AGRONOMY PROGRESS REPORT
Agricultural Experiment Station Cooperative Extension
Department of Plant Sciences
One Shields Ave.
UC Davis, Davis, CA 95616-8780
December 2025 • No.343

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2025 CALIFORNIA ALFALFA VARIETY TRIAL RESULTS

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SUMMARY

This publication details alfalfa yield trial data conducted in California for the year 2025. Yield trials were conducted in the Intermountain area (Tulelake), the Imperial Valley (El Centro) and the Sacramento Valley (Davis). A total of 139 varieties were tested, from 4 to 11 cuts/year, with a total of 5,832 yield observations. Trials were conducted on UC field research facilities around the state. The alfalfa variety trial data from the University of California is placed online well in advance of this published report, see (https://alfalfa.ucdavis.edu – click on variety).

INTRODUCTION

Choosing superior varieties of alfalfa is a significant economic factor for alfalfa growers. A number of commercial varieties are currently available, enabling a wide range of options in the different fall dormancy (FD) groups. 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 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-

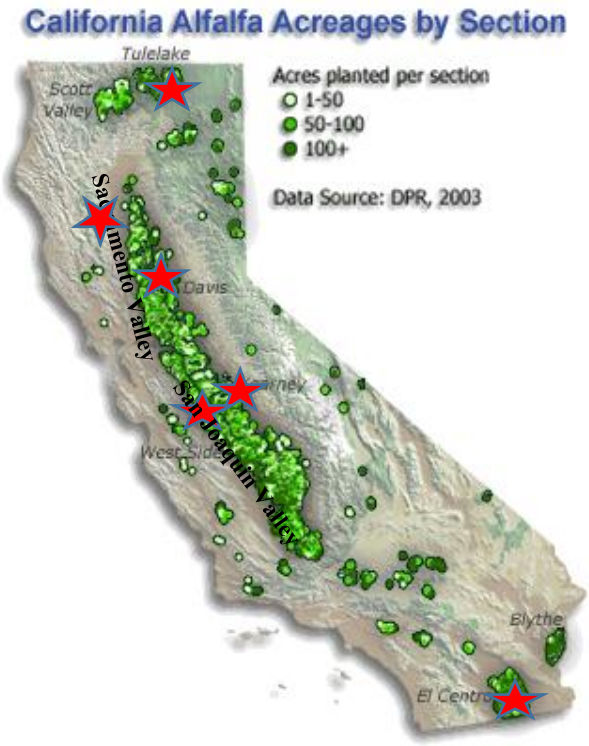

Figure 1. *California alfalfa acreage. The Intermountain region is represented by Tulelake and Scott Valley, Sacramento Valley by Davis, San Joaquin Valley by Parlier and Five Points locations.*

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8 cut systems (semi-dormant, or non-dormant varieties) in the **Northern Central Valley (Sacramento Valley)**, 7-8 cut systems (semi-dormant to non-dormant varieties) in the **Southern Central Valley (San Joaquin Valley)** and 8-11 cut systems (non-dormant varieties) in the **Low Desert**. These data are frequently used by growers to choose varieties, and by breeders to help guide further selection. Both private and public varieties are tested, and experimental lines as space allows. This report provides single year and over-the-year summary from alfalfa trials harvested in California in 2025.

VARIETY TESTING 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. Four alfalfa-variety yield trials were harvested in 2025 at Tulelake, El Centro and Davis, CA. Specific planting dates for each trial are given on the results table for each trial. Seed was planted at approximately 25 lbs./acre live seed in 3' to 4' wide plots x 18 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 subsamples 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 are taken in the Intermountain Region, while seven to eight cuttings taken in the Sacramento Valley, and up to 11 in El Centro. Cutting schedules followed 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: We have 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% level of uncertainty. 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. 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 yet represents good mean separation. Such decisions are always a compromise between practical factors and statistical vigor.

2025 YIELD RESULTS

Intermountain Region

2021 UC Tulelake Variety Trial- This 24-entry trial was planted 8/19/21. Four harvests were taken in 2025, the fourth and final year of harvest. The average yield for this trial was 8.5 t/A with a spread of 8.0-9.1 t/A among varieties (Table 1). Multi-year yield averaged 8.3 t/A, with all years being very similar in production (Table 2).

2025 UC Tulelake Variety Trial- This 42-entry trial was planted 5/30/25 to replace the 2021 planting. Two harvests were taken in 2025, the first year of harvest. The average yield for this trial was 4.1 t/A with a spread of 3.8-4.4 t/A among varieties (Table 3). As this was the establishment year, higher yields are expected for 2026 season.

Sacramento Valley Region

2023 UC Davis Variety Drought Trial. This trial was planted Sept.28, 2023 and includes 42 entries. The purpose of this trial is to address water limitations in the state and test the performance of commercial and experimental non-dormant varieties grown under full and deficit irrigation regimes. The trial is a split-plot arrangement with 5 reps. The main plot is irrigation strategy (Full irrigation- 100% of ET requirement, and deficit summer irrigation cut-off from July1-Sept30) with variety as subplots. Seven harvests were taken from the full irrigation treatment in 2025, averaging 11.9 t/A yield, and a range of 9.5-15.0 t/A among varieties (Table 4). The deficit treatments averaged 7.5 t/A yield, ranging from 5.8-9.1 t/A. Five harvests were taken from the deficit treatments in 2025 (Table 5). Irrigation for both treatments began 4/16/25 with a total of 42.6" applied to full and 19.2" to deficit treatments. Cumulative yields in years 2024-25 for full irrigation and deficit irrigation treatment can be seen in tables 6 and 7, respectively.

Low Desert Region

2023 El Centro Variety Drought Trial. Planted Nov 1, 2023, at the Desert Research and Extension Center. This trial includes 40 entries and is grown under the same full and deficit irrigation regime as in Davis. 24 entries are duplicated between Davis and El Centro to assess variety performance under very different production environments. Eleven harvests were taken from both the full irrigation treatment and deficit in 2025. Full average yield was 12.1 t/A yield, and a range of 9.9-15.0 t/A among varieties (Table 8). The deficit treatments averaged 9.6 t/A yield, ranging from 7.9-11.5 t/A (Table 9). Irrigation for both treatments began 1/21/25 with a total of 56.3" applied to full and 35.6" to deficit treatments. Cumulative yields in years 2024-25 can be seen in table 10 (full irrigation) and table 11 (deficit irrigation).

INTERPRETING YIELD TRIAL RESULTS

We suggest the following procedure for selecting varieties:

1. **Select a <u>group</u> 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 1-11. We recommend that you see the tables for over-the years summaries from the relevant locations, also posted 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 on the Alfalfa Alliance Website. Please see https://www.alfalfa.org/varietyLeaflet.php for a current (2026) listing of available alfalfa varieties marketed in the US along with pest resistance ratings.

3. **Consider the Fall Dormancy (FD) and pest resistance Ratings** of individual varieties – available at the National Alfalfa and Forage Alliance Website (www.alfalfa.org).
4. **Choose a group of 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). HarvXtra is a trait that confers higher quality and yields normally when combined with later cutting schedules.
6. **Consider biotech traits** such as glyphosate-resistance and the HarvXtra trait. RR should be compared as a comprehensive weed control strategy, not just a variety.
7. **Test a variety in strips on 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 Darrin Culp and Rob Wilson's crew at the Intermountain Research and Extension Center, Ali Montazar at Desert Research and Extension Center, Luis Loza and Israel Herrera for help on the UC Davis plots.

Table 1. 2025 YIELDS, TULELAKE ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 8/19/21

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
		4-Jun	7-Jul	8-Aug	23-Sep	TOTAL		VERNAL
	FD			Dry t/a				
Released Varieties								
AFX 439	4	3.23 (3)	2.07 (3)	2.03 (4)	1.76 (2)	9.09 (1)	A	108.7
LG4R300	4	3.01 (10)	2.03 (5)	2.07 (2)	1.69 (9)	8.80 (3)	A B C	105.3
AWS 455 salt	4	3.32 (1)	1.91 (20)	1.91 (11)	1.64 (11)	8.79 (4)	A B C D	105.1
AWS 418RL	4	3.08 (6)	1.98 (15)	2.02 (7)	1.70 (8)	8.78 (5)	A B C D E	105.0
HybriForce-4420/Wet	4	3.30 (2)	1.99 (13)	1.88 (18)	1.58 (17)	8.75 (6)	A B C D E	104.6
WL377 HQ	5	3.14 (4)	2.01 (9)	1.98 (9)	1.59 (16)	8.73 (7)	A B C D E	104.4
6453Q	4	2.98 (14)	1.97 (18)	2.02 (6)	1.75 (3)	8.72 (8)	A B C D E	104.3
WL375 HVXRR	4.6	2.89 (19)	2.04 (4)	2.01 (8)	1.72 (7)	8.66 (9)	B C D E F	103.6
AWS 390	3.9	3.10 (5)	1.91 (21)	1.90 (16)	1.74 (4)	8.64 (10)	B C D E F	103.4
LG5R300	5	2.81 (21)	1.97 (16)	2.03 (3)	1.74 (6)	8.56 (11)	C D E F G	102.4
Magna150RR	4	2.95 (16)	1.97 (17)	1.91 (14)	1.68 (10)	8.51 (12)	C D E F G H	101.8
Bison Alfalfa	3.5	3.02 (9)	1.94 (19)	1.87 (19)	1.63 (13)	8.46 (13)	C D E F G H I	101.3
WL3441 RR	4	2.85 (20)	2.02 (6)	1.96 (10)	1.62 (14)	8.45 (14)	C D E F G H I	101.1
Nexgrow 6516R	4.5	2.98 (15)	2.09 (1)	1.88 (17)	1.49 (21)	8.45 (15)	C D E F G H I	101.1
54Q29	4	2.98 (13)	1.98 (14)	1.83 (23)	1.63 (12)	8.43 (16)	C D E F G H I	100.9
6585Q	5	2.81 (23)	2.07 (2)	2.02 (5)	1.49 (22)	8.38 (17)	C D E F G H I	100.3
54VQ52	4	3.01 (11)	1.84 (23)	1.91 (12)	1.61 (15)	8.37 (18)	D E F G H I	100.2
Ameristand 428TQ	4	2.99 (12)	2.00 (11)	1.90 (15)	1.47 (23)	8.36 (19)	E F G H I	100.0
Vernal	2	3.07 (8)	1.71 (24)	1.85 (21)	1.74 (5)	8.36 (20)	E F G H I	100.0
Ameristand 416NT RF	4	2.81 (22)	2.01 (10)	1.91 (13)	1.50 (20)	8.23 (21)	F G H I	98.5
Ameristand 518NT	5	2.91 (18)	2.02 (8)	1.84 (22)	1.45 (24)	8.21 (22)	G H I	98.2
WL341 HVXRR	4	2.93 (17)	1.88 (22)	1.79 (24)	1.53 (19)	8.13 (23)	H I	97.2
Ameristand 446NT	4	2.67 (24)	1.99 (12)	1.86 (20)	1.55 (18)	8.07 (24)	I	96.6
Experimental Varieties								
SW4615	5	3.07 (7)	2.02 (7)	2.16 (1)	1.77 (1)	9.02 (2)	A B	107.9
MEAN		3.00	1.98	1.94	1.63	8.54		
CV		5.74	5.89	10.18	5.66	4.12		
LSD (0.1)		0.21	0.14	NS	0.11	0.43		

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. 2022-2025 YIELDS, TULELAKE ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 8/19/21

		2022 Yield	2023 Yield	2024 Yield	2025 Yield	Average		% of Vernal
	FD			Dry t/a				
Released Varieties								
AWS 418RL	4	7.87 (7)	8.37 (1)	8.48 (6)	8.78 (5)	8.37 (1)	A	108.7
AFX 439	4	7.56 (12)	8.04 (3)	8.31 (8)	9.09 (1)	8.25 (3)	A B C	107.1
HybriForce-4420/Wet	4	8.11 (3)	7.88 (9)	8.21 (10)	8.75 (6)	8.24 (4)	A B C	107.0
54VQ52	4	7.90 (4)	8.05 (2)	8.55 (3)	8.37 (18)	8.22 (5)	A B C D	106.7
6453Q	4	7.70 (9)	7.98 (6)	8.19 (11)	8.72 (8)	8.15 (6)	A B C D E	105.8
Magna150RR	4	8.33 (1)	7.12 (24)	8.58 (1)	8.51 (12)	8.14 (7)	A B C D E	105.6
54Q29	4	8.26 (2)	7.53 (20)	8.12 (15)	8.43 (16)	8.09 (8)	A B C D E F	105.0
WL377 HQ	5	7.71 (8)	7.77 (12)	8.10 (16)	8.73 (7)	8.08 (9)	A B C D E F G	104.8
Nexgrow 6516R	4.5	7.46 (15)	7.84 (10)	8.54 (5)	8.45 (15)	8.07 (10)	A B C D E F G	104.8
Bison Alfalfa	3.5	7.64 (11)	7.49 (21)	8.54 (4)	8.46 (13)	8.03 (11)	A B C D E F G H	104.3
Ameristand 428TQ	4	7.66 (10)	7.98 (5)	8.07 (17)	8.36 (19)	8.02 (12)	A B C D E F G H	104.1
6585Q	5	7.48 (14)	7.94 (8)	8.13 (14)	8.38 (17)	7.98 (13)	B C D E F G H	103.6
AWS 390	3.9	7.35 (19)	7.45 (22)	8.40 (7)	8.64 (10)	7.96 (14)	B C D E F G H	103.4
LG5R300	5	7.41 (17)	7.71 (16)	8.15 (12)	8.56 (11)	7.96 (15)	B C D E F G H	103.3
Ameristand 518NT	5	7.16 (23)	7.94 (7)	8.29 (9)	8.21 (22)	7.90 (16)	C D E F G H	102.6
LG4R300	4	7.25 (21)	7.64 (17)	7.74 (19)	8.80 (3)	7.86 (17)	D E F G H	102.1
WL341 HVXRR	4	7.42 (16)	7.75 (14)	8.14 (13)	8.13 (23)	7.86 (18)	D E F G H	102.0
AWS 455 salt	4	7.87 (6)	7.74 (15)	7.02 (24)	8.79 (4)	7.85 (19)	E F G H	102.0
WL375 HVXRR	4.6	7.37 (18)	7.63 (18)	7.55 (23)	8.66 (9)	7.80 (20)	E F G H	101.3
Ameristand 446NT	4	7.25 (22)	8.02 (4)	7.72 (20)	8.07 (24)	7.77 (21)	F G H	100.8
Ameristand 416NT RR	4	7.32 (20)	7.75 (13)	7.56 (22)	8.23 (21)	7.72 (22)	G H	100.2
WL3441 RR	4	7.08 (24)	7.62 (19)	7.71 (21)	8.45 (14)	7.71 (23)	G H	100.2
Vernal	2	7.55 (13)	7.14 (23)	7.76 (18)	8.36 (20)	7.70 (24)	H	100.0
Experimental Varieties								
SW4615	5	7.87 (5)	7.77 (11)	8.58 (2)	9.02 (2)	8.31 (2)	A B	107.9
MEAN		7.61	7.76	8.10	8.54	8.00		
CV		5.11	4.21	9.38	4.12	3.73		
LSD (0.1)		0.47	0.40	NS	0.43	0.36		

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. 2025 YIELDS. TULELAKE ALFALFA CULTIVAR TRIAL. TRIAL PLANTED 5-30-25

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

		Cut 1	Cut 2	YEAR	% of
		18-Aug	23-Sep	TOTAL	VERNAL
	FD		Dry t/a		
Released Varieties					
Experimental Varieties					
FSG 430ST	4	2.56 (2)	1.86 (15)	4.43 (1)	107.7
54VQ56	4	2.68 (1)	1.73 (34)	4.41 (2)	107.3
AFX 460 Hi Gest	4	2.56 (3)	1.77 (27)	4.33 (3)	105.4
Majestic	4	2.51 (4)	1.76 (29)	4.27 (4)	104.0
Hi Gest 360	3	2.45 (5)	1.83 (21)	4.27 (5)	104.0
UCAL2250	3	2.32 (12)	1.95 (3)	4.27 (6)	104.0
WL349HQ	4	2.30 (15)	1.97 (1)	4.26 (7)	103.7
WL3441HQ-RR	4.3	2.43 (7)	1.79 (25)	4.22 (8)	102.8
54VS73	4	2.44 (6)	1.78 (26)	4.22 (9)	102.7
CASIA R1C2	3	2.34 (10)	1.83 (18)	4.17 (10)	101.6
Ranger	3	2.26 (18)	1.88 (10)	4.14 (11)	100.8
WL377HQ	5	2.39 (8)	1.74 (32)	4.13 (12)	100.4
Vernal	2	2.28 (16)	1.83 (17)	4.11 (13)	100.0
UCAL2030	4	2.21 (26)	1.89 (9)	4.10 (14)	99.7
FSG 420BR	4	2.21 (28)	1.88 (11)	4.09 (15)	99.5
Ameristand 446NT	4.4	2.17 (33)	1.92 (4)	4.09 (16)	99.5
PowerStand-RR	4	2.21 (23)	1.87 (14)	4.09 (17)	99.5
SW5615	5	2.25 (21)	1.83 (20)	4.08 (18)	99.3
MOMENTUM UC	4	2.21 (24)	1.86 (16)	4.07 (19)	99.0
Wi22BK intAlf.20	4	2.19 (31)	1.88 (12)	4.07 (20)	99.0
X-Force 5420-Wet	4	2.32 (14)	1.75 (31)	4.06 (21)	98.9
FSG 527	5	2.14 (36)	1.92 (5)	4.06 (22)	98.8
AFX194011	4	2.14 (35)	1.91 (7)	4.05 (23)	98.6
NexGrow 6453Q	4.4	2.25 (22)	1.80 (24)	4.04 (24)	98.4
OTTM R2C2	4	2.14 (37)	1.91 (8)	4.04 (25)	98.4
UCAL2155	3	2.12 (38)	1.91 (6)	4.03 (26)	98.2
OTTM R1C2	4	2.21 (25)	1.82 (23)	4.03 (27)	98.1
UCAL2280	4	2.37 (9)	1.65 (40)	4.02 (28)	97.8
Ameristand 518NT	5.2	2.34 (11)	1.68 (37)	4.02 (29)	97.8
MVS4220Q	4	2.12 (39)	1.88 (13)	4.00 (30)	97.3
AmeriStand 403T	4	2.27 (17)	1.73 (35)	4.00 (31)	97.2
SIBR R1C2	2	2.32 (13)	1.67 (39)	3.99 (32)	97.0
UCAL2281	4	2.03 (42)	1.95 (2)	3.99 (33)	97.0
AFX 470	4	2.25 (19)	1.73 (33)	3.98 (34)	97.0
FSG 450	4	2.15 (34)	1.83 (22)	3.98 (35)	96.8
SIBR R2C1	2	2.20 (29)	1.76 (28)	3.96 (36)	96.4
AFX 479	4	2.25 (20)	1.70 (36)	3.96 (37)	96.3
AFX164036	4	2.12 (40)	1.83 (19)	3.95 (38)	96.1
CASIA R2C1	3	2.20 (30)	1.67 (38)	3.87 (39)	94.1
AS-RRAL-1	4	2.21 (27)	1.65 (41)	3.86 (40)	94.0
EURO R1C2	4	2.09 (41)	1.76 (30)	3.85 (41)	93.7
EURO R2C1	4	2.19 (32)	1.63 (42)	3.81 (42)	92.8
MEAN		2.27	1.81	4.08	
CV		9.15	11.38	7.56	
LSD (0.1)		0.25	NS	NS	

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. 2025 YIELDS, UC DAVIS ALFALFA DEFICIT-CULTIVAR TRIAL. FULL IRRIGATION TREATMENT. TRIAL PLANTED 9/28/23

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
		9-Apr	16-May	17-Jun	11-Jul	12-Aug	15-Sep	23-Oct	TOTAL	CUF101
	FD					Dry t/a				
Released Varieties										
CW09084 - Lot 1042383	9	1.99 (14)	2.06 (1)	2.42 (1)	2.09 (1)	2.40 (1)	2.29 (2)	1.77 (2)	15.04 (1)	125.0
SW9813S	9	2.02 (11)	1.93 (10)	2.24 (4)	1.81 (5)	2.15 (5)	2.42 (1)	1.80 (1)	14.37 (2)	119.5
NuMex 802	8	1.99 (16)	2.00 (6)	2.30 (2)	1.91 (2)	2.21 (3)	1.97 (6)	1.46 (15)	13.85 (3)	115.1
AmeriStand 835NTS RR	8	1.78 (37)	2.02 (4)	2.26 (3)	1.87 (3)	2.15 (4)	1.92 (7)	1.46 (14)	13.47 (4)	112.0
UC Impalo	9	1.92 (25)	1.87 (18)	2.22 (6)	1.82 (4)	1.90 (11)	1.65 (16)	1.42 (18)	12.79 (8)	106.4
9R400	9	2.01 (12)	1.82 (22)	1.93 (22)	1.68 (11)	2.03 (9)	1.55 (20)	1.53 (10)	12.55 (12)	104.4
HVX620RR	6	1.99 (15)	1.87 (19)	2.00 (15)	1.66 (13)	1.83 (13)	1.72 (15)	1.41 (19)	12.48 (13)	103.8
UCCibola	9	1.85 (31)	1.91 (13)	1.99 (17)	1.63 (15)	1.79 (15)	1.61 (17)	1.52 (11)	12.31 (14)	102.3
Z822	8	2.03 (9)	1.78 (29)	1.79 (31)	1.37 (30)	1.61 (26)	2.00 (5)	1.61 (6)	12.20 (15)	101.4
CUF101	9	1.91 (26)	1.74 (31)	1.98 (19)	1.56 (18)	1.65 (22)	1.82 (11)	1.37 (25)	12.03 (17)	100.0
NuMex 801	8	1.92 (24)	1.68 (35)	1.96 (20)	1.53 (21)	1.64 (24)	1.88 (8)	1.40 (20)	12.00 (19)	99.8
Alphatec 921	9	2.03 (10)	1.90 (15)	1.82 (27)	1.35 (32)	1.37 (36)	1.74 (13)	1.56 (8)	11.76 (20)	97.8
Alphatec 821	8	2.18 (2)	1.96 (8)	1.92 (23)	1.35 (31)	1.44 (32)	1.32 (30)	1.38 (23)	11.54 (25)	96.0
Highline	9	1.83 (35)	1.79 (28)	1.85 (26)	1.51 (25)	1.81 (14)	1.22 (36)	1.20 (32)	11.21 (29)	93.2
CW89126 Lot#1852310	9	1.72 (39)	1.80 (27)	1.82 (28)	1.39 (29)	1.52 (28)	1.72 (14)	1.21 (31)	11.17 (30)	92.9
WL3979 HVXRR	9	1.75 (38)	1.73 (32)	1.95 (21)	1.52 (24)	1.66 (21)	1.02 (40)	1.03 (39)	10.66 (36)	88.7
Chema 1 - Lot 0472364	9	1.78 (36)	1.68 (34)	1.64 (39)	1.18 (38)	1.31 (39)	1.16 (38)	1.33 (28)	10.09 (38)	83.9
Gunner	5	1.86 (30)	1.67 (36)	1.52 (41)	1.04 (41)	1.34 (38)	1.29 (32)	1.35 (27)	10.08 (39)	83.9
WL 458HQ.RR	6	1.84 (33)	1.54 (40)	1.59 (40)	1.14 (40)	1.17 (40)	1.40 (24)	1.19 (34)	9.87 (40)	82.1
Experimental Varieties										
UC2705	9	1.98 (17)	1.80 (25)	1.98 (18)	1.73 (6)	2.06 (8)	2.19 (3)	1.70 (3)	13.44 (5)	111.8
Z722	7	1.93 (22)	1.94 (9)	2.20 (7)	1.72 (7)	2.21 (2)	1.82 (12)	1.62 (5)	13.44 (6)	111.7
FGI-20-RR8	8	1.92 (23)	1.92 (12)	2.23 (5)	1.70 (10)	1.98 (10)	1.86 (9)	1.45 (16)	13.06 (7)	108.6
UCAL2040	9	1.97 (21)	1.97 (7)	2.07 (11)	1.63 (16)	1.76 (17)	1.84 (10)	1.47 (12)	12.71 (9)	105.7
FGI-19-RR9	9	1.98 (19)	2.03 (3)	2.11 (9)	1.59 (17)	1.73 (20)	1.60 (18)	1.56 (7)	12.59 (10)	104.7
NM2106	7.6	2.11 (4)	1.89 (17)	2.17 (8)	1.67 (12)	2.11 (6)	1.32 (29)	1.30 (29)	12.57 (11)	104.6
FGI-20-RR7	7.5	1.89 (28)	1.67 (37)	1.88 (24)	1.53 (20)	1.75 (18)	2.01 (4)	1.46 (13)	12.19 (16)	101.4
UCAL1950	9	1.84 (32)	1.86 (20)	2.00 (16)	1.72 (8)	1.78 (16)	1.40 (23)	1.42 (17)	12.01 (18)	99.9
UCAL2000	9	1.83 (34)	1.82 (23)	2.05 (12)	1.63 (14)	2.06 (7)	1.17 (37)	1.19 (33)	11.76 (21)	97.8
UCAL2010	9	2.05 (6)	1.90 (16)	2.00 (14)	1.71 (9)	1.65 (23)	1.25 (35)	1.14 (36)	11.69 (22)	97.2
UCAL2150	9	2.01 (13)	1.80 (26)	1.86 (25)	1.49 (26)	1.61 (27)	1.51 (21)	1.38 (22)	11.67 (23)	97.0
Z922	9	2.07 (5)	2.03 (2)	2.04 (13)	1.52 (23)	1.62 (25)	1.27 (34)	1.04 (38)	11.58 (24)	96.3
UCAL1940	8	2.05 (7)	1.73 (33)	1.78 (33)	1.54 (19)	1.74 (19)	1.28 (33)	1.38 (24)	11.51 (26)	95.7
NM2119	8	1.98 (18)	1.93 (11)	1.79 (32)	1.39 (28)	1.42 (33)	1.45 (22)	1.53 (9)	11.48 (27)	95.5
UCAL2030	5	2.29 (1)	2.02 (5)	1.81 (30)	1.32 (33)	1.48 (30)	1.38 (28)	1.17 (35)	11.47 (28)	95.3
UCAL1920	8	1.60 (41)	1.76 (30)	2.11 (10)	1.52 (22)	1.90 (12)	1.29 (31)	0.98 (41)	11.16 (31)	92.8
NM2120	7	2.11 (3)	1.82 (21)	1.73 (36)	1.28 (36)	1.39 (34)	1.39 (27)	1.40 (21)	11.13 (32)	92.5
NM2113	7	1.88 (29)	1.65 (39)	1.68 (37)	1.42 (27)	1.49 (29)	1.39 (26)	1.37 (26)	10.88 (33)	90.5
NM2109	7.8	1.91 (27)	1.82 (24)	1.67 (38)	1.18 (39)	1.09 (41)	1.56 (19)	1.64 (4)	10.87 (34)	90.4
UCAL2020	8	2.03 (8)	1.90 (14)	1.81 (29)	1.31 (34)	1.45 (31)	1.14 (39)	1.08 (37)	10.72 (35)	89.2
Z823	8	1.98 (20)	1.66 (38)	1.77 (34)	1.21 (37)	1.35 (37)	1.40 (25)	1.29 (30)	10.65 (37)	88.6
UCAL2155	4	1.67 (40)	1.46 (41)	1.73 (35)	1.30 (35)	1.39 (35)	0.94 (41)	0.99 (40)	9.48 (41)	78.8
MEAN		1.94	1.83	1.94	1.52	1.71	1.57	1.38	11.89	
CV		12.29	16.49	27.36	36.84	44.20	40.91	24.55	22.87	
LSD (0.1)		NS	NS	NS	NS	NS	NS	0.40	NS	

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.

Applied irrigation water beginning 4/16/25: Full irrigation 42.6", deficit irrigation 19.2"

Table 5. 2025 YIELDS, UC DAVIS ALFALFA DEFICIT-CULTIVAR TRIAL. DEFICIT IRRIGATION TREATMENT. TRIAL PLANTED 9/28/23

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
		9-Apr	16-May	17-Jun	11-Jul	12-Aug	15-Sep	23-Oct	TOTAL	CUF101
	FD	Dry t/a								
Released Varieties										
UCCibola	9	1.69 (30)	2.01 (3)	2.41 (2)	1.77 (1)	0.95 (1)	0.15 (7)	0.11 (5)	9.09 (1)	125.3
NuMex 802	8	1.87 (9)	1.97 (5)	2.49 (1)	1.72 (2)	0.65 (6)	0.11 (16)	0.05 (20)	8.85 (2)	122.1
Chema 1 - Lot 0472364	9	1.79 (20)	1.74 (29)	2.22 (6)	1.61 (4)	0.72 (3)	0.23 (2)	0.18 (3)	8.48 (5)	117.0
SW9813S	9	1.94 (5)	1.92 (9)	2.21 (8)	1.45 (14)	0.50 (16)	0.08 (24)	0.05 (26)	8.15 (8)	112.3
9R400	9	1.67 (33)	1.93 (7)	2.26 (4)	1.55 (7)	0.45 (18)	0.09 (20)	0.05 (24)	7.99 (9)	110.2
CW09084 - Lot 1042383	9	1.83 (14)	1.59 (38)	2.21 (9)	1.51 (11)	0.54 (14)	0.20 (3)	0.07 (13)	7.94 (11)	109.6
NuMex 801	8	1.79 (21)	1.68 (35)	2.03 (23)	1.49 (12)	0.66 (5)	0.02 (41)	0.06 (16)	7.72 (13)	106.5
Alphatec 821	8	1.76 (23)	1.80 (21)	2.07 (19)	1.39 (15)	0.35 (29)	0.08 (23)	0.08 (10)	7.53 (17)	103.9
HVX620RR	6	1.81 (18)	1.86 (13)	2.13 (13)	1.22 (28)	0.32 (33)	0.14 (10)	0.07 (14)	7.53 (18)	103.8
UC Impalo	9	1.93 (7)	1.74 (27)	1.71 (38)	1.32 (20)	0.59 (9)	0.04 (36)	0.04 (30)	7.38 (21)	101.7
Alphatec 921	9	1.72 (28)	1.54 (39)	2.08 (18)	1.35 (17)	0.42 (21)	0.14 (9)	0.08 (9)	7.34 (23)	101.2
CW89126 Lot#1852310	9	1.54 (40)	1.75 (24)	1.98 (27)	1.36 (16)	0.60 (8)	0.07 (28)	0.04 (31)	7.34 (24)	101.2
AmeriStand 835NTS RR	8	1.73 (27)	1.69 (34)	1.96 (29)	1.24 (23)	0.41 (24)	0.11 (13)	0.18 (2)	7.32 (25)	101.0
CUF101	9	1.56 (39)	1.64 (37)	1.98 (26)	1.28 (21)	0.56 (11)	0.12 (11)	0.09 (6)	7.25 (30)	100.0
Highline	9	1.66 (34)	1.80 (18)	2.02 (24)	1.15 (35)	0.32 (32)	0.16 (6)	0.13 (4)	7.24 (31)	99.9
Z822	8	1.97 (3)	1.82 (17)	2.06 (20)	0.96 (38)	0.23 (38)	0.06 (30)	0.03 (36)	7.14 (33)	98.5
WL3979 HVXRR	9	1.59 (37)	1.66 (36)	1.77 (36)	1.21 (29)	0.42 (20)	0.04 (38)	0.03 (40)	6.73 (38)	92.8
Gunner	5	1.74 (25)	1.73 (31)	1.61 (40)	0.87 (40)	0.12 (40)	0.03 (39)	0.03 (39)	6.14 (40)	84.7
WL 458HQ.RR	6	1.81 (17)	1.73 (30)	1.49 (41)	0.60 (41)	0.11 (41)	0.03 (40)	0.05 (28)	5.82 (41)	80.3
Experimental Varieties										
NM2119	8	2.02 (2)	1.98 (4)	2.16 (12)	1.46 (13)	0.56 (13)	0.16 (5)	0.21 (1)	8.54 (3)	117.8
NM2106	7.6	1.86 (12)	2.08 (1)	2.11 (16)	1.56 (6)	0.69 (4)	0.12 (12)	0.09 (7)	8.51 (4)	117.4
UCAL2155	4	1.87 (11)	1.96 (6)	2.27 (3)	1.54 (8)	0.62 (7)	0.11 (14)	0.05 (29)	8.41 (6)	116.0
UCAL2040	9	1.68 (31)	1.87 (11)	2.24 (5)	1.72 (3)	0.56 (12)	0.09 (22)	0.03 (41)	8.17 (7)	112.6
NM2109	7.8	2.03 (1)	2.02 (2)	2.11 (15)	1.23 (25)	0.42 (22)	0.08 (25)	0.05 (23)	7.95 (10)	109.6
Z922	9	1.93 (6)	1.87 (12)	2.19 (10)	1.23 (24)	0.40 (25)	0.08 (26)	0.05 (25)	7.75 (12)	106.9
FGI-20-RR7	7.5	1.67 (32)	1.91 (10)	2.18 (11)	1.34 (18)	0.43 (19)	0.05 (34)	0.09 (8)	7.68 (14)	105.9
UCAL2150	9	1.65 (35)	1.54 (40)	2.21 (7)	1.52 (10)	0.52 (15)	0.07 (29)	0.06 (17)	7.55 (15)	104.1
Z823	8	1.80 (19)	1.92 (8)	2.09 (17)	1.25 (22)	0.36 (28)	0.07 (27)	0.04 (33)	7.54 (16)	104.0
UCAL2010	9	1.63 (36)	1.74 (26)	2.12 (14)	1.54 (9)	0.41 (23)	0.04 (37)	0.04 (32)	7.53 (19)	103.8
UCAL1950	9	1.28 (41)	1.51 (41)	2.04 (21)	1.58 (5)	0.87 (2)	0.10 (17)	0.06 (15)	7.44 (20)	102.7
UCAL2030	5	1.85 (13)	1.84 (14)	1.86 (32)	1.34 (19)	0.39 (26)	0.05 (35)	0.03 (37)	7.37 (22)	101.6
NM2113	7	1.95 (4)	1.83 (16)	1.81 (34)	0.98 (37)	0.45 (17)	0.23 (1)	0.03 (38)	7.28 (26)	100.4
UCAL2020	8	1.83 (15)	1.80 (19)	1.97 (28)	1.19 (32)	0.35 (30)	0.09 (19)	0.05 (21)	7.28 (27)	100.4
UCAL2000	9	1.77 (22)	1.80 (20)	2.04 (22)	1.23 (26)	0.29 (35)	0.09 (18)	0.05 (19)	7.27 (28)	100.3
NM2120	7	1.91 (8)	1.79 (22)	1.88 (31)	1.20 (30)	0.39 (27)	0.06 (32)	0.04 (34)	7.26 (29)	100.2
UCAL1940	8	1.59 (38)	1.72 (32)	2.00 (25)	1.22 (27)	0.56 (10)	0.06 (31)	0.05 (22)	7.21 (32)	99.4
Z722	7	1.87 (10)	1.75 (25)	1.90 (30)	1.10 (36)	0.34 (31)	0.09 (21)	0.05 (27)	7.09 (34)	97.8
UC2705	9	1.75 (24)	1.77 (23)	1.82 (33)	1.18 (34)	0.29 (34)	0.14 (8)	0.07 (12)	7.02 (35)	96.8
FGI-19-RR9	9	1.70 (29)	1.74 (28)	1.79 (35)	1.18 (33)	0.23 (37)	0.18 (4)	0.05 (18)	6.89 (36)	95.1
UCAL1920	8	1.73 (26)	1.84 (15)	1.73 (37)	1.19 (31)	0.28 (36)	0.05 (33)	0.03 (35)	6.86 (37)	94.6
FGI-20-RR8	8	1.82 (16)	1.72 (33)	1.65 (39)	0.93 (39)	0.21 (39)	0.11 (15)	0.08 (11)	6.52 (39)	89.9
MEAN		1.77	1.80	2.02	1.31	0.45	0.10	0.07	7.51	
CV		12.98	11.92	20.01	34.42	78.57	104.16	129.28	17.61	
LSD (0.1)		0.27	0.25	NS	NS	NS	NS	NS	NS	

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.

Applied irrigation water beginning 4/16/25: Full irrigation 42.6", deficit irrigation 19.2"

Table 6. 2024-2025 YIELDS, UC DAVIS ALFALFA CULTIVAR TRIAL. FULL IRRIGATION TREATMENT. TRIAL PLANTED 9/28/23

		2024 Yield	2025 Yield	Average	% of CUF101
	FD		Dry t/a		
Released Varieties					
CW09084 - Lot 1042383	9	10.66 (8)	15.04 (1)	12.85 (1)	121.3
SW9813S	9	11.13 (2)	14.37 (2)	12.75 (2)	120.4
UC Impalo	9	11.45 (1)	12.79 (8)	12.12 (3)	114.4
NuMex 802	8	10.36 (12)	13.85 (3)	12.10 (4)	114.3
9R400	9	10.67 (7)	12.55 (12)	11.61 (8)	109.6
AmeriStand 835NTS RR	8	9.62 (26)	13.47 (4)	11.54 (10)	109.0
NuMex 801	8	10.91 (4)	12.00 (19)	11.45 (11)	108.1
HVX620RR	6	10.14 (17)	12.48 (13)	11.31 (14)	106.8
Alphatec 821	8	10.70 (6)	11.54 (25)	11.12 (15)	105.0
UCCibola	9	9.54 (27)	12.31 (14)	10.92 (17)	103.1
Alphatec 921	9	9.88 (21)	11.76 (20)	10.82 (20)	102.2
Z822	8	9.42 (29)	12.20 (15)	10.81 (23)	102.0
CW89126 Lot#1852310	9	10.38 (11)	11.17 (30)	10.77 (24)	101.7
CUF101	9	9.16 (31)	12.03 (17)	10.59 (27)	100.0
WL3979 HVXRR	9	9.81 (23)	10.66 (36)	10.23 (34)	96.6
Highline	9	9.04 (36)	11.21 (29)	10.12 (35)	95.6
WL 458HQ.RR	6	8.72 (37)	9.87 (40)	9.29 (38)	87.7
Chema 1 - Lot 0472364	9	8.42 (39)	10.09 (38)	9.25 (39)	87.4
Gunner	5	7.90 (40)	10.08 (39)	8.99 (41)	84.9
Experimental Varieties					
FGI-20-RR8	8	10.88 (5)	13.06 (7)	11.97 (5)	113.0
Z722	7	10.15 (16)	13.44 (6)	11.80 (6)	111.4
UC2705	9	10.08 (18)	13.44 (5)	11.76 (7)	111.0
UCAL2040	9	10.47 (10)	12.71 (9)	11.59 (9)	109.4
FGI-19-RR9	9	10.21 (13)	12.59 (10)	11.40 (12)	107.7
FGI-20-RR7	7.5	10.60 (9)	12.19 (16)	11.40 (13)	107.6
NM2113	7	10.97 (3)	10.88 (33)	10.93 (16)	103.1
NM2106	7.6	9.13 (33)	12.57 (11)	10.85 (18)	102.4
UCAL1950	9	9.63 (25)	12.01 (18)	10.82 (19)	102.2
UCAL2030	5	10.17 (15)	11.47 (28)	10.82 (21)	102.1
UCAL2150	9	9.96 (20)	11.67 (23)	10.81 (22)	102.1
NM2119	8	9.97 (19)	11.48 (27)	10.73 (25)	101.3
NM2120	7	10.20 (14)	11.13 (32)	10.66 (26)	100.7
UCAL2000	9	9.26 (30)	11.76 (21)	10.51 (28)	99.2
UCAL1940	8	9.50 (28)	11.51 (26)	10.50 (29)	99.2
UCAL2010	9	9.14 (32)	11.69 (22)	10.42 (30)	98.4
Z922	9	9.07 (34)	11.58 (24)	10.33 (31)	97.5
NM2109	7.8	9.77 (24)	10.87 (34)	10.32 (32)	97.4
Z823	8	9.87 (22)	10.65 (37)	10.26 (33)	96.9
UCAL2020	8	9.06 (35)	10.72 (35)	9.89 (36)	93.4
UCAL1920	8	7.85 (41)	11.16 (31)	9.51 (37)	89.7
UCAL2155	4	8.56 (38)	9.48 (41)	9.02 (40)	85.2
MEAN		9.81	11.89	10.85	
CV		15.74	22.87	17.25	
LSD (0.1)		NS	NS	NS	

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.

2024 applied irrigation water beginning 4/9/24: Full irrigation 24.3", deficit irrigation 7.4"

2025 applied irrigation water beginning 4/16/25: Full irrigation 42.6", deficit irrigation 19.2"

Table 7. 2024-2025 YIELDS, UC DAVIS ALFALFA CULTIVAR TRIAL. DEFICIT IRRIGATION TREATMENT. TRIAL PLANTED 9/28/23

		2024 Yield	2025 Yield	Average		% of CUF101
	FD		Dry t/a			
Released Varieties						
NuMex 802	8	7.49 (5)	8.85 (2)	8.17 (1)	A	117.8
UCCibola	9	6.76 (20)	9.09 (1)	7.92 (3)	A B C	114.2
Chema 1 - Lot 0472364	9	6.79 (19)	8.48 (5)	7.63 (7)	A B C D E F	110.0
SW9813S	9	6.82 (18)	8.15 (8)	7.48 (8)	A B C D E F G	107.8
AmeriStand 835NTS RR	8	7.40 (6)	7.32 (25)	7.36 (13)	A B C D E F G H	106.1
NuMex 801	8	6.88 (16)	7.72 (13)	7.30 (15)	A B C D E F G H	105.2
CW09084 - Lot 1042383	9	6.62 (25)	7.94 (11)	7.28 (16)	A B C D E F G H	105.0
Alphatec 921	9	7.01 (14)	7.34 (23)	7.17 (19)	B C D E F G H I	103.4
9R400	9	6.30 (34)	7.99 (9)	7.15 (20)	B C D E F G H I	103.0
HVX620RR	6	6.70 (22)	7.53 (18)	7.11 (21)	B C D E F G H I	102.5
Alphatec 821	8	6.51 (29)	7.53 (17)	7.02 (25)	C D E F G H I	101.2
CW89126 Lot#1852310	9	6.67 (23)	7.34 (24)	7.00 (27)	D E F G H I	100.9
UC Impalo	9	6.61 (27)	7.38 (21)	7.00 (28)	D E F G H I	100.8
CUF101	9	6.63 (24)	7.25 (30)	6.94 (30)	F G H I J	100.0
Z822	8	6.52 (28)	7.14 (33)	6.83 (33)	F G H I J K	98.4
Highline	9	6.41 (31)	7.24 (31)	6.82 (34)	F G H I J K	98.3
WL3979 HVXRR	9	6.62 (26)	6.73 (38)	6.67 (37)	G H I J K	96.2
WL 458HQ.RR	6	6.33 (33)	5.82 (41)	6.08 (40)	J K	87.6
Gunner	5	5.81 (40)	6.14 (40)	5.97 (41)	K	86.1
Experimental Varieties						
NM2106	7.6	7.37 (7)	8.51 (4)	7.94 (2)	A B	114.4
NM2109	7.8	7.85 (2)	7.95 (10)	7.90 (4)	A B C D	113.8
NM2119	8	7.18 (11)	8.54 (3)	7.86 (5)	A B C D E	113.3
Z922	9	7.96 (1)	7.75 (12)	7.86 (6)	A B C D E	113.2
NM2120	7	7.57 (3)	7.26 (29)	7.42 (9)	A B C D E F G H	106.9
UCAL2020	8	7.55 (4)	7.28 (27)	7.42 (10)	A B C D E F G H	106.9
FGI-20-RR7	7.5	7.10 (13)	7.68 (14)	7.39 (11)	A B C D E F G H	106.5
Z823	8	7.20 (9)	7.54 (16)	7.37 (12)	A B C D E F G H	106.2
NM2113	7	7.35 (8)	7.28 (26)	7.32 (14)	A B C D E F G H	105.4
UCAL2040	9	6.28 (36)	8.17 (7)	7.22 (17)	B C D E F G H I	104.1
UCAL2155	4	5.95 (39)	8.41 (6)	7.18 (18)	B C D E F G H I	103.4
Z722	7	7.11 (12)	7.09 (34)	7.10 (22)	B C D E F G H I	102.4
UCAL1940	8	6.89 (15)	7.21 (32)	7.05 (23)	B C D E F G H I	101.6
FGI-19-RR9	9	7.20 (10)	6.89 (36)	7.04 (24)	B C D E F G H I	101.5
UCAL2000	9	6.76 (21)	7.27 (28)	7.01 (26)	D E F G H I	101.1
UCAL2150	9	6.40 (32)	7.55 (15)	6.98 (29)	E F G H I J	100.6
UCAL2010	9	6.29 (35)	7.53 (19)	6.91 (31)	F G H I J	99.5
UCAL2030	5	6.43 (30)	7.37 (22)	6.90 (32)	F G H I J	99.4
UCAL1950	9	6.09 (38)	7.44 (20)	6.77 (35)	F G H I J K	97.5
FGI-20-RR8	8	6.84 (17)	6.52 (39)	6.68 (36)	G H I J K	96.3
UCAL1920	8	6.23 (37)	6.86 (37)	6.54 (38)	H I J K	94.3
UC2705	9	5.67 (41)	7.02 (35)	6.34 (39)	I J K	91.4
MEAN		6.78	7.51	7.15		
CV		11.52	17.61	10.64		
LSD (0.1)		0.93	NS	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 Fisher's (protected) LSD.

FD = Fall Dormancy reported by seed companies.

2024 applied irrigation water beginning 4/9/24: Full irrigation 24.3", deficit irrigation 7.4"

2025 applied irrigation water beginning 4/16/25: Full irrigation 42.6", deficit irrigation 19.2"

Table 8. 2025 YIELDS, EI CENTRO ALFALFA DEFICIT-CULTIVAR TRIAL. FULL IRRIGATION TREATMENT. TRIAL PLANTED 11/1/23

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	Cut 8	Cut 9	Cut 10	Cut 11	YEAR		% of
		21-Jan	24-Feb	31-Mar	30-Apr	28-May	23-Jun	21-Jul	18-Aug	16-Sep	15-Oct	8-Dec	TOTAL		CUF 101
	FD						Dry t/a								
Released Varieties															
WL656HQ	9	0.87 (9)	1.06 (16)	1.53 (5)	1.82 (14)	2.02 (12)	1.45 (9)	1.37 (11)	0.89 (11)	0.43 (22)	0.34 (9)	0.82 (11)	12.60 (8)	D E F	121.1
Chema 1	9	0.89 (6)	1.05 (17)	1.31 (28)	1.62 (29)	1.85 (29)	1.46 (8)	1.36 (12)	0.98 (6)	0.59 (5)	0.42 (6)	0.89 (5)	12.43 (10)	D E F	119.5
Highline	9	0.88 (8)	1.15 (8)	1.62 (1)	1.83 (11)	1.97 (18)	1.39 (13)	1.38 (8)	0.77 (22)	0.34 (29)	0.20 (29)	0.74 (21)	12.27 (12)	D E F G	118.0
Alphatec 921	9	0.67 (25)	1.09 (9)	1.47 (11)	1.83 (13)	2.05 (7)	1.22 (26)	1.28 (20)	0.92 (7)	0.54 (8)	0.36 (8)	0.82 (10)	12.26 (13)	D E F G H	117.8
Alphatec 821	8	0.67 (24)	1.02 (20)	1.47 (14)	1.90 (2)	1.98 (16)	1.31 (20)	1.38 (9)	0.88 (12)	0.44 (21)	0.28 (17)	0.80 (14)	12.14 (15)	D E F G H I	116.7
Magna 995	9	0.73 (18)	1.07 (14)	1.41 (20)	1.88 (4)	2.10 (4)	1.36 (15)	1.32 (17)	0.77 (21)	0.45 (19)	0.25 (21)	0.74 (22)	12.09 (16)	D E F G H I J	116.2
CW89126	9	0.75 (15)	1.06 (15)	1.37 (25)	1.84 (10)	1.95 (20)	1.46 (7)	1.33 (15)	0.77 (20)	0.45 (18)	0.30 (13)	0.78 (15)	12.07 (17)	D E F G H I J	116.1
UC Impalo	9	0.89 (7)	1.04 (18)	1.45 (16)	1.72 (23)	1.91 (24)	1.31 (21)	1.32 (16)	0.80 (19)	0.48 (14)	0.24 (24)	0.74 (19)	11.90 (20)	E F G H I J	114.4
UCCibola	9	0.62 (28)	0.98 (23)	1.38 (24)	1.66 (27)	1.77 (30)	1.36 (16)	1.22 (26)	0.75 (25)	0.48 (13)	0.29 (14)	0.81 (12)	11.31 (23)	G H I J K	108.8
CW09084	9	0.68 (23)	0.98 (24)	1.38 (23)	1.72 (22)	1.92 (22)	1.34 (18)	1.26 (21)	0.74 (27)	0.42 (25)	0.18 (30)	0.68 (26)	11.30 (24)	G H I J K	108.7
SW9813S	9	0.71 (20)	0.96 (26)	1.20 (31)	1.67 (26)	1.99 (15)	1.21 (27)	1.20 (27)	0.76 (24)	0.50 (12)	0.20 (28)	0.66 (28)	11.05 (27)	J K	106.3
CUF 101	9	0.57 (30)	0.93 (28)	1.22 (30)	1.48 (32)	1.63 (32)	1.27 (23)	1.13 (30)	0.68 (31)	0.47 (15)	0.27 (19)	0.74 (20)	10.40 (31)	K L	100.0
Experimental Varieties															
C1022TF592	10	1.13 (3)	1.19 (3)	1.56 (2)	1.84 (9)	2.21 (1)	1.78 (2)	1.76 (1)	1.12 (3)	0.74 (2)	0.63 (1)	1.03 (1)	15.00 (1)	A	144.3
C1120TF854	11	1.28 (1)	1.41 (1)	1.45 (15)	1.83 (12)	2.05 (8)	1.87 (1)	1.69 (2)	1.14 (1)	0.71 (3)	0.52 (3)	0.96 (2)	14.92 (2)	A	143.5
C1122TF599	11	1.19 (2)	1.26 (2)	1.52 (7)	1.85 (8)	2.02 (10)	1.75 (4)	1.64 (3)	1.13 (2)	0.86 (1)	0.55 (2)	0.94 (4)	14.71 (3)	A B	141.4
C1020ML851	10	0.76 (14)	1.16 (6)	1.51 (8)	1.85 (6)	2.15 (3)	1.76 (3)	1.46 (4)	1.08 (4)	0.66 (4)	0.44 (4)	0.95 (3)	13.78 (4)	B C	132.5
C1120TF855	11	0.97 (4)	1.17 (4)	1.44 (17)	1.77 (18)	2.02 (13)	1.56 (5)	1.46 (5)	0.92 (8)	0.52 (11)	0.41 (7)	0.86 (6)	13.09 (5)	C D	125.8
UCAL1940	8	0.86 (10)	1.16 (5)	1.50 (9)	1.92 (1)	2.07 (6)	1.42 (11)	1.41 (6)	0.99 (5)	0.31 (30)	0.30 (12)	0.77 (18)	12.72 (6)	D E	122.3
UCAL1911	8	0.79 (12)	1.09 (12)	1.47 (12)	1.80 (15)	2.16 (2)	1.37 (14)	1.32 (18)	0.88 (15)	0.53 (9)	0.43 (5)	0.86 (8)	12.69 (7)	D E F	122.0
UCAL2040	9	0.97 (5)	1.15 (7)	1.54 (4)	1.79 (16)	2.02 (11)	1.42 (10)	1.23 (25)	0.88 (14)	0.44 (20)	0.33 (10)	0.80 (13)	12.57 (9)	D E F	120.9
C1020TF852	10	0.73 (17)	1.08 (13)	1.47 (13)	1.70 (24)	2.03 (9)	1.56 (6)	1.34 (13)	0.87 (16)	0.46 (16)	0.28 (16)	0.77 (17)	12.30 (11)	D E F G	118.2
UCAL2000	9	0.85 (11)	1.09 (11)	1.48 (10)	1.76 (19)	1.85 (28)	1.30 (22)	1.33 (14)	0.91 (9)	0.52 (10)	0.32 (11)	0.77 (16)	12.20 (14)	D E F G H	117.3
UCAL2010	9	0.66 (26)	0.92 (31)	1.41 (21)	1.75 (20)	1.92 (23)	1.41 (12)	1.37 (10)	0.90 (10)	0.56 (6)	0.29 (15)	0.86 (7)	12.05 (18)	D E F G H I J	115.8
UCAL1950	9	0.77 (13)	1.01 (22)	1.37 (26)	1.78 (17)	1.91 (25)	1.25 (24)	1.41 (7)	0.88 (13)	0.56 (7)	0.27 (20)	0.74 (23)	11.93 (19)	E F G H I J	114.7
UCAL2150	9	0.69 (22)	1.02 (19)	1.56 (3)	1.75 (21)	1.98 (17)	1.19 (29)	1.29 (19)	0.81 (18)	0.45 (17)	0.28 (18)	0.84 (9)	11.85 (21)	E F G H I J	113.9
UCAL2020	8	0.73 (19)	1.02 (21)	1.39 (22)	1.88 (3)	2.10 (5)	1.35 (17)	1.25 (23)	0.76 (23)	0.26 (32)	0.22 (26)	0.67 (27)	11.64 (22)	F G H I J	111.9
UC2705	8	0.74 (16)	0.97 (25)	1.28 (29)	1.55 (31)	1.96 (19)	1.33 (19)	1.24 (24)	0.81 (17)	0.42 (24)	0.25 (22)	0.64 (30)	11.20 (25)	H I J K	107.7
Z823	8	0.63 (27)	1.09 (10)	1.42 (19)	1.70 (25)	1.94 (21)	1.10 (30)	1.19 (28)	0.75 (26)	0.35 (27)	0.25 (23)	0.73 (24)	11.14 (26)	I J K	107.1
Z922	9	0.56 (31)	0.83 (32)	1.43 (18)	1.85 (7)	1.90 (26)	1.19 (28)	1.25 (22)	0.68 (30)	0.41 (26)	0.23 (25)	0.70 (25)	11.05 (28)	J K	106.3
Z722	7	0.62 (29)	0.92 (30)	1.53 (6)	1.88 (5)	2.00 (14)	1.23 (25)	1.09 (32)	0.67 (32)	0.34 (28)	0.15 (31)	0.62 (31)	11.04 (29)	J K	106.2
UCAL1920	8	0.70 (21)	0.95 (27)	1.33 (27)	1.65 (28)	1.71 (31)	1.03 (31)	1.10 (31)	0.70 (28)	0.42 (23)	0.22 (27)	0.65 (29)	10.45 (30)	K L	100.5
Z822	8	0.54 (32)	0.92 (29)	1.15 (32)	1.59 (30)	1.89 (27)	0.98 (32)	1.18 (29)	0.69 (29)	0.29 (31)	0.13 (32)	0.57 (32)	9.94 (32)	L	95.6
MEAN		0.78	1.06	1.43	1.77	1.97	1.37	1.33	0.85	0.48	0.31	0.78	12.13		
CV		14.23	13.46	12.11	11.04	10.45	9.86	8.94	15.11	26.76	32.96	15.76	7.28		
LSD (0.1)		0.13	0.17	0.21	NS	0.25	0.16	0.14	0.15	0.15	0.12	0.15	1.06		

Trial seeded at 25 lb/acre viable seed at Desert Research and Extension Center, Holtville, 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.

2025 applied irrigation water beginning 1/21/25: Full irrigation 56.3", deficit irrigation 35.6"

Table 9. 2025 YIELDS, El CENTRO ALFALFA DEFICIT-CULTIVAR TRIAL. DEFICIT IRRIGATION TREATMENT. TRIAL PLANTED 11/1/23

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	Cut 8	Cut 9	Cut 10	Cut 11	YEAR		% of
		21-Jan	24-Feb	31-Mar	30-Apr	28-May	23-Jun	21-Jul	18-Aug	16-Sep	15-Oct	8-Dec	TOTAL		CUF 101
	FD	Dry t/a													
Released Varieties															
Chema 1	9	0.80 (8)	1.01 (4)	1.24 (20)	1.83 (14)	1.94 (3)	1.32 (6)	0.88 (7)	0.46 (1)	0.12 (13)	0.07 (16)	0.97 (12)	10.64 (4)	A B C	118.6
WL656HQ	9	0.74 (12)	0.92 (12)	1.33 (6)	1.77 (19)	1.88 (6)	1.25 (7)	0.84 (9)	0.08 (29)	0.11 (15)	0.07 (14)	0.99 (7)	9.98 (7)	C D E F	111.3
SW9813S	9	0.73 (13)	1.00 (5)	1.21 (24)	1.86 (11)	1.96 (2)	1.06 (20)	0.77 (19)	0.21 (3)	0.14 (7)	0.09 (5)	0.69 (32)	9.71 (11)	C D E F G	108.3
Alphatec 821	8	0.56 (29)	0.98 (7)	1.30 (12)	1.88 (9)	1.78 (14)	1.01 (25)	0.96 (4)	0.12 (16)	0.10 (21)	0.07 (15)	0.91 (20)	9.66 (12)	C D E F G	107.7
Highline	9	0.68 (17)	0.90 (19)	1.27 (15)	1.79 (18)	1.87 (8)	1.15 (15)	0.82 (14)	0.10 (23)	0.08 (27)	0.06 (21)	0.90 (22)	9.62 (14)	D E F G H	107.2
CW89126	9	0.79 (10)	0.91 (13)	1.27 (14)	1.82 (15)	1.80 (11)	1.15 (14)	0.75 (21)	0.11 (20)	0.07 (29)	0.08 (7)	0.84 (25)	9.60 (15)	D E F G H	107.0
UC Impalo	9	0.81 (7)	0.91 (14)	1.25 (19)	1.75 (22)	1.67 (25)	1.15 (13)	0.77 (20)	0.13 (9)	0.11 (18)	0.07 (11)	0.96 (13)	9.60 (16)	D E F G H	107.0
Alphatec 921	9	0.65 (20)	0.90 (17)	1.30 (10)	1.83 (13)	1.63 (27)	1.00 (27)	0.81 (15)	0.12 (11)	0.12 (11)	0.07 (10)	0.94 (18)	9.38 (22)	D E F G H I	104.6
UCCibola	9	0.60 (25)	0.88 (20)	1.26 (17)	1.67 (27)	1.68 (23)	1.06 (18)	0.73 (25)	0.13 (7)	0.23 (2)	0.09 (3)	0.87 (23)	9.22 (23)	E F G H I	102.7
CUF 101	9	0.47 (31)	0.73 (31)	1.09 (31)	1.53 (32)	1.73 (18)	0.84 (31)	0.91 (6)	0.25 (2)	0.27 (1)	0.13 (1)	1.03 (3)	8.97 (26)	F G H I J	100.0
Magna 995	9	0.59 (27)	0.81 (29)	1.11 (30)	1.64 (30)	1.65 (26)	1.06 (19)	0.71 (29)	0.10 (22)	0.06 (32)	0.06 (18)	0.77 (30)	8.55 (30)	I J K	95.4
CW09084	9	0.57 (28)	0.72 (32)	1.08 (32)	1.64 (29)	1.37 (32)	0.93 (29)	0.60 (31)	0.05 (32)	0.11 (14)	0.05 (31)	0.78 (29)	7.90 (32)	K	88.1
Experimental Varieties															
C1022TF592	10	1.00 (3)	1.04 (2)	1.38 (2)	2.04 (1)	1.98 (1)	1.55 (2)	1.10 (2)	0.09 (24)	0.14 (6)	0.08 (6)	1.07 (1)	11.47 (1)	A	127.9
C1122TF599	11	1.03 (2)	1.10 (1)	1.40 (1)	1.88 (7)	1.92 (4)	1.64 (1)	1.13 (1)	0.14 (6)	0.14 (5)	0.06 (17)	1.02 (4)	11.46 (2)	A	127.8
C1120TF854	11	1.08 (1)	1.03 (3)	1.34 (5)	1.91 (5)	1.89 (5)	1.53 (3)	1.08 (3)	0.13 (8)	0.10 (20)	0.07 (8)	0.96 (14)	11.13 (3)	A B	124.1
C1120TF855	11	0.84 (4)	0.98 (8)	1.31 (9)	1.95 (3)	1.79 (13)	1.36 (4)	0.83 (10)	0.09 (27)	0.10 (22)	0.06 (27)	1.00 (5)	10.30 (5)	B C D	114.9
UCAL2000	9	0.83 (5)	0.95 (9)	1.35 (4)	1.81 (16)	1.87 (9)	1.21 (9)	0.93 (5)	0.10 (21)	0.10 (19)	0.06 (22)	0.97 (11)	10.19 (6)	B C D E	113.6
UCAL1920	8	0.77 (11)	0.99 (6)	1.20 (26)	1.85 (12)	1.88 (7)	1.02 (22)	0.83 (11)	0.15 (4)	0.14 (8)	0.10 (2)	1.04 (2)	9.96 (8)	C D E F	111.1
C1020ML851	10	0.72 (14)	0.93 (10)	1.27 (16)	1.93 (4)	1.68 (24)	1.35 (5)	0.79 (18)	0.08 (28)	0.11 (16)	0.07 (13)	0.95 (16)	9.88 (9)	C D E F	110.2
C1020TF852	10	0.80 (9)	0.88 (21)	1.25 (18)	1.75 (23)	1.82 (10)	1.20 (11)	0.85 (8)	0.11 (19)	0.18 (3)	0.06 (25)	0.90 (21)	9.77 (10)	C D E F	108.9
UC2705	8	0.67 (19)	0.93 (11)	1.30 (11)	1.76 (21)	1.73 (20)	1.19 (12)	0.83 (13)	0.12 (10)	0.09 (23)	0.06 (20)	0.96 (15)	9.63 (13)	C D E F G	107.4
UCAL2040	9	0.69 (15)	0.87 (22)	1.23 (22)	1.77 (20)	1.74 (17)	1.21 (10)	0.80 (17)	0.09 (25)	0.14 (9)	0.06 (23)	0.98 (8)	9.57 (17)	D E F G H I	106.7
Z722	7	0.53 (30)	0.90 (16)	1.27 (13)	1.98 (2)	1.73 (19)	1.11 (17)	0.74 (22)	0.12 (13)	0.11 (17)	0.07 (12)	1.00 (6)	9.57 (18)	D E F G H I	106.6
Z823	8	0.61 (24)	0.91 (15)	1.36 (3)	1.86 (10)	1.72 (21)	1.01 (26)	0.81 (16)	0.15 (5)	0.17 (4)	0.07 (9)	0.82 (27)	9.49 (19)	D E F G H I	105.7
UCAL2150	9	0.69 (16)	0.87 (23)	1.32 (7)	1.88 (8)	1.74 (16)	1.05 (21)	0.71 (28)	0.12 (14)	0.08 (28)	0.06 (26)	0.98 (9)	9.47 (20)	D E F G H I	105.6
UCAL2010	9	0.59 (26)	0.84 (27)	1.18 (27)	1.80 (17)	1.80 (12)	1.22 (8)	0.83 (12)	0.12 (17)	0.07 (31)	0.06 (30)	0.93 (19)	9.44 (21)	D E F G H I	105.2
UCAL1911	8	0.64 (21)	0.86 (25)	1.20 (25)	1.72 (25)	1.76 (15)	1.13 (16)	0.72 (26)	0.07 (30)	0.08 (25)	0.06 (19)	0.97 (10)	9.21 (24)	E F G H I	102.7
UCAL1940	8	0.81 (6)	0.90 (18)	1.22 (23)	1.65 (28)	1.70 (22)	1.02 (23)	0.72 (27)	0.06 (31)	0.08 (26)	0.06 (29)	0.95 (17)	9.16 (25)	F G H I	102.1
UCAL2020	8	0.61 (23)	0.86 (24)	1.24 (21)	1.75 (24)	1.61 (28)	0.96 (28)	0.74 (23)	0.12 (12)	0.12 (12)	0.09 (4)	0.87 (24)	8.97 (27)	F G H I J	100.0
Z822	8	0.63 (22)	0.82 (28)	1.31 (8)	1.88 (6)	1.60 (29)	0.75 (32)	0.62 (30)	0.12 (15)	0.13 (10)	0.06 (24)	0.80 (28)	8.72 (28)	G H I J K	97.2
UCAL1950	9	0.67 (18)	0.84 (26)	1.15 (28)	1.58 (31)	1.58 (30)	1.01 (24)	0.73 (24)	0.09 (26)	0.07 (30)	0.06 (28)	0.82 (26)	8.60 (29)	H I J K	95.9
Z922	9	0.43 (32)	0.75 (30)	1.11 (29)	1.68 (26)	1.55 (31)	0.86 (30)	0.59 (32)	0.11 (18)	0.08 (24)	0.05 (32)	0.77 (31)	7.99 (31)	J K	89.1
MEAN		0.71	0.90	1.25	1.79	1.75	1.14	0.81	0.13	0.12	0.07	0.92	9.59		
CV		12.69	12.86	11.19	9.88	12.73	14.63	21.27	96.91	65.77	54.98	16.90	8.86		
LSD (0.1)		0.11	0.14	NS	0.21	0.27	0.20	0.21	NS	NS	NS	0.19	1.02		

Trial seeded at 25 lb/acre viable seed at Desert Research and Extension Center, Holtville, 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.

2025 applied irrigation water beginning 1/21/25: Full irrigation 56.3", deficit irrigation 35.6"

Table 10. 2024-2025 YIELDS, EL CENTRO ALFALFA CULTIVAR TRIAL. FULL IRRIGATION TREATMENT. TRIAL PLANTED 11/1/23

		2024 Yield	2025 Yield	Average		% of CUF 101
	FD	Dry t/a				
Released Varieties						
WL656HQ	9	8.43 (14)	12.60 (8)	10.51 (10)	D E F	112.7
Highline	9	8.58 (10)	12.27 (12)	10.43 (11)	D E F G	111.8
Alphatec 921	9	8.52 (11)	12.26 (13)	10.39 (12)	E F G H	111.4
Alphatec 821	8	8.61 (9)	12.14 (15)	10.38 (13)	E F G H	111.2
Chema 1	9	8.32 (21)	12.43 (10)	10.38 (14)	E F G H	111.2
CW89126	9	8.41 (16)	12.07 (17)	10.24 (18)	F G H I J	109.8
UC Impalo	9	8.39 (18)	11.90 (20)	10.15 (20)	F G H I J K	108.8
Magna 995	9	8.11 (29)	12.09 (16)	10.10 (22)	F G H I J K L	108.3
CW09084	9	8.36 (20)	11.30 (24)	9.83 (23)	G H I J K L M	105.4
UCCibola	9	8.28 (25)	11.31 (23)	9.79 (24)	G H I J K L M	105.0
SW9813S	9	7.96 (30)	11.05 (27)	9.51 (29)	L M N	101.9
CUF 101	9	8.26 (26)	10.40 (31)	9.33 (30)	M N O	100.0
Experimental Varieties						
C1120TF854	11	9.48 (1)	14.92 (2)	12.20 (1)	A	130.8
C1022TF592	10	9.22 (3)	15.00 (1)	12.11 (2)	A	129.9
C1122TF599	11	8.84 (8)	14.71 (3)	11.77 (3)	A B	126.2
C1020ML851	10	9.01 (5)	13.78 (4)	11.40 (4)	B C	122.2
C1120TF855	11	9.00 (6)	13.09 (5)	11.04 (5)	C D	118.4
UCAL2040	9	9.19 (4)	12.57 (9)	10.88 (6)	C D E	116.7
UCAL2010	9	9.34 (2)	12.05 (18)	10.69 (7)	D E F	114.6
UCAL1940	8	8.47 (13)	12.72 (6)	10.60 (8)	D E F	113.6
UCAL1911	8	8.40 (17)	12.69 (7)	10.55 (9)	D E F	113.0
UCAL2000	9	8.41 (15)	12.20 (14)	10.30 (15)	E F G H	110.5
C1020TF852	10	8.30 (23)	12.30 (11)	10.30 (16)	E F G H I	110.4
UCAL2020	8	8.87 (7)	11.64 (22)	10.25 (17)	E F G H I J	109.9
UCAL2150	9	8.49 (12)	11.85 (21)	10.17 (19)	F G H I J K	109.0
UCAL1950	9	8.31 (22)	11.93 (19)	10.12 (21)	F G H I J K L	108.5
Z823	8	8.38 (19)	11.14 (26)	9.76 (25)	H I J K L M	104.6
Z722	7	8.29 (24)	11.04 (29)	9.67 (26)	I J K L M	103.6
UC2705	8	8.12 (28)	11.20 (25)	9.66 (27)	J K L M	103.5
Z922	9	8.12 (27)	11.05 (28)	9.59 (28)	K L M N	102.8
UCAL1920	8	7.51 (31)	10.45 (30)	8.98 (31)	N O	96.3
Z822	8	7.47 (32)	9.94 (32)	8.70 (32)	O	93.3
MEAN		8.48	12.13	10.31		
CV		5.27	7.28	5.13		
LSD (0.1)		0.54	1.06	0.63		

Trial seeded at 25 lb/acre viable seed at Desert Research and Extension Center, Holtville, 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.

2024 applied irrigation water beginning 4/9/24: Full irrigation 69.1", deficit irrigation 32.1"

2025 applied irrigation water beginning 1/21/25: Full irrigation 56.3", deficit irrigation 35.6"

Table 11. 2024-2025 YIELDS, EL CENTRO ALFALFA CULTIVAR TRIAL. DEFICIT IRRIGATION TREATMENT. TRIAL PLANTED 11/1/23

		2024 Yield	2025 Yield	Average		% of CUF 101
	FD	Dry t/a				
Released Varieties						
Chema 1	9	7.52 (4)	10.64 (4)	9.08 (4)	B C D	112.4
UC Impalo	9	7.73 (3)	9.60 (16)	8.67 (8)	C D E F G	107.3
WL656HQ	9	7.20 (17)	9.98 (7)	8.59 (9)	D E F G	106.3
SW9813S	9	7.39 (9)	9.71 (11)	8.55 (11)	D E F G H	105.9
Highline	9	7.43 (8)	9.62 (14)	8.52 (12)	D E F G H	105.5
Alphatec 821	8	7.34 (13)	9.66 (12)	8.50 (13)	D E F G H	105.2
CW89126	9	7.35 (12)	9.60 (15)	8.48 (14)	D E F G H	105.0
Alphatec 921	9	7.05 (22)	9.38 (22)	8.21 (20)	F G H I J K	101.7
UCCibola	9	7.20 (16)	9.22 (23)	8.21 (21)	F G H I J K	101.7
CUF 101	9	7.18 (18)	8.97 (26)	8.08 (24)	G H I J K L	100.0
Magna 995	9	6.85 (28)	8.55 (30)	7.70 (30)	K L	95.3
CW09084	9	7.17 (19)	7.90 (32)	7.53 (31)	L	93.3
Experimental Varieties						
C1122TF599	11	8.04 (1)	11.46 (2)	9.75 (1)	A	120.7
C1022TF592	10	7.46 (6)	11.47 (1)	9.47 (2)	A B	117.2
C1120TF854	11	7.44 (7)	11.13 (3)	9.29 (3)	A B C	115.0
C1120TF855	11	7.48 (5)	10.30 (5)	8.89 (5)	B C D E	110.1
UCAL2000	9	7.38 (10)	10.19 (6)	8.79 (6)	C D E F	108.8
UCAL2010	9	7.98 (2)	9.44 (21)	8.71 (7)	C D E F G	107.9
C1020ML851	10	7.28 (14)	9.88 (9)	8.58 (10)	D E F G	106.2
UCAL2040	9	7.37 (11)	9.57 (17)	8.47 (15)	D E F G H	104.9
C1020TF852	10	7.04 (24)	9.77 (10)	8.41 (16)	E F G H I	104.1
Z722	7	7.14 (20)	9.57 (18)	8.35 (17)	E F G H I J	103.4
UC2705	8	6.93 (25)	9.63 (13)	8.28 (18)	E F G H I J K	102.5
UCAL2150	9	7.05 (21)	9.47 (20)	8.26 (19)	E F G H I J K	102.3
UCAL1920	8	6.29 (32)	9.96 (8)	8.13 (22)	G H I J K L	100.6
UCAL2020	8	7.22 (15)	8.97 (27)	8.10 (23)	G H I J K L	100.3
Z823	8	6.67 (30)	9.49 (19)	8.08 (25)	G H I J K L	100.0
UCAL1911	8	6.91 (27)	9.21 (24)	8.06 (26)	G H I J K L	99.8
UCAL1940	8	6.66 (31)	9.16 (25)	7.91 (27)	H I J K L	97.9
UCAL1950	9	6.93 (26)	8.60 (29)	7.77 (28)	I J K L	96.1
Z822	8	6.68 (29)	8.72 (28)	7.70 (29)	J K L	95.4
Z922	9	7.04 (23)	7.99 (31)	7.52 (32)	L	93.1
MEAN		7.20	9.59	8.39		
CV		6.92	8.86	6.47		
LSD (0.1)		0.60	1.02	0.65		

Trial seeded at 25 lb/acre viable seed at Desert Research and Extension Center, Holtville, 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.

2024 applied irrigation water beginning 4/9/24: Full irrigation 69.1", deficit irrigation 32.1"

2025 applied irrigation water beginning 1/21/25: Full irrigation 56.3", deficit irrigation 35.6"

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.

	Rating Factor										
	Fall Dormancy	Spotted Alfalfa Aphid	Pea Aphid	Blue Alfalfa Aphid	Phytopthora Root Rot	Bacterial Wilt	Fusarium Wilt	Southern Anthracnose	Stem Nematode	Root Knot Nematode	Verticillium Wilt
Production Zone	**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 reistant 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 enviornmental 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.