

PROJECT TITLE: Spring Wheat Variety Trials

YEAR/PROJECT: 1989/756 Small Grains Production

PROJECT PERSONNEL: Leader - Vern R. Stewart, Todd K. Keener - Research Specialists, NWARC, Kalispell, MT.

SUMMARY:

Spring wheat yields were very good this year and did not suffer greatly due to late season rains except for minor sprouting. Yields averaged above 100 bu/A in the Advanced Yield nursery and 96.24 bu/A in the Western Regional nursery.

Offstation data was obtained from Ravalli Co. test however the Lake Co. nursery was hailed out.

Triticale yields were higher than last year with the majority of test weights being greater than 50 lb/bu.

RESULTS:

1989 Western Regional Spring Wheat Nursery -

Yields were very good this year in the Western Regional Spring Wheat Nursery. The high yielding variety, UT613960, yielding 114.5 bushel per acre. Twelve of the thirty-six varieties yielded above 100 bushel and Owens, the check variety yielded 109.73 bu/A. Tests weight were lower due to the effect of heavy late season rains which also contributed to sprouting. The mean test weight was 56.43 lbs/bu, with 51 lbs/bu and the highest was 60.7 lbs/bu (OR 487400). Heading date averages were later this season by almost six days. Table 1.

1989 Advanced Yield Nursery -

The yields for the Advanced Yield nursery were very good this year as they were last year. Owens had the highest yield (104.7 bu/A) and last year was second highest at 129.08 bu/A. The mean yield for the nursery was 2.7 bu/A higher than in 1988 season. Test weights were not as high as last year, probably as a result of the rains at harvest time. This also caused some sprouting. Heading was five and one half days later than last year. Lodging was minimal yet did occur in some of the taller varieties. Table 2.

1989 Ravalli County Offstation Spring Wheat Nursery -

Yields for this nursery were better than last year, yet still were not as good as previous years. Thin stands and less than ideal growing conditions were factors contributing to such variation in yields. Test weights were not as drastic as expected and averaged 58.24 lbs/bu. Table 3.

1989 Triticale Variety Nursery -

Yields were very good this year in the Triticale nursery with the majority of varieties yielding above 65 bu/A (based on 60 lb/bu standard test weight). Test weights were also slightly higher this year in comparison to the 1988 data. No diseases were observed on the varieties and there was no lodging.

Table 1. Agronomic data from the 1989 Western Regional Spring Wheat Nursery grown on the Northwestern Agricultural Research Center, Kalispell.

Date seeded: April 12, 1989

Date harvested: September 12, 1989

VARIETY	Yield Bu/A	Test Wt lbs/bu	Heading Date	Height Inches
UT613960 RICK/UT 78S 147-125	114.45	52.10b	178.00a	35.96
UT 884 WYNNE/CA 353	113.45	58.73a	173.33	31.23b
CI 17904 OWENS /1	109.73	56.73	175.33	37.14
UT 817 WYNNE/CA 353	107.03	57.90	175.00	32.41b
ID 415 STERLING/BLISS	105.22	58.53a	176.33	37.80
ID 379 ID 190/ID138B	104.15	53.83b	175.00	34.12b
OR487503 EMU SIB/TJB 84/1543	103.45	55.50	179.00a	34.38b
ID 417 ID 182/FIELDWIN	102.80	58.67a	172.33b	33.99b
UT 743 WYNNE/CA 353	102.43	57.93	178.33a	33.20b
DRS 8510 MINIVET.S,CM37705K	101.38	57.30	175.00	32.15b
WA 7176 K78504/K74129-33//K7	100.83	54.73b	177.67a	36.09
CI 17903 MCKAY	100.77	58.07	177.67a	34.51b
ID 366 BRH/3/II-60-101//TZP	98.13	59.03a	173.67	35.56
WA 7326 K7205078/CI14193,S65	97.88	57.67	177.33	34.78
ID 369 A76102S-1-2/ID 134	97.78	59.10a	175.67	35.43
ID 420 A7612S-2/A75141S-2-1	96.78	58.57a	176.00	31.63b
ID 367 A76102S-1-2/ID 134	95.48b	58.10	176.00	33.73b
WA 7075 K73579/BORAH	94.95b	55.47	174.67	32.28b
WA 6920 PENAWAWA	94.73b	52.83b	177.00	32.15b
ID 341 COWBIRD"S"/5/MC/BJ06	94.15b	57.37	178.67a	30.71b
OR487570 EMU SIB/TJB 84/1543	94.10b	55.00b	178.33a	32.68b
OR487400 SN64/HN4//REX/3/EDCH	93.75b	60.70a	176.67	33.33b
WA 7493 HDM 4/NK 751 S82-62	93.38b	57.00	171.67	31.36b
OR487456 CT.S	93.07b	58.60a	173.33b	30.45b
OR487316 SAF SIB/MON SIB	92.90b	51.33b	176.33	30.58b
OR487355 JUP/BJY.S//DOVE.S	92.10b	58.20	174.33	32.15b
WA 7183 K78504/K79129-33//K7	91.98b	51.77b	177.67a	31.89b
ID 416 A73249S-11331-1/VEER	91.57b	54.83b	179.00a	34.25b
UT580646 UT77W1054-1777/906R	90.90b	56.53	175.67	30.97b
UC 638 SERRA	90.03b	57.17	173.00b	32.02b
WA 7496 K7400315/PTM70S.47	89.95b	50.93b	174.33	34.91
UT 2464 UT 78S 147-209/906R	89.72b	57.33	178.67a	33.99b
NKF 8022 KLASIC	84.92b	53.97b	169.33b	26.38b
ID 419 ID 204/ID 134	84.13b	58.67a	175.00	33.99b
CI 4734 FEDERATION	79.42b	55.60	179.00a	45.54a
OR487475 AGA/6*'YR'	77.03b	55.70	171.67b	25.72b

EXPERIMENTAL MEANS

96.24 56.43 175.72 33.32

F TEST FOR VAR.

2.90** 18.16** 10.65** 15.13**

C.V. 2: (S OF MEAN/MEAN)*100

5.12 1.02 .42 2.52

LSD (0.05)

13.89 1.63 2.07 2.37

1/ Check variety (Owens)

** Indicates statistical significance at the .01 level

a/ or b/ Values significantly greater (a) or less (b) than check at .01 level