

Title 1: Evaluation of spring wheat varieties under dryland fallow and dryland recrop conditions at five off-station sites (Flaxville, Nashua, Poplar, Wibaux, and Plentywood).

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OBJECTIVES: To evaluate the performance of experimental lines and varieties of spring wheat across eastern Montana.

MATERIALS AND METHODS:

Location:

- Daniels county (Flaxville)
- Roosevelt county (Poplar)
- Sheridan county (Plentywood)
- Valley county (Nashua)
- Wibaux county (Wibaux)

RESULTS:

Agronomic data are shown in Table 1-5.

Table 1: Daniels county spring wheat evaluation

Entry	Height cm	Grain YLD lb/ac	Grain YLD bu/ac	Protein %	TW lb/bu
MCNEAL	77	1517	25	11.5	60.5
REEDER	75	2127	35	11.1	62.1
CHOTEAU	74	2049	34	12.3	61.2
VIDA	76	2199	37	11.4	61.7
DUCLAIR	73	2157	36	11.7	61.5
MOTT	92	1758	29	11.7	63.0
WB9879CLP	71	2243	37	12.1	62.7
BRENNAN	68	2072	35	11.9	63.1
SY TYRA	76	2176	36	10.4	63.3
SY SOREN	72	2339	39	12.6	62.8
EGAN	74	2335	39	12.8	61.7
MT0245/IMI8209-1//MT0245	80	1522	25	10.8	58.7
GLENN/MT0747	73	1969	33	12.5	61.2
MT0852/MT0858	75	1901	32	12.3	59.9
VIDA/MT0827	79	2201	37	10.8	63.8
BARLOW	84	2193	37	12.1	62.7
ELGIN	84	2150	36	10.9	62.5
HRS 3504	71	1816	30	10.4	58.9
HRS 3361	74	1964	33	10.9	58.9
HRS 3530	81	1537	26	10.6	59.0
HRS 3616	76	2719	45	12.3	62.6
HRS 3100	75	2048	34	11.3	58.1
AVG	76	2045	34	11.6	61.4
Probability	0.0005	0.0006	0.0006	<.0001	<.0001
CV	6.7	13.7	13.7	5.5	1.4
LSD	8	460	8	1.0	1.4

Table 2: Roosevelt county spring wheat evaluation

Entry	Height cm	Grain YLD lb/ac	Grain YLD bu/ac	Protein %	TW lb/bu
MCNEAL	89	1606	27	15.8	60.0
REEDER	88	2522	42	14.9	60.7
CHOTEAU	83	2259	38	15.6	59.1
VIDA	91	2219	37	15.4	59.6
DUCLAIR	84	2467	41	15.6	59.6
MOTT	96	1544	26	15.2	60.7
WB9879CLP	87	2461	41	15.9	58.8
BRENNAN	80	3213	54	15.1	63.6
SY TYRA	79	1811	30	14.5	60.6
SY SOREN	80	3387	56	15.7	62.3
EGAN	89	2205	37	17.4	60.5
MT0245/IMI8209-1//MT0245	95	1430	24	15.0	57.2
GLENN/MT0747	88	2734	46	15.6	60.1
MT0852/MT0858	85	2765	46	15.2	60.9
VIDA/MT0827	87	2755	46	15.1	63.0
BARLOW	95	2361	39	15.1	62.8
ELGIN	101	2083	35	15.2	60.4
HRS 3504	87	2265	38	14.6	57.8
HRS 3361	82	2525	42	15.2	59.6
HRS 3530	89	1766	29	15.7	58.8
HRS 3616	85	2916	49	15.5	61.0
HRS 3100	81	2585	43	14.6	59.1
AVG	87	2351	39	15.4	60.3
Probability	<.0001	<.0001	<.0001	<.0001	<.0001
CV	3.9	13.6	13.6	2.2	1.2
LSD	6	541	9	0.6	1.2

Table 3: Sheridan county spring wheat evaluation

Entry	Height cm	Grain YLD lb/ac	Grain YLD bu/ac	Protein %	TW lb/bu
MCNEAL	79	1901	32	14.4	59.7
REEDER	75	2467	41	14.7	61.5
CHOTEAU	63	1978	33	14.1	60.7
VIDA	76	2689	45	14.1	61.1
DUCLAIR	64	1728	29	14.4	59.6
MOTT	76	2107	35	14.0	61.3
WB9879CLP	69	2463	41	14.6	61.0
BRENNAN	60	2643	44	15.0	62.6
SY TYRA	62	2253	38	14.0	62.6
SY SOREN	62	2527	42	15.3	62.9
EGAN	71	1996	33	15.7	58.7
MT0245/IMI8209-1//MT0245	78	2113	35	13.9	59.7
GLENN/MT0747	72	2537	42	15.2	61.2
MT0852/MT0858	68	2290	38	14.8	61.2
VIDA/MT0827	70	2166	36	13.4	62.2
BARLOW	75	2493	42	14.8	63.6
ELGIN	72	2591	43	14.2	62.0
HRS 3504	70	2742	46	13.8	61.1
HRS 3361	68	2503	42	13.9	61.9
HRS 3530	75	2222	37	13.2	60.8
HRS 3616	71	2312	39	14.7	61.7
HRS 3100	69	2572	43	13.5	61.9
AVG	70	2332	39	14.3	61.3
Probability	0.0016	0.0002	0.0002	<.0001	<.0001
CV	7.9	11.0	11.0	2.6	0.8
LSD	9	422	7	0.6	0.8

Table 4: Valley county spring wheat evaluation

Entry	Height cm	Grain YLD lb/ac	Grain YLD bu/ac	Protein %	TW lb/bu
MCNEAL	74	1811	30	15.3	60.8
REEDER	77	2403	40	15.1	63.3
CHOTEAU	65	2091	35	15.6	61.6
VIDA	74	2285	38	14.8	62.3
DUCLAIR	70	2083	35	15.1	61.8
MOTT	79	1829	30	15.1	62.1
WB9879CLP	65	2209	37	15.6	62.2
BRENNAN	65	2074	35	16.0	64.8
SY TYRA	63	1980	33	14.2	63.5
SY SOREN	62	2093	35	15.6	64.0
EGAN	73	2358	39	16.9	61.1
MT0245/IMI8209-1//MT0245	74	1946	32	14.0	61.7
GLENN/MT0747	71	2302	38	15.6	63.0
MT0852/MT0858	69	1969	33	14.8	62.9
VIDA/MT0827	71	2050	34	14.4	65.2
BARLOW	77	2012	34	14.6	64.8
ELGIN	82	2189	36	14.3	63.4
HRS 3504	64	2179	36	13.8	61.2
HRS 3361	69	1960	33	14.5	62.1
HRS 3530	73	1518	25	15.2	61.1
HRS 3616	71	2001	33	15.5	63.2
HRS 3100	66	2160	36	13.9	61.5
AVG	71	2068	34	15.0	62.6
Probability	<.0001	0.0002	0.0002	<.0001	<.0001
CV	6.7	8.8	8.8	3.1	1.0
LSD	8	301	5	0.8	1.1

Table 5: Wibaux county spring wheat evaluation

Entry	Height cm	Grain YLD lb/ac	Grain YLD bu/ac	Protein %	TW lb/bu
MCNEAL	71	2035	34	13.6	63.4
REEDER	65	2116	35	14.2	64.9
CHOTEAU	65	1719	29	13.7	64.6
VIDA	65	2060	34	12.5	65.4
DUCLAIR	66	2062	34	12.5	64.7
MOTT	74	2044	34	13.9	65.4
WB9879CLP	67	2299	38	13.8	65.5
BRENNAN	62	2392	40	13.8	66.6
SY TYRA	63	2889	48	13.2	66.7
SY SOREN	63	2800	47	14.2	66.0
EGAN	66	1800	30	16.7	62.3
MT0245/IMI8209-1//MT0245	69	2204	37	14.4	64.7
GLENN/MT0747	61	2129	35	13.9	65.1
MT0852/MT0858	67	2400	40	14.1	65.6
VIDA/MT0827	67	2590	43	14.1	66.8
BARLOW	73	2351	39	13.3	66.9
ELGIN	73	2858	48	13.2	65.4
HRS 3504	63	2865	48	12.0	64.9
HRS 3361	64	2556	43	14.4	64.1
HRS 3530	73	2644	44	13.3	64.6
HRS 3616	68	2827	47	13.7	65.3
HRS 3100	65	2529	42	12.7	64.8
AVG	67	2371	40	13.7	65.2
Probability	0.0007	0.6154	0.6154	0.0172	<.0001
CV	5.6	27.6	27.6	8.0	0.7
LSD	6	1080	18	1.8	0.8