

PROJECT TITLE: 2003 Evaluation of durum wheat variety performance in no-till fallow near Winifred.

PROJECT LEADER: D. M. Wichman, Agronomist, Moccasin, MT

PROJECT PERSONNEL: L. E. Talbert, Spring Wheat Breeder, Bozeman, MT
S. P. Lanning, Spring Wheat Research Assoc., Bozeman, MT
J. Vavrovsky, Research Specialist, Moccasin, MT
Dave Philips, Fergus County Extension Agent, Lewistown, MT

OBJECTIVES:
Evaluate the agronomic performance of durum wheat varieties in crop-fallow environment in central Montana on deeper clay soils near Winifred.

RESULTS:
A combination of frequent high winds and muddy soils made it difficult for producers seed when they wanted to. Droughty conditions that set in by the first week of June resulted in poor spring crops especially when seeded in mid-late May. Cooperating farmer seeded his spring wheat after the 21-May. The durum trial averaged 18.6 bu/a while the wheat around the plot averaged 4.1 bu/a. Over four season (200-2003) Mountrail and Maier have higher mean yields than Kyle and Lebsock (Table 1). 2003 Yield difference were not significantly different. Lebsock had significantly higher test weight than Utopia and Mountrail.

SUMMARY:
The weather continues to frustrate durum wheat production in central Montana. There is little differences in yield of the trial entries, but some have tend to have lower test weights.

FUTURE PLANS:
This trial will be continued.

Table 1 Winifred spring durum variety trial on fallow multi-year (1998-2003) yield summary and 2003 performance.

Exp. 9873 Central Agricultural Research Center, Moccasin, MT

Variety	1998	1999	2000	2001	2002	Yield 2003	Test Wt 2003	Protein 2003
	----- bu/a -----					bu/a	lbs/bu	%
McNeal ¹¹	47	44	33	25				
Kyle	39	33	34	23	36	18	58.0	16.9
Maier		36	35	23	43	18	58.3	15.9
Mountrail		34	36	26	40	18	57.5	15.9
Lebsock			30	24	36	20	59.4	15.5
Plaza			31	23	--			
Utopia						18	56.4	16.4
AC Avonlea						19	58.2	15.8
Mean	38.7	34.3	31.7	24.0	40.1	18.6	58.0	16.1
CV 1						7.295	0.79	
LSD (0.05)						2.5	0.82	
Seed Date:	2-May-03		Moist Soil depth: 42"					
Fertilizer:	10-10-10-5 w/seed		60 N urea top dress					
Harvest Date:	13-Aug-03							