**PROJECT TITLE**: Evaluation of spring wheat variety performance in trials near Moccasin, Denton, Fort Benton, and Winifred.

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**OBJECTIVES**:
To evaluate the performance of spring wheat varieties in environments and cropping methods representative of the southern triangle and central Montana.

**RESULTS**:
Yield – Yields ranged from 6.1 to 36.5 bu/a with the highest yields at the Moccasin sites (Table 28). Low moisture at the Fort Benton site contributed to lower than average yields. Reeder was one of the top yielding varieties averaging 28.6 bu/a across the five locations, however differences in yield among the varieties were significant only in the Winifred and Moccasin recrop nurseries. Multiple year summaries for the locations are reported in Tables 30-33.

Heading Date – Heading dates are reported for the Moccasin nursery on fallow only (Table 28). All varieties headed within 3 days of one another and differences between the varieties were not statistically significant.

Plant Height – Plant heights averaged just over 24 inches at all locations except for the Fort Benton site (Table 28). Dry conditions contributed to plants ranging in height from 15 to 19 inches.

Test Weight – Test weights for spring wheat averaged 60 lbs/bu on Moccasin fallow and on Denton recrop (Table 29). Test weights for other locations averaged less than 60 lbs/bu.

Protein – Proteins averaged 17 percent at three locations, 15.7 percent at Denton, and 12.4 percent on Moccasin fallow. Uneven distribution of the fall application of nitrogen resulted in the low protein levels for the Moccasin fallow nursery.

**SUMMARY**:
Low precipitation levels resulted in lower than average yields at all locations tested. This was most evident at the Fort Benton site where yields were approximately one third that of the long term averages. Yields at the Winifred site were also significantly less than long term averages for that area. Equations predicting spring wheat yields based on past variety performance are presented in Table 34.

**FUTURE PLANS**:
Spring wheat variety evaluations will continue at Moccasin, Denton, Fort Benton, and Winifred.

Table 28. 2001 Spring wheat heading date, yield, and plant height.
Exp. 9900 Central Agricultural Research Center, Moccasin, MT

| Pedigree | Mocc Heading Date | Mocc Fallow 9907 | Mocc Recrop 9970 | Denton Recrop 9971 | Ft Benton Recrop 9972 | Winifred Fallow 9973 | Average Yield | Mocc Fallow 9907 | Mocc Recrop 9970 | Denton Recrop 9971 | Ft Benton Recrop 9972 | Winifred Fallow 9973 | Average Height |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | days | bu/a | bu/a | bu/a | bu/a | bu/a | bu/a | in | in | in | in | in | in |
| Reeder | 178 | 34.4 | **35.8** | **32.1** | 10.4 | **30.3** | 28.6 | 24.0 | 27.7 | 26.0 | 17.7 | 24.0 | 23.9 |
| Scholar | 177 | 33.0 | 35.1 | 31.0 | 11.5 | 29.1 | 27.9 | 26.0 | 32.3 | 28.0 | 16.3 | 24.0 | 25.3 |
| MT 9874 | 178 | 35.2 | 32.0 | 29.4 | 10.9 | 28.2 | 27.1 | 25.0 | 28.7 | **29.0** | **18.7** | 25.0 | 25.3 |
| Amidon | 176 | 33.1 | 32.3 | 29.5 | **12.0** | 28.3 | 27.1 | 26.7 | **33.7** | **29.0** | 18.0 | **21.7** | 25.8 |
| Conan | 179 | 34.5 | 33.9 | 28.3 | 9.4 | 28.7 | 26.9 | 26.3 | 27.0 | 26.0 | 17.3 | 25.3 | 24.4 |
| Express | 176 | 31.3 | 34.0 | 27.4 | 7.7 | 29.3 | 25.9 | **23.7** | 25.7 | **20.0** | 16.7 | 24.3 | 22.1 |
| Newana | 178 | 33.1 | 32.0 | **26.1** | 10.8 | 27.2 | 25.8 | 25.3 | 27.0 | 21.0 | 18.3 | 22.7 | 22.9 |
| MTHW9710 | 178 | 33.1 | 34.6 | 28.9 | 7.1 | 25.1 | 25.8 | 26.7 | 26.0 | 24.0 | **15.0** | 24.3 | 23.2 |
| McNeal | 178 | 32.1 | 32.7 | 28.7 | 10.2 | 23.8 | 25.5 | **30.0** | 28.0 | 24.0 | 17.3 | **26.0** | 25.1 |
| MTHW9904 | 177 | 34.4 | 30.7 | 28.5 | 9.5 | 23.8 | 25.4 | 26.3 | 30.7 | **29.0** | 15.3 | 24.0 | 25.1 |
| MTHW9420 | 178 | 34.8 | 31.1 | 27.9 | 8.3 | 24.7 | 25.4 | 29.7 | 26.7 | 24.0 | **15.0** | 25.7 | 24.2 |
| Lew | 177 | 32.5 | 29.8 | 26.5 | 11.0 | 26.8 | 25.3 | 27.3 | 32.7 | 28.0 | 16.0 | 24.0 | 25.6 |
| Westbred 936 | 178 | 33.7 | 27.7 | 30.8 | 7.3 | 26.4 | 25.2 | 27.0 | **24.7** | 20.0 | 17.3 | 23.3 | 22.5 |
| Fortuna | 177 | **36.5** | 29.3 | **26.1** | 10.2 | 23.5 | 25.1 | 24.3 | 32.7 | 26.0 | 16.3 | 25.0 | 24.9 |
| Ernest | 179 | 35.1 | **26.9** | 27.7 | 11.4 | 24.0 | 25.0 | 28.3 | 31.0 | **29.0** | **18.7** | 25.0 | 26.4 |
| MT 9929 | 178 | 33.1 | 28.6 | 30.2 | 8.2 | 24.0 | 24.8 | 24.0 | 25.7 | 22.0 | 17.7 | 23.0 | 22.5 |
| Rambo | 178 | 32.0 | 28.3 | 27.1 | 10.5 | 24.7 | 24.5 | 27.7 | 25.3 | 23.0 | 17.3 | 23.7 | 23.4 |
| Westbred 926 | 177 | 33.5 | 31.5 | 27.6 | **6.1** | 23.8 | 24.5 | 24.0 | 27.0 | 24.0 | 15.3 | 23.3 | 22.7 |
| Hi-Line | 178 | **30.3** | 29.0 | 26.9 | 10.2 | 26.1 | 24.5 | **30.0** | 28.0 | 22.0 | 16.3 | 24.0 | 24.1 |
| Grandin | 178 | 31.0 | 31.3 | 28.2 | 8.5 | **22.1** | 24.2 | 28.0 | 28.0 | 27.0 | 17.7 | 25.0 | 25.1 |
| Average | 177.5 | 33.3 | 31.3 | 28.4 | 9.6 | 26.0 | 25.7 | 26.5 | 28.4 | 25.1 | 16.9 | 24.2 | 24.2 |
| CV (s/mean)*100 | 1.0 | 7.9 | 8.9 | 10.5 | 25.5 | 10.1 | | 9.4 | 4.2 | | 10.5 | 8.0 | |
| LSD (0.05) | ns | ns | 4.6 | ns | ns | 4.3 | | 4.1 | 2.0 | | ns | ns | |
| Planting Date: | | 4/19/01 | 4/18/01 | 5/9/01 | 4/23/01 | 4/24/01 | | | | | | | |
| Harvest Date: | | 8/15/01 | 8/15/01 | 8/24/01 | 8/16/01 | 8/17/01 | | | | | | | |
| Fertilizer (lbs N/a): | | 10 | 77 | 70 | 90 | 70 | | | | | | | |
| Growing Season Precip: | | 7.29 | 7.29 | 5.75 | 4.65 | 5.0 | | | | | | | |
| Producer/Cooperator: | | | | Barber | Birkeland | Udelhoven | | | | | | | |

Table 29. 2001 Spring wheat test weight and protein performance in Central Montana.
Exp. 9900 Central Agricultural Research Center, Moccasin, MT

| | | ---------- Test Weight ---------- | | | | | | ---------- Protein ---------- | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Mocc | Mocc | Denton | Ft Benton | Winifred | | Mocc | Mocc | Denton | Ft Benton | Winifred | |
| | | Fallow | Recrop | Recrop | Recrop | Fallow | | Fallow | Recrop | Recrop | Recrop | Fallow | |
| ID | Pedigree | 9907 | 9970 | 9971 | 9972 | 9973 | Average | 9907 | 9970 | 9971 | 9972 | 9973 | Average |
| | | lbs/bu | lbs/bu | lbs/bu | lbs/bu | lbs/bu | lbs/bu | % | % | % | % | % | % |
| MTHW9904 | MTHW9904 | 60.1 | 59.6 | **61.9** | 60.3 | 52.2 | 58.8 | 11.8 | 16.1 | 15.8 | 16.3 | **16.6** | 15.3 |
| PI607557 | Scholar | 58.4 | **59.9** | 60.5 | 58.8 | 51.0 | 57.7 | 12.2 | 16.7 | 16.5 | 17.9 | 18.4 | 16.3 |
| PI592761 | Ernest | 60.9 | 57.0 | 61.7 | 58.3 | 50.6 | 57.7 | **13.1** | 19.0 | 15.4 | 17.8 | 18.3 | 16.7 |
| CI 17430 | Newana | 59.6 | 56.6 | 60.2 | **61.2** | 50.5 | 57.6 | 12.3 | 17.6 | 16.1 | 16.9 | 17.4 | 16.1 |
| C982-324 | Rambo | 60.5 | 57.6 | **58.4** | 59.2 | **52.3** | 57.6 | 12.7 | 18.9 | **14.9** | 16.6 | 17.7 | 16.2 |
| CI 17429 | Lew | **58.9** | 58.6 | 59.8 | 59.3 | 51.4 | 57.6 | 12.4 | 18.7 | 16.4 | 16.4 | 17.5 | 16.3 |
| PI527682 | Amidon | 59.9 | 58.2 | 60.6 | 58.4 | 50.5 | 57.5 | 12.9 | 18.9 | 15.1 | 17.6 | 18.2 | 16.5 |
| MT 9929 | MT 9929 | 60.0 | 57.1 | 61.8 | 58.5 | 50.0 | 57.5 | 12.0 | 17.2 | 15.1 | **18.4** | 17.2 | 16.0 |
| ND 695 | Reeder | 60.3 | 57.9 | 59.6 | 59.1 | 50.3 | 57.4 | 11.5 | 16.6 | 16.0 | 17.3 | 17.4 | 15.8 |
| BZ992588 | Conan | 59.5 | 58.6 | 58.6 | 59.5 | 50.8 | 57.4 | 12.9 | **15.8** | 15.9 | 17.1 | 17.2 | 15.8 |
| CI 13596 | Fortuna | 60.4 | 58.3 | 60.3 | 58.1 | 49.5 | 57.3 | 12.7 | 17.7 | **16.8** | 17.0 | 17.3 | 16.3 |
| PI574642 | McNeal | 61.1 | 57.1 | 59.3 | 59.0 | 50.0 | 57.3 | 12.6 | 18.2 | 15.8 | 16.7 | **18.6** | 16.4 |
| MTHW9710 | MTHW9710 | 59.8 | 58.7 | 60.8 | 58.2 | 48.8 | 57.2 | 12.6 | 16.4 | 15.7 | 17.0 | 17.2 | 15.8 |
| PI531005 | Grandin | 60.0 | 57.1 | 61.4 | 57.9 | 48.5 | 57.0 | 12.3 | 17.7 | 15.4 | 17.4 | 17.6 | 16.1 |
| MT 9874 | MT 9874 | **61.4** | 55.3 | 58.6 | 58.8 | 50.6 | 57.0 | 11.9 | 16.9 | 15.4 | 16.4 | 16.8 | 15.5 |
| MTHW9420 | MTHW9420 | 60.6 | 54.3 | 60.5 | 58.5 | 49.8 | 56.7 | **11.1** | 16.2 | 15.3 | **16.1** | 16.7 | 15.1 |
| PI549275 | Hi-Line | 60.5 | 54.1 | 61.7 | 58.6 | 48.3 | 56.6 | 12.4 | 19.0 | 15.9 | 17.4 | 17.7 | 16.5 |
| WB 926 | Westbred 926 | **61.4** | 55.1 | 59.0 | 58.9 | **48.2** | 56.5 | 12.7 | **20.0** | 16.0 | 17.3 | 18.0 | 16.8 |
| WBExpress | Express | 59.2 | 56.8 | 58.8 | **57.5** | 49.8 | 56.4 | 13.0 | 16.3 | 15.5 | 16.5 | 16.7 | 15.6 |
| WB 936 | Westbred 936 | 59.7 | **53.2** | 60.9 | 58.6 | 48.5 | 56.2 | 11.9 | 19.0 | 15.3 | 18.0 | 17.6 | 16.4 |
| Average | | 60.1 | 57.1 | 60.2 | 58.8 | 50.1 | 57.3 | 12.4 | 17.6 | 15.7 | 17.1 | 17.5 | 16.1 |
| CV (s/mean)*100 | | 3.2 | 2.2 | 2.3 | | | | | | | | | |
| LSD (0.05) | | ns | 2.1 | 2.3 | | | | | | | | | |

Table 30. Moccasin recrop spring wheat multi-year summary of selected varieties.
Exp. 9970 Central Agricultural Research Center, Moccasin, MT.

| Selected Varieties | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Mean | McNeal Same Years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | bu/a | | | | | | |
| McNeal | 39 | 52 | 22 | 45 | 24 | 63 | 37 | 42 | 33 | 33 | 39.0 | - |
| Amidon | 35 | 55 | 23 | 40 | 22 | 52 | 34 | 39 | 31 | 32 | 36.3 | 39.0 |
| WestBred 926 | 29 | 51 | 23 | 42 | 23 | 58 | 36 | 34 | 31 | 32 | 35.9 | 39.0 |
| Grandin | 30 | 54 | 20 | 40 | 20 | 52 | 35 | 33 | 31 | 31 | 34.6 | 39.0 |
| Fortuna | 27 | 44 | 24 | 35 | 22 | 48 | 33 | 37 | 33 | 29 | 33.2 | 39.0 |
| Rambo | 34 | 43 | 23 | 39 | 21 | 55 | 33 | 36 | 31 | 28 | 34.3 | 39.0 |
| Lew | 34 | 46 | 20 | 36 | 19 | 52 | 35 | 35 | 29 | 30 | 33.6 | 39.0 |
| Newana | 35 | 48 | 25 | 47 | 23 | 49 | 35 | 36 | 31 | 32 | 36.1 | 39.0 |
| Hi-Line | 29 | 49 | 21 | 39 | 22 | 57 | 35 | 31 | 33 | 29 | 34.5 | 39.0 |
| Ernest | | | 21 | 40 | 20 | 48 | 34 | 30 | 30 | 27 | 31.2 | 37.3 |
| Fergus | | | | 41 | 20 | 56 | 34 | 33 | 30 | - | 35.7 | 39.5 |
| WB Express | | | | 39 | 23 | 57 | 34 | 40 | 31 | 34 | 36.9 | 39.5 |
| WestBred 936 | | | | 43 | 23 | 53 | 34 | 37 | 32 | 28 | 35.7 | 39.5 |
| Scholar | | | | | 24 | 51 | 33 | 35 | 33 | 35 | 35.2 | 38.6 |
| MTHW 9420 | | | | | 23 | 66 | 38 | 37 | 33 | 31 | 38.0 | 38.6 |
| Nursery Mean | 31.1 | 48.1 | 22.4 | 40.4 | 21.9 | 54.8 | 34.5 | 35.5 | 31.6 | 31.3 | | |

Table 31. Denton Re-Crop Spring Wheat Multi-Year Summary of Selected Varieties.
Exp. 9971 Central Agricultural Research Center, Moccasin, MT.

| Selected Varieties | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Mean | McNeal Same Years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ---------- bu/a ---------- | | | | | | | | | | | |
| McNeal | 27 | 92 | 22 | 43 | 24 | 47 | 34 | 17 | 29 | 29 | 36.4 | - |
| Amidon | 23 | 83 | 23 | 39 | 23 | 47 | 30 | 14 | 28 | 30 | 34.0 | 36.4 |
| WestBred 926 | 19 | 78 | 25 | 41 | 25 | 46 | 31 | 16 | 27 | 28 | 33.6 | 36.4 |
| Grandin | 25 | 81 | 24 | 36 | 20 | 44 | 32 | 15 | 26 | 28 | 33.1 | 36.4 |
| Fortuna | 17 | 66 | 20 | 33 | 22 | 42 | 32 | 18 | 29 | 26 | 30.5 | 36.4 |
| Rambo | 25 | 74 | 20 | 37 | 23 | 43 | 29 | 12 | 25 | 27 | 31.5 | 36.4 |
| Lew | 27 | 65 | 20 | 36 | 23 | 40 | 29 | 13 | 25 | 27 | 30.5 | 36.4 |
| Newana | 25 | 81 | 20 | 44 | 27 | 45 | 33 | 18 | 28 | 26 | 34.7 | 36.4 |
| Hi-Line | 26 | 76 | 23 | 45 | 23 | 46 | 32 | 12 | 26 | 27 | 33.6 | 36.4 |
| Ernest | | | 19 | 41 | 25 | 46 | 29 | 17 | 24 | 28 | 28.6 | 30.6 |
| Fergus | | | | 36 | 26 | 43 | 28 | 15 | 23 | - | 28.5 | 31.8 |
| WB Express | | | | 41 | 24 | 41 | 30 | 13 | 25 | 27 | 28.8 | 31.8 |
| WestBred 936 | | | | 39 | 26 | 43 | 35 | 16 | 26 | 31 | 30.8 | 31.8 |
| Scholar | | | | | 26 | 46 | 37 | 16 | 29 | 31 | 30.8 | 30.0 |
| MTHW 9420 | | | | | 24 | 44 | 30 | 12 | 26 | 28 | 27.3 | 30.0 |
| Nursery Mean | 24 | 77 | 22 | 38 | 24 | 44 | 32 | 15 | 26.6 | 28 | | |

The variety trial was planted re-crop on pea ground in 1992, re-crop on buckwheat in 1996, and re-crop following millet in 1997. All other years the trial was planted on fallow ground.

Table 32. Fort Benton Re-Crop Spring Wheat Multi-Year Summary of Selected Varieties.
Exp. 9972 Central Agricultural Research Center, Moccasin, MT.

| Selected Varieties | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | Mean | McNeal Same Years |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | bu/a | | | | | | |
| McNeal | | 18 | 47 | 37 | 45 | 32 | 22 | 28 | 14 | 10 | 27.4 | - |
| Amidon | 25 | 15 | 40 | 36 | 46 | 34 | 20 | 25 | 14 | 12 | 25.7 | 27.4 |
| WestBred 926 | 31 | 11 | 41 | 34 | 37 | 34 | 21 | 17 | 14 | 6 | 24.4 | 27.4 |
| Grandin | 29 | 10 | 43 | 35 | 32 | 33 | 17 | 23 | 12 | 9 | 25.3 | 27.4 |
| Fortuna | 33 | 12 | 36 | 35 | 42 | 31 | 21 | 27 | 16 | 10 | 26.6 | 27.4 |
| Rambo | 27 | 15 | 43 | 36 | 46 | 35 | 19 | 24 | 13 | 11 | 26.7 | 27.4 |
| Lew | 24 | 23 | 41 | 31 | 43 | 32 | 21 | 26 | 13 | 11 | 26.0 | 27.4 |
| Newana | 29 | 14 | 42 | 32 | 39 | 33 | 19 | 22 | 15 | 11 | 25.6 | 27.4 |
| Hi-Line | 22 | 12 | 44 | 32 | 44 | 34 | 19 | 26 | 13 | 10 | 25.0 | 27.4 |
| Ernest | | | | | 45 | 34 | 19 | 21 | 13 | 11 | 23.6 | 25.2 |
| Fergus | | | | | 34 | 33 | 20 | 17 | 12 | - | 22.2 | 25.2 |
| WB Express | | | | | 41 | 33 | 19 | 17 | 11 | 8 | 21.2 | 25.2 |
| WestBred 936 | | | | | 34 | 32 | 19 | 19 | 14 | 7 | 20.7 | 25.2 |
| Scholar | | | | | | 36 | 19 | 20 | 16 | 12 | 19.4 | 21.2 |
| MTHW 9420 | | | | | | 30 | 19 | 20 | 14 | 8 | 23.1 | 21.2 |
| Nursery Mean | 28.2 | 14.2 | 40.8 | 34.3 | 40.8 | 32.9 | 19.1 | 22.4 | 13.6 | 10 | | |

The 1991-1996 variety trials were located on Ron Long's farm; the 1997-2000 trials were located at the Birkeland farm. 1997 trial was abandoned due to an extreme wild oat infestation. All trials were planted on re-crop ground.

Table 33. Winifred Re-Crop Spring Wheat Multi-Year Summary of Selected Varieties.
Exp. 9973 Central Agricultural Research Center, Moccasin, MT.

| Selected Varieties | 1998 | 1999 | 2000 | 2001 | Mean | McNeal Same Years |
|---|---|---|---|---|---|---|
| | | ---------- bu/a ---------- | | | | |
| McNeal | 47 | 37 | 31 | 24 | 34.7 | - |
| Amidon | 40 | 31 | 27 | 28 | 31.6 | 34.7 |
| WestBred 926 | 47 | 36 | 23 | 24 | 32.5 | 34.7 |
| Grandin | 46 | 36 | 28 | 22 | 33.0 | 34.7 |
| Fortuna | 39 | 36 | 29 | 24 | 31.9 | 34.7 |
| Rambo | 43 | 35 | 23 | 25 | 31.4 | 34.7 |
| Lew | 34 | 31 | 28 | 27 | 30.0 | 34.7 |
| Newana | 42 | 33 | 28 | 27 | 32.6 | 34.7 |
| Hi-Line | 46 | 35 | 27 | 26 | 33.5 | 34.7 |
| Ernest | 41 | 32 | 28 | 24 | 31.3 | 34.7 |
| Fergus | 44 | 34 | 24 | - | 34.0 | 34.7 |
| WB Express | 48 | 43 | 30 | 29 | 37.6 | 34.7 |
| WestBred 936 | 53 | 38 | 27 | 26 | 36.1 | 34.7 |
| Scholar | 38 | 37 | 27 | 29 | 32.8 | 34.7 |
| MTHW 9420 | 44 | 37 | 28 | 25 | 33.4 | 34.7 |
| Nursery Mean | 42.5 | 35.5 | 27.5 | 26.0 | | |

Table 34. Predicted yields of selected spring wheat varieties grown in Central Montana based on previous seven years[1/] of variety performance. Central Agricultural Research Center, Moccasin, MT.

| | | Yield Level (**X**) in bu/a | | | | | |
|---|---|---|---|---|---|---|---|
| | | **30** | **45** | **60** | | | |
| Variety | Class | Projected Yields (**Y**) – bu/a | | | LY[2/] | Predictive Equation | $R^2$ |
| **Amidon** | HRS | **30.6** | **45.9** | **60.9** | 31 | Y = 0.9319 + 2.636 | 0.9767 |
| **Ernest** | HRS | **29.0** | **42.3** | **55.5** | 27 | Y = 0.8842 + 2.455 | 0.9733 |
| **Fergus** | HRS | **28.5** | **44.7** | **60.9** | 23 | Y = 1.0782 - 3.184 | 0.9825 |
| **Fortuna** | HRS | **29.7** | **42.7** | **55.8** | 31 | Y = 0.8717 + 3.511 | 0.9754 |
| **Grandin** | HRS | **28.9** | **43.7** | **58.6** | 25 | Y = 0.9910 - 0.8647 | 0.9761 |
| **Hi-Line** | HRS | **30.2** | **47.5** | **64.9** | 31 | Y = 1.1579 - 4.587 | 0.9728 |
| **Lew** | HRS | **28.4** | **41.6** | **54.7** | 31 | Y = 0.8766 + 2.139 | 0.9780 |
| **McNeal** | HRS | **32.4** | **49.3** | **66.3** | 31 | Y = 1.130 - 1.540 | 0.9876 |
| **MTHW 9420** | HWS | **30.6** | **48.2** | **65.8** | 22 | Y = 1.1737 - 4.643 | 0.9858 |
| **Newana** | HRS | **30.5** | **44.9** | **59.4** | 31 | Y = 0.9629 + 1.602 | 0.9775 |
| **Pioneer 2375** | HRS | **30.4** | **45.6** | **60.7** | 14[3/] | Y = 1.010 + 0.1313 | 0.9814 |
| **Scholar** | HRS | **30.6** | **44.0** | **57.4** | 27 | Y = 0.8930 + 3.849 | 0.9813 |
| **Westbred 926** | HRS | **29.7** | **45.2** | **60.6** | 31 | Y = 1.0292 - 1.132 | 0.9820 |
| **Westbred 936** | HRS | **30.9** | **47.7** | **64.5** | 26 | Y = 1.1202 - 2.761 | 0.9788 |
| **WB Express** | HRS | **30.3** | **46.6** | **63.0** | 28 | Y = 1.0905 - 2.460 | 0.9788 |

1/ Data used to calculate predictive equations is compiled from dryland environments, fallow and no-till, in Moccasin, Denton, Highwood, Fort Benton and Winifred from 1995 - 2001.
2/ LY = Number of Location/Years used to create the predictive regression equation.
3/ Varieties with fewer than 12 location/years may not be accurate; use equation with caution.
Data File C:\Regressions.xls