

**A MOTION TO RECOMMEND VIDA HARD RED SPRING WHEAT FOR
DRYLAND PRODUCTION IN DISTRICTS 1-6,
EFFECTIVE 2007**

Vida was 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- 2006 it has been tested for 40 station years in the advanced spring wheat nursery grown across Montana. Vida was approved for release in 2006 to go in effect 2007.

Vida has been one of the highest yielding wheats grown in our advanced spring wheat nursery since 2003. Across 40 location years, Vida yielded 64.5 bu/ac, 2 and 6 bushels more than Reeder and McNeal, respectively. Vida yielded an average of 54 bu/ac under dryland at Havre, Sidney, Conrad and Moccasin compared to McNeal at 47 bu/ac and Reeder at 50 bu/ac. Under irrigation, at Sidney, Huntley and Bozeman, Vida yielded 87 bu/ac with McNeal yielding 82 bu/ac and Reeder 83 bu/ac. Overall test weights were 59, 58.4 and 60 for Vida, McNeal and Reeder respectively. Across locations, Vida heads about the same as McNeal and one day later than Reeder. Vida is a semidwarf wheat about 33 inches tall which is the same as McNeal and one inch shorter than Reeder. Grain protein of Vida averages 14.5% while McNeal and Reeder average 14.7 and 14.9, respectively.

Vida has medium straw strength and tends to lodge slightly under irrigated conditions. Vida has intermediate stem solidness with moderate tolerance to the wheat stem sawfly. Vida has moderate resistance to stripe rust and septoria, but moderate susceptibility to prevalent races of stem rust. Vida exhibits acceptable milling and baking quality traits.

There were approximately 800 bushels of Foundation seed harvested in 2006.

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TABLE OF PAIRED T-TEST RESULTS

GRAIN YIELD (BU/AC)

REFERENCE MEAN: VIDA 64.5 (N= 40)

ID	NAME	ACTUAL MEAN	NO. OBS	MEAN DIFF	T-PAIRED VALUE	P-VALUE
CI 10003	THATCHER	46.7	40	-17.9	-12.1	.000
CI 13596	FORTUNA	55.1	40	-9.4	-7.1	.000
PI574642	MCNEAL	58.3	40	-6.3	-5.0	.000
PI592761	ERNEST	55.4	40	-9.1	-9.5	.000
PI607557	SCHOLAR	58.0	40	-6.6	-6.3	.000
ND 695	Reeder	62.4	40	-2.2	-1.8	.072
BZ992588	Conan	57.4	40	-7.1	-5.9	.000
BZ992322	HANK	63.5	40	-1.0	-.8	.413
PI632252	OUTLOOK	62.3	40	-2.2	-2.0	.053
PI633974	CHOTEAU	61.0	40	-3.6	-3.3	.002
AGRIPRO1	NORPRO	61.0	40	-3.5	-2.6	.014
AGRIPRO2	KNUDSON	59.1	40	-5.5	-3.5	.001

GRAIN TEST WEIGHT (LB/BU)

REFERENCE MEAN: VIDA 59.0 (N= 40)

ID	NAME	ACTUAL MEAN	NO. OBS	MEAN DIFF	T-PAIRED VALUE	P-VALUE
CI 10003	THATCHER	56.9	40	-2.1	-7.2	.000
CI 13596	FORTUNA	60.2	40	1.2	4.8	.000
PI574642	MCNEAL	58.4	40	-.6	-2.5	.016
PI592761	ERNEST	59.6	40	.6	3.5	.001
PI607557	SCHOLAR	60.1	40	1.1	5.0	.000
ND 695	Reeder	60.0	40	1.0	6.0	.000
BZ992588	Conan	59.4	40	.4	2.3	.025
BZ992322	HANK	57.7	40	-1.3	-7.2	.000
PI632252	OUTLOOK	58.0	40	-1.0	-5.7	.000
PI633974	CHOTEAU	59.6	40	.6	3.9	.000
AGRIPRO1	NORPRO	58.6	40	-.4	-1.5	.143
AGRIPRO2	KNUDSON	59.8	40	.8	4.9	.000

HEADING DATE (JULIAN DAYS;175= JUNE 24)

REFERENCE MEAN: VIDA 175.1 (N= 40)

ID	NAME	ACTUAL MEAN	NO. OBS	MEAN DIFF	T-PAIRED VALUE	P-VALUE
CI 10003	THATCHER	177.4	40	2.3	9.8	.000
CI 13596	FORTUNA	174.2	40	-.9	-4.8	.000
PI574642	MCNEAL	175.8	40	.7	3.7	.000
PI592761	ERNEST	174.6	40	-.5	-3.4	.002
PI607557	SCHOLAR	175.9	40	.8	5.4	.000
ND 695	Reeder	173.8	40	-1.3	-8.1	.000
BZ992588	Conan	173.9	40	-1.3	-7.0	.000
BZ992322	HANK	172.8	40	-2.3	-10.7	.000
PI632252	OUTLOOK	176.6	40	1.5	8.0	.000
PI633974	CHOTEAU	174.2	40	-.9	-5.5	.000
AGRIPRO1	NORPRO	174.4	40	-.7	-4.0	.000
AGRIPRO2	KNUDSON	175.0	40	-.1	-.5	.615

TABLE OF PAIRED T-TEST RESULTS (CONT.)

PLANT HEIGHT (INCHES)

REFERENCE MEAN: VIDA 33.1 (N= 40)

ID	NAME	ACTUAL MEAN	NO. OBS	MEAN DIFF	T-PAIRED VALUE	P-VALUE
CI 10003	THATCHER	41.2	40	8.0	17.7	.000
CI 13596	FORTUNA	38.1	40	4.9	13.3	.000
PI574642	MCNEAL	33.1	40	-.0	-.1	.957
PI592761	ERNEST	37.8	40	4.7	15.3	.000
PI607557	SCHOLAR	36.7	40	3.5	10.2	.000
ND 695	Reeder	33.8	40	.7	2.8	.008
BZ992588	Conan	30.7	40	-2.4	-10.7	.000
BZ992322	HANK	30.8	40	-2.4	-8.7	.000
PI632252	OUTLOOK	33.1	40	.0	.0	.993
PI633974	CHOTEAU	31.3	40	-1.9	-8.2	.000
AGRIPRO1	NORPRO	30.5	40	-2.7	-10.5	.000
AGRIPRO2	KNUDSON	32.1	40	-1.0	-3.9	.000

GRAIN PROTEIN (%)

REFERENCE MEAN: VIDA 14.5 (N= 40)

ID	NAME	ACTUAL MEAN	NO. OBS	MEAN DIFF	T-PAIRED VALUE	P-VALUE
CI 10003	THATCHER	15.2	40	.7	3.9	.000
CI 13596	FORTUNA	14.7	40	.1	1.0	.300
PI574642	MCNEAL	14.7	40	.2	1.5	.140
PI592761	ERNEST	15.2	40	.7	5.3	.000
PI607557	SCHOLAR	15.4	40	.9	5.1	.000
ND 695	Reeder	14.9	40	.4	2.7	.009
BZ992588	Conan	14.9	40	.4	3.6	.000
BZ992322	HANK	14.8	40	.2	1.8	.085
PI632252	OUTLOOK	14.4	40	-.1	-.5	.609
PI633974	CHOTEAU	14.8	40	.3	1.9	.059
AGRIPRO1	NORPRO	14.5	40	-.0	-.2	.854
AGRIPRO2	KNUDSON	14.5	40	.0	-.1	.955

2003-2006 GRAIN YIELD (BU/AC) SUMMARY FOR VIDA COMPARED TO SELECTED WHEATS GROWN IN THE ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA

ID	DISTRICT 5 HAVRE					DISTRICT 5 CONRAD DRY					DISTRICT 6 SIDNEY DRYLAND					DISTRICT 6 SIDNEY IRR				
	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE
VIDA	14.3	51.7	58.3	34.3	39.6	55.2	63.6	55.0	64.7	59.6*	73.0	71.1	51.0	60.6	63.9	105.9	90.5	49.9	77.4	80.9*
THATCHER	8.2	36.1	41.4	25.6	27.9	33.2	44.6	36.2	42.9	39.2	49.4	55.8	36.5	37.6	44.8	78.2	71.1	60.1	48.7	64.5
FORTUNA	10.8	42.0	48.2	34.0	33.7	49.6	58.0	51.0	43.7	50.6	57.4	60.3	42.0	49.0	52.2	77.5	66.4	60.3	60.3	66.1
MCNEAL	13.9	40.8	51.4	27.4	33.4	49.5	57.5	54.3	51.3	53.1	60.7	68.3	45.7	52.7	56.9	107.5	83.4	67.3	69.5	81.9*
ERNEST	11.8	39.8	46.1	26.6	31.1	42.6	56.7	37.7	54.6	47.9	54.7	61.2	44.1	48.9	52.2	92.8	76.4	63.2	69.8	75.6
SCHOLAR	12.2	44.7	46.9	27.0	32.7	46.4	52.8	48.4	60.8	52.1	59.4	67.6	44.3	51.5	55.7	94.4	72.1	59.8	68.3	73.7
REEDER	12.4	40.9	51.2	28.8	33.3	53.9	60.7	53.3	62.0	57.5*	67.6	68.0	50.2	59.7	61.4*	102.5	88.8	62.6	83.7	84.4*
CONAN	13.5	43.3	55.5	31.9	36.1	45.9	58.0	49.7	53.1	51.7	55.7	59.1	44.6	46.0	51.4	88.3	76.1	59.6	72.1	74.0
HANK	10.4	45.0	55.6	33.3	36.1	48.9	60.0	51.0	59.6	54.9	63.3	66.6	48.0	55.0	58.2	113.5	87.6	74.7	69.1	86.2*
OUTLOOK	16.2	49.0	58.3	31.8	38.8*	48.8	60.2	51.9	63.8	56.2*	69.0	67.5	46.4	57.4	60.1	104.1	84.2	75.9	69.4	83.4*
CHOTEAU	13.1	42.5	55.7	32.1	35.9	59.5	63.8	50.5	67.3	60.3	61.2	61.9	46.1	52.3	55.4	107.3	76.0	55.8	71.3	77.6
NORPRO	9.4	39.1	49.4	30.9	32.2	50.2	59.9	49.0	58.0	54.3	65.8	70.7	52.7	57.2	61.6*	115.8	80.0	80.1	74.3	87.5
KNUDSON	7.0	38.6	47.0	27.8	30.1	46.6	60.2	47.0	56.9	52.7	63.8	68.3	46.6	52.1	57.7	106.2	79.3	76.3	76.0	84.5*
AVERAGE	11.8	42.6	51.2	30.1	33.9	48.5	58.2	48.9	56.8	53.1	61.6	65.1	46.0	52.3	56.3	99.5	79.4	65.0	70.0	78.5
C.V.					6.95					6.60				3.70						8.78
LSD (.05)					3.38					5.02				2.99						9.89

ID	DISTRICT 3 HUNTLEY DRY					DISTRICT 3 HUNTLEY IRR					DISTRICT 4 MOCCASIN				
	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE
VIDA	42.3	34.3	38.2	54.0	42.2*	98.6	117.8	86.4	88.2	97.7	17.0	39.1	25.8	35.5	29.3
THATCHER	31.4	34.0	26.9	45.6	34.5	76.1	93.6	60.9	78.5	77.3	10.6	28.3	18.1	23.9	20.2
FORTUNA	37.7	31.7	36.3	41.3	36.8	79.4	108.9	62.7	70.3	80.3	18.1	37.1	25.7	32.1	28.3
MCNEAL	36.0	39.1	39.0	57.1	42.8*	88.1	114.4	78.1	89.2	92.4*	20.3	36.9	24.3	34.2	28.9
ERNEST	33.1	35.1	29.3	50.0	36.9	86.0	114.0	76.1	84.3	90.1*	15.9	34.1	20.9	22.8	23.4
SCHOLAR	36.6	32.7	35.8	50.1	38.8	87.3	116.0	68.7	85.1	89.3*	17.8	36.1	22.6	31.2	26.9
REEDER	40.6	32.8	43.4	52.5	42.3*	85.5	110.5	72.4	77.6	86.5	18.4	37.9	27.2	34.5	29.5
CONAN	35.6	28.3	39.6	41.7	36.3	77.5	113.4	73.7	70.5	83.8	17.8	39.3	25.3	32.8	28.8
HANK	42.3	29.5	44.4	47.3	40.9*	85.6	123.3	85.8	92.2	96.7*	21.4	41.5	29.2	37.2	32.3
OUTLOOK	42.5	39.3	45.0	56.5	45.8	88.9	116.2	89.8	94.0	97.2*	16.6	39.5	26.0	31.5	28.4
CHOTEAU	37.2	28.7	34.9	53.5	38.6	86.6	128.7	83.0	87.9	96.5*	15.0	35.6	26.8	33.9	27.8
NORPRO	36.5	33.5	32.9	54.8	39.4	83.5	118.5	95.7	86.9	96.2*	12.6	32.2	22.1	31.7	24.7
KNUDSON	36.8	32.9	39.6	46.1	38.9	54.6	115.2	82.3	83.2	83.8	14.2	36.9	24.9	32.5	27.1
AVERAGE	37.6	33.2	37.3	50.0	39.6	82.9	114.7	78.1	83.7	89.8	16.6	36.5	24.5	31.8	27.4
C.V.					9.45					7.57					6.23
LSD (.05)					5.36					9.76					2.44

**2003-2006 GRAIN YIELD (BU/AC) SUMMARY FOR VIDA COMPARED TO SELECTED WHEATS GROWN IN
THE ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA**

ID	DISTRICT 1 KALISPELL					DISTRICT 2 BOZEMAN DRY					DISTRICT 2 BOZEMAN IRR				
	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE
VIDA	91.6	101.7	72.4	54.5	80.0*	48.3	97.5	68.8	64.8	<u>69.9</u>	80.0	107.9	87.2	53.7	82.2*
THATCHER	69.8	81.4	48.0	22.3	55.4	31.1	64.3	51.1	44.7	47.8	53.4	71.9	58.2	36.6	55.0
FORTUNA	74.4	100.7	74.8	41.4	72.8	41.7	81.4	56.5	53.3	58.2	63.5	100.6	70.0	55.6	72.4
MCNEAL	78.5	86.8	43.6	51.3	65.0	39.8	85.3	56.4	47.3	57.2	65.3	102.9	82.5	33.0	70.9
ERNEST	75.9	89.3	61.8	50.2	69.3	41.9	80.5	52.8	48.7	56.0	74.1	90.5	74.3	48.4	71.8
SCHOLAR	82.6	99.3	82.2	37.9	75.5*	41.9	84.1	56.2	59.7	60.5	69.2	95.9	72.4	60.9	74.6
REEDER	87.4	92.4	92.4	75.1	<u>86.8</u>	44.5	85.4	60.7	65.4	64.0	74.7	97.2	83.6	56.2	77.9*
CONAN	79.7	99.0	81.4	56.5	79.1*	37.8	81.7	57.2	55.2	58.0	68.9	89.9	78.4	63.7	75.2
HANK	72.6	103.2	71.5	74.0	80.3*	41.9	89.0	67.5	56.8	63.8	74.5	115.3	91.9	60.6	<u>85.6</u>
OUTLOOK	70.5	94.7	61.0	63.0	72.3	42.7	87.4	65.0	54.9	62.5	74.3	104.2	86.4	48.4	78.3*
CHOTEAU	77.9	88.6	71.4	74.2	78.0*	37.7	90.0	56.6	59.3	60.9	70.4	103.2	87.4	54.8	78.9*
NORPRO	82.3	94.4	59.0	70.7	76.6*	39.3	92.6	60.6	47.2	59.9	77.8	104.4	90.8	39.1	78.0*
KNUDSON	83.0	93.3	77.9	72.4	81.7*	38.6	84.6	58.2	54.8	59.0	69.2	97.7	82.5	51.3	75.2
AVERAGE	78.9	94.2	69.0	57.2	74.8	40.5	84.9	59.1	54.8	59.8	70.4	98.6	80.4	50.9	75.1
C.V.					13.00					6.40					8.77
LSD (.05)					13.96					5.49					9.44

means followed by an asterisk are not significantly different (at the .05 level) from the highest yielding wheat which is underlined

**2003-2006 GRAIN TEST WEIGHT (LB/BU) SUMMARY FOR VIDA COMPARED TO SELECTED WHEATS GROWN
IN THE ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA**

ID	DISTRICT 5 HAVRE					DISTRICT 5 CONRAD DRY					DISTRICT 6 SIDNEY DRYLAND					DISTRICT 6 SIDNEY IRR				
	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE
	VIDA	56.0	58.6	57.6	53.1	56.3	54.4	60.2	59.1	58.3	58.0	61.1	61.6	61.8	59.1	60.9	62.2	62.7	61.7	58.8
THATCHER	50.5	54.1	56.2	51.0	53.0	52.6	59.8	55.1	57.6	56.3	58.5	58.3	57.5	54.2	57.1	61.4	62.0	59.8	57.3	60.1
FORTUNA	57.1	59.2	58.4	56.5	<u>57.8</u>	57.9	62.9	60.1	60.3	<u>60.3</u>	61.3	61.8	61.5	59.3	61.0	62.1	63.1	60.8	59.5	61.4*
MCNEAL	53.9	57.2	57.4	51.9	55.1	56.9	61.8	58.8	58.9	59.1*	59.8	60.0	61.1	57.3	59.5	62.9	62.4	61.8	57.3	61.1
ERNEST	56.8	59.6	56.9	54.1	56.9*	55.9	62.9	57.1	58.7	58.7	62.1	61.3	62.3	59.5	61.3*	62.6	63.3	61.3	59.0	61.6*
SCHOLAR	57.2	59.4	59.0	55.2	57.7*	56.7	61.1	60.0	59.8	59.4*	60.8	61.3	62.1	59.5	60.9	63.6	63.0	61.5	58.0	61.5*
REEDER	57.4	59.2	58.4	53.9	57.2*	56.3	60.2	59.1	60.0	58.9*	61.3	61.8	63.1	59.7	61.5*	63.0	63.0	62.0	60.8	62.2*
CONAN	56.7	59.7	59.4	54.9	57.6*	54.7	60.2	59.6	59.1	58.4*	61.2	61.5	62.3	59.8	61.2*	62.6	63.0	61.8	56.7	61.0
HANK	56.2	58.3	55.6	53.0	55.8	52.4	59.5	56.7	58.0	56.7	58.2	61.0	60.3	58.3	59.5	61.3	62.7	60.8	56.5	60.3
OUTLOOK	54.3	57.7	58.0	52.0	55.5	54.7	60.2	57.1	56.9	57.2	60.2	61.3	61.0	57.6	60.0	61.8	62.2	60.7	58.3	60.7
CHOTEAU	58.0	58.8	58.4	53.7	57.2*	55.7	63.9	59.1	59.6	59.6*	61.6	61.7	62.7	59.6	61.4*	62.8	62.8	62.0	58.2	61.4*
NORPRO	57.1	58.0	56.1	51.7	55.7	54.5	61.6	55.0	56.8	57.0	62.2	62.0	62.9	59.9	61.8*	62.9	63.3	61.5	60.0	61.9*
KNUDSON	57.1	60.0	57.6	54.6	57.3*	58.3	61.9	59.4	58.9	59.6*	61.3	62.4	63.1	60.5	<u>61.8</u>	63.3	63.7	61.7	60.3	<u>62.3</u>
AVERAGE	56.0	58.5	57.6	53.5	56.4	55.5	61.3	58.2	58.7	58.4	60.8	61.2	61.7	58.8	60.6	62.5	62.9	61.4	58.5	61.3
C.V.					1.70					1.74					0.94					1.09
LSD (.05)					1.37					1.46					0.81					0.96

ID	DISTRICT 3 HUNTLEY DRY					DISTRICT 3 HUNTLEY IRR					DISTRICT 4 MOCCASIN				
	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE
	VIDA	62.0	62.8	52.2	62.8	59.9*	61.6	62.4	61.4	63.4	62.2*	48.9	55.0	54.6	58.3
THATCHER	56.2	61.9	53.3	59.4	57.7	59.8	62.0	60.5	62.9	61.3	46.9	51.9	55.0	55.4	52.3
FORTUNA	60.7	62.4	56.0	62.2	60.3*	61.9	63.5	60.4	63.7	62.4*	50.1	56.9	56.9	60.5	56.1*
MCNEAL	58.6	62.4	54.3	61.1	59.1	61.6	63.4	62.2	63.5	<u>62.7</u>	48.8	55.0	52.9	57.8	53.6
ERNEST	61.0	63.6	55.6	62.7	60.7*	60.9	63.3	61.2	63.4	62.2*	50.8	55.0	56.1	59.2	55.3
SCHOLAR	61.1	61.6	56.5	62.6	60.5*	60.6	63.1	61.8	63.7	62.3*	52.3	57.3	57.6	59.3	<u>56.6</u>
REEDER	62.8	63.8	55.5	62.6	<u>61.2</u>	60.8	63.2	62.0	64.1	62.5*	51.2	56.2	55.5	59.6	55.6*
CONAN	61.8	63.2	53.0	62.1	60.0*	58.6	61.9	61.3	63.2	61.2	51.6	57.0	56.2	59.0	56.0*
HANK	60.3	61.7	52.8	61.0	59.0	60.6	61.0	59.9	62.5	61.0	49.1	53.6	51.8	57.1	52.9
OUTLOOK	59.2	62.4	54.0	61.3	59.2	60.8	61.9	60.9	62.6	61.6	48.2	54.1	53.6	56.0	53.0
CHOTEAU	61.2	62.8	53.5	62.1	59.9*	61.4	63.8	61.0	63.9	62.5*	51.1	57.1	56.3	60.4	56.2*
NORPRO	62.3	63.3	49.7	62.4	59.4*	62.2	63.0	61.2	63.8	62.6*	47.6	54.0	52.0	58.3	53.0
KNUDSON	61.7	62.6	54.4	62.0	60.2*	61.1	62.2	60.9	63.2	61.9*	52.0	56.3	55.0	60.4	55.9*
AVERAGE	60.7	62.7	53.9	61.9	59.8	60.9	62.6	61.1	63.4	62.0	49.9	55.3	54.9	58.6	54.7
C.V.					2.09					0.90					1.61
LSD (.05)					1.79					0.80					1.26

**2003-2006 GRAIN TEST WEIGHT (LB/BU) SUMMARY FOR VIDA COMPARED TO SELECTED WHEATS
GROWN IN THE ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA**

ID	DISTRICT 1 KALISPELL					DISTRICT 2 BOZEMAN DRY					DISTRICT 2 BOZEMAN IRR				
	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE
VIDA	58.6	60.6	56.1	60.6	59.0*	55.2	61.0	59.6	57.5	58.3	58.2	62.2	61.0	57.5	59.7*
THATCHER	56.2	59.4	58.5	57.9	58.0	51.2	59.6	58.6	56.6	56.5	54.3	61.8	56.1	55.4	56.9
FORTUNA	60.0	62.1	61.3	58.3	60.4*	57.5	62.6	61.4	61.7	<u>60.8</u>	60.9	62.7	61.9	60.3	<u>61.5</u>
MCNEAL	55.5	60.9	51.9	58.4	56.7	54.0	60.7	60.9	56.2	58.0	58.0	62.5	61.0	56.2	59.4
ERNEST	58.9	60.7	57.8	61.4	59.7*	56.9	61.3	59.5	60.1	59.5*	59.4	61.1	62.2	57.5	60.1*
SCHOLAR	60.3	61.7	60.2	59.8	<u>60.5</u>	57.2	62.5	60.5	60.1	60.1*	60.2	62.8	61.3	61.3	61.4*
REEDER	59.0	61.6	59.0	60.8	60.1*	54.5	62.8	61.1	62.3	60.2*	58.6	62.7	61.5	60.1	60.7*
CONAN	58.7	61.0	59.4	61.1	60.0*	55.0	60.4	59.5	59.9	58.7	58.3	62.2	60.2	59.3	60.0*
HANK	55.0	59.2	55.7	56.6	56.6	51.7	60.6	58.9	56.0	56.8	57.2	62.4	57.1	56.2	58.2
OUTLOOK	53.9	58.4	54.8	58.6	56.4	52.9	62.0	59.8	56.4	57.8	57.1	61.3	60.5	54.2	58.3
CHOTEAU	57.2	60.1	58.1	61.6	59.3*	54.5	61.5	59.9	58.7	58.7	58.9	61.9	61.6	57.9	60.1*
NORPRO	58.9	61.4	52.2	60.5	58.2*	55.5	63.1	58.6	55.0	58.1	59.2	63.0	59.0	53.2	58.6
KNUDSON	60.0	60.8	57.5	60.9	59.8*	56.3	61.8	60.2	58.9	59.3*	58.8	61.3	61.5	57.0	59.7*
AVERAGE	57.9	60.6	57.1	59.7	58.8	54.8	61.5	59.9	58.4	58.7	58.4	62.2	60.4	57.4	59.6
C.V.					2.67					2.13					2.28
LSD (.05)					2.26					1.79					1.94

means followed by an asterisk are not significantly different (at the .05 level) from the wheat with the highest test weight which is underlined

**2003-2006 HEADING DATE (JULIAN DAYS;170=JUNE 19) SUMMARY FOR VIDA COMPARED TO SELECTED
WHEATS GROWN IN THE ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA**

ID	DISTRICT 5 HAVRE					DISTRICT 5 CONRAD DRY					DISTRICT 6 SIDNEY DRYLAND					DISTRICT 6 SIDNEY IRR				
	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE
VIDA	180	183	178	167	177	183	185	184	178	183	170	174	172	166	171	176	178	172	170	174
THATCHER	184	183	178	168	178	185	186	186	180	184	172	178	173	170	173	180	183	173	173	177
FORTUNA	178	180	175	165	175*	183	183	184	176	182	169	173	171	165	170	175	180	171	170	174
MCNEAL	181	182	178	170	177	183	185	184	178	183	171	176	172	168	172	179	182	173	171	176
ERNEST	177	182	176	167	176	183	184	184	177	182	170	174	171	167	170	175	178	171	170	174
SCHOLAR	180	182	179	170	178	184	186	184	179	183	171	175	172	168	172	179	179	173	172	176
REEDER	179	182	176	166	176	180	185	183	176	181*	168	173	171	165	169	174	179	172	169	174
CONAN	180	180	177	166	176	181	185	184	175	181*	168	171	171	166	169	176	178	172	170	174
HANK	177	179	175	164	<u>174</u>	180	183	183	175	<u>180</u>	167	170	170	163	<u>167</u>	173	173	172	166	<u>171</u>
OUTLOOK	180	182	178	170	177	183	186	185	179	183	171	176	173	169	173	179	179	173	172	176
CHOTEAU	179	182	176	166	176	181	185	183	177	182	169	173	172	166	170	174	179	171	170	174
NORPRO	178	182	176	165	175	181	185	184	176	182	169	173	172	166	170	174	178	172	169	173
KNUDSON	180	182	178	166	176	183	185	185	178	183	170	174	172	165	170	176	179	172	169	174
AVERAGE	179	182	177	167	176	182	185	184	177	182	170	174	172	167	170	176	179	172	170	174
C.V.					0.98					0.43					0.41					0.69
LSD (.05)					1.42					1.19					1.01					1.73

ID	DISTRICT 3 HUNTLEY DRY					DISTRICT 3 HUNTLEY IRR					DISTRICT 4 MOCCASIN				
	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE
VIDA	166	158	171	158	163*	166	160	170	158	164	183	186	183	173	181
THATCHER	168	161	173	157	165	168	166	171	158	166	186	189	187	176	184
FORTUNA	166	158	171	156	163*	166	160	170	156	163*	183	185	183	171	180
MCNEAL	167	160	171	159	164	167	161	169	160	164	184	186	184	174	182
ERNEST	166	160	172	156	164*	166	161	169	157	163*	182	185	183	172	181
SCHOLAR	167	159	171	157	164*	167	161	170	158	164	183	186	184	174	182
REEDER	165	158	169	157	163*	164	159	167	157	<u>162</u>	183	185	182	171	180
CONAN	165	157	169	159	163*	165	159	167	157	162*	182	184	182	171	180
HANK	164	158	169	159	<u>163</u>	163	160	167	158	162*	181	182	181	171	<u>179</u>
OUTLOOK	167	160	172	160	165	167	164	171	163	166	184	186	185	175	183
CHOTEAU	165	158	170	158	163*	167	161	169	158	164	183	184	182	172	180
NORPRO	167	159	171	159	164*	166	161	170	160	164	183	184	183	170	180
KNUDSON	167	159	171	159	164	166	162	170	158	164	183	185	184	173	181
AVERAGE	166	159	171	158	163	166	161	169	158	164	183	185	183	173	181
C.V.					0.61					0.58					0.30
LSD (.05)					1.43					1.37					0.79

2003-2006 HEADING DATE (JULIAN DAYS;170=JUNE 19) SUMMARY FOR VIDA COMPARED TO SELECTED WHEATS GROWN IN THE ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA

ID	DISTRICT 1 KALISPELL					DISTRICT 2 BOZEMAN DRY					DISTRICT 2 BOZEMAN IRR				
	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE
VIDA	173	169	176	180	175	184	183	186	177	183	181	184	185	176	182
THATCHER	177	174	180	184	179	187	184	188	179	185	183	183	187	179	183
FORTUNA	173	168	176	180	174	184	181	184	176	181*	181	180	185	176	181
MCNEAL	173	169	177	180	175	187	183	187	177	184	182	182	186	177	182
ERNEST	174	171	177	179	175	183	182	185	176	182	180	182	185	176	181
SCHOLAR	174	170	178	181	176	186	183	187	177	183	181	183	187	177	182
REEDER	173	168	174	178	173*	184	181	183	173	<u>180</u>	180	181	184	176	180*
CONAN	171	166	175	179	173*	184	181	185	175	181*	179	180	185	176	180*
HANK	170	166	175	178	<u>173</u>	182	182	184	174	181*	180	179	184	174	<u>179</u>
OUTLOOK	175	171	179	181	177	188	183	188	178	184	183	183	187	178	183
CHOTEAU	172	168	176	179	174	183	182	184	176	181*	179	180	184	176	180*
NORPRO	173	168	176	179	174	184	182	185	176	182	180	181	184	176	180*
KNUDSON	173	169	176	179	174	184	182	187	176	182	180	181	187	177	181
AVERAGE	173	169	177	180	175	185	182	186	176	182	181	181	185	176	181
C.V.					0.35					0.43					0.41
LSD (.05)					0.87					1.13					1.08

means followed by an asterisk are not significantly different (at the .05 level) from the earliest heading wheat which is underlined

**2003-2006 PLANT HEIGHT (INCHES) SUMMARY FOR VIDA COMPARED TO SELECTED WHEATS GROWN IN THE
ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA**

ID	DISTRICT 5 HAVRE					DISTRICT 5 CONRAD DRY					DISTRICT 6 SIDNEY DRYLAND					DISTRICT 6 SIDNEY IRR				
	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE
VIDA	22.6	31.2	33.2	26.9	28.5	33.0	35.0	32.0	34.0	33.5	33.2	30.7	28.2	30.2	30.6	38.5	34.7	27.6	30.7	32.9
THATCHER	24.4	36.6	38.1	31.3	<u>32.6</u>	43.0	42.0	43.0	43.0	<u>42.8</u>	39.9	39.3	36.6	38.8	<u>38.7</u>	45.9	41.9	39.2	39.6	<u>41.7</u>
FORTUNA	23.4	34.0	34.5	27.9	29.9	41.0	38.0	42.0	42.0	40.8	39.0	37.0	32.6	34.2	35.7	42.3	38.2	34.4	35.4	37.6
MCNEAL	21.8	29.7	28.1	24.2	25.9	34.0	34.0	33.0	33.0	33.5	33.2	31.0	28.7	30.6	30.9	39.0	33.2	33.7	30.5	34.1
ERNEST	24.2	33.0	34.8	28.5	30.1	39.0	39.0	38.0	39.0	38.8	37.3	33.7	32.4	35.2	34.6	43.1	37.6	37.8	36.3	38.7
SCHOLAR	22.7	30.8	34.2	26.3	28.5	40.0	38.0	37.0	38.0	38.3	36.9	35.0	31.6	34.5	34.5	41.1	31.9	37.2	36.0	36.5
REEDER	21.3	31.1	30.5	25.4	27.1	34.0	37.0	35.0	35.0	35.3	33.4	32.7	30.0	28.2	31.1	40.5	35.4	31.2	30.2	34.3
CONAN	20.5	30.4	29.1	21.7	25.4	30.0	34.0	30.0	33.0	31.8	30.7	29.5	25.1	27.0	28.1	36.0	31.9	27.5	29.1	31.1
HANK	19.2	28.6	29.5	23.8	25.2	33.0	34.0	32.0	33.0	33.0	30.1	29.7	26.8	27.6	28.6	36.5	28.3	28.5	27.5	30.2
OUTLOOK	21.2	29.9	28.9	26.1	26.5	32.0	34.0	34.0	34.0	33.5	34.3	32.0	28.2	30.0	31.1	38.4	32.0	35.2	30.8	34.1
CHOTEAU	19.7	28.5	28.3	26.0	25.6	33.0	34.0	32.0	33.0	33.0	31.2	29.1	25.6	28.7	28.7	35.9	28.9	29.0	28.8	30.7
NORPRO	20.0	28.0	28.8	24.6	25.3	30.0	29.0	31.0	29.0	29.8	29.9	30.0	25.8	27.7	28.4	34.3	29.3	29.6	27.5	30.2
KNUDSON	19.9	29.2	28.4	24.9	25.6	33.0	35.0	35.0	31.0	33.5	31.3	30.3	25.8	28.2	28.9	37.1	32.0	30.6	28.4	32.0
AVERAGE	21.6	30.8	31.2	26.0	27.4	35.0	35.6	34.9	35.2	35.2	33.9	32.3	29.0	30.8	31.5	39.1	33.5	32.4	31.6	34.2
C.V.					4.07					3.59					2.65					4.63
LSD (.05)					1.60					1.81					1.20					2.27

ID	DISTRICT 3 HUNTLEY DRY					DISTRICT 3 HUNTLEY IRR					DISTRICT 4 MOCCASIN				
	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE
VIDA	29.8	21.5	38.9	32.6	30.7	34.6	40.8	45.1	39.8	40.1	25.3	33.5	29.5	34.7	30.7
THATCHER	37.2	27.9	44.4	43.0	<u>38.1</u>	45.1	53.1	49.4	50.5	<u>49.5</u>	25.3	38.0	32.6	43.8	34.9*
FORTUNA	32.5	24.5	43.2	38.9	34.8	38.1	44.7	45.2	45.6	43.4	27.3	37.7	38.7	39.8	<u>35.9</u>
MCNEAL	29.8	24.9	38.4	34.7	31.9	35.1	40.9	41.8	40.2	39.5	25.0	37.5	30.7	36.0	32.3
ERNEST	34.0	26.3	41.2	39.0	35.1	38.6	48.5	49.3	44.6	45.3	26.0	39.3	34.6	39.0	34.7*
SCHOLAR	34.3	24.3	42.3	36.6	34.4	37.7	45.8	46.6	45.7	44.0	26.7	36.4	33.5	38.1	33.7*
REEDER	30.4	20.1	37.5	31.3	29.8	35.5	44.8	44.5	41.3	41.5	25.7	32.5	32.3	33.8	31.1
CONAN	28.6	20.9	34.3	29.3	28.3	29.1	39.3	39.4	35.0	35.7	23.3	31.9	26.5	32.8	28.6
HANK	28.8	20.3	33.9	30.7	28.4	30.4	39.1	38.8	35.8	36.0	26.0	32.9	28.4	33.1	30.1
OUTLOOK	30.8	24.1	37.8	32.9	31.4	36.1	44.1	43.7	40.5	41.1	24.3	32.5	28.7	33.6	29.8
CHOTEAU	28.6	19.8	34.4	31.3	28.5	33.2	39.9	40.5	36.3	37.5	22.7	32.5	29.5	34.6	29.8
NORPRO	29.1	21.6	34.3	30.1	28.8	32.1	40.7	40.4	36.2	37.4	24.0	29.9	28.3	33.4	28.9
KNUDSON	30.5	21.2	36.4	30.9	29.8	34.5	41.0	42.3	35.7	38.4	24.3	33.8	32.1	33.3	30.9
AVERAGE	31.1	22.9	38.2	33.9	31.5	35.4	43.3	43.6	40.6	40.7	25.1	34.5	31.2	35.9	31.7
C.V.					4.08					3.16					5.40
LSD (.05)					1.84					1.85					2.45

**2003-2006 PLANT HEIGHT (INCHES) SUMMARY FOR VIDA COMPARED TO SELECTED WHEATS GROWN IN THE
ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA**

ID	DISTRICT 1 KALISPELL					DISTRICT 2 BOZEMAN DRY					DISTRICT 2 BOZEMAN IRR				
	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE
VIDA	33.6	37.7	33.9	38.2	35.8	29.2	36.9	34.3	33.1	33.4	33.2	38.1	37.6	32.1	35.2
THATCHER	44.6	47.9	43.2	47.5	<u>45.8</u>	37.1	49.6	42.2	44.0	<u>43.2</u>	41.6	46.6	46.3	43.5	<u>44.5</u>
FORTUNA	39.8	45.3	38.9	46.3	42.6	36.6	44.7	38.7	38.2	39.6	40.2	43.1	41.8	38.0	40.8
MCNEAL	31.8	36.8	31.0	39.9	34.9	29.6	36.5	32.4	31.5	32.5	33.1	39.7	38.8	31.4	35.8
ERNEST	39.1	40.1	38.7	44.9	40.7	33.1	42.9	39.6	39.4	38.8	37.8	45.8	44.1	37.4	41.3
SCHOLAR	37.3	39.2	39.3	42.8	39.7	32.8	42.0	38.4	37.4	37.7	35.7	42.7	42.6	37.7	39.7
REEDER	35.2	37.6	35.4	39.1	36.8	30.7	39.2	34.2	33.7	34.5	35.1	40.1	39.6	32.9	36.9
CONAN	32.2	34.8	33.5	35.7	34.0	27.3	36.4	30.5	29.9	31.0	32.0	36.1	34.3	29.7	33.0
HANK	31.0	34.1	31.1	37.5	33.4	28.0	34.5	30.9	29.2	30.6	31.5	33.5	34.1	29.4	32.1
OUTLOOK	32.9	36.6	32.4	38.2	35.0	29.4	36.5	33.2	32.2	32.8	32.8	40.6	38.1	32.9	36.1
CHOTEAU	31.4	35.4	30.7	36.6	33.5	28.6	35.1	32.4	30.6	31.7	31.7	36.4	36.9	29.9	33.7
NORPRO	31.3	34.7	30.7	35.7	33.1	27.7	33.2	30.7	29.3	30.3	31.6	34.8	34.2	29.6	32.5
KNUDSON	32.7	35.3	32.7	37.9	34.6	28.5	36.1	33.4	32.1	32.5	32.0	37.9	37.8	32.0	34.9
AVERAGE	34.8	38.1	34.7	40.0	36.9	30.7	38.7	34.7	33.9	34.5	34.5	39.7	38.9	33.6	36.7
C.V.					2.83					2.94					2.92
LSD (.05)					1.50					1.46					1.53

means followed by an asterisk are not significantly different (at the .05 level) from the tallest wheat which is underlined

**2003-2006 GRAIN PROTEIN (%) SUMMARY FOR VIDA COMPARED TO SELECTED WHEATS GROWN IN THE
ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA**

ID	DISTRICT 5 HAVRE					DISTRICT 5 CONRAD DRY					DISTRICT 6 SIDNEY DRYLAND					DISTRICT 6 SIDNEY IRR				
	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE
VIDA	18.4	15.7	13.4	17.9	16.3	16.9	10.2	14.7	13.9	13.9	14.2	14.0	11.1	13.0	13.1	16.0	13.1	11.3	13.6	13.5
THATCHER	20.3	18.0	14.2	18.7	<u>17.8</u>	18.5	10.9	16.3	13.9	14.9*	15.4	16.0	11.3	14.3	14.3*	16.8	12.1	11.0	14.7	13.7
FORTUNA	18.6	15.8	13.0	16.5	16.0	16.8	10.3	14.5	13.6	13.8	14.5	14.3	12.0	13.2	13.5	16.7	13.5	12.0	13.9	14.0
MCNEAL	19.1	17.2	14.2	18.0	17.1	16.7	11.2	14.7	13.1	13.9	15.0	14.2	12.1	13.7	13.8	16.7	12.9	11.4	13.3	13.6
ERNEST	19.7	16.9	13.1	18.7	17.1	18.7	11.5	16.7	13.4	<u>15.1</u>	16.4	15.1	12.1	14.0	14.4*	17.5	13.7	12.3	14.3	14.5*
SCHOLAR	19.4	17.2	15.3	18.5	17.6*	18.1	12.0	15.9	13.5	14.9*	17.5	15.7	11.9	14.0	<u>14.8</u>	16.5	15.6	14.8	13.8	<u>15.2</u>
REEDER	18.3	16.6	13.4	17.2	16.4	17.1	10.9	15.3	13.9	14.3	14.6	13.4	12.9	13.9	13.7	16.8	14.6	12.5	14.0	14.5*
CONAN	18.2	16.4	13.7	18.0	16.6	17.7	11.7	15.2	13.8	14.6*	14.8	14.2	12.0	13.8	13.7	15.6	14.5	12.1	13.7	14.0
HANK	19.0	16.6	14.4	17.7	16.9	18.3	10.9	15.3	14.2	14.7*	15.1	14.0	11.5	12.8	13.4	15.5	14.3	11.4	14.4	13.9
OUTLOOK	18.4	15.7	12.7	18.4	16.3	17.5	11.7	14.9	13.9	14.5*	14.2	13.8	12.3	12.9	13.3	16.4	14.2	11.9	13.1	13.9
CHOTEAU	18.6	16.5	12.9	17.8	16.4	17.4	10.8	15.3	13.7	14.3	15.3	15.5	11.7	14.1	14.2*	15.8	14.2	11.2	13.6	13.7
NORPRO	18.0	15.8	12.7	17.5	16.0	17.2	10.5	15.2	13.2	14.0	14.9	15.9	11.5	13.5	14.0*	15.0	14.5	11.2	12.9	13.4
KNUDSON	19.2	16.9	14.4	17.6	17.0	16.9	10.4	14.7	12.9	13.7	15.7	15.6	11.5	13.5	14.1*	15.0	13.3	11.9	13.1	13.3
AVERAGE	18.9	16.6	13.7	17.9	16.7	17.5	11.0	15.3	13.6	14.4	15.2	14.8	11.8	13.6	13.8	16.2	13.9	11.9	13.7	13.9
C.V.					2.73					3.02					4.57					5.23
LSD (.05)					0.66					0.62					0.91					1.04

ID	DISTRICT 3 HUNTLEY DRY					DISTRICT 3 HUNTLEY IRR					DISTRICT 4 MOCCASIN				
	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE
VIDA	12.5	13.2	15.3	12.7	13.4	15.6	13.5	11.8	11.0	13.0	20.3	16.7	15.9	13.5	16.6
THATCHER	12.2	11.6	16.7	12.7	13.3	16.9	14.5	12.1	11.8	<u>13.8</u>	20.5	19.2	18.1	14.8	<u>18.2</u>
FORTUNA	13.0	11.8	15.4	13.5	13.4	15.6	13.4	13.7	11.9	13.7*	20.0	17.8	17.4	14.1	17.3*
MCNEAL	11.8	12.2	15.8	13.1	13.2	14.8	13.2	11.4	12.1	12.9	20.3	17.2	18.3	14.4	17.6*
ERNEST	13.8	13.0	16.4	13.2	14.1	15.7	13.6	12.4	12.4	13.5*	19.9	18.1	17.0	14.0	17.2*
SCHOLAR	12.6	11.6	15.4	13.2	13.2	16.3	13.9	12.2	12.8	13.8*	20.0	18.3	16.1	14.1	17.1
REEDER	12.3	12.2	14.7	14.4	13.4	15.9	13.9	12.6	12.1	13.6*	19.8	18.4	16.7	14.6	17.4*
CONAN	14.0	13.0	15.5	13.8	14.1	16.0	13.9	12.4	12.3	13.7*	19.6	16.6	16.0	14.0	16.6
HANK	13.1	14.9	14.9	12.8	13.9	14.6	13.2	12.2	12.1	13.0*	19.7	18.6	16.1	13.6	17.0
OUTLOOK	12.4	12.1	15.1	12.6	13.1	14.1	13.0	11.2	10.7	12.3	20.2	17.0	17.9	15.3	17.6*
CHOTEAU	12.9	14.8	15.2	14.2	<u>14.3</u>	15.4	13.2	12.4	11.7	13.2*	19.8	16.5	15.2	12.8	16.1
NORPRO	11.4	11.6	15.0	12.7	12.7	15.3	13.3	10.9	13.2	13.2*	19.7	16.8	16.8	12.8	16.5
KNUDSON	13.3	13.6	14.2	13.5	13.7	16.6	12.7	11.5	12.3	13.3*	18.2	17.7	17.9	14.0	17.0
AVERAGE	12.7	12.7	15.4	13.3	13.5	15.6	13.5	12.1	12.0	13.3	19.8	17.6	16.9	14.0	17.1
C.V.					5.71					4.34					3.92
LSD (.05)					1.11 ns					0.83					0.96

**2003-2006 GRAIN PROTEIN (%) SUMMARY FOR VIDA COMPARED TO SELECTED WHEATS
GROWN IN THE ADVANCED SPRING WHEAT NURSERY ACROSS MONTANA**

ID	DISTRICT 1 KALISPELL					DISTRICT 2 BOZEMAN DRY					DISTRICT 2 BOZEMAN IRR				
	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE	2003	2004	2005	2006	AVE
VIDA	14.3	14.7	14.0	16.4	14.9	18.2	15.0	13.8	14.6	15.4*	16.4	15.2	14.6	14.2	15.1*
THATCHER	17.0	14.9	11.8	15.4	14.8	20.0	15.3	14.2	15.3	<u>16.2</u>	18.1	13.4	15.0	15.0	15.4*
FORTUNA	15.9	15.1	12.0	16.8	15.0	18.4	13.5	13.9	14.3	15.0	16.4	14.6	15.0	13.5	14.9*
MCNEAL	15.5	15.2	12.9	16.4	15.0	18.5	14.8	13.3	14.5	15.3*	16.7	13.2	15.3	14.0	14.8*
ERNEST	17.0	13.8	12.9	16.3	15.0	18.5	15.6	14.8	14.9	16.0*	17.3	14.3	15.5	14.8	15.5*
SCHOLAR	16.3	15.1	13.1	18.2	<u>15.7</u>	19.2	14.5	14.5	15.5	15.9*	17.5	14.1	15.8	15.1	<u>15.6</u>
REEDER	16.0	14.3	13.5	16.4	15.1	18.7	13.5	14.5	15.1	15.5*	17.3	13.5	15.3	14.4	15.1*
CONAN	15.7	14.8	13.0	15.1	14.7	18.9	15.4	14.0	14.9	15.8*	17.1	14.7	14.5	14.8	15.3*
HANK	15.9	14.9	12.4	15.5	14.7	19.6	12.8	13.9	14.7	15.3	16.7	13.8	14.5	14.8	15.0*
OUTLOOK	16.8	15.2	12.1	15.0	14.8	18.4	11.5	13.8	14.0	14.4	16.3	12.4	14.3	13.7	14.2
CHOTEAU	17.2	14.3	13.2	16.0	15.2	18.8	14.5	14.2	15.5	15.8*	17.3	12.6	14.8	15.0	14.9*
NORPRO	15.7	14.1	13.0	17.5	15.1	18.2	13.1	13.5	15.9	15.2	16.0	13.5	14.7	15.5	14.9*
KNUDSON	15.5	14.0	11.5	14.7	13.9	18.4	13.8	13.5	14.5	15.1	16.2	13.2	13.7	13.3	14.1
AVERAGE	16.1	14.7	12.7	16.1	14.9	18.8	14.1	14.0	14.9	15.4	16.9	13.7	14.9	14.5	15.0
C.V.					5.19					4.26					3.91
LSD (.05)					1.11 ns					0.94					0.84

means followed by an asterisk are not significantly different (at the .05 level) from the wheat with the highest grain protein which is underlined

**2003-2006 STEM SOLID RATINGS (5=HOLLOW,25=VERY SOLID) FROM THE
ADVANCED SPRING WHEAT NURSERY GROWN AT BOZEMAN**

	2003		2004		2005		2006	
PEDIGREE	DRY	IRR	DRY	IRR	DRY	IRR	DRY	IRR
MCNEAL	6.5	6.4	6.8	5.7	7.3	6.1	6.7	6.8
THATCHER	9.8	6.5	7.4	5.4	9.8	8.9	7.3	7.1
FORTUNA	19.8	18.3	19.7	18.6	18.5	13.3	18.7	16.3
ERNEST	16.3	17.2	18.3	12.2	18.8	11.4	14.3	17.2
SCHOLAR	14.9	13.6	12.8	13.0	16.4	9.4	14.1	10.5
CONAN	13.5	9.5	10.6	8.6	9.0	7.5	10.4	9.3
REEDER	6.6	6.9	6.8	5.1	6.9	5.3	6.5	6.2
OUTLOOK	8.3	7.3	7.0	5.7	7.3	6.6	7.8	6.6
CHOTEAU	23.9	21.7	20.8	21.9	18.5	19.7	21.7	20.9
HANK	9.0	7.5	8.2	6.9	8.4	7.5	8.1	7.3
VIDA	13.0	12.1	11.1	8.1	16.1	9.4	13.9	8.1

**2004-2006 SAWFLY DAMAGE RATINGS FROM SOME SPRING WHEAT NURSERIES
GROWN IN NORTH-CENTRAL MONTANA**

VARIETY	2004 TURNER	2004 LORING	2005 TURNER	2005 LORING	2005 No. of Havre	2006 Havre	2006 Turner	2006 Loring	2006 No. Havre
	(% STEMS CUT)	(% STEMS CUT)	(% STEMS CUT)	(% STEMS CUT)	(% STEMS CUT)	(% STEMS CUT)	(% STEMS CUT)	(% STEMS CUT)	(% STEMS CUT)
MCNEAL	43.3	63.3	16.67	88.3	71.7	14.5	73.3	71.67	7.0
FORTUNA	11.7	20.0	5.0	30.0	21.7	3.1	23.3	8.33	1.0
ERNEST	20.0	45.0	5.0	40.0	28.3	4.0	21.67	15.0	1.0
SCHOLAR	36.7	78.3	10.0	40.0	61.7	13.3	60.0	63.3	6.67
Conan	15.0	16.7	5.0	35.0	26.7	1.2	26.67	13.3	1.0
Reeder	28.3	68.3	5.0	33.3	65.0	7.6	81.67	55.0	15.0
OUTLOOK	31.7	66.7	8.3	38.3	63.3	15.7	81.67	68.3	7.0
CHOTEAU	15.0	28.3	5.0	26.7	8.3	.8	21.67	5.0	.67
HANK	36.7	86.7	6.7	31.7	60.0	9.8	78.3	63.3	8.33
VIDA	18.3	20	0	33.3	28.3	4.4	53.3	23.3	4.00

**2003-2006 MILLING AND BAKING SUMMARY FOR VIDA COMPARED TO SELECTED WHEATS IN THE ADVANCED SPRING
WHEAT NURSERY GROWN ACROSS MONTANA (12 LOCATION MEANS)**

VARIETY	GRAIN PROTEIN (%)	FLOUR PROTEIN (%)	FLOUR YIELD (%)	FLOUR ASH (%)	MIXOGRAPH TOLERANCE	MIXOGRAPH TIME (MIN.)	MIXOGRAPH WATER ABS. (%)	BAKE MIX TIME (MIN.)	BAKE WATER ABS. (%)	LOAF VOLUME (CC.)	CRUMB GRAIN SCORE
VIDA	15.1	13.2	68.9	0.42	3.6	3.4	63.4	4.9	73.2	1153	3.4
THATCHER	16.2	14.0	64.3	0.45	4.8	4.0	64.4	7.7	75.1	1196	3.8
FORTUNA	15.5	13.5	68.6	0.45	3.6	3.4	63.0	4.9	72.6	1131	3.8
MCNEAL	15.8	13.8	64.5	0.44	6.1	6.5	64.4	10.9	77.0	1228	3.2
ERNEST	15.8	13.9	68.1	0.42	5.2	4.1	64.0	9.1	74.2	1203	3.9
SCHOLAR	16.2	14.0	68.3	0.45	4.5	3.3	64.5	5.1	73.7	1165	3.2
Reeder	15.6	13.9	66.5	0.39	3.7	3.2	62.2	4.2	72.3	1115	3.2
Conan	15.3	13.2	65.5	0.42	4.8	4.9	63.0	7.9	74.0	1174	3.9
HANK	15.4	13.6	66.8	0.43	4.8	5.9	63.3	9.1	74.1	1189	3.6
OUTLOOK	15.2	13.4	67.0	0.44	5.1	4.2	63.2	5.8	73.1	1159	3.6
CHOTEAU	15.1	13.5	66.4	0.39	4.6	3.4	63.5	5.5	73.2	1154	3.6
NORPRO	15.1	13.1	63.1	0.45	4.8	3.8	63.8	6.3	74.7	1124	3.7
KNUDSON	15.5	13.7	67.0	0.46	6.5	7.2	67.0	18.8	80.8	1141	3.4
NURSERY AVERAGE	15.4	13.5	67.0	0.43	4.7	4.5	63.7	7.8	74.3	1158	3.6

