

PROJECT TITLE: Statewide Spring Wheat Variety Performance

PROJECT LEADER: L. Talbert - Bozeman

PROJECT PERSONNEL:

D.M. Wichman - CARC, Moccasin  
J.L.A. Eckhoff - EARC, Sidney  
G.R. Carlson - NARC, Havre  
R. Stougaard - NWARC, Kalispell  
G.F. Stallknecht - SARC, Huntley  
G.D. Kushnak - WTARC, Conrad

OBJECTIVE:

To evaluate new and existing varieties and lines of spring wheat under various Montana conditions.

RESULTS:

The 1992 Advanced Yield Spring Wheat trial was grown at seven rainfed and three irrigated locations across Montana. Kalispell and Conrad were considered high rainfall areas. Replicated multiple-row plots were established at all locations using standard research techniques.

Yield, test weight, heading date and plant height at maturity are summarized in Tables 1, 2, 3 and 4 respectively. Conrad nurseries were hailed out before any data were collected. Havre nurseries were also hailed out, but heading and plant height data were collected before the nurseries were lost. Heading and plant height data only were collected from the Bozeman irrigated site.

Rainfall was high at the Sidney and Huntley sites, while temperatures during the growing season were moderate, resulting in exceptionally high yields at both locations. A very cool and very wet June and July at Kalispell resulted in lower yields and test weights than normally achieved at that location. Trials at Moccasin suffered severe drought until the middle of June. Above average precipitation fell throughout the rest of the growing season, resulting in good yields. The trial was sprayed for Russian wheat aphids twice during the growing season at Moccasin.

SUMMARY:

The highest yielding varieties on a statewide average were soft white wheats BZ684-23, Penewawa, and Owens. BZ684-23 was the highest or nearly highest yielding variety at all locations that were harvested.

FUTURE PLANS:

New and existing varieties and experimental lines will continue to be evaluated at various sites in Montana so that breeders can release improved varieties and producers can have information on the varieties best adapted to conditions in their areas.

Table 1.

1992 YIELD (BU/AC) SUMMARY FOR THE  
ADVANCED SPRING WHEAT NURSERY GROWN  
ACROSS MONTANA

ID	PEDIGREE	Boze		Sidney		Kalis	Mocc	Huntley		AVG	BYX	RSQ
		dry	irr	dry	irr	dry	dry	dry	irr			
BZ684-23	BZ684-23	117.97	90.69	113.00	108.16	64.95	97.26	106.98	99.90	0.88	0.91	
BZ984326	WPB BZ 964-326	93.31	65.51	64.43	80.11	32.60	79.55	78.35	73.40	0.98	0.93	
C982-324	RAMBO	100.03	64.96	97.17	84.42	42.66	71.31	73.75	79.20	0.96	0.93	
CI 10003	THATCHER	76.06	74.46	76.50	86.24	44.47	69.88	74.71	71.80	0.61	0.83	
CI 13596	FORTUNA	92.40	66.26	75.73	81.39	27.49	81.17	68.45	70.40	1.03	0.92	
CI 15930	OLAF	103.14	71.18	86.20	80.58	25.16	70.12	73.58	72.90	1.22	0.97	
CI 17429	LEW	96.21	81.30	64.53	85.41	46.40	50.72	59.67	73.50	0.81	0.77	
CI 17430	NEWANA	102.79	93.04	107.23	87.15	43.16	82.84	76.99	84.70	1.04	0.90	
CI 17790	LEN	96.32	76.69	90.60	86.90	29.75	68.11	58.87	72.50	1.15	0.95	
CI 17828	PONDERA	100.89	77.00	95.23	93.37	44.86	79.92	81.82	61.90	0.95	0.99	
CI 17904	OWENS	109.01	85.92	114.00	112.11	53.06	93.27	88.65	93.70	1.06	0.93	
FA982220	FA 982-220	94.50	79.87	111.73	91.76	48.28	72.17	81.12	82.80	0.93	0.82	
MT 8402	HI-LINE	108.58	74.96	92.37	88.53	42.18	88.40	77.04	81.70	1.03	0.94	
MT 8849	RS6880/MT7819	91.48	89.66	100.30	100.65	53.16	86.55	69.63	84.50	0.80	0.80	
MT 9002	EP-VOC-512/12/BUTTE	91.92	74.33	97.00	104.80	29.47	60.39	94.26	81.70	1.19	0.84	
MT 9030	PONDERA/BUTTE	94.52	74.31	59.60	82.53	33.17	83.87	77.62	72.20	0.84	0.65	
MT 9109	GUARD//KRONSTAD'S-GALLO/MT8184	101.46	81.96	96.67	93.70	36.43	71.88	67.76	78.60	1.13	0.95	
MT 9113	PEWEE'S SCH-31630/MT8065	107.83	89.93	100.10	93.79	35.91	75.02	78.75	83.00	1.20	0.96	
MT 9115	CNO7C/4/KAL/BB/2/PCIS/3/MT8179	111.75	61.22	95.23	87.49	47.46	61.58	79.25	83.40	0.97	0.94	
MT 9117	MT8190/4/CNO17C//KAL/BB/3/PCIS	100.55	86.50	102.90	76.12	30.28	78.73	66.16	77.30	1.18	0.87	
MT 9118	MT8190/4/CNO17C//KAL/BB/3/PCIS	101.98	85.80	95.43	83.49	37.76	74.36	56.64	76.50	1.07	0.85	
MT 9121	MT8043//SELCL/74-130-7	101.71	75.64	92.07	93.99	49.67	87.64	75.25	82.30	0.86	0.93	
MT 9122	MT8043//SELCL/74-130-7	103.97	64.10	90.83	90.11	36.75	76.60	70.49	76.10	1.10	0.94	
MT 9126	ALEX/MT7881	103.71	92.77	91.67	95.54	52.43	61.60	69.52	83.90	0.84	0.85	
MT 9127	ALEX/MT7881	109.74	85.09	94.00	93.73	37.79	85.18	82.81	84.00	1.14	0.98	
MT 9129	ALEX/MT7881	101.71	80.45	105.67	94.77	34.80	80.31	80.09	82.50	1.20	0.97	
MT 9131	LEN/MT7819	88.11	78.21	93.40	89.24	42.07	77.80	69.30	76.90	0.87	0.94	
MT 9132	LEN/MT7819	98.08	75.92	94.13	94.52	36.33	74.12	52.05	75.00	1.11	0.84	
MT 9137	LEN/MT7819	103.88	79.84	92.30	79.72	36.95	73.18	64.18	75.70	1.06	0.92	
MT 9150	MT7810/3/BW559//TOB66/CNOII-24908	99.86	61.62	95.17	91.34	47.39	84.53	83.37	83.30	0.88	0.99	
MT 9151	MT7926//PI428419/BW559	95.91	72.73	80.27	96.49	36.50	78.03	71.17	75.90	1.00	0.92	
MT 9153	BW574//NEWANA/FORTUNA	94.22	86.53	89.63	96.12	40.15	78.13	73.50	79.80	0.96	0.94	
MT 9154	BW574//NEWANA/FORTUNA	89.47	69.90	74.60	88.99	30.16	75.95	82.20	73.10	0.97	0.86	
MT 9157	BW574//NEWANA/FORTUNA	96.70	69.34	68.33	81.42	40.74	74.01	68.29	69.80	0.70	0.86	
MT 9158	MEISEL2315/LEADER	96.61	86.26	95.53	85.70	47.13	76.90	73.83	80.30	0.85	0.95	
MT 9159	NK715/BW559	85.26	71.18	72.97	84.19	44.58	74.26	75.16	72.50	0.66	0.90	
MT 9160	FORTUNA/MN70170	82.26	62.22	70.97	78.91	28.99	67.93	72.19	65.20	0.88	0.92	
MT 9161	FORTUNA/MN70170	82.96	65.39	76.53	76.27	33.24	64.61	66.77	66.50	0.83	0.99	
MT 9162	MT7836/LEADER	96.77	67.66	84.60	83.51	43.36	91.59	89.53	79.60	0.82	0.75	
ND 582	STOR	101.97	89.48	100.70	107.06	40.38	79.12	83.13	86.00	1.13	0.94	
ND 606	AMIDON	103.08	84.01	107.90	98.17	38.61	76.22	74.61	83.20	1.19	0.95	
ND	CUT CUTLESS	85.67	63.87	86.50	61.72	28.81	70.59	70.74	69.60	1.01	0.97	
PH986-61	PH 986-61	112.42	75.26	103.57	88.27	31.31	78.43	97.86	83.90	1.30	0.89	
PI483235	GLENMAN	102.09	93.29	98.33	92.75	47.16	76.43	74.48	83.50	0.94	0.91	
PI486139	KLASIC	102.85	66.31	83.73	81.44	35.43	83.19	82.40	76.50	1.01	0.67	
SWP-9521	SWP-9521	112.93	76.72	97.63	102.51	41.44	88.55	95.34	87.90	1.16	0.92	
TR983239	TR 983-239	100.51	70.77	97.33	88.18	26.28	78.89	85.64	78.20	1.26	0.95	
WA 6520	PENAWANA	110.15	101.38	119.17	108.29	52.75	86.90	101.78	97.20	1.07	0.89	
WB 926	WESTBRED 926	103.32	71.79	98.63	77.37	31.68	77.22	74.45	76.40	1.16	0.94	
*****	SITE MEAN *****	98.94	78.44	92.50	89.98	39.64	78.47	76.53	79.20	1.09	1.00	

Table 2. 1992 TEST WEIGHT (LB/BU) SUMMARY FOR THE ADVANCED SPRING WHEAT NURSERY GROWN ACROSS MONTANA

ID	PEDIGREE								AVG	BYX	RSQ
		Boze dry	Sidney dry	Sidney irr	Kalis dry	Mocc dry	Huntley				
BZ684-23	BZ684-23	59.00	59.32	59.33	59.25	61.94	60.00	59.70	59.80	1.05	0.58
BZ984326	WPB BZ 984-326	62.00	60.98	61.50	60.09	62.45	59.70	60.40	61.00	0.59	0.18
C982-324	RAMBO	57.00	61.49	61.33	59.99	61.33	59.30	59.70	60.00	1.77	0.65
CI 10003	THATCHER	58.40	59.25	59.33	59.15	61.56	60.30	60.90	59.80	1.11	0.52
CI 13596	FORTUNA	61.70	59.95	60.50	61.15	61.35	61.30	60.00	60.90	-0.33	0.12
CI 15930	OLAF	59.30	60.31	60.83	59.04	60.61	59.00	59.00	59.70	0.84	0.55
CI 17429	LEW	59.50	61.72	62.50	61.37	63.26	58.00	61.20	61.10	1.71	0.48
CI 17430	NEWANA	56.80	61.62	61.00	59.72	61.65	60.90	60.40	60.30	1.87	0.65
CI 17790	LEN	59.20	60.86	60.33	59.30	60.97	60.00	60.00	60.10	0.89	0.88
CI 17828	PONDERA	60.50	61.40	61.33	60.16	62.13	60.90	61.40	61.10	0.86	0.91
CI 17904	OWENS	57.10	60.16	59.17	58.86	61.32	59.50	59.20	59.30	1.59	0.81
FA982220	FA 982-220	59.10	60.92	61.50	59.89	61.44	59.00	59.70	60.20	1.17	0.65
MT 8402	HI-LINE	61.40	61.16	61.33	60.31	61.33	60.90	61.30	61.10	0.23	0.18
MT 8849	RS6880/MT7819	57.50	61.30	61.83	60.02	60.73	59.10	60.00	60.10	1.44	0.52
MT 9002	EP-VOC-512/12/BUTTE	57.50	61.50	62.33	60.12	61.98	59.40	60.30	60.40	1.94	0.71
MT 9030	PONDERA/BUTTE	58.70	60.69	60.50	60.12	61.00	61.20	61.90	60.60	0.82	0.35
MT 9109	GUARD//KRONSTAD'S-GALLO/M	60.00	61.32	60.83	59.63	60.85	59.10	58.60	60.00	0.67	0.24
MT 9113	PEWEE'SCN-31630/MT8065	57.60	60.15	60.33	58.76	61.10	60.00	59.10	59.60	1.46	0.82
MT 9115	CNO7C/4/KAL/BB/2/PCIS/3/M	59.30	61.00	61.17	59.97	62.69	61.10	61.00	60.90	1.40	0.92
MT 9117	MT8190/4/CNO17C//KAL/BB/3	60.40	61.16	60.67	59.04	61.31	60.00	59.00	60.20	0.76	0.35
MT 9118	MT8190/4/CNO17C//KAL/BB/3	59.20	61.21	60.50	59.34	60.57	60.20	58.90	60.00	0.75	0.41
MT 9121	MT8043//SELC/74-130-7	59.60	60.71	59.67	59.21	61.81	59.70	60.70	60.20	1.06	0.72
MT 9122	MT8043//SELC/74-130-7	60.30	60.16	60.67	59.24	62.09	60.90	59.00	60.30	0.86	0.36
MT 9126	ALEX/MT7881	57.80	60.21	58.67	57.60	61.68	59.30	59.70	59.30	1.78	0.82
MT 9127	ALEX/MT7881	59.10	60.72	60.33	59.11	61.82	60.50	61.60	60.50	1.27	0.74
MT 9129	ALEX/MT7881	57.20	61.51	61.50	59.88	61.95	61.60	62.50	60.90	1.86	0.56
MT 9131	LEN/MT7819	58.40	60.70	58.67	57.78	60.91	57.20	57.80	58.80	1.44	0.51
MT 9132	LEN/MT7819	60.20	59.75	59.17	58.35	58.96	58.10	57.80	58.90	-0.09	0.01
MT 9137	LEN/MT7819	59.70	60.35	59.33	57.88	60.29	57.60	57.70	59.00	0.79	0.22
MT 9150	MT7810/3/BW559//TOB66/CNO	60.00	60.25	59.33	58.94	61.41	59.40	60.70	60.00	0.79	0.44
MT 9151	MT7926//PI428419/BW559	57.50	59.76	59.33	58.17	60.85	59.90	59.20	59.20	1.39	0.82
MT 9153	BW574//NEWANA/FORTUNA	56.70	59.16	59.67	57.83	60.81	57.90	60.20	58.90	1.85	0.84
MT 9154	BW574//NEWANA/FORTUNA	61.10	60.12	61.00	61.15	60.85	60.30	61.90	60.90	-0.14	0.03
MT 9157	BW574//NEWANA/FORTUNA	57.90	59.31	60.00	59.99	60.97	60.60	61.20	60.00	0.91	0.35
MT 9158	MEXSEL2315/LEADER	57.10	60.28	60.00	58.74	60.54	59.20	59.40	59.30	1.45	0.82
MT 9159	NK715/BW559	55.50	59.09	60.00	58.73	60.37	59.70	60.30	59.10	1.73	0.55
MT 9160	FORTUNA/MN70170	60.80	59.42	60.67	59.96	61.23	60.70	62.20	60.70	0.23	0.04
MT 9161	FORTUNA/MN70170	59.40	59.87	61.00	59.88	60.69	60.40	60.90	60.30	0.55	0.44
MT 9162	MT7836/LEADER	60.10	59.63	59.17	57.96	61.54	60.40	59.30	59.70	0.83	0.29
ND 582	STOA	60.30	60.23	60.67	59.18	60.69	60.40	60.70	60.30	0.43	0.34
ND 606	AMIDON	60.50	59.63	60.83	58.93	61.07	59.50	59.60	60.00	0.57	0.27
ND CUT	CUTLESS	60.50	59.69	60.67	59.24	61.00	60.20	61.40	60.40	0.45	0.19
PH986-61	PH 986-61	58.60	60.39	60.00	58.55	60.45	59.40	60.20	59.70	1.02	0.82
PI483235	GLENKAN	56.60	60.02	60.00	58.66	61.07	56.90	60.40	59.10	2.01	0.69
PI486139	KLASIC	62.90	60.32	60.17	59.07	61.38	61.10	60.40	60.80	-0.18	0.01
SWP-9521	SWP-9521	59.40	59.15	59.50	60.01	61.43	60.60	60.40	60.10	0.54	0.24
TR983239	TR 983-239	59.40	61.59	61.67	60.25	61.68	60.80	61.30	61.00	1.07	0.80
WA 6920	PENAWAWA	59.10	59.95	59.83	59.95	62.33	60.70	60.70	60.40	1.19	0.61
WB 926	WESTBRED 926	59.70	60.77	61.00	59.18	60.85	59.40	58.70	59.90	0.90	0.40
*****	SITE MEAN *****	59.11	60.41	60.42	59.36	61.27	59.82	60.16	60.10	1.00	1.00

Table 3. 1992 HEADING DATE (DAYS FROM JAN. 1)  
SUMMARY FOR THE ADVANCED SPRING  
WHEAT NURSERY GROWN ACROSS MONTANA

ID	PEDIGREE	Bozeman		Havre	Sidney	Kalis	Mocca	Huntley		AVG	BYX	RSQ	
		irr	dry	dry	dry	irr	dry	dry	dry				irr
BZ684-23	BZ684-23	176.00	178.00	163.33	169.95	175.84	169.85	172.75	163.00	162.00	170.10	1.06	0.97
BZ984326	WPB BZ 984-326	172.00	173.00	158.33	166.25	169.57	162.67	169.30	155.00	155.00	164.60	1.24	0.99
982-324	RAMBO	177.00	178.00	164.34	171.82	174.07	168.24	173.30	163.00	162.50	170.30	1.04	0.99
I 10003	THATCHER	175.00	177.00	164.33	172.14	173.88	170.76	174.34	163.50	163.50	170.50	0.93	0.98
CI 13596	FORTUNA	175.00	176.00	163.01	170.14	173.34	169.87	172.97	161.50	162.50	169.40	0.98	0.98
I 15930	OLAF	175.00	176.00	163.67	170.48	173.85	168.54	171.94	163.00	162.00	169.40	0.94	0.99
I 17429	LEW	178.00	179.00	165.00	174.01	175.96	171.23	174.96	165.00	165.00	172.00	1.00	0.99
CI 17430	NEWANA	177.00	177.00	165.01	173.39	176.02	171.62	173.32	164.00	163.50	171.20	0.97	0.97
CI 17790	LEN	175.00	176.00	165.00	171.40	173.97	168.87	172.60	164.00	162.50	169.90	0.89	1.00
I 17828	PONDERA	174.00	175.00	163.00	169.18	173.45	169.12	172.09	161.00	161.50	168.70	0.97	0.99
CI 17904	OWENS	175.00	176.00	162.33	168.63	172.63	167.67	172.33	161.50	162.00	168.70	1.00	0.99
FA982220	FA 982-220	176.00	178.00	163.99	170.53	174.30	167.67	172.72	163.00	162.00	169.80	1.04	0.99
T 8402	HI-LINE	175.00	175.00	162.00	167.25	171.32	166.08	171.70	158.50	159.00	167.30	1.12	0.98
T 8849	RS6880/MT7819	176.00	177.00	165.00	172.36	175.34	169.41	173.36	163.00	163.50	170.60	0.97	0.99
MT 9002	EP-VOC-512/12/BUTTE	175.00	176.00	162.66	170.33	172.88	168.37	172.41	161.50	161.50	169.00	1.01	0.99
MT 9030	PONDERA/BUTTE	175.00	177.00	164.99	171.13	173.86	169.96	172.98	163.00	162.50	170.00	0.94	0.99
T 9109	GUARD//KRONSTAD'S-GALLO/M	172.00	173.00	160.00	167.63	170.67	163.68	171.72	156.50	157.50	165.90	1.14	0.98
MT 9113	PEWEE'SCM-31630/MT8065	177.00	178.00	165.01	171.92	175.72	170.80	172.67	165.00	163.00	171.00	0.97	0.98
MT 9115	CNO7C/4/KAL/BB/2/PCIS/3/M	174.00	174.00	161.00	168.10	172.70	165.80	172.33	159.00	159.50	167.40	1.10	0.99
T 9117	MT8190/4/CNO17C//KAL/BB/3	175.00	175.00	164.00	172.00	173.41	169.10	172.38	163.00	160.50	169.40	0.96	0.97
MT 9118	MT8190/4/CNO17C//KAL/BB/3	174.00	176.00	163.67	170.01	172.71	166.80	172.29	162.50	161.00	168.80	0.96	0.99
MT 9121	MT8043//SELC/74-130-7	172.00	173.00	160.34	167.80	171.00	163.35	171.63	159.50	159.50	166.50	1.00	0.97
MT 9122	MT8043//SELC/74-130-7	173.00	173.00	159.66	166.63	169.98	162.85	170.66	159.00	157.50	165.80	1.08	0.98
T 9126	ALEX/MT7881	176.00	177.00	164.66	171.39	174.37	169.83	172.95	163.00	162.00	170.10	0.99	0.99
MT 9127	ALEX/MT7881	176.00	176.00	164.00	170.18	174.46	169.01	172.67	163.00	162.50	169.80	0.96	0.99
MT 9129	ALEX/MT7881	175.00	176.00	164.32	169.89	174.12	169.58	172.37	163.00	162.00	169.60	0.93	0.99
T 9131	LEN/MT7819	176.00	177.00	165.00	171.90	174.79	169.55	174.28	163.00	163.00	170.50	0.98	0.99
MT 9132	LEN/MT7819	176.00	176.00	164.33	170.42	173.66	169.21	173.00	163.00	161.50	169.70	0.98	1.00
MT 9137	LEN/MT7819	176.00	177.00	164.32	170.82	174.00	169.16	172.66	162.50	162.00	169.80	1.00	0.99
MT 9150	MT7810/3/BW559//TOB66/CNO	175.00	176.00	162.66	170.21	173.75	169.06	172.29	162.50	162.00	169.30	0.98	0.99
MT 9151	MT7926//PI428419/BW559	172.00	174.00	161.33	167.61	171.77	163.20	171.99	159.50	161.50	167.00	0.96	0.94
MT 9153	BW574//NEWANA/FORTUNA	174.00	175.00	161.67	168.58	172.52	164.52	171.69	160.00	161.00	167.70	1.04	0.98
MT 9154	BW574//NEWANA/FORTUNA	174.00	175.00	163.00	170.20	173.15	170.17	172.62	163.00	162.00	169.20	0.90	0.97
MT 9157	BW574//NEWANA/FORTUNA	176.00	177.00	164.00	171.87	173.28	170.68	174.01	161.50	162.00	170.00	1.04	0.97
MT 9158	HEXSEL2315/LEADER	175.00	176.00	164.00	170.69	174.20	169.10	173.69	162.50	162.00	169.70	0.98	1.00
MT 9159	NK715/BW559	178.00	179.00	165.33	172.25	175.99	169.39	174.35	164.00	164.50	171.40	1.03	0.99
MT 9160	FORTUNA/MN70170	174.00	174.00	163.66	169.36	173.27	166.24	171.99	163.00	161.00	168.50	0.89	0.97
MT 9161	FORTUNA/MN70170	175.00	177.00	166.35	172.85	174.94	170.36	172.35	164.00	163.00	170.70	0.86	0.97
MT 9162	MT7836/LEADER	173.00	174.00	159.68	167.09	169.93	162.50	169.94	156.00	158.00	165.60	1.17	0.98
MT 582	STOA	175.00	176.00	165.67	170.92	173.32	169.02	172.35	163.00	161.50	169.60	0.91	0.98
MT 606	AMIDON	175.00	176.00	164.32	171.11	173.69	170.21	172.00	164.00	162.50	169.99	0.88	0.98
ND CUT	CUTLESS	175.00	175.00	162.34	169.47	172.95	168.57	172.03	162.00	161.50	168.80	0.97	0.99
MT 9866-61	PH 986-61	173.00	174.00	161.01	166.86	170.70	163.85	170.03	159.00	159.50	166.40	1.02	0.99
MT 463235	GLENMAN	177.00	178.00	164.34	171.60	173.86	169.19	173.38	164.00	162.50	170.49	1.01	0.99
PI486139	KLASIC	171.00	171.00	159.65	165.84	168.93	163.05	166.99	154.00	155.00	163.90	1.12	0.97
SWP-9521	SWP-9521	173.00	174.00	161.33	167.54	171.03	163.90	172.03	159.00	160.50	166.90	1.02	0.97
MT 983239	TR 983-239	174.00	173.00	161.67	167.33	170.41	163.37	171.33	158.00	159.50	166.40	1.07	0.97
MT 6920	PENAWAWA	175.00	178.00	163.01	169.71	174.98	167.48	173.33	163.00	162.50	169.70	1.04	0.98
WB 926	WESTBRED 926	172.00	173.00	159.67	166.57	170.46	162.67	170.93	162.00	159.00	166.30	0.94	0.93
*****	SITE MEAN *****	174.78	175.71	163.08	169.91	173.16	167.66	172.33	161.62	161.27	168.60	1.06	1.00

Table 4. 1992 PLANT HEIGHT (INCHES) SUMMARY FOR THE ADVANCED SPRING WHEAT NURSERY GROWN ACROSS MONTANA

ID	PEDIGREE	Bozeman		Havre	Sidney		Kalis	Mocc	Huntley		AVG	EYX	RSQ
		irr	dry	dry	dry	irr	dry	dry	dry	irr			
BZ684-23	BZ684-23	35.67	33.67	18.77	28.90	36.33	31.52	28.67	35.50	39.50	32.10	1.11	0.96
BZ984326	WPB BZ 984-326	32.55	31.94	21.21	31.27	34.67	32.48	31.35	37.00	37.00	32.20	0.84	0.94
982-324	RAMBO	33.07	33.80	20.72	29.13	36.33	33.23	30.47	36.00	38.00	32.30	0.95	0.98
I 10003	THATCHER	42.06	44.06	24.89	38.84	44.33	44.89	37.74	46.50	49.00	41.40	1.30	0.97
CI 13596	FORTUNA	39.57	39.52	23.77	35.74	41.67	39.96	31.70	42.00	44.50	37.60	1.17	0.98
CI 15930	OLAF	36.65	36.26	21.28	31.89	38.67	35.50	30.30	36.00	37.50	33.80	0.98	0.96
I 17429	LEW	39.47	39.29	24.47	36.60	43.00	40.97	36.50	42.00	43.50	38.40	1.07	0.98
CI 17430	NEWANA	33.20	33.99	20.41	30.65	38.00	32.91	30.09	37.00	35.00	32.40	0.93	0.93
CI 17790	LEN	35.17	34.18	23.04	30.14	38.00	35.43	30.83	37.50	38.00	33.60	0.90	0.98
I 17628	PONDERA	33.20	33.89	21.43	31.52	38.33	34.46	29.60	37.00	39.00	33.20	0.99	0.98
I 17904	OWENS	32.74	33.98	20.24	30.35	37.00	34.10	27.85	37.00	38.00	32.40	1.03	0.98
FA982220	FA 982-220	33.92	33.23	22.03	26.87	34.67	33.48	28.64	35.00	38.00	31.80	0.89	0.94
MT 8402	HI-LINE	33.33	33.46	19.84	28.19	34.00	30.44	27.60	33.50	35.00	30.60	0.88	0.96
T 8649	RS6880/MT7819	37.27	35.03	22.68	32.40	37.33	34.95	30.42	39.00	38.00	34.10	0.93	0.96
MT 9002	EP-VOC-512/12/BUTTE	35.17	33.89	20.73	32.30	38.67	38.03	29.99	39.00	40.50	34.30	1.12	0.97
MT 9030	PONDERA/BUTTE	34.71	34.70	19.88	31.75	37.67	33.47	28.44	38.00	39.00	33.10	1.09	0.98
T 9109	GUARD//KRONSTAD'S-GALLO/M	35.30	34.28	20.41	26.77	36.00	33.80	28.94	35.50	36.00	31.90	0.97	0.93
MT 9113	PEWEE'SCM-31630/MT8065	32.28	29.92	20.01	30.75	34.33	31.10	30.43	36.50	37.00	31.40	0.89	0.91
MT 9115	CNO7C/4/KAL/BB/2/PCIS/3/M	35.43	34.07	21.97	29.56	37.67	33.35	30.70	35.00	37.50	32.80	0.89	0.96
MT 9117	MT8190/4/CNO17C//KAL/BB/3	34.32	34.26	21.53	31.76	37.33	32.82	30.32	37.00	34.50	32.60	0.84	0.91
T 9118	MT8190/4/CNO17C//KAL/BB/3	34.91	34.61	22.51	30.98	36.00	33.78	30.47	38.00	40.00	33.50	0.94	0.98
MT 9121	MT8043//SELC/74-130-7	33.99	33.21	21.82	29.17	37.33	32.17	31.94	34.00	37.50	32.30	0.85	0.93
MT 9122	MT8043//SELC/74-130-7	33.73	32.75	20.93	29.78	37.33	33.90	30.61	36.00	38.00	32.60	0.95	0.98
T 9126	ALEX/MT7881	33.37	31.20	21.17	30.57	36.00	34.74	28.79	34.00	36.50	31.80	0.86	0.95
MT 9127	ALEX/MT7881	33.01	32.46	21.55	31.55	37.67	33.86	29.63	36.00	38.50	32.70	0.93	0.97
MT 9129	ALEX/MT7881	35.30	34.22	20.87	30.85	37.67	34.98	30.07	37.50	38.50	33.30	1.02	1.00
T 9131	LEN/MT7819	36.68	36.88	23.45	33.98	40.00	35.91	32.96	38.50	45.50	36.00	1.07	0.94
MT 9132	LEN/MT7819	32.41	32.34	20.19	30.73	34.67	31.40	28.58	36.50	33.00	31.10	0.82	0.90
MT 9137	LEN/MT7819	32.81	34.27	21.35	31.63	37.00	33.95	30.12	35.00	36.50	32.50	0.86	0.96
MT 9150	MT7810/3/BW559//TOB66/CNO	31.50	31.53	19.04	28.21	36.33	31.49	26.95	35.50	38.00	31.00	1.05	0.97
MT 9151	MT7926//PI428419/BW559	34.25	33.38	19.16	29.86	34.00	34.40	30.12	33.50	37.50	31.80	0.95	0.95
MT 9153	BW574//NEWANA/FORTUNA	32.87	31.24	20.78	29.32	37.00	31.64	28.25	35.00	39.00	31.70	0.97	0.95
MT 9154	BW574//NEWANA/FORTUNA	39.80	41.44	22.17	34.94	40.67	41.91	33.19	42.50	43.50	37.80	1.23	0.95
MT 9157	BW574//NEWANA/FORTUNA	40.62	42.18	23.07	35.16	42.33	44.73	32.12	43.50	45.50	38.80	1.32	0.93
MT 9158	MEXSEL2315/LEADER	33.92	32.86	20.89	30.69	35.00	32.96	28.35	34.50	36.00	31.70	0.86	0.98
MT 9159	NK715/BW559	41.99	39.66	21.21	36.23	42.33	39.92	33.64	43.00	50.00	38.70	1.46	0.97
MT 9160	FORTUNA/MN70170	39.96	40.07	21.81	34.41	40.67	41.30	33.40	42.50	41.50	37.30	1.20	0.95
MT 9161	FORTUNA/MN70170	38.65	41.16	22.92	35.44	40.33	43.26	32.53	41.00	44.50	37.80	1.19	0.92
MT 9162	MT7836/LEADER	32.35	32.96	21.46	30.98	33.67	31.05	32.65	36.50	37.50	32.10	0.79	0.87
MT 522	STOA	43.70	41.61	22.19	34.04	43.00	39.93	32.97	42.50	45.50	38.40	1.35	0.96
MT 606	AMIDON	39.11	38.27	22.94	33.28	43.33	42.52	34.56	43.00	48.00	38.30	1.34	0.96
MT CUT	CUTLESS	38.23	36.13	19.35	32.46	38.00	35.96	29.34	39.00	40.50	34.30	1.21	0.98
PH986-61	PH 986-61	28.51	28.26	19.63	26.04	31.00	29.18	30.67	29.50	35.50	28.70	0.70	0.78
MT 483235	GLENMAN	33.53	34.43	21.98	31.27	37.33	33.91	28.12	37.50	38.50	33.00	0.96	0.97
MT 406139	KLASIC	23.69	23.30	15.84	19.97	27.67	21.39	22.12	27.50	23.50	22.90	0.53	0.70
SWP-9521	SWP-9521	33.14	33.23	19.70	29.25	35.00	32.11	30.72	33.00	38.00	31.60	0.92	0.95
MT 983239	TR 983-239	33.73	31.48	20.60	29.36	34.67	30.79	28.93	36.00	39.50	31.70	0.96	0.94
MT 6920	PENAWAWA	35.67	34.29	19.69	30.35	39.33	33.61	26.80	32.00	40.50	32.50	1.11	0.88
MT 926	WESTBRED 926	31.43	30.42	19.48	27.47	32.33	29.91	30.30	34.00	36.00	30.10	0.84	0.93
MT *****	SITE MEAN *****	35.06	34.64	21.19	31.09	37.38	34.77	30.40	37.12	39.12	33.40	1.00	1.00