

Project Title: 2006 Intrastate Alfalfa Yield Trial – Dryland

Project Leader: Dennis Cash

Project Personnel: Louise Strang

Objectives: To evaluate the yield performance of alfalfa cultivars in a northwestern Montana dryland environment.

Results:

Eighteen alfalfa cultivars were planted 5/3/06 in a randomized complete block design with 4 replicates. Spring stands were adequate following a cool and dry winter. Below average precipitation in April was followed by above average rainfall in June and July (7.45 inches) which resulted in good late season production. Post-season regrowth yielded 1.35 t/a for a total season yield average of 5.30 t/a.

Summary:

Third-year production ranged from 4.56 t/a ('WL 343HQ') to 5.91 t/a ('Cooper'). There were no significant differences among varieties in total 2008 production.

Future Plans:

This trial will remain in production through 2009.

2006 Montana Intrastate Alfalfa Variety Yield Trials

Kalispell - Dryland

2008

<u>Cultivar</u>	<u>MTNO</u>	<u>Std</u> <i>%Occup</i>	H-1	H-2	H-3	2008	2007	Total
			<u>Yield</u> <i>t/a</i>	<u>Yield</u> <i>t/a</i>	<u>Yield</u> <i>t/a</i>	<u>Total</u> <i>t/a</i>	<u>Total</u> <i>t/a</i>	<u>2007-08</u> <i>t/a</i>
Ladak 65	2	60	1.88	1.74	1.27	4.89	3.77	8.66
Shaw	328	83	2.47	2.01	1.39	5.86	5.45	11.31
Melton	333	73	2.31	2.01	1.46	5.78	5.00	10.79
Cooper	335	75	2.52	1.89	1.51	5.91	5.12	11.03
54Q25	393	63	2.33	1.84	1.37	5.54	4.75	10.29
4R200	401	73	2.02	1.91	1.53	5.45	5.38	10.84
Ameristand 407TQ	402	56	2.10	1.69	1.30	5.08	4.15	9.23
DKA34-17RR	403	73	1.89	1.82	1.27	4.97	4.09	9.06
DKA41-18RR	404	65	2.46	1.62	1.20	5.28	5.42	10.70
Genoa	405	73	1.78	1.67	1.41	4.86	4.12	8.98
GrandStand	406	72	1.81	1.72	1.30	4.84	4.42	9.26
HB8300	407	69	2.32	1.74	1.22	5.28	4.16	9.44
HB8400	408	70	2.07	1.85	1.35	5.27	4.15	9.42
Impressive	409	79	2.31	1.94	1.50	5.74	4.50	10.23
Lariat	410	79	2.38	1.92	1.38	5.68	4.36	10.04
WL 343HQ	411	58	1.82	1.62	1.13	4.56	4.26	8.82
WL 355RR	412	62	2.06	1.78	1.36	5.21	4.92	10.12
Whitney	413	73	1.91	1.91	1.33	5.16	4.87	10.03
mean		70	2.13	1.81	1.35	5.30	4.60	9.90
Pr>F		0.7591	0.9928	0.9539	0.8084	0.9919	0.8620	0.8890
LSD(0.05)		NS	NS	NS	NS	NS	NS	NS
CV(%mean)		23.7	34.6	15.3	18.9	21.7	24.3	34.7

Planting date: 5/3/06

Fertilizer: 13 lbs N 62 lbs P₂O₅ /a preplant

H-1 Harvest date: 6/24/08
 Stage at harvest: ebl

H-2 Harvest date: 7/30/08
 Stage at harvest: FBL

H-3 Harvest date: 9/29/08
 Stage at harvest: FBL