

1997 Kentucky Small Grain Variety Trials

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In 1997, Kentucky farmers harvested 26 million bushels of soft red winter wheat produced on 500,000 acres. The average yield of 52 bu/a was 1 bushel less than the 1996 yield. Barley yields were 70 bu/a, 4 bushels less than the 1996 yields.

Small grain performance tests were conducted in six of the seven agro-climatic regions of Kentucky (Fig. 1). Agricultural areas within each region are considered to have similar soil types and climatic conditions. Each region having a substantial acreage of a small grain commodity will have a trial conducted in that region for that commodity.

The objective of the Kentucky small grain variety trials is to evaluate varieties of barley and wheat that are commercially available or may soon be available to Kentucky farmers. New varieties are continually being developed by agricultural experiment stations and commercial firms. Annual evaluation of small grain varieties and selections provides seedsmen, farmers, and other agricultural workers with current information to help them select the varieties best adapted to their locality and individual requirements.

Since weather, soil, and other environmental factors will alter varietal performance from one location to another, tests are grown in six locations (Fig. 1) in the state.

Experimental Methods

The plots were planted with a specially built multi-row cone seeder. Each plot consisted of six rows to form a plot 4 feet wide, which was later trimmed to 10 feet in length. Each variety was grown in four

Table 1—Small Grain Harvested Acreage and Yields in Kentucky, 1995-1997.*

	1997		1996		1995	
	Harvest	Yield	Harvest	Yield	Harvest	Yield
Crop	1000 A	Bu/A	1000 A	Bu/A	1000 A	Bu/A
Wheat	500	52	530	53	460	53
Barley	14	70	20	74	16	70

* July 14, 1997, Kentucky Crop and Livestock Reporting Service.

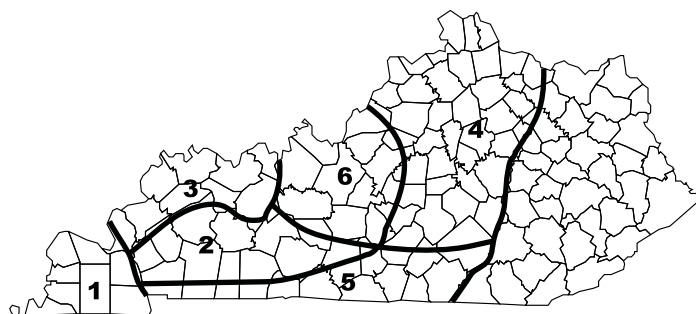


Figure 1—Agro-climatic Regions of Kentucky Small Grain Variety Trials.

Region	1997 Location	Cooperator	Crop Tested
1. Purchase	Mayfield	Joe Lynch	Wheat
2. Western Coal Field	Princeton	Research and Education Center	Barley, Wheat
3. Ohio Valley	Henderson	David Alexander	Wheat
4. Bluegrass	Lexington	Kentucky Agricultural Experiment Station	Barley, Wheat
5. Southern Tier	Bowling Green	Western Kentucky University Farm	Barley, Wheat
6. North Central	Hopkinsville Shelbyville	Donnie & Duane Moore Mike Ellis	Barley, Wheat Wheat

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replications, and the data presented are the average response from the four replications of 40 square feet harvested with a small plot combine. Planting dates of all trials for the past three years are listed in Table 2.

In some instances, uncontrollable factors — such as excessive rainfall, winter killing, high winds, hail, grazing cattle, etc.—adversely affected an experiment so that the results were judged unreliable. When this occurred, results are not given for that location and year. Data averaged over a period of years give a more accurate picture of varietal performance than do annual data.

Results and Discussion

Since genetic expression of a variety is greatly influenced by environmental conditions, it is best to have several years' data from which to draw conclusions. Performance of a variety tested for only one year should not be compared with a three-year average of another variety since it is possible that results in one of the other years were extremely good or poor, and thus not comparable.

The yield of a variety is relative and should be compared with the yields of the other varieties in the same experiment and at the same location. Small differences in yield of only a few bushels per acre between two varieties from an individual test should not be interpreted to indicate the superiority of one variety over another. However, if one variety consistently out-yields another over a period of several years, the chances are that the differences are real.

Lodging data are very difficult to interpret. A high-yielding variety should not necessarily be down-graded because of a high percentage of lodging for a given year at a

given location. Local weather conditions, such as wind and rain, may cause a variety to lodge much more than it normally does. Variety trials normally have a greater degree of lodging than do farmer fields. It should also be emphasized that a variety reported to be 50% lodged does not imply that only 50% of the grain could be harvested. With good equipment, almost all of the grain can often be saved. Lodging data for a period of years should receive more consideration than annual lodging data since they will give a more accurate picture of varietal performance.

1997 Test Conditions

Favorable weather during October allowed for timely seeding of wheat and barley variety trials. November was cooler and wetter than normal. December, January, and February had normal precipitation with normal to above-normal temperatures. March was one of the wettest on record with above-normal temperatures. April and May continued wet but with below-normal temperatures. Having come through the winter with little or no winterkill, the trials grew rather poorly due to the wet, cool spring. However, the condition of the tests improved markedly as the season progressed. Diseases were very light at all locations with the exception of some wheat spindle streak and head scab infection. Overall, yields were little affected by diseases.

The Hopkinsville (Table 8) and Lexington (Table 6) trials were treated with fungicides to control fungal diseases. Tests at all other locations were untreated so varieties could be rated for disease resistance. However, there was little opportunity for disease ratings due to the overall light infections at the test locations.

Table 2—Region, Location, Preceding Crop, and Planting Dates of Kentucky Small Grain Trials, 1995-1997.

Region	Location		Preceding		Planting Date		
			Crop	Crop	1997	1996	1995
Purchase	Mayfield	1995-96	Soybeans	Wheat		11/21	10/25
Ohio Valley	Owensboro	1995-96	Corn	Wheat	10/17	10/23	10/17
	Henderson	1997	Corn	Wheat			
Bluegrass	Lexington		Corn	Barley	10/21	10/13	10/13
				Wheat	10/17	10/17	10/13
Southern Tier	Hopkinsville	1995-97	Corn	Barley	10/16	10/18	10/27
	Bowling Green	1997	Corn	Wheat	10/16	10/18	10/27
Western Coal Field	Princeton			Barley	10/08	10/26	10/26
			Fallow	Wheat	10/08	10/26	10/26
North Central	Hardinsburg	1995-96	Corn	Wheat	10/15	10/17	10/12
	Shelbyville	1997	Corn	Wheat			

Small Grain Varieties for 1998

Varieties eligible for certification include (1) varieties that may have potential for Kentucky and (2) older varieties that are still acceptable for production in Kentucky. The characteristics of the small grain varieties are summarized in Tables 3 and 11.

Soft Red Winter Wheat Varieties

Kentucky's climate and soils are well suited for the production of high quality soft red winter wheat. No single variety has all the desirable characteristics, but each has certain advantages. Yielding ability, straw strength, height, earliness, grain quality, and disease resistance are important in choosing a variety. Varietal performance is presented in Tables 4-9.

Winter Barley Varieties

Winter barleys are less winterhardy than winter wheat but more hardy than winter oats. The degree of winterhardiness, straw strength, and maturity are important characteristics when choosing a variety. Varietal performance data are presented in Tables 12-14.

Certified Seed

Planting certified seed is one of the first steps in ensuring a good small grain crop. The extra cost of certified seed is justified in view of the high quality of seed obtained. Certified seed is seed that has been grown in such a way as to ensure the genetic identity and purity of a variety. Certified seed also helps to maintain freedom from weed and other crop seed and, in some cases, freedom from disease. The Kentucky Agricultural Experiment Station recommends that Kentucky-certified seed be used whenever possible for growing commercial crops of small grains.

TABLE 3 CHARACTERISTICS OF WHEAT VARIETIES TESTED IN 1997.

VARIETY	PROTECTED ¹	SOURCE	RELEASE DATE	YIELD (BU/AC)	TEST WEIGHT (LB/BU)	LODGING (%)	PLANT HEIGHT (IN.)	SURVIVAL (%)	HEADING DATE
2552	Yes	Pioneer Hi Bred Int.	1994	73.3	59.1	0.0	36.9	99.2	08-MAY
2540	Yes	Pioneer Hi Bred Int.	1995	71.4	56.1	0.0	37.9	99.4	11-MAY
NK COKER 9663	Yes	Northrup King	1996	67.2	57.0	2.9	41.4	97.9	06-MAY
GLORY	Yes	Ohio	1994	64.7	55.8	4.2	36.5	100.0	08-MAY
25R26	Yes	Pioneer Hi Bred Int.	1996	64.0	54.0	0.4	35.2	100.0	10-MAY
25R57	Yes	Pioneer Hi Bred Int.	1996	63.6	56.0	0.0	36.7	98.5	07-MAY
2568	Yes	Pioneer Hi Bred Int.	1995	63.3	55.2	0.0	35.9	100.0	06-MAY
2510	Yes	Pioneer Hi Bred Int.	1991	63.0	55.7	0.0	37.0	99.6	12-MAY
MADISON	Yes	Virginia	1990	62.7	54.8	5.2	36.9	100.0	05-MAY
PATTERSON	Yes	Indiana	1994	61.4	57.3	0.0	39.0	94.6	06-MAY
VERNE	Yes	Kentucky	1990	61.3	56.4	3.1	41.0	100.0	08-MAY
WAKEFIELD	Yes	Virginia	1990	61.3	55.4	0.8	39.1	97.1	09-MAY
AGRIPRO ELKHART	Yes	Agripro Biosciences	1995	60.8	58.1	0.4	38.7	97.7	06-MAY
CLARK	Yes	Indiana	1988	60.2	55.4	0.0	37.3	100.0	05-MAY
2684	Yes	Pioneer Hi Bred Int.	1994	60.2	57.9	1.7	35.3	99.6	04-MAY
KAS JUSTICE	Yes	Kentucky American Seeds	1995	59.8	54.7	0.0	38.0	99.0	10-MAY
AGRIPRO FOSTER	Yes	Agripro Biosciences	1996	59.5	56.2	0.0	37.6	99.6	09-MAY
HOPEWELL	Yes	Ohio	1995	58.7	55.5	0.0	38.1	100.0	13-MAY
BECKER	Yes	Ohio	1985	58.6	53.3	0.0	35.0	100.0	10-MAY
JACKSON	Yes	Virginia	1993	58.3	55.5	1.3	36.4	94.8	08-MAY
BECK 103	Yes	Beck's Hybrids	1997	58.3	55.0	1.3	36.5	97.9	08-MAY
2737	Yes	Pioneer Hi Bred Int.	1994	58.0	52.1	0.0	37.0	98.3	10-MAY
TERRA SR 205	Yes	Terra Industries	1997	57.9	55.6	0.0	37.0	97.3	08-MAY
EK 309	Yes	Erwin Keith, Inc.	1997	57.9	54.9	0.0	36.5	92.9	08-MAY
KAS PATRIOT	Yes	Kentucky American Seeds	1994	57.8	55.2	2.1	36.5	96.5	07-MAY
AGRIPRO CLEMENS	Yes	Agri Biosciences	1997	57.4	55.6	7.5	41.5	100.0	11-MAY
FFR 558W	Yes	Southern States Coop.	1997	57.2	57.0	0.0	38.6	98.8	09-MAY
POCAHONTAS	Yes	Virginia	1996	56.8	56.1	3.1	33.3	98.3	06 MAY
EK 102	Yes	Erwin Keith, Inc.	1997	55.8	55.0	0.0	35.9	99.0	08-MAY
EK 114	Yes	Erwin Keith, Inc.	1997	55.4	54.2	0.4	36.5	99.0	08-MAY
TERRA SR 211	Yes	Terra Industries	1997	55.4	54.5	0.0	35.9	90.2	08-MAY
TERRA SR 204	Yes	Terra Industries	1997	55.0	57.5	2.9	38.8	97.9	09-MAY
CARDINAL	Yes	Ohio	1996	54.9	54.6	0.3	41.2	81.5	13-MAY
NK COKER 9803	Yes	Northrup King	1990	54.5	58.5	0.4	33.3	99.2	06-MAY
NK COKER 9704	Yes	Northrup King	1997	54.4	58.0	0.0	32.8	98.5	05 MAY
VORIS 6044	Yes	Voris Seeds	1996	54.3	55.2	5.4	38.2	97.3	05-MAY
CALDWELL	Yes	Indiana	1980	53.9	54.2	0.0	38.2	96.7	09-MAY
FFR 555W	Yes	Southern States Coop.	1990	53.7	53.0	0.0	35.3	96.3	08-MAY
ERNIE	Yes	Missouri	1994	52.8	55.3	5.4	32.3	97.1	05-MAY
FFR 525W	Yes	Southern States Coop.	1994	52.5	56.0	6.9	35.6	98.3	06-MAY
FEATHERSTONE 520	Yes	Featherstone Farms	1995	49.9	55.1	8.1	35.0	100.0	08-MAY
NK COKER 9543	Yes	Northrup King	1990	49.8	55.0	5.4	32.5	100.0	06-MAY
FFR 523W	Yes	Southern States Coop.	1995	45.6	52.2	0.0	30.2	95.0	05-MAY

Mean = 58.4 BU/A

CV = 13.28

LSD(0.05) = 3.7

¹The CV is a measure of experimental error. The lower the CV the more reliable the results.

²The LSD (Least Significant Difference) is the minimum difference required for two varieties to be significantly different from one another.

³Unauthorized propagation prohibited. Seed of these varieties must be sold by variety name only as a class of certified seed. This includes varieties for which protection has been applied and those for which protection has been granted.

TABLE 3a AVERAGE PERFORMANCE OF WHEAT VARIETIES TESTED IN 1996-1997.

VARIETY	YIELD (BU/AC)	TEST WEIGHT (LB/BU)	LODGING (%)	PLANT HEIGHT (IN.)	SURVIVAL (%)	HEADING DATE
2540	67.6	56.1	0.0	35.5	72.9	11-MAY
2552	67.2	58.2	0.0	34.8	73.5	08-MAY
2510	63.5	56.4	0.0	34.9	78.5	12-MAY
NK COKER 9663	62.7	57.2	1.5	39.4	69.2	06-MAY
2568	62.1	55.6	0.0	33.9	70.6	06-MAY
MADISON	60.0	55.8	2.6	36.0	73.0	05-MAY
PATTERSON	60.0	56.9	0.0	36.8	72.5	06-MAY
AGRIPRO ELKHART	59.5	58.0	0.2	36.8	69.1	06-MAY
GLORY	59.1	56.4	2.1	34.6	71.8	08-MAY
HOFWELL	59.0	55.7	0.0	36.4	77.0	13-MAY
AGRIPRO CLEMENS	58.4	56.6	3.8	39.1	75.5	11-MAY
KAS JUSTICE	57.8	56.1	0.2	36.4	78.5	10-MAY
CLARK	56.8	55.7	0.0	35.7	72.9	05-MAY
VERNE	56.7	56.3	1.6	38.8	69.6	08-MAY
KAS PATRIOT	55.5	56.1	1.0	34.5	68.0	07-MAY
BECKER	54.3	54.1	0.0	33.1	70.5	10-MAY
AGRIPRO FOSTER	54.1	55.5	0.0	35.0	67.0	09-MAY
2684	54.0	57.2	0.8	33.0	65.5	04-MAY
WAKEFIELD	52.6	54.9	0.4	36.8	61.0	09-MAY
CARDINAL	51.7	54.9	0.2	38.9	55.0	13-MAY
FFR 525W	50.0	56.0	3.4	34.0	59.9	06-MAY
POCAHONTAS	49.3	55.4	1.6	31.7	58.0	06-MAY
FFR 555W	48.8	53.5	0.0	32.8	60.4	08-MAY
JACKSON	48.4	55.4	0.6	33.4	54.4	08-MAY
NK COKER 9543	47.8	55.9	2.7	31.5	67.5	06-MAY
CALDWELL	47.6	55.1	0.0	35.9	58.1	09-MAY
FFR 523W	47.4	53.8	0.0	28.8	65.0	05-MAY
ERNIE	47.4	55.6	2.7	30.8	59.0	05-MAY
FEATHERSTONE 520	45.5	55.5	4.1	33.1	60.6	08-MAY
NK COKER 9803	45.3	57.7	0.2	31.1	58.4	06-MAY

TABLE 3b AVERAGE PERFORMANCE OF WHEAT VARIETIES TESTED IN 1995-1997.

VARIETY	YIELD (BU/AC)	TEST WEIGHT (LB/BU)	LODGING (%)	PLANT HEIGHT (IN.)	SURVIVAL (%)	HEADING DATE
2552	64.8	57.6	0.0	34.5	82.4	08-MAY
2510	59.4	56.0	0.0	34.3	85.7	12-MAY
AGRIPRO ELKHART	57.6	58.3	0.1	36.7	79.4	06-MAY
GLORY	57.0	56.0	1.4	34.3	81.2	08-MAY
MADISON	56.4	55.1	1.7	34.3	82.0	05-MAY
PATTERSON	55.8	56.8	0.0	35.9	81.7	06-MAY
VERNE	55.7	55.9	1.1	38.2	79.7	08-MAY
AGRIPRO CLEMENS	55.4	56.8	2.5	38.0	83.7	11-MAY
HOPEWELL	54.2	55.3	0.0	35.5	84.7	13-MAY
2684	53.7	57.0	0.6	32.5	77.0	04-MAY
KAS PATRIOT	53.7	56.0	0.7	34.3	78.7	07-MAY
AGRIPRO FOSTER	53.5	55.6	0.0	34.4	78.0	09-MAY
WAKEFIELD	52.7	55.3	0.3	36.1	74.0	09-MAY
BECKER	52.4	54.0	0.0	33.0	80.3	10-MAY
CLARK	51.8	55.1	0.0	34.7	81.9	05-MAY
CARDINAL	50.3	54.7	0.1	38.0	70.0	13-MAY
FFR 525W	50.0	56.2	2.3	33.5	73.3	06-MAY
JACKSON	49.9	55.7	0.4	33.2	69.6	08-MAY
FFR 555W	49.5	53.6	0.0	32.7	73.6	08-MAY
NK COKER 9543	47.9	55.7	1.8	31.0	78.3	06-MAY
NK COKER 9803	47.8	57.4	0.1	30.9	72.2	06-MAY
FFR 523W	46.5	53.7	0.0	28.6	76.7	05-MAY
ERNIE	46.2	55.1	1.8	30.0	72.7	05-MAY
CALDWELL	45.3	55.1	0.0	35.2	72.1	09-MAY

TABLE 4 WHEAT PERFORMANCE TRIALS FOR PURCHASE REGION*, 1994-1996.

VARIETY	---YIELD (BU/AC)---		---TEST WT (LB/BU)---		----PCT LODGED----		---PCT SURVIVAL---			PLANT HEIGHT (IN)	HEADING DATE
	1996	1995	1994	MEAN	1996	1995	1994	MEAN	1996		
JUSTICE	55		55	55.7	0	0	0	0	30	35	16-May
2540	55		55	56.0	0	0	0	0	30	33	11-May
AGRIPRO ELKHART	53	57	55	56.8 58.2	0	0	0	0	15	58	16-May
2568	52		52	54.4	0	0	0	0	18	32	12-May
2510	52	44	62	55.1 52.5 55.3 54.3	0	0	0	0	23	100	95 73
2628	50	52	63	56.6 55.1 57.2 56.3	0	0	0	0	21	100	96 73
PATRIOT	50	48	60	56.5 54.4 55.3 55.4	0	0	0	0	19	100	100 73
PATTERSON	50	45	48	54.4 55.4	0	0	0	0	24	100	62
MADISON	49	40	88	55.0 50.4 57.5 54.3	0	0	0	0	21	100	99 73
2580	49	43	58	55.5 52.4 55.0 54.3	0	0	0	0	25	100	95 73
2552	48	53	50	54.3 53.9 54.1	0	0	0	0	16	100	58
82W	47	47	47	53.0 52.8 52.9	0	0	0	0	20	100	60
DB 562W	46		46	54.4	0	0	0	0	11	34	17-May
HOPEWELL	45	38	42	51.8 52.5	0	0	0	0	59	34	18-May
COKER 9663	45		45	56.5	0	0	0	0	16	38	18-May
FFR 525	45	48	61	55.6 53.7 58.4 55.9	0	0	8	3	11	100	96
FFR 523	44	37	41	53.3 52.1 52.7	0	0	0	0	18	100	59
CLARK	44	35	53	54.1 51.6 56.4 54.0	0	0	0	0	16	100	96 71
GLORY	44	44	44	55.5 52.7 54.1	0	0	0	0	20	100	60
2684	44	51	83	55.6 53.7 58.1 55.8	0	0	0	0	11	100	100 70
AGRIPRO MASON	44		44	53.5	0	0	0	0	19	33	17-May
ERNIE	42	34	83	54.5 47.4 56.7 52.9	0	0	4	1	10	100	99 70
FEATHERSTONE	42		42	56.8	0	0	0	0	15	32	13-May
FREEDOM	42	44	87	53.6 53.9 54.9 54.1	0	0	4	1	13	100	99 70
AGRIPRO CLEMENS	42	46	77	53.8 55.6 55.8 55.1	0	0	15	5	13	100	100 71
BECKER	42	44	90	52.1 53.8 54.0 53.3	0	0	0	0	21	100	100 74
AGRIPRO FOSTER	40	45	76	52.2 53.7 55.7 53.9	0	0	0	0	18	100	100 73
COKER 9543	40	48	79	55.7 53.2 57.6 55.5	0	0	0	0	14	100	81 65
VERNE	40	54	91	52.6 52.4 56.3 53.8	0	0	0	0	13	100	100 71
AGRIPRO HICKORY	40	48	84	55.9 53.9 59.0 56.3	0	0	0	0	19	100	95 71
AGRIPRO SHILOH	40	46	43	53.5 51.7 52.6	0	0	0	0	16	100	58
DB 494W	39		39	54.7	0	0	0	0	9	31	16-May
WAKEFIELD	37	46	90	54.8 54.4 56.8 55.3	0	0	0	0	9	100	100 70
CALDWELL	34	41	68	53.7 53.7 54.4 53.9	0	0	0	0	9	100	84 64
COKER 9803	33	50	80	57.6 53.5 59.5 56.9	0	0	0	0	8	100	93 67
CARDINAL	31	42	80	51.6 52.0 57.9 53.8	0	0	0	0	5	100	96 67
GRANT	31	41	75	51.5 52.7 54.5 52.9	0	0	0	0	13	100	89 67
2643	29	47	83	54.9 52.7 57.4 55.0	0	0	0	0	6	100	100 69
FFR 555	28	47	90	52.0 51.0 55.5 52.8	0	0	0	0	10	100	99 70
JACKSON	27	50	85	51.1 52.9 56.2 53.4	0	0	31	10	5	100	100 68
FFR 502	14		14	54.0	0	0	0	0	2	29	17-May
MEAN	42	45	83	54.4 53.1 56.5 54.7	0	0	1	0	15	100	96 71

CV = 18.1%

LSD(0.05) = 8.3 BU/A

* LOCATION: Graves County

TABLE 5 WHEAT PERFORMANCE TRIALS FOR OHIO VALLEY REGION*, 1995-1997.

VARIETY	-YIELD (BU/AC)-		-TEST WT (LB/BU)-		---PCT LODGED---		-PCT SURVIVAL--		PLANT HEIGHT (IN)	HEADING DATE				
	1997	1996	1996	1995	1997	1996	1995	1997						
2540	73	63	56.4	57.8	57.1	0	0	0	100	28	64	37	11-MAY	
2552	69	64	60.3	58.2	56.0	58.2	0	0	0	100	28	100	76	08-MAY
VERNE	67	51	59.2	57.1	56.0	57.4	0	0	0	100	19	100	73	08-MAY
EK 114	66	66	59.7	59.7	59.7	59.7	0	0	0	100	34	100	78	08-MAY
MADISON	65	55	58.9	59.1	52.0	56.7	0	0	0	100	34	100	78	05-MAY
WAKEFIELD	64	43	59.2	56.7	55.8	57.2	0	0	0	85	13	100	66	09-MAY
FEATHERSTONE 520	64	32	59.1	58.3	58.7	58.7	0	0	0	100	9	54	36	08-MAY
EK 102	63	63	58.9	58.9	58.9	58.9	0	0	0	100	4	100	68	08-MAY
NK COKER 9803	63	23	60.6	58.6	55.2	58.1	0	0	0	100	4	100	68	06-MAY
25R26	62	62	55.1	55.1	55.1	55.1	0	0	0	100	19	100	59	10-MAY
2568	61	53	57.5	56.7	57.1	57.1	0	0	0	100	19	59	35	06-MAY
NK COKER 9663	61	64	59.8	59.3	59.6	59.6	0	0	0	96	31	64	40	06-MAY
POCAHONTAS	60	47	60.4	57.9	59.2	59.2	0	0	0	100	8	54	35	06-MAY
JACKSON	60	38	58.6	57.4	53.7	56.6	0	0	0	100	8	100	69	08-MAY
FFR 525W	59	43	59.3	55.1	58.4	57.6	0	0	0	100	10	100	70	06-MAY
CLARK	59	56	57.6	57.5	56.5	57.2	0	0	0	100	34	100	78	05-MAY
NK COKER 9704	58	58	61.2	61.2	61.2	61.2	0	0	0	100	34	100	80	05-MAY
AGRIPRO FOSTER	58	45	58.8	55.5	54.4	56.2	0	0	0	100	21	100	74	09-MAY
GLORY	57	58	57.9	58.4	54.4	56.9	0	0	0	100	29	100	76	08-MAY
NK COKER 9543	55	38	59.2	57.6	51.9	56.2	0	0	0	100	19	100	73	06-MAY
TERRA SR 204	55	55	60.5	60.5	60.5	60.5	0	0	0	88	38	88	38	09-MAY
HOPEWELL	55	63	57.5	59.2	52.6	56.4	0	0	0	100	44	100	81	13-MAY
TERRA SR 211	54	54	58.0	58.0	58.0	58.0	0	0	0	75	36	75	36	08-MAY
AGRIPRO CLEMENS	53	60	58.7	59.2	58.5	58.8	0	0	0	100	46	100	82	08-MAY
BECK 103	52	52	58.3	58.3	58.3	58.3	0	0	0	93	35	93	35	08-MAY
FFR 555W	52	42	57.9	57.9	52.2	56.0	0	0	0	90	14	100	68	08-MAY
PATTERSON	52	58	59.2	59.5	55.9	58.2	0	0	0	88	41	100	76	06-MAY
2510	52	66	58.0	59.7	53.8	57.2	0	0	0	100	43	100	81	12-MAY
EK 309	52	52	57.7	57.7	57.7	57.7	0	0	0	80	34	80	34	08-MAY
AGRIPRO ELKHART	51	57	60.7	59.4	60.1	60.1	0	0	0	90	29	100	73	06-MAY
KAS PATRIOT	51	53	57.4	58.8	55.8	57.3	0	0	0	95	30	100	75	07-MAY
FFR 558W	51	51	58.3	58.3	58.3	58.3	0	0	0	93	38	93	38	09-MAY
BECKER	50	52	57.1	57.4	53.4	56.0	0	0	0	100	25	100	75	10-MAY
2684	48	37	61.4	60.3	57.8	59.8	0	0	0	100	11	100	70	04-MAY
CARDINAL	48	54	55.0	58.7	53.1	55.6	0	0	0	51	15	100	55	13-MAY
KAS JUSTICE	47	58	56.0	59.8	57.9	57.9	0	0	0	96	64	80	35	10-MAY
TERRA SR 205	47	47	59.7	59.7	59.7	59.7	0	0	0	89	34	89	34	08-MAY
25R57	45	45	58.8	58.8	58.8	58.8	0	0	0	93	36	93	36	07-MAY
ERNIE	42	33	59.7	54.9	56.7	57.1	0	0	0	90	7	100	66	05-MAY
2737	40	40	53.3	53.3	53.3	53.3	0	0	0	93	33	93	33	10-MAY
CALDWELL	40	48	56.9	58.7	52.6	56.1	0	0	0	93	14	100	69	09-MAY
VORIS 6044	38	56	58.1	57.9	58.0	58.0	0	0	0	85	46	66	35	05-MAY
FFR 523W	36	51	57.7	58.5	51.2	55.8	0	0	0	95	21	100	72	05-MAY
MEAN	55	50	58.5	58.1	54.9	57.2	0	0	0	94	24	100	73	36

CV = 22.2%

LSD(0.05) = 14.1 BU/A

* LOCATION: Henderson County

TABLE 6 WHEAT PERFORMANCE TRIALS FOR BLUEGRASS REGION*, 1995-1997.

VARIETY	-YIELD (BU/AC)-		-TEST WT (LB/BU)-		--PCT LODGED--		-PCT SURVIVAL-		PLANT HEIGHT (IN)	HEADING DATE							
	1997	1996	1997	1996	1997	1996	1997	1996									
2540	63	69	66	57.3	55.6	56.5	0	0	0	100	45	73	31	11-MAY			
2552	62	77	47	62	58.8	58.2	58.3	58.4	0	0	0	0	100	63	100	88	08-MAY
2510	61	81	60	67	57.8	57.1	57.9	57.6	0	0	0	0	100	86	100	95	12-MAY
2737	61	61	61	61	54.6	54.6	54.6	54.6	0	0	0	0	100	100	100	32	10-MAY
CALDWELL	61	32	36	43	57.1	54.2	56.7	56.0	0	0	0	0	100	18	100	73	09-MAY
25R57	60	60	60	60	56.7	56.7	56.7	56.7	0	0	0	0	100	100	100	31	07-MAY
AGRIPRO ELKHART	58	59	37	51	58.1	55.7	60.1	58.0	0	0	0	0	100	59	100	86	06-MAY
25R26	57	57	57	57	53.7	53.7	53.7	53.7	0	0	0	0	100	100	100	29	10-MAY
FFR 558W	57	57	57	57	58.7	58.7	58.7	58.7	0	0	0	0	100	100	100	33	09-MAY
KAS JUSTICE	56	66	61	61	55.7	57.1	56.4	56.4	0	0	0	0	100	75	100	88	10-MAY
WAKEFIELD	55	61	47	54	57.0	56.2	58.5	57.2	0	0	0	0	100	44	100	81	09-MAY
BECKER	55	62	47	55	54.8	53.7	56.8	55.1	0	0	0	0	100	69	100	90	10-MAY
MADISON	55	70	50	58	55.9	57.0	58.6	57.2	0	0	0	0	100	78	100	93	05-MAY
CARDINAL	55	48	43	48	57.1	54.1	55.4	55.5	0	0	0	0	100	40	100	80	13-MAY
PATTERSON	55	64	41	53	57.8	54.7	58.7	57.1	0	0	0	0	100	68	100	89	06-MAY
GLORY	55	72	52	59	56.6	57.6	58.3	57.5	0	0	0	0	100	81	100	94	08-MAY
BECK 103	54	54	54	54	57.1	57.1	57.1	57.1	0	0	0	0	100	100	100	32	08-MAY
2568	54	78	66	66	56.9	55.5	56.2	56.2	0	0	0	0	100	54	100	77	06-MAY
TERRA SR 205	54	54	54	54	56.1	56.1	56.1	56.1	0	0	0	0	100	100	100	32	08-MAY
AGRIPRO CLEMENS	53	73	47	57	56.5	57.1	59.5	57.7	0	0	0	0	100	81	100	94	11-MAY
NK COKER 9663	53	67	60	60	56.6	56.5	56.6	56.6	0	0	0	0	100	69	100	84	06-MAY
HOPEWELL	53	69	43	55	56.5	55.8	56.4	56.2	0	0	0	0	100	78	100	93	13-MAY
AGRIPRO FOSTER	52	64	48	54	56.5	53.7	58.0	56.1	0	0	0	0	100	61	100	87	09-MAY
FFR 555W	52	54	44	50	55.2	53.6	57.3	55.4	0	0	0	0	100	34	100	78	08-MAY
EK 309	52	52	52	52	55.0	55.0	55.0	55.0	0	0	0	0	100	100	100	31	08-MAY
2684	49	58	43	50	59.6	52.0	58.7	56.8	0	0	0	0	100	68	100	89	04-MAY
POCAHONTAS	49	39	44	44	56.8	52.4	54.6	54.6	0	0	0	0	100	26	100	63	06-MAY
TERRA SR 211	49	49	49	49	55.9	55.9	55.9	55.9	0	0	0	0	100	100	100	31	08-MAY
TERRA SR 204	49	49	49	49	58.5	58.5	58.5	58.5	0	0	0	0	100	100	100	32	09-MAY
KAS PATRIOT	48	57	44	50	57.0	53.1	58.7	56.3	0	0	0	0	100	61	100	87	07-MAY
ERNIE	48	43	44	45	56.3	54.7	57.8	56.3	0	0	0	0	100	41	100	80	05-MAY
VORIS 6044	47	47	47	47	56.3	56.3	56.3	56.3	0	0	0	0	100	100	100	31	05-MAY
VERNE	47	64	48	53	57.1	58.3	57.9	57.8	0	0	0	0	100	86	100	95	08-MAY
FFR 523W	47	66	40	51	55.2	55.4	56.2	55.6	0	0	0	0	100	70	100	90	05-MAY
EK 114	46	46	46	46	55.9	55.9	55.9	55.9	0	0	0	0	100	100	100	31	08-MAY
FFR 525W	45	58	38	47	57.6	55.3	58.4	57.1	0	0	0	0	100	41	100	80	06-MAY
JACKSON	44	49	46	46	58.1	53.1	60.6	57.3	0	0	0	0	100	18	100	73	08-MAY
EK 102	44	44	44	44	54.8	54.8	54.8	54.8	0	0	0	0	100	100	100	30	08-MAY
NK COKER 9543	44	56	46	48	57.5	55.0	60.0	57.5	0	0	0	0	100	59	100	86	06-MAY
NK COKER 9803	42	45	39	42	58.2	56.1	60.9	58.4	0	0	0	0	100	24	100	75	06-MAY
NK COKER 9704	42	42	42	42	58.5	58.5	58.5	58.5	0	0	0	0	100	100	100	28	05-MAY
CLARK	41	57	41	46	55.0	55.8	57.7	56.2	0	0	0	0	100	58	100	86	05-MAY
FEATHERSTONE 520	40	55	47	47	57.9	55.2	56.6	56.6	0	0	0	0	100	31	100	66	08-MAY
MEAN	52	60	45	52	56.8	55.3	58.2	56.8	0	0	0	0	100	56	100	85	31

CV = 11.3%

LSD(0.05) = 6.9 BU/A

* LOCATION: Lexington, Spindletop farm

The 1995, 1996, and 1997 tests at this location were treated with fungicides at the Feekes growth stage 8 and 10.5

TABLE 7 WHEAT PERFORMANCE TRIALS FOR WESTERN COAL FIELD REGION*, 1995-1997

VARIETY	-YIELD (BU/AC)-		-TEST WT (LB/BU)-		--PCT LODGED--		-PCT SURVIVAL-		PLANT HEIGHT (IN)	HEADING DATE						
	1997	1996	1997	1996	1997	1996	1997	1996								
NK COKER 9663	78	72	75	57.5	58.7	58.1	0	0	0	0	100	34	67	43	06-MAY	
2552	77	64	60	59.0	57.3	55.1	57.1	0	0	0	0	100	48	100	83	08-MAY
2540	75	76	76	57.4	56.2	56.8	0	0	0	0	0	100	51	76	39	11-MAY
BECKER	74	43	48	55.2	54.3	53.4	54.3	0	0	0	0	100	21	100	74	10-MAY
2568	73	65	69	56.2	55.5	55.9	0	0	0	0	0	100	41	71	37	06-MAY
2510	71	70	52	56.5	55.4	53.8	55.2	0	0	0	0	100	46	100	82	12-MAY
2684	70	55	50	58.7	56.9	55.1	56.9	0	0	0	0	100	20	100	73	04-MAY
GLORY	70	55	58	58.1	56.1	54.2	56.1	0	0	0	0	100	26	100	75	08-MAY
2737	69	69	69	54.0	54.0	54.0	0	0	0	0	0	100	43	71	38	10-MAY
VORIS 6044	69	61	65	55.7	57.2	56.5	0	0	0	0	0	100	40	100	40	05-MAY
CLARK	68	54	36	55.7	56.9	46.4	53.0	0	0	0	0	100	40	100	80	05-MAY
AGRIPRO CLEMENS	68	71	49	56.6	58.4	55.5	56.8	0	0	0	0	100	44	100	81	11-MAY
25R57	68	68	68	57.6	57.6	57.6	0	0	0	0	0	100	28	100	76	07-MAY
VERNE	67	62	53	57.1	57.7	54.0	56.3	0	1	0	0	100	34	100	78	08-MAY
MADISON	67	62	52	57.0	56.3	50.6	54.6	0	0	0	0	100	39	100	80	05-MAY
PATERSON	67	62	47	58.6	57.8	55.1	57.2	0	0	0	0	100	39	100	80	06-MAY
KAS JUSTICE	64	64	64	56.4	57.0	56.7	0	0	0	0	0	100	43	71	39	10-MAY
WAKEFIELD	64	43	51	55.9	53.3	55.2	54.8	0	0	0	0	100	14	100	71	09-MAY
BECK 103	64	64	64	57.0	57.0	57.0	0	0	0	0	0	100	15	100	72	08-MAY
CARDINAL	64	54	48	56.6	54.5	53.9	55.0	0	0	0	0	100	34	100	78	13-MAY
AGRIPRO ELKHART	64	69	57	59.0	59.7	57.0	58.6	0	0	0	0	100	23	100	74	06-MAY
FFR 555W	63	51	53	56.9	54.5	54.6	55.3	0	0	0	0	100	23	100	74	08-MAY
EK 114	63	63	63	56.7	56.7	56.7	0	0	0	0	0	100	23	100	79	08-MAY
AGRIPRO FOSTER	63	53	55	56.8	54.5	54.8	55.4	0	0	0	0	100	36	100	79	09-MAY
HOPEWELL	63	62	44	56.3	57.0	53.2	55.5	0	0	0	0	100	36	100	79	13-MAY
FFR 558W	63	63	63	57.8	57.8	57.8	0	0	0	0	0	100	16	100	72	09-MAY
JACKSON	62	51	55	56.3	56.5	55.3	56.0	0	0	0	0	100	31	100	77	08-MAY
KAS PATRIOT	62	61	50	55.7	57.7	54.1	55.8	0	0	0	0	100	31	100	77	07-MAY
EK 102	61	61	61	56.0	56.0	56.0	0	0	0	0	0	100	30	100	77	08-MAY
25R26	60	60	60	54.5	54.5	54.5	0	0	0	0	0	100	30	100	77	10-MAY
NK COKER 9543	59	55	44	56.5	58.0	55.4	56.6	0	0	0	0	100	30	100	77	06-MAY
TERRA SR 205	59	59	59	55.9	55.9	55.9	0	0	0	0	0	100	19	59	36	08-MAY
FEATHERSTONE 520	59	48	53	58.3	57.4	57.9	0	0	0	0	0	100	19	59	36	08-MAY
EK 309	58	58	58	55.8	55.8	55.8	0	0	0	0	0	100	15	100	72	08-MAY
FFR 525W	58	56	52	58.3	57.5	53.8	56.5	0	0	0	0	100	19	100	73	06-MAY
CALDWELL	57	51	38	55.1	58.2	56.1	56.5	0	0	0	0	100	14	100	71	09-MAY
ERNIE	57	54	42	56.9	57.8	52.4	55.7	0	0	0	0	100	19	100	73	05-MAY
NK COKER 9704	55	55	55	59.4	59.4	59.4	0	0	0	0	0	100	15	100	72	05-MAY
NK COKER 9803	55	47	49	59.5	57.9	54.6	57.3	0	0	0	0	100	15	100	72	06-MAY
POCAHONTAS	54	50	52	57.9	54.8	56.4	0	0	0	0	0	100	15	58	35	06-MAY
TERRA SR 211	52	52	52	55.4	55.4	55.4	0	0	0	0	0	100	21	100	74	08-MAY
FFR 523W	50	41	44	55.5	55.3	51.6	54.1	0	0	0	0	100	21	100	74	05-MAY
TERRA SR 204	49	49	49	58.1	58.1	58.1	0	0	0	0	0	100	29	100	76	09-MAY
MEAN	63	57	50	56.9	56.7	54.0	55.8	0	0	0	0	100	29	100	76	37

CV = 10.5%

LSD(0.05) = 7.9 BU/A

* LOCATION: Princeton

The 1995 and 1996 tests at this location were treated with fungicides at the Feekes growth stage 8 and 10.5.

TABLE 8 WHEAT PERFORMANCE TRIALS FOR SOUTHERN TIER REGION*, 1995-1997.

VARIETY	-YIELD (BU/AC)-			-TEST WT (LB/BU)-			-PCT LODGED--			-PCT SURVIVAL--			PLANT HEIGHT (IN)	HEADING DATE
	1997	1996	1995	1997	1996	1995	1997	1996	1995	1997	1996	1995		
25R26	88	88	88	55.3	55.3	55.3	0	0	0	100	100	100	40	10-MAY
GLORY	86	49	49	58.1	57.7	55.1	0	0	0	100	36	100	41	08-MAY
2552	85	58	68	59.7	58.8	57.3	0	0	0	100	53	100	40	08-MAY
NK COKER 9663	84	51	67	57.0	57.7	57.4	0	0	0	100	30	100	43	06-MAY
TERRA SR 211	83	83	83	57.2	57.2	57.2	0	0	0	100	100	100	39	08-MAY
2540	82	60	71	56.8	54.6	55.7	0	0	0	100	56	100	41	11-MAY
2510	81	63	52	55.5	58.0	56.7	0	0	0	100	65	100	41	12-MAY
25R57	81	81	81	55.5	55.5	55.5	0	0	0	100	100	100	40	07-MAY
AGRIPRO ELKHART	80	60	53	60.0	58.7	58.5	0	0	0	100	39	100	44	06-MAY
JACKSON	80	37	53	56.9	56.3	57.7	0	0	0	100	10	100	40	08-MAY
KAS PATRIOT	80	56	51	57.3	58.5	57.8	0	0	0	100	36	100	40	07-MAY
TERRA SR 205	79	79	79	56.5	56.5	56.5	0	0	0	100	100	100	41	08-MAY
MADISON	79	54	45	55.6	58.1	55.6	0	0	0	100	35	100	40	05-MAY
EK 309	79	79	79	55.8	55.8	55.8	0	0	0	100	100	100	41	08-MAY
2568	77	60	69	55.6	56.4	56.0	0	0	0	100	45	100	41	06-MAY
BECK 103	77	60	77	56.8	56.8	56.8	0	0	0	100	100	100	39	08-MAY
AGRIPRO CLEMENS	77	60	51	57.9	59.5	58.3	0	0	0	100	44	100	46	11-MAY
VORIS 6044	76	76	76	58.0	58.0	58.0	0	0	0	100	100	100	44	05-MAY
AGRIPRO FOSTER	76	51	48	57.4	56.9	56.4	0	0	0	100	26	100	42	09-MAY
BECKER	75	57	51	51.8	56.9	53.6	0	0	0	100	50	100	39	10-MAY
KAS JUSTICE	75	48	62	56.4	58.1	57.3	0	0	0	100	65	83	43	10-MAY
VERNE	74	49	53	58.0	56.3	56.8	0	0	0	100	21	100	44	08-MAY
WAKEFIELD	74	35	54	56.3	50.3	56.5	0	0	0	100	11	100	42	09-MAY
2684	74	45	49	57.4	57.1	56.3	0	0	0	100	15	100	37	04-MAY
ERNIE	73	43	39	55.9	56.6	54.6	0	0	0	100	15	100	34	05-MAY
FFR 558W	73	73	73	58.7	58.7	58.7	0	0	0	100	100	100	42	09-MAY
PATTERSON	72	67	51	58.2	57.4	58.5	0	0	0	100	61	100	44	06-MAY
FFR 555W	72	44	55	55.2	49.6	54.0	0	0	0	100	18	100	39	08-MAY
NK COKER 9803	71	30	60	58.2	56.0	58.3	0	0	0	100	10	100	36	06-MAY
TERRA SR 204	71	71	71	58.2	58.2	58.2	0	0	0	100	100	100	43	09-MAY
EK 102	70	70	70	57.9	57.9	57.9	0	0	0	100	100	100	38	08-MAY
CALDWELL	70	53	44	55.8	55.7	55.5	0	0	0	100	34	100	43	09-MAY
EK 114	70	70	70	56.1	56.1	56.1	0	0	0	100	100	100	39	08-MAY
2737	69	69	69	52.4	52.4	52.4	0	0	0	100	100	100	41	10-MAY
POCAHONTAS	68	44	56	56.3	54.6	55.5	0	0	0	100	11	100	35	06-MAY
NK COKER 9704	67	67	67	57.5	57.5	57.5	0	0	0	100	25	100	36	05-MAY
NK COKER 9543	66	42	44	53.8	59.6	55.3	0	0	0	100	9	100	35	06-MAY
FEATHERSTONE 520	66	33	49	56.7	52.4	54.6	0	0	0	100	9	100	37	08-MAY
FFR 525W	65	42	47	57.2	56.7	56.9	0	0	0	100	13	100	38	06-MAY
CLARK	65	57	42	56.7	56.3	56.5	0	0	0	100	53	100	40	05-MAY
CARDINAL	64	56	50	59.5	57.1	55.3	0	0	0	100	44	100	44	13-MAY
FFR 523W	64	50	42	52.6	55.1	53.9	0	0	0	100	26	100	32	05-MAY
HOPWELL	59	62	51	56.6	56.2	56.3	0	0	0	100	75	100	40	13-MAY
MEAN	74	50	50	56.7	56.4	56.3	0	0	0	100	34	100	78	40

CV = 8.6%

LSD(0.05) = 7.9 BU/A

* LOCATION: Christian County

The 1997 test at this location was treated with fungicides at the Feekes growth stage 8 and 10.5.

TABLE 8a WHEAT PERFORMANCE TRIALS FOR SOUTHERN TIER REGION*, 1997.

VARIETY	YIELD (BU/AC)	TEST WT (LB/BU)	PCT LODGED	PCT SURVIVAL	PLANT HEIGHT (IN)	HEADING DATE
25R57	80	55.3	0	100	41	02-May
NK COKER 9663	75	57.7	3	100	41	01-May
2552	74	59.4	0	100	40	03-May
2540	74	54.1	0	100	42	06-May
AGRIPRO ELKHART	72	58.4	0	100	42	01-May
PATTERSON	69	57.0	0	100	42	02-May
25R26	68	54.3	0	100	37	04-May
GLORY	67	53.2	0	100	39	03-May
AGRIPRO FOSTER	67	56.5	0	100	40	04-May
KAS PATRIOT	66	52.8	0	100	39	02-May
WAKEFIELD	65	52.3	5	100	41	03-May
TERRA SR 204	65	59.1	0	100	41	02-May
2684	64	55.9	0	100	36	27-Apr
TERRA SR 205	64	54.7	0	100	40	02-May
2568	64	52.9	0	100	38	01-May
VERNE	63	55.3	0	100	43	04-May
FFR 558W	63	56.1	0	100	42	04-May
BECK 103	63	52.8	0	100	39	03-May
POCAHONTAS	62	55.1	0	100	35	30-Apr
AGRIPRO CLEMENS	62	54.2	3	100	42	06-May
EK 309	62	54.5	0	100	40	04-May
HOPEWELL	61	51.8	0	100	43	10-May
KAS JUSTICE	60	53.0	0	100	41	04-May
CALDWELL	60	52.1	0	100	42	05-May
EK 102	60	54.8	0	100	37	04-May
MADISON	60	52.5	4	100	38	30-Apr
BECKER	59	51.6	0	100	38	04-May
CARDINAL	58	54.3	0	100	44	08-May
EK 114	58	54.5	0	100	39	04-May
CLARK	58	52.5	0	100	39	04-May
ERNIE	57	52.7	0	100	33	28-Apr
NK COKER 9704	57	57.1	0	100	34	30-Apr
VORIS 6044	56	51.2	0	100	40	01-May
TERRA SR 211	55	53.6	0	100	38	30-Apr
2510	54	53.4	0	100	41	03-May
2737	54	51.6	0	100	40	08-May
JACKSON	53	53.0	3	100	38	04-May
NK COKER 9803	49	56.2	0	100	35	03-May
FFR 525W	49	53.6	3	100	38	01-May
FFR 555W	47	48.5	0	100	38	03-May
NK COKER 9543	45	50.6	3	100	33	05-May
FFR 523W	40	46.9	0	100	32	02-May
FEATHERSTONE 520	40	48.5	4	100	32	30-Apr
MEAN	60	53.9	1	100	36	04-May
CV = 10.9%						
LSD(0.05) = 7.6 BU/A						
* LOCATION: Warren County						

TABLE 9 WHEAT PERFORMANCE TRIALS FOR NORTH CENTRAL REGION*, 1995-1997.

VARIETY	-YIELD (BU/AC)-			-TEST WT (LB/BU)-			-PCT LODGED-			-PCT SURVIVAL-			PLANT HEIGHT 1997			
	1997	1996	1995	1997	1996	1995	1997	1996	1995	1997	1996	1995		MEAN		
	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN	MEAN		MEAN		
2552	74	56	63	64	57.4	57.0	58.5	57.6	0	0	0	95	81	100	92	38
CLARK	70	53	49	58	55.0	55.0	55.8	55.3	0	0	0	100	75	100	92	40
HOPEWELL	63	55	47	55	54.5	55.0	55.3	54.9	0	0	0	100	74	100	91	40
2540	61	61	61	61	54.4	57.0	55.7		0	0	0	96	69	83		38
2510	59	54	48	53	52.7	57.0	56.9	55.5	0	0	0	98	83	100	93	38
2684	56	48	58	54	54.5	57.0	57.9	56.5	10	0	3	98	64	100	87	36
KAS JUSTICE	55	44	50	50	50.9	57.0	54.0		0	0	0	98	73	85		39
2737	55	55	55	55	46.6		46.6		0	0	0	98		98		38
PATTERSON	55	53	46	51	53.2	55.0	55.4	54.5	0	0	0	80	70	100	83	40
NK COKER 9663	54	51	52	52	53.5	55.0	54.3		15	0	5	91	63	77		45
GLORY	53	46	56	51	50.6	57.0	57.0	54.9	25	0	8	100	69	100	90	37
MADISON	52	54	53	53	49.0	55.0	55.7	53.2	28	0	9	100	75	100	92	38
2568	52	58	55	55	52.2	57.0	54.6		0	0	0	100	71	86		36
JACKSON	51	30	56	46	50.2	57.0	57.6	54.9	5	0	2	69	28	100	65	38
VERNE	51	47	54	51	51.5	55.0	54.4	53.6	19	0	6	100	69	100	90	41
POCAHONTAS	49	33	41	41	50.1	56.0	53.1		19	0	6	90	36	63		33
25R57	49	49	49	49	51.9		51.9		0	0	0	99		99		37
25R26	48	48	48	48	51.2		51.2		3	0	1	100		100		35
NK COKER 9704	48	48	48	48	54.3		54.3		0	0	0	91		91		33
NK COKER 9803	47	39	56	47	58.0	55.0	58.4	57.1	3	0	1	95	45	100	80	33
EK 309	46	46	46	46	50.3		50.3		0	0	0	78		78		38
WAKEFIELD	46	45	58	50	51.6	55.0	56.5	54.4	0	0	0	98	60	100	86	40
TERRA SR 205	45	45	45	45	50.5		50.5		0	0	0	95		95		39
AGRIPRO FOSTER	43	40	58	47	51.4	56.0	56.6	54.7	0	0	0	98	58	100	85	38
TERRA SR 204	43	43	43	43	50.6		50.6		18	0	6	100		100		41
AGRIPRO ELKHART	41	51	57	50	52.6	57.0	59.0	56.2	3	0	1	96	68	100	88	39
ERNIE	41	36	48	42	50.3	57.0	55.7	54.3	33	0	11	93	34	100	75	34
KAS PATRIOT	41	44	49	45	51.1	57.0	54.8	54.3	13	0	4	84	60	100	81	37
CARDINAL	41	48	49	46	45.0	55.0	55.7	51.9	2	0	1	38	53	100	63	42
TERRA SR 211	40	40	40	40	47.0		47.0		0	0	0	66		66		37
FFR 525W	40	40	55	45	50.2	56.0	58.0	54.7	39	0	13	90	35	100	75	36
BECK 103	40	40	40	40	48.1		48.1		8	0	3	95		95		36
VORIS 6044	39	39	39	39	52.1		52.1		33	0	11	99		99		39
BECKER	39	44	51	45	49.5	55.0	51.4	52.0	0	0	0	100	60	100	87	34
FFR 523W	38	44	50	44	45.0	55.0	55.7	51.9	0	0	0	75	54	100	76	32
FFR 555W	37	45	52	45	44.2	56.0	54.2	51.5	0	0	0	88	50	100	79	35
FFR 558W	37	37	37	37	52.3		52.3		0	0	0	100		100		39
CALDWELL	37	31	35	35	48.3	55.0	55.6	53.0	0	0	0	88	30	100	73	39
EK 102	36	36	36	36	47.7		47.7		0	0	0	94		94		36
AGRIPRO CLEMENS	32	52	48	44	49.7	57.0	56.7	54.5	43	0	14	100	79	100	93	43
FEATHERSTONE 520	31	38	35	35	50.3	55.0	52.7		45	0	15	100	45	73		35
EK 114	30	30	30	30	42.2		42.2		3	0	1	94		94		37
NK COKER 9543	30	43	49	41	52.3	55.0	56.7	54.7	30	0	10	100	64	100	88	33
MEAN	46	46	52	48	50.8	55.9	56.2	54.3	9	0	3	92	60	100	84	37

CV = 15.8%

LSD(0.05) = 8.6 BU/A

* LOCATION: Shelby County

TABLE 10 - DISEASE RATINGS OF WHEAT VARIETIES IN 1997.¹

VARIETY ²	LEAF RUST ³	LEAF BLOTCH ⁵	GLUME BLOTCH ⁵	POWDERY MILDEW ⁵	WSSMV ⁴
CALDWELL	S	VS	VS	VS	S
VERNE	VS	S	S	MS	MR
CARDINAL	VS	VS	S	VS	MS
CLARK	S	VS	VS	S	R
BECKER	S	VS	VS	VS	MS
MADISON	VS	S	MS	MS	R
WAKEFIELD	VS	S	S	MS	S
AGRIPRO FOSTER	S	MR	MS	MR	MS
NK COKER 9803	S	S	MR	MR	MS
FFR 555W	VS	VS	S	MS	MS
NK COKER 9543	R	VS	S	S	MS
2510	MS	MS	MS	VS	R
PATTERSON	MR	S	MS	S	MR
AGRIPRO CLEMENS	MR	VS	MR	VS	MS
ERNIE	VS	S	S	S	MS
NK COKER 9663	VS	--	--	R	S
2684	S	MR	MR	MR	MS
JACKSON	VS	MR	--	MR	S
AGRIPRO ELKHART	MS	S	MR	S	S
KAS PATRIOT	MS	--	--	R	MS
FFR 523W	VS	MR	MR	VS	VS
FFR 525W	VS	VS	MR	R	R
2552	VS	VS	MR	MR	R
2568	S	--	--	MR	R
2540	MR	--	--	R	R
GLORY	VS	S	MS	MS	R
HOPEWELL	VS	VS	S	R	MR
FFR 523W	MS	S	MR	R	S
KAS JUSTICE	VS	--	--	MS	MS
POCAHONTAS	--	--	--	R	S
FEATHERSTONE 520	--	--	--	R	S
EK 114	--	--	--	S	S
EK 102	--	--	--	S	S
EK 309	--	--	--	S	S
25R26	VS	--	--	MR	MR
25R57	--	--	--	R	S
2737	MS	--	--	S	MR
FFR 558W	VS	--	--	MS	S
NK COKER 9704	--	--	--	R	S
BECK 103	--	--	--	R	MS
TERRA SR 204	MS	--	--	MR	MS
TERRA SR 205	MS	--	--	MS	MS
TERRA SR 211	MR	--	--	R	MS
VORIS 6044	VS	--	--	S	MS

¹VS=VERY SUSCEPTIBLE; R=RESISTANT; MR=MODERATELY RESISTANT; S=SUSCEPTIBLE; MS=MODERATELY SUSCEPTIBLE; (--)=INSUFFICIENT OPPORTUNITY TO RATE IN PRESENCE OF DISEASE.
²In general, varieties with a VS or S reaction to a given disease will not perform well if that disease becomes severe, while varieties rated R or MR will perform well in those situations. Varieties with an MS reaction will have an intermediate response.
³Ratings of newly released varieties based on 1 yr. and 1 location.
⁴Based on disease progress and final disease level. Ratings were made in 1995. Some selected varieties were rated in 1997.
⁵Wheat spindle streak mosaic virus, 1997 ratings.
⁶Disease pressure was not sufficient in 1997 to make ratings on all varieties. Data shown on the table are the 1995 ratings with some selected varieties rated in 1997.

TABLE 11 CHARACTERISTICS OF BARLEY VARIETIES TESTED IN 1997.

VARIETY	PROTECTED	SOURCE	RELEASE DATE	YIELD (BU/AC)	TEST WEIGHT (LB/BU)	LODGING (%)	PLANT HEIGHT (IN.)	SURVIVAL (%)	HEADING DATE
CALLAO	YES	VIRGINIA	1994	82.0	47.3	5.8	33.8	100.0	28-APR
WYSOR	NO	VIRGINIA	1985	75.9	44.0	0.0	41.0	100.0	03-MAY
PAMUNKEY	YES	VIRGINIA	1993	73.1	45.5	0.8	38.3	100.0	28-APR
STARLING	YES	VIRGINIA	1993	72.3	42.9	8.3	39.8	100.0	03-MAY

MEAN = 75.8 BU/A

CV = 11.3%

LSD(0.05) = 5.9 BU/A

¹The CV is a measure of experimental error. The lower the CV the more reliable the results.

² The LSD (Least Significant Difference) is the minimum difference required for two varieties to be significantly different from one another.

³ "Unauthorized propagation prohibited." Seed of these varieties must be sold by variety name only as a class of certified seed. This includes varieties for which protection has been applied and those for which protection has been granted.

TABLE 12 BARLEY PERFORMANCE TRIALS FOR BLUEGRASS REGION*, 1994, 1995, 1997.

VARIETY	-YIELD (BU/AC)-			-TEST WT (LB/BU)-			-PCT LODGED-			-PCT SURVIVAL-			PLANT HEIGHT (IN) 1997	HEADING DATE 1997			
	1997	1995	1994	MEAN	1997	1995	1994	MEAN	1997	1995	1994	MEAN					
CALLAO	46	58	95	66	47.5	45.4	51.4	48.1	0	23	3	8	100	100	100	28	28-APR
WYSOR	38	65	108	70	40.6	41.2	48.7	43.5	0	14	1	5	100	100	100	35	03-MAY
PAMUNKEY	37	61	105	68	45.7	44.8	49.7	46.7	0	4	0	1	100	100	100	33	28-APR
STARLING	21	69	115	68	42.8	38.8	48.0	43.2	0	3	0	1	100	100	100	34	03-MAY
MEAN	35	62	103	67	44.2	41.7	50.1	45.3	0	27	1	9	100	100	100	32	

CV = 10.4%

LSD(0.05) = 4.7 BU/A

* LOCATION: Lexington, Spindletop Farm

TABLE 13 BARLEY PERFORMANCE TRIALS FOR WESTERN COAL FIELD REGION*, 1995-1997

VARIETY	-YIELD (BU/AC)-		-TEST WT (LB/BU)-		-PCT LODGED--		-PCT SURVIVAL--		PLANT HEIGHT (IN) 1997	HEADING DATE 1997								
	1997	1996	1997	1996	1997	1996	1997	1996										
CALLAO	98	53	69	73	48.2	46.4	48.2	47.6	0	0	0	0	100	8	100	69	36	28-APR
WYSOR	90	68	88	82	46.8	42.4	45.3	44.8	0	0	0	0	100	21	100	74	44	03-MAY
STARLING	88	62	79	76	44.4	43.0	43.8	43.7	0	0	0	0	100	14	100	71	42	03-MAY
PAMUNKEY	86	31	80	65	46.5	38.1	48.6	44.4	0	0	0	0	100	2	100	67	41	28-APR
MEAN	90	46	67	68	46.5	43.4	45.9	45.3	0	0	0	0	100	9	100	70	41	

CV = 12.8%

LSD(0.05) = 14.9 BU/A

* LOCATION: Princeton

TABLE 14 BARLEY PERFORMANCE TRIALS FOR SOUTHERN TIER REGION*, 1995-1997.

VARIETY	-YIELD (BU/AC)-		-TEST WT (LB/BU)-		-PCT LODGED--		-PCT SURVIVAL--		PLANT HEIGHT (IN) 1997	HEADING DATE 1997								
	1997	1996	1997	1996	1997	1996	1997	1996										
STARLING	109	71	91	90	41.5	45.3	40.3	42.4	25	0	43	23	100	20	100	73	44	03-MAY
CALLAO	103	70	106	93	46.3	48.0	46.0	46.8	18	0	70	29	100	18	100	73	38	28-APR
WYSOR	101	74	87	87	44.6	46.4	44.5	45.2	0	0	43	14	100	31	100	77	45	03-MAY
PAMUNKEY	97	50	100	82	44.3	48.9	46.5	46.6	3	0	1	1	100	6	100	69	42	28-APR
MEAN	102	63	84	83	44.2	46.3	43.9	44.8	6	0	23	10	100	20	100	73	42	

CV = 8.4%

LSD(0.05) = 11.1 BU/A

* LOCATION: Christian county