

*Measured crop performance*

**SMALL GRAIN**

**1963**

GUY L. JONES, Professor

R. WALTON MOZINGO, Research Assistant

E. L. JONES, Agricultural Research Supervisor

G. C. OLIVER, Agricultural Research Assistant

Department of Crop Science  
North Carolina State of the  
University of North Carolina  
at Raleigh

## TABLE OF CONTENTS

	Page
INTRODUCTION . . . . .	3
EXPERIMENTAL PROCEDURE . . . . .	4
Agencies Sponsoring Entries . . . . .	4
Test Locations. . . . .	4
Cultural Practices. . . . .	6
Seasonal Conditions . . . . .	6
RESULTS AND DISCUSSION . . . . .	8
Barley. . . . .	9
Oats . . . . .	10
Wheat . . . . .	11
TABLES AND FIGURES	
Location of tests . . . . .	5
Cultural practices. . . . .	12
Characteristics of varieties. . . . .	13
Barley performance in the Piedmont. . . . .	15
Barley performance in the Coastal Plain . . . . .	16
Oat performance in the Piedmont . . . . .	17
Oat performance in the Coastal Plain. . . . .	18
Wheat performance in the Piedmont . . . . .	19
Wheat performance in the Coastal Plain. . . . .	20

## PERFORMANCE OF SMALL GRAIN VARIETIES IN NORTH CAROLINA

Guy L. Jones, R. W. Mazingo, E. L. Jones, G. C. Oliver <sup>1/</sup>

## INTRODUCTION

Performance tests of small grain varieties are important in that they provide information for growers and agricultural workers to use in evaluating varieties for planting. Evaluation trials are located throughout the small grain producing area of the state and are conducted to determine the value and suitability of commercially available and prospective varieties of wheat, oats and barley for planting in North Carolina.

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.

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 mostly nearly represents the growers' conditions

---

<sup>1/</sup> Professor in Charge of Variety Testing, Research Assistant, Agricultural Research Supervisor and Agricultural Research Assistant, Department of Crop Science, North Carolina State of the University of North Carolina at Raleigh, respectively.

should be used. All available data<sup>1/</sup> were used in determining the pathologic and agronomic 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. 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

Arkansas Agricultural Experiment Sta.	Fayetteville, Ark.
Coker's Pedigreed Seed Company	Hartsville, S. C.
Georgia Agricultural Experiment Sta.	Experiment, Ga.
Indiana Agricultural Experiment Sta.	Lafayette, Ind.
North Carolina Agricultural Experiment Sta.	Raleigh, N. C.
South Carolina Agricultural Experiment Sta.	Clemson, S. C.
Virginia Agricultural Experiment Sta.	Blacksburg, Va.

#### Test Locations

Seven locations were used in 1963 with four in the Piedmont and three in the Coastal Plain as shown in Figure 1. The Davidson County test was discarded due to freeze damage resulting in an extremely poor stand. All tests, except the one in Columbus County on the Border Belt Tobacco Research Station were located on private

---

<sup>1/</sup> Special acknowledgement is due Drs. T. T. Hebert and C. F. Murphy for assistance in describing the characteristics of varieties.



farms. <sup>1/</sup> A randomized block design with four replications was used at each location. <sup>2/</sup> Varieties were planted in three-row plots 16 feet long, except the Columbus County test which was planted in five-row plots 16 feet long, and the center row was harvested for yield.

#### 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. The plots were hand-harvested, threshed, cleaned and weighed. Thimet was applied on seed after planting and before covering to aid in control of aphids which cause yellow dwarf.

#### Seasonal Conditions

The variety test plantings had very good emergence. All locations had a good seed bed and were planted on time. The stand was good, with good growth and color until the latter part of November when extremely cold weather conditions in the Piedmont area caused a heavy winter kill at all locations. Three hard freezes occurring in late November, mid-January and late February injured most of the

---

<sup>1/</sup> 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.

<sup>2/</sup> Statistical analyses were made in the statistical laboratory under the supervision of John O. Rawlings. This assistance is gratefully acknowledged.

oats and barley and caused some degree of injury to the wheat. The cold winds in January and February probably caused more actual damage than the freezing in the Piedmont.

The Davidson County test started off very good, with good stand and color, but was discarded after a freeze in late February and severe cold winds damaged more than 50% of the wheat. The oats and barley had been even more severely damaged by earlier cold weather.

In Gaston County only the wheat plots were harvested. A January freeze killed nearly all the oats and about 80% of the barley. Therefore, the oats and barley were not harvested. Approximately 20% of the wheat heads were killed by a late spring freeze.

Oats in the Iredell County test were killed by the cold weather. However, the wheat and barley, which were fair, were harvested. The yield was affected by the cold weather conditions.

The Stanly County test was not affected as much by the cold weather as the other Piedmont locations; however, the yields were reduced. New growth after the weather warmed up in the spring improved all three crops in this location. The early spring freeze killed some of the oat heads, but did not affect the barley and wheat. This was the best of the Piedmont tests. Some lodging and mildew occurred at this location.

The weather conditions in the Coastal Plain were about normal except for a late spring freeze, which damaged the heads, causing some reduction in yield. Most varieties of the oats and barley took

a second growth after this freeze. The Columbus County test had a period of dry weather around the last of March, but this did not seem to affect the yields. Some bird damage did occur in this test, which affected the yield of some plots.

The Nash County test was the best of the group this year. It was very uniform, with a good stand and good growth, but had some mildew.

The Lenoir County test had normal weather conditions except for the late spring freeze which affected some heads. Early April was dry at this location. There was some bird damage, also, in the Lenoir County test which affected the yield of those plots. Mildew was noted on the wheat.

The general seasonal conditions in the Piedmont were not conducive to producing good yields due to the loss in stand resulting from the cold. The Coastal Plain tests did not have their stands markedly affected by the cold, but the dry period in April affected the yields. The tests, in general, were representative of the respective areas of production.

#### RESULTS AND DISCUSSION

The data are presented in tabular form by crop and area showing the performance for 1963 and the previous four years. Since environment is very important in determining the genetic potential of a variety, it is best to have several years' data from which to draw conclusions. Comparisons should be made within a column in a table and not between columns. For example, if a variety appears in the two-year average but not in the three-year average, then it must be compared only within the two years 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 yield 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 at the bottom of each 1963 yield column. Unless the yield difference between two varieties is greater than the L.S.D., the varieties should not be considered as having yielded differently from each other.

#### Barley

The performance of barley in the Piedmont is shown in Table 5. The varieties and breeding lines yielded in a rather narrow range and showed no statistical differences either by individual locations or when combined over locations in 1963. The line SC 59-1018 had a high yield and test weight. Colonial 2 showed the highest five-year average for yield of the varieties tested; however, the other varieties were lower in yield and similar to each other. Rogers and Wade generally had the highest test weight (lbs/bu) of the varieties tested.

In the Coastal Plain area, Table 6, there were yield differences in 1963, with the breeding line, SC 59-1018, showing outstanding yield and test weight characteristics. Of the commercial varieties available there were very little differences in their yield; however, Rogers did show a low yield in comparison with the others this year. Considering the five-year average, Wade and Colonial 2 had the highest yields and seemed to be consistent in their performance across years. Generally, Rogers and Wade had the higher test weights per bushel. The low yield

on Rogers was probably attributable to earliness and the fact that the heads were injured by cold. There were differences for entries within each location in 1963, and also a variety by location interaction, when the data were combined across the three locations, indicating that varieties failed to respond the same from location to location. Part of this may be explained by the environment, particularly the cold damage to the early flowering heads and the bird damage to some of the later material. SC 59-1018 appeared to be outstanding for the two-year tests in which it has been included as a breeding line. Not only is it outstanding for yield, but it also has a high test weight.

#### Oats

A summary of the oat performance trials in the Piedmont is shown in Table 7. The single location in Stanly County in which the oats were harvested had reasonably good yields, except for Arlington, Victorgrain and two lines which fell below 60 bushels per acre. Roanoke, Sumter and Carolee yielded in excess of 83 bushels. Only three of the varieties have been in the test for a five-year period. However, in studying the three-year data, Sumter and Roanoke both yielded in excess of 70 bushels. These were followed very closely by Moregrain, Carolee and Fairfax. Considering test weight, Moregrain had the highest for the years in which it has been included in the test.

Data from the oat trials in the Coastal Plain are given in Table 8. Sumter led the test in 1963, with a yield of 76.4 bushels

per acre. Moregrain, Carolee and Suregrain yielded in excess of 60 bushels per acre. Several of the breeding lines yielded very high and showed good test weight. There were variety differences at each location and there was a variety by location interaction shown in these tests. Varieties failed to respond the same, relative to each other, at the different locations. However, these differences were probably not sufficient for one to choose a variety on the basis of individual location data.

#### Wheat

Data on the wheat tests in the Piedmont are presented in Table 9. Yields were generally good, particularly considering the cool weather which had markedly affected the stand. Although there were no significant differences in 1963, Wakeland led the test with a yield of 45 bushels per acre. All of the varieties tended to perform very close to this. Knox and Knox 62 had the highest test weight of the entries tested. The test weights of all varieties were particularly good in 1963. Considering the entries over a period of years, all were yielding very close to each other, with no more than a five bushel spread from the lowest to the highest in the five-year period, 1959 - 1963.

Performance of wheat varieties in the Coastal Plain is shown in Table 10. There were variety differences in 1963, with Knox 62 and Reed having the lowest yield per acre; these two wheats are definitely not adapted to the Coastal Plain region. Considering the five-year period, 1959 - 1963, Wakeland led the tests in yield per acre.

Table 1. Cultural practices for small grain tests 1963.

Area and cooperator	Fertilizer lbs/A	Topdress <sup>1/</sup> lbs/A and date	Date of planting	Date of <sup>2/</sup> harvesting
<u>Piedmont Area</u>				
Gaston Co.	500	30 N Feb. 18	Oct. 11	June 10
Henry Clark	5-10-10	45 N March 8		June 25
Stanly Co.	500	30 N Feb. 18	Oct. 10	June 10
D. G. Harwood	5-10-10	additional 30 N March 8 on oats only		June 25
Iredell Co.	500	30 N Feb. 18	Oct. 11	June 10
Allan Morrow	5-10-10	15 N March 8		June 25
Davidson Co.	500	30 N Feb. 18	Oct. 10	Test discarded
C. A. Smith	5-10-10	45 N March 8		May 1
<u>Coastal Plain Area</u>				
Lenoir Co.	500	30 N Feb. 19	Oct. 18	June 11
Franklin Scarborough	5-10-10	30 N March 11		
Nash Co.	500	30 N Feb. 19	Oct. 16	June 11
W. M. Winstead	5-10-10	30 N March 11		
Columbus Co.	None	30 N Feb. 15	Oct. 30	June 12
Wallace Dickens, Supt. Border Belt Res. Sta.		15 N March 14		

<sup>1/</sup> Ammonium nitrate was used at all locations, except the Border Belt Res. Sta., where A.N.L. was applied.

<sup>2/</sup> Second harvest date due to differences in maturity.

Table 2. Characteristics of barley varieties.

Variety	Loose smut resist- ance	Mildew resist- ance	Rust resist- ance	Scald resist- ance	Lodging resist- ance	Winter Hardiness	Maturity	Test Weight lb/bu.
Davie	Poor	Poor	Excellent	Fair	Fair	Fair	Early	Med.
Rogers	Poor	Excellent	Fair	Fair	Good	Good	Late	High
Early Marconee	Poor	Fair	Poor	Poor	Poor	Fair	Early	Med.
Wade	Poor	Poor	Excellent	Fair	Excellent	Fair	Early	High
Ga-Jet	Good	Fair	Fair	Fair	Poor	Fair	Very early	Med.
Colonial 2	Poor	Poor	Poor	Poor	Fair	Fair	Early	Med.

Table 3. Characteristics of oat varieties.\*

Variety	Rust resist- ance	Smut resist- ance	Blight resist- ance	Mosaic resist- ance	Maturity	Winter hardi- ness	Lodging resist- ance	Amount of Straw	Test Weight lb/bu.
Arlington	Fair	Good	Poor	Good	Late	Good	Fair	Heavy	Med.
Sumter	Fair	Good	Good	Good	Med.	Good	Good	Light	Med.
Moregrain BRS	Good	Good	Good	Fair	Early	Fair	Good	Light	High
Roanoke	Fair	Poor	Good	Fair	Late	Good	Fair	Heavy	Med.
Victorgrain 48-93	Fair	Good	Poor	Fair	Med.	Fair	Good	Med.	Med.
Carolee	Fair	Good	Good	Fair	Med.	Good	Good	Light	Med.
Fairfax	Fair	Poor	Good	Fair	Late	Good	Fair	Heavy	Med.
Suregrain BRS	Good	Excellent	Good	Poor	Early	Poor	Good	Light	High

\* These characteristics based upon all available observations.

Table 4. Characteristics of wheat varieties.\*

Variety	Leaf rust resist- ance	Mildew resist- ance	Mosaic resist- ance	Maturity	Winter Hardiness	Lodging resist- ance	Height of straw	Test Weight lb/bu.
Atlas 66	Fair	Fair	Poor	Med.	Fair	Good	* Med.	Low
Knox	Good	Fair	Good	Early	Good	Good	Short	High
Thorne	Poor	Poor	Good	Late	Excellent	Fair	Tall	Med.
Anderson	Fair	Fair	Fair	Late	Good	Good	Tall	Med.
Wakeland	Fair	Good	Poor	Early	Fair	Good	Short	High
Coker 47-27	Fair	Poor	Poor	Med.	Fair	Good	Tall	High
Taylor 49	Fair	Poor	Good	Med.	Good	Fair	Med.	Med.
Hadden	Good	Excellent	Poor	Early	Fair	Excellent	Short	High
Knox 62	Good	Fair	Good	Early	Good	Good	Short	High
Ga. 1123	Good	Fair	Good	Med.	Fair	Excellent	Med.	Med.
Reed	Excellent	Poor	Good	Med.	Excellent	Good	Med.	High
Monon	Excellent	Poor	Good	Early	Excellent	Good	Short	High

\* These characterizations based upon all available observations.

Table 5. Summary of barley performance trials in the Piedmont.

Variety or Line	1 yr. ave. <sup>1/</sup> 1963		2 yr. ave. <sup>2/</sup> 1962-1963		3 yr. ave. <sup>3/</sup> 1961-1963		4 yr. ave. <sup>4/</sup> 1960-1963		5 yr. ave. <sup>5/</sup> 1959-1963
	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A
	Davie	34.6	39.0	35.2	38.1	39.5	39.4	43.8	40.2
Rogers	34.0	46.6	36.0	45.6	45.2	45.8	40.2	45.6	41.0
Wade	31.5	45.4	34.4	43.9	43.5	44.1	43.5	44.6	43.7
Colonial 2	30.4	37.0	33.5	37.1	42.2	38.7	47.7	39.4	47.3
Calhoun X Bolivia 954 <sup>6/</sup>	33.2	40.6	36.0	40.1	43.3	41.2	46.9	42.0	45.7
Early Marconee	31.8	40.3	37.2	39.4	38.9	40.0			
Ga-Jet	33.9	35.9	33.6	36.4	38.0	37.9			
SC 59-1018 <sup>6/</sup>	49.8	47.0	44.9	44.4					
L.S.D. (.05)	N.S.								
(.01)	N.S.								
C.V. (%)	30								

<sup>1/</sup> Average of Stanly and Iredell County locations.

<sup>2/</sup> Average of five locations.

<sup>3/</sup> Average of nine locations.

<sup>4/</sup> Average of thirteen locations.

<sup>5/</sup> Average of sixteen locations.

<sup>6/</sup> Experimental lines.

Table 6. Summary of barley performance trials in the Coastal Plain.

Variety or Line	1 yr. ave. <sup>1/</sup>		2 yr. ave. <sup>2/</sup>		3 yr. ave. <sup>3/</sup>		4 yr. ave. <sup>4/</sup>		5 yr. ave. <sup>5/</sup>
	1963		1962-1963		1961-1963		1960-1963		1959-1963
	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A
Davie	45.8	38.7	37.3	38.7	44.4	39.3	38.6	39.1	38.0
Rogers	23.4 <sup>7/</sup>	43.8	30.6	44.8	38.8	43.8	32.6	43.6	35.9
Wade	45.5	44.5	40.0	44.5	47.9	43.7	43.7	42.8	42.2
Colonial 2	46.2	38.7	40.5	38.8	48.3	38.9	43.2	38.8	41.7
Calhoun X Bolivia 954 <sup>6/</sup>	47.2	41.3	40.5	40.9	45.6	41.0	41.4	41.4	39.2
Early Marconee	35.4 <sup>7/</sup>	40.2	31.2	40.4	37.6	40.4			
Ga-Jet	40.6	37.1	37.6	37.0	42.0	37.2			
SC 59-1018 <sup>6/</sup>	56.1	46.3	45.0	45.0					
L.S.D. (.05)	14.0								
(.01)	19.5								
C.V. ( % )	23								

<sup>1/</sup> Average of Lenoir, Nash and Columbus County locations.

<sup>2/</sup> Average of six locations.

<sup>3/</sup> Average of nine locations.

<sup>4/</sup> Average of twelve locations.

<sup>5/</sup> Average of fourteen locations.

<sup>6/</sup> Experimental lines.

<sup>7/</sup> Bird and cold damage at Lenoir County.



Table 7. Summary of oat performance trials in the Piedmont.

Variety or Line	1 yr. ave. <sup>1/</sup>		2 yr. ave. <sup>2/</sup>		3 yr. ave. <sup>3/</sup>		4 yr. ave. <sup>4/</sup>		5 yr. ave. <sup>5/</sup>	
	1963		1962-1963		1961-1963		1960-1963		1959-1963	
	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A		bu/A	
Arlington	47.6	27.9	40.4	29.1	45.7	30.5	43.6		43.7	
Moregrain BRS	77.0	34.8	63.0	33.6	66.8	34.2	62.1		61.8	
Victorgrain 48-93	56.8	37.7	47.7	31.2	51.1	31.9	45.1		46.0	
Carolee	83.5	28.7	63.9	29.4	65.8	30.8	62.3			
Roanoke	88.6	30.0	71.5	30.9	70.6	32.7	64.8			
Fairfax	78.6	30.1	62.4	31.2	66.5	32.4	60.5			
Sumter	87.6	32.5	68.7	31.2	70.9	32.0				
Coker 62-34 (58-6) <sup>6/</sup>	69.2	32.3								
SC 60-13459 <sup>6/</sup>	56.2	31.4								
Coker 62-41 (56-14) <sup>6/</sup>	37.9	32.1								
L.S.D. (.05)	28.2									
(.01)	38.0									
C.V. (%)	3									

<sup>1/</sup> Average of Stanly County location.

<sup>2/</sup> Average of four locations.

<sup>3/</sup> Average of eight locations.

<sup>4/</sup> Average of twelve locations.

<sup>5/</sup> Average of fourteen locations.

<sup>6/</sup> Experimental lines.

Table 8. Summary of oat performance trials in the Coastal Plain.

Variety or Line	1 yr. ave. <sup>1/</sup> 1963		2 yr. ave. <sup>2/</sup> 1962-1963		3 yr. ave. <sup>3/</sup> 1961-1963		4 yr. ave. <sup>4/</sup> 1960-1963	5 yr. ave. <sup>5/</sup> 1959-1963
	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	bu/A
	Arlington	58.3	29.4	51.5	31.4	54.2	31.2	57.6
Moregrain BRS	60.9	32.7	57.8	34.3	66.6	34.6	65.9	65.2
Victorgrain 48-93	59.7	29.6	51.4	31.6	54.0	31.3	54.0	52.6
Carolee	60.9	30.9	65.2	32.2	70.8	32.3	72.8	
Suregrain BRS	64.1	31.1	62.5	33.2	71.7	33.5	71.6	
Roanoke	52.1	30.2	57.0	32.1	64.0	32.6	64.4	
Fairfax	48.9	27.9	57.2	30.9	62.2	31.1	64.7	
Sumter	76.4	32.5	78.5	33.0	84.4	33.3		
Coker 62-34 (58-6) <sup>6/</sup>	68.8	33.3						
SC 60-13459 <sup>6/</sup>	63.8	32.2						
Coker 62-41 (56-14) <sup>6/</sup>	69.8	31.9						
Coker 62-26 (58-7) <sup>6/</sup>	73.6	31.3						
L.S.D. (.05)	15.4							
(.01)	N.S.							
C.V. (%)	18							

<sup>1/</sup> Average of Nash, Columbus and Lenoir County locations.

<sup>2/</sup> Average of six locations.

<sup>3/</sup> Average of nine locations.

<sup>4/</sup> Average of twelve locations.

<sup>5/</sup> Average of fourteen locations.

<sup>6/</sup> Experimental lines.

Table 9. Summary of wheat performance trials in the Piedmont.

Variety or Line	1 yr. ave. <sup>1/</sup> 1963		2 yr. ave. <sup>2/</sup> 1962-1963		3 yr. ave. <sup>3/</sup> 1961-1963		4 yr. ave. <sup>4/</sup> 1960-1963		5 yr. ave. <sup>5/</sup> 1959-1963
	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A
	Atlas 66	33.6	54.9	32.4	54.8	36.5	55.4	36.1	55.5
Knox	42.0	61.3	38.9	59.4	40.3	58.9	38.6	58.7	37.7
Thorne	41.7	56.2	37.1	55.9	39.3	56.0	38.6	56.0	38.2
Anderson	39.4	56.7	32.2	55.4	36.5	56.3	37.4	57.0	36.6
Wakeland	45.0	59.0	40.2	57.5	42.1	57.4	41.3	57.4	40.2
Coker 47-27	39.6	59.1	36.9	58.3	39.8	58.2	38.7	58.1	37.6
Taylor 49	37.6	55.8	34.7	55.6	39.1	56.0	39.2	56.2	38.8
Hadden (Coker 59-11)	39.1	58.2	35.9	57.3	38.5	57.4	37.2	57.1	
Monon	43.3	59.9	37.2	57.9	40.2	57.3			
Ga. 1123	43.9	58.2	41.3	56.7	45.2	56.6			
Knox 62	44.1	61.4	37.7	59.6					
Reed	42.2	56.9	39.2	57.0					
Coker 61-10 <sup>6/</sup> (59-11)	39.4	59.5							
N.C. 4718 <sup>6/</sup>	39.0	55.5							
N.C. 5044 <sup>6/</sup>	42.2	58.0							
L.S.D. (.05)	N.S.								
	(.01)		N.S.						
C.V. (%)	14								

<sup>1/</sup> Average of Stanly, Gaston and Iredell County locations.

<sup>2/</sup> Average of six locations.

<sup>3/</sup> Average of ten locations.

<sup>4/</sup> Average of fourteen locations.

<sup>5/</sup> Average of seventeen locations.

<sup>6/</sup> Experimental lines.

Table 10. Summary of the wheat performance trials in the Coastal Plain.

Variety or Line	1 yr. ave. <sup>1/</sup> 1963		2 yr. ave. <sup>2/</sup> 1962-1963		3 yr. ave. <sup>3/</sup> 1961-1963		4 yr. ave. <sup>4/</sup> 1960-1963		5 yr. ave. <sup>5/</sup> 1959-1963
	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A	lbs/bu	bu/A
Atlas 66	38.9	56.7	38.2	56.0	37.3	55.8	37.8	56.6	37.4
Anderson	38.6	57.6	36.7	56.8	36.2	55.8	35.6	56.8	33.9
Wakeland	43.4	59.0	41.1	57.9	39.1	57.8	40.0	58.4	40.1
Coker 47-27	42.5	60.2	40.1	58.8	37.8	58.0	39.0	58.5	37.2
Taylor 49	31.6	57.4	36.2	56.2	33.5	55.4	33.4	56.1	33.3
Hadden (Coker 59-11)	43.6	59.3	40.2	58.3	37.9	58.1	39.4	58.5	
Monon	32.5	59.2	34.1	57.9	31.3	57.0			
Ga. 1123	44.9	58.6	43.6	57.7	41.3	57.1			
Knox	30.0	60.2							
Thorne	35.7	57.8							
Knox 62	26.8	60.3							
Reed	26.4	57.6							
Coker 61-10 (59-11) <sup>6/</sup>	45.5	59.1							
N.C. 4718 <sup>6/</sup>	39.3	56.8							
N.C. 5044 <sup>6/</sup>	46.0	59.3							
L.S.D. (.05)	9.5								
(.01)	12.9								
C.V. ( % )	19								

<sup>1/</sup> Average of Nash, Columbus and Lenoir County locations.

<sup>2/</sup> Average of six locations.

<sup>3/</sup> Average of nine locations.

<sup>4/</sup> Average of twelve locations.

<sup>5/</sup> Average of fourteen locations.

<sup>6/</sup> Experimental lines.