

Measured Crop Performance

SMALL GRAIN

1975

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1975

PERFORMANCE OF SMALL GRAIN VARIETIES IN NORTH CAROLINA

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INTRODUCTION

The Official Variety Test on Small Grain varieties in North Carolina is conducted annually by locating evaluation trials throughout the small grain producing area of the state. These tests are conducted to determine the value and suitability of commercially available and prospective varieties of wheat, oats and barley for planting in North Carolina. The results of these tests are intended to aid the growers and agricultural workers in the selection of a variety best suited for their particular area of the state or region.

Wheat production in North Carolina for the 1974-75 season is forecast at 10,880,000 bushels. This would be an increase of 7 percent over the 1974 crop. Acreage to be harvested for grain is estimated at 320,000 or 30,000 acres above the 1974 harvested acreage.

It is estimated that the yield per acre for the 1975 crop will be 34 bushels per acre. This would be a decrease of one bushel from last year.

The United States winter wheat production is forecast at a new record high of 1,620 million bushels, 16 percent above the previous high set last year and 27 percent above the 1973 crop. This increase is attributed to more acres for harvest and a higher average yield this year.

^{1/}Professor in Charge of Variety Testing, Agricultural Research Supervisor and Agricultural Research Assistants, Department of Crop Science, North Carolina State University at Raleigh, respectively.

In North Carolina the oat acreage planted during the Fall of 1974 and Spring of 1975 was 165,000 acres. This was 5,000 acres less than last year's planted acreage but still 5,000 acres above the 1973 crop.

The U. S. seeding of oats for the 1975 crop is expected to total nearly 18.2 million acres based on growers intentions as of March 1 of this year. This is about one-half percent above last year. Most states in the North Central Region had increases ranging from a two percent increase in Indiana to a twenty percent increase in Illinois.

The 1974-75 oat crop in North Carolina is estimated to yield 53.0 bushels per acre. This would be an increase of three bushels per acre over the 1973-74 crop.

In 1974-75 the barley production in North Carolina was harvested from 65,000 acres with a yield of 46 bushels per acre. The 1973 acreage was 62,000 acres. The price increased from 1973 to 1974 by an average of from \$1.54 to \$1.90 per bushel.

Information on varietal performance is presented from six test locations in the state, three in the Piedmont and three in the Coastal Plain Area. In comparing the performance of varieties, data from the area which most nearly represents the grower's conditions should be used. Seasonal conditions differ from year to year; therefore, a variety which looks superior for one year may not be consistently good, hence, varieties should be evaluated on the basis of performance over several years. Depending upon the release date of the entry, data are presented for performance from one to five years. All available data^{2/} were used in determining the pathologic and agronomic characteristics of the varieties.

^{2/}Special acknowledgment is due Drs. T. T. Hebert and C. F. Murphy for their assistance in describing the characteristics of the varieties.

EXPERIMENTAL PROCEDURE

Commercial varieties and experimental lines developed by public and private agencies are included in these tests. Any individual or firm may make application for having entries included by writing the Department of Crop Science, North Carolina State University at Raleigh. A fee is charged on an entry basis for all private entries. Personnel of the testing program may include entries about which further information is desired.

Agencies Sponsoring Entries

Coker's Pedigreed Seed Company	Hartsville, S. C.
Kentucky Agricultural Experiment Station	Lexington, Kentucky
McNair Seed Company, Inc.	Laurinburg, N. C.
North Carolina Agricultural Experiment Station	Raleigh, N. C.
Purdue University Agricultural Experiment Station	Lafayette, Indiana
South Carolina Agricultural Experiment Station	Clemson, S. C.
University of Tennessee Agric. Expt. Station	Knoxville, Tennessee
Virginia Agricultural Experiment Station	Blacksburg, Virginia

Test Locations

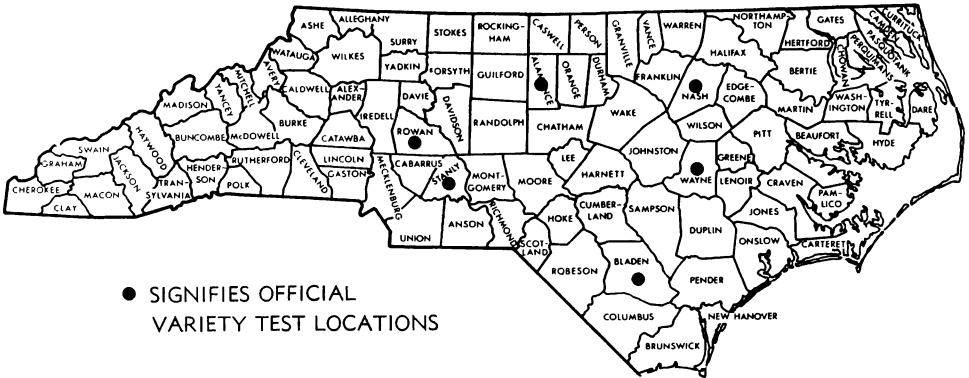
Six locations were used in 1974-75 with three in the Piedmont and three in the Coastal Plain as shown in Figure 1. Five tests were located on private farms^{1/} and one was on a research station. A randomized block design with four replications was used at each location.^{2/}

^{1/}The cooperative spirit and civic-minded service rendered by the farmers who provided land and the necessary cultural practices for these trials and the cooperation of the county agents are gratefully acknowledged.

^{2/}Statistical analyses were made in the statistical laboratory under the supervision of Dr. J. O. Rawlings. This assistance is gratefully acknowledged.

1975

LOCATION OF SMALL GRAIN PERFORMANCE TRIALS



COOPERATORS

PIEDMONT

Rowan County: Mr. Clyde McSwain, Superintendent, Piedmont Research Station, Salisbury, North Carolina
County Extension Chairman, R. R. McNeely

Stanly County: Mr. Lester Moose, Route 1, New London, North Carolina
County Extension Chairman, Elizabeth Watkins, Acting
County Extension Agent, J. Frank Simpson

Alamance County: Mr. Raymond Braxton, Route 2, Graham, North Carolina
County Extension Chairman, Millis Wright

COASTAL PLAIN

Nash County: Mr. Millard Morgan, Jr., Box 455, Bailey, North Carolina
County Extension Chairman, W. R. Shackelford

Bladen County: Mr. Allen Cox, Route 2, Box 11, Clarkton, North Carolina
County Extension Chairman, L. R. Sasser
County Extension Agent, R. Harvey Morris

Wayne County: Mr. Wayland Price, Route 4, Mt. Olive, North Carolina
County Extension Chairman, G. Mark Goforth, Jr.
County Extension Agent, Wesley Townsend

Cultural Practices

Cultural practices, such as seed bed preparation, date of planting, fertilization and topdressing were in accord with good farming practices and were uniform for all entries at a given location, Table 1. Several months prior to planting each test location, soil samples were obtained for the test field and fertilizer requirements made in accordance with the soil analysis report. Lime was applied, if needed, to adjust the pH to a desirable level for small grain production.

Starting in 1969 all tests were planted with cone-type, tractor-mounted, spring-loaded disc equipment. The disc allowed for more accurate seeding in areas with stubble or organic matter on the soil surface. The seeding rate was one gram per foot of row. The rows were spaced one foot apart. Each plot consisted of seven rows, 15 feet long with the two outside rows used as borders. The border rows were removed prior to harvest and only the five center rows were harvested. The date of planting and fertilization at planting is shown in Table 1 for each test location.

A seven foot combine was modified slightly for harvesting individual plots. Grain from individual plots was collected as it came from the elevator and weighed. The combine was stopped at the end of each plot for a short interval of time in order for the machine to clean out between plots prior to weighing the grain from the plot. A sample of grain was taken from each plot for the determination of test weight and moisture. All plots were adjusted to 13% moisture. All samples were run through a small thresher to remove the awns and foreign matter prior to taking test weights. The combine was used to more nearly simulate the conditions

under which these varieties would be harvested on farms and it appeared to give very satisfactory results.

Tests were topdressed with liquid nitrogen and weed control chemicals during February. Special acknowledgment is due F.C.X. Wholesale Services for furnishing the nitrogen for these tests.

Table 1. Cultural practices for small grain tests - 1975.

Area and Cooperator	Fertilizer lbs/A & Grade	Topdress lbs/A and date	Date of planting	Date of harvesting
<u>Piedmont Area</u>				
Stanly County Lester Moose	600 lbs. 10-10-10	30 N Ammonium Nitrate February 27	October 11	Barley - Discarded Wheat - Discarded Oats - Discarded
Alamance County Raymond Braxton	600 lbs. 5-10-10	100 N Ammonium Nitrate Broadcast before planting	October 10	Barley - Discarded Oats - Discarded Wheat - Discarded
Rowan County Clyde McSwain	600 lbs. 10-20-20	100 Ammonium Nitrate Broadcast before planting	October 14	Barley - June 9 Oats - June 9 Wheat - June 9
<u>Coastal Plain Area</u>				
Nash County Millard Morgan, Jr.	500 lbs. 5-15-30	95 N (liquid) February 27	October 25	Barley - June 6 Wheat - June 6 Oats - June 6
Wayne County Wayland Price	500 lbs. 3-9-18	75 N (liquid) February 25	October 23	Barley - June 5 Oats - June 5 Wheat - June 5
Bladen County Allen Cox	400 lbs. 5-15-30	100 N (liquid) February 14	October 21	Barley - Discarded Oats - Discarded Wheat - Discarded

Seasonal Conditions

The 1974 fall seasonal conditions in North Carolina were characterized by normal weather especially for two months during the normal small grain seeding period. This condition resulted in most small grain acreage being planted at the recommended time. Soil moisture was usually adequate for good stands.

The six locations for the 1974-75 Official Variety Test; three in the Piedmont and three in the Coastal Plain were selected to represent small grain production areas.

September 1974: This month was a relatively cool month with temperatures averaging a few degrees below normal. Precipitation was normal the first week with rains almost every day but after the first week rains occurred about every four or five days.

October 1974: The temperature averaged somewhat below normal ranging from three to five degrees below depending upon the location. October was very dry except for one period during the 15th through the 20th with substantial rains during this period.

November 1974: Temperatures averaged slightly below normal. The first ten days were dry but thereafter there was rain every few days and the total amounts for the month ranged a little on either side of normal.

December 1974: The temperatures for December averaged just at normal. The precipitation appeared up to normal with a slightly above normal amount in most areas.

January 1975: The temperatures averaged above normal mostly two to five degrees above. There were no severely low temperatures and temperatures outside the mountains rarely dropped below 15 degrees. Precipitation was fairly

frequent during the first part of the month with every two or three days having significant rains with totals for the month well above in most areas. This precipitation included rain with very little snow if any in most areas.

February 1975: February was almost a duplicate of January and temperatures averaged three to five degrees above normal with the lowest figure again around 15 degrees. In the Coastal Plain Area the temperature did not get below 20 degrees. The precipitation during this month was rain almost every day during the first week. The month's total rainfall was almost 50 percent over normal.

March 1975: This month was below normal in temperature with the coldest weather of the winter occurring in some areas during March. This was early in March around the 4th or 5th. Even so the low that occurred during this period was not below 10 degrees except in the mountain area. Wet weather continued in March with the first week having moderate rain and the mid-month period having daily rains with the heaviest on the 13th and 14th exceeding an inch on these days in most areas. After mid-month it continued to rain in normal amounts with some rain every second or third day and fairly heavy amounts again at the end of the month. The departure from normal was almost double.

April 1975: Conditions resulting from heavy rainfall during the first part of the month were improved by rapid drying and higher temperatures as a result of a high pressure system during the middle of the month. Low temperatures and wet weather caused a late spring for normally planted spring crops.

May 1975: This month temperatures averaged about four degrees above normal while precipitation was quite variable. Most of the state experienced from one to six inches of rainfall above normal. Temperatures were average across the Piedmont and Coastal Plain.

1974-75 General: The 1974-75 Small Grain Season was characterized by a somewhat normal fall with a very wet spring especially during the months of March, April and May. In spite of this heavy rainfall, serious leaf diseases were not in excess but normal amounts of mildew and rust were observed in some areas.

RESULTS AND DISCUSSION

The performance of the 1975 tests along with the previous four years are presented by crop and area in a tabular form in this report. Since the genetic expression of a variety is influenced greatly by the environment, it is best to have several years' data from which to draw conclusions. For example, if a variety appeared in the two-year average but not in the three-year average, then it must be compared only within the two-year and not with the data in the three-year average since it is possible that the third year could have been extremely good or poor and not comparable.

The 1975 data presented in this report have been analyzed statistically and the least significant difference (L.S.D.), in terms of bushels per acre is given. Unless the difference between two varieties is greater than the L.S.D., the varieties should not be considered as being any different statistically.

Barley

Table 5 shows the performance of barley in the Piedmont. The yields varied from a high of 102.3 bushels per acre for Boone to 79.8 bushels for the variety, McNair 601. The mean of the test for the 1974-75 season was 87.9 bushels per acre compared to 69.8 bushels per acre in 1973-74. The mean of the test was 18.1 bushels higher than last year.

The test weights of 46.8 for Keowee and 45.5 for N.C. 102 were the highest test weights in pounds per bushel of all entries. Keowee continued to be the highest five year average of three entries common to the test for this period of time. The yield and test weight data for barley performance in the Piedmont are averages of Rowan County.

In the Coastal Plain Area, Table 6, shows the difference in yield between varieties and breeding lines. The mean of the test in bushels per acre was 76.7 for the average of two locations in the Coastal Plain. The highest yield was from the new variety, Boone, at 84.5 bushels per acre. The test weight in pounds per bushel on the ten entries varied from 44.8 to 49.0 with a mean of 46.3. The mean test weight for 1974-75 season was 4.8 pounds more than last season's test weights. Barsoy showed the highest test weight at 49.0 with Clayton and McNair 601 recording the lowest at 44.8.

Oats

The data from the oat trials in North Carolina are recorded in Tables 7 and 8.

The mean of the test in the Piedmont was 126.6 with one entry averaging under 100 bushels per acre. The average test weight was 34.7 for the Piedmont. The highest yield was 150.3 for the new variety, Salem. The best test weight was 35.6 for Windsor and Salem. The lowest test weight was 33.8 for Carolee and the experimental, N.C. 01.

In the Coastal Plain the mean of the test was 101.5 for two locations. The mean test weight was 36.5 pounds per bushel. Salem was highest in yield at 111.4 bushels per acre with an experimental, N.C. 39, a close second at 111.0. Test weight on these entries was 38.2 and 37.4 pounds per bushel respectively. The mean of the test in yield increased 8.8 over the 1974 season.

Wheat

Table 9 shows the data on wheat trials in the Piedmont. The mean yield (bus/A) of the test for the 1975 season lacked .1 bushel being the same as 1974. The mean test weight in pounds per bushel for 1975 was 59.3 compared with 58.6 last year. The highest yielding entry was the experimental, Va. 70-52-22, with 57.9 bushels per acre. The highest test weight was on Coker 68-15 at

62.0 pounds per bushel. In the three-year average Abe was high with 57.6 bushels per acre.

The wheat yields in the Coastal Plain Area were down over last year. The mean of the test decreased from 43.4 bushels per acre as the mean for 1974 compared to 41.1 bushels per acre for 1975 mean. This was a 2.3 bushel per acre decrease.

For the three-year average, the experimental N.C. 9 was the highest yielding entry at 43.4.

Lodging

Lodging data are given in Table 11. A one-year, two-year, three-year and four-year comparison is shown. In 1975 a total of three locations was used for lodging data on barley, oats and wheat. If no lodging was recorded at a specific location, data on this location was used for the average along with percent lodging from other locations. When a test was discarded no data was used for lodging.

Table 2. Characteristics of barley varieties*

Variety	Mildew resist- ance	Leaf rust resist- ance	Scald resist- ance	Lodging resist- ance	Winter hardi- ness	Maturity	Test Weight lb/bu	Length of awns
Barsoy	Good	Poor	Fair	Good	Good	Very Early	High	Long
Boone	Fair	Good	Fair	Good	Good	Early	High	Short
Clayton	Good	Excellent	Fair	Good	Good	Early	Medium	Awnless
Keowee	Good	Poor	Fair	Good	Good	Early	High	Long
McNair 601	Good	Fair	Fair	Good	Good	Early	Medium	Awnless
Knob	Fair	Poor	Fair	Good	Good	Early	High	Awnless

Table 3. Characteristics of oat varieties*

Variety	Crown rust resist- ance	Smut resist- ance	Blight resist- ance	Mosaic resist- ance	Maturity	Winter Hardi- ness	Lodging resist- ance	Height of Straw	Test Weight lb/bu
Carolee**	Fair	Good	Good	Fair	Medium	Good	Good	Medium	Medium
Coker 227	Excellent	Good	Good	Good	Med.-Early	Good	Good	Medium	Medium
Roanoke	Fair	Poor	Good	Good	Late	Good	Fair	Tall	High
Salem	Fair	Good	Good	Good	Medium	Good	Excellent	Medium	High
Windsor	Fair	Good	Excellent	Good	Medium	Good	Good	Medium	Med.-High

*These characteristics based upon all available observations.

**Appears to have tolerance to barley yellow dwarf virus.

Table 4. Characteristics of wheat varieties*

Variety	Leaf rust resist- ance	Mildew resist- ance	Mosaic resist- ance	Maturity	Winter Hardi- ness	Lodging resist- ance	Height of Straw	Test Weight lb/bu	Soft Wheat Milling Quality
Abe**	Good	Good	Good	Medium	Excellent	Good	Medium	High	Good
Arthur 71**	Good	Good	Good	Medium	Excellent	Good	Semi-Dwarf	High	Good
Blueboy II	Good	Poor	Good	Medium	Excellent	Excellent	Semi-Dwarf	Low	Good
Coker 68-15	Good	Poor	Good	Medium	Good	Excellent	Semi-Dwarf	High	Good
McNair 701**	Good	Good	Good	Med.-Early	Good	Good	Semi-Dwarf	Medium	Good
McNair 1813**	Good	Good	Good	Medium	Good	Good	Semi-Dwarf	High	Good
McNair 4823	Good	Good	Good	Late	Excellent	Excellent	Semi-Dwarf	High	Good
Oasis**	Good	Good	Good	Medium	Excellent	Good	Medium	High	Good

*These characteristics based upon all available observations.

**Resistant to Hessian Fly.

Table 5. Summary of BARLEY performance trials in the PIEDMONT

Variety or Line	1 yr. Avg. ^{1/} 1975		2 yr. Avg. 1974-1975		3 yr. Avg. 1973-1975		4 yr. Avg. 1972-1975		5 yr. Avg. 1971-1975	
	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu
Clayton	86.9	43.8	80.6	44.4	76.4	43.5	71.5	42.8	72.3	43.0
McNair 601	79.8	42.2	65.6	42.9	56.7	42.8	54.1	42.1	57.9	42.4
Keowee	96.7	46.8	92.6	47.3	86.1	46.5	83.1	45.4	83.5	45.9
Boone	102.3	44.3	90.2	45.6	85.0	44.8	80.8	44.6		
Barsoy	88.6	45.4	83.2	47.0	77.2	46.6				
Knob	80.3	41.7								
*N.C. 25	87.3	45.0								
*Va. 70-44-213	85.3	42.3								
*Va. 72-44-525	87.8	41.9								
*N.C. 102	83.8	45.5								
<u>Mean of Test</u>	<u>87.9</u>	<u>43.9</u>	<u>82.4</u>	<u>45.4</u>	<u>76.3</u>	<u>44.8</u>	<u>72.4</u>	<u>43.7</u>	<u>71.2</u>	<u>43.8</u>
L.S.D. (.05)	9.1									
(.01)	12.3									
C.V. (%)	7									

^{1/}Average of Rowan County Location.

Table 6. Summary of BARLEY performance trials in the COASTAL PLAIN

Variety or Line	1 yr. Avg. ^{1/} 1975		2 yr. Avg. 1974-1975		3 yr. Avg. 1973-1975		4 yr. Avg. 1972-1975		5 yr. Avg. 1971-1975	
	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu
Keowee	83.5	47.9	69.8	45.5	68.0	46.1	70.8	45.3	73.4	45.3
Clayton	73.5	44.8	62.4	42.7	61.3	43.3	66.0	43.2	69.7	43.2
McNair 601	80.2	44.8	72.9	42.4	68.3	43.2	68.9	43.0	71.9	43.4
Boone	84.5	47.1	74.0	45.5	69.7	45.1	75.3	45.0		
Barsoy	80.0	49.0	71.0	47.0	67.4	47.4				
Knob	74.1	45.3								
*N.C. 25	73.7	45.0								
*Va. 70-44-213	70.2	45.7								
*Va. 72-11-18	72.8	46.2								
*Va. 72-44-362	74.3	46.8								
<u>Mean of Test</u>	<u>76.7</u>	<u>46.3</u>	<u>70.0</u>	<u>44.6</u>	<u>66.9</u>	<u>45.0</u>	<u>70.2</u>	<u>44.1</u>	<u>71.7</u>	<u>44.0</u>
L.S.D. (.05)	12.4									
(.01)	N.S.									
C.V. (%)	11									

^{1/}Average of Nash and Wayne County Locations.

*Experimentals.

Table 7. Summary of OAT performance trials in the PIEDMONT

Variety or Line	1 yr. Avg. ^{1/} 1975		2 yr. Avg. 1974-1975		3 yr. Avg. 1973-1975		4 yr. Avg. 1972-1975		5 yr. Avg. 1971-1975	
	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu
Carolee	132.3	33.8	112.4	33.1	103.1	32.5	102.1	32.8	104.0	33.3
Roanoke	96.1	35.0	80.4	35.8	71.8	35.2	74.1	34.8	78.2	35.6
Windsor	120.7	35.6	107.4	35.3	99.4	34.5	106.1	34.6	112.7	35.5
Salem	150.3	35.6	129.6	35.5	123.8	34.7				
Coker 227	134.1	35.0	116.4	35.2						
*N.C. 39	138.9	34.5								
*N.C. 01	118.4	33.8								
*N.C. 161	122.2	34.2								
<u>Mean of Test</u>	<u>126.6</u>	<u>34.7</u>	<u>109.2</u>	<u>35.0</u>	<u>99.5</u>	<u>34.2</u>	<u>94.1</u>	<u>34.1</u>	<u>98.3</u>	<u>34.8</u>
L.S.D. (.05)	16.4									
	(.01)	22.4								
C.V. (%)	9									

^{1/}Average of Rowan County.

Table 8. Summary of OAT performance trials in the COASTAL PLAIN

Variety or Line	1 yr. Avg. ^{1/} 1975		2 yr. Avg. 1974-1975		3 yr. Avg. 1973-1975		4 yr. Avg. 1972-1975		5 yr. Avg. 1971-1975	
	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu
Roanoke	75.6	36.3	71.9	35.0	67.8	34.8	71.4	33.8	73.5	33.6
Carolee	106.1	35.4	103.4	33.2	99.8	33.5	94.6	32.8	98.2	32.7
Windsor	100.8	37.3	101.8	35.6	94.9	35.4	89.2	34.0	94.3	33.9
Salem	111.4	38.2	113.0	36.3	102.2	36.3				
Coker 227	97.4	37.0	102.8	35.6						
*N.C. 1373-2	96.5	34.2	86.6	33.0						
*N.C. 39	111.0	37.4								
*N.C. 01	104.8	35.8								
*N.C. 161	106.4	36.3								
*N.C. 1371-1	105.1	36.8								
<u>Mean of Test</u>	<u>101.5</u>	<u>36.5</u>	<u>96.5</u>	<u>34.8</u>	<u>91.2</u>	<u>35.0</u>	<u>85.1</u>	<u>33.5</u>	<u>88.7</u>	<u>33.4</u>
L.S.D. (.05)	N.S.									
	(.01)	N.S.								
C.V. (%)	7									

^{1/}Average of Nash and Wayne County Locations.

*Experimentals.

Table 9. Summary of WHEAT performance trials in the PIEDMONT

Variety or Line	1 yr. Avg. ^{1/} 1975		2 yr. Avg. 1974-1975		3 yr. Avg. 1973-1975		4 yr. Avg. 1972-1975		5 yr. Avg. 1971-1975	
	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu
Coker 68-15	44.1	62.0	48.4	62.2	44.9	59.8	44.9	59.4	47.5	59.2
McNair 4823	53.0	56.0	52.1	56.7	53.8	55.7	53.4	56.2	54.7	56.4
Blueboy II	51.9	57.6	50.4	57.2	44.6	54.8	40.7	54.1	44.3	54.2
*N.C. 9	45.6	59.2	45.2	57.5	43.0	55.3	42.0	54.8		
Arthur 71	50.8	60.2	54.4	60.6	53.9	58.7				
Abe	54.0	60.1	57.9	60.3	57.6	58.6				
Oasis	50.6	60.4	54.2	60.7						
*Va. 68-24-42	53.2	57.4	49.7	56.6						
*Va. 70-52-22	57.9	58.8	57.3	57.6						
*McNair 3006	49.1	59.0								
*Coker 73-18	49.0	60.4								
*Coker 74-27	49.5	61.0								
*Va. 68-22-7	57.1	59.6								
*Va. 72-54-14	57.1	58.8								
<u>Mean of Test</u>	<u>51.6</u>	<u>59.3</u>	<u>52.2</u>	<u>58.8</u>	<u>49.6</u>	<u>57.2</u>	<u>45.2</u>	<u>56.1</u>	<u>48.8</u>	<u>56.6</u>
L.S.D. (.05)	6.7									
	(.01)									
C.V. (%)	9									

^{1/}Average of Rowan County

Table 10. Summary of WHEAT performance trials in the COASTAL PLAIN

Variety or Line	1 yr. Avg. ^{1/} 1975		2 yr. Avg. 1974-1975		3 yr. Avg. 1973-1975		4 yr. Avg. 1972-1975		5 yr. Avg. 1971-1975	
	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu
Coker 68-15	36.4	62.1	39.0	61.0	38.1	61.4	34.4	59.0	38.1	58.1
McNair 701	41.0	57.6	42.2	56.7	42.5	56.6	39.5	54.6	43.5	54.8
McNair 1813	35.1	60.4	36.4	58.8	37.7	58.6	36.0	56.4	40.4	56.0
Blueboy II	36.9	58.3	32.6	55.9	31.0	55.9	27.6	54.0		
*N.C. 9	37.8	58.2	41.0	57.3	43.4	57.4	38.7	54.4		
Arthur 71	36.1	60.4	39.6	59.8	39.2	60.1				
Abe	34.9	60.4	42.2	59.4	43.1	59.9				
Oasis	35.2	60.9	41.6	60.2						
*Va. 68-24-42	48.5	57.9	51.8	56.5						
*Va. 70-52-22	43.1	58.7	42.4	57.0						
*Coker 73-18	44.8	61.0								
*Coker 74-27	49.0	61.2								
*Va. 68-22-7	44.4	59.2								
*Va. 72-54-14	51.7	58.0								
<u>Mean of Test</u>	<u>41.1</u>	<u>59.6</u>	<u>40.9</u>	<u>58.3</u>	<u>39.3</u>	<u>58.6</u>	<u>35.2</u>	<u>55.7</u>	<u>40.7</u>	<u>56.3</u>
L.S.D. (.05)	8.0									
	(.01)									
C.V. (%)	14									

^{1/}Average of Nash and Wayne County Locations.

*Experimentals.

Table 11. Lodging Data.

Varieties or Lines	1 yr. Avg.	2 yr. Avg.	3 yr. Avg.	4 yr. Avg.
<u>BARLEY</u>	<u>1975</u>	<u>1974-1975</u>	<u>1973-1975</u>	<u>1972-1975</u>
McNair 601	50	38	32	35
Clayton	65	44	42	49
Keowee	27	25	28	40
Boone	75	48	47	56
Barsoy	43	27	27	
Knob	28			
*N.C. 25	48			
*Va. 70-44-213	36			
*Va. 72-44-525	31			
*N.C. 102	18			
*Va. 72-11-18	31			
*Va. 72-44-362	16			
<u>OATS</u>	<u>1975</u>	<u>1974-1975</u>	<u>1973-1975</u>	<u>1972-1975</u>
Carolee	37	48	40	50
Roanoke	57	54	53	52
Windsor	2	16	17	31
Salem	3	20	15	
Coker 227	40	40		
*N.C. 1373-2	11	12		
*N.C. 39	3			
*N.C. 01	32			
*N.C. 161	1			
*N.C. 1371-1	17			
<u>WHEAT</u>	<u>1975</u>	<u>1974-1975</u>	<u>1973-1975</u>	<u>1972-1975</u>
*N.C. 9	0	0	4	14
Coker 68-15	0	0	6	20
Blueboy II	0	0	3	15
McNair 701	0	0	0	17
McNair 4823	0	0	0	0
McNair 1813	0	0	0	14
Arthur 71	0	0	5	
Abe	0	0	5	
*Va. 70-52-22	0	0		
Oasis	0	0		
*Coker 74-27	0			
*Coker 73-18	0			
*Va. 68-24-42	0			
*Va. 68-22-7	0			
*Va. 72-54-14	0			

*Experimentals.