

Cereal Grain Nurseries

The cereal nurseries have probably suffered more from the station construction program than any other phase of the research program during 1963. No winter grain nurseries were seeded in the fall of 1962 and only one spring grain nursery in the spring of 1963.

The spring nursery seeded was on the Redmond location of the Station lands on May 25, 1963. This date of seeding was very late, too late for acceptable yields in the Central Oregon area. The field in which the nursery was seeded had a large number of small rocks. In some spots the rocks were so numerous that the level of the soil was lowered. The low spots were not sufficiently filled before seeding and the water ponded in these low areas. Also, the soil appeared to have a higher clay content and tended to seal, accentuating the ponding effect.

As a consequence of the late seeding date and the lack of uniform growth, yields were highly erratic in the nursery and have little meaning.

The average yields in Hundred Pounds per acre and Bushels per acre, and the bushel weight of the spring wheat, oats and barley varieties are shown in Table Nos. 1, 2, 3. The yields in hundred pounds by replicate are shown in Appendix Tables 1, 2, 3.

Table No. 1

Yield and Bushel Weight for Fifteen Spring Wheat Varieties or Lines Grown on the Redmond Location of the Central Oregon Experiment Station during 1963. Yields are Presented in Bushels Per Acre and Hundred Pound Weights Per Acre.

Variety or Line	Pedigree	Average Yield		Bushel Weight
		Hundred Pounds	Bushels	
Federation	4743	9.28	15.49	60.50
Lemhi	11415	14.08	23.50	60.50
Marfed	11916	11.87	19.81	61.75
Orfed	11913	9.94	16.58	62.50
Kenya x Lemhi ² 50-13405	12948	14.84	24.76	61.00
Svenno	-	13.44	22.43	62.00
Onas 53	13069	11.11	18.53	61.00
Lemhi 53	13258	11.29	18.85	59.00
Kenhi	13268	14.50	24.21	59.25
52 AB 9702	-	15.07	25.14	60.00
Idaed 59 B	13632	15.21	25.39	59.75
Kenya x Lemhi ⁶	13435	12.29	20.51	60.00
Idaed	11706	17.31	28.89	60.25
Wells	-	13.23	22.08	63.50
Langdon	13165	9.17	15.30	61.50

L. S. D. @ 5%

N. S.

Coefficient of Variation = 33.1%

Seeded May 25, 1963

Harvested September 27, 1963

Table No. 2

Yield and Bushel Weight for Twenty Spring Oat Varieties or Lines Grown on the Redmond Location of the Central Oregon Experiment Station during 1963. Yields Are Presented in Hundred Pound Weights Per Acre and Bushels Per Acre.

Variety or Line	Pedigree	Average Yield		Bushel Weight
		Hundred Pounds	Bushels	
Victory	1145	11.80	36.97	30.25
Overland	4181	7.76	24.32	33.75
Centore	3865	6.13	19.19	31.25
Cody	3916	6.97	21.85	35.50
Basin	5346	8.92	27.94	32.25
Clinton x Overland ²	5933	12.60	39.47	33.00
Park	6611	10.02	31.38	33.00
(B x A) logold (V x R)	6612	12.18	38.16	34.50
C. I. 4189 x Overland	6613	6.43	20.16	32.00
	7263	7.05	22.10	32.25
Marne	5163	8.34	26.13	30.50
58 AB 2781	7572	9.16	28.69	31.00
58 AB 2786	7577	7.99	25.04	31.25
58 AB 2779	7593	9.14	28.63	34.00
58 AB 2773	7588	8.27	25.91	31.00
58 AB 2784	7575	8.61	26.97	32.00
58 AB 2782	7573	9.28	29.06	32.00
58 AB 2777	7591	12.28	38.47	31.50
56 AB 6538	--	9.46	29.63	33.50
Weibulls 16004	7257	8.04	25.19	35.00

L. S. D. @ 5% = N. S.

Coefficient of Variation = 36.6%

Seeded May 25, 1963

Harvested September 27, 1963

Table No. 3

Yield and Bushel Weight for Twenty Spring Barley Varieties or Lines Grown on the Redmond Location of the Central Oregon Experiment Station during 1963. Yields Are Presented in Hundred Pound Weights Per Acre and Bushels Per Acre

Variety or Line	Pedigree	Average Yield		Bushel Weight
		Hundred Pounds	Bushels	
Trebi	936	13.00	27.14	50.00
Hannchen	531	14.33	29.91	53.25
Bonneville	7248	13.99	29.20	47.25
Ezond x Frontier (Wyo. Sel. 462)	9184	13.02	27.18	49.00
Vale	10117	11.38	23.76	47.00
B 571-2	10116	10.38	21.68	46.25
B 571-11	-	12.65	26.41	45.00
B 571-23	-	16.76	34.99	45.00
51 AB 4706	10121	11.47	23.95	46.00
B 855-14-23 (Hulless)	10641	11.87	24.78	56.00
B 855-16-5 (Hulless)	-	4.84	10.10	-
51 AB 5396	10525	12.11	25.28	48.25
Firlbecks III	10088	11.96	24.97	52.00
4363-32	10639	13.69	28.58	47.00
51 AB 5348	10526	15.77	32.93	46.50
Unitan	10421	16.84	35.15	48.00
Piroline	-	17.76	37.07	52.50
B 1163-1	-	13.07	27.28	43.50
51-AB-3425	-	8.39	17.51	46.75
51-AB-3317	-	14.86	31.01	48.25

L. S. D. @ 5%
Coefficient of Variation = 42.3%

N. S.

Seeded May 25, 1963
Harvested September 27, 1963

Appendix Table No. 1

Yield of Spring Wheat Varieties Grown at the Redmond Location
of the Central Oregon Experiment Station during 1963.
Yields are Recorded as Hundred Pounds.

Variety or Line	Pedigree	Yield in Hundred Pounds Per Replicate				Yield
		I	II	III	IV	
Federation	4743	10.13	14.76	4.07	8.14	9.28
Lemhi	11415	14.24	13.85	19.39	8.82	14.08
Marfed	11916	3.95	14.52	17.96	11.05	11.87
Orfed	11913	7.46	13.37	11.21	7.70	9.94
Kenya x Lemhi ² 50-13405	12948	16.64	15.40	9.82	17.48	14.84
Svenno		14.56	8.10	16.68	14.40	13.44
Onas 53	13069	12.37	9.26	9.54	13.25	11.11
Lemhi 53	13258	16.56	10.37	7.42	10.81	11.29
Kenhi	13268	18.23	13.25	12.17	14.36	14.50
52 AB 9702		12.41	17.80	12.97	17.08	15.07
Idaed 59B	13632	22.10	15.80	15.40	7.54	15.21
Kenya x Lemhi ⁶	13435	16.60	13.93	12.09	6.54	12.29
Idaed	11706	23.74	17.48	15.32	12.69	17.31
Wells		16.32	14.96	14.12	7.50	13.23
Langdon	13165	12.69	7.14	2.31	14.52	9.17

L. S. D. @ 5% = N.S.

Coefficient of Variation = 33.1%

Seeded May 25, 1963

Harvested September 27, 1963

Appendix Table No. 2

Yield of Spring Oat Varieties Grown at the Redmond Location
of the Central Oregon Experiment Station during 1963.
Yields Recorded as Hundred Pounds.

Variety or Line	Pedigree	Yield in Hundred Pounds By Replicate				Mean Yield
		I	II	III	IV	
Victory	1145	13.17	7.10	15.60	11.33	11.80
Overland	4181	6.98	6.38	13.53	4.15	7.76
Centore	3865	6.66	5.39	4.63	7.82	6.13
Cody	3916	6.22	8.82	4.43	8.42	6.97
Basin	5346	13.05	9.86	8.26	4.51	8.92
Clinton x Overland ²	5933	13.49	11.41	12.33	13.17	12.60
Park	6611	12.97	7.34	9.81	9.94	10.02
(B x A) logold (V x R)	6612	8.74	9.02	7.26	23.70	12.18
C. I. 4189 x Overland	6613	6.62	3.79	8.06	7.26	6.43
	7263	8.70	8.06	7.02	4.43	7.05
Marne	5163	8.54	8.62	6.50	9.70	8.34
58 AB 2781	7572	6.38	5.39	7.86	17.00	9.16
58 AB 2786	7577	4.95	8.10	8.90	10.01	7.99
58 AB 2779	7593	9.42	6.58	9.66	10.89	9.14
58 AB 2773	7588	11.57	8.14	4.75	8.62	8.27
58 AB 2784	7575	7.62	5.91	5.67	15.24	8.61
58 AB 2782	7573	10.85	6.38	11.17	8.70	9.28
58 AB 2777	7591	14.04	7.22	8.30	19.55	12.28
56 AB 6538	-	9.70	8.14	7.46	12.53	9.46
Weibulls 16004	7257	11.85	8.78	7.94	3.59	8.04

L. S. D. @ 5% =
Coefficient of Variation = 36.6%

N S

Seeded May 25, 1963
Harvested September 27, 1963

Appendix Table No. 3

Yield of Spring Barley Varieties Grown at the Redmond Location
of the Central Oregon Experiment Station during 1963.
Yields are Recorded as Hundred Pounds.

Variety or Line	Pedigree	Yield in Hundred Pounds Per Replicate				Mean Yield
		I	II	III	IV	
Trebi	936	17.08	9.14	14.84	10.93	13.00
Hannchen	531	17.56	12.37	16.16	11.21	14.33
Bonneville	7248	17.36	9.38	7.34	21.87	13.99
Ezond x Frontier (Wyo. Sel. 462)	9184	17.84	9.14	8.22	16.88	13.02
Vale	10117	11.49	15.92	13.77	4.35	11.38
B 571-2	10116	8.50	6.90	15.16	10.97	10.38
B 571-11	-	14.92	8.06	7.06	20.55	12.65
B 571-23	-	18.23	15.32	27.45	6.03	16.76
51 AB 4706	10121	16.04	12.61	13.25	3.99	11.47
B 855-14-23 (Hulless)	10641	14.24	15.12	3.91	14.20	11.87
B 855-16-5 (Hulless)	-	4.03	2.55	5.55	7.22	4.84
51 AB 5396	10525	6.34	10.85	11.65	19.59	12.11
Firlbecks III	10088	4.63	19.91	12.97	10.33	11.96
4363-32	10639	5.87	14.76	17.24	16.88	13.69
51 AB 5348	10526	11.01	20.71	20.99	10.37	15.77
Unitan	10421	9.06	13.65	28.53	16.12	16.84
Piroline	-	15.96	23.98	12.45	18.63	17.76
B 1163-1	-	17.52	11.61	13.01	10.13	13.07
51-AB-3425	-	10.29	11.13	5.31	6.82	8.39
51-AB-3317	-	13.05	9.38	19.39	17.60	14.86

L. S. D. @ 5%

Coefficient of Variation = 42.3%

N S

Seeded May 25, 1963

Harvested September 27, 1963