

PROJECT TITLE: Soft White Winter Wheat Evaluation

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OBJECTIVE:

To evaluate soft white winter wheat lines for adaptability, quality, and disease resistance in northwestern Montana.

RESULTS:

In the absence of winterkill, yields were less than 1995 but still in the acceptable range. Hill 81 and Eltan were the top yielding cultivars at 114.4 bu/A, followed closely by Malcolm. The mean test weight for the 18 cultivars was 59.8 lb/bu, with Hill 81, Neeley, and BZ6W90-470 at or above 62.0. All entries had good straw strength with little or no lodging. Stripe rust was present in small amounts throughout the nursery with leaf rust more prevalent. Hill 81, Cashup, BZ6W90-470, Madsen, and Gene displayed low levels of leaf rust infestations while the remaining cultivars were more susceptible.

SUMMARY:

Yields were lower than the first year (1995) of this nursery with low to moderate disease pressure and some water stress during early and mid grain fill.

FUTURE PLANS:

Continued soft white winter wheat evaluation through this amended nursery to best identify cultivars adapted for Pacific Northwest production including northwestern Montana.

Table 1. Agronomic data from the Soft White Winter Wheat Nursery grown at the Northwestern Agricultural Research Center in Kalispell, MT.

Planted: September 28, 1995

Harvested: August 19, 1996

VARIETY	YIELD BU/A	TEST WT LB/BU	PLANT HEIGHT	LODGING 0-9	HEADING DATE	STRIPE RUST 1/	LEAF RUST 1/
HILL 81	114.40	62.00	38.1	.00	171.00	1.00	1.00
ELTAN	114.40	58.80	36.6	1.33	174.33	1.00	2.00
MALCOLM	113.70	59.40	34.0	.00	168.67	1.00	2.00
CASHUP	111.10	59.10	32.3	.33	169.00	1.00	1.00
NEELEY	111.10	62.90	43.2	.00	167.67	1.00	3.00
MACVICAR	108.87	59.70	34.4	.00	168.67	1.00	2.00
DAWS	108.67	60.70	35.0	.00	169.67	1.00	2.00
KMOR	107.40	57.70	35.3	.00	172.00	1.00	2.00
LAMBERT	107.10	59.00	37.1	.00	168.00	1.00	3.00
BZ6W90-470	106.83	62.00	31.5	.00	166.33	1.00	1.00
MCDERMID	106.63	60.10	32.9	1.00	168.00	1.00	2.00
MADSEN	105.13	59.70	33.9	.00	169.67	1.00	1.00
BZ6W93-461	105.03	59.50	31.5	.33	168.67	1.00	3.00
NUWEST	102.80	61.00	43.3	.00	168.00	2.00	3.00
W301	98.97	58.50	33.1	.00	167.67	1.00	2.00
STEPHENS	95.33	59.20	32.3	.00	168.00	1.00	2.00
LEWJAIN	90.23	58.70	32.7	.00	174.67	1.00	3.00
GENE	87.57	57.80	31.1	.00	167.33	1.00	1.00
MEAN	105.29	59.8	34.9	.17	169.30	1.10	2.00
C.V.	7.70	NA	2.6	336.07	.42	NA	NA
LSD (.05)	13.45	NA	1.5	.93	1.18	NA	NA

1/ DISEASE LEVELS: 1=LOW, 2=MODERATE, 3=HIGH