

EXPERIMENTS WITH WINTER WHEAT - 1965

Experiments with winter wheat at the Dickinson Experiment Station in 1965 included the Hard Red Winter Wheat Regional Performance Nursery, the intrastate Winter Wheat trial and a trial comparing a hoe drill seeding at a spacing of 10 inches with a hoe drill seeding at a spacing of 20 inches.

Northern Regional Performance Nursery: The regional nursery trial is grown at Dickinson mainly as a test of winterhardiness for newly developed strains of winter wheat. In years when satisfactory survival is obtained the test is continued through harvest for an evaluation of comparative yield, disease reaction and other agronomic characteristics under western North Dakota conditions. This years' planting of the regional nursery included the entries shown in table 24. None survived to spring.

Table 24. Northern Regional Performance Nursery - 1965		
Pedigree	C.I. No.	Entry No.
Kharkof	1442	1
Minter	12138	2
Yogo	8033	3
Warrior	13190	4
Cheyenne	8885	5
Winalta	13670	6
Lancer	13547	7

Ky 58-Nth x (Cnn-Tm-Mi-Hope) ²	13864	8
do. (61975)	13881*	9
Cnn-Pnc x Tk-Cnn (61528)	13882*	10
MM-Ech-Rm ³ x Cnn ² (61930)	13883*	11
Cnn ² x Selkirk (61361)	13884*	12
Ottawa x Cheyenne ² (62378)	13885*	13
Cheyenne x Yogo BC Bulk	13993*	14
(H44 x Minturki ²) x Minter	13858	15
Mtr-M2825 x H255-Bkk (N.S.II-53-62)	13994*	16
Yogo x Rushmore 57-135	13859	17
Yogo x Rushmore 57-27	13860	18
Yogo x Cheyenne 1-1-2-1	13861	19
Yogo x Cheyenne 11-5-3	13862	20
Bulk Winterhardiness 1376-8	13863	21
II-36-3 x III-51-31 (N.S. II-53-72)	13995*	22
Qv-Kr-Hf-Pd-Kr x Kv-Mql-Kv-Tm	13285**	23
Cmn x Mi-Hope-Pn-Oro-II#1-Cmn	13548**	24

*New in 1965.

**Entered from Southern Regional Performance Nursery

Intrastate Winter Wheat Survival and Production Trial: This trial has as its objective the comparison of the furrow drill and the double disk drill for seeding winter wheat. It was begun in the fall of 1961, and is grown at several other branch stations.

All winter wheat in the 1965 planting at Dickinson, except the hoe drill plantings on stubble land, winterkilled completely. Yield data and other agronomic data from the 1965 planting at Dickinson are recorded in table 25.

The Effect of Improved Cultural Practices on Winter Wheat Survival and Yield in Western North Dakota: This trial was begun in the fall of 1964 to compare survival and yield data of winter wheat planted with the furrow drill at a row spacing of 10 inches and at a row of 20 inches. Plantings at both spacings were made on summerfallow and on stubble land. Survival of all winter wheat seeded on summerfallow in this trial was zero. Survival of winter wheat seeded on stubble land was equal for both drill spacings and was recorded as 50%. Spot overseeding with spring wheat was necessary on both spacings.

Yields from this trial are summarized in table 26.

Table 25. Winter Wheat Survival and Production Trial. Dickinson. 1965.										
Drill Treatment	Yield-Bushels Per Acre				Test Wt.	Dates		% Rust		% Survival
	1	2	3	4		Head	Ripe	Leaf	Stem	
Summerfallow										
Chey. Hoe	36.4	46.8	34.4	39.2	59.0	---	OS	OS	OS	0
Chey. Press	44.0	39.3	48.7	44.0	58.5	---	OS	OS	OS	0
Mntr. Hoe	44.0	37.8	30.3	35.1	58.5	---	OS	OS	OS	0
Mntr. Press	46.4	45.6	40.1	42.4	59.0	---	OS	OS	OS	0

Rye Hoe	50.0	60.4	61.9	48.6	56.0	6-2	8-2	0	0	90
Rye Press	83.3	66.5	74.9	60.6	56.0	6-2	8-2	0	0	90
Selk. Hoe	38.5	42.6	31.6	41.3	58.5	7-2	8-14	20	5	---
Selk. Press	42.4	35.4	44.0	43.2	58.5	7-2	8-14	20	5	---

Stubble

Chey. Hoe	24.8	26.8	25.4	29.6	60.0	6-21	8-4		70	81
Chey. Press	0	0	0	0	---	---	OS	OS	OS	0
Mntr. Hoe	37.5	34.4	35.8	35.8	62.0	6-21	8-4		30	84
Mntr. Press	0	0	0	0	---	---	OS	OS	OS	0
Rye Hoe	39.0	46.4	50.1	39.8	55.0	6-2	8-2	0	0	91
Rye Press	0	0	0	0	---	---	---	0	0	0
Selk. Hoe	0	0	0	0	---	---	---	---	---	---
Selk. Press	0	0	0	0	---	---	---	---	---	---

Soil Moisture (% oven dry)

Summerfallow				Stubble Land			
Fall				Fall			
6"		10.4		6"		8.1	
12"		11.7		12"		7.2	
18"		11.3		18"		7.9	
24"		11.8		24"		8.6	

30"	11.9	30"	9.9
36"	13.0	36"	9.1
Spring		Spring	
6"	14.5	6"	11.5
12"	14.9	12"	11.7
18"	16.4	18"	11.6
24"	17.6	24"	10.5
30"	13.8	30"	10.3
36"	16.2	36"	9.8
42"	14.4		
Fertilizer			
Kind		Rate	
11-48-0		75 Lbs./Acre	
<p>Samples of plants taken from the summerfallow plots beginning January 4 showed 35% live plants on January 4. Vigor of the live plants deteriorated progressively and on March 1 there were no live plants remaining on fallow. Overseeding on summerfallow May 4, 1965; On stubble May 12, 1965.</p>			

[Back to 1965 Research Reports Table of Contents](#)

[Back to Research Reports](#)

[Back to Dickinson Research Extension Center \(http://www.ag.ndsu.nodak.edu/dickinso/\)](http://www.ag.ndsu.nodak.edu/dickinso/)

[Email: drec@ndsuent.nodak.edu](mailto:drec@ndsuent.nodak.edu)

