

**A MOTION TO RELEASE MT 0245 HARD RED SPRING WHEAT,
EFFECTIVE 2007**

MT 0245 is to be released as a variety with PVP title V protection.

MT 0245 is a F₄ derived line first entered in the 2001 single row yield trial at Bozeman, and designated as “MT 0245” when entered in the 2002 preliminary spring wheat nursery grown at four dryland locations in Montana. From 2003- 2005 it has been tested for 30 station years in the advanced spring wheat nursery grown across Montana. It has also been entered in the 2004-05 uniform regional hard red spring wheat nursery grown at Bozeman and Sidney and other locations across the northern great plains states.

MT 0245 was derived from the cross of MT9433/ND695 made in 1998. The parents, MT 9433 and ND695 were released as Scholar and Reeder in 1999 by Montana and North Dakota, respectively.

MT 0245 has been one of the highest yielding wheat s grown in our advanced spring wheat nursery since 2003. Across 30 location years, MT 0245 yielded 66.5 bu/ac, 3 and 6 bushels more than Reeder and McNeal, respectively. MT 0245 yielded an average of 47.9 bu/ac under dryland at Havre, Sidney, Conrad and Moccasin compared to McNeal at 43.7 bu/ac and Reeder at 45.1 bu/ac. Under irrigation, at Sidney, Huntley and Bozeman, MT 0245 yielded 91.6 bu/ac with McNeal yielding 87.7 bu/ac and Reeder 86.4 bu/ac. Overall test weights were 59, 58.6 and 59.9 for MT 0245, McNeal and Reeder respectively. Across locations, MT 0245 heads about the same as McNeal and one day later than Reeder. MT 0245 is a semidwarf wheat about 33 inches tall which is the same as McNeal and one inch shorter than Reeder. Grain protein averages 14.7% similar to both McNeal and Reeder. MT 0245 also performed well in the 2005 offstation nurseries ranking number one across 16 locations with ~44 bu/ac compared to McNeal and Reeder yielding ~ 41 bu/ac.

MT 0245 has medium straw strength and tends to lodge slightly under irrigated conditions. At Kalispell and Huntley irrigated in 2005, Mt 0245 showed moderate resistance to stripe rust. MT 0245 also showed moderate resistance to Septoria at Sidney, Havre and Conrad dryland nurseries in 2005. MT 0245 showed moderate susceptibility to prevalent races of stem rust at Bozeman in 2005. MT 0245 exhibits acceptable milling and baking quality traits.

Breeders seed is available for planting in the spring of 2006.

**Submitted by: Dr. Luther Talbert
Prepared by: Susan P. Lanning**

TABLE OF PAIRED T-TEST RESULTS

GRAIN YIELD (BU/AC)

REFERENCE MEAN: MT 0245 66.5 (N= 30)

ID	NAME	ACTUAL MEAN	NO. OBS	MEAN DIFF	T-PAIRED VALUE	P-VALUE
CI 10003	THATCHER	48.7	30	-17.8	-10.0	.000
CI 13596	FORTUNA	57.5	30	-9.0	-5.6	.000
PI574642	MCNEAL	60.6	30	-5.9	-4.0	.000
PI592761	ERNEST	57.1	30	-9.4	-7.7	.000
PI607557	SCHOLAR	59.5	30	-6.9	-5.6	.000
ND 695	Reeder	63.3	30	-3.2	-2.5	.020
BZ992588	Conan	59.1	30	-7.3	-5.3	.000
BZ992322	HANK	65.2	30	-1.3	-.9	.369
PI632252	OUTLOOK	64.0	30	-2.4	-1.8	.090
PI633974	CHOTEAU	61.8	30	-4.7	-4.2	.000
AGRIPRO1	NORPRO	63.0	30	-3.4	-2.2	.036
AGRIPRO2	KNUDSON	60.3	30	-6.2	-3.3	.003

TEST WEIGHT (LB/BU)

REFERENCE MEAN: MT 0245 59.0 (N= 30)

ID	NAME	ACTUAL MEAN	NO. OBS	MEAN DIFF	T-PAIRED VALUE	P-VALUE
CI 10003	THATCHER	57.0	30	-2.0	-5.7	.000
CI 13596	FORTUNA	60.2	30	1.2	4.4	.000
PI574642	MCNEAL	58.6	30	-.4	-1.4	.166
PI592761	ERNEST	59.6	30	.6	2.8	.010
PI607557	SCHOLAR	60.1	30	1.1	4.5	.000
ND 695	Reeder	59.9	30	.9	5.3	.000
BZ992588	Conan	59.4	30	.4	1.9	.071
BZ992322	HANK	57.7	30	-1.3	-6.0	.000
PI632252	OUTLOOK	58.2	30	-.8	-3.9	.001
PI633974	CHOTEAU	59.6	30	.6	3.2	.003
AGRIPRO1	NORPRO	58.8	30	-.2	-.8	.413
AGRIPRO2	KNUDSON	59.8	30	.8	4.2	.000

HEADING DATE (JULIAN DAYS; 176 = JUNE 25)

REFERENCE MEAN: MT 0245 176.7 (N= 30)

ID	NAME	ACTUAL MEAN	NO. OBS	MEAN DIFF	T-PAIRED VALUE	P-VALUE
CI 10003	THATCHER	179.2	30	2.5	9.0	.000
CI 13596	FORTUNA	175.9	30	-.8	-3.4	.002
PI574642	MCNEAL	177.3	30	.6	2.7	.012
PI592761	ERNEST	176.3	30	-.4	-2.5	.018
PI607557	SCHOLAR	177.4	30	.7	4.6	.000
ND 695	Reeder	175.5	30	-1.2	-6.8	.000
BZ992588	Conan	175.3	30	-1.4	-6.7	.000
BZ992322	HANK	174.3	30	-2.4	-9.6	.000
PI632252	OUTLOOK	178.0	30	1.3	6.0	.000
PI633974	CHOTEAU	175.7	30	-1.0	-5.1	.000
AGRIPRO1	NORPRO	176.0	30	-.7	-3.6	.001
AGRIPRO2	KNUDSON	176.7	30	.0	.0	.973

PLANT HEIGHT (INCHES)

REFERENCE MEAN: MT 0245 33.1 (N= 30)

ID	NAME	ACTUAL MEAN	NO. OBS	MEAN DIFF	T-PAIRED VALUE	P-VALUE
CI 10003	THATCHER	40.7	30	7.6	13.7	.000
CI 13596	FORTUNA	37.9	30	4.8	10.7	.000
PI574642	MCNEAL	33.1	30	.0	-.0	.983
PI592761	ERNEST	37.6	30	4.5	12.0	.000
PI607557	SCHOLAR	36.5	30	3.4	7.9	.000
ND 695	Reeder	34.1	30	1.0	3.3	.002
BZ992588	Conan	30.8	30	-2.3	-8.5	.000
BZ992322	HANK	30.8	30	-2.3	-6.8	.000
PI632252	OUTLOOK	33.1	30	.0	.1	.924
PI633974	CHOTEAU	31.2	30	-1.9	-6.7	.000
AGRIPRO1	NORPRO	30.5	30	-2.6	-8.1	.000
AGRIPRO2	KNUDSON	32.3	30	-.8	-2.4	.022

GRAIN PRROTEIN (%)

REFERENCE MEAN: MT 0245 14.7 (N= 30)

ID	NAME	ACTUAL MEAN	NO. OBS	MEAN DIFF	T-PAIRED VALUE	P-VALUE
CI 10003	THATCHER	15.4	30	.7	3.2	.003
CI 13596	FORTUNA	14.8	30	.2	1.1	.296
PI574642	MCNEAL	14.9	30	.2	1.2	.235
PI592761	ERNEST	15.4	30	.8	4.6	.000
PI607557	SCHOLAR	15.5	30	.9	4.1	.000
ND 695	Reeder	15.0	30	.3	1.9	.064
BZ992588	Conan	15.0	30	.4	3.3	.003
BZ992322	HANK	14.9	30	.3	1.5	.144
PI632252	OUTLOOK	14.6	30	-.1	-.4	.713
PI633974	CHOTEAU	14.9	30	.2	1.4	.164
AGRIPRO1	NORPRO	14.5	30	-.2	-1.0	.316
AGRIPRO2	KNUDSON	14.7	30	.0	.2	.872

**2003-2005 GRAIN YIELD (BU/AC) SUMMARY FOR MT0245 COMPARED TO SELECTED WHEATS GROWN IN
THE ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA**

ID	PEDIGREE	DISTRICT 5 HAVRE					DISTRICT 6 SIDNEY DRYLAND					DISTRICT 6 SIDNEY IRR					DISTRICT 5 CONRAD DRY				
		2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE
MT 0245	MT9433/ND695	14.3	51.7	58.3	3	41.4	73.0	71.1	51.0	3	65.0	105.9	90.5	49.9	3	82.1	55.2	63.6	55.0	3	57.9
CI 10003	THATCHER	8.2	36.1	41.4	3	28.6	49.4	55.8	36.5	3	47.2	78.2	71.1	60.1	3	69.8	33.2	44.6	36.2	3	38.0
CI 13596	FORTUNA	10.8	42.0	48.2	3	33.7	57.4	60.3	42.0	3	53.3	77.5	66.4	60.3	3	68.1	49.6	58.0	51.0	3	52.9
PI574642	MCNEAL	13.9	40.8	51.4	3	35.4	60.7	68.3	45.7	3	58.2	107.5	83.4	67.3	3	86.1	49.5	57.5	54.3	3	53.8
PI592761	ERNEST	11.8	39.8	46.1	3	32.6	54.7	61.2	44.1	3	53.3	92.8	76.4	63.2	3	77.5	42.6	56.7	37.7	3	45.7
PI607557	SCHOLAR	12.2	44.7	46.9	3	34.6	59.4	67.6	44.3	3	57.1	94.4	72.1	59.8	3	75.4	46.4	52.8	48.4	3	49.2
ND 695	Reeder	12.4	40.9	51.2	3	34.8	67.6	68.0	50.2	3	61.9	102.5	88.8	62.6	3	84.6	53.9	60.7	53.3	3	56.0
BZ992588	Conan	13.5	43.3	55.5	3	37.5	55.7	59.1	44.6	3	53.1	88.3	76.1	59.6	3	74.7	45.9	58.0	49.7	3	51.2
BZ992322	HANK	10.4	45.0	55.6	3	37.0	63.3	66.6	48.0	3	59.3	113.5	87.6	74.7	3	91.9	48.9	60.0	51.0	3	53.3
PI632252	OUTLOOK	16.2	49.0	58.3	3	41.2	69.0	67.5	46.4	3	61.0	104.1	84.2	75.9	3	88.1	48.8	60.2	51.9	3	53.6
PI633974	CHOTEAU	13.1	42.5	55.7	3	37.1	61.2	61.9	46.1	3	56.4	107.3	76.0	55.8	3	79.7	59.5	63.8	50.5	3	57.9
AGRIPRO1	NORPRO	9.4	39.1	49.4	3	32.7	65.8	70.7	52.7	3	63.0	115.8	80.0	80.1	3	91.9	50.2	59.9	49.0	3	53.0
AGRIPRO2	KNUDSON	7.0	38.6	47.0	3	30.8	63.8	68.3	46.6	3	59.6	106.2	79.3	76.3	3	87.3	46.6	60.2	47.0	3	51.3
AVERAGE		11.8	42.6	51.2	3	35.2	61.6	65.1	46.0	3	57.6	99.5	79.4	65.0	3	81.3	48.5	58.2	48.9	3	51.8
C.V.						6.67					3.92					8.84					4.96
LSD (.05)						3.95					3.81					12.11					4.33

ID	PEDIGREE	DISTRICT 4 MOCCASIN					DISTRICT 3 HUNTLEY DRY					DISTRICT 3 HUNTLEY IRR				
		2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE
MT 0245	MT9433/ND695	17.0	39.1	25.8	3	27.3	42.3	34.3	38.2	3	38.3	98.6	117.8	86.4	3	100.9
CI 10003	THATCHER	10.6	28.3	18.1	3	19.0	31.4	34.0	26.9	3	30.8	76.1	93.6	60.9	3	76.9
CI 13596	FORTUNA	18.1	37.1	25.7	3	27.0	37.7	31.7	36.3	3	35.3	79.4	108.9	62.7	3	83.7
PI574642	MCNEAL	20.3	36.9	24.3	3	27.2	36.0	39.1	39.0	3	38.0	88.1	114.4	78.1	3	93.5
PI592761	ERNEST	15.9	34.1	20.9	3	23.6	33.1	35.1	29.3	3	32.5	86.0	114.0	76.1	3	92.0
PI607557	SCHOLAR	17.8	36.1	22.6	3	25.5	36.6	32.7	35.8	3	35.0	87.3	116.0	68.7	3	90.7
ND 695	Reeder	18.4	37.9	27.2	3	27.8	40.6	32.8	43.4	3	38.9	85.5	110.5	72.4	3	89.5
BZ992588	Conan	17.8	39.3	25.3	3	27.4	35.6	28.3	39.6	3	34.5	77.5	113.4	73.7	3	88.2
BZ992322	HANK	21.4	41.5	29.2	3	30.7	42.3	29.5	44.4	3	38.8	85.6	123.3	85.8	3	98.2
PI632252	OUTLOOK	16.6	39.5	26.0	3	27.4	42.5	39.3	45.0	3	42.3	88.9	116.2	89.8	3	98.3
PI633974	CHOTEAU	15.0	35.6	26.8	3	25.8	37.2	28.7	34.9	3	33.6	86.6	128.7	83.0	3	99.4
AGRIPRO1	NORPRO	12.6	32.2	22.1	3	22.3	36.5	33.5	32.9	3	34.3	83.5	118.5	95.7	3	99.3
AGRIPRO2	KNUDSON	14.2	36.9	24.9	3	25.3	36.8	32.9	39.6	3	36.4	54.6	115.2	82.3	3	84.0
AVERAGE		16.6	36.5	24.5	3	25.9	37.6	33.2	37.3	3	36.1	82.9	114.7	78.1	3	91.9
C.V.						5.4					9.75					8.28
LSD (.05)						2.36					5.92					12.82

**2003-2005 GRAIN YIELD (BU/AC) SUMMARY FOR MT0245 COMPARED TO SELECTED WHEATS
GROWN IN THE ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA**

ID	PEDIGREE	DISTRICT 1 KALISPELL					DISTRICT 2 BOZEMAN DRY					DISTRICT 2 BOZEMAN IRR					OVERALL AVE
		2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	
MT 0245	MT9433/ND695	91.6	101.7	72.4	3	88.6	48.3	97.5	68.8	3	71.5	80.0	107.9	87.2	3	91.7	66.47
CI 10003	THATCHER	69.8	81.4	48.0	3	66.4	31.1	64.3	51.1	3	48.9	53.4	71.9	58.2	3	61.2	48.67
CI 13596	FORTUNA	74.4	100.7	74.8	3	83.3	41.7	81.4	56.5	3	59.9	63.5	100.6	70.0	3	78.0	57.49
PI574642	MCNEAL	78.5	86.8	43.6	3	69.6	39.8	85.3	56.4	3	60.5	65.3	102.9	82.5	3	83.5	60.58
PI592761	ERNEST	75.9	89.3	61.8	3	75.7	41.9	80.5	52.8	3	58.4	74.1	90.5	74.3	3	79.7	57.09
PI607557	SCHOLAR	82.6	99.3	82.2	3	88.0	41.9	84.1	56.2	3	60.7	69.2	95.9	72.4	3	79.2	59.54
ND 695	Reeder	87.4	92.4	92.4	3	90.7	44.5	85.4	60.7	3	63.5	74.7	97.2	83.6	3	85.2	63.3
BZ992588	Conan	79.7	99.0	81.4	3	86.7	37.8	81.7	57.2	3	58.9	68.9	89.9	78.4	3	79.1	59.12
BZ992322	HANK	72.6	103.2	71.5	3	82.4	41.9	89.0	67.5	3	66.1	74.5	115.3	91.9	3	93.9	65.17
PI632252	OUTLOOK	70.5	94.7	61.0	3	75.4	42.7	87.4	65.0	3	65.0	74.3	104.2	86.4	3	88.3	64.05
PI633974	CHOTEAU	77.9	88.6	71.4	3	79.3	37.7	90.0	56.6	3	61.4	70.4	103.2	87.4	3	87.0	61.76
AGRIPRO1	NORPRO	82.3	94.4	59.0	3	78.6	39.3	92.6	60.6	3	64.2	77.8	104.4	90.8	3	91.0	63.03
AGRIPRO2	KNUDSON	83.0	93.3	77.9	3	84.7	38.6	84.6	58.2	3	60.4	69.2	97.7	82.5	3	83.1	60.3
AVERAGE		78.9	94.2	69.0	3	80.7	40.5	84.9	59.1	3	61.5	70.4	98.6	80.4	3	83.1	60.51
C.V.						9.19					5.66					5.29	2.69
LSD (.05)						12.51					5.86					7.42	2.74

2003-2005 GRAIN TEST WEIGHT (LB/BU) SUMMARY FOR MT0245 COMPARED TO SELECTED WHEATS GROWN IN THE ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA

ID	PEDIGREE	DISTRICT 5 HAVRE					DISTRICT 6 SIDNEY DRYLAND					DISTRICT 6 SIDNEY IRR					DISTRICT 5 CONRAD DRY				
		2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE
MT 0245	MT9433/ND695	56.0	58.6	57.6	3	57.4	61.1	61.6	61.8	3	61.5	62.2	62.7	61.7	3	62.2	54.4	60.2	59.1	3	57.9
CI 10003	THATCHER	50.5	54.1	56.2	3	53.6	58.5	58.3	57.5	3	58.1	61.4	62.0	59.8	3	61.1	52.6	59.8	55.1	3	55.8
CI 13596	FORTUNA	57.1	59.2	58.4	3	58.2	61.3	61.8	61.5	3	61.5	62.1	63.1	60.8	3	62.0	57.9	62.9	60.1	3	60.3
PI574642	MCNEAL	53.9	57.2	57.4	3	56.1	59.8	60.0	61.1	3	60.3	62.9	62.4	61.8	3	62.4	56.9	61.8	58.8	3	59.2
PI592761	ERNEST	56.8	59.6	56.9	3	57.8	62.1	61.3	62.3	3	61.9	62.6	63.3	61.3	3	62.4	55.9	62.9	57.1	3	58.6
PI607557	SCHOLAR	57.2	59.4	59.0	3	58.5	60.8	61.3	62.1	3	61.4	63.6	63.0	61.5	3	62.7	56.7	61.1	60	3	59.3
ND 695	Reeder	57.4	59.2	58.4	3	58.3	61.3	61.8	63.1	3	62.1	63.0	63.0	62.0	3	62.7	56.3	60.2	59.1	3	58.5
BZ992588	Conan	56.7	59.7	59.4	3	58.6	61.2	61.5	62.3	3	61.7	62.6	63.0	61.8	3	62.5	54.7	60.2	59.6	3	58.2
BZ992322	HANK	56.2	58.3	55.6	3	56.7	58.2	61.0	60.3	3	59.8	61.3	62.7	60.8	3	61.6	52.4	59.5	56.7	3	56.2
PI632252	OUTLOOK	54.3	57.7	58.0	3	56.7	60.2	61.3	61.0	3	60.8	61.8	62.2	60.7	3	61.5	54.7	60.2	57.1	3	57.3
PI633974	CHOTEAU	58.0	58.8	58.4	3	58.4	61.6	61.7	62.7	3	62.0	62.8	62.8	62.0	3	62.5	55.7	63.9	59.1	3	59.6
AGRIPRO1	NORPRO	57.1	58.0	56.1	3	57.1	62.2	62.0	62.9	3	62.4	62.9	63.3	61.5	3	62.6	54.5	61.6	55	3	57.0
AGRIPRO2	KNUDSON	57.1	60.0	57.6	3	58.3	61.3	62.4	63.1	3	62.3	63.3	63.7	61.7	3	62.9	58.3	61.9	59.4	3	59.9
AVERAGE		56.0	58.5	57.6	3	57.4	60.8	61.2	61.7	3	61.2	62.5	62.9	61.4	3	62.2	55.5	61.25	58.2	3	58.3

ID	PEDIGREE	DISTRICT 4 MOCCASIN					DISTRICT 3 HUNTLEY DRY					DISTRICT 3 HUNTLEY IRR				
		2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE
MT 0245	MT9433/ND695	48.9	55.0	54.6	3	52.8	62.0	62.8	52.2	3	59.0	61.6	62.4	61.4	3	61.8
CI 10003	THATCHER	46.9	51.9	55.0	3	51.3	56.2	61.9	53.3	3	57.1	59.8	62.0	60.5	3	60.8
CI 13596	FORTUNA	50.1	56.9	56.9	3	54.6	60.7	62.4	56.0	3	59.7	61.9	63.5	60.4	3	61.9
PI574642	MCNEAL	48.8	55.0	52.9	3	52.2	58.6	62.4	54.3	3	58.4	61.6	63.4	62.2	3	62.4
PI592761	ERNEST	50.8	55.0	56.1	3	54.0	61.0	63.6	55.6	3	60.1	60.9	63.3	61.2	3	61.8
PI607557	SCHOLAR	52.3	57.3	57.6	3	55.7	61.1	61.6	56.5	3	59.7	60.6	63.1	61.8	3	61.8
ND 695	Reeder	51.2	56.2	55.5	3	54.3	62.8	63.8	55.5	3	60.7	60.8	63.2	62.0	3	62.0
BZ992588	Conan	51.6	57.0	56.2	3	54.9	61.8	63.2	53.0	3	59.3	58.6	61.9	61.3	3	60.6
BZ992322	HANK	49.1	53.6	51.8	3	51.5	60.3	61.7	52.8	3	58.3	60.6	61.0	59.9	3	60.5
PI632252	OUTLOOK	48.2	54.1	53.6	3	52.0	59.2	62.4	54.0	3	58.5	60.8	61.9	60.9	3	61.2
PI633974	CHOTEAU	51.1	57.1	56.3	3	54.8	61.2	62.8	53.5	3	59.2	61.4	63.8	61.0	3	62.1
AGRIPRO1	NORPRO	47.6	54.0	52.0	3	51.2	62.3	63.3	49.7	3	58.4	62.2	63.0	61.2	3	62.1
AGRIPRO2	KNUDSON	52.0	56.3	55.0	3	54.4	61.7	62.6	54.4	3	59.6	61.1	62.2	60.9	3	61.4
AVERAGE		49.9	55.3	54.9	3	53.4	60.7	62.7	53.9	3	59.1	60.9	62.6	61.1	3	61.6

**2003-2005 GRAIN TEST WEIGHT (LB/BU) SUMMARY FOR MT0245 COMPARED TO SELECTED WHEATS
GROWN IN THE ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA**

ID	PEDIGREE	DISTRICT 1 KALISPELL					DISTRICT 2 BOZEMAN DRY					DISTRICT 2 BOZEMAN IRR					OVERALL AVE
		2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	
MT 0245	MT9433/ND695	58.6	60.6	56.1	3	58.4	55.2	61	59.6	3	58.6	58.2	62.2	61	3	60.47	59.01
CI 10003	THATCHER	56.2	59.4	58.5	3	58.0	51.2	59.6	58.6	3	56.5	54.3	61.8	56.1	3	57.4	56.97
CI 13596	FORTUNA	60.0	62.1	61.3	3	61.1	57.5	62.6	61.4	3	60.5	60.9	62.7	61.9	3	61.83	60.18
PI574642	MCNEAL	55.5	60.9	51.9	3	56.1	54	60.7	60.9	3	58.5	58	62.5	61	3	60.5	58.61
PI592761	ERNEST	58.9	60.7	57.8	3	59.1	56.9	61.3	59.5	3	59.2	59.4	61.1	62.2	3	60.9	59.59
PI607557	SCHOLAR	60.3	61.7	60.2	3	60.7	57.2	62.5	60.5	3	60.1	60.2	62.8	61.3	3	61.43	60.14
ND 695	Reeder	59.0	61.6	59.0	3	59.9	54.5	62.8	61.1	3	59.5	58.6	62.7	61.5	3	60.93	59.88
BZ992588	Conan	58.7	61.0	59.4	3	59.7	55	60.4	59.5	3	58.3	58.3	62.2	60.2	3	60.23	59.4
BZ992322	HANK	55.0	59.2	55.7	3	56.6	51.7	60.6	58.9	3	57.1	57.2	62.4	57.1	3	58.9	57.72
PI632252	OUTLOOK	53.9	58.4	54.8	3	55.7	52.9	62	59.8	3	58.2	57.1	61.3	60.5	3	59.63	58.16
PI633974	CHOTEAU	57.2	60.1	58.1	3	58.5	54.5	61.5	59.9	3	58.6	58.9	61.9	61.6	3	60.8	59.64
AGRIPRO1	NORPRO	58.9	61.4	52.2	3	57.5	55.5	63.1	58.6	3	59.1	59.2	63	59	3	60.4	58.77
AGRIPRO2	KNUDSON	60.0	60.8	57.5	3	59.4	56.3	61.8	60.2	3	59.4	58.8	61.3	61.5	3	60.53	59.81
AVERAGE		57.9	60.6	57.1	3	58.5	54.8	61.5	59.9	3	58.7	58.39	62.15	60.4	3	60.31	59.07

**2003-2005 HEADING DATE (Julian days;175=June 24) SUMMARY FOR MT0245 COMPARED TO
SELECTED WHEATS GROWN IN THE ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA**

ID	PEDIGREE	DISTRICT 5 HAVRE					DISTRICT 6 SIDNEY DRYLAND					DISTRICT 6 SIDNEY IRR					DISTRICT 5 CONRAD DRY				
		2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE
		MT 0245	MT9433/ND695	180	183	178	3	180	170	174	172	3	172	176	178	172	3	175	183	185	184
CI 10003	THATCHER	184	183	178	3	182	172	178	173	3	175	180	183	173	3	179	185	186	186	3	186
CI 13596	FORTUNA	178	180	175	3	178	169	173	171	3	171	175	180	171	3	175	183	183	184	3	183
PI574642	MCNEAL	181	182	178	3	180	171	176	172	3	173	179	182	173	3	178	183	185	184	3	184
PI592761	ERNEST	177	182	176	3	179	170	174	171	3	172	175	178	171	3	175	183	184	184	3	184
PI607557	SCHOLAR	180	182	179	3	180	171	175	172	3	173	179	179	173	3	177	184	186	184	3	185
ND 695	Reeder	179	182	176	3	179	168	173	171	3	171	174	179	172	3	175	180	185	183	3	183
BZ992588	Conan	180	180	177	3	179	168	171	171	3	170	176	178	172	3	175	181	185	184	3	183
BZ992322	HANK	177	179	175	3	177	167	170	170	3	169	173	173	172	3	173	180	183	183	3	182
PI632252	OUTLOOK	180	182	178	3	180	171	176	173	3	174	179	179	173	3	177	183	186	185	3	185
PI633974	CHOTEAU	179	182	176	3	179	169	173	172	3	171	174	179	171	3	175	181	185	183	3	183
AGRIPRO1	NORPRO	178	182	176	3	179	169	173	172	3	171	174	178	172	3	175	181	185	184	3	183
AGRIPRO2	KNUDSON	180	182	178	3	180	170	174	172	3	172	176	179	172	3	176	183	185	185	3	184
AVERAGE		179	182	177	3	179	170	174	172	3	172	176	179	172	3	176	182	185	184	3	184

ID	PEDIGREE	DISTRICT 4 MOCCASIN					DISTRICT 3 HUNTLEY DRY					DISTRICT 3 HUNTLEY IRR				
		2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE
		MT 0245	MT9433/ND695	183	186	183	3	184	166	158	171	3	165	166	160	170
CI 10003	THATCHER	186	189	187	3	187	168	161	173	3	167	168	166	171	3	168
CI 13596	FORTUNA	183	185	183	3	184	166	158	171	3	165	166	160	170	3	166
PI574642	MCNEAL	184	186	184	3	184	167	160	171	3	166	167	161	169	3	166
PI592761	ERNEST	182	185	183	3	183	166	160	172	3	166	166	161	169	3	165
PI607557	SCHOLAR	183	186	184	3	184	167	159	171	3	166	167	161	170	3	166
ND 695	Reeder	183	185	182	3	183	165	158	169	3	164	164	159	167	3	164
BZ992588	Conan	182	184	182	3	182	165	157	169	3	164	165	159	167	3	164
BZ992322	HANK	181	182	181	3	181	164	158	169	3	164	163	160	167	3	164
PI632252	OUTLOOK	184	186	185	3	185	167	160	172	3	166	167	164	171	3	168
PI633974	CHOTEAU	183	184	182	3	183	165	158	170	3	164	167	161	169	3	166
AGRIPRO1	NORPRO	183	184	183	3	183	167	159	171	3	166	166	161	170	3	166
AGRIPRO2	KNUDSON	183	185	184	3	184	167	159	171	3	165	166	162	170	3	166
AVERAGE		183	185	183	3	184	166	159	171	3	165	166	161	169	3	166

2003-2005 HEADING DATE (Julian days;175=June 24) SUMMARY FOR MT0245 COMPARED TO SELECTED WHEATS GROWN IN THE ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA

ID	PEDIGREE	DISTRICT 1 KALISPELL					DISTRICT 2 BOZEMAN DRY					DISTRICT 2 BOZEMAN IRR					OVERALL AVE
		2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	
MT 0245	MT9433/ND695	173	169	176	3	173	184	183	186	3	184	181	184	185	3	183	176.7
CI 10003	THATCHER	177	174	180	3	177	187	184	188	3	186	183	183	187	3	184	179.2
CI 13596	FORTUNA	173	168	176	3	172	184	181	184	3	183	181	180	185	3	182	175.9
PI574642	MCNEAL	173	169	177	3	173	187	183	187	3	186	182	182	186	3	183	177.3
PI592761	ERNEST	174	171	177	3	174	183	182	185	3	183	180	182	185	3	182	176.3
PI607557	SCHOLAR	174	170	178	3	174	186	183	187	3	185	181	183	187	3	184	177.4
ND 695	Reeder	173	168	174	3	172	184	181	183	3	183	180	181	184	3	182	175.5
BZ992588	Conan	171	166	175	3	171	184	181	185	3	183	179	180	185	3	181	175.3
BZ992322	HANK	170	166	175	3	171	182	182	184	3	183	180	179	184	3	181	174.3
PI632252	OUTLOOK	175	171	179	3	175	188	183	188	3	186	183	183	187	3	184	178.0
PI633974	CHOTEAU	172	168	176	3	172	183	182	184	3	183	179	180	184	3	181	175.7
AGRIPRO1	NORPRO	173	168	176	3	172	184	182	185	3	184	180	181	184	3	182	176.0
AGRIPRO2	KNUDSON	173	169	176	3	173	184	182	187	3	184	180	181	187	3	183	176.7
AVERAGE		173	169	177	3	173	185	182	186	3	184	181	181	185	3	183	176.5

**2003-2005 PLANT HEIGHT (INCHES) SUMMARY FOR MT0245 COMPARED TO SELECTED WHEATS GROWN IN THE
ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA**

ID	PEDIGREE	DISTRICT 5 HAVRE					DISTRICT 6 SIDNEY DRYLAND					DISTRICT 6 SIDNEY IRR					DISTRICT 5 CONRAD DRY				
		2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE
MT 0245	MT9433/ND695	22.6	31.2	33.2	3	29.0	33.2	30.7	28.2	3	30.7	38.5	34.7	27.6	3	33.6	33.0	35.0	32.0	3	33.3
CI 10003	THATCHER	24.4	36.6	38.1	3	33.0	39.9	39.3	36.6	3	38.6	45.9	41.9	39.2	3	42.3	43.0	42.0	43.0	3	42.7
CI 13596	FORTUNA	23.4	34.0	34.5	3	30.6	39.0	37.0	32.6	3	36.2	42.3	38.2	34.4	3	38.3	41.0	38.0	42.0	3	40.3
PI574642	MCNEAL	21.8	29.7	28.1	3	26.5	33.2	31.0	28.7	3	31.0	39.0	33.2	33.7	3	35.3	34.0	34.0	33.0	3	33.7
PI592761	ERNEST	24.2	33.0	34.8	3	30.6	37.3	33.7	32.4	3	34.5	43.1	37.6	37.8	3	39.5	39.0	39.0	38.0	3	38.7
PI607557	SCHOLAR	22.7	30.8	34.2	3	29.2	36.9	35.0	31.6	3	34.5	41.1	31.9	37.2	3	36.7	40.0	38.0	37.0	3	38.3
ND 695	Reeder	21.3	31.1	30.5	3	27.7	33.4	32.7	30.0	3	32.1	40.5	35.4	31.2	3	35.7	34.0	37.0	35.0	3	35.3
BZ992588	Conan	20.5	30.4	29.1	3	26.6	30.7	29.5	25.1	3	28.4	36.0	31.9	27.5	3	31.8	30.0	34.0	30.0	3	31.3
BZ992322	HANK	19.2	28.6	29.5	3	25.7	30.1	29.7	26.8	3	28.9	36.5	28.3	28.5	3	31.1	33.0	34.0	32.0	3	33.0
PI632252	OUTLOOK	21.2	29.9	28.9	3	26.6	34.3	32.0	28.2	3	31.5	38.4	32.0	35.2	3	35.2	32.0	34.0	34.0	3	33.3
PI633974	CHOTEAU	19.7	28.5	28.3	3	25.5	31.2	29.1	25.6	3	28.7	35.9	28.9	29.0	3	31.3	33.0	34.0	32.0	3	33.0
AGRIPRO1	NORPRO	20.0	28.0	28.8	3	25.6	29.9	30.0	25.8	3	28.6	34.3	29.3	29.6	3	31.1	30.0	29.0	31.0	3	30.0
AGRIPRO2	KNUDSON	19.9	29.2	28.4	3	25.8	31.3	30.3	25.8	3	29.1	37.1	32.0	30.6	3	33.2	33.0	35.0	35.0	3	34.3
AVERAGE		21.6	30.8	31.2	3	27.9	33.9	32.3	29.0	3	31.7	39.1	33.5	32.4	3	35.0	35.0	35.6	34.9	3	35.2

ID	PEDIGREE	DISTRICT 4 MOCCASIN					DISTRICT 3 HUNTLEY DRY					DISTRICT 3 HUNTLEY IRR				
		2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE
MT 0245	MT9433/ND695	25.3	33.5	29.5	3	29.4	29.8	21.5	38.9	3	30.1	34.6	40.8	45.1	3	40.2
CI 10003	THATCHER	25.3	38.0	32.6	3	32.0	37.2	27.9	44.4	3	36.5	45.1	53.1	49.4	3	49.2
CI 13596	FORTUNA	27.3	37.7	38.7	3	34.6	32.5	24.5	43.2	3	33.4	38.1	44.7	45.2	3	42.7
PI574642	MCNEAL	25.0	37.5	30.7	3	31.1	29.8	24.9	38.4	3	31.0	35.1	40.9	41.8	3	39.3
PI592761	ERNEST	26.0	39.3	34.6	3	33.3	34.0	26.3	41.2	3	33.8	38.6	48.5	49.3	3	45.5
PI607557	SCHOLAR	26.7	36.4	33.5	3	32.2	34.3	24.3	42.3	3	33.6	37.7	45.8	46.6	3	43.4
ND 695	Reeder	25.7	32.5	32.3	3	30.2	30.4	20.1	37.5	3	29.3	35.5	44.8	44.5	3	41.6
BZ992588	Conan	23.3	31.9	26.5	3	27.3	28.6	20.9	34.3	3	28.0	29.1	39.3	39.4	3	35.9
BZ992322	HANK	26.0	32.9	28.4	3	29.1	28.8	20.3	33.9	3	27.7	30.4	39.1	38.8	3	36.1
PI632252	OUTLOOK	24.3	32.5	28.7	3	28.5	30.8	24.1	37.8	3	30.9	36.1	44.1	43.7	3	41.3
PI633974	CHOTEAU	22.7	32.5	29.5	3	28.2	28.6	19.8	34.4	3	27.6	33.2	39.9	40.5	3	37.9
AGRIPRO1	NORPRO	24.0	29.9	28.3	3	27.4	29.1	21.6	34.3	3	28.3	32.1	40.7	40.4	3	37.8
AGRIPRO2	KNUDSON	24.3	33.8	32.1	3	30.1	30.5	21.2	36.4	3	29.4	34.5	41.0	42.3	3	39.3
AVERAGE		25.1	34.5	31.2	3	30.3	31.1	22.9	38.2	3	30.7	35.4	43.3	43.6	3	40.8

**2003-2005 PLANT HEIGHT (INCHES) SUMMARY FOR MT0245 COMPARED TO SELECTED WHEATS
GROWN IN THE ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA**

ID	PEDIGREE	DISTRICT 1 KALISPELL					DISTRICT 2 BOZEMAN DRY					DISTRICT 2 BOZEMAN IRR					OVERALL AVE
		2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	
MT 0245	MT9433/ND695	25.3	33.5	29.5	3	29.4	29.2	36.9	34.3	3	33.5	33.2	38.1	37.6	3	36.3	33.1
CI 10003	THATCHER	25.3	38.0	32.6	3	32.0	37.1	49.6	42.2	3	42.9	41.6	46.6	46.3	3	44.9	40.7
CI 13596	FORTUNA	27.3	37.7	38.7	3	34.6	36.6	44.7	38.7	3	40.0	40.2	43.1	41.8	3	41.7	37.9
PI574642	MCNEAL	25.0	37.5	30.7	3	31.1	29.6	36.5	32.4	3	32.8	33.1	39.7	38.8	3	37.2	33.1
PI592761	ERNEST	26.0	39.3	34.6	3	33.3	33.1	42.9	39.6	3	38.5	37.8	45.8	44.1	3	42.5	37.6
PI607557	SCHOLAR	26.7	36.4	33.5	3	32.2	32.8	42.0	38.4	3	37.7	35.7	42.7	42.6	3	40.3	36.5
ND 695	Reeder	25.7	32.5	32.3	3	30.2	30.7	39.2	34.2	3	34.7	35.1	40.1	39.6	3	38.2	34.1
BZ992588	Conan	23.3	31.9	26.5	3	27.3	27.3	36.4	30.5	3	31.4	32.0	36.1	34.3	3	34.1	30.8
BZ992322	HANK	26.0	32.9	28.4	3	29.1	28.0	34.5	30.9	3	31.1	31.5	33.5	34.1	3	33.0	30.8
PI632252	OUTLOOK	24.3	32.5	28.7	3	28.5	29.4	36.5	33.2	3	33.0	32.8	40.6	38.1	3	37.2	33.1
PI633974	CHOTEAU	22.7	32.5	29.5	3	28.2	28.6	35.1	32.4	3	32.0	31.7	36.4	36.9	3	35.0	31.2
AGRIPRO1	NORPRO	24.0	29.9	28.3	3	27.4	27.7	33.2	30.7	3	30.6	31.6	34.8	34.2	3	33.5	30.5
AGRIPRO2	KNUDSON	24.3	33.8	32.1	3	30.1	28.5	36.1	33.4	3	32.7	32.0	37.9	37.8	3	35.9	32.3
AVERAGE		25.1	34.5	31.2	3	30.3	30.7	38.7	34.7	3	34.7	34.5	39.7	38.9	3	37.7	34.0

2003-2005 GRAIN PROTEIN (%) SUMMARY FOR MT0245 COMPARED TO SELECTED WHEATS GROWN IN THE ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA

ID	PEDIGREE	DISTRICT 5 HAVRE					DISTRICT 6 SIDNEY DRYLAND					DISTRICT 6 SIDNEY IRR					DISTRICT 5 CONRAD DRY				
		2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE
MT 0245	MT9433/ND695	18.4	15.7	13.4	3	15.8	14.2	14.0	11.1	3	13.1	16.0	13.1	11.3	3	13.5	16.9	10.2	14.7	3	13.9
CI 10003	THATCHER	20.3	18.0	14.2	3	17.5	15.4	16.0	11.3	3	14.2	16.8	12.1	11.0	3	13.3	18.5	10.9	16.3	3	15.2
CI 13596	FORTUNA	18.6	15.8	13.0	3	15.8	14.5	14.3	12.0	3	13.6	16.7	13.5	12.0	3	14.1	16.8	10.3	14.5	3	13.9
PI574642	MCNEAL	19.1	17.2	14.2	3	16.8	15.0	14.2	12.1	3	13.8	16.7	12.9	11.4	3	13.7	16.7	11.2	14.7	3	14.2
PI592761	ERNEST	19.7	16.9	13.1	3	16.6	16.4	15.1	12.1	3	14.5	17.5	13.7	12.3	3	14.5	18.7	11.5	16.7	3	15.6
PI607557	SCHOLAR	19.4	17.2	15.3	3	17.3	17.5	15.7	11.9	3	15.0	16.5	15.6	14.8	3	15.6	18.1	12.0	15.9	3	15.3
ND 695	Reeder	18.3	16.6	13.4	3	16.1	14.6	13.4	12.9	3	13.6	16.8	14.6	12.5	3	14.6	17.1	10.9	15.3	3	14.4
BZ992588	Conan	18.2	16.4	13.7	3	16.1	14.8	14.2	12.0	3	13.7	15.6	14.5	12.1	3	14.1	17.7	11.7	15.2	3	14.9
BZ992322	HANK	19.0	16.6	14.4	3	16.7	15.1	14.0	11.5	3	13.5	15.5	14.3	11.4	3	13.7	18.3	10.9	15.3	3	14.8
PI632252	OUTLOOK	18.4	15.7	12.7	3	15.6	14.2	13.8	12.3	3	13.4	16.4	14.2	11.9	3	14.2	17.5	11.7	14.9	3	14.7
PI633974	CHOTEAU	18.6	16.5	12.9	3	16.0	15.3	15.5	11.7	3	14.2	15.8	14.2	11.2	3	13.7	17.4	10.8	15.3	3	14.5
AGRIPRO1	NORPRO	18.0	15.8	12.7	3	15.5	14.9	15.9	11.5	3	14.1	15.0	14.5	11.2	3	13.6	17.2	10.5	15.2	3	14.3
AGRIPRO2	KNUDSON	19.2	16.9	14.4	3	16.8	15.7	15.6	11.5	3	14.3	15.0	13.3	11.9	3	13.4	16.9	10.4	14.7	3	14.0
AVERAGE		18.9	16.6	13.7	3	16.4	15.2	14.8	11.8	3	13.9	16.2	13.9	11.9	3	14.0	17.5	11.0	15.3	3	14.6

ID	PEDIGREE	DISTRICT 4 MOCCASIN					DISTRICT 3 HUNTLEY DRY					DISTRICT 3 HUNTLEY IRR				
		2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE
MT 0245	MT9433/ND695	20.3	16.7	15.9	3	17.6	12.5	13.2	15.3	3	13.7	15.6	13.5	11.8	3	13.6
CI 10003	THATCHER	20.5	19.2	18.1	3	19.3	12.2	11.6	16.7	3	13.5	16.9	14.5	12.1	3	14.5
CI 13596	FORTUNA	20.0	17.8	17.4	3	18.4	13.0	11.8	15.4	3	13.4	15.6	13.4	13.7	3	14.2
PI574642	MCNEAL	20.3	17.2	18.3	3	18.6	11.8	12.2	15.8	3	13.3	14.8	13.2	11.4	3	13.1
PI592761	ERNEST	19.9	18.1	17.0	3	18.3	13.8	13.0	16.4	3	14.4	15.7	13.6	12.4	3	13.9
PI607557	SCHOLAR	20.0	18.3	16.1	3	18.1	12.6	11.6	15.4	3	13.2	16.3	13.9	12.2	3	14.1
ND 695	Reeder	19.8	18.4	16.7	3	18.3	12.3	12.2	14.7	3	13.1	15.9	13.9	12.6	3	14.1
BZ992588	Conan	19.6	16.6	16.0	3	17.4	14.0	13.0	15.5	3	14.2	16.0	13.9	12.4	3	14.1
BZ992322	HANK	19.7	18.6	16.1	3	18.1	13.1	14.9	14.9	3	14.3	14.6	13.2	12.2	3	13.3
PI632252	OUTLOOK	20.2	17.0	17.9	3	18.4	12.4	12.1	15.1	3	13.2	14.1	13.0	11.2	3	12.8
PI633974	CHOTEAU	19.8	16.5	15.2	3	17.2	12.9	14.8	15.2	3	14.3	15.4	13.2	12.4	3	13.7
AGRIPRO1	NORPRO	19.7	16.8	16.8	3	17.8	11.4	11.6	15.0	3	12.7	15.3	13.3	10.9	3	13.2
AGRIPRO2	KNUDSON	18.2	17.7	17.9	3	17.9	13.3	13.6	14.2	3	13.7	16.6	12.7	11.5	3	13.6
AVERAGE		19.8	17.6	16.9	3	18.1	12.7	12.7	15.4	3	13.6	15.6	13.5	12.1	3	13.7

2003-2005 GRAIN PROTEIN (%) SUMMARY FOR MT0245 COMPARED TO SELECTED WHEATS GROWN IN THE ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA

DISTRICT 1 KALISPELL					DISTRICT 2 BOZEMAN DRY					DISTRICT 2 BOZEMAN IRR					OVERALL AVE
2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	2003	2004	2005	YRS	AVE	
14.3	14.7	14.0	3	14.3	18.2	15.0	13.8	3	15.7	16.4	15.2	14.6	3	15.4	14.7
17.0	14.9	11.8	3	14.6	20.0	15.3	14.2	3	16.5	18.1	13.4	15.0	3	15.5	15.4
15.9	15.1	12.0	3	14.3	18.4	13.5	13.9	3	15.3	16.4	14.6	15.0	3	15.3	14.8
15.5	15.2	12.9	3	14.5	18.5	14.8	13.3	3	15.5	16.7	13.2	15.3	3	15.1	14.9
17.0	13.8	12.9	3	14.6	18.5	15.6	14.8	3	16.3	17.3	14.3	15.5	3	15.7	15.4
16.3	15.1	13.1	3	14.8	19.2	14.5	14.5	3	16.1	17.5	14.1	15.8	3	15.8	15.6
16.0	14.3	13.5	3	14.6	18.7	13.5	14.5	3	15.6	17.3	13.5	15.3	3	15.4	15.0
15.7	14.8	13.0	3	14.5	18.9	15.4	14.0	3	16.1	17.1	14.7	14.5	3	15.4	15.0
15.9	14.9	12.4	3	14.4	19.6	12.8	13.9	3	15.4	16.7	13.8	14.5	3	15.0	14.9
16.8	15.2	12.1	3	14.7	18.4	11.5	13.8	3	14.6	16.3	12.4	14.3	3	14.3	14.6
17.2	14.3	13.2	3	14.9	18.8	14.5	14.2	3	15.8	17.3	12.6	14.8	3	14.9	14.9
15.7	14.1	13.0	3	14.3	18.2	13.1	13.5	3	14.9	16.0	13.5	14.7	3	14.7	14.5
15.5	14.0	11.5	3	13.7	18.4	13.8	13.5	3	15.2	16.2	13.2	13.7	3	14.4	14.7
16.1	14.7	12.7	3	14.5	18.8	14.1	14.0	3	15.6	16.9	13.7	14.9	3	15.15	15.0

**2003-2005 STEM SOLID RATINGS (5=HOLLOW,25=VERY SOLID) FROM THE
ADVANCED SPRING WHEAT NURSERY GROWN AT BOZEMAN**

	2003		2004		2005	
	DRY	IRR	DRY	IRR	DRY	IRR
PEDIGREE						
MCNEAL	6.5	6.4	6.8	5.7	7.3	6.1
THATCHER	9.8	6.5	7.4	5.4	9.8	8.9
FORTUNA	19.8	18.3	19.7	18.6	18.5	13.3
ERNEST	16.3	17.2	18.3	12.2	18.8	11.4
SCHOLAR	14.9	13.6	12.8	13.0	16.4	9.4
Conan	13.5	9.5	10.6	8.6	9.0	7.5
Reeder	6.6	6.9	6.8	5.1	6.9	5.3
OUTLOOK	8.3	7.3	7.0	5.7	7.3	6.6
CHOTEAU	23.9	21.7	20.8	21.9	18.5	19.7
HANK	9.0	7.5	8.2	6.9	8.4	7.5
MT0245	13.0	12.1	11.1	8.1	16.1	9.4

**2004-2005 SAWFLY DAMAGE RATINGS FROM SOME OFFSTATION SPRING WHEAT NURSERIES
GROWN IN NORTH-CENTRAL MONTANA**

VARIETY	2004	2004	2005	2005	2005
	TURNER	LORING	TURNER	LORING	No. of Havre
	(% STEMS CUT)	(% STEMS CUT)	(% STEMS CUT)	(% STEMS CUT)	(% STEMS CUT)
MCNEAL	43.3	63.3	16.67	88.3	71.7
FORTUNA	11.7	20.0	5.0	30.0	21.7
ERNEST	20.0	45.0	5.0	40.0	28.3
SCHOLAR	36.7	78.3	10.0	40.0	61.7
Conan	15.0	16.7	5.0	35.0	26.7
Reeder	28.3	68.3	5.0	33.3	65.0
OUTLOOK	31.7	66.7	8.3	38.3	63.3
CHOTEAU	15.0	28.3	5.0	26.7	8.3
HANK	36.7	86.7	6.7	31.7	60.0
MT 0245	18.3	20	0	33.3	28.3

**2003-2004 MILLING AND BAKING SUMMARY FOR MT 0245 COMPARED TO SELECTED WHEATS IN THE ADVANCED
SPRING WHEAT NURSERY GROWN ACROSS MONTANA (8 LOCATION MEANS)**

VARIETY	GRAIN PROTEIN (%)	FLOUR PROTEIN (%)	FLOUR YIELD (%)	FLOUR ASH (%)	MIXOGRAPH TOLERANCE	MIXOGRAPH MIXTIME (MIN.)	MIXOGRAPH WATER ABS. (%)	BAKE MIX TIME (MIN.)	BAKE WATER ABS. (%)	LOAF VOLUME (CC.)	CRUMB GRAIN SCORE
MT 0245	16.4	13.6	68.5	0.42	3.9	3.2	63.7	4.9	73.4	1171.4	3.3
THATCHER	17.6	14.4	63.8	0.45	5.3	4.2	65.9	7.9	76.4	1249.9	3.8
FORTUNA	16.5	13.8	68.3	0.45	3.6	3.1	63.1	4.5	72.6	1153.1	3.6
MCNEAL	16.6	13.9	64.1	0.44	6.1	6.8	63.9	11.8	77.0	1235.8	3.1
ERNEST	17.2	14.4	67.6	0.42	5.1	3.9	64.3	9.0	74.4	1227.6	3.8
SCHOLAR	17.5	14.7	68.0	0.45	4.5	3.2	64.4	4.5	73.2	1179.4	2.9
Reeder	16.5	13.9	65.9	0.39	3.8	3.1	63.6	4.2	72.9	1111.9	2.8
Conan	16.5	13.4	65.1	0.43	5.0	4.9	62.6	8.2	73.6	1198.5	3.9
HANK	16.7	13.8	66.8	0.42	4.8	5.6	63.3	8.6	73.4	1200.0	3.6
OUTLOOK	16.0	13.4	66.5	0.44	5.1	4.0	62.7	5.8	72.5	1145.1	3.3
CHOTEAU	16.5	13.9	65.8	0.40	4.6	3.2	63.7	5.3	73.1	1153.0	3.4
NORPRO	16.3	13.4	63.0	0.46	5.0	3.8	64.6	6.4	74.8	1152.4	3.4
KNUDSON	16.6	14.0	66.5	0.45	6.5	7.2	67.1	17.7	79.8	1148.8	3.3
NURSERY AVERAGE	16.6	13.9	66.2	0.44	4.9	4.3	64.0	7.5	74.3	1177.0	3.4

2005 GRAIN YIELD (BU/AC) SUMMARY FOR THE OFFSTATION SPRING WHEAT NURSERIES GROWN ACROSS

VARIETY	NARC - HAVRE				WTARC- CONRAD				CARC- MOCCASIN				
	TURNER	NO. OF HAVRE	LORING	LOMA	CUT BANK	CHOTEAU	THE KNEE	CONRAD	IRR	MOCCASIN NO-TILL	DENTON	WINIFRED	GERALDINE
NORPRO	44.60	15.00	38.27	27.40	42.97	44.30	50.9*	62.27		27.20	26.40	31.63	9.57
KNUDSON	44.97*	21.47	36.73	34.70	42.27	47.33	49.13	58.47		22.80	22.30	25.27	11.93
ALSEN	47.43*	22.13	36.13	34.43	47.57*	47.80	49.60	65.00		<u>31.20</u>	24.97	26.30	9.40
HANK	42.10	25.23	37.20	<u>41.87</u>	51.03*	46.73	50.93*	58.20		27.77	28.03	27.17	12.33
CONAN	43.67	29.37*	36.33	35.57	37.73	43.73	47.37	56.73		29.57*	25.10	27.97	13.03
AGAWAM	46.43*	28.30	43.2*	38.97	<u>50.20</u>	53.73*	55.33*	66.73		27.67	28.93	28.60	15.77
FORTUNA	38.87	26.27	31.60	30.20	46.17*	48.27	49.13	53.57		23.97	25.70	26.20	13.77
MT 0245	<u>51.00</u>	<u>29.60</u>	42.8*	38.00	49.4*	49.93*	51.63*	68.83		30.83*	28.67	<u>32.90</u>	<u>15.30</u>
MT 0260	50.73*	23.33	38.9*	34.43	42.23	45.83	46.90	<u>69.07</u>		27.63	28.27	32.57	13.97
MT 0266	49.7*	23.60	<u>43.87</u>	33.07	47.6*	<u>55.57</u>	53.97*	63.07		27.00	<u>29.30</u>	29.20	12.30
MT 0336	48.17*	25.70	36.20	41.37	45.77*	43.07	46.70	60.93		30.37*	25.33	25.90	12.40
MTHW0202	49.8*	27.27	38.50	40.67	43.90	41.50	51.63*	66.23		30.27*	24.03	28.07	13.47
REEDER	46.0*	20.43	38.77*	35.00	44.90	45.83	48.07	57.83		25.97	26.40	27.47	12.40
McNEAL	43.00	24.27	34.53	34.87	44.10	49.33*	<u>55.80</u>	61.57		28.23	25.47	27.00	13.17
ERNEST	39.33	25.10	34.07	32.67	41.67	40.90	42.20	51.80		27.90	23.07	22.47	12.43
SCHOLAR	41.93	19.27	30.67	33.73	33.57	41.53	48.00	59.13		28.97	23.13	31.00	10.97
EXPLORER	47.8*	24.83	38.73*	38.93	48.13*	47.60	50.57*	67.70		26.80	23.93	30.07	12.17
OUTLOOK	44.47	25.93	38.33	38.77	46.63*	50.1*	52.83*	65.63		25.47	26.93	29.27	11.40
CHOTEAU	45.37	27.90	37.27	36.73	43.93	47.37	48.47	59.80		22.13	23.53	26.73	12.20
WESTBRED 926	43.17	22.57	34.00	32.90	44.13	49.73*	51.63*	63.33		30.67*	29.27	26.30	13.20
SITE MEAN *****	45.43	24.38	37.30	35.71	44.70	47.01	50.04	61.79		27.62	25.94	28.10	12.56
C.V. (S/MEAN%)	8.30	2.32	8.36	14.15	6.60	8.32	7.02	10.31		10.42	11.30	16.28	14.78
LSD (.05)	6.26	0.37	5.16	8.35 ns	4.88	6.47	5.80	10.53 ns		2.21	4.85 ns	7.56 ns	3.07 ns

VARIETY	SARC- HUNTLEY				OVERALL				
	MOLT DRY	RYEGATE DRY	HYSHAM	IRR FROMBERG	IRR	AVG	RANK	BYX	RSQ
NORPRO	9.90	29.73	<u>102.10</u>	97.9*		41.3	12	1.17	0.97
KNUDSON	11.40	26.93	98.1*	88.47		40.1	16	1.08	0.99
ALSEN	9.07	36.3*	80.30	79.50		40.4	15	0.93	0.98
HANK	10.93	<u>43.47</u>	100.93*	<u>107.57</u>		44.5*	3	1.16	0.97
CONAN	9.53	33.77	86.83	78.73		39.7	17	0.90	0.99
AGAWAM	7.40	40.97*	97.4*	85.73		44.7*	2	1.04	0.99
FORTUNA	7.10	35.50	79.03	70.50		37.9	18	0.83	0.97
MT 0245	10.50	40.93*	87.90	88.33		<u>44.8</u>	1	0.97	0.99
MT 0260	10.57	39.27*	98.47*	90.20		43.3*	6	1.07	0.99
MT 0266	8.73	37.43*	95.0*	95.43		44.1*	4	1.09	0.99
MT 0336	8.97	43.3*	86.30	89.97		41.9*	10	0.98	0.98
MTHW0202	10.43	43.23*	88.20	102.27*		43.7*	5	1.07	0.97
REEDER	<u>13.00</u>	39.53*	90.47*	85.53		41.1	13	0.98	0.99
McNEAL	9.83	35.63	87.90	74.80		40.6	14	0.92	0.98
ERNEST	9.47	30.77	89.93*	70.00		37.1	20	0.88	0.97
SCHOLAR	9.90	39.5*	77.03	67.83		37.3	19	0.81	0.96
EXPLORER	8.73	35.07	76.47	94.87		42.0*	9	0.98	0.95
OUTLOOK	11.67	40.73*	97.93*	84.77		43.2*	7	1.04	0.99
CHOTEAU	8.07	40.17*	94.33*	88.97		41.4	11	1.04	0.99
WESTBRED 926	10.27	41.13*	92.8*	90.57		42.2*	8	1.03	0.98
SITE MEAN *****	9.65	36.63	90.56	86.50		41.5		1.00	1.00
C.V. (S/MEAN%)	19.60	12.20	8.90	6.90		9.8			
LSD (.05)	3.11 ns	7.32	13.30	9.80		2.8			

**2005 OVERALL TEST WEIGHT, PLANT HEIGHT AND GRAIN PROTEIN
SUMMARY FROM THE OFFSTATION SPRING WHEAT NURSERIES GROWN
ACROSS MONTANA**

VARIETY	OVERALL TEST WT.		OVERALL PLANT HT.		OVERALL PROTEIN(%)	
	AVG	RANK	AVG	RANK		
NORPRO	55.6	17	29.6	20	13.9	14
KNUDSON	57.7	4	31.3	13	14.1	12
ALSEN	57.5	7	32.9	4	14.4	8
HANK	55.4	19	29.9	17	14.5*	6
CONAN	57.7	5	29.9	18	14.6*	3
AGAWAM	<u>59.6</u>	1	30.4	15	13.3	20
FORTUNA	58.0	3	<u>36.5</u>	1	14.2	11
MT 0245	56.7	14	32.4	7	13.9	15
MT 0260	57.1	10	32.5	6	13.5	19
MT 0266	55.2	20	32.3	9	14.1	13
MT 0336	57.0	11	32.3	10	13.7	18
MTHW0202	58.2	2	30.7	14	13.9	16
REEDER	57.3	8	32.4	8	14.5*	7
McNEAL	56.4	15	32.6	5	14.4	9
ERNEST	57.2	9	36.4*	2	<u>14.9</u>	1
SCHOLAR	57.7	6	35.7*	3	14.6*	4
EXPLORER	56.9	13	31.4	12	14.6*	5
OUTLOOK	55.5	18	31.5	11	13.9	17
CHOTEAU	57.0	12	29.9	19	14.4	10
WESTBRED 926	56.0	16	30.2	16	14.7*	2
SITE MEAN *****	57.0		32.1		14.2	
C.V. (S/MEAN%)	2.1		4.74		4.2	
LSD (.05)	0.83		1.06		0.41	

Means followed by an asterisk are not significantly different (at the .05 level) from the wheat with the highest test weight, tallest height and/or highest protein which is underlined