

Table 6. Dry matter yields (tons/acre) of furrow-irrigated alfalfa varieties sown September 19, 1997, at NMSU's Agricultural Science Center at Tucumcari and grown under differing soil moisture constraints.

Variety	1999	2000	2001 Harvests					2001	3-yr	
	Total ¹	Total	May 10	June 11	July 9	Aug. 7	Sep. 10	Oct. 29	Total	Total
Dryland: Not irrigated since 5-Oct 1997.										
OK49	2.03**	0.54	1.32*	0.49*	0.21*	.	.	.	2.03*	4.59**
Common, CO	1.40	0.50	1.61*	0.59*	0.21*	.	.	.	2.41**	4.32*
ABT 405	1.24	0.59**	1.68*	0.40*	0.12*	.	.	.	2.20*	4.03*
Salado	1.78*	0.30	1.12*	0.27	0.11*	.	.	.	1.50	3.58*
AmeriGraze 401+Z	1.41	0.18	1.21*	0.31	0.05	.	.	.	1.57	3.16
Supercuts	1.14	0.28	1.27*	0.28	0.07	.	.	.	1.62	3.03
AlfaGraze	0.97	0.20	1.09*	0.21	0.09	.	.	.	1.38	2.55
LSD (0.05)	0.56	0.05	Ns	0.23	0.11	.	.	.	0.70	1.31
Mean	1.43	0.35	1.31	0.36	0.12	.	.	.	1.79	3.58
CV, %	25.72	58.91	26.11	41.20	57.63	.	.	.	25.80	24.15
Poorly-drained/saline: Has 700 ppm sodium in the surface 6 inches.										
OK49	3.72*	6.51**	2.50*	1.78*	1.35*	1.44*	1.42	0.76**	9.24**	19.47**
Salado	4.15**	5.91*	1.41	1.54	1.24*	1.32*	1.35	0.72*	7.58	17.63*
Common, CO	2.90	5.73*	2.14*	1.61*	1.08	1.32*	1.29	0.25	7.68	16.31
Supercuts	2.97	5.91*	1.85	1.37	1.04	1.02	1.15	0.44*	6.87	15.75
AmeriGraze 401+Z	3.00	5.35*	1.85	1.53	1.13	1.20*	1.19	0.41*	7.30	15.64
AlfaGraze	2.83	5.34*	2.33*	1.35	1.03	1.20*	1.21	0.29	7.41	15.58
ABT 405	2.75	4.93*	2.40*	1.57*	1.17	1.18*	1.19	0.34*	7.85	15.53
LSD (0.05)	0.79	Ns	0.58	0.22	0.15	0.34	Ns	0.21	1.08	3.10
Mean	3.19	5.67	2.07	1.53	1.15	1.24	1.26	0.46	7.70	16.56
CV, %	16.70	19.50	18.94	9.51	8.59	18.44	15.79	30.16	9.47	12.58
Standard irrigation: Irrigated once before each harvest.										
OK49	5.08**	5.18**	1.81*	1.37*	1.37*	1.50*	1.38*	0.50*	7.93**	18.19**
Supercuts	3.97	4.55*	1.91*	1.21*	1.44*	1.25*	1.26*	0.30	7.38*	15.89*
Salado	4.10*	4.62*	1.39	1.26*	1.40*	1.36*	1.15	0.36*	6.92	15.64*
ABT 405	3.90	4.20*	1.79*	0.83	1.23*	1.39*	1.10	0.19	6.54	14.64
Common, CO	3.17	3.81*	2.00*	1.24*	1.26*	1.35*	1.00	0.18	7.03	14.02
AmeriGraze 401+Z	3.20	3.56	1.62*	1.30*	1.32*	1.32*	1.00	0.23	6.80	13.55
AlfaGraze	3.04	3.36	1.83*	1.08*	1.14	1.28*	1.10	0.15	6.57	12.98
LSD (0.05)	1.06	1.50	0.55	0.38	0.29	Ns	0.23	0.20	0.65	2.69
Mean	3.78	4.18	1.76	1.18	1.31	1.35	1.14	0.27	7.02	14.99
CV, %	18.84	24.13	20.94	21.36	14.76	14.78	13.65	50.39	6.18	12.10
Winter irrigation: Same as standard but also monthly during winter (Nov. to Apr.).										
OK49	8.17**	7.82**	2.74*	1.73*	1.39*	1.47*	1.41*	0.69**	9.42**	25.41**
AlfaGraze	7.65*	7.30*	2.93*	1.43*	1.15*	1.40*	1.32*	0.41	8.64*	23.59*
Common, CO	7.54*	6.88*	2.75*	1.54*	1.23*	1.48*	1.49*	0.48*	8.98*	23.40*
Supercuts	7.42*	6.85*	3.04*	1.46*	1.25*	1.45*	1.38*	0.47*	9.05*	23.32*
AmeriGraze 401+Z	7.65*	7.11*	2.47	1.41*	1.14*	1.41*	1.37*	0.39	8.18	22.94
Salado	7.58*	6.64*	2.33	1.21	1.17*	1.48*	1.39*	0.69**	8.27	22.49
ABT 405	5.96	5.91	2.75*	1.37*	1.17*	1.36*	1.27*	0.45	8.37	20.23
LSD (0.05)	1.18	1.41	0.40	0.44	Ns	Ns	Ns	0.24	0.91	3.23
Mean	7.42	6.92	2.71	1.45	1.22	1.44	1.38	0.51	8.70	23.04
CV, %	15.08	13.68	9.82	20.40	15.49	7.33	12.72	30.93	7.01	9.39

¹Yield data for previous years may be different than that presented in other publications due to a difference in analysis methods.

1998 Harvest dates: None taken to allow for collection of other data.

1999 Harvest dates: 21-May, 16-Jun, 13-Jul, 11-Aug, 9-Sep, and 25-Oct, except for the Dryland test, which was not harvested 9-Sep.

2000 Harvest dates: 16-May, 20-Jun, 20-Jul, 17-Aug, 11-Sep, and 2-Nov, except for the Dryland test, which was not harvested after Jul.

**Highest numerical value in the column for that test.

*Not significantly different from the highest numerical value in the column for that test based on the 5% LSD.

LSD (0.05) stands for the Least Significant Difference at the 5% level. If the difference between two numbers within a column is equal to or greater than the LSD, it is a 95% certain that they are truly different.

Ns means that there were no significant differences between varieties within that column for that test at the 5% level.

Table 7. Dry matter yields (tons/acre) of furrow-irrigated alfalfa varieties sown September 14, 1999, at NMSU's Agricultural Science Center at Tucumcari.

Variety	2000	2001 Harvests						2001	2-yr
	Total ¹	May 10	June 11	July 9	Aug. 7	Sep. 10	Oct. 29	Total	Total
NM9D11A-PAR	4.44*	1.94	1.91*	1.64*	1.80**	1.62*	0.95*	9.85*	14.29**
Rio Grande	4.11*	1.97	1.74*	1.74**	1.72*	1.77*	0.99**	9.92**	14.03*
NC+X605	4.48**	1.74	1.90*	1.60*	1.60*	1.72*	0.92*	9.47*	13.94*
5681	4.25*	2.28*	1.70	1.55*	1.58*	1.78**	0.80*	9.67*	13.92*
Archer II	3.95*	2.53**	1.93*	1.51*	1.45	1.57*	0.74	9.72*	13.67*
ZX9362	4.06*	1.83	1.94*	1.55*	1.61*	1.72*	0.72	9.36*	13.42*
Magna 601	3.80*	1.89	1.94*	1.53*	1.63*	1.74*	0.82*	9.54*	13.34*
Wilson	4.28*	1.66	1.96*	1.46	1.55	1.49*	0.85*	8.96*	13.23*
WL327	3.30	2.13*	1.86*	1.52*	1.49	1.63*	0.72	9.35*	12.64*
Abilene +Z	3.34	2.12*	1.98**	1.48	1.52	1.53*	0.65	9.28*	12.61*
Ram	3.49**	1.79	1.92*	1.51*	1.49	1.48	0.77	8.95*	12.44*
WL442	4.01*	1.44	1.74*	1.57*	1.44	1.51*	0.69	8.39	12.40*
Dona Ana	3.34	1.82	1.93*	1.40	1.59*	1.47	0.82*	9.04*	12.38*
Common, NM	3.22	1.90	1.80*	1.55*	1.57*	1.57*	0.79*	9.16*	12.38*
Dagger +EV	3.03	2.06	1.91*	1.49*	1.53	1.56*	0.60	9.14*	12.17
Sutter	3.02	1.84	1.89*	1.48	1.56*	1.66*	0.71	9.14*	12.16
Cimarron 3i	3.09	2.31*	1.87*	1.39	1.45	1.34	0.55	8.91*	12.00
54Q53	2.95	1.98	1.93*	1.46	1.53	1.46	0.64	8.99*	11.94
Garst 6420	2.72	2.35*	1.92*	1.24	1.41	1.52*	0.66	9.10*	11.82
Magnum V	2.78	2.03	1.89*	1.40	1.41	1.64*	0.54	8.92*	11.70
Monsanto 142	2.81	2.04	1.89*	1.35	1.36	1.48	0.62	8.74	11.55
Garst 6550	2.75	2.02	1.97*	1.49*	1.40	1.27	0.63	8.80	11.54
Common, SD	2.40	2.18*	1.82*	1.48	1.49	1.64*	0.44	9.04*	11.44
ABT 400 SCI	2.88	1.84	1.86*	1.36	1.42	1.51*	0.55	8.54	11.42
GH 766	2.75	1.92	1.67	1.44	1.45	1.32	0.60	8.38	11.13
ABT 350	2.92	1.93	1.83*	1.24	1.39	1.27	0.52	8.17	11.09
GH 750	2.29	2.02	1.87*	1.32	1.41	1.42	0.55	8.57	10.86
PGI 4372	1.70	2.01	1.87*	1.18	1.25	1.32	0.37	7.98	9.68
LSD (0.05)	1.04	0.44	0.22	0.26	0.25	0.30	0.22	1.04	1.86
Mean	3.29	1.98	1.87	1.46	1.50	1.53	0.68	9.04	12.33
CV, %	22.39	15.82	8.51	12.78	12.05	14.09	22.78	8.18	10.71

¹Yield data for previous years may be different than that presented in other publications due to a difference in analysis methods.

2000 Harvest dates: 21-Jun, 20-Jul, 17-Aug, 11-Sep, and 2-Nov.

**Highest numerical value in the column.

*Not significantly different from the highest numerical value in the column based on the 5% LSD.

LSD (0.05) stands for the Least Significant Difference at the 5% level. If the difference between two numbers within a column is equal to or greater than the LSD, it is a 95% certain that they are truly different.

Ns means that there were no significant differences between varieties within that column at the 5% level.

Table 8. Dry matter yields (tons/acre) of flood-irrigated alfalfa varieties sown September 1, 1999, at NMSU's Agricultural Science Center at Los Lunas.

Variety	2000	2001 Harvests				2001	2-yr
	Total ¹	May 29	July 5	Aug. 17	Oct. 4	Total	Total
Evergreen 2.0	11.27*	3.69*	3.15*	2.68*	1.94**	11.47*	22.74**
CW 55112	11.37**	3.66*	3.21*	2.53*	1.94**	11.34*	22.71*
CW 5567	11.03*	3.83**	3.15*	2.72*	1.78*	11.48*	22.52*
CW 6699	10.13*	3.77*	3.35**	2.77**	1.93*	11.83**	21.95*
LSD (0.05)	Ns	Ns	Ns	Ns	Ns	Ns	Ns
Mean	10.94	3.74	3.21	2.68	1.90	11.53	22.48
CV, %	5.61	7.54	5.15	6.84	9.89	1.76	3.99

¹Yield data for previous years may be different than that presented in other publications due to a difference in analysis methods. 2000 Harvest dates: 9-May, 13-Jun, 24-Jul, 2-Sep, and 1-Nov.

**Highest numerical value in the column.

*Not significantly different from the highest numerical value in the column based on the 5% LSD.

LSD (0.05) stands for the Least Significant Difference at the 5% level. If the difference between two numbers within a column is equal to or greater than the LSD, it is a 95% certain that they are truly different.

Ns means that there were no significant differences between varieties within that column at the 5% level.

Table 9. Dry matter yields (tons/acre) of sprinkler-irrigated alfalfa varieties sown August 13, 1999, at NMSU's Agricultural Science Center at Farmington.

Variety	2000	2001 Harvests				2001	2-yr
	Total ¹	June 1	July 5	Aug. 8	Sep. 20	Total	Total
Monsanto 142	8.18*	3.30*	2.26*	2.17*	1.86*	9.59*	17.77**
Millennia	7.80*	3.15*	2.34*	2.36**	2.03**	9.88**	17.68*
Select	8.23*	3.36*	2.14	2.13*	1.80*	9.43*	17.65*
Geneva	7.93*	3.35*	2.44**	2.11*	1.52	9.41*	17.34*
Somerset	8.35**	3.27*	2.22*	2.00	1.47	8.96	17.31*
Affinity +Z	7.90*	3.37*	2.17*	2.02	1.69	9.25*	17.15*
Archer II	7.30*	3.39**	2.16*	2.24*	1.87*	9.66*	16.96*
ZX935 I	7.45*	3.24*	2.17*	1.81	1.84*	9.06	16.51*
Focus HSN	7.33*	3.17*	2.25*	1.89	1.62	8.92	16.24*
LSD (0.05)	Ns	Ns	0.29	0.32	0.28	0.70	Ns
Mean	7.83	3.29	2.24	2.08	1.74	9.35	17.18
CV, %	12.09	10.15	8.99	10.55	11.06	5.10	7.20

¹Yield data for previous years may be different than that presented in other publications due to a difference in analysis methods. 2000 Harvest dates: 31-May, 6-Jul, 8-Aug, and 21-Sep.

**Highest numerical value in the column.

*Not significantly different from the highest numerical value in the column based on the 5% LSD.

LSD (0.05) stands for the Least Significant Difference at the 5% level. If the difference between two numbers within a column is equal to or greater than the LSD, it is a 95% certain that they are truly different.

Ns means that there were no significant differences between varieties within that column at the 5% level.

Table 11. New Mexico State University Cooperative Extension Service publications related to alfalfa management.

Number	Title	Online ?
A-107	Managing saline soils	
A-113	Selection of fertilizers	Y
A-114	Test your soil	Y
A-122	Soil test interpretations	Y
A-123	Sampling for plant tissue analysis	
A-128	Fertilizer guide for New Mexico	Y
A-128	Nitrogen fixation by legumes	Y
A-130	Inoculation of legumes	Y
A-131	Certified seed	Y
A-133	Calculating fertilizer costs	Y
A-134	Selecting synthetic fertilizers in New Mexico	Y
A-18	Micronutrient fertility guide	
A-216	Know what is in a bag of seed	Y
A-309	Alfalfa weevil and clover leaf weevil	
A-316	Structure of a hay bale	
A-317	Alfalfa fertilization in New Mexico	
A-318	Reducing alfalfa harvest losses	Y
A-325	Managing weeds in alfalfa	Y
A-327	Introduction to hay testing	Y
A-328	Sampling guidelines for hay testing	Y
A-329	Variations in hay grading	Y
A-330	Alfalfa growth stages	Y
A-331	Alfalfa quality definitions	Y
B-115	Balancing forage supply and demand	Y
CR-536	Blister beetles in alfalfa	Y
HB-11	Suggestions for managing insects in alfalfa 19 and clover 1996	
W-01	Submitting plants for plant tissue analysis	
W-13	Alfalfa disease control	

These publications are available from your county office of the NMSU Cooperative Extension Service.
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