

# ESTIMATED SMALL GRAIN LOSSES FROM RUST IN 2004

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Acreage harvested and yield production records based on 2004 Crop Production Summary, Agricultural Statistics Board, USDA. Loss data are a summary of estimates made by personnel of the State Departments of Agriculture, University extension and research projects, Agricultural Research Service, USDA, and the Cereal Disease Laboratory.

Losses were calculated for each rust as follows:

$$\text{Loss (specific rust)} = \frac{(\text{Production}) \times (\text{Percent loss})}{(100\%) - (\text{Percent loss due to rusts})}$$

Losses were indicated as a trace when the disease was present but no fields were known to have suffered significant losses. When a few fields suffered measurable losses this was reflected as a percent of the state's production. Zeros indicate the disease was not reported in that state during the season. Blanks for stripe rust indicate that the disease was not reported nor does it occur annually in that state. Trace amounts were not included in the calculation of totals and averages.

**Please note:** The small grain rust loss reports are maintained on our webpage (<http://www.cdl.umn.edu>). To request a hardcopy E-mail David Long or write to the Cereal Disease Laboratory

**WINTER WHEAT**

State	1,000 acres harvest	Yields in bushels per acre	Production in 1,000 of bushels	Losses due to:					
				Stem Rust		Leaf Rust		Stripe Rust	
				Percent	1,000 bushels	Percent	1,000 bushels	Percent	1,000 bushels
Alabama	60	48.0	2,880	0.0	0.0	1.0	29.1	*T	T
Arkansas	620	53.0	32,860	0.0	0.0	T	T	2.0	670.6
California	320	85.0	27,200	0.0	0.0	T	T	5.0	1,431.6
Colorado	1,700	27.0	45,900	0.0	0.0	T	T	T	T
Delaware	47	58.0	2,726	0.0	0.0	T	T	0.0	0.0
Florida	15	45.0	675	0.0	0.0	1.0	6.8	T	T
Georgia	190	45.0	8,550	0.0	0.0	1.0	86.4	0.0	0.0
Idaho	700	90.0	63,000	0.0	0.0	T	T	T	T
Illinois	900	59.0	53,100	0.0	0.0	1.0	536.4	T	T
Indiana	440	62.0	27,280	0.0	0.0	1.0	275.6	T	T
Iowa	24	55.0	1,320	0.0	0.0	T	T	T	T
Kansas	8,500	37.0	314,500	0.0	0.0	1.4	4,470.1	0.1	319.2
Kentucky	380	54.0	20,520	0.0	0.0	T	T	T	T
Louisiana	165	50.0	8,250	0.0	0.0	1.5	131.6	4.5	394.9
Maryland	145	59.0	8,555	0.0	0.0	T	T	0.0	0.0
Michigan	640	64.0	40,960	0.0	0.0	1.0	413.7	T	T
Minnesota	25	40.0	1,000	0.0	0.0	1.0	10.1	T	T
Mississippi	135	53.0	7,155	0.0	0.0	1.0	73.8	2.0	147.5
Missouri	930	52.0	48,360	0.0	0.0	1.0	488.5	T	T
Montana	1,630	41.0	66,830	0.0	0.0	T	T	1.0	675.1
Nebraska	1,650	37.0	61,050	0.0	0.0	3.0	1,888.1	T	T
New Jersey	24	47.0	1,128	0.0	0.0	T	T	0.0	0.0
New Mexico	300	26.0	7,800	0.0	0.0	0.0	0.0	0.0	0.0
New York	100	53.0	53,300	0.0	0.0	T	T	0.0	0.0
North Carolina	460	50.0	23,000	0.0	0.0	T	T	0.0	0.0
North Dakota	225	44.0	9,900	0.0	0.0	1.0	100.0	T	T
Ohio	890	62.0	55,180	0.0	0.0	1.0	557.4	T	T
Oklahoma	4,700	35.0	164,500	0.0	0.0	1.5	2,517.9	0.5	839.3
Oregon	780	61.0	47,580	0.0	0.0	0.2	98.3	3.0	1,474.6
Pennsylvania	135	49.0	6,615	0.0	0.0	T	T	0.0	0.0
South Carolina	180	44.0	7,920	0.0	0.0	0.5	15.9	0.0	0.0
South Dakota	1,250	45.0	56,250	0.0	0.0	1.0	568.2	T	T
Tennessee	280	49.0	13,720	0.0	0.0	T	T	T	T
Texas	3,500	31.0	108,500	0.0	0.0	4.7	5,477.4	2.2	2,563.9
Utah	120	43.0	5,160	0.0	0.0	0.0	0.0	0.0	0.0
Virginia	180	55.0	9,900	0.0	0.0	0.1	9.9	0.0	0.0
Washington	1,750	67.0	117,250	0.0	0.0	T	T	1.5	1,785.5
West Virginia	5	52.0	260	0.0	0.0	T	T	0.0	0.0
Wisconsin	225	56.0	12,600	0.0	0.0	1.0	131.2	T	T
Wyoming	135	26.0	3,510	0.0	0.0	0.0	0.0	0.0	0.0
Total from Abov	34,455	43.5	1,498,744		0.0		17,886.4		10,302.2
U.S. % Loss				0.00		1.02		0.67	
U.S. Total	34,462	43.5	1,499,434						

\*T = Trace

## SPRING WHEAT

State	1,000 acres harvest	Yields in bushels per acre	Production in 1,000 of bushels	Losses due to:					
				Stem Rust		Leaf Rust		Stripe Rust	
				Percent	1,000 bushels	Percent	1,000 bushels	Percent	1,000 bushels
Colorado	14	70.0	980	0.0	0.0	*T	T	T	T
Idaho	490	79.0	38,710	0.0	0.0	0.2	78.0	0.5	194.9
Minnesota	1,610	55.0	88,550	T	T	10.0	9,838.9	T	T
Montana	2,850	31.0	88,350	0.0	0.0	T	T	T	T
Nevada	6	105.0	630	0.0	0.0	0.0	0.0	0.0	0.0
North Dakota	5,950	41.0	243,950	T	T	3.0	7,544.8	T	T
Oregon	175	48.0	8,400	0.0	0.0	1.0	89.4	5.0	446.8
South Dakota	1,530	47.0	71,910	0.0	0.0	2.0	1,467.6	T	T
Utah	12	58.0	696	0.0	0.0	0.0	0.0	0.0	0.0
Washington	525	50.0	26,250	0.0	0.0	T	T	3.0	811.9
Wisconsin	6	42.0	252	0.0	0.0	T	T	0.0	0.0
Wyoming	6	40.0	240	0.0	0.0	0.0	0.0	0.0	0.0
Total from Above	13,174	43.2	568,918		T		11,306.5		1,453.6
U.S. % Loss				T		1.94		0.24	
<b>U.S. Total</b>	<b>13,174</b>	<b>43.2</b>	<b>568,918</b>						

\*T = Trace

## DURUM WHEAT

State	1,000 acres harvest	Yields in bushels per acre	Production in 1,000 of bushels	Losses due to:					
				Stem Rust		Leaf Rust		Stripe Rust	
				Percent	1,000 bushels	Percent	1,000 bushels	Percent	1,000 bushels
Arizona	100	97.0	9,603	0.0	0.0	0.0	0.0	0.0	0.0
California	120	90.0	9,000	0.0	0.0	0.0	0.0	5.0	473.7
Minnesota	1	55.0	55	0.0	0.0	0.0	0.0	0.0	0.0
Montana	545	33.0	17,985	0.0	0.0	0.0	0.0	0.0	0.0
North Dakota	1,600	33.0	52,800	0.0	0.0	T	T	0.0	0.0
South Dakota	18	25.0	450	0.0	0.0	0.0	0.0	0.0	0.0
Total from Above	2,363	38.0	89,893		0.0		T		473.7
U.S. % Loss				0.00		T		0.52	
<b>U.S. Total</b>	<b>2,363</b>	<b>38.0</b>	<b>89,893</b>						

# OAT

State	1,000 acres harvest	Yields in bushels per acre	Production in 1,000 of bushels	Losses due to:			
				Stem Rust		Crown Rust	
				Percent	1,000 bushels	Percent	1,000 bushels
California	25	85.0	2,125	0.0	0.0	0.0	0.0
Colorado	20	55.0	1,100	0.0	0.0	0.0	0.0
Georgia	25	50.0	1,250	0.0	0.0	*T	T
Idaho	20	72.0	1,440	0.0	0.0	0.0	0.0
Illinois	35	70.0	2,450	0.0	0.0	T	T
Indiana	12	75.0	900	0.0	0.0	T	T
Iowa	140	72.0	10,080	0.0	0.0	T	T
Kansas	40	443.0	1,720	0.0	0.0	T	T
Maine	32	75.0	2,400	0.0	0.0	0.0	0.0
Michigan	65	68.0	4,420	0.0	0.0	T	T
Minnesota	190	70.0	13,300	T	T	1.0	134.3
Missouri	13	50.0	650	0.0	0.0	T	T
Montana	40	60.0	2,400	0.0	0.0	0.0	0.0
Nebraska	55	68.0	3,740	0.0	0.0	T	T
New York	50	65.0	3,250	0.0	0.0	T	T
North Carolina	25	70.0	1,750	0.0	0.0	0.0	0.0
North Dakota	220	64.0	14,080	0.0	0.0	1.0	142.2
Ohio	50	63.0	3,150	0.0	0.0	T	T
Oklahoma	15	37.0	555	0.0	0.0	T	T
Oregon	20	100.0	2,000	0.0	0.0	0.0	0.0
Pennsylvania	110	55.0	6,050	0.0	0.0	T	T
South Carolina	20	55.0	1,100	0.0	0.0	T	T
South Dakota	170	82.0	13,940	0.0	0.0	1.0	140.8
Texas	160	40.0	6,400	0.5	35.8	10.2	731.0
Utah	8	78.0	624	0.0	0.0	0.0	0.0
Washington	7	88.0	616	0.0	0.0	T	T
Wisconsin	210	65.0	13,650	0.0	0.0	T	T
Wyoming	15	53.0	795	0.0	0.0	0.0	0.0
Total from Above	1,792	64.7	115,935		35.8		1,148.3
U.S. % Loss				0.03		0.98	
<b>U.S. Total</b>	<b>1,792</b>	<b>64.7</b>	<b>115,935</b>				

\*T = Trace

## BARLEY

State	1,000 acres harvest	Yields in bushels per acre	Production in 1,000 of bushels	Losses due to:					
				Stem Rust		Leaf Rust		Stripe Rust	
				Percent	1,000 bushels	Percent	1,000 bushels	Percent	1,000 bushels
Arizona	38	110.0	4,180	0.0	0.0	0.0	0.0	0.0	0.0
California	75	54.0	4,050	0.0	0.0	*T	T	1.0	40.9
Colorado	77	118.0	9,086	0.0	0.0	0.0	0.0	0.0	0.0
Delaware	26	80.0	2,080	0.0	0.0	0.0	0.0		
Idaho	650	92.0	59,800	0.0	0.0	0.0	0.0	0.0	0.0
Kansas	12	28.0	336	0.0	0.0	0.0	0.0		
Kentucky	8	77.0	616	0.0	0.0	0.0	0.0		
Maine	22	65.0	1,430	0.0	0.0	0.0	0.0		
Maryland	39	73.0	2,847	0.0	0.0	0.0	0.0		
Michigan	12	51.0	612	0.0	0.0	0.0	0.0		
Minnesota	115	68.0	7,820	T	T	T	T		
Montana	830	59.0	48,970	0.0	0.0	0.0	0.0	0.0	0.0
Nebraska	3	54.0	162	0.0	0.0	0.0	0.0		
Nevada	2	105.0	210	0.0	0.0	0.0	0.0		
New Jersey	2	63.0	126	0.0	0.0	0.0	0.0		
New York	10	53.0	530	0.0	0.0	T	T		
North Carolina	15	64.0	960	0.0	0.0	T	T		
North Dakota	1,480	62.0	91,760	0.0	0.0	T	T		
Ohio	4	50.0	200	0.0	0.0	0.0	0.0		
Oregon	66	73.0	4,818	0.0	0.0	0.0	0.0	0.1	4.8
Pennsylvania	55	62.0	3,410	0.0	0.0	0.0	0.0		
South Dakota	50	63.0	3,150	0.0	0.0	T	T		
Utah	40	86.0	3,440	0.0	0.0	0.0	0.0		
Virginia	40	74.0	2,960	0.0	0.0	T	T		
Washington	245	70.0	17,150	0.0	0.0	0.0	0.0	0.1	17.2
Wisconsin	30	55.0	1,650	0.0	0.0	T	T		
Wyoming	75	92.0	6,900	0.0	0.0	0.0	0.0		
Total from Above	4,021	69.4	279,253		T		T		62.9
U.S. % Loss				T		T		0.02	
U.S. Total	4,021	69.4	279,253						

\*T = Trace

## RYE

State	1,000 acres harvest	Yields in bushels per acre	Production in 1,000 of bushels	Losses due to:			
				Stem Rust		Leaf Rust	
				Percent	1,000 bushels	Percent	1,000 bushels
Georgia	25	24.0	600	0.0	0.0	*T	T
Illinois							
Kansas							
Michigan							
Minnesota							
Nebraska							
New York							
North Carolina							
North Dakota	20	39.0	780	0.0	0.0	T	T
Ohio							
Oklahoma	110	18.0	1,980	0.0	0.0	T	T
Pennsylvania							
South Carolina							
South Dakota	11	59.0	649	0.0	0.0	T	T
Texas							
Wisconsin							
Other US States***	154	29.9	4,606	0.0	0.0	T	T
<b>Total from Above</b>	<b>320</b>	<b>26.9</b>	<b>8,615</b>		<b>0.0</b>		<b>T</b>
U.S. % Loss				0.00		T	
<b>U. S. Total</b>	<b>320</b>	<b>26.9</b>	<b>8,615</b>				

\*T = Trace

\*\*\* Other US States include IL, KS, MI, MN, NE, NY, NC, PA, SC, TX, and WI