

IDAHO ALFALFA VARIETY TRIALS 2008

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INTRODUCTION

Alfalfa is the most productive and widely adapted forage species. Idaho alfalfa acreage is about 1.25 million acres, and produced 5 million ton—third in the US—with an estimated gross value of \$490 million in 2002. Forage yield and quality vary widely across Idaho environments and operations. The Idaho Agricultural Experiment Station (IAES) conducts alfalfa variety performance trials at several sites in southern Idaho including the Kimberly Research and Extension Center. Over 300 alfalfa varieties are available to US producers, and these performance trials are designed to assist producers in choosing their varieties.

Alfalfa varieties are tested for forage yield for at least three production years on irrigated sites. All trials are planted as randomized complete block experiments, with four or six replications. Trials receive adequate fertilization, irrigation, and weed control for optimum production. The 2005 Alfalfa variety trial was planted on May 27, 2005 at the University of Idaho's Kimberly Research and Extension Center. A 2006 trial was planted May 17, 2006 at the Brigham Young University-Idaho farm in Rexburg, ID in cooperation with Greg Blaser, agronomist BYU-Idaho. Seedling-year production results are limited in value for predicting future performance.

The seed industry contributes significantly to the variety trials. Besides donating the seed, they pay a significant fee to offset our costs of doing the work. The Plant, Soil, and Entomological Science Department of the University of Idaho also contributes significantly in salary and equipment—the 5-ft forage harvester purchased for our use costs as much as a big machine.

OBSERVATIONS

1. Forage variety trials give **potential yields**. The yields are measured on fresh forage with a moisture percentage of about 75%. Yields are corrected to 100% dry matter but there is very little harvest loss in our trials. Harvest losses for raking, baling, and stacking dry hay can be as much as 20% of the total dry matter production! We also intensely manage the plots and we don't have traffic on the plots 5-9 days after cutting. Thus I would expect realistic hay yields about 80 to 90% of these, however, green chop or haylage yields would be closer.
2. Phosphate and potash fertilizer was applied pre-planting.
3. Varieties are listed in rank of highest average yearly yield. The "LSD" statistic given at the bottom of the table tells us that varieties with yield-differences less than that value in that column are not significantly different. For example, the Kimberly 2008 first-cut yield LSD value is 0.61 tons/acre. So yield from 'FSG505' (4.44 tons/acre) is not statistically different than 'O-Mezzo' (3.84 tons/acre) or any yield between 4.44 and 3.83. There is a page full of good varieties!

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4. Don't put too much emphasis on 1-year's data from one location. I suggest looking at results from the Intermountain region of Northern California, Oregon's Malheur Station trials, and others similar in climate.
5. The forage quality data is preliminary and may change due to NIRS recalibration. However, relative differences will probably not change.
6. Kimberly Trial: The first cutting produced about 3.86 ton/acre hay and total average yield of 8.46. The stands are good. The spring was very cool.
7. BYU-Idaho Trial: Good stand, weed-free, and excellent yield for the elevation.
8. Check Varieties: Vernal is a public check variety used in all trials. Vernal should yield near the bottom of the list. Check 1 and check 2 are several year old commercial varieties.

Yield is the most important economic factor for alfalfa profitability. Average yield over a period of years and at several locations is a good measure of disease resistance and plant persistence. Generally, the top yielding 1/3 of the varieties are not significantly different for yield. University trials offer neutral testing of varieties but will not test blends--if the source is different every year, there is no point to test it. Industry data can be valuable because it usually is for a longer period of time, but you should ask for the complete data from the trial, not just a section of it. Avoid data with only one year or a single harvest!

Forage Quality--Plant more than one variety, especially if you have large acreage and are seeking dairy-quality hay. Varieties with different maturities will reach the cutting time up to about a week apart, allowing you to cut more hay at the pre-bud or bud stage. Harvesting at the correct maturity and agronomic practices (proper irrigation and weed control) has a larger effect on quality than does variety.

Variety selection is important but not the only factor affecting yield and quality! Soil fertility management, irrigation management, weed control, and harvest management may affect your profit more than variety. However, almost all newer varieties will yield more and be more resistant to pests and diseases than the old public varieties!

Sources of Variety Information

Idaho Hay and Forage Association <http://www.idahohay.com/>

National Alfalfa Alliance's <http://www.alfalfa.org>

North American Alfalfa Improvement Conference <http://www.naaic.org/>

Montana State University Extension:
<http://www.animalrangeextension.montana.edu/Forage/forage.htm>

University of California, Davis <http://alfalfa.ucdavis.edu/>

University of Wisconsin Extension: University of Wisconsin Extension:
<http://www.uwex.edu/ces/forage>

University of Idaho Alfalfa Variety Trials, 2008						
Harvesting Dates: May 29, June 30, August 5, September 17, 2008.						
Kimberly, Idaho, Trial Established May 2005						
1/18/2009-Sorted by 1st cut yield						
Cultivar	2006-8 3 Year Average	2008 Forage dry matter yield				
		Year total	1st	2nd	3rd	4th
	Ton/Acre	----- Tons/Acre ----- --				
FSG505	8.41	8.80	4.44	1.82	1.76	1.28
WL357HQ	8.71	8.80	4.34	2.08	1.78	1.45
AA205W	8.94	9.40	4.32	2.02	1.88	1.63
Owyhee	8.53	9.20	4.26	2.04	1.94	1.58
54Q25	9.12	9.40	4.18	2.04	2.06	1.65
FSG406	8.71	8.80	4.16	1.84	1.78	1.58
O-Nadir	8.59	9.00	4.16	2.04	2.00	1.48
Wildcard	8.35	8.40	4.12	1.76	1.68	1.55
PGI 427	8.59	8.60	4.04	1.82	1.82	1.40
Check 2	8.41	8.40	4.04	1.78	1.90	1.50
eXalt	8.53	9.20	4.00	2.12	1.98	1.58
Masterpiece	8.65	8.60	3.96	1.82	1.96	1.60
Boulder	8.59	8.60	3.92	1.78	1.94	1.55
FSG408DP	8.65	8.60	3.92	1.82	1.96	1.53
Reward II	8.71	8.60	3.90	1.98	1.72	1.60
O-Mezzo	8.35	8.20	3.84	1.70	1.90	1.45
SpringGold	8.35	8.80	3.82	1.98	2.08	1.68
Check1	8.71	8.40	3.82	1.74	1.98	1.53
Genoa	8.41	8.60	3.80	1.96	2.00	1.40
CW24022	8.35	8.00	3.78	1.78	1.78	1.43
9429	8.29	8.20	3.76	2.02	1.74	1.48
A 4330	8.59	8.60	3.70	1.80	2.06	1.58
AA204W	8.05	7.80	3.68	1.70	1.90	1.45
SummerGold	8.35	8.00	3.60	1.74	1.78	1.45
Whitney	7.94	7.80	3.52	1.62	1.84	1.50
O-Apex	8.47	8.00	3.50	1.76	2.04	1.45
Escalade	8.52	8.00	3.44	1.78	1.92	1.48
AA206W	7.94	7.40	3.32	1.60	1.82	1.60
Lahontan	8.35	8.20	3.30	1.74	2.12	1.60
Vernal	7.53	7.80	3.30	1.58	1.86	1.35
Mean	8.46	8.40	3.86	1.84	1.89	1.51
LSD (.05)	N.S.	0.95	0.61	0.21	0.18	0.18
CV %	13.3	9.0	12.6	9.0	10.5	10.5

University of Idaho Alfalfa Variety Trials, 2008						
Harvesting Date: June 9, July 16, August 13, September 10						
BYU-Idaho, Rexburg, ID, 3rd Year, planted May 2006						
1/28/2009-Sorted by 1st cut yield						
Cultivar	2007-8 2 Year Average Tons/Acre	2008 Forage dry matter yield				
		Year total	1st	2nd	3rd	4th
----- Tons/Acre ----- ---						
FSG406	9.03	9.35	3.58	2.58	2.08	1.13
4R200	9.56	9.78	3.55	2.93	2.38	1.00
Legendairy 5.0	9.15	9.33	3.48	2.88	1.98	1.03
54V09	8.99	9.23	3.43	2.78	2.15	0.95
DKA34-17RR	8.69	9.00	3.43	2.68	2.00	1.00
FSG408DP	9.16	9.35	3.38	2.78	2.23	1.05
WL343HQ	9.20	9.25	3.38	2.78	2.20	1.03
Lariat	9.20	9.25	3.35	2.65	2.25	1.00
Marvel	9.09	9.43	3.35	2.93	2.05	1.10
Arapaho	8.78	8.93	3.33	2.60	2.05	1.00
DKA41-18RR	9.08	9.63	3.30	2.78	2.23	1.10
Mystery check1	9.08	9.18	3.28	2.73	2.08	1.08
FSG351	8.74	9.13	3.25	2.78	2.10	1.03
Whitney	9.14	9.28	3.23	2.70	2.03	1.08
Vernal	8.86	9.23	3.20	2.98	2.23	1.00
Shaw	8.54	8.98	3.18	2.63	2.15	1.08
TS-5010	9.01	9.20	3.18	2.80	2.05	1.03
Magnum VI	9.10	8.98	3.15	2.70	2.10	1.00
Mariner III	8.26	8.80	3.15	2.68	2.00	1.00
MasterPiece	8.81	9.15	3.15	2.73	2.08	1.15
Melton	8.48	8.73	3.13	2.65	2.03	1.00
Oneida VR	8.78	9.18	3.10	2.78	2.08	1.15
54Q25	8.88	8.63	3.08	2.75	2.00	1.00
Kingfisher 30-30Q	8.60	8.65	3.01	2.48	2.15	1.03
Ameristand 403T	8.60	8.83	2.95	2.73	2.05	1.00
9429	8.78	8.88	2.90	2.75	2.15	1.10
Mean	8.90	9.13	3.25	2.74	2.20	1.04
LSD (.05)	0.58	N.S.	0.36	N.S.	N.S.	N.S.
CV %	6.6	5.3	8.0	8.9	8.9	13.8

University of Idaho Alfalfa Variety Trials, 2008

First Cutting, Harvested: May 24, 2008 -- Forage Quality, Sorted by Milk/Acre

Kimberly, Idaho, Trial Established May 2005

Cultivar	1st Cut	CP	ADF	NDF	dNDF48	Lignin	ash	Fat	NEL	NEM	NEG	RFV	NDFD	NFC	TDN	RFQ	Milk/Ton	Milk/Acre
	Ton/ac	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Mcal/lb	Mcal/lb	Mcal/lb	Index	(%)	(%)	(%)	Index	lbs milk/t	lbs milk/ac
FSG505	4.4	23.1	28.9	34.3	19.0	7.1	13.0	1.5	0.69	0.69	0.42	173	51.8	30.5	61.4	180	2,245	9,968
WL357HQ	4.3	22.0	29.8	35.4	18.8	7.2	11.9	1.6	0.70	0.71	0.43	178	52.5	31.9	63.2	190	2,287	9,923
Owyhee	4.3	21.8	30.1	35.6	18.2	7.1	11.9	1.6	0.69	0.7	0.43	173	52.6	31.6	62.9	185	2,270	9,669
AA205W	4.3	21.0	30.7	36.6	19.0	7.1	11.9	1.5	0.69	0.69	0.43	170	52.3	30.9	62.5	180	2,233	9,645
FSG406	4.2	22.2	29.0	34.9	18.3	6.5	12.1	1.7	0.72	0.73	0.46	188	53.5	31.3	63.6	196	2,297	9,557
Wildcard	4.1	21.5	30.0	35.3	18.3	7.4	11.9	1.6	0.69	0.69	0.42	172	52.7	30.9	62.8	184	2,288	9,427
Check2	4.0	22.9	28.8	34.0	18.3	7.1	12.2	1.5	0.69	0.7	0.43	175	53.3	31.0	62.9	187	2,317	9,360
54Q25	4.2	22.2	30.4	35.7	18.6	6.9	12.3	1.6	0.70	0.7	0.44	183	53.6	31.5	63.4	195	2,232	9,331
O-Nadir	4.2	22.0	30.1	35.6	18.6	6.9	12.3	1.6	0.70	0.7	0.43	177	53.6	30.9	63.0	189	2,238	9,308
Masterpiece	4.0	22.9	29.0	34.4	18.7	6.6	11.9	1.6	0.70	0.7	0.44	178	53.6	31.3	63.4	191	2,337	9,253
PGI 427	4.0	22.5	28.7	34.0	18.5	7.2	12.8	1.6	0.68	0.68	0.41	169	53.4	30.3	62.0	181	2,283	9,224
SpringGold	3.8	23.1	28.9	34.0	18.2	7.3	11.4	1.6	0.66	0.66	0.39	151	53.9	29.4	61.9	166	2,384	9,106
Boulder	3.9	22.4	29.5	35.0	18.4	6.9	11.8	1.6	0.70	0.7	0.44	178	53.7	30.9	63.4	189	2,305	9,034
eXalt	4.0	21.8	29.8	35.6	18.5	6.7	12.3	1.6	0.71	0.72	0.45	184	53.3	31.0	63.3	194	2,240	8,960
FSG408DP	3.9	22.3	29.8	35.3	18.8	7.2	12.0	1.6	0.70	0.7	0.42	172	52.4	30.9	62.6	182	2,284	8,954
Reward II	3.9	21.7	30.5	35.4	18.2	7.0	11.9	1.6	0.70	0.71	0.44	181	52.4	32.0	63.3	192	2,282	8,899
CW24022	3.8	22.4	29.2	34.5	18.1	7.3	11.7	1.5	0.69	0.69	0.42	171	51.3	31.5	62.4	181	2,328	8,801
O-Mezzo	3.8	22.1	29.8	35.4	18.5	6.9	12.2	1.6	0.70	0.7	0.44	179	54.6	31.3	63.5	194	2,256	8,663
Check1	3.8	21.4	30.2	35.7	18.5	7.4	12.0	1.5	0.68	0.68	0.41	168	53.2	31.4	62.9	186	2,248	8,589
9429	3.8	21.9	29.5	35.4	18.6	6.9	12.1	1.6	0.70	0.7	0.43	177	54.0	31.2	63.4	190	2,274	8,550
SummerGold	3.6	23.6	28.2	33.6	18.4	7.2	12.0	1.6	0.69	0.7	0.43	175	54.0	31.0	63.3	189	2,360	8,497
A 4330	3.7	22.2	30.4	35.5	18.6	6.9	11.8	1.6	0.69	0.7	0.43	175	53.2	31.8	63.3	188	2,284	8,452
Genoa	3.8	21.9	30.4	36.1	18.6	7.2	12.2	1.5	0.68	0.68	0.41	164	50.5	30.2	61.1	171	2,206	8,384
AA204W	3.7	22.6	29.7	34.8	18.4	7.1	12.7	1.5	0.69	0.7	0.43	174	51.2	30.4	61.6	180	2,235	8,224
O-Apex	3.5	22.5	29.5	34.6	18.3	6.8	11.9	1.6	0.70	0.7	0.43	173	52.1	30.4	62.6	182	2,318	8,114
Whitney	3.5	21.6	30.2	35.7	19.0	6.9	12.2	1.5	0.69	0.69	0.42	175	53.9	30.1	63.1	189	2,251	7,925
AA206W	3.3	22.6	29.5	35.0	18.7	7.2	11.8	1.6	0.69	0.69	0.42	170	52.2	31.2	62.6	181	2,315	7,686
Escalade	3.4	21.9	30.3	35.4	18.3	7.4	12.8	1.5	0.69	0.69	0.42	169	50.6	30.6	61.1	174	2,198	7,562
Vernal	3.3	21.7	29.7	35.3	18.9	7.4	12.3	1.7	0.69	0.7	0.43	184	54.3	31.6	63.8	199	2,274	7,504
Lahontan	3.3	22.1	30.6	36.5	19.1	7.1	12.1	1.6	0.69	0.7	0.43	174	52.3	31.0	62.5	184	2,217	7,317
Mean	3.9	22.2	29.7	35.2	18.5	7.1	12.1	1.6	0.69	0.7	0.4	174.3	52.9	31.0	62.7	185	2,276	8,796
LSD (.05)	0.6	1.3	1.6	1.7	0.9	0.1	0.0	0.2	0.0	0.0	0.0	13.1	2.7	1.5	1.8	16	NA	NA
LSd (.1)	-	1.0	1.3	1.4	0.7	0.5	0.7	0.1	0.0	0.0	0.0	10.9	2.2	1.3	1.5	14	NA	NA
CV %	12.6	4.0	3.7	3.4	3.4	5.8	4.7	6.4	2.0	2.6	3.7	5.3	3.6	3.5	2.0	6.3	NA	NA
Pr>F	-	0.04	0.16	0.09	0.79	0.34	0.10	0.62	0.03	0.01	0.01	0.01	0.17	0.25	0.12	0.05	NA	NA

University of Idaho Alfalfa Variety Trials, 2008
First Cutting, Harvested May 29, 2008 -- Forage Quality
BYU- Idaho Cooperating, Rexburg, Idaho

Cultivar	1st Cut	CP	ADF	NDF	dNDF48	Lignin	ash	Fat	NEL	NEM	NEG	RFV	NDFD	NFC	TDN	DMI1	RFQ	Milk/ Ton	Milk/ Acre
	Ton/acre	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Mcal/lb	Mcal/lb	Mcal/lb	Index	(%)	(%)	(%)	(%)	Index	lbs/ton	lbs/ac
9429	2.90	22.5	26.7	30.3	18.9	6.16	10.4	1.92	0.72	0.74	0.46	201	61.3	35.9	69.0	4.3	239	2719	7885
4R200	3.55	22.8	28.5	32.2	19.5	6.79	11.0	1.76	0.71	0.72	0.44	191	58.9	33.8	67.1	4.1	223	2567	9113
54Q25	3.08	22.8	27.3	31.2	19.5	6.06	10.6	1.96	0.72	0.74	0.46	205	62.1	36.2	69.3	4.4	246	2671	8225
54V09	3.43	22.6	28.1	32.1	18.9	5.96	10.4	1.89	0.72	0.73	0.46	197	61.4	35.7	68.9	4.2	237	2628	9013
Arapaho	3.33	22.4	27.7	31.8	19.3	6.03	10.9	1.84	0.72	0.73	0.46	201	61.3	35.8	68.5	4.3	239	2601	8662
DKA34-17RR	3.43	22.9	27.4	31.7	20.0	5.98	10.7	1.93	0.73	0.75	0.47	208	64.2	36.2	69.9	4.5	254	2647	9079
DKA41-18RR	3.30	24.3	26.9	30.4	18.7	5.77	10.9	1.96	0.72	0.74	0.47	205	60.9	34.1	68.5	4.3	242	2663	8788
DS417	3.15	22.6	27.8	31.4	19.4	5.89	10.8	1.99	0.73	0.75	0.47	212	62.2	36.1	69.4	4.5	253	2644	8328
FSG351	3.25	22.6	28.7	32.9	20.8	6.32	11.0	1.83	0.72	0.74	0.46	204	63.6	35.5	69.0	4.4	247	2567	8343
FSG406	3.58	22.5	27.6	31.3	19.0	5.97	10.4	1.94	0.72	0.73	0.46	200	62.0	35.2	69.1	4.3	242	2670	9557
FSG408DP	3.38	21.6	28.5	32.6	19.9	6.33	10.5	1.79	0.70	0.71	0.44	186	59.3	35.5	67.6	4.0	220	2608	8815
Kingfisher 30-30Q	3.01	21.3	27.8	32.1	19.8	5.97	10.4	1.88	0.72	0.73	0.46	201	61.3	36.5	69.0	4.3	241	2647	7967
Lariat	3.35	22.3	28.8	33.0	19.5	6.24	10.8	1.86	0.71	0.71	0.44	189	61.0	34.0	68.0	4.1	227	2555	8558
Legendairy 5.0	3.48	23.1	27.6	31.8	19.7	6.50	11.1	1.81	0.71	0.72	0.45	191	60.7	34.0	67.6	4.1	227	2588	9008
Mariner III	3.15	22.5	29.0	33.0	18.8	6.34	10.8	1.85	0.71	0.73	0.45	199	60.2	35.0	68.1	4.2	235	2533	7980
Marvel	3.35	22.4	27.8	30.9	19.4	6.57	11.0	1.80	0.70	0.71	0.44	190	60.9	34.7	67.6	4.1	227	2636	8830
MasterPiece	3.15	22.2	27.5	31.3	19.2	6.79	10.6	1.72	0.69	0.70	0.43	182	57.4	33.8	66.5	3.9	212	2643	8326
Melton	3.13	22.7	27.6	32.0	18.7	6.21	11.0	1.88	0.72	0.73	0.46	203	59.8	34.6	67.9	4.3	237	2571	8049
Check1	3.28	22.0	28.5	32.7	20.2	6.04	10.3	1.92	0.71	0.73	0.46	199	63.3	35.3	69.6	4.3	244	2629	8624
Oneida VR	3.10	22.4	28.6	32.6	19.3	6.12	10.7	1.74	0.70	0.71	0.44	185	57.6	34.7	66.7	3.9	214	2567	7959
Shaw	3.18	21.8	27.8	32.4	19.5	6.23	10.8	1.83	0.70	0.72	0.44	189	58.3	33.8	67.0	4.0	220	2585	8219
TS-5010	3.18	22.9	27.5	31.6	18.8	5.99	10.4	1.82	0.72	0.73	0.46	202	62.4	36.2	69.3	4.3	245	2644	8407
Vernal	3.20	22.3	28.0	32.3	20.1	6.58	10.9	1.76	0.70	0.72	0.44	188	59.9	34.6	67.4	4.1	222	2590	8286
Whitney	3.23	22.2	27.8	32.2	20.1	6.24	10.7	1.85	0.72	0.73	0.46	201	62.6	35.4	69.1	4.3	244	2615	8445
WL343HQ	3.38	22.4	28.0	31.9	19.4	6.30	10.8	2.00	0.69	0.70	0.42	176	60.9	32.1	66.8	3.9	212	2622	8864
Ameristand 403T	2.95	22.1	28.0	32.1	18.4	6.05	11.7	1.72	0.72	0.73	0.46	199	59.9	34.9	67.1	4.2	230	2489	7342
Mean	3.25	22.5	27.9	31.9	19.4	6.21	10.7	1.86	0.71	0.7	0.5	196	60.9	35.0	68.2	4	211	2612	8487
LSD (.05)	0.58	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		
CV %	6.6	5.1	4.3	5.0	4.4	7.2	5.8	6.7	2.6	3.2	4.6	7.6	4.3	4.8	2.3	6.6	8.6		
Pr>F		0.61	0.71	0.86	0.12	0.19	0.65	0.05	0.32	0.20	0.16	0.20	0.07	0.13	0.08	0.15	0.11		

Entry information for Kimberly Trials

Marketer	Variety	FD	WS	Bw	Vw	Fw	An	PRR	SAA	PA	BAA	SN	NRKN
Pioneer	54Q25	4	--	HR	HR	HR	HR	HR	R	R	--	HR	HR
Eureka/Northwest Seed	9429	4	2	HR	R	HR	HR	HR	R	HR	--	R	--
Producer's Choice Seed	A 4330	4	2	HR	HR	HR	HR	HR	--	R	--	R	HR
ABI Alfalfa	AA204W	5	--	R	R	R	R	HR	R	R	R	HR	HR
ABI Alfalfa	AA205W	4	--	HR	HR	HR	HR	HR	R	R	R	HR	HR
ABI Alfalfa	AA206W	5	--	HR	--	--	--	HR	HR	--	--	R	HR
NK/Syngenta Seeds, Inc.	Boulder	4	2	HR	HR	HR	HR	HR	HR	R	--	HR	--
Commercial	Check1	4	2	--	--	--	--	--	--	--	--	--	--
Commercial	Check2	4	2	--	--	--	--	--	--	--	--	--	--
Cal/west Seeds	CW24022	4	2	--	--	--	--	--	--	--	--	--	--
Allied Seed, LLC	Escalade	5	2	HR	R	HR	R	HR	--	R	--	MR	R
AGSeed LLC	eXalt	4	2	HR	HR	HR	HR	HR	--	--	--	--	--
Farm Science Genetics	FSG408DP	4	2	HR	R	HR	HR	HR	--	R	--	R	HR
Farm Science Genetics	FSG505	5	3	HR	HR	HR	HR	HR	R	R	--	R	R
Farm Science Genetics	FSG406	4	1	HR	HR	HR	HR	HR	R	R	--	R	R
NK/Syngenta Seeds, Inc.	Genoa	4	1	HR	HR	HR	HR	HR	HR	HR	--	R	R
Public--std check	Lahontan	6	--	MR	--	LR	--	LR	MR	LR	--	R	--
Simplot Grower Solutions	Masterpiece	4	3	HR	R	HR	HR	HR	R	--	R	HR	R
Bob Romanko ²	O-Nadir	6	--	--	--	--	--	--	--	--	--	--	--
Bob Romanko	O-Apex	6	--	--	--	--	--	--	--	--	--	--	--
Bob Romanko	Owyhee	6	--	--	--	--	--	--	--	--	--	--	--
Bob Romanko	O-Mezzo	6	--	--	--	--	--	--	--	--	--	--	--
Producers Choice ¹	PGI 427	4	2	HR	HR	HR	HR	HR	--	R	--	--	R
Producer's Choice ¹	RewardII	4	2	HR	R	HR	R	HR	R	R	R	R	HR
Tri-West Seed	SpringGold	5	2	HR	HR	HR	HR	HR	--	R	--	R	HR
Tri-West Seed	SummerGold	4	2	HR	--	HR	HR	HR	LR	R	--	HR	R
Public--std check	Vernal	2	--	R	--	MR	--	--	--	--	--	--	MR
Eureka/Northwest Seed	Whitney	4	3	HR	HR	HR	HR	HR	R	HR	--	HR	R
Bob Romanko	Wildcard	--	--	--	--	--	--	--	--	--	--	--	--
W-L Research	WL357HQ	5	2	HR	HR	HR	HR	HR	R	R	MR	MR	--

¹Available regionally through Tri-West Seed

²Experimentals from Bob Romanko, recently deceased

FD fall dormancy scale: 1 = least fall growth to 9 = greatest fall growth

WS winter survival index: 1.5=superior winter survival, 2.0=very good, 2.5=good to very good, 3=good, 3.5=adequate to good, 4=adequate, 5=low, 6=no winter survival

Bw bacterial wilt

Vw verticillium wilt

Fw fusarium wilt

An anthracnose

PRR phytophthora root rot

SAA spotted alfalfa aphid

PA pea aphid

BAA blue alfalfa aphid

SN stem nematode

NRKN northern root knot nematode

Resistance Ratings

abbreviation	Resistance class	% Resistant plants
	S	Susceptible
LR	Low resistance	.14
MR	Moderate resistance	.30
R	Resistance	.50
HR	High resistance	.00

Entry information for BYU-Idaho Trials

Marketer	Variety	FD	WS	Bw	Vw	Fw	An	PRR	APH	SAA	PA	BAA	SN	NRKN
Northwest Seed	9429	4	3	HR	R	HR	HR	HR	-	R	HR	HR	R	R
Tri-West Seed	30-30Q	3	2	HR	HR	HR	HR	HR	HR	R	R	-	-	-
Northwest Seed	4R200	4	2	HR	HR	HR	HR	HR	-	R	R	-	HR	R
Pioneer	54Q25	4	-	HR	HR	HR	HR	HR	-	R	R	-	HR	HR
Pioneer	54V09	4	-	HR	HR	R	HR	HR	-	R	HR	-	HR	HR
Tri-West Seed	Arapaho	3	2	HR	R	HR	R	HR	-	-	MR	-	R	HR
Mystery check	Check1	3	2	-	-	-	-	-	-	-	-	-	-	-
Mystery check	Check2	4	2	-	-	-	-	-	-	-	-	-	-	-
Dekalb	DKA34-17RR	3	2	HR	HR	HR	HR	HR	HR	-	HR	-	R	-
Dekalb	DKA41-18RR	4	2	HR	HR	HR	HR	HR	HR	R	HR	-	R	-
Dairyland/Tri-West Seed	Magnum VI	4	2	HR	HR	HR	HR	HR	HR	-	MR	-	R	HR
Farm Science Genetics	FSG351	3	2	HR	R	HR	R	HR	-	R	HR	R	R	HR
Farm Science Genetics	FSG406	4	1	HR	HR	HR	HR	HR	-	-	R	-	R	R
Farm Science Genetics	FSG408DP	4	2	HR	R	HR	HR	HR	-	-	R	-	R	HR
Simplot Grower Solutions	Lariat	3	1	HR	HR	HR	HR	HR	HR	-	HR	-	R	R
Cropland Genetics	Legendairy 5.0	3	2	HR	HR	HR	HR	HR	R	R	R	-	MR	LR
Allied Seed, LLC	Mariner III	4	2	HR	HR	HR	HR	HR	-	-	R	-	R	-
Allied Seed, LLC	Marvel	4	2	HR	HR	HR	HR	HR	-	R	R	-	-	-
Simplot Grower Solutions	MasterPiece	4	-	HR	R	HR	HR	HR	R	R	-	R	HR	R
Montana State Univ.	Melton	3	-	R	R	R	-	HR	-	MR	R	-	R	HR
Public--std check	Oneida VR	3	-	R	HR	HR	MR	MR	-	-	-	-	-	-
Montana State Univ.	Shaw	3	-	HR	MR	-	MR	R	-	R	R	-	MR	HR
Target Seed	TS-5010	4+	-	R	R	R	R	HR	-	R	R	R	HR	R
Public--std check	Vernal	2	-	R	-	MR	-	-	-	-	-	-	-	-
Northwest Seed	Whitney	4	3	HR	HR	HR	HR	HR	-	R	HR	-	HR	R
W-L Research	WL343HQ	4	2	HR	HR	HR	HR	HR	-	MR	R	MR	MR	-