# NEBRASKA WHEAT VARIET LES AND QUALITY

1964 AND 1965 CROPS

Release - Immediate

#### WARRIOR VARIETY MOVES INTO THE LEADING POSITION

Warrior variety moved into the leading position of winter wheat planted by Nebraska farmers for harvest in 1964 and 1965, according to the State-Federal Division of Agricultural Statistics. Warrior replaced Pawnee, a variety that had been the predominant one in the State for a number of years, but was closely followed by Ottawa, which moved into second position in 1964 and was pressing closely for the lead in 1965. Pawnee dropped from first place in 1963 to third in 1964 and was in the fifth spot in seeding of the 1965 crop. The popularity of Bison also dropped off sharply in 1964 but moved up slightly in 1965.

Warrior was planted on 22.6 percent of the acreage in 1964 followed by Ottawa with 17.4 percent and Omaha on 14.1 percent. In 1965 Warrior continued in the lead with 21.9 percent planted followed closely by Ottawa with 21.2 percent and Cheyenne with 12.2. Some of the newer varieties coming into the picture in 1965 were Scout, planted on 1.4 percent of the acreage; Lancer .8 and Gage, .7 percent. Many of the older varieties have about faded out of the picture but Turkey Red continues to be planted on a small acreage in practically all parts of the State. Nebred, which has been one of the leading varieties for a number of years, dropped down to 6.3 percent in 1964 but moved up to 7.8 percent in 1965.

Warrior was planted on over 50 percent of the acreage in the northwest area and well over a third in the southwest. Cheyenne was the second most popular variety in these areas. Omaha was the leading variety in the central district, while Ottawa moved into first position in the east central and southeast areas.

### STRONG GLUTEN VARIETIES CONTINUE TO DOMINATE THE PLANTED ACREAGE

Nebraska farmers continue to show preference for the strong gluten varieties of wheat that are considered excellent for flour used by commercial bakeries. Most of the strong gluten varieties are planted in the western part of the State. The leading varieties in this class are Warrior, Cheyenne, Nebred, Bison, Scout and Lancer. The latter two being new varieties that have been released only a short time. While only a limited acreage of the new varieties has been planted, the field performance in yield and quality would indicate that these varieties will move up in popularity with farmers.

Mellow gluten wheats make up the bulk of the remaining acreage. The principal varieties in this group include Ottawa, Omaha, Pawnee, Wichita, Triumph and Rodco. These varieties have desirable characteristics for family flour and blending purposes. Most of the objectionable varieties and the weak gluten wheats have practically disappeared from the Nebraska state acreage.

NEBRASKA--WHEAT VARIETIES
ESTIMATED PERCENTAGES PLANTED TO EACH VARIETY FOR SELECTED YEARS

	.ESTIPA	TED PE	RCENTAGES	PLANTED	TO EACH	VARIETY	FOR SELEC	TED YEARS	
Variety	1	949	: 1954	: 1959	: 1961	: 1962	: 2 : 1963	: 1964	: 1965
	Pe	rcent	Percent	Percent	Percer	it Perce	ent Perce	nt Perce	nt Perce
Warrior				,	.2	4.0			
Ottawa				· · ·		• :	3 6.3	17.4	21.2
Cheyenne	2	5.2	27.5	28.9	27.3	21.9	15.3	12.3	12.2
Omah a	,		***		.2	1	7 10.2	14.1	11.2
Pawnee	3:	3.4	35.7	31.0	26.9	24.9	9 20.1	12.6	8.2
Nebred	2	6.1	26.6	25.1	17.0	11.9	9.4	6.3	7.8
Bison				7.1	20.1	24.9	9 14.3	5.9	6.3
Wichita		.2	1.5	1.4	2.0	3.	8 3.7	3.3	3.8
Scout									1.4
Triumph	•	.1	.3	.6	1.6	2.	7 2.6	1.4	
Rodco					.1	• :	3 1.1	1,2	
Lancer					·		<b>-</b>		. 8
Gage									. 7
Turkey Red		7.8	2.7	1.0	4		t .t	.1	
Ponca Other			.2	2.4	2.2	2.	1.6	4	
and Unknown		7.2	5.5	2.5	2.0	1.	1 1.1	2.4	1.9

The Nebraska wheat variety and quality surveys are made possible by matching funds provided jointly by the Nebraska Department of Agr. and Economic Development and the Consumer and Marketing Service, U. S. Department of Agriculture under provisions of the Agricultural Marketing Act of 1946. The Agricultural Research Service, USDA also cooperated in the 1964 survey of wheat varieties.

#### THE 1964 WHEAT CROP UP 12 PERCENT FROM 1963 PRODUCTION

The 1964 wheat crop of 73,825,000 bushels was up 12 percent over the 1963 production and 6 million bushels below the 5-year (1958-62) average. Yield per acre of 25.0 bushels was up 3.5 bushels from the 1963 average. Drouth conditions reduced the yield per acre in the central and south central counties but in the southeast, yields were above average. In the northwest, returns per acre were higher than anticipated. Harvest of the crop over most of the State was the earliest of record except in the northwest where completion was about at the usual time.

The yield of the varieties showed less variation within localities than usual. Yield per harvested acre developed from the survey represents an over-all average by districts and for the State. They do not offer a valid comparison of yield by varieties such as is obtained by growing the varieties under similar or controlled conditions of experimental plots. They do, however, reflect the harvested yields obtained under the varied conditions that prevailed during the growing season.

Of the predominant varieties, Ottawa again had the highest yield followed by Scout and Rodco. In the northwest area, Warrior and Lancer had yields of 25.0 bushels followed by Nebred and Cheyenne. In the southeast, where high yields of all varieties were recorded, Ottawa with 32.7 bushels per acre was the leader followed by Wichita with 32.0 . In 1962, Wichita had the highest yield for the State but fell to near the bottom in 1963 and was near the same position in 1964. Two new varieties, Scout and Lancer, while grown on a limited acreage and with only a few reports, indicated high yielding capabilities with Lancer equaling the State average and Scout running slightly higher at 26.5 bushels. Not enough reports were received on the Gage variety to make a fair estimate of the yield.

NEBRASKA--WHEAT YIELDS PER HARVESTED ACRE BY VARIETIES--1964

			By Cr	op Reporti	ng Distri	cts	.51125 170		
	North	North	North		East	South	South	South	
Variety	West	Central	East	Central	Central	West	Central	East	State
			Bushel	ls per Har	vested Ac	re			
Warrior	25.0		16.7	22.0	25.0	23.1	26.0	-	24.3
Ottawa	-	-	25.0	23.2	28.6	30.0	25.0	32.7	30.5
Omaha	20.0	22.0	19.2	24.4	25.0	25.0	26.0	27.5	25.4
Pawnee	20.0	24.5	14.0	18.1	24.3	22.2	22.5	28.6	24.5
Cheyenne	24.2	20.7	-	12.3	20.7	20.1	17.6	15.0	22.5
Nebred	24.4	13.8	12.1	18.0	25.0	20.0	21.1	23.1	21.9
Bison	20.1	26.6	_	24.0	16.5	20.0	18.8	22.8	20.7
Wichita	20.1	-	_	21.6	23.7	19.5	21.5	32.0	21.4
Triumph	-	-			21.0	21.0	20.0	24.0	22.4
Scout	-	***		-	-		26.0	27.0	26.5
Rodco	••	_	-	24.0	22.0	20.0	24.6	28.9	26.1
Lancer	25.0			_	-			-	25.0
Other and									
Unknown	23.7	12.9	19.7	21.5	20.9	22.4	24.1	32.1	25.9
A11	24.5	18.6	13.8	22.3	25.7	21.6	23.5	30.5	25.0

#### TEST WEIGHT FOR THE 1964 CROP UP SLIGHTLY FROM A YEAR EARLIER

Test weight of the 1964 crop at 59.9 lbs. is up slightly from the 59.8 lbs. of a year earlier. There was only slight variation in the test weights of the grain within localities. The lowest test weight was in the Northeast District while in the Northwest and Southeast Districts, test weight ran as high as 60.4 lbs. per bushel.

Two new varieties, Scout and Lancer, had the highest test weights but only a limited number of returns were received for these two crops. Wichita, while being a low-yielding variety this year, had a test weight of 60.7 and was followed by Warrior and Ottawa with 60.2 lbs. per bushel.

NEBRASKA--TEST WEIGHTS BY VARIETIES--1964 WHEAT CROP

			By Cr	op Reporti	lng Distri	cts			•
	North	North	North		East	South	South	South	-
Variety	West	Central	East	Central	Central	West	Central	East	State
		· · · · · · · · · · · · · · · · · · ·		Pounds per	Bushel				
Warrior	60.5	-	56.0	57.9	55.3	59.9	60.3	-	60.2
Ottawa	_	_	57.0	58.7	59.4	60.6	60.2	60.6	50.2
Omaha	60.9	60.0	57.9	59.5	58.4	59.9	60.1	60.5	59.5
Pawnee	60.3	58.5	56.5	59.0	57.9	60.2	59.9	59.8	59.2
Cheyenne	60.1	60.0	_			59.6	59.8		59.9
Nebred	60.5	59.0	57.3	58.3	56.9	59.7	59.6	60.5	59.8
Bison	60.9	60.0	-	57.8	57.6	60.0	60.3	60.2	59.8
Wichita	60.8	-	-	-	60.4	60.6	61.0	60.1	60.7
Triumph	•	-	••	••	59.8	59.2 .		61.1	60.4
Scout	-	-	***	50.0	50 -	£0.0	62.2	62.5	62.4
Rodco	-	-	.=	59.0	59.0	58.0	60.2	60.3	60.1
Lancer	61.8	_	-	_	_	••	_	_	61.8
Other and									01.0
Unknown	60.8	53.0	57.0	51,1	57.8	60.4	60.8	60.6	60.0
A11	60.4	59.1	57.4	58.8	58.7	59.9	60.2	60.4	59.9

#### QUALITY FACTORS OF THE 1964 WINTER WHEAT CROP

## PROTEIN CONTENT OF THE 1964 CROP SLIGHTLY HIGHER THAN THAT OF 1963

Protein content of the 1964 wheat crop was 12.5 percent, up slightly from the 12.3 percent of 1963. Rodco was the leading variety with a high protein of 13.7 percent followed by Triumph with 12.9 percent. There were only a limited number of returns of the new variety, Scout, showing a protein content of 11.8. This may be on the low side and may not be representative for this variety.

Protein content was the highest in the southeast area of the State with 12.9 percent, while the southwest with 12.1 was the lowest.

NEBRASKA--PROTEIN CONTENT BY VARIETIES AND BY CROP REPORTING DISTRICTS

Variety	: North	North:	North	:Central	East	South	: South	: South :	State
variety	: West	Central:	East	: Centrar	Central		:Central	: East :	State
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Warrior	12.4					11.9	11.1		12.2
Ottawa				11.9	12.5	13.1	13.2	12.5	12.5
Omaha	12.0	11.0	12.6	12.5	1.2.6	12.8	12.2	13.8	12.8
Pawnee			11.6	11.8	11.6	10.8	12.3	13.4	12.4
Cheyenne	12.7					12.0	11.7		12.4
Nebred	12.7	14.0		12.5		11.6		11.8	12.4
Bison	12.8			13.7		12.8		11.0	12.8
Wichita	11.2					12.5	12.4	13.0	12.4
Triumph					11.6	1.3.4		13.9	12.9
Scout							12.0	11.6	11.8
Rodco	~~~~	~				1.3.6	13.7	13.8	13.7
Lancer			~					12.2	12.2
Other						,			
and Unknown	12.5				12.5	12.2	15.0	12.5	12.8
All	12.5	12.3	1.2.4	12.5	12.3	12.1	12.4	12.9	12.5

## SEDIMENTATION VALUE UP SLIGHTLY FROM A YEAR EARLIER

The sedimentation value as reported at 50 is up one point from a year earlier. Returns were limited on sedimentation values as tests were made generally only on that wheat going under loan. 'Rodco with a value of 62 was the highest reported followed closely by Omaha with 56 and Ottawa with 55. A year earlier, the sedimentation value for Omaha was 52 and for Ottawa 48. There is far greater variability in the sedimentation value than in the protein value and test weight.

NEBRASKA--SEDIMENTATION VALUE BY VARIETIES AND

17-n	:	North	: North	: North	Central	East	: South	: South :	South	: State
Variety	_:	West	: Central	: East	: Centra:	Central	: West	:Central:	East_	: State
					SEDI	MENTATI	ON VALUE	3		
Warrior		51					42	47		48
Ottawa					71 /1	54	58	49	55	55
Omaha						54	46	53	61	56
Pawnee					38 /1	29		52	50	43
Cheyenne		44					40	50		43
Nebred		54							42	54
Bison		41			64 /1		54			54
Wichita					~		43		40	42
Triumph						48				48
Scout								67	33	50
Rodco							68	61	64	62
Lancer		~-				~-				
Other										
and Unknown			<del></del> -		~-			56	59	58
A11		49		<del>-</del> -	54	47	44	52	55	50

<sup>/</sup>l Very few reports. Not considered representative.

NEBRASKA--WHEAT QUALITY--1962, 1963 AND 1964 CROPS

	R	eported T	est		Reported		S	Sedimentation		
Variety	Wei	ght per B	ushel	Pr	otein Con		Value			
	1962	1963	1964	1962	1963	1964	1962/1	1963/1	1964	
Warrior	56.1	60.1	60.2	10.9	12.0	12.2	34	44	48	
Ottawa	$\frac{2}{2}$	60.2	60.2	2/	12.8	12.5	2/	48	55	
Omaha		60.0	59.5	$\frac{2}{2}$	12.7	12.8	$\frac{2/}{2/}$	52	56	
Pawnee	56.8	59.5	59.2	10.6	12.7	12.4	30	45	43	
Cheyenne	54.9	59.1	59.9	10.5	12.4	12.4	32	47	43	
Nebred	53.3	59.7	59.8	11.1	12.2	12.4	32	51	54	
Bison	55.8	60.1	59.8	11.8	12.6	12.8	47	5 <b>3</b>	54	
Wichita	59.2	60.5	60.7	11.9	12.4	12.4	38	42	42	
Triumph	2/	39.5	60.4	2/	13.2	12.9	2/	46	48	
Scout	$\overline{2}/$		62.4	$\overline{2}/$		11.8	$\overline{2}/$		50	
Rođeo	$\frac{\overline{2}}{2}$ / $\overline{2}$ /		60.1	$\frac{\frac{2}{2}}{\frac{2}{2}}$		1.3.7	$\frac{\frac{2}{2}}{\frac{2}{2}}$		62	
Lancer	$\overline{2}$ /		61.8	$\overline{2}/$		12.2	$\overline{2}/$			
Other	-						-			
and Unknown	2/	59.6	60.0	2/	12.4	12.8	2/	49	58	
A11	55.9	59.8	59.9	77.1	12.3	12.5	37	49	50	

As determined by samples of farm and commercial stored wheat tested by the Agricultural Stabilization and Conservation Service. Sedimentation classified by varieties where identified. Minor mixed or unknown varieties included in State total.
2/ Not available.

WHEAT QUALITY 1/

			141171	T GOUTH	± ±/				
C+ -+ -	Test	t Weight Pe	Pr	ctein Cont	tent	Sedim	entation	Value	
State	1962	1963	1964	1962	1963	1964	1962	1963	1964
		Pounds	•		Percent				
Nebraska	55.9	59 <b>.8</b>	59.9	11.1	12.3	12.5	37	49	50
Colorado	61.1	60.4	60.7	12.2	12.9	12.8	43	48	43
Kansas	61.1	61.9	61.2	11.7	12.1	12.2	49	50	52

<sup>1/</sup> Colorado data obtained from samples of wheat collected at country elevators. Kansas data were obtained from carlot shipments to terminal markets.

NEBRASKA--WHEAT VARIETIES--1964 CROP

ESTIMATED PERCENTAGES PLANTED TO EACH VARIETY BY CROP REPORTING DISTRICTS

D3-+-3-+	War-				Chey-				Tri-	Other	All
Districts	rior	Ottawa	Omaha	Pawnee	enne	Nebred	Bison	Wichita		and Unknown	Varieties
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Northwest	53.9		.2	.1	28.8	11.1	2.2	1.9		1.8	100
N. Central			31.3	12.5	6.2	37.6	6.2			6.2	100
Northeast	3.2	12.9	54.9	16.1		3.2			3.2	6.5	100
Central	9.7	5.9	44.6	15.6		12.9	8.1			3.2	100
E. Central	•4	34.8	26.7	26.3		1.9	3.1	.6	3.7	2.5	100
Southwest	39.4	.8	.6	1.1	22.9	8.4	15.9	7.4	.5	3.0	100
S. Central	6.3	10.8	25.5	26.9	4.4	4.0	7.0	7.3	.2	7.6	100
Southeast		51.1	15.4	18.4		.5	1.4	1.6	3.4	8.2	100
State	22.6	17.4	14.1	12.6	12.3	6.3	5.9	3.3	1.4	4.1	100

NEBRASKA--WHEAT ACREAGE PLANTED BY VARIETIES BY CROP REPORTING DISTRICTS
1964 CROP

	War-	1			Chey-				Tri-	Other	All
Districts	rior	Ottawa	Omaha	Pawnee	enne	Nebred	Eison	Wichita	umph	and Unknown	Varietie
	,,,,			T	hou	s and	Acr	e s		, ,	
Northwest	434		2	1.	232	89	3.8	15		14	805
N. Central	Print State Mine spain		5	2	1	6	3.			ı	16
Northeast	1	4	17	5		1			1	2	31
Central	18	11	83	29		24	15	~~		6	186
E. Central	2	179	137	135		10	16	3	19	13	514
Southwest	250	5	4	7	145	53	1.01	47	3	19	634
S. Central	27	46	109	115	19	17	30	31	1.	32	427
Southeast		318	96	114		3	9	10	21	51	622
State	732	563	453	408	397	203	190	106	45	138	3,235

NEBRASKA--WHEAT VARIETIES--1965 CROP

ESTIMATED PERCENTAGES PLANTED TO EACH VARIETY BY CROP REPORTING DISTRICTS Chey-War-Other All Districts rior Ottawa Omaha Pawnee Nebred and Unknown enne Bison Wichita Scout Varieties Pct. Northwest 49.8 26.2 14.6 2.9 .6 .1 100 ~---1.8 3.9 .1 N. Central 12.5 18.8 6.2 37.5 18.8 100 --------6.2 28.6 Northeast ----50.0 10.7 ----3.6 \_\_\_\_ ---7.1 100 5.0 Central 8.4 16.8 12.3 44.0 8.9 .6 100 .6 3.4 E. Central .2 51.0 \_\_\_\_ 19.6 14.6 2.3 1.8 1.3 8.4 100 .8 Southwest 29.7 19.9 10.0 3.1 .8 .9 11.1 18.5 100 .5 5.5 S. Central 7.6 17.5 3.7 25.1 22.3 1.8 4.1 6.4 4.6 6.9 100 Southeast 59.5 12.5 12.9 .3 .8 1.1 1.3 2.4 9.2 100 State 21.9 21.2 12.2 11,2 7.3 3.8 8.2 1.4 6.2 100 6.1

NEBRASKA--WHEAT ACREAGE PLANTED BY VARIETIES BY CROP REPORTING DISTRICTS

Districts	War- rior	Ottawa	Chey- enne	Omaha	Pawnee	Nebred	Bison	Wichita		Other and Unknown	All Varieties
				T	h'o u	sand	Аc	rés			,
Northwest	487		256	6	1	143	28	18	1	38	978
N. Central	2			3	1	6	3			1	16
Northeast		8		14	3	7 2-		<del></del> -		2	28
Central	15	22		79	30	16	9	1	1	6	179
E. Central	1	236		91	66	11	9	4	6	39	463
Southwest	219	23	147	6	7	82	137	74	4	41	740
S. Central	33	76	16	109	97	8	18	28	20	30	435
Southeast		370	2_	78	80	5	7	8	15	57	622
State	757	735	421	3 86	285	272	211	133	47	214	3,461

<sup>1/</sup> Preliminary.