6	10.1 (41)	9.0 (31)	9.5 (38)	L M N O P Q	104.3
Lightning IV	4	10.3 (38)	8.7 (40)	9.5 (39)	L M N O P Q	103.9
DKA 50-18	5	10.3 (39)	8.4 (42)	9.3 (40)	M N O P Q R	102.1
WL 440HQ	5	9.7 (43)	8.7 (41)	9.2 (41)	N O P Q R	100.5
Cuf 101	9	9.5 (44)	8.8 (39)	9.2 (42)	O P Q R	100.0
4R200	4	10.2 (40)	8.0 (43)	9.1 (43)	P Q R	99.4
Integra 8401R	4	9.8 (42)	7.8 (45)	8.8 (44)	Q R	96.4
6R100	6	9.2 (45)	7.9 (44)	8.6 (45)	R	93.4
<b>Experimental Varieties</b>						
DS 067348	8	12.7 ( 4)	10.0 (10)	11.3 ( 3)	A B C	123.7
SW 9812	9	12.5 ( 6)	9.9 (11)	11.2 ( 7)	A B C D E	122.5
FG 83T048	8	12.4 ( 8)	9.8 (16)	11.1 (11)	A B C D E F G	121.1
SW 9813	9	12.2 (12)	9.8 (17)	11.0 (12)	A B C D E F G H	120.0
DS 071842	6	12.1 (17)	9.5 (20)	10.8 (14)	B C D E F G H I	117.7
DS 077601	8	12.2 (14)	9.3 (26)	10.7 (16)	B C D E F G H I J	117.0
DS 067092	8	11.0 (34)	10.4 ( 2)	10.7 (18)	B C D E F G H I J	116.9
SW 9803	9	12.1 (15)	9.0 (33)	10.6 (21)	B C D E F G H I J	115.4
CW 38065	8	11.2 (30)	9.9 (12)	10.6 (23)	B C D E F G H I J	115.4
SW 9816	9	11.3 (25)	9.4 (21)	10.4 (28)	D E F G H I J K L	113.2
CW 26089	6	11.3 (28)	9.1 (30)	10.2 (32)	G H I J K L M	111.3
CW 27092	7	11.1 (32)	9.1 (29)	10.1 (33)	H I J K L M N	110.3
MEAN		11.47	9.38	10.42		
CV		9.1	8.1	7.3		
LSD (0.1)		1.24	0.91	0.91		

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) LS

FD = Fall Dormancy reported by seed companies.

**TABLE 7. 2010 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 5-May	Cut 2 2-Jun	Cut 3 1-Jul	Cut 4 28-Jul	Cut 5 27-Aug	Cut 6 30-Sep	Cut 7 3-Nov	YEAR TOTAL	% of CUF101
	FD	Dry t/a								%
<b>Released Varieties</b>										
AL 999	9	2.1 (28)	1.8 (9)	2.4 (2)	2.1 (2)	1.9 (2)	1.4 (1)	1.1 (2)	12.8 (2)	AB 157.2
Pacifico	9	2.2 (24)	1.9 (3)	2.3 (4)	2.0 (3)	1.7 (7)	1.3 (7)	1.0 (8)	12.4 (4)	ABC 152.3
HybriForce-800	8	2.6 (2)	2.0 (1)	2.3 (6)	1.7 (17)	1.5 (22)	1.2 (13)	1.0 (12)	12.3 (5)	ABCD 150.7
WL 625HQ	9	2.1 (29)	1.7 (17)	2.1 (11)	1.9 (5)	1.9 (3)	1.3 (4)	1.1 (4)	12.2 (8)	ABCDEF 149.5
Integra 8800	8	2.3 (10)	1.8 (6)	2.1 (17)	1.9 (8)	1.6 (14)	1.3 (5)	1.0 (18)	11.9 (9)	ABCDEF G 146.6
Daytona	8	2.3 (11)	1.9 (5)	2.1 (13)	1.7 (18)	1.5 (18)	1.2 (17)	1.0 (14)	11.7 (12)	ABCDEF GHI 143.7
Pinal 9 RR	9	1.9 (47)	1.6 (32)	2.2 (7)	1.8 (9)	1.8 (5)	1.2 (8)	0.9 (34)	11.6 (14)	ABCDEF GHI J 142.0
Tripleplay	9	2.4 (6)	1.6 (35)	1.9 (26)	1.7 (21)	1.6 (15)	1.1 (26)	1.0 (9)	11.3 (19)	ABCDEF GHI J KL 138.6
SP 806	8	2.3 (12)	1.8 (14)	2.0 (22)	1.7 (22)	1.4 (25)	1.2 (19)	0.9 (28)	11.2 (20)	ABCDEF GHI J KLM 137.8
Saltana(SW9332)	9	1.9 (53)	1.6 (41)	2.1 (15)	1.8 (12)	1.6 (16)	1.2 (13)	1.0 (17)	11.1 (22)	ABCDEF GHI J KLM 135.8
Desert Sun 8.10RR	8	2.0 (44)	1.6 (39)	1.9 (25)	1.7 (20)	1.7 (10)	1.2 (15)	1.0 (15)	11.0 (23)	ABCDEF GHI J KLM 135.4
Integra 8900	9	2.1 (27)	1.6 (34)	1.9 (27)	1.6 (33)	1.5 (23)	1.2 (16)	1.0 (7)	10.8 (26)	ABCDEF GHI J KLM 133.1
Magna 995	9	2.5 (4)	1.8 (12)	1.8 (35)	1.6 (25)	1.2 (42)	1.0 (34)	0.9 (35)	10.8 (27)	ABCDEF GHI J KLM 132.9
Magna 801FQ	8	2.2 (17)	1.7 (29)	2.0 (23)	1.7 (23)	1.3 (31)	1.0 (44)	0.9 (32)	10.7 (28)	ABCDEF GHI J KLMN 131.6
AR-2	9	2.7 (1)	1.7 (27)	1.7 (39)	1.5 (42)	1.2 (40)	1.0 (35)	0.9 (40)	10.6 (29)	ABCDEF GHI J KLMN 130.4
AR-21	9	2.2 (20)	1.7 (30)	1.8 (32)	1.6 (31)	1.3 (30)	1.1 (29)	0.8 (49)	10.5 (31)	BCDEF GHI J KLMNO 128.7
UC Impalo	9	2.0 (39)	1.5 (43)	2.0 (20)	1.6 (27)	1.2 (41)	0.9 (48)	0.8 (43)	10.2 (37)	CDEF GHI J KLMNOP 125.8
Magna 801FQ+Optimize	8	2.0 (43)	1.5 (43)	1.9 (28)	1.6 (30)	1.3 (34)	1.0 (38)	0.9 (30)	10.2 (38)	CDEF GHI J KLMNOP 125.5
DKA84-10 RR	8	1.9 (51)	1.6 (33)	1.8 (34)	1.6 (29)	1.3 (38)	1.0 (31)	0.9 (39)	10.1 (41)	CDEF GHI J KLMNOP 124.2
WL 535HQ	8	2.1 (36)	1.5 (46)	1.8 (36)	1.5 (41)	1.3 (32)	1.0 (42)	0.9 (37)	10.0 (42)	CDEF GHI J KLMNOP 122.7
RRALF-8R100	8	2.1 (30)	1.4 (53)	1.7 (42)	1.5 (39)	1.3 (37)	1.0 (36)	0.8 (48)	9.9 (43)	DEF GHI J KLMNOP 121.1
HybriForce-620	6	2.4 (5)	1.6 (38)	1.6 (51)	1.4 (48)	1.1 (47)	0.9 (51)	0.8 (44)	9.8 (44)	DEF GHI J KLMNOP 120.8
AR-9	9	2.1 (25)	1.6 (40)	1.7 (41)	1.4 (45)	1.1 (45)	1.0 (45)	0.8 (52)	9.8 (45)	EF GHI J KLMNOP 119.8
Grandslam	8	2.3 (14)	1.7 (24)	1.6 (50)	1.3 (53)	1.0 (52)	1.0 (46)	0.9 (26)	9.7 (46)	F GHI J KLMNOP 119.7
Integra 8801R RR	8	1.9 (52)	1.5 (50)	1.7 (38)	1.4 (43)	1.3 (34)	1.0 (41)	0.8 (50)	9.7 (47)	GHI J KLMNOP 118.6
CG9	9	1.9 (48)	1.5 (47)	1.7 (46)	1.3 (49)	1.1 (48)	1.0 (43)	0.8 (46)	9.4 (48)	HI J KLMNOP 115.1
Revolution RR	8	1.7 (57)	1.5 (48)	1.7 (40)	1.4 (44)	1.2 (43)	0.9 (50)	0.8 (55)	9.2 (50)	J KLMNOP 113.5
Ameristand 855 RR	8	1.9 (46)	1.5 (45)	1.6 (49)	1.3 (51)	1.1 (51)	0.9 (52)	0.8 (53)	9.2 (51)	J KLMNOP 112.5
Dura 843	8	1.9 (48)	1.4 (52)	1.5 (55)	1.1 (56)	0.9 (55)	0.9 (54)	0.7 (57)	8.4 (55)	NOP 102.8
CUF101	9	1.8 (56)	1.4 (56)	1.6 (52)	1.2 (54)	0.8 (57)	0.7 (57)	0.7 (56)	8.1 (56)	OP 100.0
59N59	9	2.0 (45)	1.3 (57)	1.2 (57)	1.1 (57)	0.8 (56)	0.8 (56)	0.8 (54)	7.8 (57)	P 96.1
<b>Experimental Varieties</b>										
FG-95T284	9	2.4 (9)	1.9 (4)	2.4 (3)	1.9 (6)	1.9 (1)	1.4 (2)	1.1 (1)	13.0 (1)	A 159.7
FG-95T284+Optimize	9	2.1 (31)	1.8 (11)	2.3 (5)	1.9 (7)	1.9 (4)	1.4 (3)	1.1 (3)	12.4 (3)	ABC 152.4
SW8421	8	2.1 (34)	1.8 (7)	2.4 (1)	2.1 (1)	1.8 (6)	1.2 (21)	0.9 (25)	12.2 (6)	ABCD 149.9
DS736	8	2.4 (8)	2.0 (2)	2.2 (9)	2.0 (4)	1.6 (12)	1.2 (12)	0.9 (21)	12.2 (7)	ABCDE 149.8
DS732	8	2.6 (3)	1.7 (19)	2.0 (19)	1.8 (10)	1.5 (21)	1.2 (18)	1.0 (10)	11.8 (10)	ABCDEF GH 145.0
CW 39060	9	2.3 (15)	1.8 (8)	2.2 (8)	1.7 (19)	1.5 (18)	1.2 (9)	0.9 (27)	11.7 (11)	ABCDEF GHI 144.3
9102	9	2.0 (42)	1.8 (15)	2.2 (10)	1.8 (16)	1.7 (8)	1.3 (6)	1.0 (5)	11.7 (13)	ABCDEF GHI 143.5
9101	9	2.0 (40)	1.7 (21)	2.1 (12)	1.8 (15)	1.7 (9)	1.2 (10)	0.9 (22)	11.5 (15)	ABCDEF GHI J K 140.8
R96BD105 RR	9	2.1 (38)	1.7 (27)	2.1 (14)	1.8 (13)	1.6 (11)	1.2 (20)	1.0 (16)	11.4 (16)	ABCDEF GHI J KL 139.7
PGI 1007 BA	10	2.2 (21)	1.7 (22)	2.1 (16)	1.8 (11)	1.5 (20)	1.1 (25)	1.0 (12)	11.4 (17)	ABCDEF GHI J KL 139.7
FG-85M282	8	2.4 (7)	1.8 (9)	2.0 (18)	1.6 (25)	1.3 (29)	1.1 (24)	0.9 (20)	11.3 (18)	ABCDEF GHI J KL 138.7
CW 39087	9	1.9 (50)	1.7 (23)	2.0 (21)	1.8 (14)	1.6 (13)	1.1 (22)	1.0 (6)	11.1 (21)	ABCDEF GHI J KLM 136.5
SW115	9	2.1 (35)	1.6 (37)	2.0 (24)	1.6 (28)	1.5 (17)	1.2 (11)	1.0 (11)	11.0 (24)	ABCDEF GHI J KLM 134.9
DS733	9	2.2 (22)	1.8 (13)	1.9 (29)	1.6 (24)	1.4 (24)	1.1 (23)	0.9 (24)	11.0 (25)	ABCDEF GHI J KLM 134.5
R95BD104 RR	9	2.2 (16)	1.6 (42)	1.8 (33)	1.6 (32)	1.3 (39)	1.1 (27)	1.0 (18)	10.5 (30)	BCDEF GHI J KLMNO 128.8
FG-85M282+Optimize	8	2.1 (37)	1.7 (20)	1.9 (30)	1.5 (38)	1.4 (28)	1.1 (28)	0.9 (36)	10.5 (32)	BCDEF GHI J KLMNO 128.4
DS0571-Optimize	7	2.2 (18)	1.7 (26)	1.7 (43)	1.5 (35)	1.3 (36)	1.0 (33)	0.9 (32)	10.3 (33)	CDEF GHI J KLMNO 126.9
DS735	7	2.1 (33)	1.7 (17)	1.7 (37)	1.5 (36)	1.4 (27)	1.0 (32)	0.8 (47)	10.3 (34)	CDEF GHI J KLMNO 126.7
CW 19065	8	2.2 (23)	1.7 (16)	1.8 (31)	1.5 (37)	1.1 (46)	1.0 (39)	0.9 (23)	10.3 (35)	CDEF GHI J KLMNO 126.7
DS0571	7	2.2 (19)	1.7 (31)	1.7 (47)	1.5 (40)	1.4 (26)	1.0 (40)	0.9 (29)	10.3 (36)	CDEF GHI J KLMNO 126.3
DS734	7	2.3 (13)	1.7 (25)	1.7 (44)	1.4 (45)	1.2 (44)	1.0 (47)	0.9 (31)	10.2 (39)	CDEF GHI J KLMNOP 124.7
CW 36106	7	2.1 (32)	1.6 (36)	1.7 (48)	1.6 (34)	1.3 (33)	1.0 (30)	0.9 (41)	10.1 (40)	CDEF GHI J KLMNOP 124.3
Chema 1	9	2.0 (41)	1.5 (49)	1.7 (45)	1.4 (47)	1.0 (53)	0.9 (53)	0.9 (38)	9.3 (49)	I J KLMNOP 114.4
SW120	9	1.8 (55)	1.4 (55)	1.6 (53)	1.3 (50)	1.1 (49)	1.0 (36)	0.9 (42)	9.0 (52)	KL MNOP 111.1
R95BD106 RR	9	1.9 (54)	1.4 (54)	1.5 (54)	1.3 (52)	1.1 (50)	0.9 (49)	0.8 (45)	9.0 (53)	L MNOP 110.0
PGI 801	8	2.1 (26)	1.5 (51)	1.4 (56)	1.2 (55)	0.9 (54)	0.8 (55)	0.8 (51)	8.8 (54)	MNOP 108.2
MEAN		2.14	1.66	1.89	1.60	1.38	1.08	0.91	10.64	
CV		13.3	14.5	25.8	27.2	38.5	24.0	11.5	19.4	
LSD (0.1)		0.34	0.28	NS	NS	NS	0.31	0.12	2.44	

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 8. 2008-2010 YIELDS, UC KEARNEY ALFALFA CULTIVAR TRIAL. Trial planted 09/13/2007

		2008	2009	2010	Average		% of
	FD	Yield	Yield	Yield			CUF 101
		Dry t/a					%
<b>Released Varieties</b>							
AL 999	9	13.6 ( 8)	12.1 ( 1)	12.8 ( 2)	12.8 ( 2)	AB	131.1
HybriForce-800	8	13.8 ( 5)	12.1 ( 2)	12.3 ( 5)	12.7 ( 3)	ABC	130.0
Pacifico	9	13.1 (17)	12.1 ( 5)	12.4 ( 4)	12.5 ( 5)	ABCD	127.9
WL 625HQ	9	13.8 ( 4)	11.3 (14)	12.2 ( 8)	12.4 ( 7)	ABCDE	126.7
Daytona	8	13.4 (12)	11.2 (17)	11.7 (12)	12.1 ( 9)	ABCDEFG	123.8
Tripleplay	9	13.1 (15)	11.8 ( 7)	11.3 (19)	12.1 (12)	ABCDEFGH	123.4
SP 806	8	13.5 (10)	11.2 (18)	11.2 (20)	12.0 (16)	ABCDEFGH	122.3
Integra 8800	8	12.1 (41)	11.2 (16)	11.9 ( 9)	11.7 (21)	ABCDEFGH I J K	119.9
Integra 8900	9	12.7 (24)	10.9 (28)	10.8 (26)	11.5 (24)	BCDEFGH I J K L M	117.3
Magna 995	9	12.7 (25)	10.9 (26)	10.8 (27)	11.5 (25)	BCDEFGH I J K L M	117.2
Pinal 9 RR	9	12.3 (35)	10.5 (34)	11.6 (14)	11.5 (26)	BCDEFGH I J K L M	117.1
Desert Sun 8.10RR	8	12.7 (23)	10.6 (33)	11.0 (23)	11.4 (27)	BCDEFGH I J K L M	116.7
Magna 801FQ	8	12.1 (40)	11.1 (21)	10.7 (28)	11.3 (29)	BCDEFGH I J K L M N	115.7
UC Impalo	9	12.5 (32)	10.6 (32)	10.2 (37)	11.1 (34)	DEFGH I J K L M N O	113.6
HybriForce-620	6	12.6 (29)	10.4 (37)	9.8 (44)	11.0 (36)	DEFGH I J K L M N O P	112.1
WL 535HQ	8	11.9 (42)	11.0 (23)	10.0 (42)	11.0 (37)	DEFGH I J K L M N O P	112.0
Grandslam	8	12.4 (33)	10.5 (36)	9.7 (46)	10.9 (38)	EFGH I J K L M N O P Q	111.2
Magna 801FQ+Optimize	8	11.6 (44)	10.8 (30)	10.2 (38)	10.9 (39)	EFGH I J K L M N O P Q	111.2
AR-21	9	11.7 (43)	9.8 (47)	10.5 (31)	10.7 (40)	FGH I J K L M N O P Q	109.0
AR-2	9	11.6 (47)	9.6 (50)	10.6 (29)	10.6 (42)	GH I J K L M N O P Q	108.2
DKA84-10 RR	8	11.5 (49)	10.1 (40)	10.1 (41)	10.6 (43)	GH I J K L M N O P Q	108.1
CG9	9	12.4 (34)	9.9 (44)	9.4 (48)	10.5 (45)	GH I J K L M N O P Q	107.6
RRALF-8R100	8	11.5 (48)	9.4 (52)	9.9 (43)	10.2 (48)	J K L M N O P Q	104.7
Ameristand 855 RR	8	12.1 (38)	9.0 (55)	9.2 (51)	10.1 (50)	L M N O P Q	103.1
Integra 8801R RR	8	10.7 (56)	9.8 (48)	9.7 (47)	10.0 (51)	M N O P Q	102.6
AR-9	9	11.1 (52)	8.9 (56)	9.8 (45)	9.9 (52)	M N O P Q	101.1
CUF101	9	11.3 (50)	9.9 (43)	8.1 (56)	9.8 (54)	N O P Q	100.0
Revolution RR	8	10.6 (57)	8.8 (57)	9.2 (50)	9.6 (55)	O P Q	97.8
Dura 843	8	10.9 (53)	9.2 (53)	8.4 (55)	9.5 (56)	P Q	97.1
59N59	9	11.3 (51)	9.0 (54)	7.8 (57)	9.4 (57)	Q	95.6
<b>Experimental Varieties</b>							
FG-95T284	9	14.7 ( 1)	12.1 ( 3)	13.0 ( 1)	13.3 ( 1)	A	135.6
FG-95T284+Optimize	9	13.9 ( 2)	11.3 (12)	12.4 ( 3)	12.5 ( 4)	ABCD	128.2
SW8421	8	13.2 (13)	12.1 ( 4)	12.2 ( 6)	12.5 ( 6)	ABCD	127.9
DS736	8	13.1 (16)	11.5 (10)	12.2 ( 7)	12.2 ( 8)	ABCDE	125.1
9102	9	12.6 (28)	12.0 ( 6)	11.7 (13)	12.1 (10)	ABCDEFG	123.5
PGI 1007 BA	10	13.8 ( 6)	11.1 (20)	11.4 (17)	12.1 (11)	ABCDEFG	123.5
CW 39060	9	13.6 ( 9)	10.9 (25)	11.7 (11)	12.1 (13)	ABCDEFGH	123.3
R96BD105 RR	9	13.7 ( 7)	11.0 (22)	11.4 (16)	12.0 (14)	ABCDEFGH	123.0
CW 39087	9	13.5 (11)	11.3 (13)	11.1 (21)	12.0 (15)	ABCDEFGH	122.3
SW9332	9	13.1 (18)	11.7 ( 8)	11.1 (22)	12.0 (17)	ABCDEFGH	122.1
DS732	8	12.6 (27)	11.2 (19)	11.8 (10)	11.9 (18)	ABCDEFGH I	121.3
R95BD104 RR	9	13.9 ( 3)	11.2 (15)	10.5 (30)	11.9 (19)	ABCDEFGH I	121.3
9101	9	12.5 (31)	11.4 (11)	11.5 (15)	11.8 (20)	ABCDEFGH I J	120.3
FG-85M282	8	12.9 (20)	10.8 (29)	11.3 (18)	11.7 (22)	BCDEFGH I J K L	119.1
DS733	9	12.5 (30)	11.0 (24)	11.0 (25)	11.5 (23)	BCDEFGH I J K L M	117.3
CW 19065	8	13.2 (14)	10.6 (31)	10.3 (35)	11.4 (28)	BCDEFGH I J K L M N	116.1
CW 36106	7	12.9 (19)	10.9 (27)	10.1 (40)	11.3 (30)	BCDEFGH I J K L M N	115.5
SW115	9	12.2 (37)	10.5 (35)	11.0 (24)	11.2 (31)	CDEFGH I J K L M N	114.6
Chema 1	9	12.7 (26)	11.5 ( 9)	9.3 (49)	11.2 (32)	CDEFGH I J K L M N	114.1
DS0571-Optimize	7	12.7 (22)	10.3 (38)	10.3 (33)	11.1 (33)	DEFGH I J K L M N O	113.7
FG-85M282+Optimize	8	12.8 (21)	10.1 (41)	10.5 (32)	11.1 (35)	DEFGH I J K L M N O	113.5
DS735	7	11.6 (45)	10.0 (42)	10.3 (34)	10.7 (41)	GH I J K L M N O P Q	108.8
DS0571	7	11.6 (46)	9.8 (46)	10.3 (36)	10.6 (44)	GH I J K L M N O P Q	107.9
R95BD106 RR	9	12.3 (36)	10.2 (39)	9.0 (53)	10.5 (46)	H I J K L M N O P Q	107.2
DS734	7	10.9 (54)	9.9 (45)	10.2 (39)	10.3 (47)	I J K L M N O P Q	105.3
PGI 801	8	12.1 (39)	9.5 (51)	8.8 (54)	10.2 (49)	K L M N O P Q	103.7
SW120	9	10.8 (55)	9.6 (49)	9.0 (52)	9.8 (53)	N O P Q	100.2
MEAN		12.49	10.66	10.64	11.26		
CV		11.6	10.2	19.4	11.9		
LSD (0.1)		1.72	1.29	2.44	1.59		

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 11. 2010 YIELDS, LANCASTER ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 9/15/09**

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

		Cut 1 30-Apr	Cut 2 7-Jun	Cut 3 9-Jul	Cut 4 18-Aug	Cut 5 14-Sep	YEAR TOTAL		% of CUF101
	FD	Dry t/a							%
<b>Released Varieties</b>									
HybriForce-620	6	2.1 ( 1)	1.7 ( 5)	1.9 ( 1)	1.8 ( 3)	1.8 ( 4)	9.4 ( 1)	A	122.9
HybriForce-700	7	2.0 (10)	1.8 ( 2)	1.8 ( 8)	1.8 ( 4)	1.8 ( 7)	9.1 ( 2)	AB	119.4
Integra 8600	6	1.9 (13)	1.7 ( 4)	1.8 ( 2)	1.9 ( 1)	1.7 (15)	9.1 ( 3)	AB	119.0
HybriForce-2600(DS071842)	6	1.9 (16)	1.9 ( 1)	1.8 ( 6)	1.7 (14)	1.8 (11)	9.0 ( 4)	ABC	117.9
PGI 709	7	2.1 ( 2)	1.5 (20)	1.8 ( 5)	1.8 ( 6)	1.8 ( 9)	8.9 ( 6)	ABCD	116.8
Arriba II	7	2.0 ( 6)	1.7 ( 6)	1.7 (18)	1.7 ( 8)	1.7 (12)	8.9 ( 7)	ABCD	116.7
PGI 704	7	1.9 (12)	1.7 ( 3)	1.7 (17)	1.8 ( 2)	1.7 (22)	8.8 ( 8)	ABCDE	116.3
Bar 9242	8.5	1.8 (19)	1.6 ( 9)	1.8 ( 7)	1.7 (12)	1.9 ( 2)	8.7 (10)	ABCDEF	114.4
GrandSlam	8	2.0 ( 7)	1.6 (12)	1.6 (22)	1.7 (11)	1.8 (10)	8.7 (11)	ABCDEF	114.2
Pacifico	9	1.9 (15)	1.6 ( 7)	1.8 ( 3)	1.6 (19)	1.7 (14)	8.7 (12)	ABCDEF	114.1
HybriForce-800	8	2.1 ( 4)	1.4 (22)	1.7 ( 9)	1.7 ( 9)	1.7 (21)	8.7 (13)	ABCDEFG	113.9
WL 440HQ	6	2.1 ( 3)	1.5 (16)	1.6 (20)	1.7 (13)	1.7 (24)	8.6 (15)	BCDEFG	112.9
AmeriStand 803	8	1.9 (14)	1.5 (17)	1.7 (15)	1.6 (26)	1.8 ( 5)	8.5 (16)	BCDEFG	111.7
Medina	8.5	1.7 (20)	1.6 (13)	1.7 (10)	1.7 (10)	1.7 (13)	8.5 (17)	BCDEFG	111.4
Integra 8800	8	1.8 (17)	1.6 (10)	1.6 (24)	1.8 ( 5)	1.7 (19)	8.4 (18)	BCDEFG	111.0
Highline	9	1.7 (22)	1.5 (19)	1.7 (11)	1.7 ( 7)	1.8 ( 6)	8.4 (19)	BCDEFG	110.0
WL 363HQ	5	1.8 (18)	1.5 (15)	1.6 (21)	1.6 (24)	1.7 (17)	8.2 (20)	CDEFGH	108.1
Moapa 69	8	1.6 (23)	1.4 (24)	1.7 (19)	1.6 (18)	1.7 (20)	8.1 (23)	FGHI	106.1
Cuf 101	9	1.4 (26)	1.3 (27)	1.6 (25)	1.6 (17)	1.7 (18)	7.6 (25)	HI	100.0
WL-535	8	1.5 (24)	1.5 (21)	1.7 (13)	1.6 (16)	1.6 (26)	7.9 (24)	GHI	104.1
TechAg844		1.4 (25)	1.3 (25)	1.5 (26)	1.6 (23)	1.7 (23)	7.5 (26)	HI	98.6
<b>Experimental Varieties</b>									
CW 058071	8	2.0 ( 8)	1.6 (11)	1.8 ( 4)	1.6 (20)	1.9 ( 1)	8.9 ( 5)	ABCD	117.2
DS077661	6	2.1 ( 5)	1.6 ( 8)	1.7 (12)	1.6 (15)	1.8 ( 8)	8.8 ( 9)	ABCDEF	116.0
DS067092	8	2.0 (11)	1.6 (14)	1.7 (14)	1.6 (21)	1.8 ( 3)	8.6 (14)	ABCDEFG	113.6
CW 057072	7	2.0 ( 9)	1.4 (23)	1.7 (16)	1.6 (27)	1.5 (27)	8.2 (21)	DEFGH	107.9
FG 65T077		1.7 (21)	1.5 (18)	1.6 (23)	1.6 (25)	1.7 (16)	8.1 (22)	EFGHI	106.5
UC451		1.4 (27)	1.3 (26)	1.5 (27)	1.6 (22)	1.7 (25)	7.4 (27)	I	97.1
MEAN		1.84	1.56	1.69	1.67	1.74	8.50		
CV		11.2	11.9	8.5	8.2	8.8	6.1		
LSD (0.1)		0.30	0.27	0.21	NS	NS	0.75		

Trial seeded at 25 lb/acre viable seed in Lancaster, 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. 2010 YIELDS, WSREC ALFALFA SALINITY TRIAL. TRIAL PLANTED 10/27/09**

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	
		25-May	29-Jun	3-Aug	2-Sep	TOTAL		CUF101	
	FD	Dry t/a							%
<b>Released Varieties</b>									
<b>Medina</b>	8.5	3.1 ( 4)	3.2 ( 1)	2.9 ( 1)	1.6 ( 4)	10.9 ( 1)	A		108.1
<b>Hybriforce 800</b>	8	3.1 ( 3)	3.0 ( 2)	2.9 ( 2)	1.7 ( 2)	10.7 ( 2)	AB		106.4
<b>CW 485</b>	8	2.8 (16)	3.0 ( 4)	2.9 ( 3)	1.7 ( 1)	10.3 ( 5)	ABCDE		102.6
<b>Highline</b>	9	3.2 ( 1)	2.8 (10)	2.6 (16)	1.4 (13)	10.1 ( 6)	ABCDEF		100.2
<b>CUF101</b>	9	3.0 ( 9)	2.9 ( 5)	2.6 (11)	1.5 ( 8)	10.1 ( 7)	ABCDEF		100.0
<b>CW 95</b>	9	2.8 (18)	2.8 ( 9)	2.8 ( 5)	1.6 ( 5)	10.0 ( 8)	ABCDEF		99.9
<b>UC 452</b>		2.9 (12)	2.9 ( 7)	2.8 ( 7)	1.5 (10)	10.0 ( 9)	ABCDEF		99.8
<b>CW 8028</b>	8	3.0 ( 7)	2.9 ( 8)	2.7 (10)	1.4 (21)	9.9 (10)	ABCDEF		98.3
<b>CW 585</b>	8	3.0 ( 6)	2.8 (12)	2.6 (18)	1.4 (14)	9.8 (11)	BCDEF		97.5
<b>WL 656HQ</b>	9	2.7 (19)	2.7 (16)	2.7 ( 8)	1.5 ( 9)	9.7 (12)	BCDEFG		96.9
<b>Magna 995</b>	9	2.7 (21)	2.8 (11)	2.6 (13)	1.6 ( 6)	9.7 (13)	BCDEFG		96.8
<b>GrandSlam</b>	8	2.9 (13)	2.8 (15)	2.6 (15)	1.4 (16)	9.6 (16)	CDEFG		95.8
<b>Ameristand 901STQ</b>	9	2.7 (20)	2.7 (19)	2.6 (14)	1.5 (12)	9.6 (17)	CDEFG		95.1
<b>BAR 9242</b>	8.5	2.5 (24)	2.6 (21)	2.6 (12)	1.4 (18)	9.2 (21)	FG		91.9
<b>AmeriStand 803</b>	8	2.8 (15)	2.5 (23)	2.4 (22)	1.4 (19)	9.2 (22)	FG		91.1
<b>Integra 8900</b>	9	2.9 (11)	2.7 (20)	2.3 (24)	1.3 (24)	9.1 (23)	FG		90.7
<b>SW9803</b>	9	2.6 (23)	2.4 (24)	2.4 (21)	1.3 (22)	8.8 (24)	G		87.3
<b>Experimental Varieties</b>									
<b>FG 94T02</b>	9	2.9 (10)	3.0 ( 3)	2.8 ( 4)	1.6 ( 3)	10.4 ( 3)	ABC		103.7
<b>DS077661</b>	8	3.1 ( 2)	2.9 ( 6)	2.8 ( 6)	1.5 ( 7)	10.4 ( 4)	ABCD		103.2
<b>DS593</b>	9	3.0 ( 8)	2.8 (14)	2.5 (19)	1.4 (16)	9.7 (14)	CDEFG		96.4
<b>FG 96T707</b>	9	2.9 (13)	2.7 (16)	2.6 (16)	1.5 (11)	9.7 (15)	CDEFG		96.3
<b>DS067092</b>	8	3.1 ( 5)	2.8 (13)	2.4 (23)	1.3 (23)	9.5 (18)	CDEFG		95.0
<b>SW9812</b>	9	2.8 (17)	2.6 (22)	2.7 ( 9)	1.4 (19)	9.4 (19)	DEFG		93.6
<b>FG 96T706</b>	9	2.7 (22)	2.7 (18)	2.5 (20)	1.4 (14)	9.4 (20)	EFG		93.3
<b>MEAN</b>		2.88	2.80	2.64	1.47	9.80			
<b>CV</b>		8.5	12.6	15.1	18.3	10.2			
<b>LSD (0.1)</b>		0.24	NS	NS	NS	0.99			

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

Trial irrigated from pond with EC of 5.0-5.6

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.

**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 <sup>1</sup>
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)

<sup>1</sup> 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	<a href="mailto:rschmidt@allied.com">rschmidt@allied.com</a>
America's Alfalfa	Joe Machado	1041 Jackson Ave.	Los Banos, CA	93635	209-826-9442	209-826-8842	<a href="mailto:machado@americasalfalfa.com">machado@americasalfalfa.com</a>
Cal/West Seeds	Jon Reich	38001 Country Road 27	Woodland, CA	95695	530-666-3331	530-666-1464	<a href="mailto:j.reich@Calwestseeds.com">j.reich@Calwestseeds.com</a>
Croplan Genetics	Dennis Gehler	1080 County Road F West	St. Paul, MN	98425	651-765-5710	651-765-5727	<a href="mailto:djgehler@landolakes.com">djgehler@landolakes.com</a>
Dairyland Seed Co.	Dan Gardner	13147 Jackson Hwy.	Sloughouse, CA	95683	916-682-3215	916-682-8435	<a href="mailto:dgardner@dairylandseed.com">dgardner@dairylandseed.com</a>
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	<a href="mailto:jscallin@aol.com">jscallin@aol.com /</a>
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	<a href="mailto:delkins@foragegenetics.com">delkins@foragegenetics.com</a>
W-L Research	Cory Ritz	903 W. 500 South	Farmington, UT	84025	801-971-5359	801-451-9699	<a href="mailto:critz@wresearch.com">critz@wresearch.com</a>
Great Plains Research	Thad Busbice	3624 Kildaire Farm Rd	Cary NC.	27518	919-362-1583	919-387-7918	<a href="mailto:alfalfa@greatplainsresearch.com">alfalfa@greatplainsresearch.com</a>
Kamprath Seed Co.	Alan Steigerwald	205 Stockton St.	Manteca, CA	95337	209-823-6242	209-823-2582	<a href="mailto:alan@kamprathseed.com">alan@kamprathseed.com</a>
Lockhart Seeds, Inc.	Ian Lockhart	3 N. Wilson Way	Stockton, CA	95201	209-466-4401	209-466-9766	<a href="mailto:lockhartstd@aol.com">lockhartstd@aol.com</a>
Monsanto Golbal Seed Group	Bill Cox	2401 S.E. Cottonwood Cir	Visalia, CA	93277	559-909-0668	559-627-0742	<a href="mailto:bill.cox@monsanto.com">bill.cox@monsanto.com</a>
Monsanto Golbal Seed Group	Barbara Kutzner	1428 N. Locan Ave	Fresno, CA	93727	559-453-0740	559-453-0771	<a href="mailto:barbara.u.kutzner@monsanto.com">barbara.u.kutzner@monsanto.com</a>
Novartis Seeds Inc.	Don Barcellos	11939A Sugarmill Rd.	Longmont,CO	80501	800-521-7021	303-682-2482	<a href="mailto:don.barcellos@seeds.novartis.com">don.barcellos@seeds.novartis.com</a>
Pgi Alfalfa Inc.	Dean Teslow	409 North St.	Decorah, IA	52101	563-382-3390	563-382-2433	<a href="mailto:dean.teslow@seminis.com">dean.teslow@seminis.com</a>
Pioneer Hi-Bred	Mark Smith	1040 Settler Rd.	Connell, WA	99326	509-234-9046	509-234-0648	<a href="mailto:mark.a.smith@pioneer.com">mark.a.smith@pioneer.com</a>
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	<a href="mailto:m.crum@producerschoiceseed.com">m.crum@producerschoiceseed.com</a>
Royal Seeds	Ken May	27630 Llewellyn Rd.	Corvallis, OR	97333	1-800-228-4119	1-541-758-5305	<a href="mailto:kmay@forage-genetics.com">kmay@forage-genetics.com</a>
S & W Seeds	Bob Sheesley	P.O. Box 235	Five Points, CA	93624	559-884-2535	559-884-2750	<a href="mailto:swseedco@pacbell.net">swseedco@pacbell.net</a>
Simplot Growers Solutions	Mike Benson	624 Catalina Cir.	Tulare, CA	93274	559-779-5611		<a href="mailto:Mbenson@Simplot.com">Mbenson@Simplot.com</a>
Simplot Growers Solutions	Lorell Skogsberg	P.O. Box 70013	Boise, ID	83707	208-672-2813		<a href="mailto:Lorell.Skogsberg@simplot.com">Lorell.Skogsberg@simplot.com</a>
Syngenta Seeds	Terry Hobson	1525 Airport Rd.	Ames, IA	50010	800-258-0498	515-239-3536	<a href="mailto:terry.hobson@syngenta.com">terry.hobson@syngenta.com</a>
NK Brand/Syngenta Seeds	Joe Waldo	1116 Elm Avenue West	Menomonie, WI	54751	(715) 235-4405	715-235-4406	<a href="mailto:joe.waldo@syngenta.com">joe.waldo@syngenta.com</a>
Producers Choice Seed	Don Miller	Longbranch Station, Suite	Nampa, ID	83651	208-250-0376	208-722-6646	<a href="mailto:d.miller@producerschoiceseed.com">d.miller@producerschoiceseed.com</a>
Union Seed	Jess W. Bice	P.O. Box 339	Nampa, ID	86387	208-250-2383	208-467-9953	<a href="mailto:jbice@foragegenetics.com">jbice@foragegenetics.com</a>
WL Research	Mike Peterson	P. O. Box 8112	Madison, WI	53708	800-406-7662	608-240-0411	<a href="mailto:mpeterson@wresearch.com">mpeterson@wresearch.com</a>
Western Farm Service	Steve Ford	P.O. Box 1168	Fresno, CA	93715	559-285-6292	559-436-5949	<a href="mailto:sford@agriumretail.com">sford@agriumretail.com</a>
Wilbur Ellis Company	Derek Winn	P. O. Box 15289	Sacramento, CA	95851	916-991-9833	916-991-1837	<a href="mailto:dwinn@wilburellis.com">dwinn@wilburellis.com</a>
UAP/United Agri Products	Walter Bryant	4914 HWY 20/26	Caldwell, ID	83605	208-454-0475	208-454-0495	<a href="mailto:walter.bryant@uap.com">walter.bryant@uap.com</a>