

Alfalfa Varietal Experiment

Table No. 3 gives the yield performance of seventeen alfalfa varieties grown at Alfalfa for the years 1965 - 1968 inclusive. Table No. 9 presents the yield performance for the alfalfa varieties grown at the Redmond location from 1965 - 1968.

Table No. 10 shows the average yield for the first four years of production for the included varieties in three recent varietal yield trials, namely, Alfalfa, Redmond, and the Wendall Gross location. The data indicates a relatively small difference in yield when the hardy Vernal types or the hardy Flemish types (alfalfa) are compared. Cayuga was not included at the Gross location, but averaged out to be the highest yielding of the Alfalfa and Redmond nurseries. Cayuga is apparently a slow starter with its strength showing during the third year of production. The recognized dry land or pasture types are generally a little lower yielding than the hay types as would be expected and the less hardy flemish and common alfalfas are not adapted to Central Oregon conditions as shown by the yields of Lahontan, Talent, Socheville, Cody, DuPuits and Moopa (not shown).

The 1968 crop first and second cuttings of the Alfalfa and Redmond locations are shown in Appendix Tables No. 6, 7, 8, and 9 respectively.

Table No. 8

Yield Performance of Seventeen Alfalfa Varieties
Grown During the Years 1965 to 1968 Inclusive
Central Oregon Experiment Station - Alfalfa Location

Variety	Alfalfa Hay - Tons Per Acre				Average	% Vernal
	1965	1966	1967	1968		
Harragansett	4.33	5.15	8.68	5.36	5.88	102.1
Rhizoma	4.16	5.34	8.26	5.59	5.84	101.4
Atlantic	4.20	5.17	8.35	5.52	5.81	100.9
Cayuga	4.10	4.95	8.54	5.54	5.78	100.3
Vernal	4.32	5.14	8.20	5.38	5.76	100.0
Alfa	3.70	4.56	8.58	6.03	5.74	99.7
NK 910	3.52	4.98	8.84	5.29	5.66	98.3
Nomad	3.85	5.21	8.28	5.28	5.66	98.3
Sevelra	3.96	5.12	8.41	5.30	5.65	98.1
Uinta	3.95	5.17	8.05	5.29	5.62	97.6
Ranger	3.65	5.23	7.87	5.56	5.58	96.9
Ladak	4.23	4.51	7.55	5.51	5.53	96.0
Rambler	4.37	4.66	7.51	5.59	5.53	96.0
Teton	3.99	4.63	8.13	5.16	5.48	95.1
Du Puits	3.20	4.86	7.86	5.27	5.30	92.0
Cody	3.50	4.82	7.72	5.06	5.28	91.7
Lahontan	2.75	4.43	7.39	5.32	4.97	86.3
L.S.D. @ 5%	.48	ns	ns	ns		
C.V. %	8.71	8.24	13.76	22.5		

Table No. 9

Yield Performance of Twenty Alfalfa Varieties
Grown During the Years 1965 to 1968 Inclusive

Central Oregon Experiment Station - Redmond Location

Variety	Alfalfa Hay - Tons Per Acre					% Vernal
	1965	1966	1967	1968	Average	
Cayuga	5.04	4.99	7.63	5.08	5.69	103.8
Ladak	5.14	4.26	7.80	5.07	5.57	101.2
Nomad	4.65	4.56	7.55	5.18	5.49	100.2
Vernal	4.91	4.22	7.56	5.21	5.48	100.0
Ranger	4.78	3.85	7.69	4.79	5.28	96.4
Du Puits	4.78	4.08	7.54	4.69	5.27	96.2
Alfa	4.72	3.98	7.22	5.17	5.27	96.2
Uinta	5.04	4.16	7.19	4.61	5.25	95.8
Atlantic	4.51	3.96	7.08	4.97	5.13	93.6
Rambler	5.03	4.26	6.72	4.45	5.12	93.4
Narragansett	4.86	3.78	7.22	4.59	5.11	93.2
Sevelra	4.55	3.98	7.01	4.81	5.09	92.9
Teton	5.01	3.03	7.07	4.76	4.97	90.7
NK919	4.19	4.12	6.86	4.69	4.97	90.7
Orestan	4.39	3.82	6.82	4.76	4.95	90.3
Rhizoma	4.63	-	6.87	4.19	5.23	88.7
Cody	3.86	3.63	6.76	4.19	4.54	82.8
Talent	3.01	3.27	6.02	4.08	4.10	74.8
Socheville	3.41	3.51	5.46	3.85	4.06	74.1
Lahontan	2.98	2.54	5.16	3.89	3.64	66.4
L.S.D. @ 5%	ns	ns	.51	ns		
C.V. %	High	High	5.2	16.0		

Table No. 10

Average Yield Performance for Twenty Alfalfa Varieties Grown
in Central Oregon - Yields are an Average of the First
Four Years of Production for Each of Three Locations

Variety	Average Hay Yield - Tons Per Acre			
	Alfalfa	Redmond	Gross	Average
Cayuga	5.78	5.69	-	5.74
Narragansett	5.88	5.11	5.80	5.59
Atlantic	5.81	5.13	5.74	5.55
Vernal	5.76	5.48	5.38	5.53
Alfa	5.74	5.27	-	5.51
Rhizoma	5.84	5.23	5.42	5.49
Ladak	5.53	5.57	5.29	5.46
Uinta	5.62	5.25	-	5.44
Ranger	5.58	5.28	5.40	5.41
Nomad	5.66	5.49	5.01	5.38
Sevalra	5.65	5.09	5.38	5.37
NK 919	5.66	4.97	-	5.32
Rambler	5.53	5.12	5.14	5.26
Teton	5.48	4.97	-	5.23
Du Puits	5.30	5.27	4.93	5.16
Orestan	-	4.95	5.26	5.11
Cody	5.28	4.54	-	4.91
Socheville	-	4.06	4.93	4.50
Talent	-	4.10	4.61	4.36
Lahontan	4.97	3.64	4.14	4.25

Appendix Table No. 6

Alfalfa Hay Yields by Replication and Average for
Seventeen Alfalfa Varieties Grown at the Alfalfa Location
of the Central Oregon Experiment Station, 1968

First Cutting

Variety	Yield in Tons Per Acre				Average
	Rep. I	Rep. II	Rep. III	Rep. IV	
Ladak	3.48	2.08	2.96	3.00	2.88
Harragansett	2.26	2.66	2.92	2.15	2.50
Ranger	3.20	2.71	2.63	2.07	2.65
Teton	2.01	2.08	3.12	2.48	2.42
Rambler	3.64	2.31	2.55	3.23	2.93
Cayuga	2.21	2.23	1.65	3.30	2.35
Alfa	2.91	3.08	2.13	3.27	2.85
Atlantic	1.95	2.81	2.64	2.35	2.44
Lahontan	2.67	2.13	2.68	2.86	2.58
Vernal	1.84	2.22	2.36	2.18	2.15
Cody	2.12	2.87	1.88	2.34	2.30
Sevelra	2.29	2.62	2.17	2.32	2.35
Du Puits	2.66	2.05	2.26	2.71	2.42
Nomad	2.24	1.91	2.95	2.56	2.41
Rhizoma	2.45	3.37	3.49	1.49	2.70
NK 919	1.93	3.16	2.39	2.14	2.40
Uinta	1.98	1.97	2.60	2.20	2.19

Harvested June 25, 1968

Appendix Table No. 7

Alfalfa Hay Yields by Replication and Average for
Seventeen Alfalfa Varieties Grown at the Alfalfa Location
of the Central Oregon Experiment Station, 1968

Second Cutting

Variety	Yield in Tons Per Acre				Average
	Rep. I	Rep. II	Rep. III	Rep. IV	
Ladak	2.24	2.43	2.59	3.25	2.63
Narragansett	1.88	3.10	2.92	3.55	2.86
Ranger	2.46	2.44	2.83	3.88	2.90
Teton	1.92	2.48	2.99	3.54	2.73
Rambler	2.37	2.21	2.80	3.25	2.66
Cayuga	2.67	2.14	4.18	3.79	3.19
Alfa	2.84	2.87	2.87	4.15	3.18
Atlantic	2.80	2.75	2.85	3.95	3.09
Lahontan	3.16	1.67	2.56	3.53	2.73
Vernal	3.36	2.26	2.74	4.56	3.23
Cody	3.22	2.17	2.62	3.04	2.76
Sevelra	3.32	1.55	3.32	3.62	2.95
Du Puits	3.31	2.71	2.57	2.80	2.85
Nomad	2.98	1.54	3.19	3.75	2.87
Rhizoma	2.55	2.94	2.68	3.37	2.89
NK 919	2.82	2.16	3.05	3.50	2.88
Uinta	3.51	2.48	2.33	4.07	3.10

Harvested August 28, 1968

Appendix Table No. 8

Alfalfa Hay Yields by Replication and Average for
Twenty Alfalfa Varieties Grown at the Redmond Location
of the Central Oregon Experiment Station 1968

First Cutting

Variety	Yield in Tons Per Acre				Average
	Rep. I	Rep. II	Rep. III	Rep. IV	
Uinta	1.80	3.32	1.93	2.16	2.30
Teton	3.35	2.90	2.78	1.53	2.64
Cayuga	2.25	2.88	2.07	2.24	2.36
Vernal	3.29	2.85	2.61	2.24	2.75
Du Puits	2.68	2.30	2.45	2.18	2.40
Alfa	3.04	2.92	3.23	1.96	2.79
Rambler	2.22	2.13	2.30	2.71	2.34
Ladak	2.51	3.48	2.50	1.94	2.61
Narragansett	2.58	2.15	1.96	2.78	2.37
Atlantic	3.63	3.10	2.04	1.60	2.59
Sevelra	2.75	2.21	2.51	1.62	2.27
Lahontan	2.82	1.42	1.92	0.89	1.76
Ranger	2.44	3.23	1.75	2.29	2.43
NK 919	2.89	2.37	2.44	1.98	2.42
Rhizoma	1.73	1.82	2.32	2.44	2.08
Nomad	3.89	4.26	2.51	2.26	3.23
Ovestan	2.34	2.70	3.45	1.56	2.51
Cody	2.80	1.57	2.65	2.28	2.32
Socheville	1.73	2.17	2.08	2.49	2.12
Talent	2.05	3.11	2.39	1.19	2.18

Harvested June 27, 1968

Appendix Table No. 9

Alfalfa Hay Yields by Replication and Average for
Twenty Alfalfa Varieties Grown at the Redmond Location
of the Central Oregon Experiment Station 1968

Second Cutting

Variety	Yield in Tons Per Acre				Average
	Rep. I	Rep. II	Rep. III	Rep. IV	
Uinta	2.88	2.35	2.18	1.83	2.31
Teton	2.68	2.78	1.88	1.14	2.12
Cayuga	2.62	2.77	2.73	2.79	2.73
Vernal	2.45	2.21	2.96	2.23	2.46
Du Puits	2.56	2.10	2.24	2.24	2.29
Alfa	2.70	2.38	2.87	1.56	2.38
Rambler	2.17	2.03	1.72	2.50	2.10
Ladak	2.74	3.13	1.95	2.01	2.46
Narragansett	2.90	1.93	1.98	2.10	2.23
Atlantic	2.84	2.33	2.10	2.24	2.38
Sevelra	2.72	2.64	2.67	2.11	2.54
Lahontan	2.28	1.50	2.68	2.05	2.13
Ranger	3.03	2.31	1.96	2.15	2.36
NK 919	2.65	2.24	2.57	1.61	2.27
Rhizoma	2.21	2.18	2.02	2.03	2.11
Nomad	2.32	2.05	1.98	1.42	1.94
Orestan	2.45	2.18	2.70	1.65	2.25
Cody	1.90	1.83	1.88	1.85	1.87
Socheville	1.75	2.25	1.98	0.94	1.73
Talent	1.81	1.86	2.32	1.58	1.89

Harvested August 27, 1968

Harvested August 27, 1968