

PROJECT TITLE: Advanced Spring Wheat Evaluation

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OBJECTIVE:

To determine the adaptability of new and introduced spring wheat varieties grown under high moisture conditions in northwestern Montana.

RESULTS:

High yields were harvested in much of the spring wheat this year due to ample moisture in the spring and abundant June rainfall. The average yield of 130.7 bu/A was the highest in the last four years. Forty-one of the forty-seven entries yielding above 100 bu/A. Fergus and Penawawa were in the top three highest yielding varieties with 125 and 123 bu/A. McNeal and Newana had similar yields but the Hiline yield was only 106 bu/A. Test weights were between 58.3 and 63 lb/bu with the average for the nursery being 60.9 lb/bu. Lodging was minimal but the incidence of Septoria was moderate to high in half of the entries.

SUMMARY:

A late infection of Septoria and low lodging pressure did not effect the high yields and good test weights in the majority of entries of the Advanced Yield Spring Wheat Nursery.

FUTURE PLANS:

Continue evaluation of new lines of spring wheat adapted for northwestern Montana.

Table 1. Agronomic data from the Advanced Spring Wheat Nursery grown on the Northwestern Agricultural Research Center in Kalispell, MT.
Planted: April 18, 1995 Harvested: September 12, 1995

VARIETY	YIELD BU/A	TEST WT LB/BU	HEADING DATE	HEIGHT INCHES	LODGING INDEX	SEPTORIA 1/
MT 9328 MT7810/MT7926	130.68	61.37	176.00	37.40	.00	M
TR983239 FERGUS	125.03	62.77	169.33	31.50	.00	M
WA 6920 PENAWAWA	122.61	60.80	175.67	33.46	.00	L
MT 9427 MT8808/MARBERG	122.61	60.23	172.33	33.46	.00	M-H
MT 9332 MT7810/MT7926	122.61	61.40	175.33	38.06	.00	M
MT 9419 MT8808/MARBERG	122.61	60.47	169.67	37.40	.00	L
ND 606 AMIDON	121.81	61.40	175.00	41.34	.00	L
MT 9453 GLENMAN/AMIDON	121.81	60.67	173.67	38.71	.00	M
MT 9426 MT8808/MARBERG	121.81	60.17	170.00	33.46	.00	H
MT 9407 MT8808/MARBERG	121.81	62.63	173.67	39.37	.00	L-M
ND 677 ND622*2/CUTLESS	121.81	60.97	174.00	38.71	.00	L
WBEXPRES WESTBRED EXPRESS	121.81	61.60	173.67	28.87	.00	L-M
BZ684-23 VANNA	121.81	59.97	176.67	32.81	.00	L-M
MT 9433 MT8808/MARBERG	121.00	61.73	175.67	39.37	.00	L-M
MT 9425 MT8808/MARBERG	121.00	60.13	170.00	34.12	.00	L
PI574642 MCNEAL	120.19	62.27	174.67	36.75	.00	L
CI 17430 NEWANA	119.39	61.27	177.33	34.12	.00	L
MT 9422 MT8808/MARBERG	117.77	59.50	173.67	38.06	.00	M-H
MT 9410 MT8808/MARBERG	115.35	61.77	172.00	38.06	.00	L-M
BZ992588 RAMBO/906R	115.35	60.73	172.33	34.78	.00	L
MT 9311 MT7819/(OLAF/LEW)	115.35	63.30	177.33	37.40	.00	M-H
MT 9360 LEW/PND	113.74	60.83	172.67	35.43	.00	L
ND 673 GRANDIN/STOA'S'	113.74	62.50	174.33	43.31	.00	L
MT 9432 MT8808/MARBERG	112.13	60.53	175.67	41.34	.00	L-M
MT 9420 MT8808/MARBERG	111.32	60.17	172.00	38.06	.00	H
MT 9434 MT8808/MARBERG	111.32	59.27	169.00	33.46	.00	H
CI 17429 LEW	110.51	63.03	177.67	42.65	15.50	L-M
BZ984326 BORDER	110.51	60.60	169.33	34.78	.00	M-H
MT 9403 MT8808/AMIDON	109.71	61.57	173.67	38.71	.00	L-M
MT 9406 MT8808/AMIDON	108.90	60.73	169.67	39.37	.00	L-M
PH981-61 WESTBRED 936	108.90	60.83	170.00	28.22	.00	L-M
BZ992632 FORTUNA/906R	108.90	62.87	171.67	36.75	5.93	M
CI 17790 LEN	108.90	60.43	173.67	34.12	.00	L-M
MTRWA116 PI372129/2*PONDERA	107.29	61.73	170.00	32.81	2.43	M-H
WB 926 WESTBRED 926	106.48	60.57	169.67	32.81	.00	M
PI549275 HI-LINE	105.67	61.73	173.00	31.50	.00	H
MT 9430 MT8808/MARBERG	105.67	61.67	171.67	38.06	.00	L-M
MT 9408 MT8808/MARBERG	105.67	60.67	171.00	38.06	.00	L-M
MT 9307 MT8339/3/FTA//NK	104.06	62.00	177.33	43.31	.00	M
MT 9450 GLENMAN/AMIDON	103.25	60.30	173.67	37.40	.00	L-M
CI 10003 THATCHER	100.83	61.33	177.00	47.90	14.00	L
PI483235 GLENMAN	100.83	58.50	175.33	34.78	11.50	L-M
CI 13596 FORTUNA	99.22	60.80	173.33	41.99	19.20	M-H
MT 9405 MT8808/AMIDON	99.22	58.27	168.67	31.50	.00	H
BZ992634 FORTUNA/906R	97.61	59.67	172.00	34.78	.00	M
MT 9467 GLENMAN/PONDERA	96.80	59.63	176.67	35.43	.00	L-M
MT 9413 MT8808/MARBERG	95.19	59.10	170.00	32.15	.00	H
MT 9469 GLENMAN/PONDERA	95.19	60.40	177.00	35.43	.00	M-H
MT 9354 MT7810/(SU73/LEW)	86.31	58.30	177.00	36.75	3.70	M-H
MEAN	111.88	60.88	173.28	36.49	1.47	
L.S.D. (.05)	19.86	2.50	1.85	2.23	4.55	

1/ Septoria rating (Degree of infestation): L=Low, M= Moderate, H= High