Table . Agronomic data on winter wheat varieties grown in the U.S.D.A. Uniform Yield nursery (three distributed three-row plots), Manhattan, Kansas, 1932.

1932 row no.	C. I. no.	Kan. no.	Variety	Plant height in.	Date fully headed May	Lodged %	Leaf rust %	Bu. per acre P.E.	Test wgt. lbs.	Kernel plumpness %	Yellow berry %	Protein %
940	10089	2670	Tenmarq Sel.	43	17	2	15	65.5±4.28	60.7	89	47	11.55
952	10091	2672	Kanred x Hard Federation	39	12	4	18	65.5±1.38	61.7	89	tr	13.25
967	10094		Turkey Sel. (Neb. No. 1063)	41	20	3	50	60.1±0.74	60.9	89	1	13.10
979	10098		do (" No. 1070)	42	18	2	60	60.1±1.45	61.3	89	1	12.65
949	11373	2671	Kanred x Hard Federation	34	14	0	20	59.6±0.90	61.3	87	3	12.75
955	10092	2673	do	40	15	12	15	59.1±1.69	60.8	91	3	12.90
982	10099		Kanred Sel. (Colo. No. 1066)	43	21	23	40	58.0±0.42	59.7	84	7	13.00
928	10087	2654	P 1066-1 x Burbank	43	18	2	35	58.0±3.45	60.8	86	3	11.85
925	11374	2679	Kanred x Marquis (H.C. No. 318)	42	15	0	20	57.2±1.65	62.4	93	8	13.00
910	8856	483	Early Blackhull	43	10	28	55	57.1±3.65	62.1	90	tr	14.20
958	10093	2674	Kanred x Hard Federation	40	12	1	13	56.6±3.09	62.0	89	tr	13.50
964	10016		Turkey Sel. (Neb. No. 1069)	41	18	2	55	56.5±1.59	61.2	88	1	12.55
970	10095		do (" No. 1065)	41	20	3	48	56.2±0.10	61.3	90	tr	13.15
946	10090	2644	Kanred x Marquis	44	19	3	13	55.9±2.43	61.6	91	18	12.65
904	6251	343	Blackhull	44	18	23	48	55.3±0.26	61.6	89	tr	13.70
973	10096		Turkey Sel. (Neb. No. 1066)	41	19	0	60	55.0±0.42	61.0	92	tr	13.30
976	10097		do (" No. 1068)	43	19	2	55	54.3±0.10	60.5	89	1	13.35
931	8884		Beloglina Sel. (No. Platte No. 11)	43	22	7	35	53.4±1.95	60.2	88	27	12.80
991	8220	495	Oro	43	21	1	40	52.9±1.51	60.4	84	2	-----
994	6686	2659	Kharkov (Hays No. 2)	43	22	7	40	52.1±1.79	59.9	84	4	-----
961	10015		Turkey Sel. (Neb. No. 1062)	42	19	2	55	52.0±1.36	60.9	87	2	13.40
907	6250	322	Nebraska No. 60	45	23	10	45	51.6±0.10	59.9	88	tr	13.90
916	10084	511	Sibley No. 81	45	22	12	15	50.1±1.10	61.0	88	tr	14.05
913	10083		Turkey Sel. (Okla. No. 1)	43	23	32	50	49.7±0.46	59.5	88	2	13.45
943	8257	2594	Pulhard	43	18	5	35	49.3±0.86	61.0	88	tr	13.20
985	10100		Turkey Sel. (Colo. No. 159)	43	20	38	38	49.2±1.30	59.4	83	8	13.15
922	10086		Mediterranean (Tex. No. 3015-81)	44	20	8	3	48.1±0.98	60.4	88	tr	15.55
937	10088		Minturki x (Beloglina x Buffum)	44	22	3	25	47.2±1.00	58.6	82	3	13.00
988	11375		Turkey Sel. (Colo. No. 351)	40	23	11	50	47.0±1.43	60.2	83	7	13.40
901	1442		Kharkov	41	23	14	50	46.4±2.45	59.9	87	tr	14.40
919	10085		Mediterranean (Tex. No. 5933-20)	43	19	14	13	45.1±3.43	60.2	87	tr	15.30
934	10012		Kanred x Minturki (No. Platte No. 14)	42	23	3	25	45.0±0.28	58.0	82	29	12.75

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

Woodward

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		I GRAIN	II	III STRAW	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
✓ Nebr. No. 60	6250											465	397	362	434	41.5	
✓ Turky Sel	10096											371	389	368	532	41.5	
✓ Beloglina Sel.	8884											364	400	461	427	41.3	
✓ Kamed x Hd. Fed.	10092											458	442	377	364	41.0	
Cheyenne	8885											394	375	389	481	40.9	
✓ Kharkof	1442											356	376	424	475	40.8	
✓ Turky Sel	10095											327	420	444	415	40.2	
✓ do	10100											353	403	356	471	39.6	
✓ do.	10016											359	416	406	381	39.1	
Red	8200											427	391	365	373	38.9	
✓ Turky Sel.	10083											305	414	364	473	38.9	
✓ do	10097											357	387	332	480	38.9	
✓ Kamed x Hd. Fed.	10093											369	390	400	363	38.1	
✓ Jenney Sel.	10,089											357	365	391	405	38.0	
✓ Turky Sel	10,098											356	382	316	462	37.9	
✓ Kamed x Meguin	10,090											387	388	395	321	37.3	
✓ Kamed Selection	10,099											289	379	357	460	37.1	
✓ Turky Sel	11,375											329	359	365	416	36.7	

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		GRAIN I	GRAIN II	STRAW III	Test weight per bushel	Protein content	U. S. grade
						Per ct.	*Per ct.*	*Inches*	*Per ct.*	*Per ct.*	*Per ct.*	*Bushels*	*Pounds*	*Pounds*	*Pounds*	*Per ct.*	
✓ Turky Sel.	10,015											328	382	416	330	36.4	
✓ do	10,094											307	458	357	326	36.2	
✓ Kamed x Hd. 7 ed	10,091											414	292	370	367	36.1	
✓ P1066-1 x Burbank	10,087											342	392	348	352	35.9	
✓ Blackhull	6251											395	334	306	355	34.8	
✓ Minturki x Bel-Buff	10088											282	353	305	427	34.2	
✓ Fulhard	8257											373	321	318	328	33.5	
✓ Kamed x Hd. 7ed.	11,373											348	300	328	334	32.8	
✓ Early Blackhull	8856											274	364	290	368	32.4	
✓ Kamed x minturki	10,012											258	316	267	432	31.8	
✓ Kamed x Mayo	11,374											291	307	322	30.8 —	30.7	
✓ Sibley 8P	10,084											349	395	380	336	36.5	
✓ Med. Sel.	10,085											318	394	293	350	33.9	
✓ do	10,086											276	331	296	304	30.2	
			P.E. of diff.					=	± 2.1135			bu./A.					
			Gen. P.E.					=	± 1.4945			"	"				
								=	4.07 %								

C. I. Form No. 158

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

U. S. D. A. UNIFORM YIELD TEST NURSERY, STILLWATER, OKLAHOMA, 1931-32.

Agronomy Farm, East 8300

Variety	C.I.No.	Okla.N.S.N.	Height	½ Headed	Ripe	Spring Survival	Plat 1	Plat 2	Plat 3	Plat 4	Average
Kharkof	1442	III-32-1	33	5/7	6/6	95	42.0	36.4	44.0	46.6	42.5
Nebr. 60	6250	" 2	32	5/7	6/6	90	41.6	36.2	37.0	35.8	37.7
Turkey	Check		32	5/7	6/6	85	43.2	38.0	41.0	40.2	40.6
Blackhull	6251	" 3	34	5/7	6/6	85	33.8	31.6	34.0	33.4	33.2
Fulhard	8257	" 4	34	5/3	6/2	90	19.4	35.2	33.6	34.8	30.8
Early Blackhull	8856	" 5	34	4/27	6/1	75	35.6	20.4	21.2	19.4	24.2
Beloglina Sel.	8884	" 6	34	5/7	6/6	100	28.2	30.4	30.8	31.0	30.1
Kanred X Minturki	10012	" 7	33	5/7	6/6	95	47.2	33.2	35.4	46.0	40.5
Turkey	Check		34	5/7	6/6	94	49.8	40.6	36.6	44.8	43.0
Turkey Sel.	10015	" 8	33	5/3	6/3	95	42.0	36.2	37.0	44.4	39.9
" "	10016	" 9	34	5/3	6/3	95	45.8	35.6	38.0	38.0	38.9
" "	10083	" 10	33	5/7	6/6	95	45.2	40.6	42.6	35.6	~~39.8~~ 41.0
Sibley No. 81	10084	" 11	35	5/7	6/6	80	35.6	28.0	35.8	35.6	33.8
Mediterranean Sel.	10085	" 12	32	5/7	6/7	70	24.6	23.4	24.0	25.4	24.4
Turkey	Check		34	5/7	6/6	95	45.6	48.0	52.0	46.0	47.9
Mediterranean Sel.	10086	" 13	33	5/7	6/7	80	27.2	23.7	30.0	21.8	25.7
P 1066 X Burbank	10087	" 14	33	5/7	6/7	80	36.8	27.8	26.7	38.4	32.4
Minturki X Bel.Bu.	10088	" 15	34	5/7	6/6	100	45.2	43.4	44.0	41.0	43.4
Tenmarq Sel.	10089	" 16	34	5/4	6/6	100	37.8	40.0	45.0	43.6	41.6
Kanred X Marquis	10090	" 17	35	5/7	6/6	85	37.2	35.8	34.4	35.2	35.7
Turkey	Check		33	5/7	6/6	90	49.6	43.8	45.2	45.0	45.9
Kanred X Hard Fed.	10091	" 18	29	4/28	6/2	85	37.0	40.0	37.2	26.4	35.2
" " "	10092	" 19	31	4/28	6/2	95	41.6	38.6	44.0	36.0	40.1
" " "	10093	" 20	29	4/26	6/2	80	25.6	35.8	30.8	24.0	29.1
Turkey Sel.	10094	" 21	30	5/7	6/6	100	43.2	38.6	41.2	41.2	41.1
" "	10095	" 22	30	5/7	6/6	100	39.6	34.0	39.0	40.4	38.3
Turkey	Check	"	31	5/7	6/6	100	37.0	43.0	48.8	41.0	42.5
Turkey Sel.	10096	" 23	31	5/7	6/6	100	35.4	34.6	34.6	34.6	34.8
" "	10097	" 24	32	5/7	6/6	95	41.4	39.0	37.2	37.8	38.9
" "	10098	" 25	31	5/7	6/6	95	32.0	33.0	39.0	38.4	35.6
Kanred Sel.	10099	" 26	31	5/7	6/6	90	41.6	34.8	43.0	38.6	39.5
Turkey Sel.	10100	" 27	31	5/7	6/6	95	45.4	39.8	43.2	45.4	43.5
Turkey	Check		33	5/7	6/6	90	40.2	40.8	38.0	41.6	40.2
Kanred X Hard Fed.	11373	" 28	31	5/1	6/2	75	32.2	33.8	34.0	35.6	33.9
Kanred X Marquis	11374	" 29	29	5/2	6/3	40	11.0	11.6	14.2	15.0	13.0
Turkey Sel.	11375	" 30	30	5/7	6/6	100	46.6	45.0	36.0	42.4	42.5

Table . Agronomic data on strains of winter wheat grown in U.S.D.A. Uniform Yield nursery (three distributed three-row plots), Colby, Kansas, 1932.

1932 row no.	C. I. no.	Kan. no.	Variety	Winter-killing %	Plant height in. (a)	Date full head June	Bu. per acre P.E.	Test wgt. lbs.	Kernel plumpness %	Protein %
86	10100		Turkey Sel. (Colo. 159)	1	30	8	*44.5	----	87	13.50
83	10099		Kanred Sel. (Colo. 0166)	1	29	8	40.2±1.36	61.7	86	13.25
2	1442		Kharkov	tr	33	9	40.2±0.62	61.6	86	13.40
32	8884		Beloglina Sel. (No. Platte 11)	3	32	7	39.3±0.84	61.2	86	13.25
14	10083		Turkey Sel. (Okla. 1)	6	33	9	38.8±1.59	60.3	85	13.60
62	10015		do (Neb. 1062)	1	33	9	*38.1	----	85	14.15
77	10087		do (" 1068)	2	31	8	37.3±3.17	61.7	86	13.90
71	10095		do (" 1065)	12	28	8	36.9±1.14	62.0	86	13.50
56	10092	2673	Kanred x Hard Federation	23	25	8	36.8±1.93	61.6	86	13.75
35	10012		Kanred x Minturki (No. Platte 14)	2	33	9	36.8±0.08	59.3	82	13.55
74	10096		Turkey Sel. (Neb. 1066)	2	29	8	36.8±0.78	62.5	86	13.65
68	10094		do (" 1063)	5	26	8	36.7±0.14	61.7	87	13.50
26	11374	2679	Kanred x Marquis (N.C. 318)	37	32	8	35.6±1.28	61.2	85	14.75
89	11375		Turkey Sel. (Colo. 351)	3	30	9	*35.1	----	85	13.40
47	10090	2644	Kanred x Marquis	13	33	9	35.0±2.71	61.8	86	13.90
8	6250	322	Nebraska No. 60	2	34	9	34.9±0.72	60.2	84	13.70
80	10098		Turkey Sel. (Neb. 1070)	2	24	8	34.9±1.20	62.3	87	13.60
38	10088		Minturki x (Beloglina x Buffum)	2	36	10	33.9±1.65	58.7	85	14.25
29	10087	2654	P 1066-1 x Burbank	19	30	7	33.6±1.32	60.7	84	13.10
5	6251	343	Blackhull	18	31	8	33.5±3.13	61.4	84	13.55
17	10084	511	Sibley No. 81	18	35	9	*32.6	----	84	14.75
65	10016		Turkey Sel. (Neb. 1069)	5	29	8	32.6±0.46	61.7	86	13.45
53	10091	2672	Kanred x Hard Federation	25	24	8	30.4±0.38	----	85	14.35

(continued)

Table continued.

1932 row no.	C. I. no.	Kan. no.	Variety	Winter-killing %	Plant height in.	Date: full: head: June	Bu. per acre P.E.	Test: wgt.: lbs.	Kernel: plump-ness %	Protein %
41	10089	2670	Tenmarq Sel.	13	30	8	*30.1	----	83	14.05
59	10093	2674	Kanred x Hard Federation	21	23	8	29.6±2.69	----	85	15.55
50	11373	2671	do	32	25	8	*27.6	----	84	13.90
44	8257	2594	Pulhard	23	32	8	27.0±2.09	----	83	14.50
23	10086		Mediterranean (Tex. 5015-81)	68	37	10	25.9±0.30	----	78	16.45
11	8856	483	Early Blackhull	55	30	1	20.3±2.61	----	83	14.15
20	10085		Mediterranean (Tex. 5933-20)	78	35	9	19.8±2.55	----	76	15.90

(a) Plant height figures are averages of only two series.

* Yields and kernel plumpness figures of these varieties are averages of only two series, because tags of bundles were lost in shipping.

Where there is no figure on test weight, sufficient grain not available.

P. E. of diff. = ±1.9443 Bu / A.
Generalized P.E = ±1.3748 " "
= 4.07 %

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Denton

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		I GRAIN	II	III STRAW	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Red Sel. –	10086											248	255	354	265		28.1
do –	10085											267	308	379	354		32.7
Kamed x Marquis –	10090											387	347	335	300		34.2
Early Blackhull –	8856											308	286	299	284		29.4
Blackhull –	6251											202	278	252	239		24.3
Kanred –	1442											228	238	274	245		24.6
Nebr. No. 60 –	6250											260	244	247	237		24.7
Turkey –	10083											239	305	276	240		26.5
Sibley 81 –	10084											282	331	314	330		31.4
Kamed x Marquis	11374											200	68	203	208		17.0
P1066-1 x Burbank	10087											359	328	295	354		33.4
Beloglina Sel. –	8884											236	299	266	279		27.0
Kamed x Mintaka –	10012											234	269	238	253		24.9
Mintaka x Red Bluff –	10,088											293	257	266	215		25.8
Jenney Sel. –	10,089											238	327	341	310		30.4
Fulcaster –	8257											309	317	270	300		29.9
Kamed x Red. Fife –	11373											271	246	272	268		26.4
do. –	10,091											262	331	308	324		30.6

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE
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AGRONOMIC AND QUALITY DATA

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DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		GRAIN I	GRAIN II	STRAW III	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Kanred × Hd. Fed.	– 10,092											298	386	336	324		31.1
do	– 10,093											206	356	285	354		30.0
do	– 10,015											142	171	188	168		16.7
do	– 10094											182	211	217	210		20.5
do	– 10095											188	226	220	212		21.2
do	– 10096											173	173	219	190		18.9
do	– 10097											179	163	188	162		17.3
do	– 10016											224	221	226	246		22.9
do	– 10098											217	244	179	228		21.7
do	– 10099											228	270	327	210		25.9
do	– 10100											331	264	270	259		28.1
do	– 11375											233	211	225	212		22.0

P. E. of diff. = ±1.5077 bu./A.
Generalized P. E. = ±1.0661 " "
= 4.119

C. I. Form No. 158

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

Notes on advanced Nursery.

Planted Series 1 & 2 Oct 21 - Emerged Oct 27
" Ser 3 & 4 Oct 26 " Nov. 5

Because of difference in planting dates notes on series 1 & 2 were used for dates of first head & fully ripe.

Abundant moisture throughout winter and spring. Severe epidemic of leaf rust in Feb & March. Freeze of March 13 checked leaf rust and allowed more more normal growth. Minimum temperature of 15°F on Mar 13 caused damage to Fulty, K x M, 2679, and Neb 28 as indicated by ~~so~~ stand notes.

Shattering notes taken on June 9 after plot rows were harvested. A severe wind storm a few days before had lodged most all varieties.

Denton check rows in yield summary cannot be directly compared as 2 & 3 series were not planted in same order as Series 1 & 4. They are included this way however as the first and last series can be compared.

Table _ Advanced Nursery

Winter Wheat Varieties Grown in 16 Foot, 3-Row Blocks - 4 Replications Each

Variety	T.S. No	C.I No.	Dates First Heading	Dates Fully Ripe	Fruiting Period	Stand or Survival	Height	Loose Smut	Lodging	Rust Leaf	Rust Stem	Shattering 1-9	Acre Yield Grain
							In	%	%	%	%		Bu
Denton - all Check	9236	8265	4-27	6-1	35		41	0	9	15	24	4	30.7
Mediterranean	3015-63		4-26	5-31	35	100	39	0	9	6	28	5	30.7
"	3015-72		4-27	6-1	35	"	39	0	39	48	23	6	23.1
"	3015-81	10086	4-26	5-30	34	"	38	0	33	33	16	8	28.1
"	3015-105-1		4-27	6-1	35	"	41	0	21	14	40	3	32.4
"	3015-130		4-26	6-1	36	"	40	0	9	21	24	4	29.3
"	5933-7		4-23	5-30	37	"	40	0	38	21	18	5	31.1
"	5933-20	10085	4-24	5-31	37	"	39	0	13	15	11	9	32.7
"	5933-23		4-25	5-31	36	"	42	0	10	4	16	9	30.1
"	5933-32		4-23	5-30	37	"	40	0	34	26	35	3	29.1
"	5933-34		4-24	5-31	37	"	39	0	9	24	11	7	29.5
"	5933-35		4-23	5-30	37	"	43	0	36	11	21	5	30.1
"	5933-36		4-24	5-31	37	"	42	0	24	13	24	9	28.7
"	5933-38		4-23	5-30	37	"	42	0	30	13	25	3	29.5
Red May	9250-1	5336	4-27	5-31	34	"	35	0	9	30	25	9	30.5
Fultz *		3416	4-22	5-24	32	79	36	0	4	79	9	4	18.9
Kanvale	12577	9180	4-29	6-1	35	100	39	0	T	21	18	9	34.9
Kanred x Fulcaster													
Ks 1928 Row 93			4-26	6-1	36	"	40	0	3	26	15	10	35.7
Ks 1928 Row 72			4-28	6-2	35	"	41	0	8	18	13	5	32.4
Ks. 1928 Row 73			4-27	6-2	36	"	41	0	21	31	23	7	34.8
Kanred x Marquis 2640			4-27	6-1	35	"	38	0	4	23	9	4	30.6
" x " 2644		10090	4-29	6-1	33	"	39	0	29	13	14	4	34.2
White Mediterranean	15834	10023	4-23	5-30	37	"	40	0	10	68	41	7	33.0
Clark 40		8858	4-28	6-2	35	"	42	0	T	45	40	2	30.7
Sutton	15832	10053	5-1	6-2	32	"	40	0	13	24	50	5	28.5

* 2% damage from freeze March 13

Table - Advanced Nursery - continued

Variety	T. S. No.	C.I No.	Dates First Heading	Dates Fully Ripe	Fruiting Period	Stand	Height	Loose Smut	Lodging	Rust Leaf	Rust Stem	Shattering 1-5	Acre Yield Grain
						%	In.	%	%	%	%		Bu.
Ohio, TN. 1047	16828		4-29	6-2	34	100	41	0	1	71	50	5	23.9
Fulcaster	9082	6491	4-29	6-2	34	100	42	0	8	78	43	5	29.4
Harvest Queen	15837	6199	4-29	6-2	34	100	43	0	1	83	35	2	23.4
Tenmarq	12576	6936	4-29	6-2	34	100	39	0	13	44	9	2	29.0
Kanred	11763	5146	5-1	6-2	32	100	36	0	35	76	8	1	25.9
Early Blackhull	15838	8856	4-20	5-23	33	100	35	0	2	83	T	1	29.4
Blackhull	7172	6251	4-29	6-2	34	100	39	0	20	80	8	1	24.3
Prelude X Kanred	15833	8886	4-23	5-30	37	100	37	0	9	30	5	1	30.3
Smithsonian		10022	5-2	6-4	33	100	41	0	64	20	30	T	21.4
Kharkof	16930	1442	5-1	6-3	33	100	38	2	10	81	11	3	24.6
Nebraska 60	15835	6250	5-1	6-3	33	100	38	5	19	88	14	T	24.7
Nebraska 28	15836	5149	4-15	5-21	36	86	29	0	0	85	0	8	19.7
Oro		8220	5-1	6-2	32	100	39	0	6	75	8	1	27.3
Cheyenne		8885	5-1	6-2	32	110	37	0	6	78	10	T	25.3
Fultz-Mediterranean Col. No. 358			4-27	5-31	34	100	39	0	3	75	8	1	33.4
Canadian Hybrid Col. No 359			4-30	6-2	33	100	36	0	13	88	10	1	22.3
Turkey Sel.		10083	4-27	6-2	34	100	38	0	39	75	8	1	26.5
Sibley's 81		10084	4-27	6-1	35	100	39	0	18	45	10	3	31.4
Kanred X Marquis		11374	4-24	6-1	38	61	35	T	8	36	3	1	17.0
P.1066 X Burbank		10087	4-25	5-30	35	100	38	0	9	63	13	1	33.4

Table - Advanced Nursery - Concluded

Variety	T. S. No	C.I. No	Dates First Heading	Dates Fully Ripe	Fruiting Period	Stand	Height	Shattering	Lodging	Rust Leaf	Rust Stem	Stripe 5-9	Yield Per Acre
					Days	%	In	%	%	%	%		Bu.
Beloglina Sel.		8884	5-2	6-3	32	100	38	0	35	74	13	3	27.0
Kanred x Minturki		10012	5-2	6-2	31	100	39	T	29	75	9	1	24.9
Minturki x Bel. Buffum		10088	5-2	6-2	31	100	40	T	24	81	9	4	25.8
Tenmarq Sel.		10089	4-28	6-2	35	100	37	0	11	35	8	2	30.4
Fulhard		8857	4-26	5-30	34	100	38	0	5	80	11	8	29.9
Kanred x H. Federation		11373	4-21	5-31	40	100	34	0	4	51	8	2	26.4
" x "		10091	4-19	5-27	38	100	33	0	0	38	4	T	30.6
" x "		10092	4-22	5-31	39	100	34	0	4	48	10	1	31.1
" x "		10093	4-19	5-26	37	100	33	0	0	46	6	T	30.0
Turkey Sel		10015	4-30	6-2	33	100	36	5	6	94	6	4	16.7
Turkey Sel		10094	5-1	6-2	31	100	35	5	4	76	8	1	20.5
"		10095	4-30	6-2	32	100	34	5	6	94	10	2	21.2
"		10096	4-29	6-2	34	100	35	5	4	96	9	1	18.9
		10097	4-29	6-2	34	100	35	5	10	94	8	3	17.3
"		10016	4-28	6-2	35	100	36	5	4	96	9	1	22.9
"		10098	4-28	6-2	36	100	36	5	4	94	9	3	21.7
Kanred Sel.		10099	5-1	6-2	32	100	39	0	28	76	10	1	25.9
Turkey Sel.		10100	4-30	6-2	33	100	36	0	50	88	26	2	28.1
"		11375	4-29	6-1	33	100	37	0	15	91	16	1	22.0

Table —

Summary of Grain Yields - Advanced Nursery
Winter Wheat Nursery Grown in 16 Foot,
3 Row Blocks, 4 Replications Each.

Variety	Plot No.	T.S. No.	C.I No.	Yield Per Plot - Grams I	II	III	IV	Average	Yield Per Acre Bu.	Rank
Mediterranean	46	3015-63		327	313	293	253	307	30.7	14
"	47	3015-72		203	244	249	229	231	23.1	51
" ✓	48	3015-81	10086	248	255	354	265	281	28.1	35
Denton (ck)	49	3015-105-1		331	358	336	272	324	32.4	9
	50	9236	8265	276	311	297	297	295	29.5	
Mediterranean	51	3015-130		293	322	306	249	293	29.3	30
"	52	5933-7		295	328	301	328	311	31.1	12
" ✓	53	5933-20	10085	267	308	379	354	327	32.7	8
"	54	5933-23		288	293	277	347	301	30.1	22
"	55	5933-32		246	285	297	337	291	29.1	31
"	56	5933-34		248	316	320	297	295	29.5	26
"	57	5933-35		273	288	335	309	301	30.1	22
"	58	5933-36		282	269	329	266	287	28.7	33
"	59	5933-38		303	296	285	296	295	29.5	26
Denton (ck)	60	9236	8265	273	319	302	289	296	29.6	
Red May	61	7250-1	5336	327	304	288	302	305	30.5	19
Fultz	62		3416	156	127	244	229	189	18.7	60
Kawvale	63	12577	8180	331	358	360	347	349	349	2
Kanred x Fulcaster	64	K.1728-53		369	360	330	368	357	35.7	1
" x "	65	K.1729-72		333	262	356	346	324	32.4	9
" x "	66	K.1728-73		365	373	333	320	348	34.8	3
Kanred x Marquis 2640	67			277	314	323	311	306	30.6	17
" x " 2644	68		10090	387	347	335	300	342	34.2	4
White Mediterranean	69	15834	10023	319	340	358	303	330	33.0	7
Denton (ck)	70	9236	8265	314	305	307	274	300	30.0	
Clark 40	71		8958	266	326	325	310	307	30.7	14
Sutton	72	15832	10053	248	294	318	280	285	28.5	34
Ohio, T.N. 1047	73	16828		196	259	245	257	239	23.9	49
Fulcaster	74	7082	6471	279	245	323	330	294	29.4	28
Harvest Queen	75	15837	6159	190	263	253	251	234	23.4	50

Table —

Summary of Grain Yields - Continued

Variety	Serial Plot No.	T.S. No.	C.I. No.	Yield Per Plot - Grams I	II	III	IV	Average	Yield Per Acre Bu.	Rank
Tenmarq	76	12576	6136	283	303	353	221	290	29.0	32
Kanred	77	11763	5146	225	274	257	281	259	25.9	41
Early Blackhull ✓	78	15838	8856	301	286	299	284	294	29.4	28
Blackhull ✓	79	7172	6251	202	278	252	239	243	24.3	48
Denton (ck)	80	9236	8265	245	311	340	282	294	27.4	
Prelude x Kanred	81	15833	8846	226	307	323	355	303	30.3	21
Smithsonian	82		10022	191	285	204	197	219	21.4	56
Kharkof ✓	83	16830	1442	228	238	274	245	246	24.6	47
Nebraska 60 ✓	84	15835	6250	260	244	247	237	247	24.7	46
Nebraska 28	85	15836	5147	193	212	208	184	199	19.7	54
Oro	86		8220	266	314	243	270	273	27.3	37
Cheyenne	87		8885	242	266	271	233	253	25.3	44
Fultz-Mediterranean Col. 358	88			320	362	346	368	334	33.4	5
Canadian Hybrid Col. 359	89			234	220	192	247	223	22.3	53
Denton	90	9236	8265	268	315	285	300	292	27.2	
Turkey ✓	91		10083	239	305	276	240	265	26.5	39
Sibley 81 ✓	92		10084	282	331	314	330	314	31.4	11
Kanred x Marquis ✓	93		11374	200	68	203	208	170	17.0	63
Pilot x Burbank ✓	94		10087	359	328	275	354	334	33.4	5
Beloglina Sel. ✓	95		8384	236	299	266	279	270	27.0	38
Kanred x Minturki ✓	96		10012	234	269	238	253	249	24.9	45
Minturki x Bel Buff ✓	97		10088	293	259	266	215	258	25.8	43
Tenmarq Sel. ✓	98		10089	238	327	341	310	304	30.4	20
Fulhard ✓	99		8257	309	319	270	300	299	29.9	25
Denton	100	9236	8265	299	309	331	391	333	33.3	

Table -

Summary of Grain yields Advanced Nursery

Variety	Series I Plot No.	T.S. No.	C.I. No.	Yield Per Plot Grams I	II	III	IV	Average	Yield Per Acre Bu.	Rank
Kanred X H. Federation	101		11373	271	246	272	268	264	26.4	40
" X "	102		10091	262	331	308	324	306	30.6	17
" X "	103		10092	298	286	336	324	311	31.1	12
" X "	104		10093	206	356	285	354	300	30.0	24
Turkey Sel.	105		10015	142	171	188	168	167	16.7	64
"	106		10094	182	211	217	210	205	20.5	58
"	107		10095	188	226	220	212	212	21.2	57
"	108		10096	173	173	219	170	187	18.9	60
"	109		10097	179	163	188	162	173	17.3	62
Denton	110	9236	8265	306	340	339	365	338	33.8	
Turkey	111		10016	224	221	226	246	229	22.9	52
"	112		10098	217	244	171	228	217	21.7	55
Kanred	113		10099	228	270	327	210	259	25.9	41
Turkey	114		10100	331	264	270	259	281	28.1	35
"	115		11375	233	211	225	212	220	22.0	54
Denton (all checks)		9236	8265	283	315	315	314	307	30.7	14

Table Individual row yields in grams and average yields in bushels for winter wheat in uniform yield nursery in replicated nursery plots of three rows 16 feet long and 12 inches apart, Fort Hays Experiment Station, Hays, Kans., 1932. Also rank in yield for the varieties within the group and rank in yield for the entire nursery.

Row No.	Variety	C.I. No.	Other identification numbers	Weight in grams from center row from series 1	2	3	Yield per acre bus.	Rank in yield Within group	Rank in yield For entire nursery
1	Kharkof	1442		35.8	36.0	45.6	38.4	24	58
10	Blackhull	6251		49.4	50.3	47.2	49.0	5	11
31	Nebraska No. 60	6250		36.5	38.4	45.1	40.3	18	49
32	Early Blackhull	8856		33.8	41.4	48.4	41.2	15	45
33	Turkey Sel.	10083	Okla. No. 1	48.8	42.2	51.9	47.8	5	16
34	Sibley No. 81	10084		34.2	35.5	44.4	38.0	26	61
35	Mediterranean Sel.	10085	Texas No. 5935-80	37.5	27.8	40.7	35.3	29	72
36	Mediterranean Sel.	10086	" " 5015-81	38.8	45.9	44.7	42.5	13	37
37	Kanred x Marquis	11374	Kans. No. 2879, NO 518	43.2	31.5	47.9	40.9	16	46
38	P 1066-1 x Burbank	10087	N.C. 521	44.7	54.0	56.2	51.6	1	4
4	Beloglina Sel.	8804	North Platte No. 11	43.4	45.4	42.3	43.7	10	35
39	Kanred x Minturki	10018	" " " 14	49.8	35.5	32.2	39.2	21	53
40	Kanred (Check)			47.4	49.7	49.5	48.9	4	12
41	Minturki x Bel-Buff	10088	19115 V 1-14	40.8	42.2	36.9	40.0	19	50
42	Tenmarq Sel.	10089	Kans. No. 2870	56.1	49.1	48.4	51.2	2	5
43	Pulhard	8257		45.9	51.3	40.5	45.9	6	22
44	Kanred x Marquis	10090	Kans. No. 2644	49.4	45.9	44.2	46.8	7	23
13	Kanred x Hard Fed.	11375	" " 2671	43.5	39.4	40.9	41.3	14	44
45	Kanred x Hard Fed.	10091	" " 2672	54.5	46.9	49.9	43.8	9	32
46	Kanred x Hard Fed.	10092	" " 2673	36.2	41.5	39.5	39.1	22	54
47	Kanred x Hard Fed.	10093	" " 2674	22.0	42.1	40.0	34.7	30	75
48	Turkey Sel.	10015	Nebr. No. 1062	29.8	37.6	36.3	34.6	31	76
8	Turkey Sel.	10016	" " 1069	34.2	42.5	42.9	39.9	20	51
49	Turkey Sel.	10094	" " 1063	40.7	44.1	43.1	42.6	12	36
50	Kanred (Check)			31.9	30.4	39.9	40.7	17	47
51	Turkey Sel.	10095	" " 1065	37.2	38.5	40.9	38.9	23	55
52	Turkey Sel.	10096	" " 1066	30.8	38.0	34.0	34.3	32	78
53	Turkey Sel.	10097	" " 1068	35.3	36.8	41.5	37.9	27	62
54	Turkey Sel.	10098	" " 1070	37.9	42.0	50.9	43.6	11	34
55	Kanred Sel.	10099	Colo. No. 0166	29.9	37.5	47.2	38.2	25	59
56	Turkey Sel.	10100	" " 159	34.1	46.1	51.8	37.3	28	66
57	Turkey Sel.	11575	" " 351	45.9	51.5	36.0	45.1	8	26

Table Agronomic data and yields for 30 varieties and selections of wheat grown in the uniform yield nursery in replicated 3-row plots 16-feet long at the Fort Hays Experiment Station, Hays, Kans., 1932.

1932 row No.	Selection	C.I. No.	Other identification numbers	Head-ed	Ripe	Ht. ins.	Estimated per cent Winter kill-ing	Fly in-jury	Leaf rust	Ave. acre bus.	After ripening notes
1	Kharkof	1442		5-21	6-27	38	2	6	50	38.4	40% down
9	Kanred (check)	5146		5-19	6-27	39	3	8	15	42.9	5% leaning, good
10	Blackhull	6251		5-17	6-25	39	3	4	10	49.0	Slight lean, good
31	Nebraska No. 60.	6250		5-22	6-28	36	2	10	50	40.5	10% lodging, only fair
32	Early Blackhull	8856		5-11	6-25	36	14	3	5	41.2	Badly curled
33	Turkey Sel.	10083	Okla. No. 1	5-21	6-27	36	12	8	50	47.6	10% down, smut susceptible
34	Sibley No. 81	10084		5-21	6-27	37	5	10	30	38.0	15% down, purple straw
35	Mediterranean sel.	10085	Tex. 5935-20	5-18	6-27	35	4	4	10	35.5	Erect, brown glume, not uniform
36	Mediterranean sel.	10086	" 3015-81	5-20	6-28	37	2	3	5	42.5	Erect, brown glume, uniform
37	Kanred x Marquis	11574	Kans 2679	5-18	6-27	36	25	6	5	40.9	Poor showing
38	P 1066-1 x Burbank	10087	H.C. 521	5-18	6-26	38	4	T	30	51.6	Erect, attractive
4	Beloglina sel.	8884	N.P. 11	5-21	6-27	38	0	7	40	45.7	30% down
39	Kanred x Minturki	10012	N.P. 14	5-21	6-28	39	22	3	50	39.2	30% down, not uniform
40	Kanred (check)	5146		5-19	6-28	38	2	3	10	48.9	10% leaning
41	Minturki x Bel-Buff	10088	19115 VI-14	5-22	6-28	42	3	3	25	40.0	30% broken over
42	Tennarq sel.	10089	K. 2670	5-16	6-26	40	1	4	5	51.2	5% broken or leaning
43	Fulhard	8257		5-18	6-27	39	1	1	15	45.9	Erect, attractive
44	Kanred x Marquis	10090	K. 2644	5-18	6-27	40	6	6	15	45.8	30% broken
13	Kanred x Hard Fed.	11573	K. 2671	5-15	6-24	36	2	18	5	41.3	20% down
45	Kanred x Hard Fed.	10091	K. 2672	5-12	6-24	35	7	23	T	43.8	Leaning badly
46	Kanred x Hard Fed.	10092	K. 2675	5-14	6-24	35	5	30	T	39.1	Leaning
47	Kanred x Hard Fed.	10093	K. 2674	5-13	6-24	35	4	30	T	34.7	Leaning
48	Turkey sel.	10015	Neb. 1062	5-19	6-24	35	T	25	T	34.6	30% leaning
8	Turkey sel.	10016	Neb. 1069	5-17	6-26	37	4	12	15	39.9	5% down
49	Turkey sel.	10094	Neb. 1063	5-18	6-25	34	1	22	T	42.6	3% down 30% down
50	Kanred (check)	5146		5-20	6-26	36	3	11	T	40.7	Leaning badly
51	Turkey sel.	10095	Neb. 1065	5-20	6-27	36	2	8	T	38.9	Leaning
52	Turkey sel.	10096	" 1066	5-20	6-27	36	3	14	T	34.3	25% down
53	Turkey sel.	10097	" 1068	5-20	6-27	37	2	20	T	37.9	5% down and leaning
54	Turkey sel.	10098	" 1070	5-15	6-27	37	6	12	15	43.6	Stand heavy, leaning early
55	Kanred sel.	10099	Colo 0166	5-21	6-27	39	5	9	15	38.2	Broken over
56	Turkey sel.	10100	Colo 159	5-20	6-27	37	10	14	T	37.3	Down or leaning badly
57	Turkey sel.	11575	Colo 351	5-21	6-27	39	7	6	5	45.1	30% down or leaning

Table Agronomic data and yields for 17 selections and varieties of winter wheat, with checks, received as introductions from Dr. J. H. Parker, Kansas Experiment Station, and grown in replicated 3-row plots 16-feet long, Fort Hays Experiment Station, Hays, Kans., 1932. Also similar data for three miscellaneous wheats.

1932 Nursery No.	Selection or Varieties	C.I. No.	Other identification numbers	Headed	Ripe	Days	Estimated Winter kill	Estimated Fly injury	1932 Acre bus.	After ripening notes
Received fall of 1931										
88	Kanred x Hard Federation		Kan. 2675	5-19	6-28	40	9	5	47.6	10% broken or leaning, fair
89	Kanred (Check)	5146		5-20	6-28	38	5	12	51.9	10% broken
90	Prelude x Kanred		Kan. 2677	5-16	6-24	38	27	38	37.5	Acceptable to hessian fly
91	" " "		Kan. 296557	5-16	6-24	38	28	20	38.9	30% leaning
92	Temmarq Sel.		Kan. 285742	5-18	6-25	38	5	9	44.7	10% leaning, promise
93	" "		Kan. 285724	5-17	6-24	37	2	10	42.2	10% leaning, fair
94	Kanred x Marquis		Kan. 285111	5-18	6-24	37	15	16	41.9	30% broken
95	Kanred x Temmarq F^6		M.R. 3548 '31	5-20	6-24	36	9	9	42.0	10% broken, promise
96	Kanred x Temmarq F^6		" " 1924 '31	5-19	6-26	38	5	7	46.9	
97	Kanred x (K x M Kan. 443)		" " 2041 '31	5-20	6-26	37	7	13	40.0	30% leaning, fair
98	Prelude x Kanred		Kan. 292626	5-17	6-24	37	18	18	42.2	50% leaning or broken
99	Kanred (Check)	5146		5-21	6-27	38	5	15	45.9	Leaning
100	Prelude x Kanred		Kan. 285465	5-17	6-27	37	18	22	39.6	30% leaning
101	" " "		Kan. 292624	5-17	6-27	38	15	28	44.5	40% leaning
102	Kanred x Hard Federation		Kan. 286215	5-14	6-24	37	4	22	42.1	30% leaning
103	" " "		Kan. 306297	5-17	6-24	36	38	15	37.8	40% leaning or broken
104	" " "		Kan. 2651	5-15	6-24	37	1	8	53.6	Very good type, promising
Received previous to 1931										
105	Kanred x Hard Federation		Kan. 254634	5-16	6-24	38	9	22	38.2	40% leaning
106	Prelude x Kanred		Kan. 263826	5-17	6-24	39	22	24	42.1	40% leaning
Miscellaneous group										
107	Zenka			5-22	6-28	45	12	2	43.9	Stiff straw, late
108	Smithsonian			5-21	6-28	44	6	6	50.7	Late, Montana product
109	Kanred check	5146		5-21	6-27	42	4	9	42.5	Leaning badly, border effect
110	Clark's No. 40			5-20	6-28	46	4	3	49.5	Stiff straw, beardless

Table Individual row yields in grams and average yields in bushels for 27 hybrid introductions received from Dr. J. H. Parker, Kansas Agric. Experiment Station, Manhattan, and three Kanred checks. Grown in replicated nursery plots of three rows 16 feet long and 12 inches apart, Fort Hays Experiment Station, Hays, Kans., 1932. Also rank in yield for the varieties within the group and rank in yield for the entire nursery. Data on three additional varieties in a miscellaneous group also included in this table.

Row No.	Selections or varieties	Kans. No.	Weight in grams from center row from series 1	2	3	Yield per acre bus.	Rank in yield Within group	For entire nursery
Received fall of 1931								
88	Kanred x Hard Federation	2375	55.3	42.9	46.7	47.6	4	16
89	Kanred (Check)		50.0	54.9	50.7	51.9	2	5
90	Prelude x Kanred	2377	27.1	37.5	48.0	37.5	20	65
91	" "	238597	37.1	49.6	30.1	38.9	17	53
92	Tenmarq Sel.	238742	29.4	53.4	51.4	44.7	7	28
93	" "	238724	42.6	45.3	40.7	42.2	11	38
94	Kanred x Marquis	238111	29.7	51.2	44.8	41.9	14	41
95	Kanred x Tenmarq F^5	M.R.3548 '31	29.7	45.0	51.4	42.0	13	40
96	Kanred x Tenmarq F^6	M.R.1924 '31	36.1	57.3	47.3	46.9	5	18
97	Kanred x (Kanred x Marq. Kans 443)	MR.2041 '31	34.7	46.0	39.2	40.0	15	50
98	Prelude X Kanred	292826	37.2	43.9	45.6	42.2	11	38
99	Kanred (Check)		38.0	47.7	32.1	45.9	6	22
100	Prelude x Kanred	285485	41.9	45.0	31.9	39.6	16	52
101	" "	292824	39.6	50.2	43.6	44.5	8	30
102	Kanred x Hard Federation	238215	38.7	55.8	57.3	42.1	12	39
103	" " "	308297	27.2	39.0	47.2	37.8	19	63
104	" " "	2851	46.2	56.9	57.7	53.6	1	2
Received previous to 1931								
105	Kanred x Hard Federation	254654	35.2	37.7	41.7	38.2	18	59
106	Prelude x Kanred	263826	36.0	40.3	47.9	42.1	12	39
Miscellaneous group								
107	Zenka		37.8	50.0	43.9	43.9	9	31
108	Smithsonian		32.9	22.0	37.3	30.7	21	84
109	Kanred (Check)		40.1	43.2	44.2	42.5	10	37
110	Clarks' No. 40		53.3	47.3	48.0	49.5	3	8

Akron, Colo.

Uniform Yield Nursery 1931-1932

Planted 9-17-31. Emerged in fore part of April, 1932. Planted in 16-foot rows.

Variety	C. I. No.	Stand: no. plants per row 1st.	2d.	3d.	Height inches	Dates Headed	Ripe	(Yield in) grams per row 1st.	2d.	3d.	Bushels per acre
Kharkof	1442	8	4	7	24	6-30	7-26	25	52	91	5.6
Blackhull	6251	8	3	6	25	6-27	7-18	33	21	52	3.5
Nebraska No. 60	6250	10	5	7	25	6-30	7-25	55	32	77	5.5
Early Blackhull	8856	6	2	2	22	6-21	7-18	17	9	3	1.0
Turkey Sel.(Okla)	10083	9	4	4	23	7-1	7-26	40	14	89	4.8
Sibley's No. 81	10084	6	2	5	26	6-28	7-27	23	9	55	2.9
Mediterranean Sel.	5933-20 10085	5	3	4	25	6-28	7-25	19	1	60	2.7
Mediterranean Sel.	3015-81 10086	6	4	7	25	6-30	7-27	35	14	88	4.6
Kanred x Marquis	11374	6	5	5	25	6-28	7-24	26	25	62	3.8
P-1066-1x Burbank	10087	11	8	11	22	6-25	7-23	47	31	112	6.3
Beloglina Sel.	8884	13	6	12	23	6-29	7-24	42	30	139	7.0
Kanred x Minturki	10012	8	2	6	24	6-30	7-25	29	1	84	3.8
Minturki x Bel-Buff	10088	8	5	7	24	7-1	7-26	31	20	61	3.7
Tenmarq Sel.	10089	7	4	6	24	6-28	7-23	32	12	68	3.7
Fulhard	8257	11	2	3	24	6-19	7-19	44	9	25	2.6
Kanred x Marquis	10090	13	11	10	24	6-29	7-21	43	42	106	6.4
Kanred x Hard Federation	11373	11	9	7	22	6-20	7-20	43	32	60	4.5
ditto	10091	12	8	13	20	6-20	7-18	27	10	70	3.6
ditto	10092	10	5	9	22	6-20	7-19	47	23	98	5.6
ditto	10093	6	9	13	21	6-20	7-26	12	7	72	3.0
Turkey Sel.	10015	9	5	10	24	6-24	7-22	28	31	88	4.9
ditto	10016	5	3	9	23	6-26	7-23	26	18	79	4.1
ditto	10094	6	7	6	23	6-26	7-21	31	35	82	4.9
ditto	10095	4	6	5	23	6-28	7-24	11	42	38	3.0
ditto	10096	7	8	4	22	6-27	7-22	28	42	25	3.2
ditto	10097	4	5	7	24	6-26	7-24	15	29	73	3.9
ditto	10098	8	7	6	24	6-25	7-20	28	45	82	5.2
Kanred Sel.0166	10099	11	8	5	22	6-30	7-22	48	33	37	3.9
Turkey Sel. 159	10100	6	17	9	23	6-28	7-21	31	23	76	4.3
Turkey Sel.(Colo.351)	11375	9	18	11	22	6-28	7-21	44	46	100	6.3

Table Individual and average yields in pounds for 1/50 acre plots, also average bushel yield per acre for winter wheat replicated twice on cropped land and twice on fallow land, Fort Hays Experiment Station, Hays, Kans., 1932. Also average bushel yield per acre for the cropped and fallowed plots and rank of varieties.

Plot No.	Variety	C.I. No.	Yield in pounds per plot and bushels per acre: Cropped land: Pounds: Series 1	Cropped land: Pounds: Series 2	Cropped land: Pounds: Aver.	Cropped land: Aver. acre bus.	Fallowed land: Pounds: Series 1	Fallowed land: Pounds: Series 2	Fallowed land: Pounds: Aver.	Fallowed land: Aver. acre bus.	Bus per acre all plots	Variety rank
1	Early Blackhull	8856	40	40	40.0	33.3	50	49	49.5	41.2	37.3	4
2	Prelude x Kanred	8886	40	38	39.0	32.5	49	52	50.5	42.1	37.3	4
3	Blackhull	6251	40	38	39.0	32.5	53	51	52.0	43.3	37.9	3
4	Marquis x Kanred H.C. 318	11374	31	34	32.5	27.1	40	45	41.5	34.6	30.9	8 14
5	Tenmarq Kansas 514	6936	43	42	42.5	35.4	50	51	50.5	42.1	38.8	1
6	Tenmarq Kansas 2670	10089	42	41	41.5	34.6	50	51	50.5	42.1	38.4	2
7	Kanred	5146	39	37	38.0	31.7	46	48	47.0	39.2	35.5	4 7
8	Turkey	1568	35	39	37.0	30.8	47	46	46.5	38.7	34.8	6 9
9	Kharkof Hays No. 2	6686	38	38	38.0	31.7	49	48	48.5	40.4	36.1	5 6
10	Kharkof	1442	40	36	38.0	31.7	46	46	46.0	38.3	35.0	9 8
11	Oro	8220	38	38	38.0	31.7	50	49	49.5	41.2	36.5	6 5
12	Minturki	6155	35	37	36.0	30.0	45	44	44.5	37.1	33.6	5 11 10
13	Nebraska No. 60	6250	38	39	38.5	32.1	46	50	48.0	40.0	36.1	5 7 6
14	Kooperatorka	8861	34	37	35.5	29.6	42	42	42.0	35.0	32.3	10 15 11
15	Cheyenne	8885	38	42	40.0	33.3	48	51	49.5	41.2	37.3	4
16	P 1066-1 x Burbank	10087	36	35	35.5	29.6	37	44	40.5	33.7	31.7	14 12
17	Marquis x Kanred H.C. 312		36	36	36.0	30.0	37	45	40.0	33.3	31.7	14 12
18	Kawvale	8180	34	35	34.5	28.7	46	46	46.0	38.3	33.5	12 10
19	Kanred x Hard Fed. Ks.2671	11573	33	36	34.5	28.7	39	43	41.0	34.2	31.5	15 13
20	Nebraska No. 28	5147	30	33	31.5	26.2	37	36	36.5	30.4	28.3	17 15

P.E. of diff. = ±0.8113 bu. per Acre
Generalized P.E = ±0.5737 " " "
= 1.65%

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

Table Agronomic data averaged for 20 varieties of winter wheat grown on two replicated plots on cropped land and two replicated plots on fallowed land, 1/50 acre size, Fort Hays Experiment Station, Hays, Kans.

DATE OF SEEDING September 28, 1931 DATE OF EMERGENCE October 15, 1931

VARIETY a/	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf b/	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Early Blackhull	8856	5-12	6-23	253	211		96	36	5			37.3			63		
Prelude x Kanred	8836	5-16	6-24	254	215		97	35	T			37.3			64		
Blackhull	6251	5-18	6-24	254	217		91	35	15			37.9			64		
Marquis x Kanred H.C.318	11374	5-17	6-25	255	216		96	33	T			30.9			63		
Tenmarq Kansas 514	6936	5-17	6-25	255	216		97	35	4			38.8			63		
Tenmarq Kansas 2670	10089	5-17	6-25	255	216		95	34	9			38.4			62		
Kanred	5146	5-20	6-26	256	219		96	33	8			35.5			63		
Turkey	1558	5-20	6-27	257	219		91	34	18			34.8			63		
Kharkof Hays No. 2	6686	5-20	6-27	257	219		100	36	5			36.1			63		
Kharkof	1442	5-20	6-27	257	219		99	36	4			35.0			63		
Oro	8220	5-21	6-27	257	220		100	34	15			36.5			63		
Minturki	6155	5-21	6-27	257	220		100	32	25			33.6			62		
Nebraska No. 60	6250	5-21	6-27	257	220		100	36	25			36.1			63		
Kooperatorka	8861	5-20	6-25	255	219		95	35	25			32.3			63		
Cheyenne	8885	5-20	6-25	255	219		99	37	35			37.3			63		
P 1066-1 x Burbank	10087	5-18	6-25	255	217		96	34	8			31.7			63		
Marquis x Kanred H.C.312		5-21	6-26	256	220		75	34	2			31.7			63		
Kawvale	8180	5-18	6-23	253	217		100	33	T			33.5			62		
Kanred x Hard Fed. K.2671	11373	5-19	6-24	254	218		93	34	1			31.5			63		
Nebraska No. 28	5147	5-12	6-22	252	211		97	30	--			28.3			62		

Full stand Fall 1931

None observed

No lodging

Not taken at this station

a/ All data, except for leaf rust, average of two plots on cropped land and two plots on fallowed land.

b/ Average of two series on fallowed land only.

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Individual and average yield in pounds for 1/50 acre plots, also average bushel yield per acre for winter wheat grown twice on cropped land and twice on fallowed land when sown on seven different dates, Fort Hays Experiment Station, Hays, Kans., 1932.

Variety and date of planting		Cropped land				Fallowed land				Ave. all plots	Rank in yield	
		Pounds			Ave. acre bus.	Pounds			Ave. acre bus.		For date within variety	Without regard to variety
		Series 1	Series 2	Ave.		Series 1	Series 2	Ave.				
Early Blackhull	Sept. 8	21	31	26.0	21.7	8	6	7.0	5.8	13.8	7	28
	Sept. 15	26	30	28.0	23.3	28	38	33.0	27.5	25.4	6	25
	Sept. 22	33	32	32.5	27.1	38	49	43.5	36.2	31.7	4	19
	Sept. 29	37	33	35.0	29.2	38	46	42.0	35.0	32.1	3	17
	Oct. 6	33	30	32.5	27.1	52	45	48.5	40.4	33.8	2	14
	Oct. 13	39	30	34.5	28.7	49	47	48.0	40.0	34.4	1	12
	Oct. 20	34	27	30.5	25.4	42	45	43.5	36.2	30.8	3	21
Prelude X Kanred	Sept. 8	30	36	33.0	27.5	5	15	10.0	8.3	17.9	7	27
	Sept. 15	32	34	33.0	27.5	16	32	24.0	20.0	23.8	6	26
	Sept. 22	35	35	35.0	29.2	28	34	31.0	25.8	27.5	4	22
	Sept. 29	37	37	37.0	30.8	27	29	28.0	23.3	27.1	5	23
	Oct. 6	37	31	34.0	28.3	52	49	50.5	42.1	35.2	2	11
	Oct. 13	35	31	33.0	27.5	55	51	52.0	43.3	35.4	1	10
	Oct. 20	32	22	27.0	22.5	51	46	48.5	40.4	31.5	3	20
Kanred	Sept. 8	34	37	35.5	29.6	20	35	27.5	22.9	26.3	7	24
	Sept. 15	35	34	34.5	28.7	35	51	42.0	35.0	31.9	6	18
	Sept. 22	37	38	37.5	31.2	39	51	45.0	37.5	34.4	4	15
	Sept. 29	36	36	36.0	30.0	35	52	43.5	36.2	33.1	5	15
	Oct. 6	41	37	39.0	32.5	61	63	62.0	51.7	42.1	1	1
	Oct. 13	41	35	38.0	31.7	62	59	60.5	50.4	41.1	2	2
	Oct. 20	38	33	35.5	29.6	57	55	56.0	46.7	38.2	3	4
Oro	Sept. 8	35	28	31.5	26.2	44	49	46.5	38.7	32.5	7	16
	Sept. 15	37	33	35.0	29.2	53	55	54.0	45.0	37.1	4	7
	Sept. 22	36	31	33.5	27.9	58	53	56.5	47.1	37.5	3	6
	Sept. 29	34	31	32.5	27.1	55	57	56.0	46.7	36.9	5	8
	Oct. 6	35	32	33.5	27.9	60	59	59.5	49.6	38.8	1	3
	Oct. 13	37	31	34.0	28.3	57	57	57.0	47.5	37.9	2	5
	Oct. 20	37	30	33.5	27.9	56	53	54.0	45.0	36.5	6	9

Table — Individual plat and average yields of winter wheat varieties grown in four 1/50 acre plots at the Judith Basin Branch Station, Moccasin, Montana, in 1932

Number.		Variety.	Pounds per plot								Avg. bushels per acre
Plat.	C. I.		I	II	III	IV		Avg.			
	8036	Eureka x Minhardi	35.0	40.0	51.0	40.0		43.5		36.2	
	8045	Kanred x minessa	32.0	38.0	54.0	46.5		42.6		35.5	
	8033	Mintumbi x Bet-Bof	34.0	39.5	47.0	49.0		42.4		35.3	
	10000	Kanred x Minhardi	33.5	38.0	49.5	47.0		42.0		35.0	
	8888	Minard x Minhardi	33.0	38.0	50.5	45.5		41.8		34.8	
	8034	Minhardi x Mintumbi	32.0	37.5	46.0	50.0		41.4		34.5	
	8042	Kanred x minhardi	32.0	37.5	51.0	44.0		41.4		34.5	
	1442	Kharkof	33.0	40.0	50.0	42.5		41.4		34.5	
	6250	Bobs No. 60	33.0	39.0	45.5	47.5		41.3		34.4	
	8040	Kanred x Minhardi	31.0	37.0	54.0	42.5		41.1		34.2	
	8889	Minard x Minhardi	32.0	40.5	49.0	42.5		41.0		34.2	
	6155	Mintumbi	33.5	42.5	47.0	41.0		41.0		34.2	
	6700	Karmont	34.0	41.0	49.5	39.5		41.0		34.2	
	8887	Turkey (C.I. 6152) x Minessa	31.5	36.5	51.0	43.5		40.6		33.8	
	6152	Turkey	32.5	37.0	42.5	46.0		39.5		32.9	

C. I. Form No. 66.

8—5013 GOVERNMENT PRINTING OFFICE

Table continued

(2)

Number: Plat.	Number: C. I.	Variety	Pounds per plot: I	II	III	IV	Avg.	avg. bushels per acre
	8215	Minhardi x Minturki	33.5	35.0	46.5	40.0	38.8	32.3
	5146	Kanred	30.0	41.0	44.0	38.5	38.4	32.0
	8218	Minturki x Minhardi	32.0	34.5	47.0	39.5	38.3	31.9
	1558	Turkey	32.5	37.0	42.0	40.0	38.1	31.7
	6935	Newturk	29.0	37.0	36.5	48.5	37.8	31.5
	6938	Kharkof	27.0	34.5	47.5	41.0	37.5	31.2
	8220	Oro	29.0	34.0	39.5	43.0	36.4	30.3
	10022	Smithsonian	30.5	28.5	43.0	40.5	35.6	29.7
	11505	Turkey (C.I. 1558) x Minessa (N.W. 48)	27.5	34.5			31.0	25.8) for 2

Lawton, Oklahoma, 1932.

Wheat Variety Test Notes.

The lack of moisture up to October 22 1931 made the preparation of seed beds suitable for seeding impossible. Precipitation to the amount of 5.82 inches from October 11 to 22 delayed seeding until the 27th.

Germination of all varieties was rapid and uniform emergence was recorded November 5. Subsequent temperatures up to November 16 were quite favorable to a vigorous plant growth and the plants were well established with a plentiful supply of moisture for the winter period.

The winter months of December and January were characterized by a mean temperatures that were slightly above normal, the sky generally cloudy and moisture laden, excessive rainfall and the absence of winter storms. A total of 17.12 inches of precipitation from October 1 to January 31 was 7.50 inches above the normal for this 4 month period.

Spring growth was renewed quite rapidly the latter part of February. Mar March weatherxxxix including late freezes, a good many days of high wind velocity, and but very little precipitation was more or less a repetition of similar conditions in 1932 1931. The minimum temperature ranged from 16° to 28° from March 4 to 14 and the maximum ranged from 30° to 62° during the same period. A minimum temperature of 29°, frost, and ice were again recorded on the 31st. The high winds during March depleted surface moisture rapidly and the three little showers representing a total of 0.21 inch for March were of little consequence.

The late March freezes produced a little leaf tip injury on all varieties of soft wheat, but it was not serious. Nebraska 28 was jointing and 50 to 75 per cent of the growth was killed. Similar injury occurred to Early Blackhull, but to a considerable less extent. Both varieties recovered with a second growth. Kanred x Hard Federation Nos. 2671 and 2673 both showed about the same degree of leaf tip injury as most of the soft wheats.

During the week ending April 16 the wheat varieties ranged from 15 to 24 inches in height and the earlier maturing varieties were booting.

All varieties, especially the early maturing ones, suffered from dry weather between April 22 29 and May 28. Slightly more than an inch of rain on May 28 was of timely value to all varieties except Nebraska 28, Early Blackhull, Prelude x Kanred, and Kanred x Hard Federation Nos. 2671 and 2673 which were harvested on this date. The plants of these varieties dried up before the grain reached maturity. The remainder of the varieties profited greatly by the rain on the 28th, and matured normally under subsequent cooler temperatures.

The total precipitation in March of 1.19 inches in May was 3.36 inches below the monthly mean, and the deficiency from January 1 to May 31 amounted to 8.20 inches.

A sultry, humid atmosphere and 3.27 inches of rain from June 1 to 13 quickly produced a heavy, black mold in the wheat that was cut and shocked the last of May and early in June. Much handling and re-shocking that was necessary resulted in considerable loss of grain by shattering. A great deal of sprouting was also present. The later maturing varieties suffered similar damage, but to a lesser extent.

Lawton, Okla., 1932.

Office cooperating, Cereal Crops and Diseases.
Size of each plot- 0.02 acre.
Seeding rate: 4 pecks per acre.
Emerged: November 5.

Crop: Winter wheat; Variety Test.
Plot dimensions, 8eet-6 inches x 103 feet.
Seeding date: October 27.
Seed treated with copper carbonate.

Number. Plat.	Number. C. I.	VARIETY.	Heading First.	Heading Fully.	Ripe Fully.	Ripe Cut.	Ht. In.	Lodging.	Shattering	Loose Smut.	Leaf rust.	Weight per plot Total.	Grain.	Straw	Bu. per acre.	Test.
Chk. 1	1558	Turkey	5-2	5-10	6-5	6-7	37	None	None	T	5%	110	39.5	70.5	32.9	60
2	"		"	"	"	"	36	"	"	T	5%	95	41.25	53.75	34.3	60
3	"		"	"	"	"	36	"	"	T	5%	105	37.75	77.25	23.1	60
4	"		"	"	"	"	37	"	"	T	5%	80	36.25	43.75	30.1	60
		Average					36.5				30.0	98	36.2	61.3	27.9	60
A	5147	Nebraska -28	4-19	4-24	5-26	5-28	28	None	None	0	65%	70	26.5	43.5	22.1	60
B	"		"	"	5-28	5-28	29	"	"	0	65%	80	30.5	49.5	25.3	60
C	"		"	"	5-28	5-30	28	"	"	0	65%	80	29.5	50.5	24.6	58
		Average					28				23.9	77	28.8	47.5	24.0	59
A	8856	Early Blackhull	4-19	4-24	5-28	5-28	32	None	None	T	40%	95	35.25	59.75	29.2	62
B	"		"	"	"	"	34	"	"	T	40%	90	37.75	52.25	31.5	62
C	"		"	"	"	5-30	32	"	"	T	40%	100	36.75	63.25	30.7	62
		Average					33				30.3	95	36.6	58.4	30.5	62

C. I. Form No. 66.

8—5013 GOVERNMENT

Lawton, Okla. 1932.

Office Cooperating: Cereal Crops and Diseases.
Size of each plot- 0.02 acre.
Seeding rate : 4 pecks per acre.
Emerged : November 5

Crop: Winter wheat; Variety Test.
Plot dimensions, 8 feet-6 inches x 103 feet.
Seeding date : October 27.
Seed treated with copper carbonate.

Number.		VARIETY.	Heading		Ripe		Ht.	Lodging.	Shattering	Loose Smut	Leaf Rust	Weight per plot			Bu. per acre	Test
Plat.	C. I.		First.	Fully	Fully	Cut	In.				%	Total.	Grain.	Straw		
A	8886	Prelude x Kanred	4-21	4-27	5-28	5-28	33	Trace	None	None	Trace	85.0	37.75	47.25	31.5	62½
B	"		"	"	"	"	37	"	"	"	"	110	43.00	67.00	35.8	62
C	"		"	"	"	"	37	"	"	"	"	110	44.50	65.50	37.1	61½
		Average					36				34.6	102	41.7	59.9	34.8	62
A	8180	Kanvale	4-27	5-4	5-31	6-1	34	None	Heavy	None	Trace	95	34.5	60.5	28.7	59
B	"		"	"	6-1	"	38	"	"	"	"	95	42.5	52.5	35.4	59
C	"		"	"	"	"	37	"	"	"	"	100	40.5	59.5	33.7	59
		Average					36				32.5	97	39.2	57.5	32.6	59
A	----	Eagle Chief	4-28	5-4	6-1	6-1	33	None	None	None	5-10	85	36	49	29.9	61
B			"	"	"	"	34	"	"	"	5	100	40	60	33.3	60
C			"	"	6-3	6-3	34	"	"	"	5	95	42.75	52.25	35.6	60
		Average					34				32.8	97	39.6	53.7	33.0	60
A	6936	Tenmarq	4-27	5-4	5-31	6-1	33	None	None	None	5	90	36.5	53.5	30.4	59½
B	"		"	"	6-1	6-1	35	"	"	"	5	95	39	56	32.5	59½
C	"		"	"	6-3	6-3	36	"	"	"	5	95	42.5	52.5	35.4	60
		Average					35				32.6	97	39.3	54	32.9	60

C. I. Form No. 66.

8-6013 GOVERNMENT PRINTING OFFICE

Lawton, Okla. 1932.

Office cooperating: Cereal Crops and Diseases.
Size of each plot- 0.02 Acre.
Seeding rate: 4 pecks per acre.
Emerged November 5.

Crop: Winter wheat; Variety Test.
Plot dimensions, 8 feet-6 inches x 103 ft.
Seeding date : October 27.
Seed treated with copper carbonate.

Number.		VARIETY.	Heading		Ripe		Ht.	Lodging	Shattering	Loose Smut	Leaf Rust	Weight per plot			Bu. per acre.	Test.
Plat.	C. I.		First.	Fully	Fully	Cut	In.				%	Total	Grain	Straw		
A	1442	Kharkof	4-29	5-5	6-1	6-1	32	None	None	Trace	5	75	34.5	40.5	28.2	59
B	"		"	"	6-5	6-7	34	"	"	"	5	95	38.25	56.75	31.9	59
C	"		"	"	"	6-7	35	"	"	"	5	105	42	63	35.0	59½
		Average					34				31.7	92	38.2	53.4	31.9	59
A	5146	Kanred	4-29	5-4	6-1	6-1	31	None	None	Trace	25	80	37	43	30.8	61
B	"		"	5-5	6-3	6-3	33	"	"	"	25	105	42.25	52.75	35.2	60
C	"		"	5-5	6-7	6-7	36	"	"	None	25	115	42	73	35.0	60½
		Average					33				33.5	100	40.4	56.8	33.7	60½
A	Kansas 2671	Kanred x Hard Federation	4-21	4-28	5-28	5-28	29	None	None	None	5	90	37.5	52.5	31.2	61½
B	"		4-21	4-28	5-28	5-30	34	"	"	"	5	100	38.5	61.5	34.1	61
C	"		4-21	4-28	5-31	6-1	34	"	"	"	5	105	43	62	35.8	61
		Average					32				32.9	98	39.7	58.7	33.0	61
A	Kansas 2673	Kanred x Hard Federation	4-21	4-28	5-28	5-28	29	None	None	None	5	85	34.75	50.25	29.0	61
B	"		4-21	4-28	5-28	5-30	34	"	"	"	5	90	41.5	48.50	34.4	61
C			4-21	4-28	5-31	6-1	34	"	"	"	5	105	43	62	35.8	61
		Average					32				33.0	93	39.7	53.6	33.1	61

C. I. Form No. 66.

8—5013 GOVERNMENT PRINTING OFFICE

Lawton, Okla. 1932.

Office Cooperating : Cereal Crops and Diseases
Size of each plot- 0.02 acre
Seeding rate : 4 pecks per acre.
Emerged November 5.

Crop: Winter wheat; Variety Test.
Plot dimensions, 6 feet-6 inches x 103 feet.
Seeding date : October 27.
Seed treated with copper carbonate.

Number.		VARIETY.	Heading		Ripe		Ht.	Lodg-	Shat-	Loose	Leaf	Weight per plot			Bu.	
Plat.	C. I.		First	Fully	Fully	Cut	In.	ing	tering	Smut	Rust %	Total	Grain	Straw	per acre	Test.
A	6251	Blackhull	4-27	5-4	6-1	6-1	34	None	None	Trace	25-40	90	34.75	55.25	28.8	62
B	"		"	"	"	"	36	"	"	None	25-40	95	39.25	53.75	32.75	62
C	"		"	"	6-3	6-3	39	"	"	None	25-40	115	40.75	74.25	33.8	62
		Average					36				31.7	100	38.8	61.8	31.9	62
A	8054	Superhard Blackhull	4-27	5-4	6-1	6-1	35	None	None	None	25-40	95	32.5	62.5	27.1	62
B	"		"	"	"	"	37	"	"	"	25-40	85	39.25	45.75	32.75	62
C	"		"	"	6-3	6-3	41	"	"	"	25-40	110	39	71	32.3	62
		Average					38				30.6	97	36.9	59.7	30.8	62
A	----	Turkey-102-Goodwell	4-29	5-4	6-3	6-3	33	None	None	Trace	10	85	34.25	50.75	28.5	60½
B	----		"	"	"	"	34	"	"	"	10	100	38.75	61.25	32.2	60½
C	----		"	"	6-5	6-7	39	"	"	None	10	105	43	62	35.8	60½
		Average					35				32.1	97	38.7	58	32.2	60½
A	8885	Cheyene (Size of Plot .0.018 acre)	4-28	5-4	6-5	6-7	32	None	None	None	40	70	30.25	39.75	28.0	60½
B	"	0.02 acre plot	4-28	5-4	6-5	6-7	32	"	"	"	40	90	39	51	32.5	60½
C	"	0.02 acre plot	4-29	5-4	6-5	6-7	37	"	"	"	40	100	41.25	58.75	34.2	61½
		Average					34				31.5	87	36.8	49.8	31.6	61

C. I. Form No. 66. 8 [illegible] Government Printing Office

Plot A. Stand spotted & uneven

Lawton, Okla. 1932

Office cooperating: Cereal Crops and Diseases
Size of each plot- 0.02 acre.
Seeding rate : 4 pecks per acre
Emerged November 5.

Crop : Winter wheat; Variety test.
Plot dimensions, 8 feet-6 inches x 103 feet.
Seeding date : October 27
Seed treated with copper carbonate.

Number: Plat.	Number: C. I.	VARIETY.	Heading: First	Heading: Fully	Ripe: Fully	Ripe: Cut	Ht. In.	Lodging	Shattering	Loose Smut	Leaf Rust %	Weight per plot: Total	Weight per plot: Grain	Weight per plot: Straw	Bu. Per Acre	Test
A	6250	Nebraska 60 (Uneven stand.)	4-30	5-8	6-5	6-7	33	None	None	Trace	40	75	31.50	43.50	~~26.2~~ 26.1	60
B	"	(Fair stand)	"	"	"	"	35	"	"	"	40	85	35.75	49.25	~~29.8~~ 29.6	60
C	"	(Fair stand)	5-2	5-10	6-8	6-11	39	"	"	"	40	105	37.25	67.75	~~31.0~~ 30.9	60
		Average					36				28.9	88	34.8	53.5	29.0	60
A	8381	Purkoff	4-29	5-6	6-5	6-7	39	None	None	Trace	-5	85	34	51	~~28.3~~ 28.2	59½
B	"		"	"	"	"	42	"	"	"	-5	100	37.25	62.75	~~31.0~~ 30.9	59
C	"		4-30	5-9	6-8	6-11	43	"	"	None	None	100	36.25	63.75	~~30.2~~ 30.1	59
		Average					41				28.7	95	35.8	59.2	29.8	59
A	---	Ioturk (Thin uneven stand)	5-3	5-12	6-5	6-7	34	None	None	None	40	75	27.25	47.75	~~22.7~~ 22.6	60
B	---		"	"	"	"	35	"	"	"	40	100	36	64	~~30.0~~ 29.9	60
C	---		5-4	"	6-8	6-11	36	"	"	"	10-25	80	28	52	~~23.3~~ 23.2	60
		Average					35				25.2	85	30.4	54.6	25.3	60
A	(3326 class)	Currell	4-23	5-4	5-31	6-1	39	None	None	None	65	80	34.5	45.5	~~28.7~~ 28.6	59½
B	"		4-25	5-4	"	"	40	"	"	"	65	90	37	53	~~30.8~~ 30.7	59½
C	"		4-27	5-4	6-3	6-3	41	"	"	"	65	95	37.5	57.5	~~31.2~~ 31.1	60
		Average					40				30.1	~~88~~x88	36.3	52.0	30.2	60

C. I. Form No. 66. 8—5013 Government Printing Office

Lawton, Okla. 1932

Office cooperating: Cereal Crops and Diseases
Size of each plot- 0.02 acre.
Seeding rate : 4 pecks per acre
Emerged November 5.

Crop : Winter wheat; Variety test.
Plot dimensions, 8 feet-6 inches x 103 feet.
Seeding date : October 27
Seed treated with copper carbonate.

Number.		VARIETY.	Heading		Ripe		Ht.	Lodging	Shattering	Loose Smut	Leaf Rust	Weight per plot			Bu. Per Acre	Test
Plat.	C. I.		First	Fully	Fully	Cut	In.				%	Total	Grain	Straw		
A	Class. 3416	Fultz	4-28	5-3	5-31	6-1	39	None	None	None	65	85.0	30.5	54.5	25.3	59
B	"	✓	4-28	5-3	5-31	6-1	40	"	"	"	40-65	90.0	35.0	55.0	29.2	59
C	"		4-29	5-6	6-3	6-3	44	"	"	"	65	95.0	37.25	57.75	30.9 31.0	59
		Average					41				28.4	90	34.3	55.8	28.5	59
A	8205	Denton	4-29	5-6	6-3	6-3	40	None	None	None	Trace	90.0	38.75	51.25	32.1	60
B	"	✓	"	"	"	"	40	"	"	"	"	100.0	39.50	60.50	32.9	60
C	"		"	"	"	"	41	"	"	"	"	97.75 100.0	37.50	62.25	31.2	60½
		Average	"	"			40				32.0	97.0	38.6	58.80	32.1	60
A	10084	Sibley-81	4-29	5-4	6-1	6-1	37	none Slight	Heavy	None	5	95.0	36.25	58.75	30.2	60½
B	"	✓	"	"	"	"	36	"	"	"	5	100.0	38.50	61.50	31.9 32.1	61
C	"		"	"	6-3	6-3	39	"	"	"	5	90.0	38.50	51.50	31.9 32.1	61
		Average					37				31.3	95	37.4	57.3	31.5	61
A	----	Redhull	4-29	5-6	6-3	6-3	37	Some	None	Trace	65	95.0	38.0	57.0	31.75	60½
B	"	✓	"	"	"	"	36	"	"	"	40-65	95.0	37.5	57.5	31.61	61
C	"		4-30	5-7	6-5	6-7	38	"	"	"	40	100.0	37.0	63.0	30.87	60½
		Average					37				34.1	97	37.5	59.2	31.2	61

C. I. Form No. 66.

8—5013 GOVERNMENT PRINTING OFFICE

Lawton, Okla. 1932

Office cooperating: Cereal Crops and Diseases.
Size of each plot - 0.02 acre.
Seeding rate : 4 pecks per acre.
Emerged , November 5.

Crop: Winter wheat; Variety Test.
Plot dimensions, 8 feet- inches x 109 feet.
Seeding date ; October 27
Seed treated with copper carbonate.

Number.		VARIETY.	Heading First	Ripe Fully	Ripe Fully	Cut	Ht. In.	Lodging	Shattering.	Loose smut.	Leaf Rust	Total	Grain	Straw	Bu. per acre.	Test.
Plat.	C. I.															
A	6471	Fulcaster	4-28	5-4	6-3	6-3	41	None	Heavy	None	25	100	39	61	32.5	60
B	"	✓	"	"	"	"	39	"	"	"	10-25	90	39.5	50.5	32.3	60
C	"		4-30	5-6	6-5	6-7	41	"	"	# T	10	85	34.5	50.5	28.7	60
		Average					40				31.2	92	37.7	54.0	31.4	60
A	6199	Harvest Queen	4-29	5-4	6-3	6-3	45	None	Some	None	40-65	90	33.75	56.25	28.1	59
B	"		"	"	"	"	41	"	"	"	65	95	35.0	60.0	29.2	59
C	"	✓	"	5-6	6-5	6-7	43	"	"	"	40-65	90	34.25	55.75	28.5	60
		Average					43				28.5	92	34.3	57.7	28.6	59
A	Class 229-6	Mediterranean	4-28	5-4	6-3	6-3	41	None	None	T	25	95	39.25	55.75	32.7	60
B	"	✓	"	"	"	"	38	"	"	T	10-25	100	39	61	32.5	60
C	"		4-29	5-6	6-5	6-7	40	"	"	T	10-25	80	32.5	47.5	26.9	59½
		Average					40			3.6	10-25	92	36.9	54.7	30.8	60

P.E. of diff. = ±1.2842 bu./A.
Gen. P.E. = ±0.9081 " "
= 2.95%

C. I. Form No. 66.

8—5013 GOVERNMENT PRINTING OFFICE

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

Stillwater

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING 10-15-31 DATE OF EMERGENCE 10-20-32

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		GRAIN		STRAW	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
1. Turkey Check		5/7	6/6	230	30	100	100	22.3				25.3	1518	2670	56.6		
2. Early Blackhull		4/27	6/1	225	35	100	80	24.3				23.0	1380	1578	58.5		
3. Nebraska 28		4/27	6/3	227	37	100	35	21.5				11.1	666	No data	52.6		
4. Turkey Check		5/7	6/6	230	30	100	100	21.3				26.0	1560	2557	56.2		
5. Prelude X Kanred		5/1	6/3	227	33	100	95	23.5				17.5	1050	1629	55.4		
6. Kawvale		5/8	6/6	230	29	100	90	24.0				17.9	1074	2181	52.6		
7. Turkey Check		5/7	6/6	230	30	100	100	22.3				26.5	1590	2148	57.1		
8. Eagle Chief		5/7	6/6	230	30	100	95	22.3				25.8	1548	2062	56.5		
9. Tenmarq		5/3	6/6	230	34	100	90	23.8				23.1	1386	2122	55.5		
10. Turkey Check		5/7	6/6	230	30	100	100	21.8				26.1	1566	2618	57.4		
11. Superhard Blackhull		5/7	6/6	230	30	100	85	22.8				23.6	1416	1818	58.2		
12. Blackhull		5/7	6/6	230	30	100	95	25.5				21.5	1290	2245	57.3		
13. Turkey Check		5/7	6/6	230	30	100	100	22.0				23.2	1392	2859	57.3		
14. Redhull								22.0				24.2	1452	2291	56.6		
15. Kanred		5/6	6/6	230	31	100	100	22.0				24.9	1494	2418	57.9		
16. Turkey Check		5/7	6/6	230	30	100	100	21.5				26.4	1584	2707	57.3		
17. Goodwell Turkey No. 102		5/6	6/6	230	31	100	100	22.0				20.9	1254	2310	57.7		
[redacted] Kharkof		5/7	6/6	230	30	100	95	21.0				21.4	1284	2315	57.2		

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

Stillwater

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
						Per ct.	*Per ct.*	*Inches*	*Per ct.*	*Per ct.*	*Per ct.*	*Bushels*	*Pounds*	*Pounds*	*Pounds*	*Per ct.*	
19. Turkey Check		5/7	6/6	230	30	100	95	20.8				25.0	1500	2971	57.2		
20. Sibley No. 81	✓	5/7	6/6	230	30	100	85	22.5				20.8	1248	2692	57.5		
21. Sibley No. 62	✓							21.3				28.0	1680	2474	57.8		
22. Turkey Check		5/7	6/6	230	30	100	100	26.3				27.0	1620	2819	56.2		
23. Cheyenne	✓	5/5	6/6	230	32	100	100	21.8				21.8	1308	2290	56.8		
24. Fulcaster	✓	5/7	6/6	230	30	100	85	24.5				20.5	1230	2503	55.0		
25. Turkey Check		5/7	6/6	230	30	100	100	21.8				24.3	1458	2734	56.9		
26. Harvest Queen	✓	5/10	6/6	230	27	100	80	27.0				20.2	1212	2302	55.7		
27. Denton	✓	5/7	6/6	230	30	100	75	26.5				23.0	1380	2391	55.8		
28. Turkey Check		5/7	6/6	230	30	100	100	22.5				26.8	1608	2819	55.9		
29. Nebraska 60	✓	5/7	6/6	230	30	100	100	21.8				19.4	1164	2162	55.4		
30. Mediterranean	✓	5/10	6/6	230	27	100	70	24.8				22.7	1362	2446	54.9		
31. Turkey Check		5/7	6/6	230	30	100	100	22.5				24.8	1488	2801	56.6		
32. Purkof	✓							25.0				21.9	1314	2321	54.0		
33. Malakof	✓	5/7	6/6	230	30	100	95	23.3				23.7	1422	2626	56.6		
34. Turkey Check		5/7	6/6	230	30	100	100	22.5				27.9	1674	2923	57.3		
[redacted] Currell	✓							28.3				17.9	1074	2314	53.0		
[redacted] turk	✓	5/7	6/6	230	30	100	95	24.0				21.8	1308	2164	54.9		

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

Stillwater

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
						Per ct.	*Per ct.*	*Inches*	*Per ct.*	*Per ct.*	*Per ct.*	*Bushels*	*Pounds*	*Pounds*	*Pounds*	*Per ct.*	
37. Turkey Check		5/7	6/6	230	30	100	100	23.0				29.5	1770	2623	57.4		
38. Velvet Chaff	✓							23.0				25.2	1512	2433	56.0		
39. Fultz	✓	5/8	6/6	230	29	100	50	26.8				22.0	1320	2554	54.0		
40. Turkey Check		5/7	6/6	230	30	100	100	21.0				25.4	1524	2289	57.7		
41. Turkey Sel. O.A.M.C.	✓							21.8				26.2	1572	2038	56.8		
42. Nittany	✓							25.8				22.1	1326	2308	54.0		
43. @ Turkey Check	✓	5/7 ✓	6/6 ✓	230	30	100	100	21.0				27.5	1650	3429	56.2		
							99.7	22.2				26.1			56.9		

Experiment planted in quadruplicate -- plats 70" X 55 ft.

@ Data on one plat only.

1/113 A

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

Carrier Wheat Variety

AGRONOMIC AND QUALITY DATA

In Duplicate

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING 10-10-32 DATE OF EMERGENCE 10-15-31

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
1.(1) Turkey Check												31.8	1908	2012			
2. Early Blackhull											✓	21.0	1260	1558			
3. Nebraska 28											✓	16.3	978	1261			
4.(2) Turkey Check												28.9	1734	2303			
5.(2) Prelude X Kanred											✓	19.2	1152	1836			
6.(2) Kawvale											✓	23.4	1404	2234			
7. Turkey Check												27.3	1638	2102			
8. Eagle Chief											✓	26.9	1614	1783			
9. Tenmarq											✓	27.0	1620	1782			
10.(2) Turkey Check												28.0	1680	1979			
11.(2) Superhard Blackhull											✓	24.1	1446	1737			
12.(2) Blackhull											✓	25.6	1536	1813			
13. Turkey Check												28.2	1692	1942			
14. Redhull											✓	27.8	1668	1871			
15. Kanred											✓	27.8	1668	1802			
16. Turkey Check												29.0	1740	1861			
17. Turkey 102 (Goodwell)											✓	28.4	1704	1943			
18. Kharkof											✓	28.0	1680	2001			

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DATE OF SEEDI

VARI

19. Turkey C
20. Sibley
21. Cheyenne
22. Turkey C
23. Fulcaste
24. Harvest
25. Turkey C
26. Denton
27. Nebraska
28. Turkey C
29. Mediterr
30. Purkof
31. Turkey C
32. Currell
33. Ioturk
34. Turkey C
35. Velvet C
36. Fulz

. I. Form No. 158

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

Carrier Wheat Variety

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
(2) 37. Turkey Check												31.7	1902	2341			
(2) 38. Turkey Sel. O.A.M.C.											✓	28.0	1680	2171			
(2) 39. Turkey Sel. O.A.M.C.											✓	25.6	1536	2238			
(1) 40. Turkey Check											✓	25.4	1524	1811			

Data were taken and average computed on three plats. The experiment was planted in sextuplet (6 times) but part of the experiment was plowed under due to volunteer oats.

(1) Data on one plat only.

(2) Average of two plats.

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

Yields of Winter Wheat Varieties Grown in quadruplicated field plots at the Woodward Field Station, 1932.

Variety	C.I.No.	Yield					
		Series 1	2	3	4	Average	
		pounds	pounds	pounds	pounds	pounds	Bushels per A.
Hard Red Winter:							
Kharkof, Hays No. 2	6686	63.6	61.5	38.5	39.2	50.7	43.5
Kharkof	1442	63.0	62.1	36.5	37.8	49.9	42.8
Local Turkey	--	63.0	58.7	34.6	39.6	49.0	42.0
Redhull	--	59.2	58.7	34.5	32.6	46.3	39.7
Cheyenne	8885	60.0	59.7	31.2	34.0	46.2	39.6
Nebraska No. 60	6250	56.6	62.2	34.8	31.1	46.2	39.6
Tenmarq	6936	59.7	54.8	33.0	35.5	45.8	39.3
Oro	8220	59.0	57.2	32.5	33.7	45.6	39.1
Eagle Chief	8868	56.3	57.0	32.9	33.7	45.0	38.6
Kanred	5146	59.6	55.8	29.0	34.1	44.6	38.2
Turkey, Goodwell 102P	--	59.2	51.8	32.2	34.3	44.4	38.1
Superhard	8054	54.6	53.7	33.9	32.2	43.6	37.4
Blackhull	6251	54.5	51.7	31.6	30.5	42.1	36.1
Kanred x Marquis	10090	52.8	51.7	30.2	31.7	41.6	35.7
Prelude x Kanred	8886	55.6	51.5	29.0	29.4	41.4	35.5
Cooperatorka	8861	50.3	51.5	27.2	27.6	39.2	33.6
Early Blackhull	8856	45.5	41.5	27.3	25.5	35.0	30.0
Soft Red Winter:							
Sibley No. 81	10084	50.6	51.8	35.7	34.3	43.1	36.9
Fulcaster	6471	53.1	51.8	28.5	33.8	41.8	35.8
Denton	8265	53.9	45.3	31.2	28.8	39.8	34.1
Kawvale	8180	48.6	48.7	31.0	30.6	39.7	34.0
Harvest Queen	6199	48.6	42.9	27.8	25.3	36.2	31.0
Nebraska No. 28	5147	37.4	35.3	18.2	17.7	27.2	23.3

Note: Series 1 and 2 were on fallow ground, series 3 and 4 on cropped ground. The plots were 132 feet long and 77 inches wide, with an area of 847 square feet. The factor used to convert pounds to bushels per acre was 0.8571.

P. E. of diff. = ± 0.9415 lbs. /A.
Generalized P.E = ± 0.6657 " "
= 1.827.

Average Yields in bushels per acre of winter wheat varieties grown in 1/50-acre plots at the Woodward Field Station, 1932.

Variety	C.I.No.	Yields in bushels per acre		
		Average of Two plots on fallow	Two plots on cropped ground	All four plots*
Hard Red Winter:				
Kharkof, Hays No. 2	6686	53.7	33.3	43.5
Kharkof	1442	53.7	31.9	42.8
Local Turkey	--	52.2	31.8	42.0
Redhull	--	50.6	28.8	39.7
Cheyenne	8885	51.3	27.9	39.6
Nebraska No. 60	6250	50.9	28.3	39.6
Tenmarq	6936	49.1	29.4	39.3
Oro	8220	49.8	28.4	39.1
Eagle Chief	8868	48.6	28.5	38.6
Kanred	5146	49.5	27.1	38.2
Turkey, Goodwell 102P	--	47.6	28.5	38.1
Superhard	8054	46.5	28.4	37.4
Blackhull	6251	45.5	26.7	36.1
Kanred x Marquis	10090	44.8	26.6	35.7
Prelude x Kanred	8886	45.9	25.0	35.5
Cooperatorka	8861	43.6	23.5	33.6
Early Blackhull	8856	37.3	22.6	30.0
Soft Red Winter:				
Sibley	10084	43.9	30.0	36.9
Fulcaster	6471	45.0	26.7	35.8
Denton	8265	42.5	25.7	34.1
Kawvale	8180	41.7	26.4	34.0
Harvest Queen	6199	39.3	22.8	31.0
Nebraska No. 28	5147	31.2	15.4	23.3

* The average for all four plots in all cases is not the exact average of the other two averages, as all averages were computed directly in pounds and then transformed to bushels per acre.

UNITED STATES DEPARTMENT OF AGRICULTURE

BUREAU OF PLANT INDUSTRY

DIVISION OF
CEREAL CROPS AND DISEASES

REPLY TO:
Southern Great Plains Field Station,
Woodward, Oklahoma.

General remarks about winter wheat varieties, 1932.

Moisture conditions in the fall of 1931 were favorable for rapid full emergence of the winter wheat varietal plots. The varieties were subjected to a period of little effective precipitation from the latter part of February to the middle of April. After this period, precipitation apparently was sufficient, and became excessive during the last part of the ripening period, and during harvest.

As in 1931, a severe freeze occurred in March, lasting this year from March 4 to March 11. The minimum temperature recorded during this freeze was 8° F., equal to the minimum for the winter. No complete killing was noted, but tender varieties, particularly the early-maturing Nebraska No. 28, were killed back considerably.

In general, the later-maturing varieties were highest in yield. They probably were able to take better advantage of the late rainfall, and the early varieties suffered more from the late freeze and from the dry period in early spring. The two plots on fallow of all varieties yielded around 20 bushels per acre more than the two plots on cropped ground. The test weight of the grain was light in all varieties. This was very largely the result of being wet in the shock. There was some sprouting in the shock, and loss from this cause was particularly heavy in the variety Kawvale. Leaf rust infection was light, and no stem rust was noted. Some loose smut was present in most varieties. Denton, with the heaviest infection, had around 4 per cent. This loose smut probably was introduced with the variety Denton in 1931.

Edmund Stephens

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

Goodwell

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

P.E. of diff. = ±2.9580 bu. per Acre
Generalized P.E. = ±2.0916 " " "
= 9.85 %

DATE OF SEEDING 10/13 DATE OF EMERGENCE 10/20-23

VARIETY	Shaw (~~C. I. No.~~) Sq. ft.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading (Straw)				Leaf	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Early Blackhull 2317	36.0	5/5	6/15		1591	98	100	29	10		3		1257		60		
✓ 2356	33.9	5/4	6/15		2827	92	100	21	3		4		~~1186~~ 910		61		
2391	24.8	5/5	6/14		1224	97	100	22	6		3		700		60		
	31.6	5/5	6/15		1681	96	100	24	6		3	15.9	956		60		
Nebr. #28 2318	53.1	5/6	6/16		11264	98	100	26	25		5		1319		58		
✓ 2355	32.9	5/2	6/17		7701	95	100	21	5		5		~~890~~ 891		59		
2392	38.7	5/3	6/15		14,904	97	100	22	4		5		748		59		
	41.6	5/4	6/16		11,290	97	100	23	11		5	16.4	986		59		
Prelude × Kanred 2320	43.8	5/8	6/18		4186	95	95	25	T		5		1024		58		
✓ 2359	29.4	5/8	6/18		2828	93	96	24	1		3		1414		60		
2394	33.5	5/7	6/16		5023	94	96	21	0		3		1024		61		
	35.6	5/8	6/17		4012	94	96	23	T		4	19.2	1154		60		
Kanred 2321	42.0	5/13	6/21		2765	97	100	26	T		2		1033		61		
✓ 2358	23.8	5/10	6/19		3709	92	100	25	0		2		1310		58		
2395	28.1	5/13	6/20		1058	94	100	22	0		1		~~809~~ 810		59		
Average →	31.3	5/12	6/20		2511	94	100	24	0		2	17.5	1051		59		
Eagle Chief 2323	50.4	5/14	6/21		372	94	100	25	11		2		1538		60		
✓ 2362	30.7	5/14	6/22		0	93	100	22	4		1		1048		61		
2397	36.2	5/17	6/21		545	94	100	21	1		2		1048		61		
	39.1	5/15	6/21		306	94	100	23	5		2	20.2	1211		61		

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UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Jennaq	2324	46.2	5/9	6/21		952	93	100	25	26	2		1500		60		
✓	2361	31.5	5/10	6/21		444	93	100	25	4	1		1286		60		
	2398	37.0	5/11	6/21		246	93	100	22	2	2		1157		60		
		38.2	5/10	6/21		547	93	100	24	11	2	21.9	1314		60		
Superfood	2326	38.8	5/11	6/19		1237	95	100	26	10	1		1386		61		
✓	2365	25.1	5/12	6/20		375	94	100	19	4	2		762		62		
	23100	36.7	5/10	6/20		0	95	100	24	3	3		1295		62		
		33.5	5/11	6/20		537	95	100	23	6	2	19.1	1148		62		
Blackhull	2327	45.0	5/11	6/19		1060	97	100	25	10	2		1348		60		
✓	2364	31.6	5/12	6/20		361	92	100	18	2	2		790		61		
	23101	44.6	5/10	6/20		216	96	100	24	3	2		1319		62		
		40.4	5/11	6/20		546	95	100	22	5	2	19.2	1153		61		
Redhull	2329	43.2	5/12	6/21		0	96	100	22	6	1		1243		60		
	2366	48.3	5/13	6/22		0	95	100	19	2	3		1257		61		
✓	23102	44.9	5/12	6/22		0	95	100	26	2	3		1533		61		
		45.5	5/12	6/22		0	95	100	22	3	2	22.4	1344		61		

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BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING ____________ DATE OF EMERGENCE ____________

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		GRAIN		STRAW	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Kharkof 2330	47.7	5/13	6/22		426	95	99	21	10		1		1343		60		
✓ 2367	32.9	5/13	6/22		324	93	100	17	4		2		881		61		
23104	55.6	5/16	6/23		0	92	100	26	2		2		1224		61		
	45.4	5/14	6/22		250	93	100	21	5		2	19.2	1149		61		
Sibley No. 81 2332	46.2	5/13	6/21		2683	97	100	21	8		2		1171		59		
✓ 2371	36.4	5/14	6/20		1149	96	100	21	3		2		1243		60		
✓ 23106	58.4	5/13	6/20		854	95	100	25	4		3		1338		60		
	47.0	5/13	6/20		1562	96	100	22	5		2	20.9	1251		60		
Cheyenne 2333	45.8	5/16	6/25		0	97	100	21	17		1		1400		61		
✓ 2370	34.9	5/15	6/22		181	93	100	22	2		2		1581		62		
23107	53.6	5/16	6/23		0	93	100	24	2		3		1362		62		
	44.8	5/16	6/23		60	94	100	22	7		2	24.1	1448		62		
Fulcaster 2335	40.1	5/14	6/22		1516	93	100	23	15		1		1319		60		
✓ 2376	30.3	5/15	6/~~18~~ 20		5143	91	100	23	1		3		833		60		
✓ 23109	38.7	5/15	6/21		466	92	100	25	~~2~~ 1		~~1~~ 2		1224		60		
	36.4	5/15	6/21		2375	92	100	24	6		2	18.8	1125		60		

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UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Harnet Queen	2336	37.3	5/14	6/22		0	95	100	27	22		3		1381	60		
✓	2373	23.3	5/16	6/22		1106	94	100	24	2		2		1033	61		
	23110	40.8	5/11	6/22		495	95	100	27	2		3		1152	61		
		33.8	5/14	6/22		534	94	100	26	9		3	19.8	1189	61		
Denton	2338	45.4	5/16	6/23		0	95	100	26	T		1		1552	59		
✓	2377	32.0	5/16	6/22		2341	94	100	26	T		3		976	60		
	23112	45.5	5/15	6/24		0	95	100	28	T		2		1357	60		
		41.0	5/16	6/23		780	95	100	27	T		2	21.6	1295	60		
Nebr. #60	2339	58.6	5/19	6/26		0	94	100	25	14		1		2019	61		
✓	2376	46.5	5/19	6/26		0	91	100	20	3		3		1037 2	61		
	23113	39.8	5/19	6/26		0	93	100	27	2		2		1594	61		
		47.3	5/19	6/26		0	93	100	24	6		2	25.8	1548	61		
Mediterranean	2341	50.2	5/15	6/22		469	93	100	29	11		1		1829	60		
	2380	27.1	5/10	6/21		4000	95	100	25	T		1		1000	60		
✓	23115	31.4	5/14	6/23		0	95	100	24	T		2		795	60		
		36.2	5/13	6/22		1490	94	100	26	4		1	20.1	1208	60		

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UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		GRAIN		STRAW	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Purkof	2342	41.2	5/16	6/25	0	98	100	31	T		T		1996		60		
	2379	42.5	5/13	6/22	433	97	100	25	0		1		1319		60		
	23116	35.1	5/15	6/24	0	96	100	28	T		2		1062		60		
		39.6	5/15	6/24	144	97	100	28	T		1	24.2	1452		60		
Iotuch	2344	46.5	5/19	6/26	0	93	100	27	18		1		1914		61		
	2383	42.5	5/18	6/26	0	95	100	24	1		1		1162		61		
	23118	43.6	5/19	6/25	0	94	100	30	1		3		1352		61		
		44.2	5/19	6/26	0	94	100	27	7		2	24.6	1476		61		
Fultz	2345	48.9	5/15	6/21	1720	92	100	29	28		4		1495		59		
	2382	24.4	5/13	6/20	2857	94	100	23	2		1		800		58		
	23119	35.3	5/15	6/22	291	95	100	30	2		4		981		59		
		36.2	5/14	6/21	1623	94	100	27	11		3	18.2	1092		59		
Malakof	2347	55.0	5/9	6/21	1322	95	100	30	3		5		2162		62		
	2386	31.5	5/9	6/19	4041	94	98	21	1		3		919		60		
	23121	43.5	5/7	6/21	506	94	100	28	1		4		1129		61		
		43.3	5/8	6/20	1956	94	99	26	2		4	23.4	1403		61		

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UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		GRAIN		STRAW	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Minturki	2348	53.4	5/16	6/25		0	92	100	32	16		1		2176		61	
	2385	37.9	5/19	6/23		0	92	100	22	2		1		895		60	
	23122	53.3	5/19	6/22		0	94	100	30	2		3		1052		60	
		48.2	5/18	6/23		0	93	100	28	7		2	22.9	1374		60	
Turkey 101	2350	72.3	5/14	6/22		111	95	100	32	11		2		2577		61	
	2389	38.7	5/18	6/21		265	94	100	20	4		2		1076		61	
	23124	39.2	5/15	6/21		277	96	100	25	1		4		1029		61	
		50.1	5/16	6/21		218	95	100	26	5		3	26.0	1559		61	
Turkey 102	2351	84.2	5/15	6/22		209	95	100	32	10		1		2729		62	
	2388	39.4	5/18	6/21		277	91	100	21	3		1		1029		61	
	23125	40.6	5/15	6/21		0	94	100	23	1		3		976		61	
		54.7	5/16	6/21		162	93	100	25	5		2	26.3	1578		61	
Kanred (check)	(2300 Pailing)	58.6	5/14	6/21		718	95	100	24	15		2		1792		61	
" "	(2300N Stubble)	38.5	5/15	6/21		552	93	100	21	3		2		1173		61	
" "	(2300S Stubble)	45.2	5/15	6/21		265	94	100	24	2		3		1215		61	
	Average	47.4	5/15	6/21		512	94	100	23	7		2	23.2	1393		61	

Average 7/13 plots

C. I. Form No. 158

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

Kanred Checks

Goodwell Checks.

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING 10/13 DATE OF EMERGENCE 10/20 to 10/23

VARIETY	Straw ~~C. I. No.~~ lg Ft.	DATES Headed	DATES Ripe	DAYS TO MATURITY FROM Emergence	DAYS TO MATURITY FROM ~~Heading~~ S[illegible]	STAND	WINTER SURVIVAL	HEIGHT	RUST Leaf	RUST Stem	LODGING	ACRE YIELD Grain	ACRE YIELD Grain	ACRE YIELD Straw	GRAIN QUALITY Test weight per bushel	GRAIN QUALITY Protein content	GRAIN QUALITY U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
~~[illegible]~~ 2316	48.4	5/15	6/21		1125	95	100	24	25		3		1524		61		
2319	57.1	5/13	6/21		2018	95	100	25	20		2		1557		61		
2322	50.6	5/13	6/21		1056	95	100	25	10		2		1624		61		
2325	48.8	5/13	6/21		1338	95	100	24	23		1		1495		61		
2328	46.5	5/15	6/21		655	96	100	22	10		2		1310		61		
2331	57.9	5/13	6/21		614	94	100	20	10		3		1395		61		
2334	46.5	5/16	6/21		367	95	100	21	15		1		1557		61		
2337	60.2	5/13	6/21		153	95	100	24	21		2		1862		61		
2340	56.6	5/16	6/22		435	94	100	27	15		2		1971		61		
2343	67.1	5/16	6/21		281	95	100	25	14		2		2033		61		
2346	55.6	5/14	6/22		829	95	100	28	16		2		2067		62		
2349	80.3	5/14	6/22		238	95	100	29	14		1		2405		62		
2352	85.7	5/15	6/22		229	96	100	31	6		2		2500		62		
2353	47.7	5/13	6/22		332	90	100	28	6		2		1719 ?		62		
2354	40.5	5/12	6/20		816	92	100	21	5		2		1400		62		
2357	38.0	5/13	6/20		1035	90	100	22	2		2		1105		61		
2360	34.6	5/13	6/20		213	95	100	23	5		1		1343		61		
2363	33.1	5/16	6/21		339	93	100	19	5		2		843		61		

Series I (23w - Fallow)

C. I. Form No. 158

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	~~Heading~~ Fatty				Leaf	Stem		GRAIN		STRAW	Test weight per bushel	Protein content	U. S. grade
						Per ct.	*Per ct.*	*Inches*	*Per ct.*	*Per ct.*	*Per ct.*	*Bushels*	*Pounds*	*Pounds*	*Pounds*	*Per ct.*	
Series II (2366 N-Stella) 2366	29.6	5/14	6/21		0	92	100	17	5		3		600		60		
2369	40.8	5/12	6/21		209	94	100	19	1		1		1367		61		
2372	40.3	5/14	6/21		202	93	100	20	4		3		1414		61		
2375	31.5	5/17	6/21		625	92	100	19	2		2		914		61		
2378	39.6	5/16	6/21		1417	94	100	24	1		3		1210		61		
2381	42.1	5/15	6/21		1195	95	100	23	2		2		1195		61		
2384	38.6	5/16	6/22		789	94	100	22	~~3~~ 2		~~3~~ 3		1086		61		
2387	44.7	5/18	6/21		0	93	100	22	~~2~~ 1		~~x~~ 2		1057		61		
Series III (2390 S-Stella) 2390	37.3	5/18	6/21		365	93	100	20	3		2		781		61		
2393	37.6	5/12	6/21		452	93	100	21	1		1		1262		61		
2396	39.3	5/16	6/21		621	93	100	21	3		2		919		61		
2399	50.4	5/18	6/21		232	95	100	23	~~2~~ 1		2		1229		61		
23102	45.4	5/16	6/21		606	93	100	24	1		3		1414		61		
23105	46.6	5/13	6/21		203	93	100	26	2		2		1405		61		
23108	47.0	5/16	6/22		0	93	100	24	2		2		1343		61		
23111	43.6	5/13	6/22		179	96	100	26	1		4		1591		61		
23114	32.4	5/18	6/23		0	95	100	24	2		4		1081		61		
23117	44.7	5/16	6/22		0	95	100	27	3		3		1448		60		

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading Spring				Leaf	Stem		GRAIN		STRAW	Test weight per bushel	Protein content	U. S. grade
						Per ct.	*Per ct.*	*Inches*	*Per ct.*	*Per ct.*	*Per ct.*	*Bushels*	*Pounds*	*Pounds*	*Pounds*	*Per ct.*	
23120	47.6	5/16	6/22		236	94	100	28	1		4		1210		61		
23123	56.9	5/14	6/21		241	95	100	26	1		4		1181		60		
23126	59.1	5/16	6/21		307	94	100	23	3		4		928		61		

Grd.

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

Panhandle Agr. Exp. Station, Goodwell, Ok

Plot No.	Variety	Spring Survival	Manner of Growth	Ht. of Plant In.	Lodging %	Shattering	Leaf Rust	Lbs. Grain Per Acre	Lbs. Straw Per Acre	Total Crop	Bu. Wt.	Percent Dockage
2316	Kanred	100	sp	24	3	1125	25.0	1524	2857	4381	61.0	.66
2317	Early Blackhull	100	sp	28.5	3	1591	10.0	1257	1862	3119	59.9	.80
2318	Nebraska 28	100	sp	26	5	11264	25.0	1319	1991	3310	58.0	1.68
2319	Kanred	100	sp	25	2	2018	20.0	1557	2729	4286	61.0	.58
2320	Prelude x Kanred	95	sp	25	5	4186	T	1024	2286	3310	58.4	2.69
2321	Kawvale	100	sp	26	2	2765	T	1033	2443	3476	60.9	2.17
2322	Kanred	100	sp	25	2	1056	10.0	1624	2614	4238	60.9	.86
2323	Eagle Chief	100	sp	25	2	372	11.0	1538	2414	3952	59.9	1.33
2324	Tenmarq	100	sp	25	2	952	25.5	1500	2119	3619	60.1	1.90
2325	Kanred	100	sp	24	1	1338	22.5	1495	2314	3809	60.5	1.05
2326	Superhard Blackhull	100	sp	26	1	1257	10.0	1386	2042	3429	61.4	.91
2327	Blackhull	100	sp	25	2	1060	10.0	1348	2319	3667	60.2	1.09
2328	Kanred	100	sp	22	2	655	10.0	1310	1976	3286	60.6	.93
2329	Redhull	100	sp	22	1	0	6.0	1243	2281	3524	60.1	1.66
2330	Kharkov	99	sp	21	1	426	10.0	1343	2181	3524	59.8	1.74
2331	Kanred	100	sp	20	3	614	10.0	1395	2129	3524	60.5	1.02
2332	Sibley's 81	100	sp	21	2	2683	8.0	1171	1805	2976	58.9	2.37
2333	Cheyenne	100	sp	21	1	0	16.5	1400	2148	3548	60.8	1.14
2334	Kanred	100	sp	21	1	367	15.0	1557	2205	3762	61.0	.98
2335	Fulcaster	100	sp	23	1	1516	15.0	1319	2062	3381	59.5	1.12

Series I - (2300 - Yellow)

Panhandle Agr. Exp.
Station, Goodwell, Okla.

Plot No.	Variety	Spring Survival	Manner of Growth	Ht. of Plant In.	Lodging %	Shattering	Leaf Rust	Lbs. Grain Per Acre	Lbs. Straw Per Acre	Total Crop	Bu. Wt.	Percent Dockage
2336	Harvest Queen	100	sp	27	3	0	21.5	1381	2548	3928	59.8	1.38
2337	Kanred	100	sp	24	2	153	21.0	1862	2852	4714	61.0	.68
2338	Denton	100	sp	26	1	0	T	1552	2971	4523	59.4	1.73
2339	Nebraska 60	100	sp	25	1	0	13.5	2019	3076	5095	61.3	1.16
2340	Kanred	100	sp	27	2	435	15.0	1971	3362	5333	61.4	.61
2341	Mediterranean	100	sp	29	1	469	10.5	1829	3005	4834	60.2	.76
2342	Purkof	100	sp	31	T	0	T	1976	3738	5714	59.9	1.51
2343	Kanred	100	sp	25	2	281	13.5	2033	3252	5285	61.2	.62
2344	Ioturk	100	sp	27	1	0	18.0	1914	3229	5143	61.0	1.24
2345	Fultz	100	sp	29	4	1720	28.0	1495	2648	4143	59.1	1.60
2346	Kanred	100	sp	28	2	829	15.5	2067	3648	5715	61.6	.79
2347	Malakof	100	sp	30	5	1322	2.5	2162	2981	5143	61.9	1.86
2348	Minturki	100	sp	32	1	0	16.0	2176	4014	6190	60.6	1.96
2349	Kanred	100	sp	29	1	238	14.0	2405	4405	6810	61.7	.79
2350	Turkey 101	100	sp	32	2	111	10.5	2571	4191	6762	61.4	.72
2351	Turkey 102	100	sp	32	1	209	9.5	2729	4462	7191	61.7	.73
2352	Kanred	100	sp	31	2	229	5.5	2500	4024	6524	61.5	.49
2353	Kanred	100	sp	28	2	332	5.5	1719	2686	4405	61.5	.63
2354	Kanred	100	sp	21	2	816	4.5	1400	1933	3333	61.5	.75
2355	Nebraska 28	100	sp	21	5	7701	5.0	890	1181	2071	58.8	1.40

Series II

Panhandle Agr. Exp. Station, Goodwell, Okla.

Plot No.	Variety	Spring Survival	Manner of Growth	Ht. of Plant In.	Lodging %	Shattering	Leaf Rust	Lbs. Grain Per Acre	Lbs. Straw Per Acre	Total Crop	Bu. Wt.	Percent Dockage
2356	Early Blackhull	100	sp	21	4	2827	2.5	910	1186	2096	60.7	1.04
2357	Kanred	100	sp	22	2	1035	1.5	1105	1467	2572	61.3	.69
2358	Kawvale	100	sp	25	2	3709	0	1310	1095	2405	57.9	2.76
2359	Prelude x Kanred	96	sp	24	3	2828	.5	1414	824	2238	60.3	2.87
2360	Kanred	100	sp	23	1	213	4.5	1343	1705	3048	61.1	.67
2361	Tenmarq	100	sp	25	1	444	3.5	1286	1714	3000	60.1	1.65
2362	Eagle Chief	100	sp	22	1	0	3.5	1048	1381	2429	60.8	1.09
2363	Kanred	100	sp	19	2	339	4.5	843	1300	2143	60.7	.74
2364	Blackhull	100	sp	18	2	361	1.5	790	1210	2000	61.4	.77
2365	Superhard Blackhull	100	sp	19	2	375	4.0	762	1048	1810	61.7	.67
2366	Kanred	100	sp	17	3	0	4.5	600	971	1571	60.4	.78
2367	Kharkov	100	sp	17	2	324	4.0	881	1405	2286	60.5	1.28
2368	Redhull	100	sp	19	3	0	1.5	1257	1838	3095	61.4	1.00
2369	Kanred	100	sp	19	1	209	1.0	1367	1729	3096	61.0	.61
2370	Cheyenne	100	sp	22	2	181	1.5	1581	1991	3572	61.8	.97
2371	Sibley's 81	100	sp	21	2	1149	2.5	1243	1709	2952	59.8	.92
2372	Kanred	100	sp	20	3	202	3.5	1414	1871	3285	61.1	1.06
2373	Harvest Queen	100	sp	24	2	1106	1.5	1033	1538	2571	60.6	1.08
2374	Fulcaster	100	sp	23	3	5143	1.0	833	1200	2033	59.8	1.41
2375	Kanred	100	sp	19	2	625	1.5	914	1324	2238	60.5	.76

Series II - (230 on N Stubble)

Panhandle Agr. Exp. Station, Goodwell, Okla.

Plot No.	Variety	Spring Survival	Manner of Growth	Ht. of Plant In.	Lodging %	Shattering	Leaf Rust	Lbs. Grain Per Acre	Lbs. Straw Per Acre	Total Crop	Bu. Wt.	Percent Dockage
2376	Nebraska 60	100	sp	20	3	0	3.0	1031	1574	2605	61.2	.99
2377	Denton	100	sp	26	3	2341	T	976	1643	2619	59.7	1.96
2378	Kanred	100	sp	24	3	1417	1.0	1210	1695	2905	61.0	.47
2379	Purkof	100	sp	25	1	433	0	1319	1967	3286	60.4	1.48
2380	Mediterranean	100	sp	25	1	4000	T	1000	1429	2429	59.6	.89
2381	Kanred	100	sp	23	2	1195	1.5	1195	1614	2809	60.7	.57
2382	Fultz	100	sp	23	1	2857	2.0	800	1200	2000	58.4	1.47
2383	Ioturk	100	sp	24	1	0	.5	1162	1886	3048	61.0	1.18
2384	Kanred	100	sp	22	3	789	2.0	1086	1628	2714	60.7	.53
2385	Minturki	100	sp	22	1	0	1.5	895	1533	2428	59.9	2.25
2386	Malakof	98	sp	21	3	4041	1.0	919	1176	2095	60.1	2.49
2387	Kanred	100	sp	22	2	0	1.0	1057	1848	2905	61.1	.74
2388	Turkey 102	100	sp	21	1	277	2.5	1029	1566	2595	61.2	.93
2389	Turkey 101	100	sp	20	2	265	3.5	1076	1614	2690	60.5	1.04
2390	Kanred	100	sp	20	2	365	3.0	781	1410	2191	60.5	.90
2391	Early Blackhull	100	sp	22	3	1224	6.0	700	1238	1938	60.2	1.40
2392	Nebraska 28	100	sp	22	5	14904	4.0	748	1395	2143	58.6	1.83
2393	Kanred	100	sp	21	1	452	1.0	1262	1976	3238	61.3	1.02
2394	Prelude x Kanred	96	sp	21	3	5023	0	1024	1357	2381	60.6	2.50
2395	Kawvale	100	sp	22	1	1058	0	809	1429	2238	58.6	2.18

Panhandle Agr. Exp. Station, Goodwell, Okla.

Plot No.	Variety	Spring Survival	Manner of Growth	Ht. of Plant In.	Lodging %	Shattering	Leaf Rust	Lbs. Grain Per Acre	Lbs. Straw Per Acre	Total Crop	Bu. Wt.	Percent Dockage
2396	Kanred	100	sp	21	2	621	2.5	919	1319	2238	60.5	.95
2397	Eagle Chief	100	sp	21	2	545	1.0	1047	1762	2809	60.7	1.05
2398	Tenmarq	100	sp	22	2	246	1.5	1157	1676	2833	60.3	1.57
2399	Kanred	100	sp	23	2	232	1.0	1229	2009	3238	60.8	1.00
23100	Superhard Blackhull	100	sp	24	3	0	2.5	1295	1967	3262	61.8	.88
23101	Blackhull	100	sp	24	2	216	2.5	1319	2014	3333	62.0	.92
23102	Kanred	100	sp	24	3	606	1.0	1414	2038	3452	60.6	.83
23103	Redhull	100	sp	26	3	0	2.0	1533	2324	3857	61.4	.98
23104	Kharkov	100	sp	26	2	0	1.5	1224	2109	3333	60.8	.85
23105	Kanred	100	sp	26	2	203	1.5	1405	1976	3381	60.9	.78
23106	Sibley's 81	100	sp	25	3	854	3.5	1338	1948	3286	60.1	1.25
23107	Cheyenne	100	sp	24	3	0	2.0	1362	2114	3476	61.6	1.21
23108	Kanred	100	sp	24	2	0	1.5	1343	2086	3429	60.8	.66
23109	Fulcaster	100	sp	25	2	466	.5	1224	2038	3262	60.2	1.01
23110	Harvest Queen	100	sp	27	3	495	1.5	1152	2157	3309	60.5	1.14
23111	Kanred	100	sp	26	4	179	1.0	1591	2338	3929	60.9	.56
23112	Denton	100	sp	28	2	0	T	1357	2548	3905	59.8	1.41
23113	Nebraska 60	100	sp	27	2	0	2.0	1594	2523	4117	61.1	.93
23114	Kanred	100	sp	24	4	0	1.5	1081	1681	2762	60.7	.73
23115	Mediterranean	100	sp	24	2	0	T	795	1443	2238	59.6	.64

Series III - (2300's Stubble)

Panhandle Agr. Exp.
Station, Goodwell, Okla.

Plot No.	Variety	Spring Survival	Manner of Growth	Ht. of Plant In.	Lodging %	Shattering	Leaf Rust	Lbs. Grain Per Acre	Lbs. Straw Per Acre	Total Crop	Bu. Wt.	Percent Dockage
23116	Purkof	100	sp	28	2	0	T	1062	2224	3286	59.7	1.13
23117	Kanred	100	sp	27	3	0	2.5	1448	2195	3643	60.4	.92
23118	Toturk	100	sp	30	3	0	1.0	1352	2267	3619	61.0	1.07
23119	Fultz	100	sp	30	4	291	1.5	981	1733	2714	58.7	1.80
23120	Kanred	100	sp	28	4	236	.5	1210	2076	3286	60.5	.86
23121	Malakof	100	sp	28	4	506	1.0	1129	1800	2929	60.5	1.91
23122	Minturki	100	sp	30	3	0	2.0	1052	2329	3381	60.1	2.07
23123	Kanred	100	sp	26	4	241	.5	1181	2105	3286	60.1	1.11
23124	Turkey 101	100	sp	25	4	277	1.0	1029	1876	2905	60.5	1.14
23125	Turkey 102	100	sp	23	3	0	.5	976	1667	2643	60.7	1.00
23126	Kanred	100	sp	23	4	307	3.0	928	1881	2809	60.6	1.20

Panhandle Agricultural Exp. Station, Goodwell, Okla.

Plot No.	Variety	Size of Plot	Rate of Seeding	Date Sown	Date Emerged	Date First Heading	Date Fully Headed	Date First Ripe	Date Fully Ripe	Date Harvested	Stand
2316	Kanred	.021	2	10-13	10-20	5-15	5-22	6-15	6-21	6-29	95
2317	Early Blackhull	.021	2	10-13	10-20	5- 5	5-11	6-11	6-15	6-29	98
2318	Nebraska 28	.021	2	10-13	10-20	5- 6	5-12	6-11	6-16	6-29	98
2319	Kanred	.021	2	10-13	10-20	5-13	5-22	6-15	6-21	6-29	95
2320	Prelude x Kanred	.021	2	10-13	10-20	5- 8	5-16	6-13	6-18	6-29	95
2321	Kawvale	.021	2	10-13	10-20	5-13	5-23	6.14	6-21	6-29	97
2322	Kanred	.021	2	10-13	10-20	5-13	5-22	6-15	6-21	6-29	95
2323	Eagle Chief	.021	2	10-13	10-20	5-14	5-24	6-15	6-21	6-29	94
2324	Tenmarq	.021	2	10-13	10-20	5- 9	5-23	6-14	6-21	6-29	93
2325	Kanred	.021	2	10-13	10-20	5-13	5-22	6-15	6-21	6-28	95
2326	Superhard Blackhull	.021	2	10-13	10-20	5-11	5-17	6-13	6-19	6-28	95
2327	Blackhull	.021	2	10-13	10-20	5-11	5-18	6-13	6-19	6-28	97
2328	Kanred	.021	2	10-13	10-20	5-15	5-22	6-15	6-21	6-28	96
2329	Redhull	.021	2	10-13	10-20	5-12	5-23	6-14	6-21	6-28	96
2330	Kharkov	.021	2	10-13	10-20	5-13	5-23	6-15	6-22	6-28	95
2331	Kanred	.021	2	10-13	10-20	5-13	5-23	6-14	6-21	6-28	94
2332	Sibley's 81	.021	2	10-13	10-20	5-13	5-23	6-14	6-21	6-28	97
2333	Cheyenne	.021	2	10-13	10-20	5-16	5.24	6-18	6-25	6-28	97
2334	Kanred	.021	2	10-13	10-20	5-16	5-23	6-15	6-21	6-28	95

Series I (2300- follows)

Panhandle Agricultural Exp. Station, Goodwell, Okla.

Plot No.		Size of Plot	Rate of Seeding	Date Sown	Date Emerged	Date First Heading	Date Fully Headed	Date First Ripe	Date Fully Ripe	Date Harvested	Stand
2335	Fulcaster	.021	2	10-13	10-20	5-14	5-25	6-16	6-22	6-28	93
2336	Harvest Queen	.021	2	10-13	10-20	5-14	5-25	6-16	6-22	6-28	93
2337	Kanred	.021	2	10-13	10-20	5-13	5-22	6-15	6-21	6-28	95
2338	Denton	.021	2	10-13	10-20	5-16	5-24	6-16	6-23	6-28	95
2339	Nebraska 60	.021	2	10-13	10-20	5-19	5-26	6-20	6-26	6-28	94
2340	Kanred	.021	2	10-13	10-20	5-16	5-23	6-16	6-22	6-28	94
2341	Mediterranean	.021	2	10-13	10-20	5-15	5-24	6-16	6-22	6-28	93
2342	Purkof	.021	2	10-13	10-20	5-16	5-25	6-19	6-25	6-28	98
2343	Kanred	.021	2	10-13	10-20	5-16	5-23	6-15	6-21	6-28	95
2344	Ioturk	.021	2	10-13	10-20	5-19	5-26	6-20	6-26	6-28	93
2345	Fultz	.021	2	10-13	10-20	5-15	5-25	6-14	6-21	6-28	92
2346	Kanred	.021	2	10-13	10-20	5-14	5-23	6-15	6-22	6-28	95
2347	Malakof	.021	2	10-13	10-20	5- 9	5-17	6-13	6-21	6-28	95
2348	Minturki	.021	2	10-13	10-20	5-16	5-27	6-19	6-25	6-28	92
2349	Kanred	.021	2	10-13	10-20	5-14	5-23	6-15	6-22	6-28	95
2350	Turkey 101	.021	2	10-13	10-20	5-14	5-23	6-15	6-22	6-28	95
2351	Turkey 102	.021	2	10-13	10-20	5-15	5-23	6-15	6-22	6-28	95
2352	Kanred	.021	2	10-13	10-20	5-15	5-23	6-15	6-22	6-28	96
2353	Kanred	.021	2	10-13	10-23	5-13	5-23	6-15	6-22	6-28	90
2354	Kanred	.021	2	10-13	10-23	5-12	5-20	6-14	6-20	6-28	92

Panhandle Agricultural Exp. Station, Goodwell, Okla.

Plot No.		Size of Plot	Rate of Seeding	Date Sown	Date Emerged	Date First Heading	Date Fully Headed	Date First Ripe	Date Fully Ripe	Date Harvested	Stand
2355	Nebraska 28	.021	2	10-13	10-23	5- 2	5-10	6-10	6-17	6-28	95
2356	Early Blackhull	.021	2	10-13	10-23	5- 4	5-11	6-10	6-15	6-28	92
2357	Kanred	.021	2	10-13	10-23	5-13	5-23	6-14	6-20	6-28	90
2358	Kawvale	.021	2	10-13	10-23	5-10	5-18	6-13	6-19	6-28	92
2359	Prelude x Kanred	.021	2	10-13	10-23	5- 8	5-16	6-12	6-18	6-28	93
2360	Kanred	.021	2	10-13	10-23	5-13	5-20	6-15	6-20	6-28	95
2361	Tenmarq	.021	2	10-13	10-23	5-10	5-18	6-14	6-21	6-28	93
2362	Eagle Chief	.021	2	10-13	10-23	5-14	5-24	6-15	6-22	6-28	93
2363	Kanred	.021	2	10-13	10-23	5-16	5-23	6-14	6-21	6-28	93
2364	Blackhulls	.021	2	10-13	10-23	5-12	5-18	6-13	6-20	6-28	92
2365	Superhard Blackhull	.021	2	10-13	10-23	5-12	5-18	6-13	6-20	6-28	94
2366	Kanred	.021	2	10-13	10-23	5-14	5-22	6-14	6-21	6-28	92
2367	Kharkov	.021	2	10-13	10-23	5-13	5-23	6-15	6-22	6-28	93
2368	Redhull	.021	2	10-13	10-23	5-13	5-23	6-15	6-22	6-28	95
2369	Kanred	.021	2	10-13	10-23	5-14	5-23	6-15	6-21	6-28	94
2370	Cheyenne	.021	2	10-13	10-23	5-15	5-23	6-16	6-22	6-28	93
2371	Sibley's 81	.021	2	10-13	10-23	5-14	5-24	6-14	6-20	6-28	96
2372	Kanred	.021	2	10-13	10-23	5-14	5-22	6-15	6-21	6-28	93
2373	Harvest Queen	.021	2	10-13	10-23	5-16	5-25	6-15	6-22	6-28	94
2374	Fulcaster	.021	2	10-13	10-23	5-15	5-24	6-13	6-20	6-28	91

Series II (230 N-Stubble)

Panhandle Agr.Exp.
Station, Goodwell, Okla.

Plot No.	Variety	Size of Plot	Rate of Seeding	Date Sown	Date Emerged	Date First Heading	Date Fully Headed	Date First Ripe	Date Fully Ripe	Date Harvested	Stand
2375	Kanred	.021	2	10-13	10-23	5-17	5-22	6-15	6-21	6-28	92
2376	Nebraska 60	.019	2	10-13	10-23	5-19	5-25	6-20	6-26	6-28	91
2377	Denton	.021	2	10-13	10-23	5-16	5-23	6-15	6-22	6-28	94
2378	Kanred	.021	2	10-13	10-23	5-16	5-22	6-15	6-21	6-28	94
2379	Purkof	.021	2	10-13	10-23	5-13	5-25	6-17	6-22	6-28	97
2380	Mediterranean	.021	2	10-13	10-23	5-10	5-24	6-14	6-21	6-28	95
2381	Kanred	.021	2	10-13	10-23	5-15	5-20	6-15	6-21	6-28	95
2382	Fultz	.021	2	10-13	10-23	5-13	5-24	6-14	6-20	6-28	94
2383	Ioturk	.021	2	10-13	10-23	5-18	5-25	6-21	6-26	6-28	95
2384	Kanred	.021	2	10-13	10-23	5-16	5-22	6-14	6-22	6-28	94
2385	Minturki	.021	2	10-13	10-23	5-19	5-25	6-15	6-23	6-28	92
2386	Malakof	.021	2	10-13	10-23	5- 9	5-19	6-13	6-19	6-28	94
2387	Kanred	.021	2	10-13	10-23	5-18	5-22	6-15	6-21	6-27	93
2388	Turkey 102	.021	2	10-13	10-23	5-18	5-22	6-15	6-21	6-27	91
2389	Turkey 101	.021	2	10-13	10-23	5-18	5-22	6-15	6-21	6-27	94
2390	Kanred	.021	2	10-13	10-23	5-18	5-22	6-15	6-21	6-27	93
2391	Early Blackhull	.021	2	10-13	10-23	5- 5	5-12	6-10	6-14	6-27	97
2392	Nebraska 28	.021	2	10-13	10-23	5- 3	5-11	6-10	6-15	6-27	97
2393	Kanred	.021	2	10-13	10-23	5-12	5-22	6-15	6-21	6-27	93
2394	Prelude x Kanred	.021	2	10-13	10-23	5- 7	5-18	6-12	6-16	6-27	94

Series II

Series III

Panhandle Agr. Exp.
Station, Goodwell, Okla.

Plot No.	Variety	Size of Plot	Rate of Seeding	Date Sown	Date Emerged	Date First Heading	Date Fully Headed	Date First Ripe	Date Fully Ripe	Date Harvested	Stand
2395	Kawvale	.021	2	10-13	10-23	5-13	5-23	6-14	6-20	6-27	94
2396	Kanred	.021	2	10-13	10-23	5-16	5-23	6-15	6-21	6-27	93
2397	Eagle Chief	.021	2	10-13	10-23	5-17	5-23	6-15	6-21	6-27	94
2398	Tenmarq	.021	2	10-13	10-23	5-11	5-20	6-14	6-21	6-27	93
2399	Kanred	.021	2	10-13	10-23	5-18	5-23	6-15	6-21	6-27	95
23100	Superhard Blackhull	.021	2	10-13	10-23	5-10	5-16	6-13	6-20	6-27	95
23101	Blackhull	.021	2	10-13	10-23	5-10	5-17	6-13	6-20	6-27	96
23102	Kanred	.021	2	10-13	10-23	5-16	5-24	6-15	6-21	6-27	93
23103	Redhull	.021	2	10-13	10-23	5-12	5-25	6-15	6-22	6-27	95
23104	Kharkov	.021	2	10-13	10-23	5-16	5-25	6-16	6-23	6-27	92
23105	Kanred	.021	2	10-13	10-23	5-13	5-23	6-15	6-21	6-27	93
23106	Sibley's 81	.021	2	10-13	10-23	5-13	5-24	6-14	6-20	6-27	95
23107	Cheyenne	.021	2	10-13	10-23	5-16	5-24	6-16	6-23	6-27	93
23108	Kanred	.021	2	10-13	10-23	5-16	5-23	6-15	6-22	6-27	93
23109	Fulcaster	.021	2	10-13	10-23	5-15	5-24	6-14	6-21	6-27	92
23110	Harvest Queen	.021	2	10-13	10-23	5-11	5-24	6-15	6-22	6-27	95
23111	Kanred	.021	2	10-13	10-23	5-13	5-22	6-15	6-22	6-27	96
23112	Denton	.021	2	10-13	10-23	5-15	5-23	6-16	6-24	6-27	95
23113	Nebraska 60	.017	2	10-13	10-23	5-19	5-25	6-21	6-26	6-27	93
23114	Kanred	.021	2	10-13	10-23	5-13	5-21	6-14	6-23	6-27	95

Panhandle Agricultural Exp. Station, Goodwell, Okla.

Plot No.	Variety	Size of Plot	Rate of Seeding	Date Sown	Date Emerged	Date First Heading	Date Fully Headed	Date First Ripe	Date Fully Ripe	Date Harvested	Stand
23115	Mediterranean	.021	2	10-13	10-23	5-14	5-22	6-14	6-23	6-27	95
23116	Purkof	.021	2	10-13	10-23	5-15	5-27	6-15	6-24	6-27	96
23117	Kanred	.021	2	10-13	10-23	5-16	5-22	6-15	6-22	6-27	95
23118	Ioturk	.021	2	10-13	10-23	5-19	5-25	6-19	6-25	6-27	94
23119	Fultz	.021	2	10-13	10-23	5-15	5-26	6-14	6-22	6-27	95
23120	Kanred	.021	2	10-13	10-23	5-16	5-22	6-15	6-22	6-27	94
23121	Malakof	.021	2	10-13	10-23	5- 7	5-17	6-13	6-21	6-27	94
23122	Minturki	.021	2	10-13	10-23	5-19	5-25	6-15	6-22	6-27	94
23123	Kanred	.021	2	10-13	10-23	5-14	5-22	6-14	6-21	6-27	95
23124	Turkey 101	.021	2	10-13	10-23	5-15	5-22	6-14	6-21	6-27	96
23125	Turkey 102	.021	2	10-13	10-23	5-15	5-22	6-14	6-21	6-27	94
23126	Kanred	.021	2	10-13	10-23	5-16	5-22	6-15	6-21	6-27	94
23127	Panhandle Barley	.021	4.5	10-13	10-22	5- 7	5-14	6- 8	6-15	6-27	99
23128	Michigan Barley	.021	4.5	10-13	10-22	5- 5	5-11	6- 7	6-14	6-27	100
23129	Wisconsin Barley	.021	4.5	10-13	10-22	5-10	5-17	6-10	6-21	6-27	98

YIELDS OF VARIETIES OF WHEAT GROWN ON THE AGRONOMY FARM, MANHATTAN, KANSAS, 1932.

Variety	Kansas Number	C.I. Number	Yield - bu. per Acre Series I	Series II	Series III	Ave.	Rank
Varieties of hard winter wheat in triplicated plots.							
Kanred (average of 5 checks)			48.0	42.9	44.1	45.0	
Early Blackhull	483	8856	41.2	50.6	52.9	48.2	14
Prelude X Kanred	2628	8886	55.5	57.7	49.6	54.3	3
Kanred	2401	5146	51.7	43.6	38.3	44.5	—
Kanred X Hd. Fed.	516		43.1	51.3	50.9	48.4	13
Kanred X Hd. Fed.	2671	11373	46.7	50.0	50.9	49.2	10
Kanred X Hd. Fed.	2672	10091	54.9	55.9	53.3	54.7	2
Kanred X Hd. Fed.	2673	10092	52.1	45.1	45.4	47.5	15
Kanred X Marquis	2679	11374	50.1	46.9	50.9	49.3	9
Kanred			48.0	44.0	40.6	44.2	—
Kanred X Marquis	2644	10090	48.3	49.4	47.9	48.5	12
Tenmarq	514	6936	54.9	54.0	51.4	53.4	5
Tenmarq	2670	10089	55.6	52.2	54.5	54.1	4
Blackhull	343	6251	48.9	48.1	50.5	49.2	10
Cheyenne	2667	8885	57.9	53.4	62.7	58.0	1
Kanred			47.0	45.4	51.6	48.0	—
Turkey	570	1558	46.1	44.7	51.3	47.4	16
Kharkof	2591	1442	44.5	39.9	53.5	46.0	18
Kharkof Hays No. 2	2659	6686	44.9	40.7	50.6	45.4	20
Nebraska 60	322	6250	49.7	47.0	53.7	50.1	8
Minturki	2464	6156	50.6	48.9	53.7	51.1	6
Ksnred			50.0	45.7	48.5	47.4	—
Oro	495	8220	48.7	46.1	45.1	46.6	17
Cooperatorka	499	8861	45.7	49.2	58.3	51.1	6
(Average yield of all Kanred plots was 46.0 bu.)							18
Varieties of soft winter wheat in triplicated plots.							
Kawvale	2593	8180	53.2	51.7	50.4	51.8	1
Fulcaster	317	6471	48.5	46.7	49.1	48.1	3
Kanred	2401	5146	43.1	37.9	41.5	40.8	4
Clark 40	505		49.4	48.1	52.3	49.9	2
Harvest Queen	19	8199	40.5	39.5	41.1	40.4	5
Varieties of wheat in single plots.							
Tenmarq (Colby)	534		55.0				
Tenmarq	514	6936	55.1				
Tenmarq (Akron)	535		53.9				
Kanred	2401	5146	42.2				
Prelude X Kanred	2689		52.1				
Kanred X Marquis	2690		56.4				
Kanred X Hd. Fed.	2691		44.2				
Harvest Queen - Kanred			45.7				
Currell - Kanred			41.1				
Kanred			39.7				
Kanred X Genesee Giant			53.1				
(P. X K. C.I. 8250) X (Turkey X Nigger C.I. [illegible])			46.5				

(continued)

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING October 2 1931 Triplicate plots DATE OF EMERGENCE October 8

VARIETY	C. I. No.	DATES: Headed	DATES: Ripe	DAYS TO MATURITY FROM: Emergence	DAYS TO MATURITY FROM: Heading	Stand 000 omitted: ~~STAND~~ Plants per A	Stand 000 omitted: ~~WINTER SURVIVAL~~ Culms per A	HEIGHT	RUST: Leaf	RUST: Stem	LODGING	ACRE YIELD: Grain	ACRE YIELD: Grain	ACRE YIELD: Straw	GRAIN QUALITY: Test weight per bushel	GRAIN QUALITY: Protein content	GRAIN QUALITY: U. S. grade
						~~Per ct.~~	~~Per ct.~~	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Early Blackhull	8836	5/11	6/13	249	33	831	2656	43	5		48				61.3		
Prelude x Kanred	8886	5/13	6/16	252	34	861	2289	44	15		2				61.5		
Kanred x Hard Federation	Kans 516	5/15	6/21	257	37	847	2525	39	3		10				60.7		
" x " "	11373	5/14	6/20	256	37	801	2548	39	T		19				61.0		
" x " "	10091	5/12	6/17	253	36	915	2913	38	T		24				60.5		
" x " "	10092	5/15	6/20	256	36	786	2988	40	T		35				60.3		
Kanred x Marquis	11374	5/18	6/20	256	33	891	2518	40	3		27				61.7		
" x "	10090	5/20	6/22	258	33	756	2865	43	T		42				61.9		
Tenmarq	6936	5/20	6/22	258	33	791	2614	44	13		38				61.1		
"	10089	5/19	6/22	258	34	801	2476	43	13		28				59.6		
Blackhull	6251	5/19	6/21	257	33	836	2763	45	50		87				61.4		
Cheyenne	8885	5/21	6/22	258	32	826	2912	42	55		17				61.0		
Turkey	1558	5/21	6/22	258	32	886	2862	41	65		63				61.1		
Kharkof	1442	5/23	6/23	259	31	856	2780	41	65		42				60.7		
Hays #2	6686	5/23	6/23	259	31	841	2746	40	60		55				60.4		
Nebraska 60	6250	5/23	6/23	259	31	796	2994	43	60		58				60.7		
Minturki	6156	5/23	6/22	258	30	891	2749	45	70		12				61.2		
Oro	8220	5/22	6/22	258	31	831	2721	42	50		55				60.8		

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UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING October 2 Triplicate plots DATE OF EMERGENCE October 8

VARIETY	C. I. No.	DATES: Headed	DATES: Ripe	DAYS TO MATURITY FROM: Emergence	DAYS TO MATURITY FROM: Heading	Stand (000 omitted): ~~STAND~~ Plants per a	Stand (000 omitted): ~~WINTER SURVIVAL~~ Culms per a	HEIGHT	RUST: Leaf	RUST: Stem	LODGING	ACRE YIELD: GRAIN		ACRE YIELD: STRAW	GRAIN QUALITY: Test weight per bushel	GRAIN QUALITY: Protein content	GRAIN QUALITY: U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Cooperatorka ✓	8861	5/21	6/21	257	31	767	2878	44	73		58				61.1		
Kanred (12 plots)	5146	5/21	6/22	258	32	762	2661	41	39		81				58.9		
Date of seeding	Sept 30	Triplicate plots									Date of emergence - Oct 5						
Kawvale ✓	8180	5/18	6/20	259	33	836	2628	46	T		17				59.2		
Fulcaster ✓	6471	5/18	6/20	259	33	794	2708	48	35		35				60.6		
Clark 40 ✓	Kans 505	5/20	6/22	261	33	832	2499	50	55		50				62.4		
Harvest Queen ✓	6199	5/20	6/23	262	34	857	2583	52	73		53				60.5		
Kanred	5146	5/20	6/21	260	32	862	2434	41	45		82				57.8		
Date of seeding Sept 30		Single plots									Date of emergence - Oct 5						
Tenmarq (Colby)	Kans 534	5/20	6/22	261	33	717	2374	42	12		15				61.2		
"	6936	5/19	6/22	261	34	791	2434	44	20		20				61.0		
" (Akron)	Kans 535	5/21	6/22	261	32	821	2882	43	25		25				60.7		
Kanred	5146	5/21	6/21	260	31	777	2912	41	50		90				58.8		
Prelude x Kanred	Kans 2689	5/16	6/18	257	33	866	2539	42	25		35				60.1		
Kanred x Marquis	Kans 2690	5/17	6/21	260	35	971	2578	43	T		30				61.5		
Kanred x Hard Federation	Kans 2691	5/13	6/21	260	39	887	2688	42	20		25				57.2		

 U. S. GOVERNMENT PRINTING OFFICE: 1921 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE

BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING Sept 30 Single plots DATE OF EMERGENCE Oct 5

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		Stand 000 omitted		HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading	Plants per a (STAND)	Culms per a (WINTER SURVIVAL)		Leaf	Stem		GRAIN		STRAW	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Harvest Queen—Kanred mix						717	2867	51+ 46			65				59.4		
Currell-Kanred mixture						806	2918	48+ 45			75				57.6		
Kanred	5746	5/20	6/21	260	32	926	2777	40	50		90				58.0		
Kanred x Genessee Giant						851	2583		70		10				58.6		
CI 8259 x CI 8028 Kans 579						956	2733	42	20		15				58.1		
CI 8036 x CI 8258 Kans 578						926	2972	42	40		15				58.7		
CI 8028 x CI 8258 Kans 517						911	2434	43	40		15				58.6		

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

YIELDS OF VARIETIES OF WHEAT GROWN ON THE AGRONOMY FARM, MANHATTAN, KANSAS, 1932.

(continued)

Variety	Kansas Number	C.I. Number	Yield - bu. per acre				Rank
			Series I	Series II	Series III	Ave.	
(Eureka X Minhardi C.I. 8036) X(Kanred X Hd. Fed. Sel. C.I. 8258)		518				51.1	
(Turkey X Minessa C.I. 8028) X (Kanred X Hd. Fed. Sel. C.I. 8259)		517				46.1	

YIELDS OF WHEAT GROWN IN THE DATE-VARIETY TEST
Agronomy Farm, Manhattan, Kansas, 1932.

Date of Planting	Yield - bushels per acre				
	Early Blackhull	P. X K. 2628	Kanred	Oro	Average for dates
Sept. 14	52.7	53.2	48.4	56.1	52.6
Sept. 28	48.0	54.1	40.2	47.6	47.5
Oct. 5	51.5	63.7	53.8	52.3	55.3
Oct. 17	47.3	56.4	43.6	41.8	47.3
Oct. 24	39.8	33.1	35.6	41.3	37.5
Oct. 31	32.8	30.7	31.7	36.7	33.0
Ave. yield of Varieties	45.4	48.5	42.2	46.0	

Average agronomic data for winter wheat varieties grown in 4 fiftieth-acre plots, 2 on fallow and 2 on cornland, at the Akron Field Station, Akron, Colo.

Date of seeding - Sept. 17, 1931 Rate of seeding - 3 pecks. Date of Emergence {fallow emerged 10-13-1931 / cornland emerged 4-5-1932

Variety		C.I. No.	Stand %		Dates		Height Inches	Acre Yield		Bu. Wt Pounds
			Fallow	Cornland	First Heading	Ripe		Grain Bu.	Straw Pounds	
Rosen Rye		195	85	6	6-1	7-10	30	12.9	1603	49.5
Early Blackhull	✓	8856	65	5	6-5	7-14	26	9.8	1323	56.8
Blackhull	✓	6251	65	5	6-7	7-15	28	9.5	1476	55.0
Prelude x Kanred	✓	8886	65	5	6-8	7-17	27	7.1	1300	53.0
Tenmarq	✓	6936	70	5	6-7	7-17	26	8.7	1331	51.5
Turkey Sel. (Nebr.)	✓	10016	73	13	6-11	7-19	24	9.3	1255	53.8
Kanred	✓	5146	65	5	6-11	7-20	26	8.0	1244	53.0
Kanred 0166	✓	10099	60	5	6-11	7-20	25	8.0	1255	52.8
Turkey Sel. 159	✓	10100	60	5	6-8	7-17	26	7.4	1348	52.3
Oro	✓	8220	58	5	6-9	7-17	26	7.2	1401	53.5
Nebraska No. 6	✓	6249	60	5	6-11	7-18	24	6.7	1303	53.5
Pesterboden Sel. 1564-2-11	✓	8266	58	5	6-11	7-19	24	7.2	1296	54.5
Minturki x Bel-Buffum	✓	8033	63	5	6-12	7-19	26	8.4	1418	52.0
Cheyenne	✓	8885	65	5	6-13	7-19	25	7.2	1280	54.0
Newturk	✓	6935	53	5	6-16	7-19	26	6.8	1243	53.0
Nebraska No. 60	✓	6250	63	5	6-15	7-21	26	6.6	1161	54.0
Kharkof	✓	1583	58	5	6-15	7-21	24	5.6	1204	54.0
Kharkof, Hays No. 2	✓	6686	55	5	6-15	7-21	25	6.5	1138	54.3
Kharkof	✓	1442	55	5	6-14	7-21	28	7.2	1263	52.5
Alton	✓	1438	40	5	6-15	7-22	26	5.3	1066	53.3
Minhardi x Minturki		8034	48	5	6-17	7-23	26	4.7	1243	51.0
Minturki	✓	6155	45	5	6-17	7-25	25	4.9	1250	51.0

Station?

Winter Wheat Varietal Experiment

1931-1932

Variety	C. I. No.	Replications on Fallow 1st.	2d.	Ave.	Cornland 1st.	2d.	Ave.	4-plot ave.
Rosen Rye	195	32.4	15.2	23.8	2.2	1.6	1.9	12.9
Early Blackhull	8856	24.6	11.9	18.3	1.3	1.2	1.3	9.8
Blackhull	6251	21.1	14.2	17.7	1.3	1.3	1.3	9.5
Prelude x Kanred	8886	18.8	7.5	13.2	1.1	1.1	1.1	7.1
Tenmarq	6936	19.6	12.9	16.3	1.1	1.3	1.2	8.7
Turkey Sel. (Nebr.)	10016	19.4	13.2	16.3	2.5	1.9	2.2	9.3
Kanred	5146	17.1	12.5	14.8	1.3	1.1	1.2	8.0
Kanred Sel. 0166	10099	17.8	11.7	14.8	1.3	1.1	1.2	8.0
Turkey Sel. 159	10100	16.9	9.8	13.4	1.7	1.3	1.5	7.4
Oro	8220	16.5	7.9	12.2	2.5	1.7	2.1	7.2
Nebraska No. 6	6249	15.0	8.6	11.8	1.7	1.3	1.5	6.7
Pesterboden Sel. 1564-2-11	8266	15.3	10.3	12.8	1.7	1.5	1.6	7.2
Minturki x Beloglina-Buffum	8033	17.5	12.1	14.8	2.1	1.7	1.9	8.4
Cheyenne	8885	16.3	10.0	13.2	1.7	.8	1.3	7.2
Newturk	6935	15.3	9.6	12.5	1.5	.7	1.1	6.8
Nebraska No. 60	6250	15.0	9.0	12.0	1.5	.8	1.2	6.6
Kharkof	1583	12.5	7.9	10.2	1.3	.8	1.1	5.6
Kharkof, Hays No. 2	6686	15.8	7.8	11.8	1.7	.8	1.3	6.5
Kharkof	1442	17.1	9.0	13.1	1.7	.8	1.3	7.2
Alton	1438	12.5	7.3	9.9	.8	.4	.6	5.3
Minhardi x Minturki	8034	10.4	7.3	8.9	.7	.4	.6	4.7
Minturki	6155	10.0	8.3	9.2	.8	.4	.6	4.9

Omitted from P.E.

P.E. of diff. ~~±0.8307~~ = ± 1.1678 (bu/A?)
Gen. P.E. ~~±0.5875~~ = ± 0.8258 "
~~6.13 %~~ = 6.27 %

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

Lincoln, Nebr., 1932 crop Plot = 1/27 Acre

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Av. acre GRAIN	Plat GRAIN	STRAW	Av. Test weight per bushel	Protein content	U. S. grade
		May	June			Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Early Blackhull ✓	8856	20	22				89	31				30.2	81.0 70.8 53.0 63.6		61.1	•	
Blackhull ✓	6251	25	28				91	33				32.9	84.4 71.2 63.8 72.8		59.9		
Superhard Blackhull ✓	8054	24	28				91	33				32.6	88.3 71.1 63.8 66.5		59.5		
Prelude x Kanred #2628 ✓	8886	27	29				73	30				22.5	68.6 45.8 37.9 47.1		55.9		
Kawvale ✓	8180	25	27				95	36				44.1	108.0 92.5 88.1 103.2		57.8		
Tenmarq ✓	6936	26	29				89	33				33.0	105.0 57.8 49.9 80.4		55.8		
Tenmarq Sel. Ks. 2637 ✓		26	28				90	35				37.4	102.9 69.9 61.5 78.2		55.3		
Kanred ✓	5146	28	29				93	32				28.4	80.3 64.9 46.6 61.1		55.6		
Fulhard ✓	8257	23	25				97	35				40.8	97.7 96.5 86.8 81.4		60.0		

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

Lincoln, Nebr., 1932 crop.

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Av. acre GRAIN	Plat GRAIN	STRAW	Av. Test weight per bushel	Protein content	U. S. grade
		May	June			Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Cheyenne	8885	26	28				96	32				~~38.0~~ 37.3	119.2 81.6 60.6 70.2		58.0		
Oro	8220	27	30				94	33				29.6	87.5 62.2 48.9 64.3		56.6		
Minturki	6155	27	28				96	36				35.9	93.8 69.4 66.7 88.8		58.4		
Beloglina N.P. 11	8884	28	30				94	33				29.7	87.6 60.0 50.7 65.2		55.9		
Kharkof	1442	28	30				94	33				31.1	98.4 55.9 56.2 66.4		56.9		
Hay's Kharkof	6686	28	30				95	32				31.0	94.4 55.4 58.9 66.8		57.3		
Turkey (Nebr. 1011)		28	30				95	31				30.8	87.9 59.7 57.9 68.4		58.1		
Turkey Sel.	10094	27	29				95	32				30.6	91.6 61.4 56.7 62.7		59.0		
Turkey Sel.	10098	24	27				95	31				31.4	80.9 61.4 72.2 64.4		58.8		

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

Lincoln, Nebr, 1932 crop

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		av. acre GRAIN	Plot GRAIN	STRAW	av. Test weight per bushel	Protein content	U. S. grade
		May	June			Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Turkey Sel.	✓ 10016	24	27				95	31				29.0	86.1 59.2 56.7 55.4		58.5		
Turkey Sel.	✓ 10015	27	29				96	33				27.9	79.8 53.6 56.6 57.8		58.6		
Iowa 2025 (Iowin)	✓ 10017	27	29				94	36				29.3	89.2 51.5 47.1 72.0		59.6		
Kanmont	✓ 6700	31	30				93	33				23.6	81.9 44.4 39.0 44.3		54.8		
Iobred	✓ 6934	27	30				94	36				30.0	83.9 59.5 57.1 66.1		60.9		
Minard	✓ 6690	30	30				96	36				31.7	93.5 61.3 54.8 72.2		58.0		
Canada Kharkof	✓ 6938	31	30				95	37				23.8	73.2 38.0 37.4 62.7		53.3		
Krause	✓ 11524	29	29				94	36				30.9	87.4 52.5 69.0 65.9		59.4		
Turkey (Nebr. 1)	✓	29	30				95	35				28.9	79.3 47.3 58.1 72.5		59.1		

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

Lincoln, Nebr., 1932 crop.

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Av. acre GRAIN	Plat	STRAW	Av. Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Turkey (Nebr.)	6249	30	30				93	32				23.7	57.3 36.5 50.6 66.0		58.5		
Crimean	1435	29	29				91	33				23.4	59.9 38.1 42.1 68.4		57.9		
Nebr. 60	6250	30	30				95	33				25.0	(60 plat, average)		56.0		Omitted from P.E.

P. E. of diff. = ± 1.6989 bu./A.
Gen. P. E. = ± 1.2013 " "
= 3.91 %

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

Average Agronomic data on 20 varieties of winter wheat grown on fallow in 1/40 acre plats in duplicate at the North Platte Substation, North Platte, Nebr. 1931-1932

DATE OF SEEDING 9/15/31 DATE OF EMERGENCE Uneven due to drought

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Grain Bushels	Grain Pounds	Straw	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Kanred x Prelude	8886	6/9	7/20			20		30				10.0	15.0				
Turkey Selection	10016	6/11	7/20			30		30				10.4 3	15.6 5				
Fulhard	8257	6/12	7/20			30		32				8.7	13.0				
Blackhull	6252	6/12	7/23			25		32				9.0	13.5				
Tenmarq	6936	6/16	7/23			30		31				9.0	13.5				
Tenmarq Selection	10089	6/12	7/23			30		30				6.4 3	9.5				
Cheyenne	8885	6/16	7/23			40		30				6.7	10.0				
Kanred	5146	6/15	7/23			40		33				7.4 3	11.0				
Local Turkey		6/14	7/23			30		31				6.7	10.0				
Oro	8220	6/16	7/23			35		32				9.4 3	14.0				
N. P. 15	10013	6/18	7/23			20		31				2.7	4.0				
Beloglina	1543	6/17	7/23			35		32	Black chaff			6.0	9.0				
N. P. 11	8884	6/17	7/23			30		31	Black chaff			7.0	10.5				
Newturk	6935	6/13	7/23			30		32				7.0	10.5				
Nebraska 60	6250	6/16	7/23			30		33				9.7	14.5				

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

Cont'd.

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
						Per ct.	*Per ct.*	*Inches*	*Per ct.*	*Per ct.*	*Per ct.*	*Bushels*	*Pounds*	*Pounds*	*Pounds*	*Per ct.*	
Kharkof ✓	1442	6/14	7/23			30		32				10.7	16.0				
Hays No. 2 ✓	6686	6/17	7/23			30		34				10.4 3	15.5				
Sherman ✓	4430	6/14	7/20			50		33				7.4 3	11.0				
N. P. 14 ✓	10012	6/16	7/23			30		34				9.4 3	14.0				
Minturki ✓	6155	6/15	7/23			55		34				10.7	16.0				

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

Yield in pounds per acre from individual plats and average of duplicate plats of 20 varieties of winter wheat on summer tilled (fallow) ground at the North Platte Substation, North Platte, Nebr. 1931-32.

PE - M - 1.146C

VARIETY, HYBRID, OR SELECTION	Cereal No.	Replications 1	2	Average
Kanred x Prelude	8886	11 ~~16~~	18	15.0
Turkey Selection	10016	16	15	15.5
Fulhard	8257	14	12	13.0
Blackhull	6252	11	16	13.5
Tenmarq	6936	10	17	13.5
Tenmarq Selection	10089	9	10	9.5
Cheyenne	8885	9	11	10.0
Kanred	5146	12	10	11.0
Local Turkey		7	13	10.0
Oro	8220	10	18	14.0
North Platte 15	10013	4	4	4.0
Beloglina	1543	8	10	9.0
North Platte 11	8884	10	11	10.5
Newturk	6935	11	10	10.5
Nebraska 60	6250	13	16	14.5
Kharkof	1442	14	18	16.0
Hays No. 2	6686	16	15	15.5
Sherman	4430	13	9	11.0
North Platte 14	10012	13	15	14.0
Minturki	6155	15	17	16.0

P.E. of diff. = ± 1.0795 ✓ lbs./A.
General P.E. = ± 0.7633 ✓ " "
= 9.31 % ✓

U. S. GOVERNMENT PRINTING OFFICE: 1930 8—7077

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

Ascher Field Station

DATE OF SEEDING Sept. 2-1931 DATE OF EMERGENCE Sept. 7-1931

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Kanred	5146	7/4	7/28			100	60	21				8.0			58		
Nebraska No 60	6250	7/5	7/30			100	45	22.5				9.6			58		
Pesterboden	1564-2-4	7/5	7/29			100	50	20.5				8.9			59		
Kharkof	1442	7/5	7/29			100	58	22.0				9.2			59		
Beloglinka	1543	7/6	7/29			100	52	21.0				8.4			57		
Turkey	1571	7/5	7/28			100	70	21.5				10.2			58		
Karmont	6700	7/5	7/28			100	73	22.0				11.5			59		
Minturki Bel. Buff	8033	7/8	7/31			100	45	24				9.8			56		
Immhardi x Minturki	8215	7/8	8/2			100	29	24				6.6			57		
Immhardi x Minturki	8034	7/8	7/31			100	52.5	24				10.2			58		
Minturki	6155	7/8	7/31			100	42.5	23				9.1			57		
Minard x Immhardi	8889	7/8	8/2			100	35	22				8.5			59		
Galgalos x Turkey		7/5	7/30			100	60	21.5				9.9			60		
Alton	1438	7/6	7/29			100	60	22.5				9.3			59		
Immhardi	5149	7/8	8/2			100	35	22.0				5.2			55		
Newturki	6935	7/5	7/28			100	72.5	22				8.7			59		
Eureka x Immhardi	8036	7/6	7/28			100	52.5	23.5				10.2			59		

No rust

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

Individual and average plot yields in a varietal experiment with winter wheat seeded at the rate of 3 pecks per acre with the furrow drill in quadruplicate fifty-second acre plots at the Archer Field Station, 1932

Number: Plat.	Number: C. I.	Variety.	Grain bu. per acre: G	H	G	H	Four			Grain pound per plot: G	H	G	H		
	5146	Kanred	8.2	6.1	9.5	8.2	8.0			9.5	7.0	11.0	9.5		
	6250	Nebraska No 60	10.8	6.1	10.8	10.8	9.6			12.5	7.0	12.5	8.0		
	15402	" Pertschanskaia	9.5	6.1	12.1	7.8	8.9			11.0	7.0	14.0	9.0		
	1442	Kharkof	12.1	6.9	11.7	6.1	9.2			14.0	8.0	13.5	7.0		
	1543	Beloglina	10.0	5.6	9.1	8.7	8.4			11.5	6.5	10.5	10.0		
	1571	Turkey	13.9	9.1	10.0	7.8	10.2			16.0	10.5	11.5	9.0		
	6700	Karmont	13.0	10.4	12.6	10.0	11.5			15.0	12.0	14.5	11.5		
	8033	Minturki x Bel Buff	10.4	7.8	10.0	10.8	9.8			12.0	9.0	11.5	12.5		
	8013	Minhardi x Minturki	6.5	6.5	6.8	6.5	6.6			7.5	7.5	7.0	7.5		
	8034	Minhardi x Minturki	11.3	8.2	10.4	10.8	10.2			13.0	9.5	12.0	12.5		
	6155	Minturki	10.4	7.8	8.2	10.0	9.1			12.0	9.0	9.5	11.5		
	8889	Minard x Minhardi	9.1	7.4	8.2	9.1	8.5			10.5	8.5	9.5	10.5		
		Galgalos x Turkey	10.8	8.7	12.1	7.8	9.9			12.5	10.0	14.0	9.0		
	1438	Altai	12.6	7.4	9.5	7.8	9.3			14.5	8.5	11.0	9.0		
	5149	Minhardi	5.2	4.3	4.3	6.9	5.2			6.0	5.0	5.0	8.0		

aorr.

Number: Plat.	Number: C. I.	VARIETY.	Grain bus per acre: G	H	G	H	Aver		Grain from els per acre: G	H	G	H
	1935	T[illegible]	13.0	7.4	8.7	5.6	8.7		15.0	8.5	10	6.5
	8032	Eu[illegible]	11.3	9.5	10.4	9.5	10.2		13.0	11.0	12.0	11.0

P. E. of diff = ± 0.6633 bu. / A.
Generalized P. E. = ± 0.469 " "
= 5.21 %

C. I. Form No. 66. 8—5013 Government Printing Office

Sheridan Field Station
Sheridan, Wyo
1932

Individual yields in pounds per fortieth acre plot of Winter Wheat Varieties.

Sown September 15, 1931 Emerged September 30, 1931.

Number. Plat.	Number. C. I.	VARIETY.	I	II	III	Avg Bu/A.
	5146	Kanred	68	55	59	40.4
	1442	Kharkof	73	65	54	42.7
		Minturki	63	62	52	39.3
	6700	Karmont	79	71	54	45.3
	1442	Kharkof Guard 4	78	70	60	
	1571	Turkey	81	68	64	47.3
	8889	8889	78	66	58	44.9
		Nebraska No. 60	76	71	62	46.4
	6935	Newturk	69	67	69	45.6
	1442	Kharkof Guard 5	76	67	77	
	5549	Montana No. 36	73	69	68	46.7
	6686	Hayes No. 2	76	66	60	44.9
	8033	Minturki x Beloglina Buffum	76	67	59	44.9
	8034	Minhardi x Minturki	71	63	58	42.7
	8215		64	69	58	42.4
	1442	Kharkof Guard 6	67	63	59	
		Kharkof Guard 7	61	64	66	

P.E. of diff. = ± 1.5305 Bu./A.
C.E. = ± 1.0822 " "
= 2.45 %

C. I. Form No. 66. 8—5013 GOVERNMENT PRINTING OFFICE

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

Sheridan, Wyoming 1932

DATE OF SEEDING 9/15/31 DATE OF EMERGENCE 9/30/31

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
		6/8-	7/15-16			Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Kanred ✓	5146	6/17				85		47	t		1	40.4		4840	60		
Kharkof ✓	1442	6/8- 6/17	7/14- 7/16			85		51			1	42.7		4640	61		
Minturki ✓		6/9- 6/18	7/16			87		54	t			39.3		5640	60		
Karmont ✓	6700	6/9- 6/18	7/14- 7/17			87		51			1	45.3		4560	61		
Kharkof Guard 4	1442	6/8- 6/17	7/16			87		52			2	46.2		4840	62		
Turkey ✓	1571	6/9- 6/18	7/14- 7/15			83		49			(1)20	47.3		4680	62		
8889 ✓	8889	6/10- 6/18	7/15- 7/16			81		48				44.9		4240	62		
Nebraska NO. 60 ✓		6/10- 6/21	7/12- 7/15			82		46				46.4		3880	63		
Newturk ✓	6935	6/9- 6/21	7/13- 7/14			84		47				45.6		3880	61		
Kharkof Guard 5	1442	6/10- 6/18	7/14- 7/16			89		47				48.9		5080	63		
Montana 36 ✓	5549	6/9- 6/22	7/14- 7/16			87		49				46.7		4000	62		
Hayes No. 2 ✓	6686	6/8- 6/21	7/14- 7/16			85		50				44.9		4320	61		
Minturk x Beloglina Buffum 8033 ✓	8033	6/11- 6/22	7/14- 7/15			85		50				44.9		4440	61		
Minhardi x Minturki ✓	8034	6/9- 6/22	7/14- 7/15			86		48				42.7		4160	60		
✓	8215	6/10- 6/20	7/15- 7/17			86		55			(2)30	42.6		4720	59		
Kharkof Guard 6	1442	6/9- 6/18	7/14			83		49				42.0		4560	62		
Kharkof Guard 7	1442	6/8- 6.17	7/16- 7/16			85		48				42.5		4440	62		

C. I. Form No. 158

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

Note: Lodging in Series indicated as I (1) or II (2)

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

1/40 acre plots, Waseca, Minn., 1932

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	Minn. No.	C. I. No.	Yield in bu. per A. Replications		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
			Headed 1st	Ripe 2nd	Emergence 3rd	Heading 4th				Leaf	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
							Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Minturki	1507	6155	29.8	25.1	33.8	29.6												
Marquis Minhardi	2199		18.4	24.1	22.0	21.5												
Minturki Minard Minhardi	2312	8215	31.4	32.5	27.6	30.5												
"	2313	8888	38.4	32.3	35.6	35.4												
Minturki Marquis Minhardi	2314	8889	37.6	37.6	34.5	36.5												
Marquis	2552	—	37.6	40.2	31.9	36.5												
Kanred	2191	5146	32.2	33.1	28.9	31.4												
Kharkof	2318	1442	38.5	36.1	33.6	36.1												
Neb. 60 Minhardi	2319	6250	33.8	34.3	36.9	35.0												
Minturki Minturki	2320	8034	27.1	29.0	30.4	28.8												
Bel. Buff.	2321	8033	32.7	31.3	33.3	32.4												
Karmont	2322	6700	31.3	29.0	31.4	30.5												
Newturk	2323	6935	35.1	37.1	28.8	33.7												
P.E. of diff.				= ±	1.5859		✓											
Gen. P.E.				= ±	1.1214		✓											
				=	3.43%		✓											

C. I. Form No. 158

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

1/40 acre plots, Waseca, Minn., 1932

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		Lodging	Winter survival	Height	Rust		Lodging	Acre yield			Grain quality		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	~~Per ct.~~ Degree	Bushels	Pounds	Pounds	Pounds	Per ct.	
Minturki Minn. 1507	6155	6-9	7-13			50	92	50	80	3	35	29.6			57.6		
Minard Minkardi	2199	6-11	7-15			47	95	52	80	28	50	21.5			54.3		
Minturki Minard	2312	8215	6-8	7-14			22	90	50	-	5	45	30.5			57.9		
Minkardi	2313	8888	6-9	7-15			30	95	48	80	10	30	35.4			60.7		
"	2314	8889	6-8	7-14			82	85	47	80	3	49	36.5			58.9		
Minturki Marquis	2552		6-8	7-13			100	83	50	40	3	38	36.5			59.3		
Minkardi Marquis	2551		6-8	7-14			73	87	51	10	T	40	39.5			59.9		
Kanred	2191	5146	6-7	7-13			100	87	46	80	7	60	31.4			54.4		
Kharkof	2318	1442	6-8	7-13			100	88	47	60	12	47	36.1			58.4		
Nebraska 60 Minkardi	2319	6250	6-9	7-13			100	97	49	80	18	53	35.0			56.4		
Minturki Minturki	2320	8034	6-9	7-15			93	80	51	90	20	40	28.8			56.3		
Bld. Buff.	2321	8033	6-10	7-15			100	72	49	80	2	43	32.4			56.8		
Karmont	2322	6700	6-9	7-14			97	75	47	80	17	67	30.5			55.6		
Newturki	2323	6935	6-9	7-13			90	53	46	90	27	63	33.7			55.4		

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
						Per ct.	*Per ct.*	*Inches*	*Per ct.*	*Per ct.*	*Per ct.*	*Bushels*	*Pounds*	*Pounds*	*Pounds*	*Per ct.*	
#Plot																	
Minturki (a)	6155	6/8	7/11			100	60	34					30.5		58.0		
" (b)			"			"	65	34	50	1			28.5		56.0		
" (c)			"			"	70	28				21.7	24.0	27.7	58.5	57.5	
						65			32								
Minx Bel-Buff. (a)	8033	6/9	"				65	32					40.0		60.0		
" (b)			"			"	75	34	50	1			31.0		57.0		
" (c)			"			"	75	28				28.8	39.0	36.7	59.0	58.7	
						72			31								
Kanred (a)	5146	6/10	"				40	30					23.0		58.5		
" (b)			"			"	50	30	30	2			29.0		58.5		
" (c)			"			"	50	26				17.4	14.5	22.2	56.5	57.8	
						47			29								
Minhardi x Minturki (a)	5034	6/9	"				85	35					28.5		58.5		
" (b)			"			"	90	35	50	2			14.5		56.0		
" (c)			"			"	90	30				18.5	27.5	23.5	58.0	57.5	
						88			33								
Nebr. No. 60 (a)	6250	6/8	"				45	26					26.0		59.0		
" (b)			"			"	50	27	50	2			24.0		57.0		
" (c)			"			"	60	24				19.9	26.0	25.3	58.5	58.2	
						52			26								

C. I. Form No. 158

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

Redfield 1932

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

DATE OF SEEDING _____ DATE OF EMERGENCE _____

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Karmont (a)	6700	6/10	7/11			100	53	28					29.5		59.0		
" (b)			"			"	53	30	50	5			23.5		56.5		
" (c)			"			"	63	26	28			21.3	28.5	27.2	58.0	57.8	
Newturk (a)	6935	6/9	"			"	60	28					27.0		58.0		
" (b)			"			"	50	28	50	10			16.0		57.5		
" (c)			"			"	60	25	27			17.0	22.0	21.7	58.0	57.8	
Minard x Minhardi (a)	8889	6/8	"			57	80	29					33.5		59.5		
" (b)			"			"	80	30	50	2			30.0		58.5		
" (c)			"			"	80	27	29			22.9	24.0	29.2	59.0	59.0	
Kharkof (a)		6/9	"			"	63	29					27.0		58.5		
" (b)			"			"	60	30	50	2			19.5		58.0		
" (d)			"			"	63	27				18.1	22.5	23.0	57.5	58.0	
Minhardi x Minturki (a)	8213	6/9	"			63	75	32	29				24.0		58.0		
" (b)			"			"	75	33	50	5			31.5		57.5		
" (c)			"			"	80	29				20.0	21.0	25.5	58.0	57.8	
						77			31								

*(a) + (c) = corn ground
(b) = fallow

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

Winter wheat varieties grown in duplicate 40th acre plots, protected in winter by standing cornstalks at the Dickinson Substation in 1932.

DATE OF SEEDING Sept. 14, '31 DATE OF EMERGENCE Sept. 24, 1931

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Kharkof	1583	6-22	7-17	297	25	87	81	39.5	trace		none	20.1	1208	2292	58		
Karmont	6700	6-23	7-17	297	24	99	79	38.5				21.1	1266	2634	58		
Turkey	1571	6-22	7-17	297	25	77	85	38.5				23.8	1426	2534	60		
Minturki	6155	6-23	7-17	297	24	82	84	40				20.3	1216	2644	58		
Beloglina	1543	6-22	7-17	297	25	87	88	39				21.0	1256	2742	58		
Kanred x Buff.803		6-24	7-18	298	24	100	77	38.5				17.8	1066	2694	57		
Minturki x Bel.-Buff.	8033	6-23	7-18	298	25	100	90	39.5				22.5	1348	2832	59		
Kanred	5146	6-22	7-16	296	24	68	79	36.5				22.3	1338	2382	59		
Minhardi x Minturki	8034	6-22	7-18	298	26	100	88	42				21.8	1314	2670	59		
Nebraska No. 60	6250	6-22	7-16	296	24	91	83	38				22.9	1376	2684	59.5		

S. E. of diff. = ± 0.6838 bu./A.
Generalized P.E. = ± 0.4835 " "
= 2.26%

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

Yields of grain in pounds per 40th acre plot obtained from winter wheat varieties grown on the Dickinson Substation in 1932

Variety	Pounds per plot (1)	(2)	Average
Kharkof	28.9	31.5	30.2
Kharmont	30.0	33.3	31.65
Turkey	33.2	38.1	35.65
Minturki	28.0	32.8	30.4
Beloglina	28.6	34.3	31.45
Kanred x Buffum C.I.8030	25.0	28.3	26.65
Minturki x Bel.-Buff.8033	32.4	35.0	33.7
Kanred	33.4	33.5	33.45
Minhardi x Minturki 8034	31.8	33.7	32.75
Nebraska No.60	35.0	33.8	34.4

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station
Huntley, Montana, Field Station, Division of Dry Land Agriculture.
Winter Wheat Varieties, 1932.

DATE OF SEEDING September 18. DATE OF EMERGENCE October 13.

Plot	Variety	C. I. No.	Dates: Headed	Dates: Ripe	Days to maturity from: Emergence	Days to maturity from: Heading	Stand	Winter survival	Height	Rust: Leaf	Rust: Stem	Lodging	Acre yield: Grain	Acre yield: Grain	Acre yield: Straw	Test weight per bushel	Protein content	U. S. grade
							Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
6	Montana 36		6-10	7-15	277	35	100	100	35	0	0	0	28.3	1700	3700	58		
16	" "		"	"	"	35	100	100	34	0	0	0	29.2	1750	3650	58	(1)	
26	" "		"	"	"	"	100	90	36	0	0	0	36.7	2200	3950	58		
	average		6-10	7-15	277	35	100	97	35	0	0	0	31.4	1883	3767	58		
5	Ridit		"	"	"	"	100	100	36	0	0	0	25.0	1500	3650	57		
15	"		"	"	"	"	100	100	37	0	0	0	35.0	2100	3350	57	(2)	
25	"		"	"	"	"	100	90	38	0	0	0	24.2	1450	4500	57		
			6-10	7-15	277	35	100	97	37	0	0	0	28.1	1683	3833	57		
2	Kharkof		"	"	"	"	100	100	36	0	0	0	25.0	1500	3200	57		
12	"		"	"	"	"	100	100	36	0	0	0	29.2	1750	3700	57	(4)	
22	"		"	"	"	"	100	100	36	0	0	0	29.2	1750	4000	57		
			6-10	7-15	277	35	100	100	36	0	0	0	27.8	1667	3633	57		
7	Newturk		"	"	"	"	100	100	34	0	0	0	23.3	1400	3300	57		
17	"		"	"	"	"	100	90	34	0	0	0	27.5	1650	3600	57	(3)	
27	"		"	"	"	"	100	90	36	0	0	0	32.5	1950	4450	57		
			6-10	7-15	277	35	100	93	35	0	0	0	27.8	1667	3783	57		
10	Nebraska 60		6-12	"	"	33	100	100	36	0	0	0	24.2	1450	3350	57		
20	" "		6-14	"	"	31	100	90	36	0	0	0	25.8	1550	3550	57	(6)	
30	" "		"	"	"	"	100	80	36	0	0	0	29.2	1750	3700	57		
			6-13	7-15	277	32	100	90	36	0	0	0	26.4	1583	3533	57		
[illegible]	[illegible]lton		6-10	"	"	35	100	100	37	0	0	0	24.2	1450	3350	57		
[illegible]			"	"	"	"	100	90	36	0	0	0	27.5	1650	3650	57	(5)	
[illegible]			"	"	"	"	100	100	36	0	0	0	29.2	1750	3900	57		
			6-10	7-15	277	35	100	97	36	0	0	0	27.0	1617	3633	57		

P.E. of diff. = ±4.625 bu./A.
Generalized P.E. = ±3.270 "
" = 12.12%

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

Huntley, Montana, Field Station, Division of Dry Land Agriculture.
Winter Wheat Varieties, 1932 (Cont.)

DATE OF SEEDING September 18. DATE OF EMERGENCE October 13.

VARIETY	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
		Headed	Ripe	Emergence	Heading				Leaf	Stem		Grain		Straw	Test weight per bushel	Protein content	U. S. grade
Plot.						Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
9 Kanred		6-12	7-15	277	33	100	80	35	0	0	0	24.2	1450	3350	56		
19 "	✓	"	"	"	"	100	90	37	0	0	0	26.7	1600	3500	56		
29 "		"	"	"	"	100	90	37	0	0	0	26.7	1600	3700	56		
		6-12	7-15	277	33	100	87	36	0	0	0	25.9	1550	3517	56		
8 Turkey		"	"	"	"	100	90	36	0	0	0	22.5	1350	3050	56		
18 "	✓	"	"	"	"	100	90	36	0	0	0	23.3	1400	3400	56		
28 "		"	"	"	"	100	90	37	0	0	0	28.3	1700	3650	56		
		6-12	7-15	277	33	100	90	36	0	0	0	24.7	1483	3367	56		
4 Karmont		"	"	"	"	100	80	36	0	0	0	22.5	1350	3000	56		
14 "		"	"	"	"	100	90	35	0	0	0	20.8	1250	3150	56		
24 "		"	"	"	"	100	100	35	0	0	0	28.3	1700	3750	56		
		6-12	7-15	277	33	100	90	35	0	0	0	23.9	1433	3300	56		

(7) (8) (9)

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

Box Butte Experimental Station,
Alliance, Nebraska,
July 26, 1932.

Dr. K. S. Quisenberry,
Experimental Station,
Moccasin,
Montana.

Dear Mr. Quisenberry:

As you requested, I am sending to you the yield of our winter wheat varieties which were planted in 1/40th acre plots.

	Lbs. per plot	Bus. per acre.
Nebr. 60	14.5	9.7
Minturki 6155	11.5	7.6
Turkey 10015	11.25	7.5
Kharkof 6686	11.0	7.3
Crimean 12	11.0	7.3
Kanred	10.75	7.2
Cheynne 8885	9.75	6.5
Turkey 10016	9.5	6.3
Oro	8.5	5.6
Kharkof 1442	8.75	5.7
Blackhull 6251	6.0	4.0
Tenmarq 6936	6.0	4.0
Kanred x Prelude 8886	3.5	2.3

Yours truly,

Miles D. Austin

Project: Havre 7, Montana 345.

WINTER WHEAT VARIETIES.

Havre, Montana, 1932.

Fourteen varieties of winter wheat were sown September 16, 1931, on fallow with a furrow drill in triplicated 1/50 acre plats. The rate of seeding approximated 1 bushel per acre of grain dusted with copper carbonate. Most plats emerged unevenly on September 27, owing to a lack of surface moisture. Stands improved to some extent during the month of October, however, the condition of the crop before freezing weather was not promising because of scant subsoil moisture and continued drought thruout the autumn season which prevented the wheat from becoming well rooted.

The winter of 1931-1932 was colder than either of the two preceding winters. Several extended cold spells occurred in January, February, and March at which time the snow cover was inadequate for protection. Survival thruout the variety project as a whole was poor but stands improved remarkably from tillering during the favorable growing season of 1932. The thin stands enabled Russian thistles and other weeds to become established in numbers, resulting in a very dense growth which made harvesting difficult.

Yields of winter wheat in 1932 were considerably lower than those of spring wheat. However, the results from the variety project were especially interesting in that the superiority of winter hardy hybrids over common standard varieties was clearly demonstrated. Considerable progress apparently has been made in the development of hardier winter wheats for the plains section of Northern Montana where winter killing is frequently severe.

C. I. Nos. 8033, 8028, 8030, and 8215 were the best yielding hybrids, ranging in production from 14.7 to 11.4 bushels per acre. Standard varieties such as Newturk, Karmont, Montana 36, and Kanred varied in yield from 7.5 to 4.2 bushels per acre. These data indicate the outstanding performance of the newer hardy selections under conditions experienced in 1932.

Average and comparative yields covering periods of various lengths during the years 1919 to 1932 are given in one of the following tables. Montana 36, Newturk, Karmont, and Kanred ranked as named with average acre yields of 21.4, 20.3, 19.5, and 18.3 bushels during the 7 years, 1926 to 1932.

Certain hybrids, Turkey X Minessa, C.I. 8028; Minturki X Beloglina-Buffum No. 17, C.I. 8033; Kanred X Buffum No. 17, C.I. 8030; and others have shown promise during the few seasons under observation. Some re-selections have been made from C.I. 8028 and it is planned to secure mass selected stock from C.I. 8033 provisional to its survival in 1933.

Individual plat yields in bushels per acre of 14 varieties of winter wheat grown on fallow in triplicated 1/50 acre plats.

Havre, Montana, 1932.

Variety or Hybrid	C.I. No.	Yield Per Replicate 1st	2nd	3rd	Average
Minturki X Beloglina-Buffum No. 17	8033	11.7	16.7	15.8	14.7
Minturki	6155	10.0	19.2	10.0	13.1
Turkey X Minessa	8028	10.8	16.7	10.8	12.8
Kanred X Buffum No. 17	~~8030~~ 8030	10.0	15.0	9.2	11.4
Minhardi X Minturki	8215	11.7	14.2	8.3	11.4
Do	8034	8.3	10.0	~~10.1~~ 10	~~9.5~~ 9.4
Minard X Minhardi	8889	6.7	10.0	6.7	7.8
Newturk	6935	5.0	12.5	5.0	7.5
Karmont	6700	5.0	11.7	5.0	7.2
Oro	8220	5.8	8.3	5.0	6.4
Nebraska No. 60	6250	5.0	8.3	5.0	6.1
Montana No. 36	5549	2.5	7.5	6.7	5.6
Kanred	5146	2.5	6.7	4.2	4.5
Kharkof	1442	2.5	6.7	3.3	4.2

P. E. of diff. = ± 0.9162 bu./A.
Generalized P.E. = ± 0.6479 " "
= 7.447.

Average and comparative annual yields of winter wheat varieties grown in plat experiments

Havre, Montana, 1919 to 1932.*

Number.		VARIETY.	Annual Yields: Bushels per Acre-									Average of			
Plat.	C. I.		1919	1921	1926	1927	1928	1929	1930	1931	1932	Variety Listed	Montana No.36	Difference **	Percent of Mont 36
	5549	Montana No. 36	7.6	20.1	31.0	46.5	39.2	18.4	4.5	4.6	5.6	19.7	19.7	----	100.00
	1442	Kharkof	5.9	13.3	31.8	46.1	38.7	13.6	4.2	3.6	4.2	17.9	19.7	-1.8	90.86
	5146	Kanred	6.0	14.8	31.7	35.4	34.0	13.8	4.5	4.1	4.5	16.5	19.7	-3.2	83.76
	6935	Newturk			32.7	45.7	36.7	11.5	4.2	3.7	7.5	20.3	21.4	-1.1	94.86
	6700	Karmont			35.2	37.4	38.2	13.2	5.1	3.9	7.2	19.5	21.4	-1.9	91.12
	8028	Turkey X Minessa				45.3	31.5	16.1	5.6	3.0	12.8	19.1	19.8	-0.7	96.46
	8030	Kanred X Buffum No. 17				35.0	33.7	13.0	5.0	2.1	11.4	16.7	19.8	-3.1	84.34
	8220	Oro					41.7	9.2	4.7	3.6	6.4	13.1	14.5	-1.4	90.34
	8034	Minhardi X Minturki							4.7	3.2	9.5	5.8	4.9	0.9	
	8215	Do								3.6	11.4	7.5	5.1	2.4	
	8033	Minturki X Beloglina-Buffum No. 17								3.4	14.7	9.1	5.1	4.0	
	8889	Minard X Minhardi								3.9	7.8	5.9	5.1	0.8	
	1558	Turkey		20.0	31.5	41.2	39.0	15.3	4.7			25.3	26.6	-1.3	95.11
	8031	Kanred X Minhardi				38.9	28.4	12.1	4.7	2.5		17.3	22.6	-5.3	76.55
	6680	Ashkof				36.5	29.2	6.5				24.1	34.7	-10.6	
	5149	Minhardi				40.9	30.8	11.5				27.7	34.7	-7.0	

C. I. Form No. 66. * Omitting years when, for various reasons, the winter wheat project was a failure.
** In favor of the variety listed.

8—5013 GOVERNMENT PRINTING OFFICE

Individual plat yields of 14 varieties of winter wheat grown on fallow in triplicated 1/50 acre plats.

Havre, Montana, 1932.

Number.		VARIETY. or Hybrid	1st Rep. Pounds		2nd Rep. Pounds		3rd Rep. Pounds		Average Pounds per Acre		Bus. Per Acre
Plat.	C. I.		Straw	Grain	Straw	Grain	Straw	Grain	Straw	Grain	
	5549	Montana No. 36	27	3	16	9	19	8	1033'	333	5.6'
	5146	Kanred	25	3	26	8	18	5	1150'	267	4.5'
	6250	Nebraska No. 60	24	6	30	10	20	6	1233'	367	6.1'
	6700	Karmont	22	6	33	14	16	6	1183'	433	7.2'
	6935	Newturk	20	6	29	15	16	6	1083'	450	7.5'
	1442	Kharkof	17	3	27	8	18	4	1033'	250	4.2'
	8220	Oro	22	7	31	10	19	6	1200'	383	6.4'
	8155	Minturki	29	12	53	23	28	12	1833'	783	13.1'
	8028	Turkey X Minessa	28	13	44	20	31	13	1717'	767	12.8'
	8815	Minhardi X Minturki	31	14	41	17	28	10	1667'	683	11.4'
	8034	Minhardi X Minturki	33	10	32	12	31	12	1600'	567	9.5' 4
	8033	Minturki X Belo-Buff. 17	33	14	42	20	39	19	1900'	883	14.7'
	8869	Minard X Minhardi	27	8	27	12	24	8	1300'	467	7.8'
	8030	Kanred X Buffum No. 17	33	12	37	18	32	11	1700'	683	11.4'

8—5013 Government Printing Office

Average agronomic data recorded for 14 varieties of winter wheat grown on fallow in triplicated 1/50 acre plats.

Havre, Montana, 1932.

Date of seeding Sept., 16, 1931, with a furrow drill

Variety or Hybrid	C. I. No.	Dates.			Days to maturity from—		Stand, thousand plants per acre.	Winter survival.	Height, inches.	Rust.		Lodging.	Acre yield.				Bushel weight, pounds.
													Grain.			Straw, pounds.	
		Emergence.	Headed.	Ripe.	Emergence.	Heading.				Leaf.	Stem.		Bushels.	Probable error.	Pounds.		
		1931	1932	1932			%	%		%	%	%					
Minturki X Beloglina-Buffum No. 17	8033	9-27	6-20	8-1	309	41	43	18	42				14.7		883	1900	56*
Minturki	6155	9-27	6-22	8-1	309	40	38	17	39				13.1		78.3	1833	56
Turkey X Minessa	8028	9-27	6-23	7-30	307	37	52	19	40				12.8		767	1717	56
Kanred X Buffum No. 17	8030	9-27	6-22	8-1	309	40	43	18	38				11.4		683	1700	54
Minhardi X Minturki	8215	9-27	6-22	7-31	308	39	40	17	42				11.4		683	1667	56
Do	8034	9-27	6-22	8-2	310	41	25	11	43				9.54		567	1600	56
Minard X Minhardi	8889	9-27	6-22	8-1	309	40	37	15	36				7.8		467	1300	57
Newturk	6935	9-27	6-18	7-30	307	42	16	8	35				7.5		450	1083	57
Karmont	6700	9-27	6-20	7-30	307	40	17	7	34				7.2		433	1183	57
Oro	8220	9-27	6-21	8-2	310	42	12	7	37				6.4		383	1200	58
Nebraska No. 60	6250	9-27	6-20	8-1	309	42	13	6	35				6.1		367	1233	56
Montana No. 36	5549	9-27	6-20	8-1	309	42	10	5	35				5.6		333	1033	56
Kanred	5146	9-27	6-21	7-31	308	40	12	6	35				4.5		267	1150	56
Kharkof	1442	9-27	6-21	8-1	309	41	12	4	35				4.2		250	1033	57

C. I. Form No. 13.

* Bleached less than other varieties.

Government Printing Office 8—2502

Crude Protein data recorded for certain varieties of winter wheat grown in replicated plats.

Havre, Montana, 1927 to 1931.

Variety	C.I. No.	Crude Protein: N. X 5.7: 13.5% Moisture 1927	1928	1929	1930	1931	Average for- Variety	Montana 36	
Montana 36	5549	13.74	13.35	15.92	15.20	16.90	15.02	15.02	100
Kanred	5146	14.47	13.65	15.83	15.30	17.15	15.28	15.02	101.7
Karmont	6700	13.68	13.25	16.74	15.15	16.50	15.06	15.02	100.3
Newturk	6935	13.53	13.70	16.44	14.95	16.90	15.10	15.02	100.5
Kharkof	1442	14.42	14.15	16.99	15.50	17.45	15.70	15.02	104.5
Turkey X Minessa	8028	15.79	14.20	17.69	16.95	16.80	16.29	15.02	108.5
Kanred X Buffum 17	8030	15.95	12.10	17.95	17.05	17.20	16.05	15.02	106.9
Kanred X Minhardi	8031	16.44	13.85	17.48	16.60	18.25	16.52	15.02	110.0
Oro	8220		13.95	16.31	15.20	17.65	15.78	15.34	102.9
Turkey	1558	14.38	13.32	16.13	17.80		15.41	14.55	105.9
Minhardi	5149	14.26	12.50	17.04			14.60	14.34	101.8
Minhardi X Minturki	8034				16.60	17.20	16.90	16.05	105.3
Minturki X Beloglina-Buffum 17	8033					17.35	17.35	16.90	102.7

Analyses made by the Department of Chemistry of the Montana Experiment Station in 1927, and by the Montana Grain Inspection Laboratory thereafter.

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAUS OF PLANT INDUSTRY AND
AGRICULTURAL ECONOMICS

YIELD, MILLING, AND BAKING DATA

(Data obtained by the Division of Cereal Crops and Diseases in cooperation with the Grain Division)

Uniform Yield Nursery - 1932

VARIETY OR STATION	YIELD PER ACRE	GRADE	BUSHEL WEIGHT	CRUDE[1] PROTEIN	MILLING RESULTS			BAKING RESULTS					ASH IN FLOUR
					FLOUR	SHORTS	BRAN	WATER ABSORPTION	LOAF				
									Volume	Weight	Texture	Color	
	Bushels		Pounds	Per cent	Per cent	Per cent	Per cent	Per cent	c. c.	Grams	Per cent	Per cent	Per cent
10088	37.1	2 HRW	58.8	13.25	76.2	14.9	12.2	58	556	143	90 G.	105 Cr	.44
10097	37.0	1 HRW	60.8	13.25	76.5	10.5	14.4	58	474	145	70$_S$ P	65 C G	.44
8257	36.7	1 DHRW	61.3	13.90	76.5	14.9	10.2	60	538	146	80 F	70 Gr.	.43
6250	36.3	1 HRW	60.5	13.11	75.9	13.0	13.7	58	523	140	60 P	85 Cr.	.43
10012	36.3	3 HRW	59.1	13.34	76.3	14.0	12.5	58	562	140	100 G	95 Cr.	.46
10015	35.4	1 HRW	61.8	13.33	75.5	13.2	12.2	58	500	144	65 P	80 Cr.	.52
10096	35.3	1 HRW	61.5	13.04	77.4	12.7	13.0	58	497	143	75 P	65 Cr.	.41
8856	34.7	1 HRW	62.3	13.30	74.9	12.7	13.2	58	532	142	65 P	75 Gr.	.42
10093	34.6	3 HRW	61.7	14.28	76.8	12.8	14.5	58	540	142	85 G.	75 Cr.	.41
10084	34.5	3 HRW	60.0	14.06	74.7	17.2	10.2	58	556	143	100 G	80 C G.	.40
11373	33.6	5 G. HRW	61.0	13.51	77.0	11.4	13.8	58	605	146	60 F	70 Cr.	.37
10086	32.3	2 HRW	59.8	15.79	72.6	13.6	15.8	57	404	141	40 VP	70 Gr.	.39
10085	31.2	2 HRW	59.2	15.43	71.8	14.4	16.0	57	414	145	50 VP	70 Gr.	.39
11374	30.2	3 HRW	61.0	14.48	76.8	~~15.7~~ 11.7	15.1	58	500	144	60 S P	65 Gr.	.41

[1] Crude protein equals nitrogen x 5.7 computed to a basis of 13.5 per cent moisture in the wheat.

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—7673

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAUS OF PLANT INDUSTRY AND
AGRICULTURAL ECONOMICS

YIELD, MILLING, AND BAKING DATA

(Data obtained by the Division of Cereal Crops and Diseases in cooperation with the Grain Division)

VARIETY OR STATION	YIELD PER ACRE	GRADE	BUSHEL WEIGHT	CRUDE[1] PROTEIN	MILLING RESULTS			BAKING RESULTS					ASH IN FLOUR
					FLOUR	SHORTS	BRAN	WATER ABSORPTION	LOAF				
									Volume	Weight	Texture	Color	
	Bushels		*Pounds*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*Per cent*	*c. c.*	*Grams*	*Per cent*	*Per cent*	*Per cent*
10089	40.9	1 HRW	60.4	12.97	77.0	14.7	11.7	58	564	143	100 G	90 Cr Gr.	.43
10087	40.6	1 HRW	61.1	12.77	76.3	11.5	15.2	58	511	142	75 P	70 Gr.	.38
11375	39.8	1 HRW	61.4	13.25	74.0	14.0	12.8	58	483	144	70 F	75 Cy.	.38
10100	39.5	2 HRW	60.0	13.25	76.3	10.7	15.0	58	505	143	70 F	65 Gr.	.39
10099	39.4	1 HRW	60.7	12.95	76.8	13.0	12.6	58	550	143	80 G	80 Cr.	.39
10094	38.6	1 HRW	61.8	13.12	76.8	10.1	15.5	58	474	144	70 sP	65 Cr. Y	.39
6251	38.4	1 HRW	62.2	13.28	75.9	14.0	12.7	58	502	142	70 P	80 Cr	.42
10083	38.3	1 HRW	60.4	13.19	76.3	12.1	14.1	58	532	141	90 F	95 Cr.	.43
8884	38.2	1 HRW	60.7	13.01	75.9	14.7	11.1	58	532	142	85 F	90 Cr.	.45
10090	37.8	1 HRW	61.6	13.74	76.6	13.7	11.8	58	575	143	105 G.	90 Cr. Gr	.40
10092	37.8	5 HRW	60.8	13.07	77.0	12.7	14.2	58	517	142	70 F	70 Gr.	.37
10098	37.8	3 HRW	61.6	13.07	76.2	12.9	13.7	58	520	144	65 P	65 Cr. Gr.	.44
10016	37.4	1 HRW	61.5	12.73	75.7	13.9	12.5	58	509	143	70 F	75 Cr.	.52
10091	37.4	1 HRW	61.6	13.77	76.5	13.7	12.1	58	535	141	90 G.	90 CG	.39
10095	37.2	1 HRW	61.6	13.37	76.7	10.7	14.1	58	535	144	90 G.	75 CG	.47
1442	37.1	1 HRW	61.0	13.00	76.0	12.8	12.8	58	544	143	70 F	85 CG	.44

[1] Crude protein equals nitrogen x 5.7 computed to a basis of 13.5 per cent moisture in the wheat.

U. S. GOVERNMENT PRINTING OFFICE: 1921 8—7673

TABLE ____ AGRONOMIC DATA - WINTER WHEAT VARIETIES, TRIPLICATE 1/120 ACRE PLATS - BOZEMAN, MONTANA - - 1932

Date of seeding - Sept. 8, 1931 Date of emergency - Sept. 28, 1931

Variety	C. I No.	Date headed June	Winter surv.	Hail damg. %	Bu. per A.	Lbs Per A.	Test wt. per bu.
Kanred x Prelude	8886	21	99.5	21.3	76.0	4560	62.4
Kharkov	1442	27	100.0	24.4	72.0	4320	61.0
Karmont	6700	28	100.0	24.7	71.3	4320	60.5
Minh x Mint.	8034	29	100.0	10.0	70.7	4200	59.2
Montana 36.	5549	29	100.0	32.4	69.3	4200	60.5
Minturki	6155	29	100.0	35.0	66.0	3960	59.9
Nebraska 60	6250	29	100.0	27.9	65.3	3960	59.5
Newturk	6935	28	99.7	24.1	64.7	3840	60.2
Mint. x Bel. x Buf.	8033	29	99.7	25.1	64.7	3840	59.9
Minh. x Mint.	8215	29	99.5	24.0	63.3	3840	59.5
Kanred	5146	28	99.7	24.2	61.3	37.20	61.3
Turk x Mint. N. N. 487	-	30	100.0	27.7	61.3	3720	60.5
Turkey x Florence	-	28	100.0	33.1	60.7	3600	59.2
Eureka x Minhardi	8036	27	100.0	15.9	60.0	3600	60.7
Turkey x Minessa	8887	29	100.0	24.4	55.3	3360	59.2
Minard x Minhardi	8889	29	100.0	14.3	52.7	3120	59.6

Dr. Quisenberry

TABLE ____ INDIVIDUAL YIELDS, WINTER WHEAT VARIETIES, TRIPLICATE

1/120 ACRE PLATS, BOZEMAN, MONTANA - - 1932

Variety	C. I. No.	Bushels per acre I	II	III	Ave.	Em
Kanred x Prelude	8886	74.0	70.0	84.0	76.0	± 2.81
Kharkov	1442	76.0	78.0	62.0	72.0	± 3.39
Kamont	6700	66.0	78.0	70.0	71.3	± 2.38
Minh. x Mint.	8034	68.0	70.0	74.0	70.7	± 1.19
Montana 36	5549	68.0	72.0	68.0	69.3	± 0.90
Minturki	6155	62.0	68.0	68.0	66.0	± 1.35
Nebraska 60	6250	68.0	72.0	56.0	65.3	± 3.24
Newturk	6935	64.0	70.0	60.0	64.7	± 1.96
Mint. x Bel. x Buf.	8033	68.0	62.0	64.0	64.7	± 1.19
Minh. x Mint.	8215	60.0	76.0	54.0	63.3	± 4.43
Kanred	5146	58.0	66.0	60.0	61.3	± 1.62
N. N. 487	----	60.0	62.0	62.0	61.3	± 0.045
Turk x Florence	----	56.0	62.0	64.0	60.7	± 1.62
Eureka x Minhardi	8036	58.0	60.0	62.0	60.0	± 0.78
Turk x Minessa	8887	42.0	62.0	62.0	55.3	± 4.49
Minard x Minh.	8889	62.0	38.0	58.0	52.7	± 5.00

Use Error diff. = ± 3.8002 bu./A.
Combined P.E = ± 2.6872 " "
= 4.16%

TABLE ___ INDIVIDUAL YIELDS, WINTER WHEAT VARIETIES, TRIPLICATE 1/40 ACRE PLATS, BOZEMAN, MONTANA, 1931-32

Variety	C. I. No.	Bushels per acre I	II	III	Ave.	Em
Cheyenne	8885	55.3	62.7	64.0	60.7	± 1.86
Montana 36	5549	59.3	58.7	52.0	56.7	± 1.58
Turkey	6152	54.7	54.7	48.0	52.5	± 1.50
Oro	8220	49.3	49.3	54.7	51.1	± 1.21
Jones Fife	4162	46.7	32.0	41.3	40.0	± 2.89

TABLE ___ AGRONOMIC DATA, WINTER WHEAT VARIETIES, TRIPLICATE 1/40 ACRE PLOTS, BOZEMAN, MONTANA, 1932

Date of seeding - Sept. 8 Date of emergence - Sept. 23

Variety	C. I. No.	Date headed June	Wntr. Surv.	Hail Loss %	Bu. per A.	Lbs. Per A.	Test wt. per bu.
Cheyenne	8885	24	99.0	21.9	60.7	3640	60.8
Montana 36	5549	23	97.0	21.8	56.7	3320	61.0
Turkey	6152	24	97.0	29.9	52.5	3160	60.6
Oro	8220	24	99.0	25.7	51.1	3080	61.3
Jones Fife	4162	21	97.0	25.6	40.0	2400	59.5

Winter Wheat Varieties Grown in 1/55 Acre Field Plots

Texas Substation No.6- Denton, Texas 1932

Variety	C.I.	T.S. No.	Replication I	II	III	IV	Average	Test Weight	Rank
Prelude x Kanred	8886	15833	31.7 3	32.8 1	~~38.5~~ ~~37.7~~	~~37.1~~ ~~36.8~~	~~34.9~~ 5	55.8	1
Mediterranean		5933-34	~~26.8~~ 5	32.8 7	35.8 3	~~33.8~~ 6	~~32.3~~ 0	55.8	2
"		5933-38	28.5 6	~~32.1~~ 31.9	~~33.7~~ 4	~~33.7~~ 6	32.0	55.0	3
Temmarq	6936	12578	30.3 4	26.2	~~34.1~~ 2	37.2	32.0	55.8	4
Kawvale	8180	12577	~~27.6~~ 7	~~27.2~~ 3	35.8 1	35.2 3	31.4	55.8	5
Mediterranean	10085	5933-20	25.7	~~30.1~~ 29.6	~~34.8~~ 6	33.2	~~31.0~~ ~~30.8~~	56.0	6
Denton †	8265	9236	28.3 4	~~28.1~~ 27.9	~~33.9~~ 7	31.9	30.8 5 †	56.1 *	7
Mediterranean		5933-23	~~24.6~~ 25.0	~~29.3~~ 6	33.9	~~32.3~~ 4	~~30.0~~ 2	57.0	8
Sutton	10053	15832	~~26.0~~ 25.7	~~28.3~~ 1	~~32.9~~ 8	31.7 3	29.7 ~~6~~	55.6	9
Kanred	5146	11763	~~24.4~~ 7	~~26.2~~ 25.7	30.9	~~25.7~~ 35.6	~~29.3~~ 2	54.1	~~10~~ 11
Mediterranean	10086	3015-81	25.1 3	26.8	~~34.3~~ 6	30.7 5	~~29.2~~ 3	56.9	~~11~~ 10
"		5933-36	27.4 2	~~28.1~~ 25.8	31.5 3	30.8 3	~~29.0~~ ~~28.9~~	54.6	12
White Mediterranean	10023	15834	24.8 7	26.3	~~31.2~~ 1	29.6	27.9	52.0	13
Mediterranean		5933-32	25.7 5	27.8 5	28.5 3	~~29.2~~ 28.9	27.8 6	54.5	14
Fulcaster	6471	7082	~~23.5~~ 6	~~24.2~~ 1	27.4 3	~~28.5~~ 31.1	~~25.9~~ ~~26.5~~	54.5	15
Mediterranean		3015-72	22.9	~~22.9~~ 7	26.8 6	26.1 3	24.7 6	55.0	16
Blackhull	6251	7172	~~18.3~~ 4	~~17.4~~ 5	~~24.6~~ 7	27.5 4	~~21.9~~ ~~22.0~~	54.4	17
Kharkof	1442	16830	~~20.4~~ 6	~~18.2~~ 3	22.1	25.9 8	21.7	51.3	18
Nebraska 60	6250	15835	~~17.6~~ 8	~~18.8~~ 7	~~23.1~~ ~~22.9~~	24.6 5	21.0	53.3	19
Harvest Queen	6199	15837	16.6 7	~~18.0~~ 2	~~21.2~~ 3	20.1 2	~~19.0~~ 1	54.5	20
Nebraka 28	5147	15838	16.2 4	~~14.8~~ 15.0	19.6 5	~~11.8~~ 9	~~15.8~~ 7*	52.5	21

* Nebraska 28 injured by freeze on March 13, minimum temperature 15 F. Damage estimated at 20%.

† Average of 10 plots

P.E. of diff = ±1.0161 bu. per Acre

Generalized P.E = ±0.7185 " " "

= 2.62 %

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PLANT INDUSTRY

AGRONOMIC AND QUALITY DATA

Data obtained by the Division of Cereal Crops and Diseases in cooperation with the State Agricultural Experiment Station

Variety Test of Winter Wheat Grown in 1/55 Acre Plots, 1932
Denton, Texas.

DATE OF SEEDING October 9, 1931 DATE OF EMERGENCE October 19, 1931

VARIETY	T. S. No.	C. I. No.	DATES		DAYS TO MATURITY FROM		STAND	WINTER SURVIVAL	HEIGHT	RUST		LODGING	ACRE YIELD			GRAIN QUALITY		
			Headed	Ripe	Emergence	Heading				Leaf	Stem		GRAIN		STRAW	Test weight per bushel	Protein content	U. S. grade
							Per ct.	Per ct.	Inches	Per ct.	Per ct.	Per ct.	Bushels	Pounds	Pounds	Pounds	Per ct.	
Denton *	9236	8265	5-4	6-3	194	30	100	100	38	25	28	2	30.4	1823.3		56.1		
Blackhull	7172	6251	5-6	6-4	196	29	100	"	35	84	15	19	22.0	1319.5		54.4		
Kanred	11763	5146	5-5	6-3	195	29	100	"	35	76	8	25	29.2	1754.0		54.1		
Tenmarq	12578	6936	5-4	6-3	194	30	"	"	36	36	6	10	32.0	1920.6		55.8		
Kawvale	12577	8180	5-5	6-2	195	28	"	"	37	20	19	T	31.3	1879.4		55.8		
Kharkof (B)	16830	1442	5-11	6-6	189	26	"	"	35	84	35	25	21.7	1301.9		51.3		
Nebraska 60 (B)	5835	6250	5-11	6-6	189	26	"	"	35	84	26	20	21.0	1259.3		53.3		
Nebraska 28	15836	5147	4-23	5-21	187	28	"	"	26	85	1(a)	0	15.7	941.1		52.8		
Preludex Kanred	15833	8886	4-27	5-29	191	32	"	"	34	35	4	11	34.5	2070.2		55.8		
Fulcaster (B)	7082	6471	5-6	6-3	192	28	"	"	38	86	30	24	26.5	1590.6		54.5		
Harvest Queen	15837	6199	5-8	6-3	198	26	"	"	38	84	35	3	19.1	1145.7		54.5		
Sutton	15832	10053	5-6	6-3	196	28	"	"	37	36	41	19	29.5	1768.8		55.6		
White Mediterranean	15834	10023	4-30	5-30	194	31	"	"	35	80	44	21	27.9	1675.3		52.0		
Mediterranean	3015-8	10086	5-2	6-1	192	30	"	"	35	31	16	9	29.3	1759.5		56.9		
B	3015-72		5-4	6-3	194	30	"	"	36	29	23	21	24.6	1478.4		55.0		
(B)	5933-20	10085	5-1	5-31	177	30	"	"	35	29	14	10	30.8	1850.2		56.0		
(B)	5933-23		5-4	6-3	180	30	"	"	42	T	51	9	30.2	1813.4		57.0		
(B)	5933-32		5-3	6-2	179	30	"	"	39	56	45	15	27.5	1652.8		53.5		
(B)	5933-34		5-1	6-1	177	31	"	"	35	39	14	19	32.0	1921.2		55.8		
(B)	5933-36		5-2	6-2	178	31	"	"	40	24	29	14	28.7	1719.9		54.1		
(B)	5933-38		5-2	6-1	178	30	"	"	39	19	33	15	32.0	1920.1		55.0		

* Average 10 check Plots. (a) Escaped stem rust. (B) Replanted Oct. 26, Emerged Nov. 6

C. I. Form No. 158

U. S. GOVERNMENT PRINTING OFFICE: 1931 8—2503

Table - Summary of Grain Yields, Winter Wheat

Denton, Texas 1932

Variety	T.S. No.	C.I. No.	Rank	Yield per Plot - Pounds					Yield Per Acre	
				Series I	Series II	Series III	Series IV	Average	Pounds	Bushels
Denton - Cherks	9236	8265	7	30.94	30.44	36.78	34.75	33.15*	1823.3	30.4
Blackhull	7172	6251	17	20.06	19.06	26.94	29.88	23.99	1319.5	22.0
Kanred	11763	5146	11	26.94	28.06	33.69	38.88	31.89	1754.0	29.2
Tenmarq	12578	6936	2	33.19	28.56	37.31	40.63	34.92	1920.6	32.0
Kawvale	12579	8180	5	30.19	27.75	38.25	38.50	34.17	1879.4	31.3
Kharkof	16830	1442	13	22.44	20.00	24.06	28.19	23.67	1301.9	21.7
Nebraska 60	15835	6250	19	19.44	20.39	24.94	26.69	22.86	1257.3	21.0
Nebraska 28	15836	5147	21	17.94	16.31	21.25	12.94	17.11(a)	941.1	15.7
Prelude x Kanred	15833	8886	1	34.19	35.06	41.13	40.19	37.64	2070.2	34.5
Fulcaster	7082	6471	15	25.75	26.31	29.75	33.88	28.92	1590.6	26.5
Harvest Queen	15837	6199	20	18.25	19.81	23.19	22.06	20.83	1145.7	19.1
Sutton	15832	10053	9	28.06	30.63	35.75	34.19	32.16	1768.8	29.5
Mediterranean	3015-81	10086	10	27.63	29.25	39.75	39.31	31.99	1759.5	29.3
"	3015-72	-	16	25.00	24.81	29.0	28.69	26.88	1478.4	24.6
White Mediterranean	15834	10023	13	26.94	28.69	33.94	32.25	30.46	1675.3	27.9
Mediterranean	5933-20	10085	6	28.0	32.56	37.75	36.25	33.64	1850.2	30.8
	5933-23	-	8	27.25	32.25	37.00	35.38	32.97	1813.4	30.2
	5933-32	-	14	27.81	30.00	30.88	31.50	30.05	1652.8	27.5
	5933-34	-	2	28.88	35.63	38.50	36.69	34.93	1921.2	32.0
	5933-36	-	12	29.69	28.19	34.13	33.06	31.27	1719.9	28.7
	5933-38	-	2	31.19	34.81	37.00	36.63	34.91	1920.1	32.0

* Average of 10 individual plots. (a) N[illegible] 28 damaged by frost March 13, estimated 1090