

COOPERATIVE SMALL GRAIN NURSERY TRIALS

Plantings in 1986 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 31 varieties and experimental lines in the Uniform Regional Hard Spring Wheat Trial; 30 lines in the Uniform Regional Durum Nursery; 70 varieties and experimentals in three barley nurseries. Yields were less than those of field plots. Hard red spring wheat yields ranged from a low of 29.4 bushels per acre to 58.0 bushels per acre. High field plot yield was 69.8 bushels per acre. D81183, a North Dakota experimental, was high producer in the Regional Durum Trials and ND 820294, at 143.2 bushels per acre, was the highest yielding oats in the 1986 trials. A wide range of yields were produced by 81 barley lines, with a high yield of 88.6 pounds per acre recorded for MT 140523. Barley yields ranged from a low of 33.3 to 88.6 bushels per acre. Individual nursery yields are set forth in Tables 35 through 42.

Table 36. 1986 Uniform Regional Durum Nursery, Dickinson

Entry	Bu/A Avg.	Test Wt. Lbs.	Days to Head	Height Cm	1000 K.W. Grams
Mindum	40.5	60.0	53	112	42.0
Ward	51.8	62.0	50	79	48.0
Rugby	49.2	61.5	50	75	49.0
Vic	43.6	61.0	50	74	53.0
Lloyd	49.3	59.0	51	63	45.0
Medora	49.4	60.0	53	76	49.0
Monroe	43.3	59.5	49	72	52.0
Laker	48.1	60.0	53	74	47.0
Sceptre	46.3	60.0	51	67	47.0
D 79168	50.1	61.5	55	65	53.0
D 79209	49.3	61.0	50	67	47.0
D 8012	46.1	61.0	50	70	42.0
D 8016	47.0	59.0	51	69	46.0
D 8019	50.8	61.0	53	74	50.0
NAHD 81-466	45.4	61.5	48	62	49.0
NAHD 81-485	47.8	62.0	50	77	66.0
D 8172	50.6	61.0	51	77	47.0
D 8191	53.1	60.0	51	71	45.0
D 8193	49.0	61.5	49	68	47.0
D 8194	47.9	62.5	50	66	46.0
D 81151	56.2	61.5	50	80	47.0
D 81154	52.3	62.0	53	70	47.0
D 81183	55.5	61.0	51	69	47.0
D 8261	46.9	62.0	51	64	50.0
D 8263	48.6	62.5	51	63	49.0
D 8269	50.0	62.0	53	67	52.0
D 8279	47.5	61.0	51	67	51.0
D 8291	52.7	60.0	51	65	47.0
D 82136	48.6	62.0	50	60	43.0
FA 883-323	51.0	62.0	51	82	47.0
Seeding Date: May 11, 1986					
Harvest Date: August 18, 1986					
LSD .05 = 3.8 CV = 7.8%					

Table 37. 1986 Uniform Early Oats Nursery, Dickinson

Variety or Selection	Bu/A Avg.	Test Wt. Lbs.	Height Cm	Heading Date
Otee (ck)	101.1	35.5	70	27-Jun
Don	82.5	36.0	61	26-Jun
IL 80-2294	86.0	35.0	65	26-Jun
9257	107.8	38.0	82	01-Jul
IA D504	133.0	38.0	75	27-Jun
IA D623-15	91.0	34.0	69	30-Jun
7463	92.2	39.5	63	25-Jun
PA 7967-9010	64.0	43.5	58	27-Jun
PA 8393-17654	75.8	35.0	59	28-Jun
PA 8393-17353	89.6	36.5	64	30-Jun
PA 8393-17405	89.6	38.0	64	30-Jun
PA 8196-1334	82.7	35.0	67	27-Jun
PA 8290-3373	95.1	38.0	62	30-Jun
PA 8290-3375	92.6	38.5	67	26-Jun
PA 8290-6113	57.0	45.0	68	26-Jun
Starter	87.9	36.5	69	28-Jun
MN 84134	82.4	38.5	63	27-Jun
4170	81.6	37.0	68	25-Jun
MO 07399	88.6	37.0	69	27-Jun
MO 07444	73.1	34.5	56	28-Jun
MO 06767	85.4	38.0	67	28-Jun
MO 07824	99.8	37.5	62	01-Jul
MO 07477	76.8	36.0	57	27-Jun
9212	91.5	36.0	69	26-Jun
Date Planted: May 7, 1986				
Date Harvested: August 19, 1986				
LSD .05 = 13.3 CV = 13.1% No. of Reps = 3				

Table 38. 1986 Uniform Midseason Oats Nursery, Dickinson

Entry	Bu/A Avg.	Test Wt. Lbs.	Height Cm	----- Heading -----	
				Date	fr 1/1
IL 80-3072	95.6	37.5	70	30-Jun	180
IL 79-4924	83.0	36.5	66	30-Jun	180
IL 81-1882	84.9	35.0	63	30-Jun	180
IL 81-2570	95.0	37.0	70	28-Jun	178
IL 82-1657	105.2	34.0	71	03-Jul	183
9401	81.1	36.5	58	28-Jun	178
P7869D1-5-3-4	88.4	39.0	72	27-Jun	177
P76178RD1-29-3-3-1	104.3	38.0	67	30-Jun	180
P76178RD1-29-3-3-6	90.9	37.5	68	30-Jun	180
P76178A4-6-1-6-5	81.1	36.0	70	30-Jun	180
IA B605-1085	85.9	38.0	65	28-Jun	178
PA 8098-9433	65.4	40.5	60	27-Jun	177
PA 8398-17361	90.1	37.0	59	30-Jun	180
PA 8393-15040	68.9	37.5	47	29-Jun	179
PA 8290-9301	79.9	34.5	53	30-Jun	180
PA 8290-8084	88.5	35.5	56	01-Jul	181
7639	73.8	37.5	69	29-Jun	179
SD 800287	92.8	38.5	76	30-Jun	180
SD 810109	99.3	41.5	81	01-Jul	181
SD 820045	101.8	39.5	73	29-Jun	179
MN 81229	90.0	39.5	70	29-Jun	179
MN 81227	93.5	38.5	72	01-Jul	181
MN 83207	112.1	39.5	79	07-Jul	187
MN 84231	104.1	37.5	75	04-Jul	184
2027	108.1	36.5	79	01-Jul	181
ND 820603	130.9	38.0	69	03-Jul	183
ND 810104	136.5	37.0	77	30-Jun	180
ND 820294	143.2	36.5	80	01-Jul	181
ND 820742	129.1	38.0	75	03-Jul	183
ND 820559	132.1	37.5	83	03-Jul	183
9159	94.1	38.0	77	04-Jul	184
WI X4312-13	91.7	37.5	71	05-Jul	185
WI X4361-9	116.7	40.5	84	04-Jul	184
WI X4872-3	103.2	34.0	75	01-Jul	181
WI X4872-10	110.5	36.0	72	30-Jun	180
WI X4872-13	107.6	37.0	76	30-Jun	180
Date Planted: May 11, 1986					
Date Harvested: August 19, 1986					
LSD .05 = 10.1 CV = 8.8% No. of Reps = 3					

Table 39. 1986 Station Oats Nursery, Dickinson

Entry	Bu/A Avg.	Test Wt. Lbs.	Heading Date	Height In.
Don	75.4	35.5	27-Jun	25
Dumont	134.7	39.0	04-Jul	30
Hystest	88.8	42.0	30-Jun	32
Monida	107.9	36.0	06-Jul	30
Otana	105.7	38.0	04-Jul	33
Proat	102.2	37.0	05-Jul	31
Riel	135.8	38.5	05-Jul	33
Sandy	101.1	38.0	01-Jul	33
Steele	124.5	37.5	01-Jul	31
ND 810104	106.5	36.5	30-Jun	28
Seeding Date: May 11, 1986				
Harvest Date: August 19, 1986				

Table 40. 1986 Western Spring Barley Nursery

Entry	Bu/A Avg.	Test Wt. Lbs.	Heading fr 1/1	Height Cm	Plumpness		% Pan
					6/64	5.5/64	
CI 936	51.8	41.0	185	53	85.1	9.3	5.6
CI 15299	46.4	42.0	185	53	94.9	3.5	1.6
CI 15478	61.9	45.0	188	72	92.2	4.8	3.0
CI 15773	61.7	45.0	185	63	86.2	9.4	4.4
ID 910719	48.1	44.0	186	52	86.2	9.4	4.4
WA 890878	75.8	48.0	187	60	91.5	5.4	4.1
BA 280529	75.4	48.5	189	70	86.1	8.5	6.4
BA 814038	68.7	45.5	187	62	82.3	13.3	4.4
CB 1	63.3	48.5	189	54	93.4	4.0	2.6
CB 2	64.5	47.0	189	53	90.1	5.5	4.4
ID 910740	73.0	48.5	188	65	81.2	13.6	5.2
MT 81161	74.8	46.5	188	63	82.3	11.9	5.8
MT 81616	79.2	45.5	189	66	84.5	9.9	4.6
NK 41558	41.9	43.5	188	48	80.0	13.4	6.6
OR 8407	54.3	42.5	188	53	64.4	24.5	11.1
OR 8408	62.2	46.0	188	56	90.3	7.4	2.3
VD 23878	61.5	48.5	187	61	85.3	8.3	6.4
BA 680761	61.3	44.0	187	63	91.3	6.3	2.4
ID 223222	57.2	43.5	189	48	86.0	9.5	4.5
MT 81143	73.5	50.0	188	67	81.7	11.0	7.3
MT 81502	73.5	48.0	188	64	84.4	10.3	5.3
ND 7691	67.9	44.5	188	63	87.9	7.7	4.4
OM 8424	70.3	43.5	189	52	80.2	15.3	4.5
OR 8432	68.0	47.0	190	52	72.2	19.1	8.7
PB 29	56.8	44.5	188	61	65.5	21.9	12.7
UT 1731	49.8	42.5	188	59	77.5	14.9	7.6
UT 1505	54.1	41.0	187	55	74.9	19.6	3.5
VD 403582	64.6	47.5	189	50	93.9	4.3	1.8
WA 107898	65.7	46.5	188	56	81.7	11.0	7.3
WA 870780	58.3	42.0	187	63	94.1	4.8	1.2
Date Seeded: May 11, 1986		Date Harvested: August 12, 1986					
LSD .05 = 8.0		CV = 11.0%					

Table 41. 1986 Western Dryland Spring Barley Nursery

Entry	Bu/A Avg.	Test Wt. Lbs.	Heading fr 1/1	Height Cm	Plumpness		% Pan
					6/64	5.5/64	
CI 6009	37.5	48.0	189	46	90.6	6.2	1.2
CI 15229	47.7	44.5	177	51	91.2	6.2	2.6
CI 15514	76.3	46.0	188	66	85.4	9.6	5.0
CI 15857	81.3	46.5	188	64	75.6	17.4	7.0
ID 810099	85.7	46.5	188	65	84.7	9.8	5.5
ID 789009	53.3	43.5	181	51	82.1	12.7	5.2
CI 15856	82.0	46.5	188	67	78.9	12.1	10.0
PI 483237	86.6	46.0	188	61	83.8	12.1	4.1
AZ 2221	33.3	39.0	189	51	74.6	16.9	8.5
AZ 2229	43.9	39.0	188	49	80.7	16.3	3.0
BA 280529	72.5	46.5	189	71	78.0	14.9	7.1
MT 81143	73.2	48.5	188	69	76.2	13.3	10.5
MT 81502	78.1	46.0	189	68	69.5	20.3	10.2
MT 81616	78.5	44.0	189	64	81.7	12.4	5.6
MT 81619	79.3	44.0	189	66	67.1	20.8	12.1
OR 8432	61.5	45.5	189	53	54.1	30.4	15.5
VD 22872	63.9	45.0	187	58	74.0	15.8	10.2
VD 23878	65.0	46.0	187	63	81.0	11.2	7.8
WA 890878	71.0	46.0	188	62	71.1	19.7	9.2
BA 814038	67.4	44.0	189	65	67.4	24.8	8.8
BA 280350	72.8	45.5	189	65	57.6	25.4	17.0
ID 810274	87.1	46.5	189	61	86.9	8.9	4.2
ID 910719	63.0	45.0	177	51	88.1	8.2	3.4
MT 81161	74.8	46.0	180	59	85.9	9.7	4.4
MT 140523	88.6	46.0	188	60	87.7	8.1	4.2
OM 8413	69.3	44.0	189	52	40.8	41.7	17.5
Date Seeded: May 7, 1986		Date Harvested: August 11, 1986					
LSD .05 = 9.7		CV = 12.1%					

Table 42. 1986 Advanced 2-Row Barley Nursery (Exp. 12)

Entry	Bu/A Avg.	Test Wt. Lbs.	Heading Date	Height Cm
Bowman	80.6	49.0	01-Jul	61
Hazen	63.7	43.0	01-Jul	63
Lewis	78.9	49.5	04-Jul	64
Morex4	63.0	44.0	28-Jun	64
ND 5883	74.1	47.0	04-Jul	58
ND 5971	72.7	46.0	04-Jul	64
ND 8557	78.6	45.5	05-Jul	69
ND 8558	72.7	45.5	28-Jun	69
ND 8594	80.3	49.5	03-Jul	72
ND 8644	81.9	48.5	08-Jul	69
ND 8650	69.3	46.0	28-Jun	56
ND 8668	75.4	48.0	08-Jul	64
ND 8669	75.7	48.5	09-Jul	63
ND 8670	77.4	45.5	07-Jul	61
ND 8671	85.4	48.5	07-Jul	71
ND 8743	72.2	49.0	07-Jul	65
ND 8753	77.8	49.0	04-Jul	62
ND 8763	83.1	48.5	07-Jul	76
ND 8793	81.5	49.0	08-Jul	64
ND 8803	67.0	48.0	30-Jun	63
ND 8825	82.3	49.5	09-Jul	70
ND 8862	72.9	47.5	09-Jul	69
ND 7556	79.3	47.0	07-Jul	72
ND 7714	70.3	48.0	07-Jul	65
ND 7771	76.4	46.0	07-Jul	65
Seeding Date: May 7				
Harvest Date: August 14				
LSD .05 = 5.6 CV = 6.4%				