

PROJECT TITLE: Northern Regional Winter Wheat Performance Nursery

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OBJECTIVES:

To evaluate winter wheat lines developed throughout the Great Plains and Pacific Northwest for adaptability, agronomic performance, yield, and quality in the Northern Plains and Central Montana.

RESULTS:

Yields ranged from 41.9 to 64.1 bu/a with the average yield equal to 50.9 bu/a (Table 1). Test weights were below average at 59.6 lbs/bu and proteins averaged 15.3 percent. Plant heights ranged from 19 to 32 inches with Kharkof being the tallest. The mild winter resulted in little winter-kill and stands averaged 95.9 percent. Cultivars tested all headed within one week with the average heading date being June 12 at 163 days.

SUMMARY:

The nursery was planted on fallow. Low moisture levels resulted in lower than average yields.

FUTURE PLANS:

The Northern Regional Winter Wheat Performance Nursery will continue to be evaluated at the Central Agricultural Research Center.

Table 1. 2001 Northern Regional Performance Nursery
Exp. 3307 Central Agricultural Research Center, Moccasin, MT

ID	Class	Pedigree	Grain	Test	Heading	Plant	Winter	Grain
			Yield	Weight	Date	Height	Survival	Protein
			bu/a	lbs/bu	day	inches	%	%
NE96737	HRW	N87L421/NE88582	64.1	57.6	165	26	98.3	14.8
NE97669	HRW	Vista/KS87H6//KSSB-369--7	63.0	58.2	164	25	96.7	14.4
NW97S218	HWW	KS85W663-1-1/Karl 92	57.0	61.1	164	25	95.0	14.8
SD921073	HRW	Brule//Bennett/Chisholm/3/Arapahoe	56.5	59.0	166	27	98.3	14.9
NE98503	HRW	Niobrara sib//Brule/Bennett	55.8	59.0	163	25	96.7	14.9
NW97S078	HWW	Arlin/Pronghorn	55.7	60.2	163	24	96.7	14.9
NW97S278	HWW	Pronghorn/Arlin	54.9	60.8	162	25	93.3	15.1
96MD7436	HRW	NE90616/Ike	54.3	58.8	162	26	98.3	15.3
NuWest	HWW	MT check	54.3	56.6	170	28	92.7	15.6
Abilene	HRW	check	54.0	61.3	163	22	96.7	16.1
SD921075	HRW	Brule//Bennett/Chisholm/3/Arapahoe	53.2	58.9	166	28	98.3	15.1
NE97638	HRW	NE90614/NE87612	52.3	58.5	166	28	98.3	14.6
96MD7458	HRW	NE90616/Ike	51.2	58.0	162	23	96.7	15.6
NE97689	HRW	NE90614/NE87612	50.7	57.7	165	26	96.7	14.5
NE98471	HRW	Brule/Bennett//Niobrara	50.6	59.3	160	22	95.0	15.3
NW97S295	HWW	Arlin/Pronghorn	50.5	60.9	160	21	93.3	14.6
SD97W604	HWW	SD89333(Gent/Sxl)//Abilene	50.2	61.3	160	23	96.7	15.2
Nekota	HRW	check	50.1	60.3	162	22	95.0	15.0
NE96579	HRW	NE83404/SB-360-?	50.0	59.1	164	24	98.3	14.9
Neeley	HRW	MT check	49.2	56.1	166	29	91.7	16.2
NI98418	HRW	NE89526/Yuma	48.9	59.0	162	25	93.3	14.5
NW97S112	HWW	N91L122/Arlin	48.4	60.7	161	22	93.3	14.7
NE99585	HRW	KS91H184/Arapahoe	48.4	59.8	161	25	98.3	15.0
NW97S114	HWW	N91L122/Arlin	47.5	61.2	160	23	91.7	14.5
SD97457	HRW	Tomahawk/Bennett	46.5	60.6	161	24	91.7	15.3
NE99564	HRW	Colt/Cody//Yuma	46.4	60.7	161	26	97.7	15.9
96MD7110-71	HRW	MT8713/NE87612//Ike	46.2	60.4	163	21	96.7	16.2
Trego	HWW	check	45.5	62.4	162	19	97.7	15.2
NW97S092	HWW	N90L119/Arlin	45.0	60.1	164	25	93.3	15.9
NW97S182	HWW	KS87809-10/Arapahoe	44.5	59.5	164	28	93.3	16.1
Kharkof	HRW	check	43.1	61.5	165	32	99.3	16.6
Roughrider	HRW	check	41.9	59.1	167	31	98.3	16.7
Average			50.9	59.6	163	25	95.9	15.3
LSD (0.05)			10.8	1.8	3	3	4.7	
C.V.			13.0	1.9	1	8	3.0	

Seeded on September 27, 2000 at a depth of 3/4 inch and harvested on August 1, 2001.

Fertilizer: 50 lbs of 20-20-0 placed with the seed and 67 lbs of N were broadcast in fall of 2000.

Previous crop was fallow; growing season precipitation was 7.29 in; Bronate 1.5pts/a applied on May 8, 2001.