

Research Report No. 1
July 1956

Measured crop performance

SMALL GRAIN

1956

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Introduction

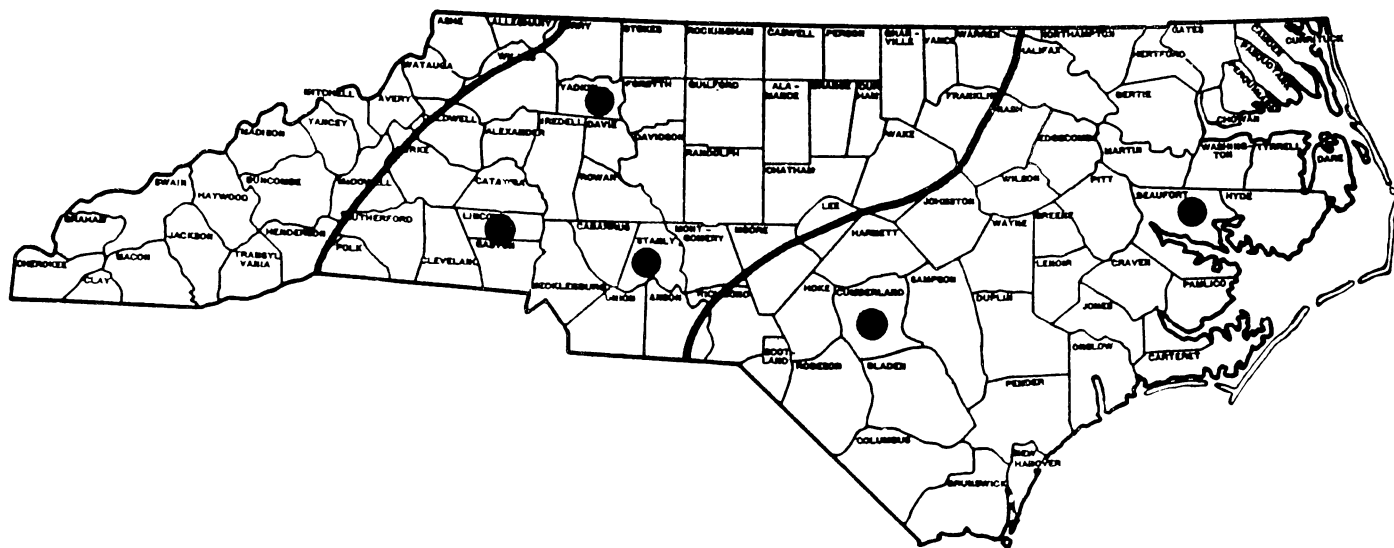
Variety evaluation trials are conducted each year on farmer fields by the North Carolina Agricultural Experiment Station, and this report presents records of performance of commercially available and prospective varieties of oats, wheat and barley. Seasonal conditions differ from year to year and a variety that appears to be excellent for a single year may not prove to be consistently superior. Records of three or more years duration present a better basis for choosing varieties that are more likely to consistently excel. Therefore only those that have been tested for three consecutive years (1954, 1955, and 1956) are compared in table form.

The annual performance (yield) records (1956) are presented in tables by areas and by crops.

Since small grains occupy a relatively small acreage in the mountain counties official variety tests are not conducted in this area.

The small grain breeding utilizes the Mountain Research Station near Waynesville to evaluate its prospective new varieties for winter hardiness and cold tolerance. In conjunction with this a small variety test is conducted and used as a basis for recommending small grain varieties for the mountain counties.

LOCATION OF TESTS



Five field tests were conducted on private farms and branch research farms during the 1955 - 1956 season and represent different soil and climatic conditions and areas of most concentrated small grain production.

The testing agency recognizes the cooperative spirit and civic-minded service rendered by the following farmers who have furnished the land and prepared it for these tests.

The County Agents have contributed liberally of their time in locating and observing these tests as well as utilizing the information derived from them.

1. Farm of Mrs. R. R. Killian, Lincoln County, Lincolnton R#2, County Agent G. A. Stoudemire and Assistants cooperating.
2. Farm of Price Efird, Stanly County, Albemarle RFD 4, County Agent V. A. Honeycutt and Assistants Cooperating.
3. Farm of J. M. Spear, Yadkin County, Boonville RFD, County Agent, R. D. Smith and Assistants cooperating.
4. Farm of W. B. Rodman, E. L. Slack, Mgr., Beaufort County, Pinetown RFD, County Agent M. P. Chesnutt and Assistants cooperating.
5. Farm of E. V. Edens, Cumberland County, Fayetteville, R-4, County Agent J. T. Monroe and Assistants cooperating.

SMALL GRAIN VARIETIES RECOMMENDED

By

NORTH CAROLINA AGRICULTURAL
EXPERIMENT STATION AND EXTENSION SERVICE

(Revised July 1956)

MOUNTAINSOatsForkedeer
Arlington 5/
AtlanticWheatThorne
SenecaBarley

Colonial 2

PIEDMONTOatsArlington
Victorgrain 48-93
Fulgrain
Fulwood
WoodgrainWheat 4/Anderson 1/
Atlas 50 2/
Atlas 66
Coker 47 - 27
Taylor 3/
Knox
Taylor 49 3/BarleyColonial 2
DavieCOASTAL PLAINOatsArlington
Victorgrain 48-93
Fulgrain
Fulwood
WoodgrainWheat 4/Anderson 1/
Atlas 50 2/
Atlas 66
Coker 47 - 27BarleyColonial 2
Davie

-
- 1/ Should be harvested as early as possible to prevent excess weather damage to grain.
- 2/ Atlas 50 under heavy mildew conditions may be expected to excel.
- 3/ Has fair mosaic resistance. Taylor 49 high Mosaic resistance to be available in 1956.
- 4/ On mosaic land in Piedmont, Seneca and Thorne may be used.
- 5/ Has winterkilled in Mountain area during severe winters.

Issued July 23, 1956

Approved: Field Crops and Plant
Pathology

Agencies Sponsoring Entries

Coker Pedigreed Seed Co., Hartsville, S. C.

North Carolina Agricultural Experiment Station, Raleigh, N. C.

T W Woods & Sons, Richmond, Va.

Management of Test Fields

Cultural practices such as seedbed preparation, date of seeding, fertilization, amount and time of topdressing, were in accord with good farm practice and recommendations of N. C. Agr. Experiment Station and Extension Service.

Seasonal Conditions

Seedings were made under favorable conditions in a well prepared and fertilized seed bed. Good stands were obtained at all locations for all entries of oats, wheat and barley.

Good stands were maintained throughout the growing season with the exception of barley in the Beaufort county test. The progressive reduction of stands in the third, fourth, fifth and sixth replications was probably caused by an excessive amount of rainfall during January, February, and March. The replication adjacent to the drainage ditch maintained good stands with a marked reduction in stands as the distance from the ditch increased.

The early maturing entries of wheat and barley were damaged by freezing temperatures in April. Less damage was observed in the Yadkin county test where the growth at this time was not as advanced as the growth in other locations where the damage was more severe.

Winter Hardiness

The less winter hardy oat and wheat varieties that are not injured by prevailing temperatures of the Coastal Plain are often damaged and stands reduced when grown in the Northwestern Piedmont and only the most winter hardy will survive in the Mountains.

Low temperatures (18 to 28 degrees) that occur in spring (March 15 to April 15) cause greater damage and reduction in yield to early maturing varieties than to those that mature later. Since spring freezes are likely to occur in about one year out of each five this factor should be kept clearly in mind when choosing extremely early maturing varieties.

Differences in Yield

Little significance should be attributed to very small differences in yield between varieties since it is not possible to determine the absolute performing ability. The size of difference that may have been due to chance has been computed and listed at the end of each table of the 1956 data as "Least Significant Difference, (L.S.D.)." A similar value is not listed for the average of two or more years data, but the level of significance in such instances will be somewhat smaller than for the individual years. These measures of chance difference should be used to remind the reader not to misinterpret small yield differences.

Choice of Variety

In choosing or deciding on a variety, yield usually receives first consideration. The characteristics that contribute to yield and quality may be as important as yield itself. Such characteristics as disease resistance, winter hardiness, lodging resistance, height of straw, ratio of grain to straw, ease of harvesting and storing, earliness or lateness of maturity, and market quality are all essential and should be considered.

Hard Red Winter Wheat

Hard red winter wheat varieties from the mid-west, namely: Ponca, Tenmarq, Cheyenne, and Comanche were entered in the 1955-1956 variety trials to determine if they can be grown in this state and maintain desirable yields and baking qualities. The yields of these varieties are given on pages 10 and 11.

Limited observations indicate these bearded wheats are medium tall, with medium straw strength and are susceptible to some races of mildew and rust. More information on these wheats will be necessary before conclusions can be made. Testing will be continued.

Characteristics of Recommended Wheat Varieties

Variety	Leaf Rust Resistance	Mildew Resistance	Mosaic Resistance	Maturity	Cold Tolerance	Late Spring Freeze Tolerance	Lodging Resistance	Height of Straw	Test Weight per Bus.
1 Atlas 50	Fair	Good	Poor	Medium early	Fair	Fair	Fair to good	Medium	Fair
2 Atlas 66	Good*	Fair	Poor	Medium early	Fair	Fair	Fair to good	Medium	Fair
3 Coker 47-27	Good*	Fair	Poor	Medium early	Fair	Fair	Good	Medium tall	Good
4 Anderson	Good*	Fair	Poor	Medium early	Good	Good	Good	Tall	Good
5 Taylor	Good*	Poor	Fair	Medium early	Good	Fair	Good	Tall	Fair
6 Thorne	Poor	Poor	Good	Medium late	Very good	Good	Fair	Medium	Good
7 Seneca	Poor	Poor	Good	Medium late	Very good.	Good	Fair	Medium	Good
8 Knox	Excellent	Fair	Good	Early	Good	Poor	Good	Short	Good
9 **Taylor 49	Good	Poor	Good ²	Medium early	Good	Fair	Good	Tall	Fair

*Susceptible to some races of rusts.

**Taylor 49 is a reselection of Taylor and has good resistance to mosaic. Other characteristics are essentially the same as Taylor.

These characterizations based upon all available observations.

Characteristics of Recommended Oat Varieties*

Variety	Rust Resistance	Smut Resistance	Blight Resistance	Mosaic Resistance	Maturity	Cold Tolerance	Lodging Resistance	Amount of Straw	Test Wt. Per Bu.
1 Arlington	Good	Good	Poor	Good	Medium early	Good	Fair	Heavy	Good
2 Victorgrain 48-93	Good	Good	Poor	Good	Early	Fair	Good	Medium	Good
3 Fulgrain	Good	Good	Poor	Good	Early	Fair	Good	Light	Good
4 Fulwood	Good	Good	Poor	Good	Very early	Fair	Good	Light	Good
5 Forkedeer	Poor	Poor	Good	Good	Medium late	Excellent	Fair-	Medium	Good
6 Woodgrain	Good	Good	Poor	Good	Early	Fair	Good	Light	Good
7 Atlantic	Good	Good	Poor	Good	Medium early ^m	Excellent	Fair	Heavy	Good

Characteristics of Recommended Barley Varieties*

Variety	Loose Smut Resistance	Mildew Resistance	Rust Resistance	Scald Resistance	Lodging Resistance	Cold Tolerance	Maturity	Amount of Straw	Test Wt. Per Bu.
1 Colonial 2	Poor	Poor	Poor	Poor	Good	Fair	Medium early	Light	Fair
2 Davie	Poor	Good	Good	Fair	Good	Fair	Medium early	Light	Fair

*These characterizations based upon all available observations.

Table 1
Performance of Wheat Varieties
Three Year Average
Piedmont
1954-1955-1956

Entries	Average Yield	Average Yield	Average Yield	Average Yield
	Bus/A 3 locations 1954	Bus/A 2 locations 1955	Bus/A 3 locations 1956	Bus/A 8 locations
Anderson	36.2	37.1	41.7	38.3
Seneca	32.3	33.3	43.5	36.4
Thorne	31.4	33.5	43.1	36.0
Taylor 49	32.9	35.4	38.4	35.6
Atlas 50	34.8	34.4	36.9	35.4
Coker 47-27	33.3	32.6	39.1	35.0
Leap	29.9	33.7	41.0	34.9
Taylor	32.5	32.9	39.0	34.8
Chancellor	33.1	34.3	36.9	34.8
1/ R-1341-B	34.1	31.0	37.5	34.2
1/5464 x Hardired-3855	36.3	27.5	36.9	33.6
Atlas 66	30.9	34.5	35.0	33.5
Knox	33.5	26.9	35.5	32.0
Mean of Standard	33.0	33.2	38.0	34.7

Standards are: 1954 Atlas 66, Atlas 50, Coker 47-27 and Chancellor
 1955 Atlas 66, Atlas 50, Coker 47-27, Anderson, Knox and Taylor.

1956 Atlas 66, Atlas 50, Coker 47-27, Anderson, Knox, Taylor
 and Taylor 49.

1/ Experimental entries: Not commercially available.

Table 2

Performance of Wheat Varieties

Three Year Average

Coastal Plain

1954-1955-1956

Entries	Average Yield	Average Yield	Average Yield	Average Yield
	Bus/A	Bus/A	Bus/A	Bus/A
	2 locations	2 locations	2 locations	6 locations
	1954	1955	1956	
Anderson	--	33.7	43.9	38.8 ^{1/}
Atlas 50	36.3	30.8	40.6	35.9
Atlas 66	35.6	28.8	42.4	35.6
Taylor 49	37.3	27.9	41.8	35.6
Coker 47-27	39.0	21.6	43.5	34.7
^{2/} 5464 x Hardired-3855	32.8	21.8	46.3	33.6
Coastal	39.2	21.9	38.0	33.0
Seneca	26.7	33.7	38.4	32.9
^{2/R} -1341-B	37.3	21.4	38.3	32.3
Thorne	25.6	31.6	39.3	32.2
Redhart	27.6	9.3	43.3	26.7
Mean of Standard	36.0	28.7	42.6	35.8

Standards are: 1954 Atlas 50 and Atlas 66

1955 and 1956 Atlas 50, Atlas 66, Anderson and Coker 47-27

^{1/} Not planted in 1954. Two year average only.^{2/} Experimental entries: Not commercially available

Table 3

Performance of Wheat Varieties

Piedmont

1956

Entries	Stanly Co. Bus/A	Lincoln Co. Bus/A	Yadkin Co. Bus/A	Average Three Test Bus/A
Seneca	44.8	45.1	40.5	43.5
Thorne	42.8	44.8	41.7	43.1
<u>1/</u> Coker 55-3	44.7	49.2	34.0	42.6
Anderson	41.3	36.2	47.7	41.7
Leap's Prolific	43.6	39.2	40.2	41.0
<u>1/</u> Coker 55-23	43.2	39.2	37.1	39.8
<u>1/</u> T.W.H.H. x Atlas 66-840	38.4	36.0	43.7	39.4
<u>1/</u> y2223+37	42.9	43.2	31.9	39.3
Coker 47-27 BRS	35.0	38.1	44.1	39.1
Taylor	42.4	37.6	37.0	39.0
<u>1/</u> Kentucky 50-9929	41.9	41.6	33.3	38.9
<u>2/</u> Ponca	40.9	43.9	31.0	38.6
Taylor 49	39.6	35.0	40.7	38.4
<u>1/</u> 5464 x Hardired 3855-M563	38.6	35.9	40.3	38.3
<u>1/</u> R - 1341 - B	39.2	35.2	38.2	37.5
<u>1/</u> T.W.H.H. x Atlas 66-766	35.3	35.8	39.9	37.0
Atlas 50	37.2	38.9	34.6	36.9
Chancellor	36.9	35.3	38.6	36.9
<u>1/</u> 5464 x Hardired - 3855	35.1	36.3	39.3	36.9
Knox	37.1	30.7	38.8	35.5
Atlas 66	35.6	37.3	32.2	35.0
<u>2/</u> Comanche	33.1	36.9	33.8	34.6
Friscó	34.2	35.3	32.5	34.0
<u>2/</u> Cheyenne	32.9	37.8	30.5	33.7
<u>2/</u> Tenmarq	26.1	30.6	25.1	27.3
Redhart	24.5	20.0	33.3	25.9
L.S.D. .05	4.8	8.5	8.9	
Mean of Standard	38.3	36.3	39.3	38.0

Standards are: Atlas 50, Atlas 66, Anderson, Taylor, Taylor-49
Knox and Coker 47-27

1/ Experimental entries: Not commercially available

2/ Hard red winter wheat

Table 4

Performance of Wheat Varieties
Coastal Plain
1956

	Beaufort Co. Bus/A	Cumberland Co. Bus/A	2 test Average Bus/A
1/ 5464 x Hardired - 3855	56.8	35.8	46.3
1/ Coker 54-1	50.0	41.6	45.8
1/ Coker 55-3	49.1	41.7	45.4
Anderson	50.6	37.1	43.9
Coker 47-27 BRS	52.4	34.6	43.5
Redhart	47.8	38.8	43.3
1/ 5464 X Hardired-3855-M563	52.2	34.2	43.2
Atlas 66	47.6	37.1	42.4
Chancellor	45.8	38.4	42.1
1/ Coker 55-18	46.4	37.3	41.9
Taylor 49	47.9	35.6	41.8
1/ T. W. H. H. x Atlas 66-840	45.8	36.7	41.3
Atlas 50	48.4	32.8	40.6
1/ Coker 55+23	45.2	35.9	40.5
1/ Coker 55-13	47.5	32.6	40.1
Taylor	48.9	30.3	39.6
Thorne	48.7	29.8	39.3
1/ y2223-37	45.4	32.3	38.9
Seneca	45.5	31.3	38.4
1/ R-1341-B	48.4	28.1	38.3
Coastal BRS	44.2	31.8	38.0
1/ T.W.H .H. x Atlas 66 - 766	46.6	28.7	37.7
Leap's Prolific	46.6	27.6	37.1
Frisco	38.8	27.6	33.2
Knox	46.1	16.8	31.5
2/ Cheyenne	37.5	15.3	26.4
1/ Kentucky 50-9929	35.0	17.4	26.2
2/ Tenmarq	31.0	17.6	24.3
2/ Comanche	32.3	15.3	23.8
2/ Ponca	34.6	11.3	23.0
L.S.D. .05	9.3	7.5	
Mean of Standards	49.8	35.4	42.6

Standards are: Anderson, Atlas 50, Atlas 66, Coker 47-27.

1/ Experimental entries: Not commercially available.

2/ Hard red winter wheat.

Table 5

Performance of Oat Varieties

Three Year Average

Piedmont

1954-1955-1956

Entries	Average Yield	Average Yield	Average Yield	Average Yield
	Bus/A 3 locations 1954	Bus/A 2 locations 1955	Bus/A 3 locations 1956	Bus/A 8 locations
<u>L</u> / C.l. 6571	67.2	72.6	76.4	72.1
<u>I</u> /Atl. x (cl ² -S.F.)2288-96	62.7	62.0	72.9	65.9
Arlington	60.8	54.4	77.2	64.1
Fulwood	70.0	48.8	71.7	63.5
Lee	62.6	51.8	69.6	61.3
Woodgrain	63.9	50.9	65.5	60.1
Victorgrain 48-93 BRS	64.1	49.9	63.0	59.0
<u>L</u> / Williams	66.6	45.1	60.1	57.3
Fulgrain BRS	67.3	41.6	62.6	57.2
<u>L</u> /Victorgrain 52-29	64.6	45.5	60.4	56.8
Mean of Standard	64.1	49.1	68.0	60.4

Standards are: 1954 Arlington, Victorgrain 48-93 and Fulgrain
1955 and 1956 Arlington, Victorgrain 48-93, Fulgrain, Woodgrain
and Fulwood.

L/ Experimental entries: Not commercially available.

Table 6

Performance of Oat Varieties
 Three Year Average
 Coastal Plain
 1954-1955-1956

Entries	Average Yield	Average Yield	Average Yield	Average Yield
	Bus/A 2 locations 1954	Bus/A 2 locations 1955	Bus/A 2 locations 1956	Bus/A 6 locations
<u>1</u> /C.I. 6571	72.8	84.3	80.3	79.1
<u>1</u> /Atl. x (cl ² -S.F.)2288-96	64.7	67.7	88.5	73.6
Woodgrain	67.4	61.4	80.9	69.9
Victorgrain 48-93 BRS	63.8	64.1	78.6	68.8
Fulwood	62.0	55.5	87.0	67.9
Arlington	61.9	56.3	84.3	67.5
<u>1</u> /Victorgrain 52-29	59.6	66.2	74.4	66.7
<u>1</u> /Coker 53-29	64.4	63.4	71.5	66.4
<u>1</u> /Williams	66.1	53.4	63.2	60.9
Fulgrain BRS	60.6	52.2	64.4	59.1
Mean of Standard	62.1	57.9	79.0	66.3

Standards are 1954 Arlington, Victorgrain 48-93 and Fulgrain
 1955 and 1956 Arlington, Victorgrain 48-93, Fulgrain, Woodgrain
 and Fulwood

1/ Experimental entries - Not commercially available.

Table 7
Performance of Oat Varieties
Piedmont
1956

Entries	Stanly Co. Bus/A	Lincoln Co. Bus/A	Yadkin Co. Bus/A	3 test Average Bus/A
<u>2/</u> Wintok-(cl ² -S.F.) x Fork.-2391	94.0	102.3	63.1	86.5
<u>2/</u> Trispernia x Lemont - 2542	88.7	90.4	72.3	83.8
<u>2/</u> C.l. '4658' x (cl ² -S.F.)-2973	104.3	85.1	57.1	82.2
<u>2/</u> Atl.-(cl ² -S.F.)-24	93.1	95.1	53.3	80.5
<u>2/</u> C.l. 6575-2264	104.3	82.2	53.8	80.1
<u>2/</u> C.l. 6583-2623	97.5	90.7	49.3	79.2
<u>2/</u> New Nortex x Landhafer-394	93.0	90.8	52.6	78.8
Arlington	94.1	95.3	42.3	77.2
<u>2/</u> C.l. '6571	87.6	77.1	64.4	76.4
<u>2/</u> Atl.-(cl ² x S.F.)-2288-96	81.1	91.0	46.7	72.9
<u>1/ 2/</u> Coker 55-7 (53-29)	90.0	0.0	55.3	72.9
Fulwood	80.3	78.3	56.6	71.7
<u>1/ 2/</u> Coker 55-6 (53-29)	82.3	0.0	57.1	69.7
Lee	72.2	70.9	65.7	69.6
Woodgrain	72.9	75.3	48.8	65.5
Victorgrain 48-93 BRS	85.7	53.2	50.0	63.0
Fulgrain BRS	72.1	65.3	50.3	62.6
<u>2/</u> Victorgrain 52-29(48-93)	87.4	49.9	43.9	60.4
<u>2/</u> Williams	65.5	59.7	55.0	60.1
L. S. D. .05	14.2	18.8	16.1	
Mean of Standard:	81.0	73.5	49.5	68.0

Standards are: Arlington Victorgrain 48-93, Fulgrain,
Fulwood and Woodgrain

1/ Average of two tests-plantings of this experimental selection in Lincoln County were a total loss due to mosaic and Helminthosporium problems.

2/ Experimental entries: Not commercially available.

Table 8
Performance of Oat Varieties
Coastal Plain
1956

Entries	Beaufort Co. Bus/A	Cumberland Co. Bus/A	Average Bus/A
<u>1</u> /New Nortex x Landhafer-394	112.7	75.4	93.6
<u>1</u> /Atl.-(cl ² S.F.)-2288-96	104.7	72.3	88.5
Fulwood	105.1	68.9	87.0
<u>1</u> /Atl.-(cl ² S.F.)-24	99.5	72.9	86.2
<u>1</u> /Trispernia x Lemont-2542	99.1	72.8	86.0
<u>1</u> /Wintok-(cl ² S.F.) x Fork.-2391	104.3	67.6	86.0
Arlington	105.5	63.0	84.3
<u>1</u> /Coker 55-21	102.6	63.1	82.9
<u>1</u> /Coker 55-5 (53-29)	98.4	65.9	82.2
Woodgrain	102.5	59.3	80.9
<u>1</u> /C.I. 6571	104.6	56.0	80.3
Lee	87.6	69.7	78.7
Victorgrain 48-93 BRS	100.1	57.1	78.6
<u>1</u> /C.I. 6583+2623	103.1	52.7	77.9
<u>1</u> /C.I. 6575-2264	100.3	53.5	76.9
<u>1</u> /Victorgrain 52-29 (48-93)	87.7	61.0	74.4
<u>1</u> /C.I. 4658 x (cl ² S.F.) - 2973	93.8	53.5	73.7
<u>1</u> /Coker 53-29	81.1	61.9	71.5
<u>1</u> /Coker 55-6 (53-29)	72.3	63.2	67.8
Fulgrain BRS	76.7	52.1	64.4
<u>1</u> /Williams	70.8	55.6	63.2
<u>1</u> /Coker 55-7 (53-29)	65.6	59.4	62.5
L.S.D. .05	22.5	12.9	
Mean of Standard	98.0	60.1	79.0

Standards are: Fulgrain, Fulwood, Woodgrain, Victorgrain 48-93 and Arlington

1/ Experimental entries: Not commercially available.

Table 9
Performance of Barley Varieties
Three Year Average
Coastal Plain
1953-1955-1956

Entries	Average Yield	Average Yield	Average Yield	Average Yield
	Bus/A 2 locations 1953	Bus/A 2 locations 1955	Bus/A 2 locations 1956	Bus/A 6 locations
Colonial ₂	59.8	23.5	47.8	43.7
Davie	44.9	19.4	43.7	36.0
Marconee	37.1	23.2	32.5	30.9
Wong	18.1	14.2	19.6	17.3
Mean of Standard	52.3	21.5	45.8	39.9

Standards are: Colonial ₂ and Davie

↓/ Barley variety test were not conducted in 1954.

Table 10
Performance of Barley Varieties
Three Year Average
Piedmont
1954-1955-1956

Entries	Average Yield	Average Yield	Average Yield	Average Yield
	Bus/A 3 locations 1954	Bus/A 2 locations 1955	Bus/A 3 locations 1956	Bus/A 8 locations
Davie	49.7	15.5	42.7	35.9
↓/Colonial x Bolivia-392	36.1	19.6	46.3	34.0
↓/Sunrise x Bolivia 1027-448	45.7	16.2	37.1	33.0
Colonial ₂	42.8	19.1	35.9	32.6
↓/Sunrise x Bolivia 1027-463	48.2	15.6	31.5	31.8
Wong	35.9	17.4	35.9	29.7
Marconee	41.0	16.1	30.3	29.1
Mean of Standard	46.3	16.9	36.3	33.2

Standards are: 1954 Colonial ₂ and Davie
1955 and 1956 Colonial ₂, Davie and Marconee

↓/ Experimental entries - Not commercially available

Table 11

Performance of Barley Varieties

Piedmont

1956

Entries				3 tests
	Stanly Co. Bus/A	Lincoln Co. Bus/A	Yadkin Co. Bus/A	Average Bus/A
✓ Colonial x Bolivia 1341	54.2	71.7	27.3	51.1
✓ Colonial x Bolivia 1355	53.0	70.4	27.6	50.3
✓ Colonial x Bolivia 392	51.3	65.3	22.2	46.3
Davie	35.9	67.1	25.0	42.7
Hudson	36.9	65.4	23.3	41.9
✓ Sunrise x Bolivia 1027-448	32.9	50.9	27.4	37.1
Colonial ₂	25.0	59.6	23.0	35.9
Wong	39.0	48.9	19.7	35.9
✓ Sunrise x Bolivia 1027-463	31.1	45.1	18.4	31.5
Marconee	30.6	38.1	22.1	30.3
L. S. D. .05	12.8	12.9	N.S.	
Mean of Standard:	30.5	54.9	23.4	36.3

Standards are: Davie, Colonial₂ and Marconee

✓ Experimental entries: Not commercially available

Table 12
 Performance of Barley Varieties
 Coastal Plain
 1956

Entries	Beaufort Co. Bus/A	Cumberland Co. Bus/A	Average Bus/A
Colonial ₂	47.8	47.7	47.8
✓ Colonial ₂ x Bolivia-1341	46.0	48.0	47.0
Davie	49.1	38.2	43.7
✓ Colonial x Bolivia-1355	44.2	40.3	42.3
✓ Colonial x Bolivia-392	44.0	36.5	40.3
✓ Sunrise x Bolivia 1027-463	40.0	38.9	39.5
✓ Sunrise x Bolivia 1027-448	42.3	29.0	35.7
Marconee	39.7	25.3	32.5
Hudson	24.9	27.1	26.0
Wong	19.1	20.0	19.6
L. S. D. .05	10.4	9.1	
Mean of Standards:	48.5	43.0	45.8

Standards are: Colonial₂ and Davie

✓ Experimental entries: Not commercially available