Table 18.—Spring Oat Performance Trials for All Regions of Kentucky, 1978-801.

Conservable		Yield	Bu/A	110	Tes	ar Weig	ht Lb	/Bu	De	te Hea	ded Ju	me
Variety	1980	1979	1978	Avg	1980	1979	1978	Avg	1980	1979	1978	As
Andrey	55	74	76	68	35.4	38.5	36.5	36.8	3	2	5	ġ
Bates	49	75	91	72	35.6	38.0	35.4	36.3	1	1	5	. 3
Clintford	49	62	69	60	37.2	39.4	38.2	38.3	3	1	5	1
Lang	53	77	87	72	33.3	35.7	35.1	34.7	1	1	2	1
Otee	48	65	83	65	36.6	38.0	36.0	36.9	3	1	5	
1		Height	Ins.		Gr	ams/10	00 See	d				
Variety	1980	1979	1978	Avg	1980	1979	1978	Avg				
Andrey	32	45	42	40	26.0	30.9	29.0	28.6				
Bates	26	38	36	33	26.3	29.7	29.8	28.6				
Clintford	27	35	34	32	29.1	32.4	32.7	31.4				

1/ Location was Lexington in 1978, 1979 and 1980. Lodging was zero in all years.

35

34 31

35 33

Lang

Otee

27.7 33.9 33.4 31.7

24.3 26.4 26.5 25.7

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Kentucky Small Grain Variety Trials—1980

W.E. Vian, V.C. Finkner, C.R. Tutt, W.H. Roberts, and K.M. Tichenor

Progress Report 250



UNIVERSITY OF KENTUCKY

COLLEGE OF AGRICULTURE
Agricultural Experiment Station

Department of Agronomy
Lexington

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In 1980 Kentucky produced more wheat (13.65 million bushels) than had been produced in Kentucky since 1900. In 1900 the record amount was produced (19.88 million bushels) on a near record acreage (1.42 million acres). Average yield in 1900 was 14 bu/a while the 1980 average yield was 39 bu/a. Record high average yields for Kentucky were produced in 1971 for wheat (40 bu/a) and barley (59 bu/a) and in 1970 for oats (47 bu/a).

Table 1.—Small Grain Harvested Acreage and Yields in Kentucky 1978-1980*

	19	80	19)	79	1978			
CROP	Harvest 1,000A	Yield Bu/A	Harvest 1,000A	Yield Bu/A	Harvest 1,000A	Yield Bu/A		
Wheat	350	39	290	38	195	35		
Barley	28	53	25	50	23	43		
Oats	6	44	8	41	7	42		
Rye	3	26	4	24	4	27		

*August 11, 1980 Crop Production, ESCS, USDA, Washington, D.C.

Small grain performance tests were conducted in six of the seven agroclimatic 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.

Acknowledgement is made to William Green, William Hendrick, Tom Amos, and Jack Snyder, county Extension agents for agriculture, for assistance in locating test sites and collecting data.





Region	Location	Cooperator	Crop Tested
1. Purchase	Mayfield	Mr. Paul Payne	Wheat
2. Western Coal Field	Princeton (Sandstone soil)	Research & Education Center—Princeton	Barley, Wheat
3. Ohio Valley	Henderson	Mr. Walter Gooch	Wheat
4. Bluegrass	Lexington	Kentucky Agricul- tural Experiment Station	Barley, Winter Oats, Wheat, Spring Oats
5. Southern Tier	Hopkinsville Princeton (Limestone soil)	Mr. Harry Young Research & Education Center—Princeton	Barley, Wheat Barley, Winter Oats, Wheat
6. North Central	Elizabethtown	Mr. Allen Baugh	Barley, Wheat

The objective of the Kentucky small grain variety trials is to evaluate varieties of barley, wheat, and oats 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. Suggested varieties are revised each year because of the availability of new varieties, improvements in production practices, and continually changing disease and insect hazards.

EXPERIMENTAL METHODS

The plots were planted with a specially built multi-row cone seeder. Each plot consisted of four or six rows to form a plot 4 feet wide, which was later trimmed to 10 feet in length. Each variety was grown in four 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 3 years are listed in Table 2.

Table 2.—Region, Location, Preceding Crop and Planting Dates of Kentucky Small Grain Trials 1978-1980.

Region	Location	Preceding	Crop		Planting Dat	e
		Crop		1980	1979	1978
Purchase	Mayfield	Sovheans	Wheat	10/17	_	191
rurenuse	Murray	Soybeans	Wheat		10/12	10/31
	in ising	sugara.	Barley	-	10/12	10/31
			Winter Oats	10 Million	10/12	10/31
Western Coal	Princeton	None	Barley	10/16	i ke i	
Field	(Sandstone soil)		Winter Oats	10/16		-
			Wheat	10/16	-	-
Ohio Valley	Henderson	Soybeans	Wheat	10/19	10/16	-
Bluegrass	Lexington	None	Barley	10/17	10/18	10/18
			Winter Oats	10/9	10/6	10/20
			Spring Oats	4/3	3/22	3/30
			Wheat	10/15	10/10	10/25
Southern Tier	Hopkinsville	Corn	Barley	10/18	17.17.11.10	11 -
			Wheat	10/18	1 . +	1100
	Princeton	None	Barley	10/11	10/10	10/17
	(Limestone soil)		Winter Oats	10/11	10/4	10/17
			Wheat	10/11	10/17	10/17
North Central	Elizabethtown	Corn	Barley	10/18	10/20	-
			Wheat	10/18	10/20	10/21

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 gives a more accurate picture of varietal performance than does annual data.

DATA COLLECTED

It is important to consider other characteristics in addition to grain yield when selecting a variety.

Grain yield of most plots was taken by cutting all rows with a self-propelled combine. The grain yields for barley and oats at Lexington and barley at Elizabethtown were taken by cutting each plot and threshing grain with a Vogel type stationary plot thresher. The weights of each plot were recorded in grams and converted to bushels per acre.

Test weight, or the weight of a bushel of grain, is a measure of the quality of the grain. The higher the test weight, the higher the quality and market value, unless the grain has been down-graded because of another quality factor.

Lodging was recorded as the percentage of the total plants lying on the ground or leaning at a 45-degree angle from the vertical when the grain was mature. The term "maturity" as used in this report refers to the date the grain was ready to be combine harvested.

Plant height was recorded as the number of centimeters from the ground to the tip of the upright grain head, and converted to inches.

Survival was recorded as the percentage of plants estimated to have survived the winter. This is a measure of winterhardiness and is an important factor to consider when selecting a variety.

Heading date is reported as the date when 50% of the heads had emerged from the plants in each plot. This is also a measure of maturity and is important when selecting a variety for use in a doublecropping system.

Grams per thousand seeds is a measure of seed size and seed quality. Planting rates can be adjusted by knowing seed size. Poor quality grain is usually low in weight per thousand seeds.

Disease and insect data are reported as relative amounts that occurred on the varieties at the time the readings were made. Disease and insect problems are often different in different years.

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 3-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 and 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.

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1980 TEST CONDITIONS

The 1980 crop was seeded at near normal times and conditions in the fall of 1979. The winter season was also near normal with very little winter killing. Unseasonably warm temperatures did occur for several days in January and February, but the small grain plants maintained their winter-hardened condition and survived subsequent cold weather. Heading dates were earlier than normal, but spring freeze damage did not occur. Cooler than normal temperatures in May and June helped to alleviate below normal precipitation. Harvest was accomplished without unusual weather related delays.

Head scab disease caused considerable damage to late heading wheat. Scab was most severe in wheat planted in no-till corn fields where the above-ground corn residue served as a scab source. Barley yellow dwarf, wheat leaf rust, wheat spindle streak mosaic virus, wheat mildew, and barley scald were observed but caused minimal yield losses. Again this year, the cereal leaf beetle continued to expand its territory but caused little yield loss.

1979 TEST CONDITIONS

In contrast to the 1977 fall seeding weather, the 1978 fall seeding weather was near ideal. The first half of October was wet, but the latter half of October and the first half of November were mostly warm and dry, allowing good development of the small grains. The second half of November was cooler and wetter than normal. December had mild temperatures with above normal precipitation causing floods. Only a trace of snow occurred in December. January was colder and wetter than normal, averaging almost 9 degrees below normal, making it the fifth coldest January on record. February was also colder and wetter than normal, with temperatures about 8 degrees below normal and one inch plus of precipitation above normal. December through February was the seventh coldest winter on record.

March was about 6 degrees above normal with three inches below normal precipitation. Cool wet conditions prevailed through April and May, causing the spring of 1979 to be the latest on record. Precipitation and temperature averaged above normal for the month of June. The greater than normal winter rainfall kept soils in a high moisture condition and resulted in more plant heaving damage than usual. This was true for all small grains, but was especially severe in barley. The plant heaving and colder than normal winter temperatures resulted in severe winter killing of barley and oats in some areas of the state. Winter killing of wheat was only slight (less than 5%) but the wet spring caused some localized water damage areas. Many wheat diseases occurred, but wheat spindle streak mosaic virus was the most severe infection recorded since 1974. Scab on wheat and barley was frequently observed in many fields.

The prevalence of the cereal leaf beetle continued to increase. Most plants in the spring oat test at Lexington had their flag leaves destroyed by beetle feeding.

1978 TEST CONDITIONS

The fall planting period was marked by rainy, wet soil conditions which reduced the acres planted by many small grain farmers. An early snowfall on Thanksgiving weekend stopped almost all fall small grain growth. The remainder of November and the rest of the winter months were cold. Below zero temperatures were reported in December and January with snow depths of 15 to 20 inches over most of the state. February was the coldest February on Weather Service records. Below seasonal temperatures were recorded in March and April.

Winter killing of fall seeded small grains was severe, resulting in the complete loss of some barley and oat fields. A similar winter killing occurred in our small grain breeding nursery at Lexington, with a nearly complete loss of barley and oats and even a 15% reduction in stand of the more winter-hardy varieties of wheat. The nurseries at other locations had winter killing, but it was not as severe as that at Lexington. The reported yield of the varieties closely correlates to winter survival.

Many small grain diseases were observed, but the severity was not any greater than normal except for Scab (*Fusarium* spp.) on wheat. The variety Doublecrop had the most severe infection. Cereal leaf beetle infestation in the Lexington nurseries was the heaviest ever observed.

SMALL GRAIN VARIETIES FOR 1981

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 10.

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 11-14. Varieties now commonly grown are Barsoy and Volbar.

Table 3.-Characteristics of Wheat Varieties Tested in 1980.

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. Arthur and Abe are the two most widely grown varieties.

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Winter oats are the least winterhardy of the winter grains. Early seeding, good fertilization practices, and planting on well-drained soils are recommended to minimize winter killing. Winter oats are also excellent for grazing and silage. Performance of the winter oat varieties is presented in Tables 15-17. Varieties now commonly grown are Compact, Norline, and Walken.

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The only small grain suitable for spring seeding by farmers in Kentucky is spring oats. Spring oats are used mainly for hay or silage, and as a companion crop for grasses and legumes. Grain and forage yields of spring oats are lower than those of the winter oat varieties when yields of winter oats are not severely reduced from winter killing or disease. Two spring oat varieties (Otee and Jaycee) are commonly grown because of their higher level of resistance to Barley Yellow Dwarf Virus (oat red leaf). Performance data are listed in Table 18.

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 which 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.

				_	A	verage o	f 1980 T	ests		
Variety P	rotected 1/	Source	Release Date	Bu/A		Lbs	/Bu	heading than Doublecrop		
				21oc.	61oc.	Zloc.	6 loc.	Zloc.	6loc.	
Abe	Yes	Indiana	1972	56	52	58.5	59.9	5	6	
Arthur	No	Indiana	1968	63	58	59.2	60.2	.4	5	
Artimer 71	Yes	Indiana	1971	61	53	59.4	60.4	6	0	
Coker 762	Yea	Coker's Pedi- greed Seeds	1979	63	57	51.8	54.6	8	8	
Dancer	Yes	N. American Plant Breed- ers	1977	57	54	59.4	60.6	5	.0	
Doublecrop	NO	Arkansas	1975	57	55	60.0	60.8	0	0	
Hart	No	Missourl	1976	67	61	59.4	59.6	5	6	
McNair 1003	Yes	Northrup King Seeds	1977	79	70	56.1	57.0	5	6	
Gasis	'Yen	Indiana	1973	59.	56	\$9.0	60.5	6	6	
Rosen	No	Arkansas	1079	57	59	56.0	57.1	- 4	5	
876	Tes	Pioneer Hi Bred Int'I	1976	68	63	58.4	59.1	7	В	
\$78	Yes	Pioneer Hi Bred Int'l	1978	65	61	56.8	58.3	8	9	
Voris 8018	Tes	Voris Seeds		65	65	54.1	56.8	4	5	
Benu	Yes	Indiana	1976	66		59.9	-	6		
Centurk-2/	Yes	Nebraska	1971	49	++	57.6		6	-	
Coker 747	Yes	Coker's Pedi- greed Seeds	1977	72		\$5.2		7	1	
Downy	Yes	Indiana	1976	62		58.2		6.	-	
McNair 1813	Yes	Northrup King Seeds	1976	72	70 1	56.2		4.		
Roland	No	Illinois	1977	64	-	56.7		8	-	
Boy	Yes	N. Carolina	1979	65	-	54.4		6	10	
Ruler	Yes	Ohio	1975	55		55.2	-	9	14	
Sulltvan	Yes	Indiana	1977	59	100.00	59.8	-1	5	-	
THE R P. LEWIS CO., NAME OF TAXABLE	Van	Ohto	1978	68		54.8		10		

1/ "Unauthorized propogation 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.

2/ Centurk is a hard red winter wheat.

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				-	-A	verage o	NI 1380 L	rsts	
Variety 1	rotected 1/	Source	Release	Bu/	A	Lbs	s/Bu	Days headir Doub	later ng than lecrop
				21oc.	61oc.	21oc.	6 loc.	21oc.	61oc.
Abe	Yes	Indiana	1972	56	52	58.5	59.9	5	6
Arthor	No	Indiana	1968	63	58	59.2	60.2	4	5
Arthur 71	Yes	Indiana	1971	61	53	59.4	60.4	6	1.6
Coker 762	Yes	Coker's Pedi- greed Seeds	1979	63	57	51.8	54.6	8	8
Dancer	Yes	N. American Plant Breed- ers	1977	57	:54	59.4	60.6	5	6
Doublecrop	No	Arkansas	1975	57	53	60.0	60.8	0	0
Harr	No	Missouri	1976	67	61	59.4	59.6	5	6
McNair 1003	Yes	Northrup King Seeds	1977	79	70	56.1	57.0	5	6
Gasie	fen	Indiana	1973	59	56	59.0	60.5	6	6
Rosen	No	Arkansas	1979	57	59	56.0	57.1	4	5
\$76	Yes	Pioneer Hi Bred Int'I	1976	68	63	58.4	59.1	7	8
S7B	Yes	Pioneer Hi. Bred Int'1	1978	65	61	56.8	58,3	8	9
Voris 8018	Yes	Voris Seeds		65	65	54.1	56.8	.4	5
Beau	Yes	Indiana	1976	66	-	59.9		6	
Centurk	Yes	Nebraska	1971	49		57.6		6	191
Coker 747	Yes	Coker's Fedi- greed Sends	1977	72	-98	55.2		7	24
Downy	Yes	Indiana	1976	62		58.2		6	
McNalr 1813	Yes	Northrup King Seeds	1976	72		56.2	-	4	-
Roland	No	Ellinois	1977	64		56.7	-	8	-
Roy	Yes	N. Carolina	1979	65	-	34.4		6	
Ruler	Yes	Ohio	1975	55		35.2		9	-
Sullivan	Yes	Indiana	1977	39	(and	59.8		5	
Tiran	Yest	Ohio	1978	68		54.8		10	-

1/ "Unauthorized propogation prohibited." Seed of these variaties must be sold by variety name only as a class of certified seed. This includes variaties for which protection has been applied and these for which protection has been granted.

2/ Centurk is a hard red winter wheat.

Table 4.—Wheat Performance Trials for Purchase Region, 1978-801.

Varlety		Yi	eld			Test	Weis	tht			1	Lodg	ing	
		b	a/A			1	b/bu					z,		
1.1.5	1980	1979	1978	mean	1980	1979	1	78	mean	19	80 1	979	1978	nea
Abe	47	36	49	- 44	61.6	61.0	51	.3	60.0		0	0	0	0
Arthur at	51	25	41	39	61.9	59.9	57	.8	60.0		0	0	0.	0
Arthur 712	50	22	26	33	61.7	. 59.6	51	1.5	59.6		0	0	0	.0
Coker 762	66	26	36	43	58.3	55.0	1 54	.2	55.8		0	0	0	-0
Dancer	49	-	-		61.4			-			0			-
Doublecrop	61	26	40	42	62.0	61.4	. 57	1.0	60.1		0	0	0	0
Hart	46			-	60.4			-			0			-
McNair 1003	65	20	38	41	58.5	54.3	5	1.6	55.3		0	0	0	0
Oanis	52	30	39	40	62.1	60.6	58	8.6	60.4		0	0	0	0
Rosen	63	21	67	14.14	58.2	56.6	51	6.0	56.9		0	0	0	0
\$76	45	16	32	31	60.3	57.3	57	1.4	58.3		0	0	0	0
\$78	54	23	41	39	59.5	56.8	5	1.2	57.8		0	0	0	0
Voris 8018	76	-		-	59.5			-			0	0	0	0
Variety	PI	ant F	leight		-	Sur	vival		1	-	Date	: Hea	ided	7
		Ir					z					May		
11.25	1980	1979	1978	Mean	1980	1979	1978	Mean	1	1980	1979	197	8 Me	m
Abe	38	34	34	35	100	89	88	92		8	6	11		8
Arthur a/	:41	35	36	37	100	86	75	86		7	7	10	1	8
Arthur 71-	40	31	34	35	100	83	20	68		8	10	17	1	2
Coker 762	38	27	31	32	100	86	33	73		7	11	22	1	3
Dancer	45		-		100					9	-		-	-
Doublecrop	43	36	35	38	100	86	63	83		2	1	7		3
Hart	39	-	-		100					9	-			-
McNair 1003	40	-30	35	35	100	83	- 44	76		8	9	14	1	0
Oasis	41	34	36	37	100	81	51	77		9	10	14	1	1
Rosen	38	30	34	34	100	76	64	80		5	8	12		8
\$76	.37	-30	31	33	100	81	69	77		12	14	13	1	4
0.54	16	29	33	33	100	76	68	81		13	12	16	1	4
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 $\underline{1}/$ The locations where the trial was grown were 1978, Murray; 1979, Murray; 1980, Mayfield.

2/ The germination of the meed lot planted in 1978 was approximately 602.

Table 5.—Wheat Performance Trials for Western Coal Field Region, 1978-801.

Variety		Yi	eld		14	Test	Weig	tht			Loc	iging	
		ъ	u/A			1	b/bu					z	
	1980	1979	1978	nean	1980	1979	15	978	mean	198	80 1979	1978	near
1.1.1.1						-			44.4				
Abe	50	53	30	44	58.3	59.6	60	1.0	59.3	55	0	0	20
Arthur 2/	63	42	27	44	58.7	60.2	60	0.7	59.9	24	0	0	ő
Arthur 71-	61	late	9	38	59.2	60.3	56	5.0	58.5	33	24	0	19
Coker 762	45	46	27	39	49.2	54.8	56	5.1	54.1	75	5	0	28
Dancer	55				58.7	-				65			
Doublecrop	59	40	27	42	59.1	59.9	55	9.9	59.6	61	3	0	21
Hart	67			-	58.7		1.1	÷ . .		24			100
McNair 1003	76	48	37	54	55.2	55.3	56	5.7	55.7	5	8	0	. 4
Oasis	53	45	19	39	58.9	59.9	56	i.9	58.6	41	34	0	25
Rosen	53	58	26	46	54.6	56.8	58	1.7	56.7	0	0 (0	0
\$76	66	56	33	52	57.8	59.8	60	1.2	59.3	6	0	0	2
S78	67	70	29	55	56.8	58.5	60	1.7	58.7	C	0 0	0	0
Beau -	70	37	29	45	60.5	60.7	60	.7	60.6	0	23	0	7
Centurk 3/	37	51	33	40	56.2	58.4	61	.1	58.6	70	36	0	35
Coker 747	68	54	25	49	54.1	58.6	60	0.3	57.7	0	48	0	16
Downy	62		-		57.9	100		1010		68			
McNair 1813	71	3.8	15	41	57.9	59.0	55	5.7	57.5	15	0	0	6
Reland	66	56	33	52	55.4	58.4	59	0.0	57.6	0	0	0	0
Roy	67	-	1	2	51.8		1	-		13			-
Buler	4.8	40	35	41	53.5	55.0	57	.4	35.3	3	23	0	9
Sullium	57	47	19	41	59.5	59.9	57	1.7	59.0	58	18	0	25
Titon	61	12.	22	22	55.6					5	24	-	-
Voris 8018	65	-		+-	53.0		-	-		21	-		
Variety	Pl	ant F	leight	4		Surv	ival			3	Date B	eaded	-
	1980	11 1979	1978	Mean	1980	1979	1978	Mean	2	1980	1979 1	978 Me	ban .
and the second second	10	- 20	20	-26	100	84	84	90		Q.	10	14 1	11
ADC	17	20	41	20	100	RA	66	83		g .	10	15 1	11
Arthur 712/	47	30	25	37	100	85	7	66		10	11	22 1	4
ATCHUT /1-	30	39	26	12	100	83	33	72		11	18	26 1	8
CORET 781	30	31	20	34	100	0.0	12	1		9		_	-
Dancer	10	20		10	100	85	76	86		3	5	8	5
Doublecrop	42	23	34	30	100	9.7	2	-		10			-
Hart.	42	26	24	27	100	76	199	77		9	13	19 1	4
MCNAIT 1003	44	32	33	30	100	80	40	76		10	10	21 1	14
Oasis	43	91	31	39	100	22	61	83		8	11	16 1	12
Rosen	42	30	30	37	100	0.0	8.8	02		12	15	19	15
576	42	30	32	37	100	00	66	94		13	16	21 1	17
\$78	40	35	29	32	100	93	60	00		10	13	16 1	13
Beau 3/	45	37	31	38	100	00	80	0.4		10	16	19	15
Centurk-	47	45	36	43	100	89	0.4	23		1.2	10	10	16
Coker 747	47	35	24	30	100	.43	37	0.1		3.1	1.0		
Downy	46				100		20	10		4.4	12	10	13
McNair 1813	47	37	28	37	100	00	29	03		12	13	10	15
Roland	43	34	29	32	100	89	19	89		1.0	4.4	10	
Roy	45			10	100					10	10	21	10
Ruler	47	41	35	41	100	91	84	41		19	10	13 1	1.0
Sullivan	66	60	29	38	100	-86	. 59	80		9	10	TV I	1.6
Titan	46		77	-	100			~		15			-
Joris BD18	44				100			-		8	-		

 $\underline{1}/$ The locations where the trial was grown were 1978, Princeton; 1979, Princeton; 1980, Princeton.

2/ The germination of the seed lot planted in 1978 was approximately 60%.

3/ Hard Red Winter Wheat

Table 7.-Wheat Performance Trials for Bluegrass Region, 1978-801.

Table 6.—Wheat Performance Trials for Ohio Valley Region, 1978-801.

N DIEL

Variety		YL	eld.			Test	Weight	hart	10		Lodg	ing	
		b	u/A			11	/bu				x		
	1980	1979	1978	nean.	1980	1979	1978	sean	1	980	1979	1978	near
Abe	58	72		65	61.2	59.9		60.6		0	79		40
Arthur 2/	56	73)		70	61.7	61.0		61.4		0	45		23
Archur 71	62	67		65	62.0	60.3		61.2		0	40		25
Coker 762	68	62		65	56-0	52.2		54 1		ő	26		23
Dancer	60			14	62.2					ő			
Doublecros	58	64		61	62.9	50.8		61 4		ñ	32		4.7
Hart	68	1		-	60.7	"adden		0.4.1.4		8	33		-47
McNair 1003	71	26		79	57.6	58.0		57.0		0	32		17
Oasis	67	68		58	61 8	60.6		61 1		0	3.5		20
Rosien	65	26		71	58.0	57.0		01.1		0	49		23
\$76	6.0	81		25	50.0	80.0		37.3		8	44		22
878	0.9	22		13	50.3	29.0		60.2		0	10		2
Voels 0016	20	10		1.0	39.4	20.0		29+2		0	28		14
Variety	PL	ant He	ight			Survi	val	-		Dat	e Hea	fed	
		in				3					May		
	1980	979 1	978 M	-iars	1980	1979 1	978 Mean	1	1980	197	9 197	3 Mea	m
Abe.	36	40	-	8	100	100	100		11	10		11	
Arthur 2/	42	41	4	2	100	100	100		11	10		11	
Arthur 71	60	40	1	0	100	100	100		11	12		12	
Coker 762	36	34	3	15	100	100	100		14	14		14	
Dancer	-45	and in		-	100				11	-		-	
Doublecrop	41	39	1	0	100	100	100		4	3		4	
Mart	-61	2			100	22			11	-			
McNair 1003	40	39	1	0	100	100	100		13	12		13	
Ousta	41	62	1	2	100	100	100		11	11		11	
Roman	36	37		17	100	100	100		10	0		10	
476	30	30		ed.	100	100	100		12	1.9		13	
678	36	24		14	100	100	100		12	12		14	
District Brite	30	20		11	100	300	100		13	14		19	
VIT 13 -8018.	1			-	100.				.11	-			

 $1^{/}$ The locations where the trial was grown were 1978, No test conducted; 1979, Henderson; 1980, Henderson.

2/ The germination of the seed lot planted in 1978 was approximately 60%.

ariety		YI	eld			fest	Weigh	6		Lo	dging	
		b	u/A			15	/bu				2	
COST TO	1980	1979	1978	mean	1980	1979	197	8 mean	198	0 197	9 197	8 mm
Abe	62	38	45	48	58.7	55.1	58.	7 57.5	0	48	0	I
Arthur	62	37	43	47	59.7	56.2	58.	9 58.3	0	62	1	2
Arthur 71-	61	26	31	39	59.6	52.7	\$7.	5 .56.6	0	71	0	2
Coker 762	82	50	44	50	56.3	49.5	54	7 52.8	D	43	0	1
Dancer	50				60.2				0	-		1.2
Doublector	55	20	AD.	45	60.8	65.7	60	3 60 6	0	18	0	
linet	67		40		60.1	2004.1		3 99.9	0	1.0	9	
McNate 1003	83	66	46	63	57.0	10 1	84	2 84 2	0	66	0	
Coale 1003	62	33	90	01	27.0	49.4	20.	3 39.6		71	0	
Janis	09	33	30	90	39.2	24.2	20.	0 37.3	0	11		-
nosen .	10	33	48	4/	57.4	67.8	2/ .	0 04.2	D.	40		-1
576	70	37	40	51	59.1	52.0	58.	/ 56.6	0	0	0	
578	69	41	.95	50	56.9	50.4	58.	0 55.1	0	35	0	1
Beau 3/	62	38	40	47	59.3	55.6	59.	0 58.0	0	19	0	
Centurk-	62	26	59	49	58.9	46.4	60.	1 55.1	15	- 91	9	-3
Coker 747	75	29	40	.48	56.4	49.8	59.	2 55.1	0	60	0	2
Downy	62				58.5	and i			Ú.	-		-
McNair 1813	73	52	17	67	54.4	44.8	56.	2 51.8	0	21	0	7
Roland	61	33	41	45	58.0	44.6	56.	6 53.1	0	16	1	
Roy	62		_	-	56.9		-		0		2	
Ruler	62	32	59	51	56.9	44.8	58.	9 53.5	ō.	0	1	
Sullivan	60	36	36	46	60.1	54 9	50	1 58.0	0	50	0	1.1
CITAN	77	30	44		54 0			1 30.0		1	8	
Landa RATE	10	_	-		59.7	(TT)					-	
	-										_	
Variety	ī	lant	Heigh	e		Sur	vival		-	Date	Heade	eđ
Variety	Ŧ	lant	Heigh	it.		Sur	vival		-	Date	Heade	ed
Variety	1980	lant 1975	Heigh In 1978	it Mean	1980	Sur 1 1979	viva1 2 1978	Mean	1980	Date 1979	Heade Iny 1978	ed Mean
Variety	1980 40	lant 1975 41	Heigh In 0 1978 37	t Mean 39	1980	Sur 1979	viva1 2 1978 90	Mean 97	1980	Date 1979 13	Heade Iny 1978 22	ed Mean 17
Variety Abe Arthur 2/	1980 40 44	1 1975 41 45	Heigh In 0 1978 37 38	Mean 39 42	1980 100 98	Sur 1979 100 100	2 1978 90 91	Mean 97 96	1980 17 16	Date 1979	Heado (ny 1978 22 22	ed Mean 17 17
Variety Abe Arthur Arthur 71 ^{2/}	1980 40 44 42	lant 1975 41 45 44	Heigh In 0 1978 37 38 31	Mean 39 42 39	1980 100 98 99	Sur 1979 100 100 99	vival 2 1978 90 91 30	Mean 97 96 76	1980 17 16 12	Date 1979 13 13 14	Head (ny 1978 22 22 26	2d Mean 17 17 19
Variety Abe Arthur 712/ Arthur 712 Coker 762	1980 40 44 42 35	lant 1975 41 45 44 34	Heigh In 0 1978 37 38 31 30	Mean 39 42 39 33	1980 100 98 99 94	Sur 1979 100 100 99 95	vival 2 1978 90 91 30 68	Mean 97 96 76 86	1980 17 16 17 29	Date 1979 13 13 14 15	Headd (ay 1978 22 22 26 28	ed Mean 17 17 19 21
Variety Abe Arthur Arthur 712/ Coker 762 Dancer	1980 40 44 42 35 43	1 1975 41 45 44 34	Heigh In 0 1978 38 31 30	t Mean 39 42 39 33 	1980 100 98 99 94 95	Sur 1979 100 100 99 95	xival 1978 90 91 30 68	Mean 97 96 76 86	1980 17 16 17 20 17	Date 1979 13 13 14 15	Headd (ny 1978 22 22 26 28 	2d Mean 17 17 19 21
Variety Abe Arthur 71 ^{2/} Coker 762 Dancer Doublecrop	1980 40 44 42 35 43 42	1 1975 41 45 44 34 42	Heigh In 0 1978 38 31 30 34	Mean 39 42 39 33 39	1980 100 98 99 94 95 98	Sur 1979 100 100 99 95 100	2 1978 90 91 30 68 74	Mean 97 96 76 86 	1980 17 16 17 20 17 12	Date 1979 13 13 14 15 10	Heade 1978 22 22 26 28 19	2d Mean 17 17 19 21
Variety Abe Arthur Arthur 712/ Coker 762 Dancer Doublecrop Bart	1980 40 44 42 35 42 42	1 1975 41 45 44 34 42	Heigh 10 1978 37 38 31 30 34	Mean 39 42 39 33 	1980 100 98 99 94 95 98	Sur 1979 100 99 95 100	vival 2 1978 90 91 30 68 74	Mean 97 96 76 86 	1980 17 16 12 20 17 12 16	Date 1979 13 13 14 15 10	Heade 1978 22 22 26 28 	ed Mean 17 17 19 21
Variety Abe Arthur 712/ Arthur 712 Coker 762 Dancer Doublecrop Hart NoNatr 1003	1980 40 44 42 35 43 42 42 41	1 1975 41 45 44 34 42 42	Heigh 10 1978 37 38 31 30 	Mean 39 42 39 33 	1980 100 98 99 94 95 98 99	Sur 1979 100 100 99 95 100	vival 2 1978 90 91 30 68 	Mean 97 96 76 86 91 90	1980 17 16 12 20 12 12 16 12	Date 1979 13 13 14 15 10 	Headd (ny 1978 22 23 26 28 	2d Mean 17 17 19 21 14 14
Variety Abe Archur 712/ Archur 712 Dancer Doublecrop Bart NcNair 1003 Oanis	1980 40 44 42 35 43 42 42 42 42 42 42	1 1975 41 45 44 34 42 42 42 44	Heigh 1978 37 38 31 30 	Mean 39 42 39 33 39 33 39 41	1980 1980 99 94 95 98 99 95 97	Sur 1979 100 100 99 95 100 99 100	2 1978 90 91 30 68 74 75 78	Mean 97 96 76 86 91 90 92	1980 17 16 12 20 17 12 12 16 17	Date 1979 13 13 14 15 10 	Heade (ny 1978 22 22 26 28 	2d Mean 17 17 19 21 14 18 18
Variety Abe Arthur 72/ Coker 762 Daublecrop Bart McNair 1003 Ossis Romen	1980 40 44 42 35 43 42 42 41 43 37	1975 41 45 44 34 42 42 42 42 42 438	Heigh 1978 37 38 31 30 34 33 34 33 36 36	Mean 39 42 39 33 	1980 98 99 94 95 98 99 95 97 97 97	Sur 1 1979 1 100 100 99 95 	vival 2 1978 90 91 30 68 	Mean 97 96 76 86 91 90 92 92	1980 17 16 12 20 12 12 16 17 17	Date 1979 13 13 14 15 10 12 14 12	Headd (ay 1978 22 22 26 28 19 24 24 24 23	Mean 17 17 19 21 14 18 18
Variaty Abe Arthur 12/ Arthur 712/ Coker 762 Daublecrop Bart McNair 1003 Oasis Romen S76	1980 40 44 42 35 43 43 43 42 41 43 378	1975 41 45 44 34 42 42 42 42 43 839	Heigh 10 1978 37 38 31 30 34 33 36 34 33	Mean 39 42 39 33 	1980 100 98 94 95 95 95 95 95 95 95 95 95	Sur 1 1979 1 100 100 99 95 100 	vival 2 1978 90 91 30 68 74 75 78 80 91	Mean 97 96 76 86 	1980 17 16 17 12 12 16 17 12 16 17 17	Date 1979 13 13 14 15 10 12 14 12 14 12	Heade (ay 1978 22 23 26 28 19 24 24 24 23	ed Mean 17 17 19 21 14 18 18 17
Variaty Abe Arthur 712/ Arthur 712 Dancer Doublecrop Bart McNair 1003 Oasis Rosen S76 S78	1980 40 44 42 42 42 42 42 43 37 38	1ant 1975 41 45 44 34 42 42 44 38 395	Heigh 1978 37 38 31 30 	Mean 39 42 39 33 39 39 41 36 37	1980 98 99 94 95 98 99 95 97 99 95 97 99	Sur 1979 100 100 99 95 	2 1978 90 91 30 68 	Mean 97 96 76 86 	1980 17 16 12 29 12 12 12 12 12 12 12 17 17 17 18	Date 1979 13 13 14 15 10 12 14 12 14 12	Heade (ny 1978 22 26 28 24 26 28 24 24 23 24 25	ed Mean 17 17 19 21 14 18 18 17 19 20
Variety Abe Arthur 72/ Coker 762 Dancer Doublecrop Bart McNair 1003 Oasis Romen S76 S78 Beau	1980 40 44 42 42 42 42 42 41 37 38 37 38	1 19799 41 45 44 34 42 42 42 44 38 39 35 5 22	Heigh 1978 37 38 31 30 34 33 36 34 33 36 34 33 32 27	Mean 39 42 39 33 39 41 36 37 34	1980 98 99 95 98 99 95 98 97 97 97 99 95 97 97 99 95 97 97 99 95 95 95 95 95 95 95 95 95 95 95 95	Sur 1979 100 100 99 95 100 	vival 2 1978 90 91 30 68 	Mean 97 96 76 86 91 90 92 93 96 94	1980 17 16 17 12 12 12 16 17 17 17 18 20	Date 1979 13 13 14 15 10 	Heade (ny 1978 22 22 26 28 19 	Mean 17 17 19 21 14 18 18 18 18 17 19 200
Variety Abe Arthur 712/ Arthur 712/ Coker 762 Daublecrop Bart NoNair 1003 Oasis Romen S76 S78 Beau S78	1980 40 442 35 43 42 41 43 378 36 39	1 1979 41 41 44 44 44 44 44 42 	He1gh 10 1978 37 38 31 30 	Mean 39 42 39 33 39 41 36 37 34 39 41 36 37 34	1980 98 99 94 95 98 99 95 95 95 95 95 95 95 95 95 95 95 95	Sur 1 1979 1 100 1 100 1 100 99 95 100 100 100 100 99 100	2 1978 90 91 30 68 74 75 78 80 91 83 93	Mean 97 96 76 86 	1980 17 16 12 29 12 12 12 16 17 17 17 18 20 18	Date 1979 13 13 14 15 10 	Heade 1978 22 22 26 19 24 24 23 24 25 23	Mean 17 17 19 21 14
Variety Abe Arthur 712/ Coker 762 Dancer Doublecrop Hart McNair 1003 Oasis Rosen S76 S78 Beau Centurk Coher 742	1980 40 44 42 35 42 42 42 42 43 37 38 36 39 45	1 1979 41 1979 41 45 44 45 44 45 44 45 44 45 44 45 42 44 43 8 9 35 42 41	Heigh 10 1978 37 38 31 30 	Mean 39 42 39 33 39 41 36 37 36 37 34 39 43	1980 98 99 94 95 98 99 95 97 99 95 97 99 96 96 96	Sur 1979 100 100 99 95 	xival 1978 90 91 30 68 74 -75 78 80 91 83 93 93 98	Mean 97 96 76 86 	1980 17 16 12 20 17 12 16 17 17 17 18 20 18 18	Date 1979 13 13 14 15 10 12 14 12 14 12 15 16 15 17	Headd (ny 1978 22 22 26 28 24 24 24 23 24 25 23 24	Mean 17 17 17 19 21 14 18 18 18 17 19 20 19 20
Variaty Abe Arthur 12/ Arthur 712/ Coker 762 Daublecrop Bart NcNair 1003 Oasis Romen S76 S78 Beau S76 S78 Beau 2 Coker 747 Down	1980 40 44 42 35 42 42 41 42 41 43 7 38 36 39 9 45 43	1 1 1979 41 45 44 45 44 45 44 45 44 45 44 45 44 42 42 44 43 8 39 5 35 42 41 38	Height 1978 36 31 30 30 30 30 30 30 30 30 33 33 32 37 42 32	Mean 39 42 39 33 	1980 98 99 94 95 98 99 95 97 99 99 96 96 96 96 96	Sur 1 1979 1 000 99 95 100 100 100 100 100 100 100 10	2 1978 90 91 30 68 74 75 75 80 91 83 93 98 93 98 79	Mean 97 96 76 86 	1980 17 16 17 12 12 12 12 12 12 12 12 12 12 12 12 12	Date 1979 13 13 14 15 10 	Headd (ny 1978) 22 22 26 26 27 26 26 27 24 24 23 24 25 24 25 24 25 24 25	Mean 17 17 19 21 14 14 18 18 18 18 17 19 20 19 20 20
Variaty Abe Arthur 712/ Arthur 712 Doublecrop Bart McNair 1003 Oasis Rougen S76 S78 Beau Centurk Ocher 747 Douby Leaver 1200	1980 40 44 42 343 42 41 43 37 38 36 39 45 36 39 45 36 39	1 1979 41 1979 41 45 44 42 42 42 42 438 39 35 42 41 38	Height 197895 37 36 31 30 33 36 33 36 34 33 36 33 32 37 42 32 	Mean 39 42 39 33 39 41 36 37 37 37 34 38 43 38	1980 98 99 95 95 98 99 95 97 99 95 96 96 96 96 96 96 98 98	Sur- 1 1979 1000 99 95 99 1000 1000 1000 1000 1000 1000	2 1978 90 91 30 68 74 75 78 80 91 83 93 83 93 879 	Mean 97 96 76 86 	1980 17 16 12 20 17 12 16 17 17 17 17 17 18 20 18 18 21 18	Date 1979 13 13 14 15 10 	Headd Iny 1978 22 22 24 23 24 23 24 25 23 24 24 25 23 24 25 24 25 26 27 26 27 27 26 27 27 27 27 27 27 27 27 27 27	ed Mean 17 17 19 21 14 18 18 18 18 17 19 20 20 20
Abe Arthur 2/ Arthur 72/ Coker 762 Daubiecrop Hart Rowen S76 S78 Beau Centurk Coker 747 Downy McNair 1813	1986 40 44 42 35 43 42 41 437 38 36 39 45 43 45 43 45 43	11ant 119797 41 45 44 44 42 44 42 44 438 335 42 41 41 41 42 44 44 44 44 44 44 44 44 44 44 44 44	Height 19788 37 36 31 30 	Mean 39 42 39 33 39 41 36 37 34 36 37 34 38 38 38	1980 99 94 95 98 99 96 97 97 97 97 97 97 97 97 97 97 97 97 97	Sur 1 1979 1 100 100 99 95 100 100 100 100 99 100 100 99 100 99 100 99 100 99 100 99 95 100 100 99 95 100 100 100 100 100 100 100 10	2 1978 90 1978 90 68 	Mean 97 96 76 86 91 90 92 93 96 94 99 94 99 95 95 96 99 93 66	1980 17 16 12 20 12 12 16 17 17 18 20 17 17 18 20 18 18 18 18 18	Date 1979 13 13 14 15 10 12 14 12 14 12 14 12 15 16 15 17 14 12 12	Heade (ny 1978 22 22 26 28 	2d Mean 17 17 19 21 14
Variety Abe Arthur 712/ Arthur 712 Coker 762 Daublecrop Bart NoNair 1003 Oasis Romen S76 Beau Centurk3 Coher 747 Downy McNair 1813 Roland	1986 40 44 42 43 5 43 43 43 43 43 36 43 36 43 36 43 36 43 38 43 38 43 38 43 38 43 38 43 38 43 38 43 38 43 38 43 38 43 43 38 43 44 44 44 44 44 44 44 44 44 44 44 44	1 1975 41 45 44 42 42 42 44 43 8 39 39 5 42 41 38 39 5 42 41 38 39 5 42 41 38 39 5 42 41 39	In Height 1978 37 36 31 30 30 34 31 30 34 32 32 32 32 32 33	Mean 39 42 39 33 	1980 98 99 94 95 98 99 95 99 95 99 96 99 96 99 96 99 96 99 96 99 96 99 90 97 99 90 90 90 90 90 90 90 90 90 90 90 90	Sur- Sur- 1 1979 100 99 100 100 100 100 100 100 100 100	xival 2 1978 90 91 30 68 74 75 80 91 83 93 93 93 98 79 13 33	Mean 97 96 76 86 	1980 17 16 17 17 17 17 17 17 17 18 200 18 18 21 18 21 18 21 18 21 18 21 19 19 19 19 19 19 19 19 19 19 19 19 19	Date 1979 13 13 14 15 10 	Heade (ny 1978 22 22 26 28 - 19 - - 24 24 25 24 24 25 23 24 24 25 23 24 24 26 23 24 24 24 25 22 22 24 24 22 22 22 22 22 22 22 22 22	ed Mean 177 17 19 21 14 18 19 200 200 200 200 200 200 200 200 200 20
Variety Abe Arthur 712/ Arthur 712/ Coker 762 Dancer Daubiecrop Hart McNair 1003 Oasis Rosen S76 S78 Beau Centurk ² Coker 747 Downy McNair 1813 Roland Roy	1980 40 44 42 42 41 43 35 43 42 42 41 37 38 37 38 37 38 43 37 45 43 43 43 43 44 44 44 44 45 45 45 45 45 45 46 46 46 46 46 46 46 46 46 46 46 46 46	1 1979 411 45 44 45 44 45 44 45 44 45 44 45 42 42 44 43 83 9 35 5 42 41 38 41 38 41 39 9 9 9 9	In 1978 37 36 31 31 36 31 33 36 34 33 36 34 33 32 37 37 32 32 32 33	Mean 39 42 39 33 39 41 36 37 34 38 38 37 37	1980 99 94 95 98 99 95 98 99 95 97 99 96 96 96 96 96 96 96 96 96 96 96 96	Sur 1 1979 1 100 9 99 9 95 	2 1978 90 91 30 68 	Mean 97 96 76 86 	1980 17 16 17 17 17 18 16 17 17 18 18 18 18 18 18 16 19 19 17	Date 1979 13 14 15 10 12 14 15 16 15 16 17 14 15 15 15 16 17 15 16 15 16 15 16 16 17 17 16 16 16 16 16 16 16 16 16 16	Heade (ny 1978 22 22 26 28 24 26 28 24 23 24 25 23 24 24 25 23 24 24 26 24 26 24 26 24 26 24 26 26 26 26 26 26 26 26 26 26 26 26 26	ed Mean 17 17 19 21 14 18 18 18 17 19 20 20 20 18 19 20 20
Variaty Abe Arthur 712/ Arthur 712/ Coker 762 Daublecrop Bart Coker 762 Daublecrop Bart NeNair 1003 Oasis S78 Beau S76 S78 Beau 2/ Coker 747 Douny NeNair 1813 Roland Rolar	1980 40 42 42 42 42 42 42 42 42 42 43 35 34 5 43 36 43 36 43 36 43 38 8 43 43 44 44 44	1 1979 41 45 44 45 44 45 44 45 44 45 42 44 43 8 39 35 42 41 38 39 42 41 41 39 42 42 41 41 42 44 44 42 44 44 44 44 44 44 44 44 44	In 1978 1978 37 38 31 30 	Mean 39 42 39 33 	1980 98 99 94 95 98 99 95 97 99 96 99 96 99 96 99 96 99 96 99 98 96 99 98 96 99 98 96 99 98 96 99 98 96 99 98 99 96 99 98 98 99 99 99 99 99 99 99 99 99 99	Sur- Sur- 1 1979 1 100 1 000 9 95 - 9 95 - 9 9 100 100 100 100 100 100 100 10	vival 2 1978 90 91 30 68 74 75 78 80 91 33 93 93 93 93 93 93 93 93 93	Mean 97 96 76 86 	1980 17 16 17 17 12 19 17 12 16 17 17 17 17 18 18 20 18 18 18 18 18 19 10 12 12 20 20 20	Date 1979 13 14 15 10 - 12 14 12 15 16 15 17 14 15 - 22	Hondo (ny 1978 22 22 26 28 19 24 25 23 24 25 23 24 25 23 24 26 24 25 23 24 26 23 24 25 23 24 25 26 27 27 26 26 27 26 26 27 26 26 27 26 26 27 26 26 27 26 26 27 26 26 27 26 26 26 27 26 26 27 26 26 27 26 26 27 26 26 27 26 27 26 26 27 27 26 26 27 26 27 27 26 27 27 26 27 27 27 26 27 27 27 27 27 27 27 27 27 27 27 27 27	201 17 17 19 21 14 18 18 17 19 20 20 20 20 20 20 20 20 20 20 20 20 20
Variaty Abe Arthur 712/ Arthur 712/ Coker 762 Dancer Boublecrop Bart McNair 1003 Oasis S76 S78 Beau S76 S78 Beau Centurk Coker 747 Downy McNair 1813 Roland Roy Ruler Sullivan	1980 40 44 35 43 42 41 43 37 38 43 36 39 9 45 38 43 42 43 36 39 9 45 38 43 44 44 38 40 44 44 44 38 40 44 44 44 38 45 38 45 45 45 45 45 45 45 45 45 45 45 45 45	1 1979 411 455 444 45 444 42 	In 197884	Mean 39 42 39 33 39 41 36 37 34 38 38 38 38 38 38 37 40 41	1980 98 99 95 95 98 99 95 97 99 96 96 96 96 96 96 96 96 96 96 96 96	Sur- Sur- 1 1979 1000 99 95 - 100 100 100 100 100 100 100	2 1978 90 91 30 68 -74 -75 78 80 91 83 93 93 93 93 93 -13 33 -96 37	Mean 97 96 76 86 	1980 17 16 17 17 12 29 17 12 16 17 17 18 18 18 18 18 18 18 19 17 20 17	Date 1979 13 14 15 10 -12 14 15 16 15 17 14 -12 15 -22 14	Headd (ny 1978 22 22 23 24 24 24 25 23 24 24 24 25 23 24 24 24 25 23 24 24 25 23 24 25 23 24 24 25 25 26 28 29 26 27 26 28 29 26 28 29 26 28 29 26 26 27 26 28 26 28 26 27 26 27 26 27 26 27 26 27 26 27 26 27 26 27 26 27 26 27 26 27 26 27 26 27 26 27 26 27 26 27 26 27 26 27 27 26 27 27 26 27 27 26 27 27 27 27 27 27 27 27 27 27	ed Mean 17 17 19 21 14
Abe Arthur 22/ Arthur 72/ Coker 762 Dancer Doublecrop Hart McNair 1003 Oasis Rosen S76 S78 Beau Coker 747 Doomy McNair 1813 Roland Roland Roland Sullivan Titan	1986 40 44 42 42 42 42 42 42 42 42 42 43 36 39 39 36 45 38 6 45 38 45 43 340 45 42 23 80 45 42 23 80 45 42 42 42 42 42 42 42 42 42 42 42 42 42	1 1979 41 45 44 42 42 42 44 43 8 35 42 41 42 42 44 43 8 35 42 41 42 42 44 44 42 44 44 42 44 44 44 44 44	Heigh 1978 1978 1978 1978 37 36 31 30 31 30 31 34 34 33 34 34 35 37 37 42 32 32 37 37 37 37 36 34 34 35 34 34 34 34 34 35 36 36 36 36 36 36 36 36 36 36	Mean 39 42 39 33 39 41 36 37 34 36 37 34 38 37 34 38 37 40 41	1980 99 94 95 98 99 95 97 97 99 96 96 96 96 96 96 96 96 96 96 96 96	Sur- Sur- 1 1979 1 100 9 99 95 100 100 100 100 100 100 99 100 100	2 1978 90 91 30 68 	Mean 97 96 76 86 91 90 92 93 96 94 96 99 99 93 66 57 98 60	1980 17 16 17 16 17 17 17 17 17 17 17 17 17 17 17 17 18 20 18 18 21 18 16 19 17 20 17 21 21 21 21 21 21 21 21 21 21 21 21 21	Date 1979 13 13 14 15 10 -12 14 12 14 15 16 15 17 14 -22 14 -22 14 -22 -22 -22 -22 -22 -22 -22 -2	Hoadd (ny 1978 22 22 22 23 24 25 23 24 25 23 24 25 23 24 25 23 24 25 23 24 25 23 24 25 24 25 24 25 24 25 26 27 27 26 27 27 26 27 27 26 27 27 26 27 27 26 27 27 26 27 26 27 27 26 27 27 26 27 27 26 27 27 26 27 27 26 27 27 26 27 27 27 27 27 27 27 27 27 27	ed Mean 17 17 19 21 18 18 18 17 19 20 20 20 20 20 18 19 20 20

2/ The germination of the seed lot planted in 1978 was approximately 60%

3/ Hard Red Winter Wheat

Table 8.—Wheat Performance Trials for Southern Tier Region, 1978-801.

Variety		Yi	eld			Test	Weigt	nt.			Loc	iging	
		b	u/A			1	b/bu					X,	
	1980	1979	1978	mean	1980	1979	197	8 🗉	ean	1980	1975	1.978	3 meas
Abe	57	46	37	47	61.6	60.7	54.	7 5	9.0	10	0	20	10
Arthur	59	49	44	51	61.9	60.9	56.	1 5	9.6	20	0	6	9
Arthur 712/	52	43	42	46	61.7	60.7	55.	2 5	9.2	33	0	8	14
Coker 762	55	43	34	44	55.7	54.0	51.	6 5	3.8	41	0	0	14
Dancer	56				61.4	-		2	-	48			-
Doublecrop	59	45	26	43	62.0	61.7	54.	1 5	9.3	18	0	0	.6
Hart	68	-	-	-	61.1	-			-	5			100
McNair 1003	75	46	50	57	58.3	55.6	51.	9 5	5.3	0	0	0	D
Oasis	56	49	40	48	62.1	60.7	53.	7 5	8.8	25	0	28	18
Rosen	65	51	43	53	57.5	57.9	53.	7 5	6.4	1	0	14	5
576	76	46	46	56	60.3	59.B	54.	9 5	8.3	3	0	0	1
\$78	61	48	47	52	59.5	\$9.8	55.	5 5	8.3	8	0	5	4
Voris 8018	63		-		58.0		-		1	27	0	0	0
Variety	P	lant	Heigh	Ľ		Sur	vival			Ţ	ate l	leaded	
	1000	1070	1079	Magn	1080	1070	1078	Maran		1020 1	Ma	iy 079 w	
	4.900	7313	1310	nyan	1900	19/9	1310	ciean.	1	1900 1	919-1	210 6	ue an
Abe	44	37	35	39	100	94	100	98		11	6	8	в
Arthur a	47	39	38	41	1.00	93	99	97		11	6	8	8
Arthur 714	45	38	38	40	100	88	66	85		11	8	10	10
Coker 762	39	32	.30	34	100	85	25	70		14	12	20	15
Dancer	48	-	-		100			-		12			
Doublecrop	45	39	38	41	100	91	96	96		6	2	3	4
Hart	47.				100		-			11			-
McNair 1003	43	38	36	39	100	86	73	86		11	8	12	10
Oasis	46	39	38	41	100	89	95	95		11	9	9	10
Rosen	1.h	35	35	38	100	89	89	96		10	7	9	9
	19-9												
\$76	Tala.	35	35	38	100	- 91	95	95		11	10	14	12
\$76 \$78	44	35 34	35 34	38 37	100	91 93	95 93	95 95		11 14	10 12	14	12

 $\underline{1}/$ The locations where the trial was grown were 1978, Elkton; 1979, Elkton; 1980, Hopkinsville,

 $\underline{2}$ / The germination of the seed lot planted in 1978 was approximately 60%.

Table 9.—Wheat Performance Trials for North Central Region, 1978-801.

Variety		Yi	eld			Test	Weig	ght:				Lod	ging	
		b	u/A			1	b/bu						z	
	1980	1979	1978	mean	1980	1979	15	978	mean	19	980	1979	1978	mean
Abe	40	41	33	38	58.6	60.1	57	.7	58.8	1	0	0	0	0
Arthur 7/	49	40	29	39	58.5	60.6	58	1.4	59.2		0	0	0	0
Arthur 71-	35	36	14	28	58.6	60.6	53	.5	57.6		0	0	0	0
Coker 762	39	tote	22	35	53.8	56.8	50	.2	53.6		0	Ð	0	0
Dancer	44			-	59.3	-		-			0			-
Doublecrop	34	38	27	33	57.9	60.7	60	.0	59.5		0	0	0	0
Hart	48	-	-		56.4	-					0		-	-
McNair 1003	50	36	31	39	55.4	58.8	52	.8	55.7		0	0	0	0
Oasis	42	44	25	37	59.2	60.7	56	.3	58.7		0	0	0	0
Rosen	49	47	32	43	56.9	58.6	56	.5	57.3		0	0	0	0
s76	55	39	42	45	56.8	59.7	58	.9	58.5		0	0	0	ö
578	49	41	32	41	56.6	58.8	56	.9	57.4		õ.	0	0	ö
Voris 8018	45		-		56.5		-				0	-		
ariety	Fl	ant H	eight			Surv	vival				Dat	e Hea	aded	
/ariety	Fl	ant H	eight	1		Surv	ival				Dat	e Hea	aded	
Variety	F1 1980	ant H in 1979	eight 1978	Mean	1980	Surv 1979	rival 2 1978	Mean		1980	Dat 197	e Hea May 9 19	aded 78 Mer	sn
Variety	F1 1980 32	ant H in 1979 34	eight 1978	Mean 33	1980	Surv 1979 98	ival 2 1978 61	Mean 86		1980	Dat 197	e He: May 9 19	aded 78 Mas	an 3
/ariety .be withur	F1 1980 32 35	ant H in 1979 34 34	eight 1978	Mean 33 35	1980 100 100	Surv 1979 98 88	ival 1978 61 84	Mean 86 91		1980 15 14	Dat 197 11	e He: May 9 19	aded 78 Mes 11	sm 3 3
Variety Sbe Nrthur 712/	F1 1980 32 35 33	ant H In 1979 34 34 35	eight 1978	Mean 33 35 34	1980 100 100	Surv 1979 98 88 97	ival 2 1978 61 84 60	Mean 86 91 86		1980 15 14 15	Dat 197 11 12 11	e Her May 9 19	aded 78 Mes 11 12 13	sm 3 3 3
Variety Nother Nother 71-2/ Josker 762	F1 1980 32 35 33 29	ant H 1979 34 35 30	eight 1978	Mean 33 35 34 30	1980 100 100 100 100	Surv 1979 98 88 97 95	ival 2 1978 61 84 60 59	Mean 86 91 86 85		1980 15 14 15 19	Dat 197 11 12 11	e Hea May 9 19	aded 78 Mes 13 13 13 13	833 3 7
Variety Sbe Wrthur 712/ Joker 762 Jancer	F1 1980 32 35 33 29 35	ant H 1979 34 35 30	eight 1978	Mean 33 35 34 30 	1980 100 100 100 100	Surv 1979 98 88 97 95	2 1978 61 84 60 59	Mean 86 91 86 85		1980 15 14 15 19 15	Dat 197 11 12 11 15	e He: May 9 19	aded 78 Mes 13 13 13 13	sm 3 3 7
Variety Nobe Wrthur 712/ Noker 762 Jancer Joublecrop	F1 1980 32 35 33 29 35 32	ant H 1979 34 35 30 	eight 1978	Mean 33 35 34 30 	1980 100 100 100 100 100	Surv 1979 98 88 97 95 92	2 1978 61 84 60 59 80	Mean 86 91 86 85 91		1980 15 14 15 19 15 10	Dat 197 11 12 11 15 -	e He: May 9 19	aded 78 Mei 13 13 13 13	sm 3 3 3 7 5
Variety whe withur withur 71 ^{2/} Joker 762 Jancer Janker Janker	F1 1980 32 35 33 29 35 32 32 34	ant H 1979 34 35 30 	eight 1978	Mean 33 35 34 30 	1980 100 100 100 100 100 100	Surv 1979 98 88 97 95 95 92	2 1978 61 84 60 59 	Mean 86 91 86 85 91		1980 15 14 15 19 15 10 16	Dat 197	e He: May 9 19	aded 78 Mei 11 12 13	an 3 3 3 7 7
Warlety whe withur withur 712/ wherer whole wherer whole	P1 1980 32 35 33 29 35 32 34 34	ant H 1979 34 35 30 	eight 1978	Mean 33 35 34 30 34 30 34 30	1980 100 100 100 100 100 100 100	Surv 1979 98 88 97 95 	2 1978 61 84 60 59 	Mean 86 91 86 85 91 81		1980 15 14 15 19 15 10 16 17	Dat 197 11 12 11 15 6 	e Hei May 9 19	aded 78 Mea 13 13 13 13 13 13 14 14 14 14 14 14 14 14 14 14 14 14 14	an 3 3 3 7
Variety Nariety Var	P1 1980 32 35 32 35 32 34 35	ant H 1979 34 34 35 30 	eight 1978	Mean 33 35 34 30 34 34 35 36	1980 100 100 100 100 100 100 100 100	Surv 1979 98 88 97 95 	2 1978 61 84 60 59 80 	Mean 86 91 86 85 91 81 81 90		1980 15 14 15 19 15 10 16 17 14	Dat 197 11 15 6 	e Hea May 9 19	78 Mea	an 3 3 3 7
Variety Note Not	F1 1980 32 35 33 29 35 32 34 34 34 35 32	ant H in 1979 34 35 30 	eight 1978	Mean 33 35 34 30 	1980 100 100 100 100 100 100 100	Surv 1979 98 88 97 95 92 92 98 99 99 98	2 1978 61 84 60 59 80 46 71 58	Mean 86 91 86 85 91 		1980 15 14 15 19 15 10 16 17 14 15	Dat 197 11 15 6 	e Hes May 9 19	78 Mes 12 13 13 13 14 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	un 3 3 3 7 7 5 3 3 3
Variety lbe Wrthur 712/ Soker 762 Jancer Sobblectop Lart IcNair 1003 Maifin Josen 76	F1 1980 32 35 32 35 32 34 34 35 32 34 35 32 34 35 32 34 35 32 34	ant H inn 1979 34 35 30 36 36 37 34 32	eight 1978	Mean 33 35 34 30 34 35 36 33 33	1980 100 100 100 100 100 100 100 100 100	Surv 1979 98 88 97 95 	1978 1978 61 84 60 80 46 71 58 66	Mean 86 91 86 85 91 81 90 85 88		1980 15 14 15 19 15 10 16 17 14 15 17	Dat 197 11 12 11 15 	e Her May 9 19	aded 78 Mei 11 11 12 12 12 12 12 12 12 12 12 12	un 3 3 3 7 7 5 3 3 3 5 5
Variety be withur 71 ^{2/} Joker 762 Jancer Joublecrop iart foNair 1003 tasis Josen 176	F1 1980 32 35 32 35 32 34 35 32 34 35 32 33 31	ant H in 1979 34 35 30 36 37 34 36 37 34 32 31	eight 1978	Mean 33 35 34 30 	1980 100 100 100 100 100 100 100 100 100 1	Surv 1979 98 88 97 95 92 98 99 98 99 98 98 99	2 1978 61 84 60 59 	Mean 86 91 86 85 81 90 85 88 82		1980 15 14 15 19 15 10 16 17 14 15 17 14	Dat 197 11 12 13 	e He: May 9 19)	78 Mea 13 13 13 13 13 13 14 14 14 14 14 14 14 14 14 14 14 14 14	un 3 3 3 7 - 5 3 3 5 5 5 5 5

1/ The locations where the trial was grown were 1978, Elizabethtown; 1979, Elizabethtown; 1980, Elizabethtown.

2.7 The germination of the seed lot planted in 1978 was approximately 60%.

Table 10.—Characteristics of Barley and Oat Varieties Tested in 1980.

North Cole

					avg Al	1 1980 Tests
Variety	Protected	Origin	Release Date	Bu/A	Lbs/Bu	Days later heading than Baraby
		Winter 1	Jarley			
Barsoy	No	Kentucky	1966	64	51.1	.00
Ky 1	No	Kentucky	1935	45	46.6	16
faury	No	Virginia	1977	60	46.0	13
tonroe	No	Virginia	1976	57	45.0	14
Perry	No	Minnouri	1977	48	49.3	10
lke	Yes	Indiana	1975	55	48.0	06
Surry	No	Virginia	1976	55	46.0	08
/olbar	No	Tennessee	1974	71	45.6	11
		Winter	Oats			
Brooks	No	N. Carolina	1979	79	33.6	21
Coker 716	ĭes	Coker Seed	1971	96	35.3	19
Compact	No	Kentucky	1969	73	36.3	27
Cv67-695	Experimental	Kentucky		79	36.7	27
Sorline	No	Indiana	1960	74	35.4	27
ennvin	No	Pennsylvania	1973	76	34.7	29
States 76-30-2/	Yes	Southern States Coop	1980	88	35.7	19
Walken	Na	Kentucky	1970	84	36.2	31
		Spring	Oats			
Andrew	No	Minnesota	1949	55	35.4	-39
lates	No	Missouri	1976	49	35.6	37
lintford	No	Indiana	1966	49	37.3	39
Lang	Yes	Illinois	1976	53.	33.3	37
Otee	No	Illinois	1973	48	36.6	39

1/ "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.

2/ Previously tested and listed as Coker 76-30.

Table 11.—Winter Barley Performance Trials for Western Coal Field Region, 1978-80¹.

Variety	Yield Bu/A	Survival Z	Test Weight Lbs/Bu	Heading Date	Height Inches	Lodging X	Seed Weight Grams/1000 seed
Barsoy	41	85.	51.9	4/25	28	00	31.5
Ky 1	30	81.	48.4	5/14	36	00	33.1
Maury	34	84	47.8	5/12	29	00	32.1
Monroe	23	74	44.9	5/15	26	00	29.5
Perry	24	82.	50.1	5/9	27	00	31.7
Pike	13	68	48.8	5/6	21	00	28.5
Surry	18	61.	47.1	5/9	26	00	28.5
Volbar	49	69	44.0	5/7	36	00	36.7

 $1\!/$ The location in 1980 was Princeton sandstone soil. Tests were not grown in 1978 and 1979.

Table 12.—Winter Barley Performance Trials for Bluegrass Region, 1978-80.

Variety		Yiel	Bu/	1	I Survival			a1	Test Weight Lbs/Bu			Bu
	1980	1979	1978	Avg.	1980	1979	1978	Avg.	1980	1979	1978	Avg.
Barsoy	42	21	11	25	100	28	05	45	52.7	49.2	50.8	50.5
Ky 1	46	56	40	47	100	65	52	72	50.7	46.9	52.4	50.0
Maury	39	54	33	42	100	58	25	61	48.8	45.7	47.6	47.4
Mouroe	38	46	34	39	100	60	28	63	47.5	44.6	47.4	46.5
Perry	36	41	37	38	100	45	50	65	53.2	47.8	51.2	50.7
Pike	42	27	23	31	100	45	35	60	50.6	47.7	50.5	49.6
Surry	40	52	23	38	100	60	18	59	48.7	44.9	46.2	46.6
Volbar	41	53	00	31	100	52	00	51	47.7	45.4		-

Variety		Date Headed				Height ins.				Grams/1000 Seed			
	1980	1979	1978	Avg.	1980	1979	1978	Avg.	1980	1979	1978	Avg.	
Barsoy	4/28	5/6	5/18	5/7	30	29	24	28	30.2	35.0	35.6	33.6	
Ky 1	\$/12	5714	5/28	5/18	36	41	39	39	30.7	38.0	38.4	35.7	
Maury	5/11	5/11	5/28	5/17	26	36	30	31	30.6	37.1	38.4	35.4	
Monroe	5/12	5/12	5/30	5/18	29	33	28	30	30.2	36.3	35.6	34.0	
Perry	5/6	5/9	5/24	5/13	29	33	34	32	30.7	37.7	39.0	35.8	
Pike	5/4	5/6	5/20	5/10	26	32	24	27	29.2	35.3	36.4	33.6	
SUTTY	5/5	5/8	5/24	5/12	28	35	29	31	29.2	35.1	35.4	33.2	
Volbar	5/12	5/10	-	122	31	36			35.6	41.8	-	-	

 $\underline{1}^{f}$ Tests were grown at Lexington each year. Lodging was zero each year.

Table 13.—Winter Barley Performance Trials for Southern Tier Region, 1978-80¹.

	-		Yi	eld	Bu/A		_		_	I Su	rviv	a1		_
-	19	80	19	79	1978			19	080	1979		19	78	
Variety	P	H	P	E	P	E	AVR	P	H	P	Б	P	E	Avg
Barsoy	80	98	41	33	13	46	52	99	100	89	49	15	65	70
Ky 1	54	44	63	58	31	29	46	100	100	100	70	44	95	85
Maury	75	87	57	45	17	70	58	100	100	96	69	12	92	78
Monroe	73	96	51	40	11	77	58	100	100	96	66	15	90	78
Perry	59	62	69	44	27	54	52	100	100	99	66	46	92	84
Pike	73	90	43	-31	20	53	52	99	100	95	61	36	86	80
Surry	78	80	47	46	07	80	56	100	100	96	64	08	58	71
Volbar	98	93	71	56	02	13	56	.99	100	94	51	01	04	58

	-	1	test là	ight.	Lbs/B	u		Date Headed						
	19	50	19	19	19	78		19	80	19	79	.19	78	
Variety	P	H	P	E	P	Е	Avg	P	Ħ	P	E	P	Е	Avg
Barsoy	49.9	51.2	47.8	48.0	45.6	46.4	48.2	4/23	4/21	4/26	4/26	5/09	4/30	4/28
Ky I	44.5	43.6	48.8	48.1	43.6	43.3.	45.3	5/8	5/9	5/12	5/12	5/24	5/14	5/13
Maury	44.2	44.1	45.0	45.7	43.1	42.1	44.0	5/4	5/3	5/7	5/9	5/28	5/11	5/10
Monroe	44.3	44.5	43.9	44.7	40.4	41.5	43.2	5/4	5/4	5/11	3/11	5/28	5/13	3/12
Perry	47.9	46.2	50.1	49.0	46.7	46.0	47.6	5/1	5/1	5/4	5/6	5/18	5/8	5/6
Pike	45.8	47.1	46.6	47.1	44.8	43.6	45.8	4/26	4/26	4/29	5/1	5/10	5/3	5/1
Surry	44.6	44.2	44.1	44.2	44.6	42.3	44.0	4/28	4/30	5/4	5/6	5/21	5/14	5/7
Volbar	44.7	46.1	46.7	44.1		47.2		5/2	5/3	5/5	5/8		5/13	

	-	_	He	ight	Ins.			_		7.	Lodge	ed	1.11	
	19	80	19	79	19	78		19	80	1.9	79	19	78	
Variety	P	Н	P	E	p	E.	Avg	P	н	y	Ε	P	E	Avg
Barsoy	43	41	32	33	25	33	35	5	15	33	01	00	48	17
Ky 1	49	46	47	41	34	61	43	100	100	43	20	00	100	60
Maury	43	45	39	33	22	37	36	45	- 29	03	00	DO	32	1.8
Monroe	44	45	37	31	22	38	36	59	68	01	00	00	39	28
Perry	43	45	37	34	27	37	37	82	98	DG	00	00	55	39
Pike	38	38	32	30	23	34	32	16	49	53	00	00	75	32
Surry	42	45	37	36	23	41	37	32	71	05	00	00	12	20
Volbar	49	49	42	40	-	39	37	00	25	01	00	-	0.1	

		Grams/1000 Seed									
	19	80	19	79	19	78					
Variety	p	В	p	E	Р	Ε	Ave				
Barsoy	27.3	29.9	29.1	30.8	30.6	35.0	30.4				
Ky 1	27.3	27.1	34.8	35.4	34.3	31.6	31.8				
Naury	27.8	28.6	30.2	33.0	34.2	32.0	31.0				
Nonroa	27.6	29.5	30.5	31.9	30.9	31.1	30.2				
Perry	28.6	28.5	33.6	32.5	33.8	33.6	31.8				
Pike	29.4	26.2	28.4	29.3	31.3	32.2	29.5				
Surry	27.9	27.1	29.9	29.5	30.9	35.1	30.1				
Volbar	33.9	32.8	39.8	39.4	36.3	37.8	36.7				

1/ Barley trials were grown at Princeton limestone soil (P) and Hopkinsville (H) in 1980 and Princeton limestone soil (P) and Elkton (E) in 1978 and 1979.

Table 14.—Winter Barley Performance Trials for North Central Region, 1978-80¹.

Variety	Y	ield Bu	/٨		Surviv	Ia	Test	Weight	Lbs/Bu
	1980	1979	Ave.	1980	1979	Ave.	1980	1979	Ave.
Barsoy	58	40	49	100	82	91	49.6	48.2	48.9
Ky 1	52	59	56	100	98	99	45.9	48.0	47.0
Maury	63	51	57	100	85	92	45.1	45.5	45.3
Monroe	54	50	52	100	85	92	44.0	43.0	43.5
Perry	57	50	54	100	85	92	49.2	48.9	49.0
Pike	58	38	48	100	90	95	47.5	46.6	47.0
Surry	57	47	52	100	B2	91	45.2	45.2	45.2
Volbar	76	79	78	100	88	94	45.4	44.3	44,8
Variety	Da	ate hear	ded	Не	ight in	s		% lodged	I
	1980	1979	Avg.	1980	1979	Avg.	1980	1979	Ave.
Barsoy	4/29	4/26	4/28	38	33	36	00	00	00
Ky 1	5/14	5/12	5/13	41	43	42	100	00	50
Maury	5/8	5/9	5/8	37	35	36	25	00	12
Monroe	519	5/11	5/10	35	36	36	90	00	00
Perry	5/6	5/6	5/6	36	35	36	00	00	00
Pike	5/1	5/1	5/1	32	31	32	00	00	00
Surry	5/3	\$/6	5/4	37	35	36	00	00	00
Volbar	5/8	5/8	5/8	42	40	41	00	00	00
Variety	Grams	/1000 :	reed						
	1980	1979	Avg.						

	1980	1979	Avg.
Barsov	30.5	32.0	31.1
Ky 1	32.2	35.7	34.0
Haury	31.4	31.4	31.4
Mouroe	31.4	32.1	31.8
Perry	32.7	32.8	32.8
Pike	30.5	31.2	30.8
Surry	30.6	31.1	30.8
Volbar	37.7	40.7	39.2

 $1^{j\prime}$ The location was Elizabethtown in 1979 and 1980. No trial was grown in this region in 1978.

Table 15.—Winter Oat Performance Trials for Western Coal Field Region, 1978-801.

Variety	Yield Bu/A	Survival I	Test Weight Lbs/Bu	Heading Date	Height Inches	Lodging Z	Seed Weight Grams/1000 Seed
Brooks	59	54	31.9	5/17	36	100	29.9
Coker 716	7.4	84	35.8	5/16	32	100	26.6
Compact	68	79	38.0	5/22	32	100	25.6
Ky 67-695	70	71	36.2	5/21	42	100	27.5
Norline	68	70	36.0	5/20	41	100	30.7
Pennyin	76	70	36.4	5/23	38	100	29.2
Southern States 76-30	69	75	35.6	5/15	36	100	28.8
Walken	72	74	36.9	5/26	60	100	24.9

 $^{\frac{1}{2}}$ The location in 1980 was Princeton sandstone soil. Tests were not grown in 1978 and 1979.

Table 16.—Winter Oat Performance Trials for Bluegrass Region, 1978-801.

200 B - P	Yield Bu/A				I Survival				Test Weight Lbs/Bu		
Variety	1980	1979	1978	Avg	1980	1979	1978	Avg	1980	1979	Avg
Brooks	67	-			100			-	36.6		
Coker 716	85	18	00	34	100	30	00	43	35.2	35.8	35.5
Compact	65	43	00	36	100	72	00	57	35.5	37.4	36.6
Ky 67-695	66	50	00	39	100	88	00	63	37.8	37.7	37.8
Norline	62	47	00	36	100	78	00	59	35.9	37.6	36.8
Fennwin	74	54	00	43	100	78	00	59	36.6	36.8	36.7
Southern States 76-30	72	32	00	35	100	48	00	49	35.0	37.3	36.2
kalken	69	60	00	43	100	85	00	62	36.8	37.4	37.1
Variety	1980	late F	leaded	Avg	1980	eight 19	Ins. 79	Avz	<u>Gran</u> 1980	ns/1000 1979	Seed Avg
Ironka	5/17				31			_	30.7		
lokar 716	5/16	51	14	5/15	31	3	4	32	23.7	30.0	26.5
foreact	5/22	5/	20	5/21	26	1	2	20	22.8	27 8	25
14 67-695	5/24	5/	20	5/22	30	3	6	33	27.0	30.0	28.
lorling	5/23	5/	19	5/21	30	3	4	34	26.7	33.9	30.
lengutin	5/25	51	20	5/22	33	4	a	36	27.8	33.3	30.
Southern States 76-30	5/14	5/	12	5/13	34	3	8	36	24.6	31.6	28-1
Valkern	5/26	5/	25	5/26	29	3	6	32	28.2	27.5	27.1

 $\underline{\mathcal{W}}$ The location for all three years was Lexington. There was zero lodging in 1979 and 1980.

Table 17.—Winter Oat Performance Trials for Southern Tier Region, 1978-801.

		11	eld 1	Bu/A	_	2 Survival						
	1980	197	9	19	78		1980	19	79	19	79	
Variety	P	Р	E	P	E.	Avg	P	P	E	р	E	Avg
Brooks	110	-	-	-			82				-	-
Coker 716	130	92	41	26	.31	64-	92	91	18	16	80	-45
Compact	86	89	74	65	41	71	89	95.	74	42	14	63
Ky 67-695	102	84	72	55	73	77	92.	91	50	56	56	69
Norline	-90	109	66	54	38	75	90	95	51	34	18	58
Pennwin	80	100	64	47	66	71	94	92	32	32	32	56
Southern States 76-30	123	90	56	38	26	67	88	90	22	29	15	- 49
Walken	111	104	55	44	56	-74	94	99	42	35	13	57

		Date Headed May										
	1980	19	79	19	78		1980	19	79	15	78	
Variety	ħ	P	E	P	E	Avg	2	P	В	P	B	Avg
Brooks	32.2				-		15	-	-	-		1
Coker 716	34.8	35.8	36.2	31.1	33.2	34.2	12	12	15	27	2.2	18
Compact	35.8	37.0	37.9	33.2	32.5	35.3	21	20	17	28	24	22
Ky 67-695	36.0	37.2	37.2	31.2	33.8	35.1	21	19	19	24	22	23
Norline	34.2	36.3	36.2	32.4	33.0	34.4	22	19	1.8	28	27	23
Pennwin	31.0	36.8	35.7	31.0	33.3	33.6	24	20	21	28	29	24
Southern States 76-30	36.6	36.2	35.8	31.3	32.8	34.5	12	11	14	24	24	17
Walken	15.0	36.0	35.4	31.8	29.4	33.5	26	25	23	35	29	28

	Height Ins.						Z Lodged							
	1980	19	79	19	78		1980	15	29	1.5	78			
Variety	P	P	E	P	3	Avg	p	P	E	2	Ĩ.	Avg		
Brooks	43	-	-+		-		100		-	-				
Coker 716	:43	37	37	27	28	34	100	00	00	00	00	20		
Compact	42	34	30	25	25	31	100	00	00	00	00	20		
Ky 67-695	46	42	39	32	30	38	100	00	00	00	06	21		
Norline	:46	.45	41	34	33	40	100	00	00	00	06	21		
Pennwin	46	43	42	32	36	40	100	00	00	00	22	24		
Southern States 76-30	41	41	39	30	27	37	100	00	00	00	00	20		
Walken	47	40	38	32	30	.37	100	00	00	00	00	20		

	Grams/1000 Sned										
	1980	1.9	79	19							
Variety	p	2	E	P	Ē	Avg					
Brooks	25.8			-							
Coker 716	23.5	26.6	27.0	29.4	30.4						
Compact	22.5	26.9	24.8	27.2	27.6						
Ky 67-695	23.2	27.3	28.5	28,8	36.0						
Norline	26.5	30.2	30.3	30.8	39.8						
Pennwin	20.7	30.9	28.2	30.6	36.4						
Southern States 76-30	24.7	29.4	28.5	31.7	31.7						
Walken	22.4	26.0	22.7	26.0	35.6						

 $\rm L^{f}Winter$ oat trials were grown at Princeton limestone soll (P) in 1978, 1979 and 1980 and at Eikton (E) in 1978 and 1979.