

PROJECT TITLE: Western Regional Spring Wheat Evaluation

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OBJECTIVE:
To determine the adaptability of spring wheat varieties grown under high moisture conditions in northwestern Montana.

RESULTS:
A slow spring and long mid-season dry spell diminished considerably the yield potential of these cultivars. Washington line 7798 was the top yielder at 83 bu/A. Late season precipitation did lead to good test weights. The dry conditions also saw heights shorter than normal with the cool and damp spring contributing to later than normal maturity. Some degree of lodging was evident in approximately half of the entries with none of it severe. All entries had substantial stripe and leaf rust infection with the exception of WA7806, OR493032, and Mckay.

SUMMARY:
Poor growing conditions at critical growth stages and prevalent disease pressure resulted in considerably lower than average yields. This aside, test weights were better than previous years.

FUTURE PLANS:
Cultivars will continue to be evaluated at Kalispell in an attempt to identify those best adapted for growth in northwestern Montana.

Table 1. Agronomic data from the Western Regional Hard Red Spring Wheat Nursery grown at the Northwestern Agricultural Research Center in Kalispell, MT.

Planted: April 25, 1996

Harvested: August 31, 1996

VARIETY	YIELD BU/A	TEST WT LB/BU	HEIGHT INCHES	LODGING 0-9	HEADING DATE	LF&STRP RUST 1/
WA 7798	82.93	60.80	32.53	.00	186.67	2.00
OR492092	77.77	59.80	30.43	.00	186.67	2.00
WAWAWAI	77.37	61.10	33.70	.00	184.33	2.00
WA 7806	77.33	59.40	32.57	1.33	186.33	1.00
PENAWAWA	75.73	58.70	30.60	.00	185.67	3.00
OR390362	75.03	59.20	27.57	.33	185.00	3.00
OR488372	74.30	60.60	29.40	.00	186.00	2.00
OR895181	73.43	58.70	30.03	.00	184.67	2.00
SERRA	72.67	59.00	28.73	2.33	184.33	3.00
ID 494	72.27	60.70	28.60	.00	181.33	3.00
UT 2938	72.13	59.80	41.07	2.33	184.00	3.00
SDM50014	72.13	60.10	30.43	.00	187.67	2.00
ALPOWA	71.40	60.50	33.47	.00	186.00	3.00
CA 896	70.80	61.10	29.67	.00	184.00	2.00
OR493032	70.77	60.00	29.63	.00	187.33	1.00
SDM50030	70.23	58.60	31.23	.00	185.00	3.00
MCKAY	69.90	59.10	30.70	.00	187.67	1.00
ID 476	69.67	59.40	30.97	.00	183.00	3.00
OR487401	68.40	60.60	28.33	1.00	186.00	3.00
CA 1036	68.20	59.20	23.47	.00	183.33	3.00
UT 1146	67.57	58.70	33.73	.33	185.67	3.00
FMBR9154	66.47	58.50	28.97	1.00	182.00	3.00
ID 469	66.40	58.70	28.07	.00	183.33	3.00
ID 495	66.33	60.10	29.77	.00	185.00	3.00
CA 985	66.20	61.20	30.57	.00	184.00	3.00
ML316402	66.07	58.70	27.97	.33	185.67	3.00
ID 474	65.67	59.40	31.23	.00	185.67	3.00
SDM04055	65.23	58.20	29.00	.33	186.33	3.00
ID 496	64.93	58.90	31.10	.67	184.00	3.00
ID 489	64.87	60.80	30.70	.33	183.33	3.00
FEDERATION	64.20	56.90	42.50	2.00	186.67	3.00
ID 492	63.90	60.70	30.33	.33	185.00	3.00
SDM50005	63.43	60.80	32.83	.00	187.33	2.00
UT 1175	63.00	58.50	34.27	.67	186.00	2.00
CA 1037	62.50	58.90	20.37	.33	183.00	3.00
CA 1041	61.87	58.40	20.37	.33	183.00	3.00
UT 3006	61.80	60.50	40.30	2.33	184.33	3.00
ID 462	60.40	60.10	30.57	.33	184.67	3.00
FMBR5783	60.37	56.60	23.20	.67	183.00	3.00
UT 2464	59.90	58.40	32.93	.00	188.00	3.00
ID 493	59.90	60.70	30.70	.00	185.00	3.00
UT 3007	58.20	60.40	40.83	2.00	185.67	3.00
KLASIC	57.43	58.50	22.33	.33	180.67	3.00
ID 488	57.30	58.90	28.33	.67	184.67	3.00
CA 1032	57.10	59.20	23.23	.67	187.00	3.00
WA 7802	57.07	60.10	32.13	.67	184.33	2.00
ML042409	55.43	55.60	30.17	.33	188.00	3.00
MEAN	66.94	59.4	30.42	.47	185.03	2.70
C.V.	12.64	NA	5.13	89.57	.25	NA
LSD (.05)	13.53	NA	2.53	.68	.76	NA

1/ LEAF AND STRIPE RUST DISEASE LEVELS:

0=RESISTANT, 1=MODERATELY RESISTANT, 2=SUSCEPTIBLE, 3=HIGHLY SUSCEPTIBLE