2003 4-Cut Alfalfa Variety Trial
2004-2007 Results
Preliminary Final Report

Central Oregon Agricultural Research Center
Madras, Oregon

http://oregonstate.edu/dept/coarc/index.php

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NOTE: (Last Updated 2/12/2007) The data from 2004 has been corrected from what was posted in 2005. We apologize for any inconvenience this may have caused.

We have experienced some minor problems with voles and gophers in 2005. We also have experienced irrigation problems on all 4 cuttings (minimally on 1st cut) in 2005. Irrigation spacing is 30 x 40 feet, with the exception of third cutting in 2005, which was 40 x 40 feet-spacing; we used 9/64 inch Rainbird nozzles. We experienced no irrigation problems in 2006.

Deer have discovered the trial and have done some minor grazing on fourth cutting, all three years. The fourth year we had little if any grazing damage to the trial from deer.

Year Four: We had no perceivable problems with the trial. We did continue to bait the trial in a couple of sites in the trial, and were controlled. A badger decided to dig a hole in the center of the trial, but luckily it was in the alley area between plots for the most part.

Ameristand 802 and Ascend stands, and yield, was affected by winter injury (starting with the first Winter).

Table 1. Fall dormancy, winter survival index, disease, insect, and nematode pest resistance ratings and other trait ratings for the alfalfa variety trial planted in August, 2003 at the COARC, Madras, Oregon.

#	Variety	FD	WS	BW	VW	FW	An	PRR	SAA	PA	BAA	SN	APH1	APH2	SRKN	NRKN	RLN	PL	MLE	GT
14	329	2		HR	HR	HR	HR	HR	R	HR		R	R							
4	Mountaineer 2.0	5	2	HR	R	HR	HR	HR	R	HR		HR	R			R			H	
13	Ascend	5		HR	VW	HR	HR	HR	HR			R	HR							
35	PSS XO3[1]	?																		
39	Resis[1]	?																		
38	Grimm	1/2		S																
52	Spredor III	1		HR	MR	HR	R	MR	S	MR		MR	S							
21	Agate	2		HR		HR	MR	R												
40	Iroquois	2	H	HR	S	MR	LR					LR				LR				
17	Ladak	2	VH	LR				S												
24	Ladak 65	2	H	R		LR	LR	S				LR				S				
23	Ranger	2	H	LR	S	MR		S	S	S		S				S				
18	Vernal	2		R		MR										MR				
19	Wrangler	2		R	LR	R	LR	HR	HR	HR										
22	53V08	3	2	HR	HR	HR	HR	HR	R	HR	MR	HR	LR			HR				
3	Boulder	3		HR	HR	HR	HR	HR	HR	HR		HR	R			R				
9	Cooper	3		HR	R		R	R	MR	R		R	MR			R				
26	DKA 33-16	3	1	HR	HR	HR	HR	HR	R	R			HR			R			H	
45	FSG 351	3	2	HR	R	HR	R	HR	R	HR	R	R	R			HR				
43	Goldleaf	3	2	HR	R	HR	R	HR		R		R	R			HR				
42	Ladak Plus	3		HR	MR	HR	LR	R		MR		R	MR			HR				
2	LegenDairy 5.0	3	2	HR	HR	HR	HR	HR	R	R		MR	HR			R			H	
46	Multi 775	3		HR	R	HR	R	R		MR			LR						H	
20	Perry	3	H	R			LR	S	MR	R										
10	Shaw	3		HR	MR		MR	R	R	R		MR				HR				
15	Surpass	3	3	HR	R	HR	MR	R		R										
32	54Q25	4		HR	HR	HR	HR	HR	R	R		HR	R			HR				
30	Amerigraze 401+Z	4		HR	HR	HR	HR	HR		R		R	R							
31	Ameristand 403T	4	2	HR	HR	HR	HR	HR	MR	R		MR	HR	R						X
27	DKA 42-15	4	1	HR	HR	HR	HR	HR	R	HR		R	HR						H	
44	Goliath	4		HR	R	HR	HR	HR	HR	R		R				R			H	
34	HybriFforce 400*	4	2	HR	R	HR	R	HR	HR	R	MR	R				HR				
35	HybriForce 420/Wet*	4	2	HR	R	HR	R	HR	R	R		HR				HR				
11	Masterpiece	4	3	HR	R	HR	HR	HR	R		R	HR	R			R				
48	Multi 777	4		R	R	HR	MR	R		MR			MR						H	
53	Phirst*	4	2	HR	R	HR	HR	HR	R	R		R	R			HR				

1	Plumas	4	2	HR	R	HR	HR	HR	R	R		HR	R			MR		H
29	Robust T&N	4		R	HR	HR	HR	HR	R	HR	MR	HR	MR			R		
41	Robust T&N (Treat)	4		R	HR	HR	HR	HR	R	HR	MR	HR	MR			R		
28	ST 9429	4		HR	R	HR	HR	HR	R	R	HR	R	HR					H
37	Vernema	4		MR	MR		LR	LR	MR			HR						
6	WL 327	4		HR	R	HR	HR	HR	R	R	HR	R	HR					
8	XTRA-3	4		HR	R	HR	HR	HR	R	HR	R	HR	R				Y	
25	DKA50-18	5	2	HR	HR	HR	HR	HR	R	R		R	HR					H
12	Dura 512	5		HR	R	HR	HR	HR	R	R	HR	R	R					H
7	Recover	5	3	R	R	HR	R	R	R	R	R	R	R					
36	Winema	5		MR	LR	HR		LR	R		HR	R						
5	WL 357HQ	5	2	HR	HR	HR	HR	HR		HR			HR					
16	Lahontan	6		MR	LR		LR		MR	LR		R						
49	Lobo	6		MR	R	HR	R		R	R	R	R				R		
50	AmeriLeaf 721	7		R	R	HR	HR	HR	HR	R	MR	MR			R			
51	Ameristand 802	8		HR	HR	HR	R	HR	HR	HR	HR	R	R		HR			

* = Hybrid [1] = unknown parentage

Fall Dormancy Ratings (FD): 1 = very dormant, 11 = Very Non Dormant

Winter Survival Ratings (WS): 1 = Superior, 2 = Very Good, 3 = Good, 4 = Moderate, 5 = Low, 6 = Non Winter Hardy. (The H (High) and VH (Very High) are old ratings from an old source)

Resistance ratings: S = Susceptible(0-5% plants), LR = Low Resistance (6-14% plants), MR = Moderate Resistance (15-29% plants), R = Resistance (30-50% plants), HR = High Resistance (>50% plants).

BW = Bacterial Wilt, VW = Verticillium Wilt, FW = Fusarium Wilt, AN = Anthracnose Race 1, PRR = Phytophthora Root Rot, SAA = Spotted Alfalfa Aphid, PA = Pea Aphid, Blue Alfalfa Aphid, SN = Stem Nematode, APH1 = Aphanomyces Race 1, APH2 = Aphonomyces Race 2, SRKN Southern Root Know Nematode, NRKN = Northern Root Knot Nematode, RLN = Root Lesion Nematode, PL = Potato Leaf Hopper, MLE = Mult-Foliate Experssion (H = high), GT = Continuous Grazing Tolerance.

Table 2. Plant height (cm) of the alfalfa varieties planted on August 20, 2003 at the COARC, Madras, Oregon and measured on October 24, 2003.

#	Variety	FD Rating	Plant Height (cm.)
13	Ascend	5	24.0
51	Ameristand 802	8	19.3
10	Shaw	3	17.5
4	Mountaineer 2.0	5	15.5
43	Goldleaf	3	15.5
49	Lobo	6	15.5
41	Robust T&N (Treat)	4	15.3
50	Amerileaf 721	7	15.0
36	Winema	5	14.5
16	Lahontan	6	14.3
3	Boulder	4	14.0
8	XTRA-3	4	14.0
5	WL357HQ	5	14.0
9	Cooper	3	13.8
32	54Q25	4	13.8
29	Robust T&N	4	13.5
52	Spredor III	1	13.3
37	Vernema	4	13.3
18	Vernal	2	13.0
7	Recover	5	13.0
38	“Grimm”	1/2	12.8
35	PSS X03		12.3
27	DKA42-15	4	12.3
14	329	2	12.0
46	Multi 775	3	11.5
31	Ameristand 403T	4	11.5
33	HybriForce 420/Wet	4	11.3
44	Goliath	4	11.0
1	Plumas	4	11.0
34	HybriForce 400	4	10.8
53	Phirst	4	10.8
12	Dura 512	5	10.8
39	Resis		10.5
20	Perry	3	10.5
30	Amerigraze 401+Z	4	10.5
21	Agate	2	10.3
40	Iroquois	2	10.3
17	Ladak	2	10.3
28	ST 9429	4	10.3
47	Trophy	4	10.3
19	Wrangler	2	10.0
22	53V08	3	10.0
11	Masterpiece	4	10.0
25	DKA50-18	5	10.0
24	Ladak 65	2	9.8
48	Multi 777	4	9.8
26	DKA33-16	3	9.5
23	Ranger	2	6.3
	Mean		12.5
	PLSD 0.01		5.4
	PLSD 0.05		4.0
	PLSD 0.10		3.4
	CV%		23.3
	Prob. > F		0.0001

2.5 cm = 1 inch

Table 3. 2004-2007 yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD Rating	2004 Yield (t/ac)	2005 Yield (t/ac)	2-Yr. Total Yield (t/ac)	2006 Yield (t/ac)	3-Yr Total Yield (t/ac)	2007 Yield (t/ac)	4-Yr. Total Yield (t/ac)
4	Mountaineer 2.0	5	10.46	8.93	19.39	8.79	28.18	9.10	37.27
32	54Q25	4	10.10	9.34	19.44	8.72	28.16	8.49	36.65
27	DKA42-15	4	9.68	9.13	18.81	9.08	27.89	8.69	36.58
25	DKA50-18	5	9.86	8.95	18.81	9.09	27.90	8.43	36.33
22	53V08	3	9.95	8.91	18.87	8.81	27.68	8.59	36.27
35	PSS X03		10.14	9.01	19.15	8.70	27.85	8.37	36.22
5	WL357HQ	5	9.68	8.86	18.54	8.87	27.40	8.38	35.78
1	Plumas	4	10.86	8.47	19.34	8.18	27.52	8.23	35.75
7	Recover	5	10.04	8.80	18.84	8.62	27.47	8.22	35.69
12	Dura 512	5	9.61	8.96	18.57	8.57	27.14	8.52	35.67
8	XTRA-3	4	9.99	8.92	18.91	8.42	27.32	8.25	35.58
11	Masterpiece	4	10.04	8.67	18.71	8.64	27.36	8.13	35.49
26	DKA33-16	3	9.61	8.50	18.12	8.67	26.78	8.64	35.41
33	HybriForce 420/Wet	4	10.08	8.42	18.50	8.35	26.85	8.42	35.28
10	Shaw	3	10.48	8.72	19.20	7.74	26.95	8.15	35.10
41	Robust T&N (Treat)	4	9.93	9.08	19.01	7.95	26.96	8.07	35.0
3	Boulder	3	10.06	8.42	18.48	8.22	26.70	8.28	34.98
43	Goldleaf	3	9.95	8.66	18.62	8.13	26.75	7.91	34.66
53	Phirst	4	9.80	8.36	18.16	8.23	26.40	8.16	34.56
34	HybriForce 400	4	9.90	8.27	18.16	8.25	26.41	8.09	34.50
9	Cooper	3	10.05	8.48	18.54	7.60	26.13	8.19	34.33
29	Robust T&N	4	9.83	8.35	18.18	7.60	25.78	8.17	33.95
46	Multi 775	3	9.67	8.52	18.18	7.78	25.96	7.98	33.94
50	Amerileaf 721	7	9.13	8.11	17.24	8.15	25.40	8.50	33.89
28	ST 9429	4	9.63	8.25	17.88	7.89	25.78	8.00	33.78
48	Multi 777	4	9.84	8.21	18.05	7.80	25.85	7.92	33.78
39	Resis		10.54	8.55	19.10	7.08	26.18	7.52	33.70
30	Amerigraze 401+Z	4	9.74	8.38	18.12	7.61	25.72	7.66	33.39
14	329	2	10.21	8.29	18.50	7.48	25.96	7.40	33.38
47	Trophy	4	9.74	8.80	18.54	8.58	27.11	8.07	33.19
49	Lobo	6	9.46	8.32	17.78	7.37	25.15	7.93	33.08
40	Iroquois	2	9.46	8.50	17.97	7.45	25.41	7.31	32.73
20	Perry	3	9.61	8.13	17.74	7.24	24.98	7.69	32.66
44	Goliath	4	9.62	8.05	17.67	7.20	24.86	7.70	32.56
37	Vernema	4	9.73	8.19	17.92	6.92	24.83	7.34	32.17
16	Lahontan	6	8.89	7.79	16.68	7.63	24.31	7.65	31.96
21	Agate	2	9.12	8.26	17.38	7.09	24.47	7.49	31.96
19	Wrangler	2	9.14	7.99	17.14	7.23	24.37	7.41	31.78
18	Vernal	2	9.32	7.67	16.98	7.22	24.21	7.43	31.64
52	Spredor III	1	9.50	7.81	17.31	6.97	24.28	7.35	31.64
31	Ameristand 403T	4	9.62	7.52	17.14	6.94	24.09	7.52	31.61
51	Ameristand 802*	8	8.22	7.93	16.15	7.37	23.52	7.89	31.40
36	Winema	5	9.21	7.74	16.95	6.77	23.72	7.59	31.31
17	Ladak	2	9.04	7.44	16.48	6.66	23.14	7.15	30.29
38	Grimm	1/2	8.92	7.40	16.32	6.57	22.89	7.36	30.24
24	Ladak 65	2	8.68	7.22	15.90	6.84	22.73	6.81	29.53
13	Ascend*	5	8.62	7.35	15.97	6.07	22.05	6.47	28.52
23	Ranger	2	8.38	6.74	15.12	5.81	20.93	6.72	27.65
	Mean		9.65	8.32	17.97	7.77	25.74	7.90	33.64
	PLSD 0.01		0.81	1.04	1.45	0.94	2.04	0.65	2.40
	PLSD 0.05		0.61	0.79	1.10	0.72	1.54	0.49	1.81
	PLSD 0.10		0.51	0.66	0.92	0.60	1.29	0.41	1.52
	CV%		4.5	6.8	4.4	6.6	4.3	4.4	3.9
	Prob. > F		0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	% of Total Yield		28.7	24.7	53.4	23.1	76.5	23.5	100.0

* suffered some winter kill in 2003/2004. Yield presented on dry matter basis.

Table 4. 2004-2007 relative annual, and total yield ranking results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD Rating	2004 Rel. Yield (%)	2004 Rank	2005 Rel. Yield (%)	2005 Rank	2 Yr. Rel. Yield (%)	2006 Rel. Yield (%)	2006 Rank	3-Yr. Rel. Yield (%)	2007 Rel. Yield (%)	2007 Rank	4 Yr. Rel. Yield (%)	4 Yr. Total Rank
4	Mountaineer 2.0	5	108.3	4	107.3	7	107.9	113.1	5	109.5	115.2	1	110.8	1
32	54Q25	4	104.7	7	112.3	1	108.2	112.2	6	109.4	107.5	7	108.9	2
27	DKA42-15	4	100.3	26	109.7	2	104.7	116.9	2	108.4	110.0	2	108.7	3
25	DKA50-18	5	102.2	18	107.6	6	104.7	117.0	1	108.4	106.7	8	108.0	4
22	53V08	3	103.1	14	107.1	9	105.0	113.4	4	107.5	108.7	4	107.8	5
35	PSS X03		105.1	6	108.3	4	106.6	112.0	7	108.2	105.9	11	107.7	6
5	WL357HQ	5	100.3	25	106.5	10	103.2	114.2	3	106.4	106.1	10	106.4	7
1	Plumas	4	112.5	1	101.8	21	107.6	105.3	18	106.9	104.2	14	106.2	8
7	Recover	5	104.0	11	105.8	11	104.8	110.9	10	106.7	104.1	15	106.1	9
12	Dura 512	5	99.6	31	107.7	5	103.3	110.3	12	105.4	107.8	5	106.0	10
8	XTRA-3	4	103.5	13	107.2	8	105.2	108.4	13	106.1	104.4	13	105.8	11
11	Masterpiece	4	104.0	12	104.2	14	104.1	111.2	9	106.3	102.9	20	105.5	12
26	DKA33-16	3	99.6	33	102.2	18	100.8	111.6	8	104.0	109.4	3	105.3	13
33	HybriForce 420/Wet	4	104.5	8	101.2	22	102.9	107.5	14	104.3	106.6	9	104.8	14
47	Trophy	4	100.9	23	105.8	12	103.2	110.4	11	105.3	102.2	22	104.6	15
10	Shaw	3	108.6	3	104.8	13	106.8	99.6	25	104.7	103.2	19	104.3	16
41	Robust T&N (Treat)	4	102.9	16	109.1	3	105.8	102.3	21	104.7	102.2	23	104.1	17
3	Boulder	3	104.2	9	101.2	23	102.8	105.8	17	103.7	104.8	12	104.0	18
43	Goldleaf	3	103.1	15	104.1	15	103.6	104.6	20	103.9	100.1	28	103.0	19
53	Phirst	4	101.6	21	100.5	25	101.1	105.9	16	102.6	103.3	18	102.7	20
34	HybriForce 400	4	102.6	17	99.4	29	101.1	106.2	15	102.6	102.4	21	102.6	21
9	Cooper	3	104.1	10	101.9	20	103.2	97.8	28	101.5	103.7	16	102.0	22
29	Robust T&N	4	101.9	20	100.4	26	101.2	97.8	29	100.2	103.4	17	100.9	23
46	Multi 775	3	100.2	27	102.4	17	101.2	100.1	24	100.9	101.0	25	100.9	24
50	Amerileaf 721	7	94.6	40	97.5	35	95.9	104.9	19	98.7	107.6	6	100.7	25
28	ST 9429	4	99.8	28	99.2	31	99.5	101.5	22	100.2	101.3	24	100.4	26
48	Multi 777	4	102.0	19	98.7	32	100.4	100.4	23	100.4	100.3	27	100.4	27
39	Resis		109.2	2	102.8	16	106.2	91.1	39	101.7	95.2	35	100.1	28
30	Amerigraze 401+Z	4	100.9	22	100.7	24	100.8	97.9	27	99.9	97.0	32	99.3	29
14	329	2	105.8	5	99.6	28	102.9	96.3	30	100.9	93.7	39	99.2	30
49	Lobo	6	98.0	36	100.0	27	98.9	94.9	32	97.7	100.4	26	98.3	31
40	Iroquois	2	98.0	35	102.2	19	99.9	95.9	31	98.7	92.5	44	97.3	32
20	Perry	3	99.6	32	97.7	34	98.7	93.2	34	97.0	97.3	31	97.1	33
44	Goliath	4	99.7	30	96.8	36	98.3	92.7	37	96.6	97.5	30	96.8	34
37	Vernema	4	100.8	24	98.4	33	99.7	89.1	42	96.5	92.9	43	95.7	34
16	Lahontan	6	92.1	44	93.6	40	92.8	98.2	26	94.4	96.8	33	95.0	36
21	Agate	2	94.5	41	99.3	30	96.7	91.2	38	95.1	94.8	37	95.0	37
19	Wrangler	2	94.7	39	96.0	37	95.4	93.1	35	94.7	93.1	41	94.4	38
18	Vernal	2	96.6	37	92.2	42	94.5	92.9	36	94.1	94.1	38	94.1	39
52	Spredor III	1	98.4	34	93.9	39	96.3	89.7	40	94.3	93.0	42	94.0	40
31	Ameristand 403T	4	99.7	29	90.4	43	95.4	89.3	41	93.6	95.2	36	93.9	41
51	Ameristand 802*	8	85.2	48	95.3	38	89.9	94.9	33	91.4	99.9	29	93.4	42
36	Winema	5	95.4	38	93.0	41	94.3	87.1	44	92.2	96.1	34	93.1	43
17	Ladak	2	93.7	42	89.4	44	91.7	85.7	45	89.9	90.5	45	90.0	44
38	Grimm	1/2	92.4	43	88.9	45	90.8	84.6	46	88.9	93.2	40	89.9	45
24	Ladak 65	2	89.9	45	86.8	47	88.5	88.0	43	88.3	86.2	46	87.8	46
13	Ascend*	5	89.3	46	88.3	46	88.9	78.1	47	85.7	81.9	48	84.8	47
23	Ranger	2	86.8	47	81.0	48	84.1	74.8	48	81.3	85.1	47	82.2	48
	Mean		100.0	--	100.0	--	100.0	100.0	--	100.0	100.0	--	100	--
	% of Total Yield		28.7		24.7		53.4	23.1		76.5	23.5		100.0	

* suffered some winter kill in 2003/2004. Yield presented on dry matter basis.

Table 5. Four year totals for cuttings 1-4 total yield, percent of variety's total yield, and 4-year total yield results for the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD Rating	1st Cut 4-year Yield (t/ac)	Cut-1 % of it's total	2nd Cut 4-year Yield (t/ac)	Cut-2 % of it's Total	3rd Cut 4-year Yield (t/ac)	Cut-3 % of it's total	4th Cut 4-year Yield (t/ac)	Cut-4 % of it's total	Total 4-year Yield (t/ac)
4	Mountaineer 2.0	5	13.92	37.3	10.09	27.1	7.01	18.8	6.25	16.8	37.27
32	54Q25	4	13.97	38.1	9.71	26.5	7.21	19.7	5.76	15.7	36.65
27	DKA42-15	4	14.01	38.3	9.96	27.2	7.15	19.5	5.46	14.9	36.58
25	DKA50-18	5	13.66	37.6	9.81	27.0	7.05	19.4	5.81	16.0	36.33
22	53V08	3	13.68	37.7	10.13	27.9	6.89	19.0	5.56	15.3	36.27
35	PSS X03		13.47	37.1	9.95	27.5	7.12	19.7	5.68	15.7	36.22
5	WL357HQ	5	13.23	37.0	9.69	27.1	7.33	20.5	5.54	15.5	35.78
1	Plumas	4	13.67	38.2	9.33	26.1	6.63	18.5	6.11	17.1	35.75
7	Recover	5	13.08	36.6	9.73	27.3	7.26	20.3	5.62	15.7	35.69
12	Dura 512	5	13.55	38.0	9.44	26.5	6.82	19.1	5.85	16.4	35.67
8	XTRA-3	4	13.01	36.6	9.60	27.0	7.23	20.3	5.73	16.1	35.58
11	Masterpiece	4	13.10	36.9	9.65	27.2	6.85	19.3	5.88	16.6	35.49
26	DKA33-16	3	13.18	37.2	9.94	28.1	6.87	19.4	5.43	15.3	35.41
33	HybriForce 420/Wet	4	13.44	38.1	9.34	26.5	6.83	19.4	5.66	16.0	35.28
10	Shaw	3	13.83	39.4	9.10	25.9	6.53	18.6	5.65	16.1	35.10
41	Robust T&N (Treat)	4	12.78	36.5	9.46	27.0	6.88	19.6	5.92	16.9	35.04
3	Boulder	3	12.76	36.5	9.59	27.4	6.95	19.9	5.68	16.2	34.98
43	Goldleaf	3	13.43	38.7	9.10	26.3	6.80	19.6	5.33	15.4	34.66
53	Phirst	4	13.52	39.1	9.15	26.5	6.57	19.0	5.32	15.4	34.56
34	HybriForce 400	4	13.75	39.9	9.23	26.8	6.39	18.5	5.13	14.9	34.50
9	Cooper	3	13.74	40.0	8.94	26.0	6.37	18.6	5.28	15.4	34.33
29	Robust T&N	4	12.44	36.6	9.40	27.7	6.66	19.6	5.45	16.1	33.95
46	Multi 775	3	13.33	39.3	9.13	26.9	6.51	19.2	4.97	14.6	33.94
50	Amerileaf 721	7	11.79	34.8	9.05	26.7	6.72	19.8	6.33	18.7	33.89
48	Multi 777	4	12.90	38.2	9.12	27.0	6.42	19.0	5.33	15.8	33.78
28	ST 9429	4	13.06	38.7	9.20	27.2	6.49	19.2	5.03	14.9	33.78
39	Resis		13.08	38.8	9.25	27.4	6.31	18.7	5.05	15.0	33.70
30	Amerigraze 401+Z	4	13.22	39.7	8.97	26.9	6.24	18.7	4.95	14.8	33.39
14	329	2	12.69	38.0	8.78	26.3	6.42	19.2	5.49	16.4	33.38
47	Trophy	4	13.43	40.5	9.70	29.2	6.79	20.5	5.26	15.8	33.19
49	Lobo	6	11.77	35.6	8.88	26.8	6.57	19.9	5.87	17.7	33.08
40	Iroquois	2	13.13	40.1	8.88	27.1	6.23	19.0	4.48	13.7	32.73
20	Perry	3	13.10	40.1	8.75	26.8	6.09	18.6	4.72	14.5	32.66
44	Goliath	4	12.48	38.3	8.50	26.1	6.32	19.4	5.27	16.2	32.56
37	Vernema	4	13.00	40.4	8.55	26.6	6.00	18.7	4.63	14.4	32.17
16	Lahontan	6	11.60	36.3	8.80	27.5	6.59	20.6	4.98	15.6	31.96
21	Agate	2	13.04	40.8	8.72	27.3	6.08	19.0	4.12	12.9	31.96
19	Wrangler	2	12.76	40.2	8.48	26.7	6.06	19.1	4.48	14.1	31.78
52	Spredor III	1	13.00	41.1	8.47	26.8	5.75	18.2	4.41	13.9	31.64
18	Vernal	2	13.00	41.1	8.79	27.8	5.94	18.8	3.91	12.4	31.64
31	Ameristand 403T	4	12.71	40.2	8.51	26.9	5.71	18.1	4.67	14.8	31.61
51	Ameristand 802*	8	9.51	30.3	8.56	27.3	7.20	22.9	6.13	19.5	31.40
36	Winema	5	11.55	36.9	8.72	27.9	6.48	20.7	4.56	14.6	31.31
17	Ladak	2	11.83	39.1	8.45	27.9	5.66	18.7	4.34	14.3	30.29
38	Grimm	1/2	12.18	40.3	8.45	27.9	5.82	19.2	3.80	12.6	30.24
24	Ladak 65	2	11.78	39.9	8.19	27.7	5.74	19.4	3.83	13.0	29.53
13	Ascend*	5	8.84	31.0	7.97	27.9	6.34	22.2	5.37	18.8	28.52
23	Ranger	2	12.69	45.9	7.39	26.7	4.98	18.0	2.59	9.4	27.65
	Mean		12.84	38.2	9.10	27.1	6.52	19.4	5.18	15.3	33.64
	PLSD 0.01		1.20		0.81		0.58		0.94		2.40
	PLSD 0.05		0.91		0.61		0.44		0.72		1.81
	PLSD 0.10		0.76		0.51		0.37		0.60		1.52
	CV%		5.1		4.8		4.8		9.9		3.9
	Prob. > F		0.0036		0.0014		0.0001		0.0003		0.0001
	% of Total Yield Mean		38.2		27.1		19.4		15.3		100.0

* suffered some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried).

Table 6. 2004 yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD Rating	1st Cut Yield (t/ac)	2nd Cut Yield (t/ac)	3rd Cut Yield (t/ac)	4th Cut Yield (t/ac)	Total Yield (t/ac)	% of Mean (%)
1	Plumas	4	3.63	3.10	2.06	2.07	10.86	112.5
39	Resis		3.71	3.00	2.04	1.80	10.54	109.2
10	Shaw	3	3.62	2.91	2.06	1.90	10.48	108.6
4	Mountaineer 2.0	5	3.45	2.97	2.16	1.88	10.46	108.3
14	329	2	3.43	2.80	2.13	1.85	10.21	105.8
35	PSS X03		3.31	2.95	2.17	1.72	10.14	105.1
32	54Q25	4	3.38	2.87	2.13	1.72	10.10	104.7
33	HybriForce 420/Wet	4	3.51	2.68	2.03	1.86	10.08	104.5
3	Boulder	3	3.32	2.93	1.99	1.82	10.06	104.2
9	Cooper	3	3.37	2.80	2.05	1.84	10.05	104.1
7	Recover	5	3.28	2.85	2.19	1.72	10.04	104.0
11	Masterpiece	4	3.20	2.93	2.08	1.84	10.04	104.0
8	XTRA-3	4	3.16	2.87	2.15	1.81	9.99	103.5
22	53V08	3	3.22	2.98	2.02	1.73	9.95	103.1
43	Goldleaf	3	3.56	2.56	2.08	1.75	9.95	103.1
41	Robust T&N (Treat)	4	3.33	2.67	2.00	1.92	9.93	102.9
34	HybriForce 400	4	3.44	2.85	1.98	1.62	9.90	102.6
25	DKA50-18	5	3.37	2.91	2.07	1.51	9.86	102.2
48	Multi 777	4	3.41	2.62	2.03	1.78	9.84	102.0
29	Robust T&N	4	3.23	2.75	2.01	1.83	9.83	101.9
53	Phirst	4	3.33	2.80	2.07	1.59	9.80	101.6
30	Amerigraze 401+Z	4	3.19	2.86	2.03	1.66	9.74	100.9
47	Trophy	4	3.23	2.84	2.04	1.63	9.74	100.9
37	Vernema	4	3.34	2.80	2.00	1.59	9.73	100.8
5	WL357HQ	5	3.44	2.66	1.98	1.59	9.68	100.3
27	DKA42-15	4	3.41	2.61	2.10	1.56	9.68	100.3
46	Multi 775	3	3.35	2.70	2.07	1.55	9.67	100.2
28	ST 9429	4	3.22	2.71	2.02	1.68	9.63	99.8
31	Ameristand 403T	4	3.44	2.71	1.81	1.66	9.62	99.7
44	Goliath	4	3.09	2.70	2.04	1.79	9.62	99.7
12	Dura 512	5	3.13	2.69	2.02	1.78	9.61	99.6
20	Perry	3	3.16	2.72	2.00	1.73	9.61	99.6
26	DKA33-16	3	3.23	3.00	1.91	1.47	9.61	99.6
52	Spredor III	1	3.41	2.74	1.82	1.53	9.50	98.4
40	Iroquois	2	3.16	2.72	2.00	1.58	9.46	98.0
49	Lobo	6	3.01	2.59	1.99	1.88	9.46	98.0
18	Vernal	2	3.31	2.76	1.95	1.30	9.32	96.6
36	Winema	5	2.96	2.75	2.05	1.45	9.21	95.4
19	Wrangler	2	2.96	2.79	1.88	1.51	9.14	94.7
50	Amerileaf 721	7	2.82	2.52	2.01	1.77	9.13	94.6
21	Agate	2	3.02	2.73	1.90	1.47	9.12	94.5
17	Ladak	2	2.89	2.81	1.83	1.51	9.04	93.7
38	Grimm	1/2	3.21	2.52	1.99	1.20	8.92	92.4
16	Lahontan	6	3.05	2.40	1.97	1.47	8.89	92.1
24	Ladak 65	2	2.91	2.59	1.92	1.26	8.68	89.9
13	Ascend*	5	2.48	2.36	1.97	1.81	8.62	89.3
23	Ranger	2	3.15	2.48	1.64	1.11	8.38	86.8
51	Ameristand 802*	8	2.02	2.42	2.03	1.74	8.22	85.2
	Mean		3.23	2.75	2.01	1.66	9.65	100.0
	PLSD 0.01		0.62	0.47	0.25	0.29	0.81	
	PLSD 0.05		0.46	0.36	0.19	0.22	0.61	
	PLSD 0.10		0.39	0.30	0.16	0.19	0.51	
	CV%		10.4	9.3	6.7	9.6	4.5	
	Prob. > F		0.0001	0.0101	0.0002	0.0001	0.0001	
	Harvest Date		5/26	7/8	8/11	10/25		
	Percent of Yield %		33.5	28.5	20.8	17.2	100.0	

* suffered some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 138 Degrees F)

Table 7. 2004 First-cut yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD	Yield (%)	% of Mean	Dry Matter (%)	Moisture (%)	Lodging (%)
39	Resis		3.71	114.9	19.2	80.8	63
1	Plumas	4	3.63	112.4	17.3	82.7	59
10	Shaw	3	3.62	112.1	19.1	80.9	49
43	Goldleaf	3	3.56	110.2	19.9	80.1	43
33	HybriForce 420/Wet	4	3.51	108.7	19.7	80.3	29
4	Mountaineer 2.0	5	3.45	106.8	18.6	81.4	66
5	WL357HQ	5	3.44	106.5	19.2	80.8	50
31	Ameristand 403T	4	3.44	106.5	19.7	80.3	48
34	HybriForce 400	4	3.44	106.5	18.9	81.1	30
14	329	2	3.43	106.2	17.8	82.2	35
27	DKA42-15	4	3.41	105.6	18.7	81.3	55
52	Spredor III	1	3.41	105.6	18.4	81.6	73
48	Multi 777	4	3.41	105.6	19.7	80.3	71
32	54Q25	4	3.38	104.6	18.5	81.5	71
9	Cooper	3	3.37	104.3	19.2	80.8	28
25	DKA50-18	5	3.37	104.3	19.2	80.8	39
46	Multi 775	3	3.35	103.7	18.8	80.2	33
37	Vernema	4	3.34	103.4	18.5	81.5	41
41	Robust T&N (Treat)	4	3.33	103.1	20.0	80.0	43
53	Phirst	4	3.33	103.1	18.7	81.3	44
3	Boulder	3	3.32	102.8	18.9	81.1	48
18	Vernal	2	3.31	102.5	19.7	80.3	40
35	PSS X03		3.31	102.8	18.4	81.6	13
7	Recover	5	3.28	101.5	18.7	81.3	36
29	Robust T&N	4	3.23	100.0	18.9	81.1	41
47	Trophy	4	3.23	100.0	17.8	82.2	48
26	DKA33-16	3	3.23	100.0	18.7	81.3	40
28	ST 9429	4	3.22	99.7	17.9	82.1	26
22	53V08	3	3.22	99.7	20.2	79.8	43
38	Grimm	1/2	3.21	99.4	21.1	78.9	13
11	Masterpiece	4	3.20	99.1	19.0	81.4	34
30	Amerigraze 401+Z	4	3.19	98.8	17.1	82.9	50
8	XTRA-3	4	3.16	97.8	17.7	82.3	18
20	Perry	3	3.16	97.8	19.0	81.0	10
40	Iroquois	2	3.16	97.8	19.7	80.3	44
23	Ranger	2	3.15	97.5	18.1	81.9	63
12	Dura 512	5	3.13	96.9	18.4	81.6	1
44	Goliath	4	3.09	95.7	19.0	81.0	3
16	Lahontan	6	3.05	94.4	18.4	81.6	53
21	Agate	2	3.02	93.5	19.2	81.8	0
49	Lobo	6	3.01	93.2	19.6	80.4	21
36	Winema	5	2.96	91.6	18.9	81.1	24
19	Wrangler	2	2.96	91.6	19.0	81.0	5
24	Ladak 65	2	2.91	90.1	18.2	81.8	51
17	Ladak	2	2.89	89.5	18.6	81.4	29
50	Amerileaf 721	7	2.82	87.3	19.1	80.9	24
13	Ascend*	5	2.48	76.8	19.8	81.2	8
51	Ameristand 802*	8	2.02	62.5	15.9	84.1	6
	Mean		3.23	100.0	18.8	81.2	36.6
	PLSD 0.01		0.62		2.2	2.2	51.7
	PLSD 0.05		0.46		1.7	1.7	39.1
	PLSD 0.10		0.39		1.4	1.4	32.8
	CV%		10.4		6.3	1.5	76.5
	Prob. > F		0.0001		0.0003	0.0003	0.0012
	Harvest Date		5/26				

* had some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 138 Degrees F).

Table 8. 2004 second-cut yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD	Yield (%)	% of Mean	Dry Matter (%)	Moisture (%)	Stem Size (1-3)
1	Plumas	4	3.10	112.7	21.3	78.7	2.3
26	DKA33-16	3	3.00	109.1	21.5	78.5	2.0
39	Resis		3.00	109.1	21.6	78.4	2.3
22	53V08	3	2.98	108.4	21.3	78.7	2.0
4	Mountaineer 2.0	5	2.97	108.0	20.5	79.5	2.7
35	PSS X03		2.95	107.3	19.6	80.4	2.0
3	Boulder	3	2.93	106.5	21.3	78.7	2.7
11	Masterpiece	4	2.93	106.5	23.4	76.6	2.7
10	Shaw	3	2.91	105.8	20.7	79.3	2.3
25	DKA50-18	5	2.91	105.8	20.4	79.6	2.0
8	XTRA-3	4	2.87	104.4	19.9	80.1	2.6
32	54Q25	4	2.87	104.3	21.1	78.9	2.3
30	Amerigraze 401+Z	4	2.86	104.0	19.9	80.1	1.5
7	Recover	5	2.85	103.6	20.7	79.3	3.0
34	HybriForce 400	4	2.85	103.6	21.7	78.3	1.5
47	Trophy	4	2.84	103.3	19.1	80.9	2.3
17	Ladak	2	2.81	102.2	21.2	78.9	1.3
9	Cooper	3	2.80	101.8	22.5	77.5	1.7
14	329	2	2.80	101.8	19.2	80.8	2.8
37	Vernema	4	2.80	101.8	20.9	79.1	1.8
53	Phirst	4	2.80	101.8	21.1	78.9	2.5
19	Wrangler	2	2.79	101.5	19.3	80.7	1.5
18	Vernal	2	2.76	100.4	20.9	79.1	1.7
29	Robust T&N	4	2.75	100.0	23.3	76.7	2.0
36	Winema	5	2.75	100.0	18.8	81.2	1.7
52	Spredor III	1	2.74	99.6	21.2	78.8	2.0
21	Agate	2	2.73	99.3	19.5	80.5	1.7
20	Perry	3	2.72	98.9	22.3	77.7	1.3
40	Iroquois	2	2.72	98.9	19.4	80.6	1.7
28	ST 9429	4	2.71	98.5	20.9	79.1	2.6
31	Ameristand 403T	4	2.71	98.5	20.7	79.3	1.5
44	Goliath	4	2.70	98.2	20.4	79.6	2.5
46	Multi 775	3	2.70	98.2	19.9	80.1	2.5
12	Dura 512	5	2.69	97.8	18.4	81.6	2.5
33	HybriForce 420/Wet	4	2.68	97.5	20.0	80.0	1.5
41	Robust T&N (Treat)	4	2.67	97.1	23.5	76.5	2.3
5	WL357HQ	5	2.66	96.7	20.4	79.6	2.3
48	Multi 777	4	2.62	95.3	21.1	78.9	1.8
27	DKA42-15	4	2.61	94.9	21.0	79.0	3.0
24	Ladak 65	2	2.59	94.2	24.2	75.8	1.7
49	Lobo	6	2.59	94.2	26.8	73.2	2.0
43	Goldleaf	3	2.56	93.1	20.8	79.2	2.0
38	Grimm	1/2	2.52	91.6	21.3	78.7	1.8
50	Amerileaf 721	7	2.52	91.6	22.3	77.7	2.5
23	Ranger	2	2.48	90.2	18.4	81.6	1.0
51	Ameristand 802*	8	2.42	88.0	25.3	74.7	2.3
16	Lahontan	6	2.40	87.3	24.8	75.2	2.7
13	Ascend*	5	2.36	85.8	26.1	73.9	2.8
	Mean		2.75	100	21.2	78.8	2.1
	PLSD 0.01		0.47		NS	NS	1.2
	PLSD 0.05		0.36		4.1	4.1	0.9
	PLSD 0.10		0.30		3.5	3.5	0.8
	CV%		9.3		13.9	3.7	29.4
	Prob. > F		0.0101		0.0142	0.0142	0.0001
	Harvest Date		7/8				

* suffered some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 138 Degrees F)
stem size: small = 1, medium = 2, large = 3.

Table 9. 2004 third-cut yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD	Yield (%)	% of Mean	Dry Matter (%)	Moisture (%)	Height (in)	Stem Size (1-3)
7	Recover	5	2.19	109.0	18.5	81.5	27.3	2.6
35	PSS X03		2.17	108.0	19.0	81.0	26.0	2.1
4	Mountaineer	5	2.16	107.5	19.3	80.7	28.0	2.1
8	XTRA-3	4	2.15	107.0	20.4	79.6	26.3	2.4
14	329	2	2.13	106.0	18.3	81.7	25.8	2.6
32	54Q25	4	2.13	106.0	19.2	80.8	25.8	2.1
27	DKA42-15	4	2.10	104.5	18.4	81.6	26.5	2.1
11	Masterpiece	4	2.08	103.5	19.3	80.7	26.3	2.3
43	Goldleaf	3	2.08	103.5	18.8	81.2	26.3	1.8
25	DKA50-18	5	2.07	103.0	20.0	80.0	25.8	2.0
46	Multi 775	4	2.07	103.0	19.0	81.0	25.2	2.3
53	Phirst	4	2.07	103.0	17.8	82.3	26.5	2.1
1	Plumas	4	2.06	102.5	19.1	80.9	26.5	2.5
10	Shaw	3	2.06	102.5	19.1	80.9	26.0	2.0
9	Cooper	3	2.05	102.0	18.4	81.6	26.5	1.6
36	Winema	5	2.05	102.0	18.5	81.5	25.5	2.0
39	Resis		2.04	101.5	19.1	80.9	26.3	2.3
44	Goliath	4	2.04	101.5	19.5	80.5	24.3	2.4
47	Trophy	4	2.04	101.5	18.7	81.3	26.0	2.0
30	Amerigraze 401+Z	4	2.03	101.0	19.2	80.8	23.8	1.5
33	HybriForce 420/Wet	4	2.03	101.0	19.1	80.9	25.3	1.9
48	Multi 777	4	2.03	101.0	20.2	79.8	25.8	2.0
51	Ameristand 802*	8	2.03	101.0	21.8	78.2	28.3	2.1
12	Dura 512	5	2.02	100.5	17.1	82.8	26.3	2.3
22	53V08	3	2.02	100.5	20.1	79.9	24.5	1.9
28	ST 9429	4	2.02	100.5	18.5	81.5	25.3	2.1
29	Robust T&N	4	2.01	100.0	19.3	80.8	27.0	2.1
50	Amerileaf 721	7	2.01	100.0	19.0	81.0	27.8	2.6
20	Perry	3	2.00	99.5	19.4	80.6	25.0	2.3
37	Vernema	4	2.00	99.5	18.5	81.5	25.8	1.8
40	Iroquois	2	2.00	99.5	19.5	80.5	25.0	2.1
41	Robust T&N (Treat)	4	2.00	99.5	19.3	80.7	27.3	2.1
3	Boulder	3	1.99	99.0	18.7	81.3	26.5	2.5
38	Grimm	1/2	1.99	99.0	18.8	81.2	25.3	2.0
49	Lobo	6	1.99	99.0	20.1	79.9	26.3	2.0
5	WL357HQ	5	1.98	98.5	18.3	81.7	26.0	2.3
34	HybriForce 400	4	1.98	98.5	17.4	82.6	24.8	1.5
13	Ascend*	5	1.97	98.0	20.6	79.4	27.3	2.5
16	Lahontan	6	1.97	98.0	19.5	80.5	26.8	2.0
18	Vernal	2	1.95	97.0	19.0	81.0	23.3	1.1
24	Ladak 65	2	1.92	95.5	18.4	81.6	24.8	1.8
26	DKA33-16	3	1.91	95.0	18.6	81.4	24.5	2.3
21	Agate	2	1.90	94.5	17.9	82.1	24.5	2.0
19	Wrangler	2	1.88	93.5	18.7	81.3	24.0	1.8
17	Ladak	2	1.83	91.0	19.6	80.4	24.0	1.4
52	Spredor III	1	1.82	90.5	17.9	82.1	24.3	2.0
31	Ameristand 403T	4	1.81	90.0	20.4	79.6	23.3	1.0
23	Ranger	2	1.64	81.6	17.8	82.2	21.3	1.0
	Mean		2.01	100.0	19.0	81.0	25.6	2.0
	PLSD 0.01		0.25		NS	NS	2.1	0.8
	PLSD 0.05		0.19		2.0	2.0	1.6	0.6
	PLSD 0.10		0.16		1.7	1.7	1.4	0.5
	CV%		6.7		7.5	1.7	4.5	20.1
	Prob. > F		0.0002		0.0328	0.0328	0.0001	0.0001
	Harvest Date		8/11					

* suffered some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 138 Degrees F).

Table 10. 2004 fourth-cut yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD	Yield (%)	% of Mean	Dry Matter (%)	Moisture (%)	Height (in)
1	Plumas	4	2.07	125.7	22.5	77.5	24.0
41	Robust T&N (Treat)	4	1.92	116.6	23.1	76.9	25.8
10	Shaw	3	1.90	114.5	23.7	76.3	24.3
4	Mountaineer 2.0	5	1.88	113.3	23.3	76.7	23.8
49	Lobo	6	1.88	113.3	23.5	76.5	24.8
33	HybriForce 420/Wet	4	1.86	112.0	23.6	76.4	23.8
14	329	2	1.85	111.4	24.3	76.9	23.0
9	Cooper	3	1.84	110.8	23.1	76.9	21.8
11	Masterpiece	4	1.84	110.8	23.7	77.3	24.3
29	Robust T&N	4	1.83	110.2	23.4	76.6	24.3
3	Boulder	3	1.82	109.6	23.1	76.9	22.0
8	XTRA-3	4	1.81	109.0	22.9	77.1	24.5
13	Ascend*	5	1.81	109.0	26.3	73.7	26.5
39	Resis		1.80	108.4	23.5	76.5	24.0
44	Goliath	4	1.79	107.8	23.0	77.0	23.3
12	Dura 512	5	1.78	107.2	23.3	76.7	23.3
48	Multi 777	4	1.78	107.2	23.8	76.3	24.0
50	Amerileaf 721	7	1.77	106.6	23.5	76.5	23.5
43	Goldleaf	3	1.75	105.4	23.2	76.8	21.5
51	Ameristand 802*	8	1.74	104.8	24.5	75.5	26.3
20	Perry	3	1.73	104.2	23.3	76.7	23.5
22	53V08	3	1.73	104.2	23.7	76.3	22.5
7	Recover	5	1.72	103.6	23.8	76.2	21.5
32	54Q25	4	1.72	103.6	23.1	76.9	22.5
35	PSS X03		1.72	103.6	24.1	75.9	21.8
28	ST 9429	4	1.68	101.2	22.9	77.1	20.0
30	Amerigraze 401+Z	4	1.66	100.0	23.5	76.5	20.3
31	Ameristand 403T	4	1.66	100.0	23.4	76.6	19.8
47	Trophy	4	1.63	98.2	23.5	76.5	19.8
34	HybriForce 400	4	1.62	97.6	23.9	76.1	21.5
5	WL357HQ	5	1.59	95.8	23.6	76.4	19.5
37	Vernema	4	1.59	95.8	23.4	76.6	21.3
53	Phirst	4	1.59	95.8	23.7	76.3	20.8
40	Iroquois	2	1.58	95.2	24.2	75.8	18.3
27	DKA42-15	4	1.56	94.0	23.4	76.6	22.0
46	Multi 775	3	1.55	93.4	24.1	75.9	18.8
52	Spredor III	1	1.53	92.2	23.7	76.3	20.5
17	Ladak	2	1.51	91.0	24.1	75.9	20.8
19	Wrangler	2	1.51	91.0	23.6	76.4	20.0
25	DKA50-18	5	1.51	91.0	23.7	76.3	19.8
16	Lahontan	6	1.47	88.6	24.3	75.7	21.8
21	Agate	2	1.47	88.6	23.7	76.2	17.8
26	DKA33-16	3	1.47	88.6	23.8	76.2	18.5
36	Winema	5	1.45	87.3	24.1	75.9	19.3
18	Vernal	2	1.30	78.3	24.6	75.4	17.0
24	Ladak 65	2	1.26	75.9	23.7	76.3	20.8
38	Grimm	1/2	1.20	72.3	24.7	75.3	19.0
23	Ranger	2	1.11	66.9	24.0	76.0	17.3
	Mean		1.66	100.0	23.6	76.4	21.7
	PLSD 0.01		0.29		NS	NS	4.3
	PLSD 0.05		0.22		1.4	1.4	3.0
	PLSD 0.10		0.19		1.2	1.2	2.5
	CV%		9.6		4.2	1.3	9.7
	Prob. > F		0.0001		0.0380	0.0380	0.0001
	Harvest Date		10/25				

* suffered some winter kill. In 2003/2004 Yield presented on a dry matter basis (oven-dried at 138 degrees F)

Table 11. 2005 yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD Rating	1st Cut Yield (t/ac)	2nd Cut Yield (t/ac)	3rd Cut Yield (t/ac)	4th Cut Yield (t/ac)	Total Yield (t/ac)	% of Mean (%)
32	54Q25	4	3.31	2.58	1.90	1.54	9.34	112.3
27	DKA42-15	4	3.24	2.77	1.78	1.34	9.13	109.7
41	Robust T&N (Treat)	4	2.98	2.60	1.89	1.61	9.08	109.1
35	PSS X03		2.83	2.76	1.85	1.57	9.01	108.3
12	Dura 512	5	3.10	2.55	1.76	1.54	8.96	107.7
25	DKA50-18	5	3.29	2.38	1.61	1.67	8.95	107.6
4	Mountaineer 2.0	5	2.95	2.68	1.61	1.68	8.93	107.3
8	XTRA-3	4	3.02	2.55	1.92	1.42	8.92	107.2
22	53V08	3	3.08	2.70	1.70	1.45	8.91	107.1
5	WL357HQ	5	2.88	2.64	1.96	1.37	8.86	106.5
7	Recover	5	2.70	2.62	1.95	1.53	8.80	105.8
47	Trophy	4	2.95	2.70	1.82	1.33	8.80	105.8
10	Shaw	3	3.20	2.41	1.69	1.41	8.72	104.8
11	Masterpiece	4	2.94	2.52	1.73	1.49	8.67	104.2
43	Goldleaf	3	2.93	2.46	1.83	1.44	8.66	104.1
39	Resis		3.05	2.53	1.68	1.29	8.55	102.8
46	Multi 775	3	2.93	2.50	1.81	1.27	8.52	102.4
26	DKA33-16	3	2.96	2.45	1.71	1.38	8.50	102.2
40	Iroquois	2	3.05	2.48	1.75	1.22	8.50	102.2
9	Cooper	3	3.05	2.52	1.63	1.28	8.48	101.9
1	Plumas	4	2.99	2.33	1.66	1.50	8.47	101.8
3	Boulder	3	2.68	2.47	1.88	1.39	8.42	101.2
33	HybriForce 420	4	2.87	2.39	1.72	1.43	8.42	101.2
30	Amerigraze 401+Z	4	3.19	2.51	1.47	1.20	8.38	100.7
53	Phirst	4	2.93	2.44	1.58	1.41	8.36	100.5
29	Robust T&N	4	2.79	2.60	1.65	1.32	8.35	100.4
49	Lobo	6	2.70	2.48	1.65	1.49	8.32	100.0
14	329	2	2.87	2.43	1.64	1.34	8.29	99.6
34	HybriForce 400	4	3.02	2.44	1.53	1.28	8.27	99.4
21	Agate	2	3.16	2.45	1.61	1.04	8.26	99.3
28	ST 9429	4	3.12	2.37	1.58	1.17	8.25	99.2
48	Multi 777	4	2.88	2.44	1.61	1.28	8.21	98.7
37	Vernema	4	3.07	2.32	1.62	1.18	8.19	98.4
20	Perry	3	3.10	2.37	1.52	1.13	8.13	97.7
50	Amerileaf 721	7	2.60	2.38	1.40	1.74	8.11	97.5
44	Goliath	4	2.90	2.23	1.60	1.32	8.05	96.8
19	Wrangler	2	2.89	2.27	1.62	1.21	7.99	96.0
51	Ameristand 802*	8	2.22	2.20	1.86	1.64	7.93	95.3
52	Spredor III	1	2.99	2.19	1.49	1.14	7.81	93.9
16	Lahontan	6	2.35	2.30	1.73	1.41	7.79	93.6
36	Winema	5	2.37	2.39	1.81	1.17	7.74	93.0
18	Vernal	2	2.77	2.39	1.56	0.94	7.67	92.2
31	Ameristand 403T	4	2.73	2.23	1.40	1.17	7.52	90.4
17	Ladak	2	2.71	2.12	1.47	1.15	7.44	89.4
38	Grimm	1/2	2.61	2.46	1.43	0.90	7.40	88.9
13	Ascend*	5	2.06	2.31	1.63	1.34	7.35	88.3
24	Ladak 65	2	2.51	2.25	1.51	0.94	7.22	86.8
23	Ranger	2	2.74	2.08	1.37	0.55	6.74	81.0
	Mean		2.88	2.44	1.67	1.33	8.32	100.0
	PLSD 0.01		0.62	0.36	0.38	0.44	1.04	
	PLSD 0.05		0.47	0.27	0.29	0.33	0.79	
	PLSD 0.10		0.39	0.23	0.24	0.28	0.66	
	CV%		11.6	8.0	12.4	17.9	6.8	
	Prob. > F		0.0001	0.0001	0.0001	0.0001	0.0001	
	Harvest Date		6/2	7/14	8/15	10/12		
	Percent of Yield %		34.6	29.3	20.1	16.0	100.0	

* suffered some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 138 Degrees F)

Table 12. 2005 First-cut yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD	Yield (%)	% of Mean	Dry Matter (%)	Moisture (%)	Height (in.)
32	54Q25	4	3.31	114.9	25.7	74.3	29.3
25	DKA50-18	5	3.29	114.2	25.1	74.9	29.0
27	DKA42-15	4	3.24	112.5	27.4	72.6	28.8
10	Shaw	3	3.20	111.1	30.8	69.2	26.5
30	Amerigraze 401+Z	4	3.19	110.8	29.8	70.2	24.8
21	Agate	2	3.16	109.7	29.5	70.5	30.0
28	ST 9429	4	3.12	108.3	24.7	75.3	27.5
12	Dura 512	5	3.10	107.6	27.4	72.6	27.8
20	Perry	2	3.10	107.6	26.3	73.7	29.0
22	53V08	3	3.08	106.9	31.8	68.2	26.3
37	Vernema	4	3.07	106.6	29.3	70.7	28.3
9	Cooper	3	3.05	105.9	27.8	72.2	27.0
39	Resis		3.05	105.9	27.4	72.6	27.8
40	Iroquois	2	3.05	105.9	26.7	73.3	29.0
8	XTRA-3	4	3.02	104.9	29.6	70.4	26.0
34	HybriForce 400	4	3.02	104.9	30.6	69.4	26.8
1	Plumas	4	2.99	103.8	25.1	74.9	27.5
52	Spredor III	1	2.99	103.8	28.9	71.1	26.8
41	Robust T&N (Treat)	4	2.98	103.5	27.2	72.8	27.0
26	DKA33-16	3	2.96	102.8	30.4	69.6	27.8
4	Mountaineer 2.0	5	2.95	102.4	30.3	69.7	26.8
47	Trophy	4	2.95	102.4	30.5	69.5	28.0
11	Masterpiece	4	2.94	102.8	32.7	67.3	23.8
43	Goldleaf	3	2.93	101.7	28.4	71.6	28.8
46	Multi 775	3	2.93	101.7	30.1	69.9	26.8
53	Phirst	4	2.93	101.7	29.8	70.2	26.3
44	Goliath	4	2.90	100.7	29.6	70.4	24.8
19	Wrangler	2	2.89	100.3	32.3	67.7	25.0
5	WL357HQ	5	2.88	100.0	31.2	68.8	26.0
48	Multi 777	4	2.88	100.0	26.2	73.8	27.5
14	329	2	2.87	99.7	28.0	72.0	26.5
33	HybriForce 420/Wet	4	2.87	99.7	27.0	73.0	28.8
35	PSS X03		2.83	98.3	31.7	68.3	26.0
29	Robust T&N	4	2.79	96.9	28.1	71.9	25.8
18	Vernal	2	2.77	96.2	30.8	69.2	27.5
23	Ranger	2	2.74	95.1	27.7	72.3	26.0
31	Ameristand 403T	4	2.73	94.8	28.9	71.1	24.8
17	Ladak	2	2.71	94.1	28.7	71.3	23.5
7	Recover	5	2.70	93.8	27.7	72.3	25.8
49	Lobo	6	2.70	93.8	28.5	71.5	26.5
3	Boulder	3	2.68	93.1	32.6	67.4	25.8
38	Grimm	1/2	2.61	90.6	32.3	67.7	24.5
50	Amerileaf 721	7	2.60	90.3	28.7	71.3	24.8
24	Ladak 65	2	2.51	87.2	28.2	71.9	25.8
36	Winema	5	2.37	82.3	33.3	66.7	23.5
16	Lahontan	6	2.35	81.6	32.7	67.3	25.5
51	Ameristand 802*	8	2.22	77.1	26.3	73.7	24.8
13	Ascend*	5	2.06	71.5	29.1	70.9	23.0
	Mean		2.88	100.0	29.0	71.0	26.5
	PLSD 0.01		0.62		NS	NS	NS
	PLSD 0.05		0.47		NS	NS	3.7
	PLSD 0.10		0.39		NS	NS	3.1
	CV%		11.6		14.7	6.0	10.0
	Prob. > F		0.0001		0.3686	0.3686	0.0175
	Harvest Date		6/2				

* had some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 138 Degrees F).

Table 13. 2005 second-cut yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD	Yield (%)	% of Mean	Dry Matter (%)	Moisture (%)	Height (in.)
27	DKA42-15	4	2.77	113.5	20.2	79.8	27.8
35	PSS X03		2.76	113.1	20.7	79.3	28.8
22	53V08	3	2.70	110.7	22.5	77.5	27.0
47	Trophy	4	2.70	110.7	18.7	81.3	27.3
4	Mountaineer 2.0	5	2.68	109.8	21.6	78.4	28.0
5	WL357HQ	5	2.64	108.2	18.5	81.5	27.5
7	Recover	5	2.62	107.4	19.5	80.5	29.3
29	Robust T&N	4	2.60	106.6	19.3	80.7	28.8
41	Robust T&N (Treat)	4	2.60	106.6	20.1	79.9	28.3
32	54Q25	4	2.58	105.7	19.9	80.1	27.5
8	XTRA-3	4	2.55	104.5	18.4	81.6	29.0
12	Dura 512	5	2.55	104.5	18.2	81.8	28.0
39	Resis		2.53	103.7	19.6	80.4	28.8
9	Cooper	3	2.52	103.3	17.5	82.5	29.0
11	Masterpiece	4	2.52	103.3	21.4	78.6	28.5
30	Amerigraze 401+Z	4	2.51	102.9	19.1	80.9	27.3
46	Multi 775	3	2.50	102.5	18.9	81.1	27.8
40	Iroquois	2	2.48	101.6	19.7	80.3	27.5
49	Lobo	6	2.48	101.6	18.9	81.1	29.8
3	Boulder	3	2.47	101.3	21.5	78.5	28.3
38	Grimm	1/2	2.46	100.8	21.0	79.0	28.0
43	Goldleaf	3	2.46	100.8	17.4	82.6	27.5
21	Agate	2	2.45	100.4	18.6	81.4	27.5
26	DKA33-16	3	2.45	100.4	20.5	79.5	27.0
34	HybriForce 400	4	2.44	100.0	20.3	79.7	27.0
48	Multi 777	4	2.44	100.0	19.7	80.3	28.3
53	Phirst	4	2.44	100.0	19.0	81.0	27.0
14	329	2	2.43	99.6	18.6	81.4	28.0
10	Shaw	3	2.41	98.8	19.0	81.0	26.5
18	Vernal	2	2.39	98.0	18.5	81.5	27.0
33	HybriForce 420/Wet	4	2.39	98.0	19.4	80.6	26.5
36	Winema	5	2.39	98.0	18.1	81.9	27.8
25	DKA50-18	5	2.38	97.5	23.1	76.9	25.8
50	Amerileaf 721	7	2.38	97.5	23.5	76.5	27.0
20	Perry	2	2.37	97.1	18.0	82.0	28.5
28	ST 9429	4	2.37	97.1	19.8	80.2	28.8
1	Plumas	4	2.33	95.5	20.2	79.8	26.0
37	Vernema	4	2.32	95.1	21.1	78.9	27.0
13	Ascend*	5	2.31	94.7	19.4	80.6	28.5
16	Lahontan	6	2.30	94.3	21.5	78.5	26.8
19	Wrangler	2	2.27	93.0	17.7	82.3	27.5
24	Ladak 65	2	2.25	92.2	19.8	80.2	26.0
31	Ameristand 403T	4	2.23	91.4	20.2	79.8	24.5
44	Goliath	4	2.23	91.4	18.2	81.8	25.0
51	Ameristand 802*	8	2.20	90.2	21.4	78.6	28.3
52	Spredor III	1	2.19	89.8	19.8	80.2	27.5
17	Ladak	2	2.12	86.9	19.9	80.1	26.3
23	Ranger	2	2.08	85.2	17.6	82.4	25.5
	Mean		2.44	100.0	19.7	80.3	27.5
	PLSD 0.01		0.36		NS	NS	NS
	PLSD 0.05		0.27		NS	NS	2.6
	PLSD 0.10		0.23		NS	NS	2.2
	CV%		8.0		13.0	3.2	6.7
	Prob. > F		0.0001		0.1684	0.1684	0.0493
	Harvest Date		7/14				

* had some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 138 Degrees F)

Table 14. 2005 third-cut yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD	Yield (%)	% of Mean	Dry Matter (%)	Moisture (%)	Height (in)
5	WL357HQ	5	1.96	117.4	18.7	81.3	24.5
7	Recover	5	1.95	116.8	19.2	80.8	25.5
8	XTRA-3	4	1.92	115.0	18.8	81.2	25.8
32	54Q25	4	1.90	113.8	17.6	82.4	24.8
41	Robust T&N (Treat)	4	1.89	113.2	19.4	80.6	25.3
3	Boulder	3	1.88	112.6	20.6	79.4	26.0
51	Ameristand 802*	8	1.86	111.4	24.4	75.6	24.3
35	PSS X03		1.85	110.8	19.7	80.3	24.8
43	Goldleaf	3	1.83	109.6	16.0	84.0	26.3
47	Trophy	4	1.82	109.0	19.4	80.6	22.5
36	Winema	5	1.81	108.4	17.0	83.0	27.3
46	Multi 775	3	1.81	108.4	18.6	81.4	24.0
27	DKA42-15	4	1.78	106.6	19.0	81.0	22.8
12	Dura 512	5	1.76	105.4	18.3	81.7	25.3
40	Iroquois	2	1.75	104.8	19.5	80.5	23.0
11	Masterpiece	4	1.73	103.6	20.1	78.9	23.0
16	Lahontan	6	1.73	103.6	20.3	79.7	25.0
33	HybriForce 420/Wet	4	1.72	103.0	18.7	81.3	23.8
26	DKA33-16	3	1.71	102.4	20.7	79.3	23.0
22	53V08	3	1.70	101.8	20.6	79.4	21.0
10	Shaw	3	1.69	101.2	18.4	81.6	23.5
39	Resis		1.68	100.6	18.4	81.6	24.5
1	Plumas	4	1.66	99.4	20.7	79.3	22.5
29	Robust T&N	4	1.65	98.8	18.8	81.2	23.5
49	Lobo	6	1.65	98.8	18.7	81.3	23.5
14	329	2	1.64	98.2	18.2	81.8	24.5
9	Cooper	3	1.63	97.6	16.8	93.2	24.3
13	Ascend*	5	1.63	97.6	19.1	80.9	25.8
19	Wrangler	2	1.62	97.0	17.9	82.1	23.3
37	Vernema	4	1.62	97.0	19.6	80.4	25.5
4	Mountaineer 2.0	5	1.61	96.4	18.6	81.4	24.5
21	Agate	2	1.61	96.4	17.5	82.5	23.3
25	DKA50-18	5	1.61	96.4	19.5	80.5	22.0
48	Multi 777	4	1.61	96.4	19.4	80.6	22.5
44	Goliath	4	1.60	95.8	18.4	81.6	22.5
28	ST 9429	4	1.58	94.6	17.5	82.5	24.0
53	Phirst	4	1.58	94.6	19.4	80.6	21.0
18	Vernal	2	1.56	93.4	17.4	82.6	23.8
34	HybriForce 400	4	1.53	91.6	19.0	81.0	22.8
20	Perry	2	1.52	91.0	18.1	81.9	23.5
24	Ladak 65	2	1.51	90.4	19.7	80.3	22.3
52	Spredor III	1	1.49	89.2	18.1	81.9	21.8
17	Ladak	2	1.47	88.0	18.4	81.6	20.8
30	Amerigraze 401+Z	4	1.47	88.0	18.0	82.0	22.0
38	Grimm	1/2	1.43	85.6	20.0	80.0	21.8
31	Ameristand 403T	4	1.40	83.8	18.2	81.8	20.8
50	Amerileaf 721	7	1.40	83.8	21.1	78.9	21.5
23	Ranger	2	1.37	82.0	17.1	82.9	20.3
	Mean		1.67	100.0	18.9	81.1	23.5
	PLSD 0.01		0.38		NS	NS	NS
	PLSD 0.05		0.29		3.1	3.1	3.8
	PLSD 0.10		0.24		2.6	2.6	3.1
	CV%		12.4		11.8	2.8	11.4
	Prob. > F		0.0001		0.0365	0.0365	0.0472
	Harvest Date		8/15				

* had some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 138 Degrees F).

Table 15. 2005 fourth-cut yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD	Yield (%)	% of Mean	Dry Matter (%)	Moisture (%)	Height (in)
50	Amerileaf 721	7	1.74	130.8	20.8	79.2	24.0
4	Mountaineer 2.0	5	1.68	126.3	20.9	79.1	22.8
25	DKA50-18	5	1.67	125.6	21.9	78.1	21.0
51	Ameristand 802*	8	1.64	123.3	20.7	79.3	24.5
41	Robust T&N (Treat)	4	1.61	121.1	21.4	78.6	21.3
35	PSS X03		1.57	118.0	21.5	78.5	20.0
12	Dura 512	5	1.54	115.8	20.7	79.3	19.8
32	54Q25	4	1.54	115.8	21.1	78.9	20.5
7	Recover	5	1.53	115.0	21.6	78.4	21.3
1	Plumas	4	1.50	112.8	21.8	78.2	18.3
11	Masterpiece	4	1.49	112.0	21.1	78.9	20.8
49	Lobo	6	1.49	112.0	21.6	78.4	20.5
22	53V08	3	1.45	109.0	21.2	78.8	18.0
43	Goldleaf	3	1.44	108.3	21.4	78.6	19.3
33	HybriForce 420/Wet	4	1.43	107.5	21.1	79.0	20.0
8	XTRA-3	4	1.42	106.8	21.5	78.5	19.8
10	Shaw	3	1.41	106.0	22.3	77.7	19.5
16	Lahontan	6	1.41	106.0	21.3	78.7	20.8
53	Phirst	4	1.41	106.0	21.7	78.3	17.8
3	Boulder	3	1.39	104.5	21.0	79.0	18.5
26	DKA33-16	3	1.38	103.8	21.1	78.9	16.5
5	WL357HQ	5	1.37	103.0	21.5	78.5	19.0
13	Ascend*	5	1.34	100.8	20.8	79.2	25.3
14	329	2	1.34	100.8	21.1	78.9	18.5
27	DKA42-15	4	1.34	100.8	21.5	78.5	19.0
47	Trophy	4	1.33	100.0	21.0	79.0	17.3
29	Robust T&N	4	1.32	99.2	20.6	79.4	20.5
44	Goliath	4	1.32	99.2	22.4	77.6	18.8
39	Resis		1.29	97.0	22.2	77.8	19.3
9	Cooper	3	1.28	96.2	22.2	77.8	17.5
34	HybriForce 400	4	1.28	96.2	21.7	78.3	17.0
48	Multi 777	4	1.28	96.2	22.4	77.6	17.5
46	Multi 775	3	1.27	95.5	22.3	77.7	16.8
40	Iroquois	2	1.22	91.7	22.7	77.3	16.0
19	Wrangler	2	1.21	91.0	22.4	77.6	16.3
30	Amerigraze 401+Z	4	1.20	90.2	23.0	77.0	14.8
37	Vernema	4	1.18	88.7	21.7	78.3	16.3
28	ST 9429	4	1.17	88.0	21.7	78.3	16.3
31	Ameristand 403T	4	1.17	88.0	22.7	77.3	15.8
36	Winema	5	1.17	88.0	22.4	77.6	17.5
17	Ladak	2	1.15	86.7	23.0	77.0	17.0
52	Spredor III	1	1.14	85.7	22.4	77.6	17.5
20	Perry	3	1.13	85.0	22.3	77.7	16.8
21	Agate	2	1.04	78.2	22.7	77.3	12.8
18	Vernal	2	0.94	70.7	23.4	76.6	14.0
24	Ladak 65	2	0.94	70.7	22.6	77.4	15.0
38	Grimm	1/2	0.90	67.7	22.4	77.6	15.3
23	Ranger	2	0.55	41.3	23.7	76.3	12.0
	Mean		1.33	100.0	21.8	78.2	18.4
	PLSD 0.01		0.44		1.6	1.6	5.3
	PLSD 0.05		0.33		1.2	1.2	4.0
	PLSD 0.10		0.28		1.0	1.0	3.4
	CV%		17.9		4.0	1.1	15.7
	Prob. > F		0.0001		0.0001	0.0001	0.0001
	Harvest Date		10/12				

* suffered some winter kill in 2003/2004

Table 16. 2006 yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD Rating	1st Cut Yield (t/ac)	2nd Cut Yield (t/ac)	3rd Cut Yield (t/ac)	4th Cut Yield (t/ac)	Total Yield (t/ac)	% of Mean (%)
25	DKA50-18	5	3.60	2.15	1.94	1.39	9.09	117.0
27	DKA42-15	4	3.79	2.13	1.87	1.29	9.08	116.9
5	WL357HQ	5	3.56	2.05	1.95	1.30	8.87	114.2
22	53V08	3	3.73	2.03	1.86	1.20	8.81	113.4
4	Mountaineer 2.0	5	3.40	2.10	1.92	1.37	8.79	113.1
32	54Q25	4	3.62	1.99	1.82	1.28	8.72	112.2
35	PSS X03		3.72	1.98	1.79	1.21	8.70	112.0
26	DKA33-16	3	3.52	2.10	1.78	1.26	8.67	111.6
11	Masterpiece	4	3.50	2.03	1.77	1.34	8.64	111.2
7	Recover	5	3.52	2.03	1.81	1.26	8.62	110.9
47	Trophy	4	3.78	2.00	1.70	1.10	8.58	110.4
12	Dura 512	5	3.55	2.03	1.78	1.22	8.57	110.3
8	XTRA-3	4	3.36	1.97	1.82	1.27	8.42	108.4
33	HybriForce 420	4	3.34	2.03	1.80	1.19	8.35	107.5
34	HybriForce 400	4	3.60	1.84	1.69	1.12	8.25	106.2
53	Phirst	4	3.48	1.85	1.73	1.18	8.23	105.9
3	Boulder	3	3.37	1.92	1.76	1.18	8.22	105.8
1	Plumas	4	3.28	1.83	1.76	1.30	8.18	105.3
50	Amerileaf 721	7	2.82	1.94	1.89	1.51	8.15	104.9
43	Goldleaf	3	3.50	1.87	1.69	1.08	8.13	104.6
41	Robust T&N (Treat)	4	3.07	1.94	1.72	1.22	7.95	102.3
28	ST 9429	4	3.28	1.88	1.70	1.04	7.89	101.5
48	Multi 777	4	3.15	1.89	1.63	1.13	7.80	100.4
46	Multi 775	3	3.46	1.81	1.44	1.06	7.78	100.1
10	Shaw	3	3.14	1.78	1.67	1.16	7.74	99.6
16	Lahontan	6	3.07	1.89	1.59	1.07	7.63	98.2
30	Amerigraze 401+Z	4	3.33	1.64	1.61	1.03	7.61	97.9
9	Cooper	3	3.23	1.66	1.61	1.11	7.60	97.8
29	Robust T&N	4	2.93	1.82	1.73	1.12	7.60	97.8
14	329	2	2.99	1.70	1.62	1.17	7.48	96.3
40	Iroquois	2	3.45	1.74	1.46	0.80	7.45	95.9
49	Lobo	6	2.76	1.78	1.64	1.19	7.37	94.9
51	Ameristand 802*	8	2.24	1.86	1.91	1.36	7.37	94.9
20	Perry	3	3.15	1.64	1.51	0.94	7.24	93.2
19	Wrangler	2	3.22	1.64	1.53	0.83	7.23	93.1
18	Vernal	2	3.35	1.64	1.40	0.82	7.22	92.9
44	Goliath	4	2.86	1.68	1.57	1.08	7.20	92.7
21	Agate	2	3.15	1.68	1.51	0.74	7.09	91.2
39	Resis		2.90	1.70	1.54	0.94	7.08	91.1
52	Spredor III	1	3.05	1.64	1.43	0.86	6.97	89.7
31	Ameristand 403T	4	2.98	1.60	1.46	0.90	6.94	89.3
37	Vernema	4	3.06	1.58	1.36	0.92	6.92	89.1
24	Ladak 65	2	3.06	1.55	1.36	0.86	6.84	88.0
36	Winema	5	2.81	1.60	1.45	0.92	6.77	87.1
17	Ladak	2	2.99	1.55	1.29	0.82	6.66	85.7
38	Grimm	1/2	2.83	1.57	1.35	0.82	6.57	84.6
13	Ascend*	5	1.89	1.50	1.54	1.14	6.07	78.1
23	Ranger	2	3.08	1.24	1.13	0.35	5.81	74.8
	Mean		3.22	1.81	1.64	1.09	7.77	100.0
	PLSD 0.01		0.42	0.27	0.24	0.32	0.94	
	PLSD 0.05		0.32	0.20	0.19	0.24	0.72	
	PLSD 0.10		0.26	0.17	0.16	0.21	0.60	
	CV%		7.0	8.0	8.1	16.1	6.6	
	Prob. > F		0.0001	0.0001	0.0001	0.0001	0.0001	
	Harvest Date		6/9	7/12	8/15	10/11		
	Percent of Yield %		41.4	23.3	21.1	14.0	100.0	

* suffered some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 138 Degrees F)

Table 17. 2006 First-cut yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD	Yield (%)	% of Mean	Dry Matter (%)	Moisture (%)
27	DKA42-15	4	3.79	117.7	20.3	79.7
47	Trophy	4	3.78	117.5	20.3	79.7
22	53V08	3	3.73	115.7	21.9	78.1
35	PSS X03		3.72	115.5	21.6	78.4
32	54Q25	4	3.62	112.6	21.2	78.8
25	DKA50-18	5	3.60	111.8	20.0	80.0
34	HybriForce 400	4	3.60	111.8	21.4	78.6
5	WL357HQ	5	3.56	110.5	20.7	79.3
12	Dura 512	5	3.55	110.2	20.0	80.0
7	Recover	5	3.52	109.4	22.2	77.8
26	DKA33-16	3	3.52	109.4	20.2	79.8
11	Masterpiece	4	3.50	108.7	20.6	79.4
43	Goldleaf	3	3.50	108.7	21.0	79.0
53	Phirst	4	3.48	108.0	21.7	78.3
46	Multi 775	3	3.46	107.5	21.6	78.4
40	Iroquois	2	3.45	107.2	21.7	78.3
4	Mountaineer 2.0	5	3.40	105.5	20.6	79.4
3	Boulder	3	3.37	104.6	21.5	78.5
8	XTRA-3	4	3.36	104.4	20.5	79.5
18	Vernal	2	3.35	104.3	22.1	77.9
33	HybriForce 420/Wet	4	3.34	103.8	21.0	79.0
30	Amerigraze 401+Z	4	3.33	103.4	20.7	79.3
1	Plumas	4	3.28	101.9	20.2	79.8
28	ST 9429	4	3.28	101.9	20.8	79.2
9	Cooper	3	3.23	100.2	20.8	79.2
19	Wrangler	2	3.22	100.1	21.0	79.0
20	Perry	2	3.15	97.8	20.9	79.1
21	Agate	2	3.15	97.8	21.0	79.0
48	Multi 777	4	3.15	97.8	20.6	79.4
10	Shaw	3	3.14	97.6	20.7	79.3
23	Ranger	2	3.08	95.8	20.2	79.8
16	Lahontan	6	3.07	95.3	22.8	77.2
41	Robust T&N (Treat)	4	3.07	95.3	21.2	78.8
24	Ladak 65	2	3.06	95.0	22.4	77.6
37	Vernema	4	3.06	95.0	21.9	78.1
52	Spredor III	1	3.05	94.9	21.6	78.4
14	329	2	2.99	92.9	20.5	79.5
17	Ladak	2	2.99	92.9	21.6	78.4
31	Ameristand 403T	4	2.98	92.4	20.9	79.1
29	Robust T&N	4	2.93	91.1	20.8	79.2
39	Resis		2.90	90.1	21.3	78.7
44	Goliath	4	2.86	88.8	20.7	79.3
38	Grimm	1/2	2.83	88.0	21.6	78.4
50	Amerileaf 721	7	2.82	87.6	20.6	79.4
36	Winema	5	2.81	87.3	22.2	77.8
49	Lobo	6	2.76	58.7	21.1	78.9
51	Ameristand 802*	8	2.24	69.7	21.0	79.0
13	Ascend*	5	1.89	58.8	21.2	78.8
	Mean		3.22	100.0	21.1	78.9
	PLSD 0.01		0.42		1.3	1.3
	PLSD 0.05		0.32		1.0	1.0
	PLSD 0.10		0.26		0.8	0.8
	CV%		7.0		3.4	0.9
	Prob. > F		0.0001		0.0001	0.0001
	Harvest Date		6/9			

* had some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 138 Degrees F).

Table 18. 2006 second-cut yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD	Yield (%)	% of Mean	Dry Matter (%)	Moisture (%)	Height (in.)
25	DKA50-18	5	2.15	118.9	16.9	83.1	28.8
27	DKA42-15	4	2.13	117.7	17.2	82.8	28.8
4	Mountaineer 2.0	5	2.10	116.0	17.1	82.9	30.8
26	DKA33-16	3	2.10	116.0	16.6	83.4	30.0
5	WL357HQ	5	2.05	113.5	16.5	83.5	30.3
7	Recover	5	2.03	112.1	16.8	83.2	30.0
11	Masterpiece	4	2.03	112.1	16.3	83.7	30.5
12	Dura 512	5	2.03	112.1	16.7	83.3	30.0
22	53V08	3	2.03	112.1	17.0	83.0	29.8
33	HybriForce 420/Wet	4	2.03	112.1	17.0	83.0	29.8
47	Trophy	4	2.00	110.4	16.5	83.5	28.5
32	54Q25	4	1.99	110.0	16.7	83.3	29.8
35	PSS X03		1.98	109.6	16.9	83.1	28.3
8	XTRA-3	4	1.97	108.8	17.5	82.4	29.0
41	Robust T&N (Treat)	4	1.94	107.0	17.4	82.6	29.0
50	Amerileaf 721	7	1.94	107.0	17.0	83.0	31.3
3	Boulder	3	1.92	105.8	16.6	83.4	30.8
16	Lahontan	6	1.89	104.4	17.9	82.1	29.8
48	Multi 777	4	1.89	104.4	17.3	82.7	29.3
28	ST 9429	4	1.88	103.6	17.0	83.0	28.3
43	Goldleaf	3	1.87	103.5	17.1	82.9	28.5
51	Ameristand 802*	8	1.86	102.7	17.9	82.1	32.3
53	Phirst	4	1.85	102.0	16.9	83.2	27.8
34	HybriForce 400	4	1.84	101.9	16.5	83.5	28.3
1	Plumas	4	1.83	101.1	16.4	83.6	26.8
29	Robust T&N	4	1.82	100.6	17.1	82.9	29.0
46	Multi 775	3	1.81	100.3	17.2	82.8	27.5
10	Shaw	3	1.78	98.3	17.3	82.7	27.8
49	Lobo	6	1.78	98.3	17.5	82.5	29.8
40	Iroquois	2	1.74	96.2	17.9	82.1	28.0
14	329	2	1.70	93.9	17.0	83.0	27.8
39	Resis		1.70	93.9	17.8	82.2	28.5
21	Agate	2	1.68	92.8	17.6	82.4	25.8
44	Goliath	4	1.68	92.8	17.8	82.2	28.0
9	Cooper	3	1.66	91.8	16.7	83.3	26.3
18	Vernal	2	1.64	90.6	18.0	82.0	26.8
19	Wrangler	2	1.64	90.6	16.8	83.2	26.0
20	Perry	2	1.64	90.6	17.1	82.9	29.0
30	Amerigraze 401+Z	4	1.64	90.6	17.1	82.9	27.0
52	Spredor III	1	1.64	90.6	17.5	82.5	27.0
31	Ameristand 403T	4	1.60	88.4	17.9	82.1	26.3
36	Winema	5	1.60	88.4	18.0	82.0	28.3
37	Vernema	4	1.58	87.2	18.6	81.4	28.0
38	Grimm	1/2	1.57	86.9	18.5	81.5	26.3
17	Ladak	2	1.55	85.6	17.8	82.2	26.8
24	Ladak 65	2	1.55	85.6	18.4	81.6	25.8
13	Ascend*	5	1.50	82.9	18.0	82.0	27.8
23	Ranger	2	1.24	68.6	17.7	82.3	23.0
	Mean		1.81	100.0	17.3	82.7	28.4
	PLSD 0.01		0.27		1.3	1.3	2.9
	PLSD 0.05		0.20		1.0	1.0	2.2
	PLSD 0.10		0.17		0.9	0.9	1.9
	CV%		8.0		4.2	0.9	5.6
	Prob. > F		0.0001		0.0001	0.0001	0.0001
	Harvest Date		7/12				

* had some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 138 Degrees F)

Table 19. 2006 third-cut yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD	Yield (%)	% of Mean	Dry Matter (%)	Moisture (%)
5	WL357HQ	5	1.95	118.9	18.5	81.5
25	DKA50-18	5	1.94	118.5	18.5	81.5
4	Mountaineer 2.0	5	1.92	117.1	18.6	81.4
51	Ameristand 802*	8	1.91	116.2	19.5	80.5
50	Amerileaf 721	7	1.89	115.3	18.8	81.1
27	DKA42-15	4	1.87	113.9	18.0	82.0
22	53V08	3	1.86	113.5	18.4	81.6
8	XTRA-3	4	1.82	111.0	18.1	81.9
32	54Q25	4	1.82	110.7	17.8	82.2
7	Recover	5	1.81	110.6	18.2	81.8
33	HybriForce 420/Wet	4	1.80	109.6	18.8	81.2
35	PSS X03		1.79	109.3	18.4	81.6
12	Dura 512	5	1.78	108.7	17.9	82.1
26	DKA33-16	3	1.78	108.7	18.2	81.8
11	Masterpiece	4	1.77	108.2	17.8	82.2
1	Plumas	4	1.76	107.3	18.6	81.4
3	Boulder	3	1.76	107.3	18.1	81.9
29	Robust T&N	4	1.73	105.5	18.9	81.1
53	Phirst	4	1.73	105.5	18.2	81.8
41	Robust T&N (Treat)	4	1.72	105.3	18.1	81.9
28	ST 9429	4	1.70	103.7	17.7	82.3
47	Trophy	4	1.70	103.7	17.5	82.5
34	HybriForce 400	4	1.69	103.0	18.0	82.0
43	Goldleaf	3	1.69	103.0	18.6	81.4
10	Shaw	3	1.67	101.7	18.3	81.7
49	Lobo	6	1.64	100.1	18.4	81.6
48	Multi 777	4	1.63	99.4	18.5	81.5
14	329	2	1.62	98.5	18.5	81.5
9	Cooper	3	1.61	98.2	18.2	81.8
30	Amerigraze 401+Z	4	1.61	98.2	18.2	81.8
16	Lahontan	6	1.59	97.1	18.8	81.2
44	Goliath	4	1.57	95.9	18.6	81.4
13	Ascend*	5	1.54	93.9	19.6	80.4
39	Resis		1.54	93.9	19.5	80.5
19	Wrangler	2	1.53	93.4	18.1	81.9
20	Perry	2	1.51	92.1	18.2	81.8
21	Agate	2	1.51	92.1	18.2	81.8
31	Ameristand 403T	4	1.46	89.0	19.1	80.9
40	Iroquois	2	1.46	89.0	19.8	80.2
36	Winema	5	1.45	88.2	18.9	81.1
46	Multi 775	3	1.44	87.9	17.9	82.1
52	Spredor III	1	1.43	86.9	18.4	81.6
18	Vernal	2	1.40	85.4	18.9	81.1
24	Ladak 65	2	1.36	82.9	18.8	81.2
37	Vernema	4	1.36	82.9	18.9	81.1
38	Grimm	1/2	1.35	82.2	19.5	80.5
17	Ladak	2	1.29	78.7	18.8	81.2
23	Ranger	2	1.13	69.1	19.3	80.7
	Mean		1.64	100.0	18.5	81.5
	PLSD 0.01		0.24		1.2	1.2
	PLSD 0.05		0.19		0.9	0.9
	PLSD 0.10		0.16		0.8	0.8
	CV%		8.1		3.6	0.8
	Prob. > F		0.0001		0.0001	0.0001
	Harvest Date	8/15				

* had some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 138 Degrees F).

Table 20. 2006 fourth-cut yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD	Yield (%)	% of Mean	Dry Matter (%)	Moisture (%)	Height (in)
50	Amerileaf 721	7	1.51	138.1	22.1	77.9	22.0
25	DKA50-18	5	1.39	127.6	20.8	79.2	19.5
4	Mountaineer 2.0	5	1.37	125.7	21.8	78.2	20.8
51	Ameristand 802*	8	1.36	125.0	20.7	79.3	24.3
11	Masterpiece	4	1.34	122.5	22.6	77.4	19.5
1	Plumas	4	1.30	119.3	22.0	78.0	17.8
5	WL357HQ	5	1.30	119.3	20.5	79.5	19.5
27	DKA42-15	4	1.29	118.5	20.9	79.1	19.3
32	54Q25	4	1.28	117.8	21.0	79.0	16.3
8	XTRA-3	4	1.27	116.5	21.7	78.3	18.3
7	Recover	5	1.26	115.6	20.5	79.5	20.0
26	DKA33-16	3	1.26	115.6	20.6	79.4	18.0
12	Dura 512	5	1.22	111.9	20.6	79.4	19.0
41	Robust T&N (Treat)	4	1.22	111.9	20.7	79.3	17.8
35	PSS X03		1.21	110.7	21.8	78.2	16.8
22	53V08	3	1.20	109.9	21.3	78.7	16.8
33	HybriForce 420/Wet	4	1.19	109.2	21.7	78.3	16.3
49	Lobo	6	1.19	109.2	21.0	79.0	18.3
3	Boulder	3	1.18	108.3	21.1	78.9	17.8
53	Phirst	4	1.18	108.3	21.1	78.9	16.0
14	329	2	1.17	107.0	21.8	78.2	17.0
10	Shaw	3	1.16	106.0	21.4	78.6	17.3
13	Ascend*	5	1.14	105.0	21.5	78.5	22.0
48	Multi 777	4	1.13	104.0	21.6	78.4	16.5
29	Robust T&N	4	1.12	102.8	19.6	80.4	19.0
34	HybriForce 400	4	1.12	102.8	21.4	78.6	15.8
9	Cooper	3	1.11	101.5	21.2	78.8	16.3
47	Trophy	4	1.10	100.8	20.8	79.2	17.3
43	Goldleaf	3	1.08	99.1	21.4	78.6	16.0
44	Goliath	4	1.08	99.1	20.2	79.8	15.8
16	Lahontan	6	1.07	98.5	20.7	79.3	19.0
46	Multi 775	3	1.06	97.4	21.7	78.3	16.8
28	ST 9429	4	1.04	95.5	20.1	79.9	15.5
30	Amerigraze 401+Z	4	1.03	94.6	22.4	77.6	14.5
20	Perry	3	0.94	86.2	22.0	78.0	16.5
39	Resis		0.94	86.2	21.7	78.3	14.8
36	Winema	5	0.92	84.4	21.3	78.7	16.3
37	Vernema	4	0.92	84.4	21.9	78.1	14.0
31	Ameristand 403T	4	0.90	82.4	22.6	77.4	13.8
24	Ladak 65	2	0.86	78.9	22.7	77.3	13.5
52	Spredor III	1	0.86	78.9	22.0	78.0	13.8
19	Wrangler	2	0.83	76.5	22.4	77.6	11.8
17	Ladak	2	0.82	75.2	21.8	78.2	12.8
18	Vernal	2	0.82	75.2	22.7	77.3	12.8
38	Grimm	1/2	0.82	75.1	22.1	77.9	14.5
40	Iroquois	2	0.80	73.1	22.3	77.7	13.0
21	Agate	2	0.74	68.0	21.2	78.8	11.8
23	Ranger	2	0.35	32.6	22.9	77.1	8.0
	Mean		1.09	100.0	21.5	78.5	16.6
	PLSD 0.01		0.32		NS	NS	3.6
	PLSD 0.05		0.24		1.7	1.7	2.7
	PLSD 0.10		0.21		1.4	1.4	2.3
	CV%		16.1		5.8	1.6	11.6
	Prob. > F		0.0001		0.0413	0.0413	0.0001
	Harvest Date	10/11					

* suffered some winter kill in 2003/2004

Deer grazed 4th Cut extensively, but seemed to graze all plots, “somewhat evenly”, from the top down.

Table 21. 2007 Total and cuttings 1-4 yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD Rating	1st Cut Yield (t/ac)	2nd Cut Yield (t/ac)	3rd Cut Yield (t/ac)	4th Cut Yield (t/ac)	Total Yield (t/ac)	% of Mean (%)
4	Mountaineer 2.0	5	4.12	2.34	1.31	1.32	9.10	115.2
27	DKA42-15	4	3.57	2.45	1.40	1.27	8.69	110.0
26	DKA33-16	3	3.46	2.39	1.46	1.32	8.64	109.4
22	53V08	3	3.66	2.43	1.31	1.19	8.59	108.7
12	Dura 512	5	3.77	2.18	1.26	1.31	8.52	107.8
50	Amerileaf 721	7	3.55	2.22	1.42	1.31	8.50	107.6
32	54Q25	4	3.66	2.26	1.36	1.22	8.49	107.5
25	DKA50-18	5	3.39	2.37	1.43	1.24	8.43	106.7
33	HybriForce 420	4	3.72	2.25	1.28	1.17	8.42	106.6
5	WL357HQ	5	3.35	2.32	1.44	1.27	8.38	106.1
35	PSS X03		3.61	2.27	1.30	1.19	8.37	105.9
3	Boulder	3	3.96	2.28	1.31	1.29	8.28	104.8
8	XTRA-3	4	3.47	2.21	1.34	1.23	8.25	104.4
1	Plumas	4	3.76	2.08	1.15	1.23	8.23	104.2
7	Recover	5	3.57	2.22	1.32	1.12	8.22	104.1
9	Cooper	3	4.09	1.96	1.09	1.06	8.19	103.7
29	Robust T&N	4	3.50	2.23	1.27	1.18	8.17	103.4
53	Phirst	4	3.76	2.06	1.18	1.14	8.16	103.3
10	Shaw	3	3.87	2.00	1.11	1.18	8.15	103.2
11	Masterpiece	4	3.47	2.17	1.27	1.22	8.13	102.9
34	HybriForce 400	4	3.69	2.10	1.18	1.12	8.09	102.4
41	Robust T&N (Treat)	4	3.40	2.26	1.26	1.16	8.07	102.2
47	Trophy	4	3.47	2.17	1.22	1.21	8.07	102.2
28	ST 9429	4	3.44	2.24	1.19	1.13	8.00	101.3
46	Multi 775	3	3.59	2.11	1.19	1.09	7.98	101.0
49	Lobo	6	3.31	2.03	1.29	1.30	7.93	100.4
48	Multi 777	4	3.47	2.17	1.15	1.13	7.92	100.3
43	Goldleaf	3	3.44	2.20	1.21	1.06	7.91	100.1
51	Ameristand 802*	8	3.02	2.08	1.40	1.38	7.89	99.9
44	Goliath	4	3.62	1.90	1.11	1.07	7.70	97.5
20	Perry	3	3.70	2.02	1.06	0.92	7.69	97.3
30	Amerigraze 401+Z	4	3.51	1.96	1.13	1.06	7.66	97.0
16	Lahontan	6	3.12	2.21	1.30	1.02	7.65	96.8
36	Winema	5	3.40	1.98	1.18	1.03	7.59	96.1
31	Ameristand 403T	4	3.56	1.97	1.04	0.94	7.52	95.2
39	Resis		3.43	2.02	1.06	1.02	7.52	95.2
21	Agate	2	3.69	1.87	1.07	0.86	7.49	94.8
18	Vernal	2	3.56	1.99	1.03	0.85	7.43	94.1
19	Wrangler	2	3.69	1.78	1.02	0.92	7.41	93.8
14	329	2	3.39	1.84	1.03	1.13	7.40	93.7
38	Grimm	1/2	3.53	1.90	1.04	0.88	7.36	93.2
52	Spredor III	1	3.55	1.90	1.02	0.88	7.35	93.0
37	Vernema	4	3.52	1.85	1.02	0.95	7.34	92.9
40	Iroquois	2	3.47	1.94	1.02	0.88	7.31	92.5
17	Ladak	2	3.25	1.97	1.07	0.85	7.15	90.5
24	Ladak 65	2	3.30	1.80	0.94	0.77	6.81	86.2
23	Ranger	2	3.72	1.57	0.84	0.57	6.72	85.1
13	Ascend*	5	2.41	1.80	1.20	1.07	6.47	81.9
	Mean		3.52	2.09	1.19	1.10	7.90	100.0
	PLSD 0.01		0.40	0.25	0.15	0.21	0.65	
	PLSD 0.05		0.31	0.19	0.11	0.16	0.49	
	PLSD 0.10		0.26	0.16	0.10	0.13	0.41	
	CV%		6.2	6.6	6.9	10.2	4.4	
	Prob. > F		0.0001	0.0001	0.0075	0.0001	0.0001	
	Harvest Date		6/13	7/16	8/15	10/11		
	Percent of Yield %		44.6	26.4	15.1	13.9	100	

* had some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 130 Degrees F).

Table 22. 2007 First-cut yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD	Yield (%)	Rel. Yield (%)	Dry Matter (%)	Moisture (%)
4	Mountaineer 2.0	5	4.12	117.0	22.1	77.9
9	Cooper	3	4.09	116.2	21.5	78.5
3	Boulder	3	3.96	112.5	21.4	78.6
10	Shaw	3	3.87	109.9	21.3	78.7
12	Dura 512	5	3.77	107.1	21.3	78.7
1	Plumas	4	3.76	106.8	20.7	79.3
53	Phirst	4	3.76	106.8	22.3	77.7
23	Ranger	2	3.72	105.7	21.5	78.5
33	HybriForce 420/Wet	4	3.72	105.7	21.7	78.3
20	Perry	2	3.70	105.1	22.6	77.4
19	Wrangler	2	3.69	104.8	21.0	79.0
21	Agate	2	3.69	104.8	22.2	77.8
34	HybriForce 400	4	3.69	104.8	22.3	77.7
22	53V08	3	3.66	104.0	20.9	79.1
32	54Q25	4	3.66	104.0	21.7	78.3
44	Goliath	4	3.62	102.8	22.0	78.0
35	PSS X03		3.61	102.6	21.7	78.3
46	Multi 775	3	3.59	102.0	21.7	78.3
7	Recover	5	3.57	101.4	21.4	78.6
27	DKA42-15	4	3.57	101.4	19.9	80.1
18	Vernal	2	3.56	101.1	21.7	78.3
31	Ameristand 403T	4	3.56	101.1	21.7	78.3
50	Amerileaf 721	7	3.55	100.9	21.6	78.4
52	Spredor III	1	3.55	100.9	21.1	78.9
38	Grimm	1/2	3.53	100.3	22.8	77.2
37	Vernema	4	3.52	100.0	22.4	77.6
30	Amerigraze 401+Z	4	3.51	99.7	21.6	78.5
29	Robust T&N	4	3.50	99.4	21.9	78.1
8	XTRA-3	4	3.47	98.6	20.9	79.1
11	Masterpiece	4	3.47	98.6	20.0	78.0
40	Iroquois	2	3.47	98.6	21.9	78.1
47	Trophy	4	3.47	98.6	21.0	79.1
48	Multi 777	4	3.47	98.6	22.3	77.7
26	DKA33-16	3	3.46	98.3	20.9	79.1
28	ST 9429	4	3.44	97.7	20.8	79.2
43	Goldleaf	3	3.44	97.7	20.9	79.1
39	Resis		3.43	97.4	20.8	79.2
36	Winema	5	3.40	96.6	22.0	77.0
41	Robust T&N (Treat)	4	3.40	96.6	21.6	78.4
14	329	2	3.39	96.3	21.1	78.9
25	DKA50-18	5	3.39	96.3	20.4	79.6
5	WL357HQ	5	3.35	95.2	20.4	79.6
49	Lobo	6	3.31	94.0	21.7	78.3
24	Ladak 65	2	3.30	93.8	22.1	77.9
17	Ladak	2	3.25	92.3	21.3	78.7
16	Lahontan	6	3.12	88.6	22.5	77.5
51	Ameristand 802*	8	3.02	85.8	21.7	78.3
13	Ascend*	5	2.41	68.5	21.4	78.6
	Mean		3.52	100.0	21.5	78.5
	PLSD 0.01		0.40		NS	NS
	PLSD 0.05		0.31		NS	NS
	PLSD 0.10		0.26		NS	NS
	CV%		6.2		3.9	1.1
	Prob. > F		0.0001		0.2266	0.2266
	Harvest Date		6/13			

* suffered some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 130 Degrees F).

Table 23. 2007 second-cut yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD	Yield (%)	% of Mean	Dry Matter (%)	Moisture (%)	Stem Size[1]
27	DKA42-15	4	2.45	117.2	17.3	82.7	4.5
22	53V08	3	2.43	116.3	17.6	82.4	3.4
26	DKA33-16	3	2.39	114.4	17.2	82.8	3.3
25	DKA50-18	5	2.37	113.4	16.9	83.1	4.0
4	Mountaineer 2.0	5	2.34	112.0	17.3	82.7	4.8
5	WL357HQ	5	2.32	110.0	17.3	82.7	4.0
3	Boulder	3	2.28	109.1	17.9	82.1	4.0
35	PSS X03		2.27	108.6	17.4	82.6	3.3
32	54Q25	4	2.26	108.1	17.4	82.6	4.3
41	Robust T&N (Treat)	4	2.26	108.1	17.6	82.4	3.5
33	HybriForce 420/Wet	4	2.25	107.7	17.8	82.2	2.8
28	ST 9429	4	2.24	107.2	17.3	82.7	4.3
29	Robust T&N	4	2.23	106.7	17.0	82.0	4.0
7	Recover	5	2.22	106.2	17.4	82.6	3.8
50	Amerileaf 721	7	2.22	106.2	17.6	82.4	4.3
8	XTRA-3	4	2.21	105.7	17.0	83.0	4.5
16	Lahontan	6	2.21	105.7	17.9	82.1	3.0
43	Goldleaf	3	2.20	105.3	18.0	82.0	3.3
12	Dura 512	5	2.18	104.3	17.2	82.8	4.0
11	Masterpiece	4	2.17	103.8	17.1	82.9	3.8
47	Trophy	4	2.17	103.8	16.7	83.3	3.8
48	Multi 777	4	2.17	103.8	17.6	82.4	3.8
46	Multi 775	3	2.11	101.0	17.7	82.3	4.3
34	HybriForce 400	4	2.10	100.5	17.2	82.8	3.0
1	Plumas	4	2.08	99.5	17.2	82.8	4.3
51	Ameristand 802*	8	2.08	99.5	18.4	81.6	4.3
53	Phirst	4	2.06	98.6	17.7	82.3	2.5
49	Lobo	6	2.03	97.1	17.6	82.4	3.5
20	Perry	2	2.02	96.7	18.2	81.8	3.0
39	Resis		2.02	96.7	18.4	81.6	4.5
10	Shaw	3	2.00	95.7	17.3	82.7	3.5
18	Vernal	2	1.99	95.2	17.5	82.5	1.3
36	Winema	5	1.98	94.7	18.3	81.7	3.5
17	Ladak	2	1.97	94.3	18.1	81.9	3.8
31	Ameristand 403T	4	1.97	94.3	18.4	81.6	2.5
9	Cooper	3	1.96	93.8	17.4	82.6	4.0
30	Amerigraze 401+Z	4	1.96	93.8	17.6	82.4	2.8
40	Iroquois	2	1.94	92.8	18.1	81.9	3.0
38	Grimm	1/2	1.90	90.9	18.6	81.4	3.5
44	Goliath	4	1.90	90.9	17.6	82.4	4.0
52	Spredor III	1	1.90	90.9	18.0	82.0	3.5
21	Agate	2	1.87	89.5	17.4	82.6	2.5
37	Vernema	4	1.85	88.5	17.8	82.2	4.0
14	329	2	1.84	88.0	17.6	82.4	4.3
13	Ascend*	5	1.80	86.1	18.8	81.2	4.8
24	Ladak 65	2	1.80	86.1	17.3	82.7	3.3
19	Wrangler	2	1.78	85.2	16.8	83.2	1.5
23	Ranger	2	1.57	75.1	16.7	83.3	1.8
	Mean		2.09	100.0	17.6	82.4	3.6
	PLSD 0.01		0.25		1.1	1.1	1.3
	PLSD 0.05		0.19		0.8	0.8	1.0
	PLSD 0.10		0.16		0.7	0.7	0.8
	CV%		6.6		3.4	0.7	19.4
	Prob. > F		0.0001		0.0099	0.0099	0.0003
	Harvest Date		7/16				

* had some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 130 Degrees F)

[1] = Stem Size: 1 = small, 5 = large based on subjective observation while taking moisture samples.

Table 24. 2007 third-cut yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD	Yield (%)	% of Mean	Dry Matter (%)	Moisture (%)	Plant Height (in.)
26	DKA33-16	3	1.46	122.7	17.3	82.7	23.3
5	WL357HQ	5	1.44	121.0	17.7	82.3	24.3
25	DKA50-18	5	1.43	120.2	17.3	82.7	22.8
50	Amerileaf 721	7	1.42	119.3	17.6	82.4	25.0
27	DKA42-15	4	1.40	117.6	18.7	81.3	22.5
51	Ameristand 802*	8	1.40	117.6	18.2	81.8	26.3
32	54Q25	4	1.36	114.3	17.6	82.4	22.5
8	XTRA-3	4	1.34	112.6	17.6	82.4	23.5
7	Recover	5	1.32	110.9	17.4	82.6	23.8
3	Boulder	3	1.31	110.1	17.8	82.1	23.8
4	Mountaineer 2.0	5	1.31	110.1	17.2	82.8	24.3
22	53V08	3	1.31	110.1	17.4	82.6	21.8
16	Lahontan	6	1.30	109.2	18.1	81.9	23.5
35	PSS X03		1.30	109.2	17.7	82.3	21.3
49	Lobo	6	1.29	108.4	18.0	82.0	22.8
33	HybriForce 420/Wet	4	1.28	107.6	17.8	82.2	20.8
11	Masterpiece	4	1.27	106.7	17.2	82.8	23.0
29	Robust T&N	4	1.27	106.7	17.3	82.7	23.0
12	Dura 512	5	1.26	105.9	17.2	82.8	22.3
41	Robust T&N (Treat)	4	1.26	105.9	18.0	82.0	20.8
47	Trophy	4	1.22	102.5	16.9	83.1	20.8
43	Goldleaf	3	1.21	101.7	18.4	81.6	20.0
13	Ascend*	5	1.20	100.8	18.8	81.2	26.0
28	ST 9429	4	1.19	100.0	17.2	82.8	21.3
46	Multi 775	3	1.19	100.0	18.1	81.9	20.5
34	HybriForce 400	4	1.18	99.2	17.6	82.4	19.8
36	Winema	5	1.18	99.2	18.2	81.8	20.5
53	Phirst	4	1.18	99.2	17.6	82.4	20.3
1	Plumas	4	1.15	96.6	17.6	82.4	20.5
48	Multi 777	4	1.15	96.6	17.7	82.3	20.8
30	Amerigraze 401+Z	4	1.13	95.0	17.8	82.2	18.3
10	Shaw	3	1.11	93.3	18.1	81.9	20.3
44	Goliath	4	1.11	93.3	17.9	82.1	20.8
9	Cooper	3	1.09	91.6	16.8	83.2	20.3
17	Ladak	2	1.07	89.9	18.4	81.6	20.0
21	Agate	2	1.07	89.9	18.4	81.6	18.3
20	Perry	2	1.06	89.1	18.0	82.0	20.0
39	Resis		1.06	89.1	18.7	81.3	21.3
31	Ameristand 403T	4	1.04	87.4	17.9	82.1	18.8
38	Grimm	1/2	1.04	87.4	18.8	81.2	19.3
14	329	2	1.03	866	18.2	81.8	19.3
18	Vernal	2	1.03	86.6	18.8	81.2	17.8
19	Wrangler	2	1.02	85.7	17.7	82.3	16.8
37	Vernema	4	1.02	85.7	18.4	81.6	20.5
40	Iroquois	2	1.02	85.7	18.8	81.2	19.0
52	Spredor III	1	1.02	85.7	18.4	81.6	19.0
24	Ladak 65	2	0.94	79.0	18.4	81.6	18.0
23	Ranger	2	0.84	70.6	17.8	82.2	14.3
	Mean		1.19	100.0	17.9	82.1	21.1
	PLSD 0.01		0.15		1.2	1.2	2.8
	PLSD 0.05		0.11		0.9	0.9	2.1
	PLSD 0.10		0.10		0.7	0.7	1.8
	CV%		6.9		3.6	0.8	7.2
	Prob. > F		0.0075		0.0001	0.0001	0.0047
	Harvest Date		8/15				

* suffered some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 130 Degrees F).

Table 25. 2007 fourth-cut yield results of the alfalfa variety trial planted in August of 2003 at the COARC, Madras, Oregon.

#	Variety	FD	Yield (%)	% of Mean	Dry Matter (%)	Moisture (%)	Height (in)
51	Ameristand 802*	8	1.38	125.5	22.5	77.5	24.5
4	Mountaineer 2.0	5	1.32	120.0	22.9	77.1	20.0
26	DKA33-16	3	1.32	120.0	22.4	77.6	18.5
12	Dura 512	5	1.31	119.1	22.8	77.2	19.0
50	Amerileaf 721	7	1.31	119.1	21.9	78.1	21.0
49	Lobo	6	1.30	118.2	23.3	76.7	19.5
3	Boulder	3	1.29	117.3	22.4	77.6	19.0
5	WL357HQ	5	1.27	115.5	22.0	78.0	20.0
27	DKA42-15	4	1.27	115.5	22.7	77.3	17.8
25	DKA50-18	5	1.24	112.7	22.6	77.4	19.0
1	Plumas	4	1.23	111.8	23.4	76.6	16.5
8	XTRA-3	4	1.23	111.8	22.3	77.7	19.5
11	Masterpiece	4	1.22	110.9	22.3	77.7	18.8
32	54Q25	4	1.22	110.9	22.3	77.7	17.3
47	Trophy	4	1.21	110.0	22.3	77.7	15.8
22	53V08	3	1.19	108.2	23.1	76.9	16.8
35	PSS X03		1.19	108.2	22.6	77.4	16.3
10	Shaw	3	1.18	107.2	23.0	77.0	18.0
29	Robust T&N	4	1.18	107.2	22.4	77.6	18.5
33	HybriForce 420/Wet	4	1.17	106.4	23.0	77.0	16.5
41	Robust T&N (Treat)	4	1.16	105.5	23.0	77.0	19.5
53	Phirst	4	1.14	103.6	23.6	76.4	16.0
14	329	2	1.13	102.7	23.4	76.6	14.8
28	ST 9429	4	1.13	102.7	22.7	77.3	15.5
48	Multi 777	4	1.13	102.7	23.0	77.0	16.5
7	Recover	5	1.12	101.8	23.3	76.7	18.5
34	HybriForce 400	4	1.12	101.8	23.3	76.7	15.5
46	Multi 775	3	1.09	99.1	22.9	77.1	15.0
13	Ascend*	5	1.07	97.3	23.8	76.2	23.3
44	Goliath	4	1.07	97.3	23.0	77.0	16.0
9	Cooper	3	1.06	96.4	22.7	77.3	15.0
30	Amerigraze 401+Z	4	1.06	96.4	23.1	76.9	13.8
43	Goldleaf	3	1.06	96.4	23.0	77.0	15.5
36	Winema	5	1.03	93.6	23.7	76.3	16.3
16	Lahontan	6	1.02	92.7	23.2	76.8	18.0
39	Resis		1.02	92.7	23.5	76.5	16.0
37	Vernema	4	0.95	86.4	23.9	76.1	15.3
31	Ameristand 403T	4	0.94	85.5	23.4	76.6	14.0
19	Wrangler	2	0.92	83.6	23.0	77.0	13.0
20	Perry	3	0.92	83.6	23.9	76.1	14.3
38	Grimm	1/2	0.88	80.0	23.6	76.4	13.0
40	Iroquois	2	0.88	80.0	23.8	76.2	14.5
52	Spredor III	1	0.88	80.0	23.2	76.8	13.5
21	Agate	2	0.86	78.2	23.5	76.5	11.8
17	Ladak	2	0.85	77.3	24.1	75.9	14.3
18	Vernal	2	0.85	77.3	23.5	76.5	14.0
24	Ladak 65	2	0.77	70.0	24.5	75.5	12.8
23	Ranger	2	0.57	51.8	23.9	76.1	9.8
	Mean		1.10	100.0	23.1	76.9	16.6
	PLSD 0.01		0.21		1.4	1.4	NS
	PLSD 0.05		0.16		1.1	1.1	2.5
	PLSD 0.10		0.13		0.9	0.9	2.1
	CV%		10.2		3.3	1.0	10.6
	Prob. > F		0.0001		0.0001	0.0001	0.0416
	Harvest Date		10/11				

* suffered some winter kill in 2003/2004. Yield presented on dry matter basis (oven dried at 130 Degrees F).

Table 26. 2007 Fall regrowth (from October 11th) plant height (inches) of selected varieties measured on November 8th for the alfalfa variety trial planted in August, 2003 at the COARC, Powell Butte, Oregon.

#	Variety	FD	Rep I (in)	Rep II (in)	Rep III (in)	Rep IV (in)	Mean (in)
52	Spredor III	1	1.0	1.0	1.25	1.0	1.0
18	Vernal	2	1.5	1.5	1.50	1.25	1.4
22	53V08	3	1.75	1.75	1.5	1.5	1.6
41	Robust T&N (Treat)	4	1.75	1.5	1.75	1.75	1.7
13	Ascend[1]	5	2.75	3.0	4.0	3.5	3.3
16	Lahontan	6	1.25	1.25	1.25	1.75	1.4
50	AmeriLeaf 721[2]	7	3.0	2.0	2.5	3.0	2.6
51	Ameristand 802[1]	8	3.5	3.5	3.5	3.25	3.4
	Mean						
	PLSD 0.01						
	PLSD 0.05						
	PLSD 0.10						
	CV %						
	Prob. > F						

[1] suffered considerable winter kill in 2003/2004.
[2] Suffered some winter kill in 2003/2004