

Alfalfa Cultivar Choice

Kearney Field Day—Sept 18, 2015

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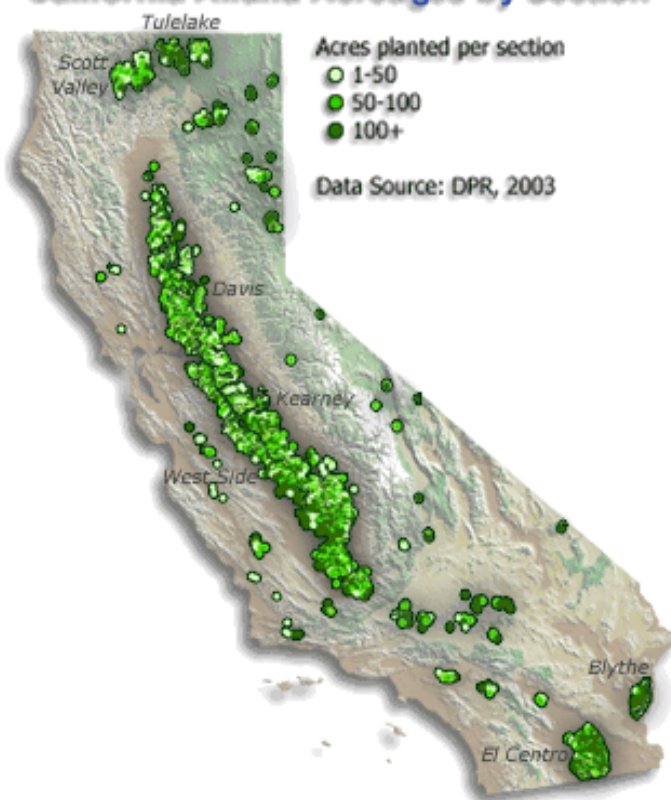
See: <http://alfalfa.ucdavis.edu> for current information

Choosing Alfalfa Varieties:

It is important to carefully choose a good variety. The 'upper limit' of your yield and variety performance on the day you choose the genetic potential of your crop – in the seed!! So why not take a little care in choosing your variety??

Growers often choose cultivars based upon promotion, price or habit. However, the choice of a variety can make a large difference in profitability, yield and quality. Variety selection is often the only strategy available to offer resistance to pest and diseases.

California Alfalfa Acreages by Section

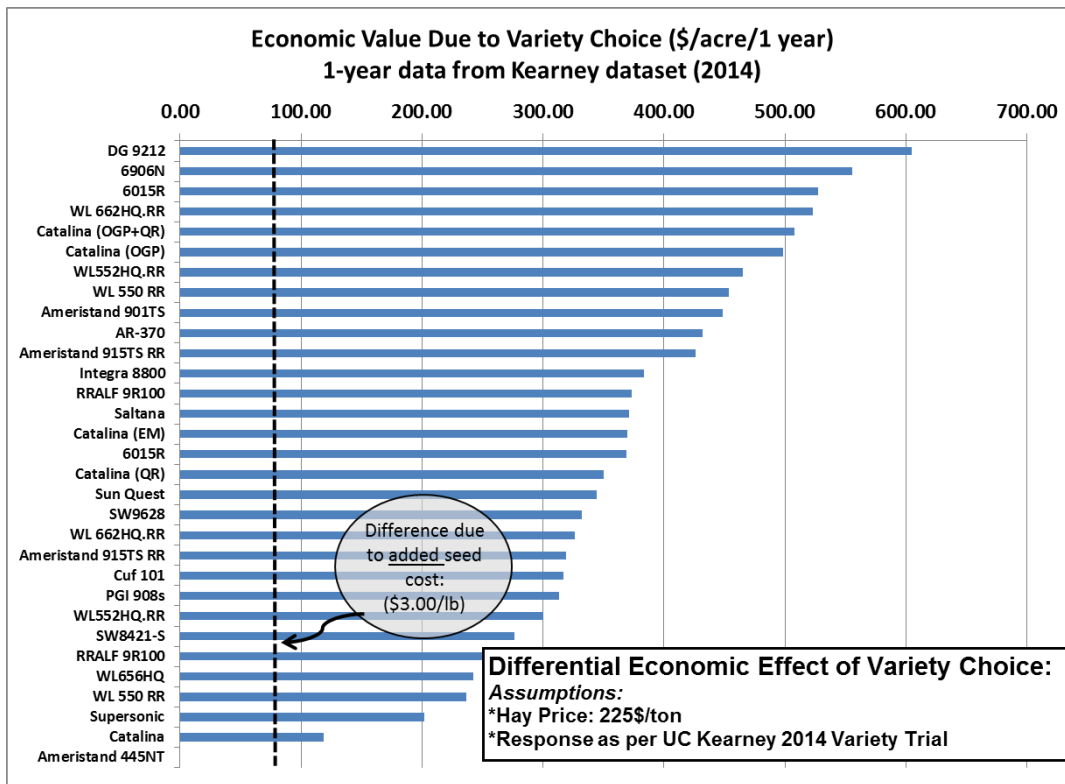
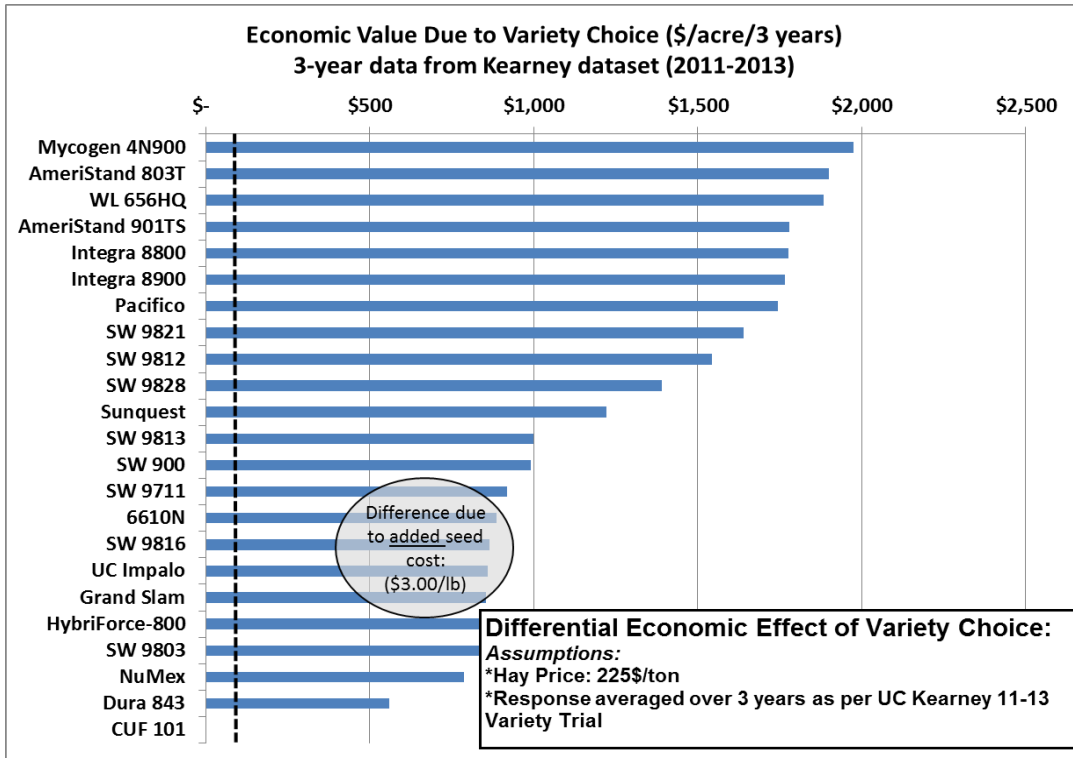


UC Variety Testing Program

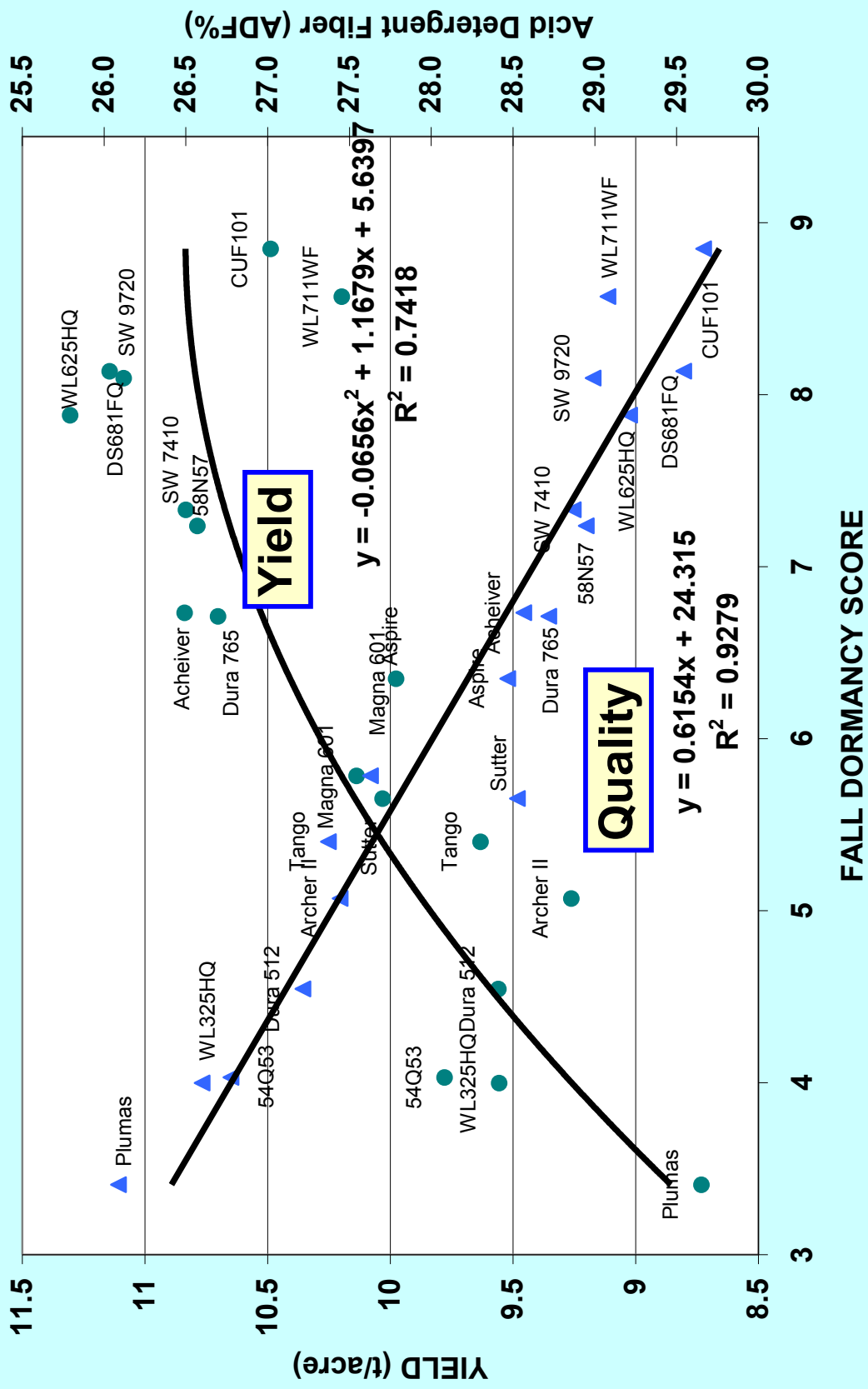
The University of California testing program is the most comprehensive in the western US, and provides unbiased information that can be used to judge performance of alfalfa varieties. We have plots ranging from Tulelake and Scott Valley (Intermountain), to Davis and Kearney (Central Valley), and El Centro (Desert). It takes less than 1 tenth of 1 ton to justify even a \$2 increase in the price of seed; many varieties produce yield differences 10 times this amount.

Yields are important, but are not the only criteria for variety selection. Take a look at the fall dormancy, the disease resistance, and the quality characteristics, too. Research is continually underway to improve the performance of alfalfa varieties.

**Cost and Price – is it important?? You bet!
 But look at the value of production FIRST, and other benefits (pest resistance, persistence, and quality) and THEN look at the seed price.**



2002-2004 All Harvests



**LET'S TALK ABOUT PEST RESISTANCE -
Make sure you have the right high level
of Pest Resistance for your region.**

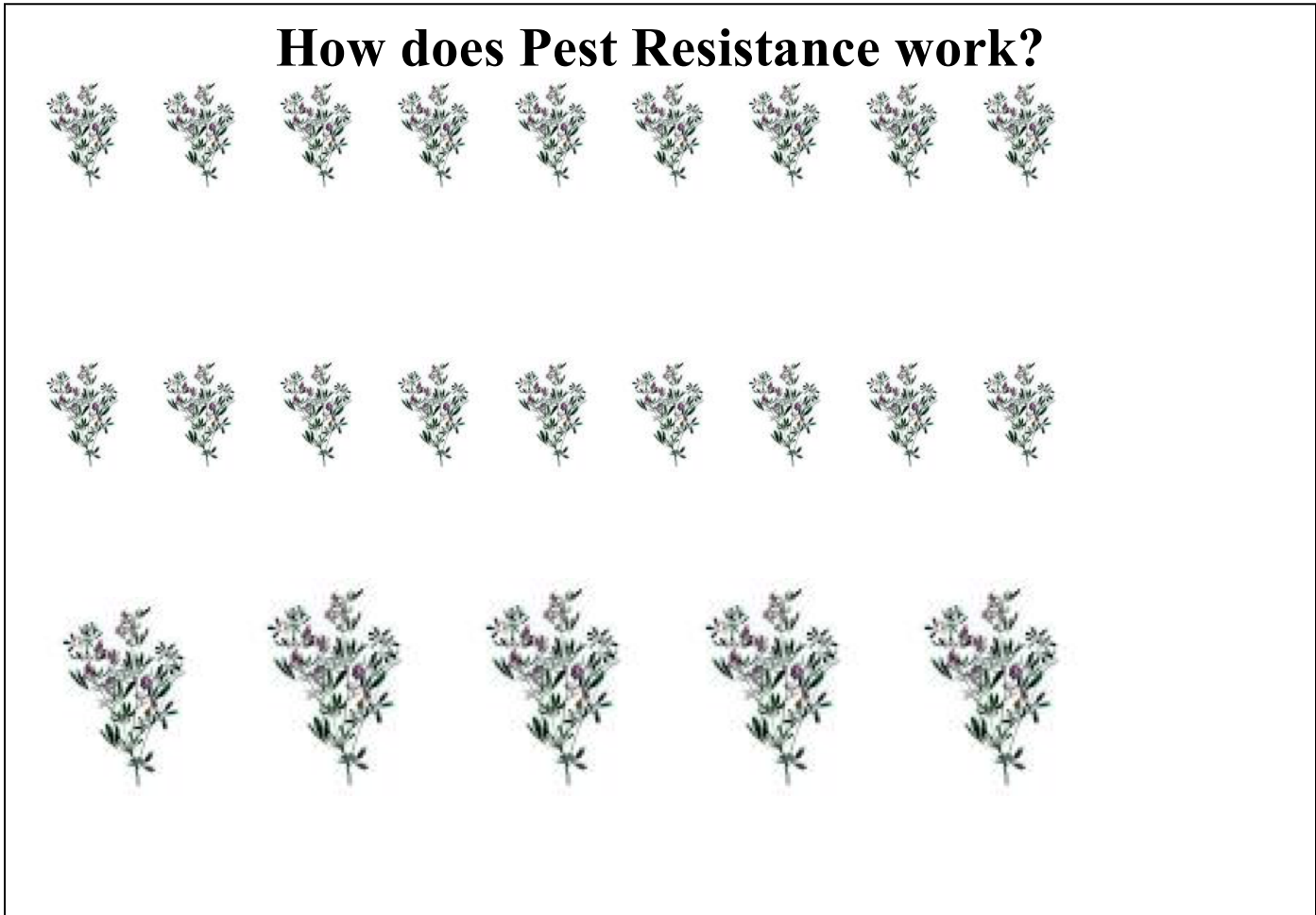


**Varietal Pest Resistance through choice of variety
is often the only way to combat specific diseases
or insect pests.**

Recommendations Sacramento/San Joaquin Valley:

	4-8 Rating
Fall Dormancy:	
Spotted Alfalfa Aphid (SAA):	R
Pea Aphid (PA)	HR
Blue Alfalfa Aphid (BAA):	HR
Pythophthora Root Rot (PRR).	HR
Bacterial Wilt (BW):	MR
Fusarium Wilt (FW):	HR
Stem Nematode:	HR
Root Not Nematode:	HR

How does Pest Resistance work?



Verticillium Wilt (VW)

R

HOWEVER:

- **Resistance is not absolute (it is a % of plants in a population)**
- **Even highly resistant varieties can be overwhelmed by a severe pest infestation.**
- **Pest Resistance is often the only economic measure against some pest problems.**
- **Think of Pest Resistance as you do auto insurance— not important every year, but can be very important.**

Year 1

Disease Stress eliminates plants

Year 2

Remaining plants are stronger

Resistance Abbreviations

Percent resistance¹

HR Highly Resistant

>51%

R	Resistant	31-50%
MR	Moderately Resistant	15-30%
LR	Low Resistant	6-14%
S	Susceptible	<5%

2014 YIELDS, UC KEARNEY ALFALFA CULTIVAR TRIAL. TRIAL PLANTED SEPT. 18, 2013

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
		23-Apr	21-May	18-Jun	16-Jul	13-Aug	15-Sep	17-Oct	TOTAL	CUF 101
	FD	Dry t/a								%
Released Varieties										
DG 9212	9	2.4 (11)	1.9 (20)	2.3 (5)	2.1 (4)	2.0 (1)	2.0 (4)	1.6 (12)	14.4 (1)	109.7
6906N	9	2.3 (17)	2.0 (5)	2.3 (3)	2.1 (6)	1.8 (24)	2.0 (6)	1.7 (6)	14.2 (2)	108.1
6015R	10	2.4 (13)	2.0 (6)	2.2 (13)	2.1 (3)	1.9 (6)	2.1 (3)	1.4 (35)	14.1 (5)	107.1
WL 662HQ.RR	9	2.6 (2)	1.9 (33)	1.9 (49)	2.1 (5)	1.8 (22)	2.0 (5)	1.7 (5)	14.0 (6)	107.0
Catalina (OGP+QR)	9	2.5 (6)	1.9 (26)	2.2 (19)	2.0 (22)	1.7 (31)	1.9 (22)	1.9 (3)	14.0 (7)	106.5
Catalina (OGP)	9	2.3 (21)	1.9 (15)	2.3 (6)	2.1 (9)	1.8 (10)	2.0 (9)	1.5 (25)	13.9 (8)	106.2
WL552HQ.RR	10	2.8 (1)	1.8 (49)	2.0 (34)	1.9 (28)	1.7 (30)	1.9 (28)	1.6 (10)	13.8 (9)	105.0
WL 550 RR	8	2.4 (8)	1.9 (34)	2.2 (7)	2.0 (25)	1.8 (12)	1.9 (25)	1.5 (22)	13.7 (10)	104.6
Ameristand 901TS	9	2.1 (46)	1.8 (45)	2.0 (40)	2.2 (2)	1.7 (39)	2.1 (2)	1.9 (2)	13.7 (11)	104.5
AR-370	10	2.3 (23)	2.0 (9)	2.0 (32)	2.0 (17)	1.8 (14)	1.9 (17)	1.6 (13)	13.6 (15)	103.9
Ameristand 915TS RR	9	2.3 (25)	1.9 (18)	2.2 (11)	2.0 (13)	1.9 (9)	1.9 (13)	1.4 (37)	13.6 (16)	103.7
Integra 8800	8	2.3 (24)	1.9 (21)	2.2 (20)	1.9 (33)	1.8 (27)	1.8 (33)	1.6 (14)	13.4 (19)	102.3
RRALF 9R100	9	1.9 (54)	1.8 (38)	2.2 (9)	2.0 (18)	1.9 (3)	1.9 (18)	1.7 (8)	13.4 (21)	101.9
Saltana	9	2.0 (50)	1.9 (19)	2.0 (38)	2.0 (14)	1.8 (15)	1.9 (14)	1.6 (10)	13.4 (22)	101.8
Catalina (EM)	9	2.2 (33)	1.9 (27)	2.2 (20)	1.9 (26)	1.8 (28)	1.9 (26)	1.6 (20)	13.4 (23)	101.8
6015R	10	2.2 (28)	1.8 (48)	2.2 (15)	2.0 (20)	1.9 (7)	1.9 (20)	1.4 (36)	13.4 (24)	101.8
Catalina (QR)	9	2.2 (27)	1.9 (36)	2.2 (10)	2.0 (15)	1.7 (33)	1.9 (15)	1.4 (48)	13.3 (25)	101.1
Sun Quest	9	2.0 (48)	1.9 (35)	2.1 (22)	2.0 (19)	1.8 (20)	1.9 (19)	1.5 (23)	13.2 (27)	100.9
SW9628	9	2.0 (53)	2.0 (2)	2.2 (16)	2.0 (21)	1.7 (40)	1.9 (21)	1.5 (30)	13.2 (29)	100.5
WL 662HQ.RR	9	2.1 (44)	1.9 (24)	2.0 (35)	1.9 (37)	1.9 (5)	1.8 (37)	1.6 (17)	13.2 (30)	100.3
Ameristand 915TS RR	9	2.4 (15)	1.9 (22)	1.9 (48)	1.8 (40)	1.8 (11)	1.8 (40)	1.4 (38)	13.1 (32)	100.1
Cuf 101	9	2.3 (19)	1.7 (53)	2.0 (32)	2.2 (1)	1.6 (51)	2.1 (1)	1.3 (51)	13.1 (33)	100.0
PGI 908s	9	2.2 (38)	1.9 (14)	2.2 (11)	1.9 (30)	1.6 (50)	1.8 (30)	1.5 (32)	13.1 (34)	99.9
WL552HQ.RR	10	2.4 (10)	1.9 (29)	2.0 (44)	1.8 (44)	1.7 (35)	1.8 (44)	1.5 (33)	13.0 (36)	99.4
SW8421-S	8	2.1 (47)	1.8 (39)	2.1 (26)	2.1 (7)	1.7 (37)	2.0 (7)	1.1 (54)	12.9 (38)	98.6
RRALF 9R100	9	2.6 (4)	1.8 (41)	1.7 (53)	1.7 (49)	1.8 (21)	1.7 (49)	1.6 (16)	12.9 (39)	98.6
WL656HQ	9	2.2 (39)	2.0 (10)	2.0 (36)	1.8 (46)	1.7 (43)	1.7 (46)	1.5 (27)	12.8 (45)	97.5
WL 550 RR	8	2.4 (16)	1.8 (47)	1.7 (54)	1.7 (50)	1.8 (29)	1.7 (50)	1.8 (4)	12.8 (46)	97.3
Supersonic	9	2.1 (43)	1.8 (46)	1.9 (51)	1.8 (41)	1.7 (38)	1.8 (41)	1.5 (28)	12.6 (49)	96.1
Catalina	9	2.0 (51)	1.7 (52)	2.0 (45)	1.9 (35)	1.7 (41)	1.8 (35)	1.1 (53)	12.2 (53)	93.3
Ameristand 445NT	4	2.1 (42)	1.9 (32)	1.7 (52)	1.6 (54)	1.4 (54)	1.5 (54)	1.4 (40)	11.7 (54)	89.3
Experimental Varieties										
FG 106T701	10	2.4 (9)	2.0 (11)	2.1 (28)	2.0 (12)	2.0 (2)	2.0 (12)	1.7 (9)	14.1 (3)	107.6
SW9108	9	2.3 (25)	2.0 (7)	2.3 (1)	2.1 (8)	1.9 (4)	2.0 (8)	1.6 (18)	14.1 (4)	107.3
SW8341	8	2.3 (19)	1.9 (23)	2.0 (38)	2.0 (16)	1.9 (8)	1.9 (16)	1.7 (7)	13.7 (12)	104.4
RD121	10	2.4 (14)	2.0 (8)	2.3 (4)	2.0 (23)	1.7 (32)	1.9 (23)	1.5 (29)	13.7 (13)	104.3
CW058071	8	2.4 (7)	2.0 (1)	2.3 (2)	2.0 (10)	1.5 (52)	2.0 (10)	1.3 (49)	13.7 (14)	104.2
Vulcan	9	2.2 (31)	1.9 (31)	2.2 (16)	1.9 (28)	1.6 (48)	1.9 (28)	1.9 (1)	13.6 (17)	103.3
FG 98T812	10	2.3 (18)	1.9 (16)	2.2 (8)	2.0 (24)	1.8 (13)	1.9 (24)	1.4 (47)	13.5 (18)	102.8
UC 417	9	2.6 (3)	2.0 (3)	2.0 (46)	1.8 (47)	1.8 (18)	1.7 (47)	1.6 (15)	13.4 (20)	102.2
AR-12	9	2.1 (45)	1.8 (42)	2.1 (23)	2.0 (11)	1.8 (26)	2.0 (11)	1.4 (39)	13.2 (26)	101.0
98T811	9	2.4 (12)	2.0 (12)	2.1 (27)	1.9 (38)	1.7 (36)	1.8 (38)	1.4 (42)	13.2 (28)	100.9
SW9106	9	2.2 (30)	1.9 (16)	2.2 (18)	1.8 (45)	1.8 (23)	1.7 (45)	1.5 (24)	13.1 (31)	100.2
SW1037	10	2.2 (35)	2.0 (4)	2.0 (47)	1.9 (27)	1.6 (49)	1.9 (27)	1.5 (25)	13.1 (35)	99.7
CW060046	10	2.1 (41)	1.8 (43)	2.2 (14)	1.9 (36)	1.8 (19)	1.8 (36)	1.4 (41)	13.0 (37)	99.2
UC 419	9	2.1 (40)	1.9 (13)	2.1 (25)	1.7 (52)	1.8 (17)	1.6 (52)	1.5 (21)	12.9 (40)	98.3
AR-380	9	2.2 (36)	1.8 (37)	2.1 (29)	1.9 (31)	1.8 (25)	1.8 (31)	1.3 (50)	12.9 (41)	98.3
UC 101	9	2.2 (32)	1.8 (44)	2.1 (24)	1.9 (34)	1.7 (45)	1.8 (34)	1.4 (46)	12.9 (42)	98.2
108T813	9	2.0 (52)	1.8 (40)	2.1 (31)	1.9 (32)	1.8 (16)	1.8 (32)	1.5 (34)	12.9 (43)	98.2
SW7339	7	2.2 (34)	1.9 (30)	2.0 (43)	1.8 (43)	1.7 (34)	1.8 (43)	1.4 (43)	12.8 (44)	97.5
RD132	8	2.0 (48)	1.9 (25)	1.9 (50)	1.8 (42)	1.6 (47)	1.8 (42)	1.6 (18)	12.6 (47)	96.2
UC 418	9	2.2 (29)	1.9 (28)	2.0 (37)	1.9 (39)	1.6 (46)	1.8 (39)	1.2 (52)	12.6 (48)	96.2
NeMex Melton	7	2.6 (5)	1.8 (50)	2.0 (42)	1.7 (48)	1.4 (53)	1.7 (48)	1.4 (45)	12.6 (50)	96.0
UC 416	9	2.2 (37)	1.7 (51)	2.1 (30)	1.7 (51)	1.7 (44)	1.6 (51)	1.5 (31)	12.4 (51)	94.9
SW9107	9	2.3 (22)	1.7 (54)	2.0 (41)	1.7 (53)	1.7 (42)	1.6 (53)	1.4 (43)	12.3 (52)	93.8
MEAN		2.26	1.88	2.08	1.92	1.76	1.85	1.51	13.25	
CV		14.8	7.5	11.9	14.4	12.4	14.4	24.1	8.3	
LSD (0.1)		NS	0.17	NS	NS	NS	NS	NS	NS	

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.

2011-2013 YIELDS. UC KEARNEY ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 9/14/2010

		2011	2012	2013	Average		% of
	FD	Yield	Yield	Yield			Cuf 101
			Dry/t/a				%
Released Varieties							
Mycogen 4N900	9	13.5 (1)	12.2 (20)	14.3 (3)	13.3 (2)	A B	128.09
AmeriStand 803T	8	12.6 (9)	13.0 (5)	14.1 (6)	13.2 (3)	A B C	127.02
WL 656HQ	9	12.4 (15)	13.2 (3)	14.0 (8)	13.2 (4)	A B C	126.80
AmeriStand 901TS	9	12.8 (7)	12.7 (8)	13.7 (11)	13.0 (5)	A B C D	125.30
Integra 8800	8	13.3 (2)	12.3 (15)	13.5 (13)	13.0 (7)	A B C D	125.28
Integra 8900	9	12.1 (23)	13.3 (2)	13.6 (12)	13.0 (8)	A B C D E	125.12
Pacifico	8	12.3 (19)	12.3 (16)	14.4 (2)	13.0 (11)	A B C D E F	124.81
SW 9821	9	12.2 (20)	12.5 (14)	13.9 (10)	12.8 (13)	A B C D E F G	123.32
SW 9812	9	12.5 (12)	12.8 (7)	12.8 (24)	12.7 (16)	A B C D E F G H I	121.96
SW 9828	9	12.9 (6)	12.0 (26)	12.6 (30)	12.5 (22)	B C D E F G H I J	119.78
Sunquest	10	11.3 (45)	12.3 (17)	13.1 (18)	12.2 (28)	C D E F G H I J K L	117.39
SW 9813	9	12.0 (26)	11.9 (27)	11.8 (43)	11.9 (33)	F G H I J K L	114.20
SW 900	9	10.8 (48)	12.2 (21)	12.6 (29)	11.9 (34)	G H I J K L	114.10
SW 9711	9	11.5 (42)	11.7 (34)	12.1 (38)	11.8 (35)	G H I J K L	113.06
6610N	6	11.9 (29)	11.5 (38)	11.8 (41)	11.7 (37)	H I J K L	112.60
SW 9816	9	11.9 (30)	11.3 (43)	11.9 (40)	11.7 (40)	H I J K L	112.32
UC Impalo	9	11.6 (40)	11.4 (41)	12.1 (37)	11.7 (41)	H I J K L	112.23
Grand Slam	4	12.1 (25)	11.6 (37)	11.4 (45)	11.7 (42)	H I J K L	112.16
HybriForce-800	8	11.8 (33)	11.0 (47)	12.2 (34)	11.7 (43)	H I J K L	112.09
SW 9803	9	11.8 (34)	11.0 (46)	12.1 (36)	11.6 (44)	I J K L	111.84
NuMex	7	11.7 (35)	11.4 (39)	11.6 (44)	11.6 (45)	J K L	111.19
Dura 843	8	11.7 (37)	11.0 (45)	11.1 (47)	11.2 (47)	L M	107.98
CUF 101	9	11.0 (46)	10.0 (48)	10.3 (48)	10.4 (48)	M	100.00
Experimental Varieties							
FG 96T706	9	12.4 (17)	13.5 (1)	15.4 (1)	13.8 (1)	A	132.22
FG R97T704	9	13.3 (3)	12.6 (11)	13.3 (15)	13.0 (6)	A B C D	125.29
FG R97T708	9	11.9 (32)	13.1 (4)	14.1 (7)	13.0 (9)	A B C D E	125.09
DS097040	9	13.1 (4)	12.6 (10)	13.3 (14)	13.0 (10)	A B C D E	124.98
FG R96Bx303	9	12.5 (10)	11.7 (33)	14.3 (4)	12.8 (12)	A B C D E F G	123.38
FG R97T701	9	11.9 (31)	12.2 (18)	14.2 (5)	12.8 (14)	A B C D E F G H	122.72
FG R97T707	9	11.7 (38)	12.5 (13)	13.9 (9)	12.7 (15)	A B C D E F G H I	121.97
DS385	8	12.9 (5)	12.0 (25)	13.2 (16)	12.7 (17)	A B C D E F G H I	121.87
CW 059051	9	12.4 (16)	12.7 (9)	13.0 (19)	12.7 (18)	A B C D E F G H I J	121.83
CW 068068	8	12.1 (24)	12.8 (6)	12.7 (27)	12.5 (19)	B C D E F G H I J	120.44
Ameristand 901STQ(EMD)	9	12.0 (27)	12.5 (12)	13.0 (20)	12.5 (20)	B C D E F G H I J	120.05
UC 469		12.4 (13)	12.2 (19)	12.8 (23)	12.5 (21)	B C D E F G H I J	120.04
UC 470		12.2 (21)	12.1 (23)	12.9 (21)	12.4 (23)	B C D E F G H I J K	118.99
DS097645	10	12.4 (14)	11.8 (32)	12.8 (25)	12.3 (24)	B C D E F G H I J K L	118.22
FG R97T715	9	12.2 (22)	11.8 (29)	12.9 (22)	12.3 (25)	B C D E F G H I J K L	118.19
DS097643	9	12.5 (11)	11.7 (35)	12.7 (28)	12.3 (26)	B C D E F G H I J K L	118.13
FG R96Bx301	9	12.6 (8)	11.1 (44)	13.1 (17)	12.3 (27)	B C D E F G H I J K L	117.82
UC 471		12.0 (28)	12.0 (24)	12.5 (31)	12.2 (29)	C D E F G H I J K L	117.15
FG R97T710	9	11.7 (36)	11.8 (31)	12.8 (26)	12.1 (30)	D E F G H I J K L	115.98
FG R96Bx308	9	11.6 (41)	12.1 (22)	12.5 (32)	12.1 (31)	D E F G H I J K L	115.88
FG R96Bx304	9	11.6 (39)	11.9 (28)	12.3 (33)	11.9 (32)	E F G H I J K L	114.45
UC 493		11.3 (44)	11.7 (36)	12.2 (35)	11.7 (36)	G H I J K L	112.77
DS097569	8	11.5 (43)	11.8 (30)	11.8 (42)	11.7 (38)	H I J K L	112.42
DS097041	9	12.3 (18)	11.4 (40)	11.3 (46)	11.7 (39)	H I J K L	112.32
FG R97M711	9	10.9 (47)	11.3 (42)	11.9 (39)	11.3 (46)	K L M	108.95
MEAN		12.10	12.03	12.83	12.32		
CV		7.5	6.6	11.7	7.6		
LSD (0.1)		1.08	0.94	1.78	1.11		

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