

Cooperative Small Grain Nursery Trials

Plantings in 1988 included: Uniform Regional Hard Red Spring Wheat, Project leader Dr. Robert Busch, University of Minnesota; Uniform Hard Red Winter Wheat, Dr. Darryl Cox, Agronomy Dept., North Dakota State University; Uniform Regional Durum, Project leader Dr. R.G. Cantrell, North Dakota State University; Uniform Early and Uniform Midseason Oats, Project leader Dr. Howard Rines, University of Minnesota; Western Spring Barley and Western Dryland Spring Barley, Project leader Dr. E.A. Hockett, Montana State University; and Advanced Two-row Barley Nursery, cooperator Dr. Jerry Franckowiak, North Dakota State University. Field performance reports are furnished to respective project leaders for evaluation and compilation into composite regional reports. Required samples for quality analysis are furnished to appropriate state or USDA cereal chemistry laboratories upon request of respective project leaders. Trials included 30 varieties and experimental lines in the Uniform Regional hard spring wheat trial; 28 lines in the Uniform Regional durum nursery; 81 varieties and experimentals in three barley nurseries, and 60 varieties and experimental cultivars in the Uniform Early and Uniform Midseason Oat Nurseries.

Yields in all nursery plantings were low, reflecting the droughty growing conditions prevailing during the year. Hard spring wheat yields ranged from a low 3.6 to a high of 9.5 bushels per acre. Durum yields ranged from 5.4 to 10.9 bushels per acre. The highest barley yield in 1988 was 20.8 bushels per acre from ND 9147. Low barley yield was 3.2 bushels per acre. Oat yields ranged from a high of 25.6 bushels to 7.3 bushels per acre. Lowest test weights ever recorded at the station for oats, from 13.5 to 19 pounds per bushel, were produced in 1988, and are an indication of the severity of the drought.

Table 33. Uniform Regional Hard Red Spring Wheat Nursery

Entry	Bu/A Avg.	Test Wt. Lbs.	Heading Date	Height In.	1000 K.W. Grams
Marquis	9.2	57.0	21-Jun	18	22.0
Chris	7.4	57.0	13-Jun	17	23.2
Stoa	7.0	56.0	16-Jun	18	23.4
Era	8.5	57.5	15-Jun	18	22.4
Butte 86	5.7	58.5	12-Jun	18	23.0
SD 3005	3.6	59.5	11-Jun	15	23.6
SD 3000	7.4	56.0	14-Jun	19	23.4
SD 2980	6.5	60.5	12-Jun	17	23.8
SD 2999	7.6	56.0	12-Jun	16	22.4
SD 3014	7.6	57.5	15-Jun	17	24.5
MN 81110	8.2	55.0	15-Jun	16	25.6
MN 82354	8.4	57.0	13-Jun	15	23.4
MN 85324	8.6	57.0	15-Jun	19	27.7
MN 85110	5.2	57.0	15-Jun	17	31.5
MN 85328	7.5	57.0	13-Jun	15	23.8
MN 85167	7.5	55.0	17-Jun	17	25.4
ND 618	8.7	57.0	15-Jun	20	22.3
ND 626	8.3	58.0	15-Jun	20	26.0
ND 640	9.5	57.5	16-Jun	19	23.2
ND 650	7.9	59.0	17-Jun	19	24.4
ND 652	8.5	58.0	18-Jun	18	24.8
HS85-30	8.1	57.0	16-Jun	17	27.9
HS85-476	6.9	54.0	15-Jun	17	26.0
HS85-674	9.0	58.0	15-Jun	16	27.3
HS85-902	7.5	58.0	17-Jun	17	27.6
2375	5.9	60.0	13-Jun	14	27.1
FA 984-384	8.8	58.0	13-Jun	19	23.7
BZ 986-345	6.5	54.5	13-Jun	16	33.4
WA 7493	9.3	56.0	12-Jun	15	27.8
WA 7494	7.3	56.0	13-Jun	16	27.4
Seeding Date: April 20 Harvest Date: July 20					
LSD .05 = 2.8 Bu/A CV = 22.6%					

Table 34. 1988 Uniform Regional Durum Nursery, Dickinson

Entry	Bu/A Avg.	Test Wt. Lbs.	Days to Head	Height Cm	1000 K.W. Grams
Mindum	7.6	59.5	61	56	32.1
Stoa	6.4	58.5	57	44	29.7
Ward	7.0	59.0	58	45	29.4
Rugby	7.8	59.5	58	51	31.3
Vic	5.7	59.0	58	54	33.6
Lloyd	7.5	59.0	59	47	34.5
Monroe	8.1	58.0	56	57	30.9
Renville	7.3	59.0	59	57	31.5
Medora	8.8	60.0	58	53	34.2
Sceptre	8.2	59.0	59	52	30.3
Stockholm	8.0	59.5	59	42	31.4
Fjord	9.6	60.0	58	52	32.5
D 8261	7.6	59.0	58	48	31.2
D 8291	10.1	59.0	61	44	30.2
FA 883-323	8.6	59.0	59	50	29.9
D 8302	10.9	59.0	58	46	32.2
D 8370	8.1	60.0	60	44	31.1
D 8374	7.6	60.0	61	45	34.3
D 8380	6.4	59.5	60	43	33.3
D 83103	7.2	59.0	58	47	35.0
D 8434	7.0	60.0	54	46	33.3
D 8458	9.7	59.0	58	44	32.0
D 8459	10.3	60.0	58	45	33.5
D 8460	9.0	59.0	58	45	28.9
D 8475	8.3	61.0	58	45	32.7
D 8479	7.8	59.0	59	43	35.4
D 84130	5.4	61.0	60	41	34.4
D 84134	7.3	59.5	58	39	31.1
Seeding Date: April 20			Harvest Date: July 20		
LSD .05 = 3.7 Bu/A			CV = 33.1%		

Table 35. 1988 Advanced 2-Row Barley Nursery (Exp. 12)

Entry	Bu/A Avg.	Test Wt. Lbs.	Heading Date	Height Cm
Bowman-19	11.7	47.0	19-Jun	42
Hazen	9.5	45.0	20-Jun	43
Lewis	12.5	47.5	23-Jun	44
Morex	12.8	46.5	17-Jun	44
ND 5971	3.3	32.0	23-Jun	41
ND 8953	7.9	42.0	18-Jun	43
ND 8995	9.4	48.0	20-Jun	39
ND 9034	12.4	50.0	21-Jun	39
ND 9104	7.2	44.5	22-Jun	34
ND 9147	12.2	47.5	23-Jun	38
ND 9859	11.7	46.0	21-Jun	43
ND 9864	8.5	46.0	21-Jun	40
ND 9866	8.2	48.0	21-Jun	44
ND 9867	9.4	48.0	22-Jun	41
ND 9870	11.0	47.5	22-Jun	47
ND 9905	14.4	47.0	22-Jun	47
ND 9917	9.0	45.0	22-Jun	40
ND 9926	9.8	47.0	23-Jun	39
ND 10030	11.1	48.0	23-Jun	39
ND 10042	13.4	48.0	22-Jun	40
ND 10071	12.6	49.0	22-Jun	46
ND 10122	10.7	45.0	23-Jun	47
ND 10143	10.7	46.0	22-Jun	34
ND 8671-3	3.2	33.0	22-Jun	40
ND 8671-18	4.8	35.5	23-Jun	44
Seeding Date: April 20		Harvest Date: July 21		
LSD .05 = 3.9 Bu/A		CV = 23.8%		

Table 36. 1988 Western Spring Barley Nursery, Dickinson

Entry	Bu/A Avg.	Test Wt. Lbs.	Heading fr 1/1	Height Cm	-----Plumpness %-----		
					6/64	5.5/64	Pan
Trebi *	14.6	41.0	177	34	69.7	16.4	13.9
Steptoe *	11.7	40.0	169	37	77.4	13.9	8.7
Klages	13.1	42.0	173	38	68.3	17.3	14.4
Morex *	18.5	48.0	173	35	75.8	13.1	11.1
ID 223222 *	14.1	44.0	172	43	70.1	17.2	12.7
MT 81143	18.6	46.0	173	40	77.3	13.4	9.3
MT 81502	17.2	46.0	177	40	70.0	13.6	16.4
ND 7691	15.7	44.0	177	42	71.9	17.6	10.5
VD 403582	15.4	46.0	172	36	73.6	19.5	6.9
PB 265	16.1	45.0	177	42	74.2	14.9	10.9
SF 8623 *	13.8	45.0	176	35	73.5	16.2	10.3
SM 8618	15.4	45.0	177	39	65.2	20.2	14.6
WA 877178	19.7	48.0	173	40	75.4	15.1	9.5
WA 102178 *	15.6	46.0	177	38	64.6	21.6	13.8
BA 4039	19.1	46.0	175	33	77.4	12.2	10.4
BA 8529	15.0	47.0	177	38	74.0	15.4	10.6
ID 82519 *	10.9	50.0	169	31	76.0	17.7	6.3
ID 71966 *	6.9	45.0	169	26	67.4	23.2	9.4
MT 83533	13.9	46.0	176	35	79.6	13.0	7.4
MT 140523	20.5	49.0	177	36	75.1	15.4	9.5
ND 9147	20.8	49.0	173	34	80.3	11.4	8.3
OR 842008	13.9	42.0	176	34	71.9	13.6	14.5
OR 842011	11.5	41.0	NA	26	58.8	19.2	22.0
UT 1731 *	9.5	38.0	170	35	76.9	12.4	10.6
UT 1075 *	14.5	43.0	NA	30	61.1	25.8	13.1
UT 2507 *	11.9	38.0	169	32	69.4	18.7	11.9
WA 944883	19.3	46.0	NA	34	75.0	12.8	12.1
WA 128098 *	7.9	42.0	171	34	83.6	10.0	6.4
WA 136278	10.7	45.0	NA	36	67.7	14.6	17.7
WP 7877 *	14.8	45.0	173	32	64.4	27.8	7.8
*6-row							
Seeding Date: April 20				Harvest Date: July 26			
LSD .05 = 5.8 Bu/A				CV = 24.3%			

Table 37. 1988 Western Dryland Spring Barley Nursery, Dickinson

Entry	Bu/A Avg.	Test Wt. Lbs.	Heading fr 1/1	Height Cm	-----Plumpness-----		
					6/64	5.5/64	Pan
Munsing	16.5	47.0	174	35	69.9	21.9	8.2
Steptoe	10.0	41.0	169	37	74.7	12.4	13.9
Clark	14.0	48.0	174	37	78.5	14.2	8.3
Hector	12.5	46.0	177	38	75.2	13.7	11.1
ID 810099	10.6	44.0	177	26	36.4	43.9	19.7
Lewis	18.0	46.0	174	36	74.1	16.1	9.9
Bowman	12.8	45.0	172	37	76.9	12.1	11.1
BA 280350	15.5	46.0	177	34	70.7	16.2	13.2
ID 810274	12.4	45.0	177	36	71.7	14.5	13.8
MT 81161	11.6	41.5	178	42	72.5	16.2	11.4
MT 140523	15.4	51.0	172	39	82.8	11.2	6.0
MT 83422	17.3	47.0	177	37	76.8	12.8	10.4
MT 83424	13.0	46.0	176	41	72.2	17.6	10.2
MT 83435	18.4	49.0	177	42	74.0	16.0	10.1
MT 83533	15.7	48.0	178	33	75.9	15.0	9.1
ND 8671	15.4	48.0	172	39	86.8	8.2	5.0
WA 877178	12.2	47.0	177	35	74.4	12.7	12.9
ID 71966	14.3	46.0	169	33	73.0	20.4	6.6
MT 83491	14.4	45.0	178	36	71.7	16.8	11.5
MT 83518	12.1	44.0	178	38	74.0	13.3	12.7
ND 9870	15.8	48.0	172	42	90.0	5.6	4.9
ND 10122	18.0	49.0	176	46	82.5	9.8	8.2
WA 701883	11.9	46.0	177	38	83.5	7.9	8.6
WA 755283	15.5	49.0	174	32	74.3	18.3	7.4
WA 777383	9.5	43.0	176	37	77.2	12.3	10.5
WA 102178	7.1	38.0	174	37	81.9	10.2	7.9
Seeding Date: April 20				Harvest Date: July 25			
LSD 0.5 = 4.1 Bu/A				CV = 18.0%			

Table 38. 1988 Uniform Early Oats Nursery, Dickinson

Entry	Bu/A Avg.	Test Wt. Lbs.	Height Cm	----- Heading -----	
				Date	fr 1/1
Otee (ck)	17.0	14.5	48	15-Jun	166
IL 81-1882	17.3	16.0	39	15-Jun	166
IL 83-8037-1	11.3	17.0	44	13-Jun	164
IL 83-8022	17.6	18.0	42	14-Jun	165
IL 84-3098-1	13.9	16.5	42	14-Jun	165
IL 80-2294	11.6	16.5	38	13-Jun	164
Don (ck)	16.7	16.0	43	14-Jun	165
IA D623-15	16.8	17.0	45	14-Jun	165
IA X933-11-2	7.3	16.0	49	12-Jun	163
Clintford (ck)	17.0	18.0	43	14-Jun	165
PA 8196-1334	18.5	17.0	43	14-Jun	165
PA 8290-7026	20.3	16.5	44	14-Jun	165
PA 8393-15050	13.3	17.5	37	14-Jun	165
PA 8393-17361	22.1	18.0	39	16-Jun	167
SD 830095	17.5	18.0	42	13-Jun	164
MN 84134	18.4	14.5	48	17-Jun	168
Andrew (ck)	12.6	18.5	45	12-Jun	163
MO 07831	14.4	15.5	39	13-Jun	164
MO 07929	12.7	17.5	38	13-Jun	164
MO 07824	22.0	17.5	36	15-Jun	166
MO 07941	10.7	16.0	37	15-Jun	166
MO 08054	15.8	16.0	38	15-Jun	166
Bates (ck)	17.2	17.0	40	13-Jun	164
WI X487 2-1-3	11.8	16.0	35	12-Jun	163
Seeding Date: April 20			Harvest Date: August 5		
LSD .05 = 6.3 Bu/A			CV = 24.6%		

Table 39. 1988 Uniform Midseason Oat Nursery, Dickinson

Entry	Bu/A Avg.	Test Wt. Lbs.	Height Cm	----- Heading -----	
				Date	fr 1/1
IL 81-1882	18.9	15.0	47	17-Jun	168
IL 81-2570	16.0	15.5	36	17-Jun	168
IL 82-2154	17.3	17.5	46	20-Jun	171
IL 83-8518-1	14.9	19.0	41	16-Jun	167
IL 82-2070	17.1	18.0	30	16-Jun	167
Ogle	12.8	17.0	42	18-Jun	169
P7869D1-5-17-3	18.8	16.5	40	18-Jun	169
OA 698-2	20.9	16.0	41	17-Jun	168
W 82056	20.4	18.0	45	20-Jun	171
W 83101	19.0	17.0	47	22-Jun	173
W 84061	24.8	16.5	51	21-Jun	172
NY 80002-1	19.3	17.0	47	21-Jun	172
PA 8494-9588	20.6	15.5	44	21-Jun	172
PA 8494-4099	19.6	19.0	42	18-Jun	169
PA 8393-11138	17.0	18.0	46	21-Jun	172
PA 8494-11717	14.7	17.5	31	15-Jun	166
PA 8393-1500	25.6	18.5	37	21-Jun	172
Clintland	16.8	19.0	41	15-Jun	166
SD 820045	15.8	14.5	43	17-Jun	168
SD 840104	19.1	17.5	43	21-Jun	172
SD 84065	16.6	18.5	43	14-Jun	165
MN 84231	15.0	17.0	45	15-Jun	166
MN 85175	17.0	17.0	42	16-Jun	167
Gopher	13.3	16.5	44	17-Jun	168
ND 820294	19.6	17.5	47	15-Jun	166
ND 830775	16.2	15.0	46	16-Jun	167
ND 830646	18.9	17.0	41	16-Jun	167
ND 840876	20.1	14.5	41	22-Jun	173
ND 840341	17.3	13.5	48	21-Jun	172
ND 840769	20.2	14.0	50	19-Jun	170
Dal	16.1	17.0	46	15-Jun	166
WI X487 2-10	19.3	16.5	43	15-Jun	166
WI X487 2-2	15.9	18.0	43	15-Jun	166
WI X4223-2-1-1	19.0	16.0	44	15-Jun	166
WI X5208-2	18.5	18.0	44	16-Jun	167
WI X5240-1	22.6	19.0	42	17-Jun	168
Seeding Date: April 20		Harvest Date: August 5			
LSD .05 = 7.2 Bu/A		CV = 23.3%			