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Measured crop performance

SMALL GRAIN 1960

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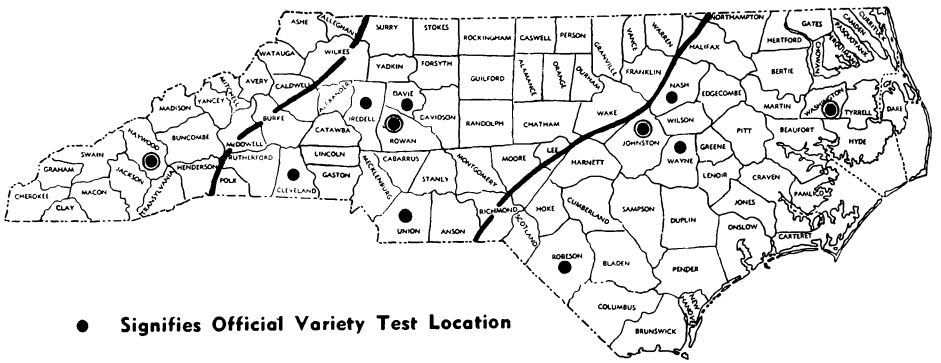
LOCATION OF SMALL GRAIN PERFORMANCE TRIALS 1960



● Signifies Official Variety Test Location

◉ Signifies Plant Breeders Test Locations

CO-OPERATORS

PIEDMONT

Davie County: Cecil Leagans, Route 5, Mocksville. County Agricultural Agent, Leo Williams.
Iredell County: Alan Morrow, Box 275, Route 2, Cleveland. County Agricultural Agent, Wayne Franklin.
Union County: Corbett Greene, Route 2, Marshville. County Agricultural Agent, Jim Marsh.
Cleveland County: Paul Allan, Route 1, Shelby. County Agricultural Agent, H. R. Clapp.

COASTAL PLAIN

Wayne County: P. G. May, Dudley. County Agricultural Agent, G. M. Goforth, Jr. and Assistant County Agricultural Agent, T. S. Godwin.
Robeson County: Burleigh Lowery, Route 1, Rowland. County Agricultural Agent, O. P. Owens.
Nash County: Millard Morgan and Millard Morgan, Jr., P. O. Box 118, Bailey. County Agricultural Agent, J. P. Woodard.

SMALL GRAIN VARIETY TRIALS IN NORTH CAROLINA

1960

The North Carolina Agricultural Experiment Station maintains a co-ordinated research program for developing and evaluating improved varieties of small grain. Evaluation is obtained from trials widely located throughout the state. These trials include the experiment station's own best lines and those from various other sources. Experimental results are summarized and revised annually to give growers the best available information on varietal performance.

The 1960 results were obtained from seven Official Variety Tests. In compiling data on established varieties for a three-year period, data from Experiment Station tests are also used. This is true not only for yield data but for disease reaction as well.

Location of Trials. The location of the 1960 trials are shown on the opposite page, there being a total of five in the Piedmont and five in the Coastal Plain area.

The agricultural workers in their respective areas contribute to the success of these trials by aiding in the location of test sites, holding field meetings, and by their utilization of the information obtained.

Participants in the 1959-60 North Carolina Small Grain Variety trials.

Name	Address
Coker's Pedigreed Seed Company	Hartsville, South Carolina
North Carolina Agricultural Experiment Station	Raleigh, North Carolina
T. W. Wood Seed Company	Richmond, Virginia

Management of Test Plots. Cultural practices such as seedbed preparation, date of planting, and fertilization were in accord with good farming practices and were the same for all entries in a given test. Planting, harvesting, and yield measurements were directly supervised by personnel of the North Carolina Agricultural Experiment Station.

Description of Varieties

Yield data from performance trials are given in the section of this report following a description of varieties. In choosing a variety for seeding, it is important to know something about its (1) yield performance, (2) winter-hardiness, (3) reaction to various diseases, (4) its relative maturity and (5) its seed quality and market value. The following descriptions are based upon all available information.

WHEAT

Anderson (C.I.12536) is intermediate in winter habit. The straw is midtall to tall, stands well and is white in color. The spike or head is awnleted (very short awns at the tip), rather long and lax, the chaff bronze. The kernels are midlong--larger than those of any other variety described in this bulletin. They are dark red.

Anderson is resistant to leaf rust, but moderatly susceptible to powdery mildew and to mosaic. It averages less than the Atlas strains in percent protein, but is somewhat higher than many other varieties grown in the South. Its quality is satisfactory for medium strength soft wheat flour or for blending with hard wheats in the manufacture of bread flour.

Anderson was developed from a cross between Leapland and Fronteira by the Cereal Crops Research Branch, A.R.S., U.S.D.A. It was distributed in South Carolina in the fall of 1951 and in North Carolina in 1952.

Atlas 66 (C.I.12561) is intermediate in winter habit. The straw is medium in height and of good strength. It has white stems and chaff. Spikes are awnleted and the kernels are light red.

Atlas averages higher in protein content than most varieties grown in this area. Lots with good quality grain have proven satisfactory for blending with Hard Red Winter wheats for the manufacture of bread flour.

This variety is resistant to leaf rust and has mild resistance to powdery mildew. It is highly susceptible to mosaic and should not be grown in fields where the soil is infested with this disease. It is well adapted to the Pidemont and Coastal Plain Areas of the state, except where mosaic occurs.

Atlas 66 was developed cooperatively by the Cereal Crops Research Branch, A.R.S., U.S.D.A. and the North Carolina Agricultural Experiment Station from a cross made in 1936 between Frondoso and a selection from Rex Mart 3 x Noll 28. The final selection was made in 1942, and the variety distributed in North Carolina in 1948.

Atlas 50 (C.I.12534) is similar to Atlas 66 except it is less resistant to leaf rust and slightly more resistant to mildew and has longer awnlets.

Atlas 50 is a sister selection to Atlas 66. It was distributed in North Carolina in 1948.

Coker 47-27 (C.I.12536) is intermediate in growth habit. It is midtall and the straw stands well. Spikes are awnleted. Both stem and chaff are white. Kernels are red and soft to semi-hard.

Coker 47-27 is moderately resistant to leaf rust and moderately susceptible to mildew and to mosaic. It should not be used on land where mosaic is severe.

Coker 47-27 was selected at the Coker's Pedigreed Seed Company at Hartsville, South Carolina, from a cross between Fronteira and Hardired made in 1939. It was offered for sale in the fall of 1950.

Taylor 49 (C.I.13249) is a mosaic resistant selection from Taylor. Having mosaic resistance and being generally adapted to the Piedmont area, it has led the yield tests in this section of the state for the past six years. It has not been as widely tested for quality as Anderson and the two Atlas strains, but is considered satisfactory for medium strength soft wheat flour. It about equals Anderson in protein content.

Taylor was developed from the cross Trumbull x Frondoso made by the Cereal Crops Research Branh, A.R.S., U.S.D.A. It was distributed in both North and South Carolina in 1953. Taylor 49, the reselection, was distributed in North Carolina in 1956.

Dual (C.I.13085) has a true winter habit. It is somewhat superior to the commonly grown soft wheats in winterhardiness. It has proven well adapted in the mountains of western North Carolina. The straw is medium short and stands well under high fertility. Dual is a medium season, white chaffed, beardless, soft wheat. The grain is superior in milling and baking qualities but is below most standard varieties in test weight.

Under North Carolina conditions, Dual has shown good resistance to leaf rust and to mosaic but susceptibility to mildew. It is also resistant to Hessian fly.

Dual was developed jointly by the Indiana Agricultural Experiment Station and the Cereal Crops Research Branch, A.R.S., U.S.D.A. It is from a complex cross, involving eight different varieties. It was released in 195

Knox (C.I.12798) has a winter to intermediate habit but is early in maturity (about the same as Purplestraw). It has a short, stiff straw. The heads are awnleted, the chaff is white, the kernels red and soft. The test weight and milling quality of the grain are excellent. It is winter hardy and well adapted to the Piedmont area of the state. It has not, however, proven satisfactory in the Coastal Plain.

It is especially suited to mosaic infested soils where an early soft wheat is desired. Knox has a high type of resistance to leaf rust and good resistance to mildew, as well as to mosaic.

Knox was developed jointly by the Indiana Agricultural Experiment Station and the Cereal Crops Researah Branch, A.R.S., U.S.D.A.

It is from a complex cross involving seven varieties, and it was released in 1953.

Thorne (C.I.11856) is a true winter type wheat. It is midtall and the straw has fair strength. The stems are faint purple. The heads are awnleted and the chaff is bronze. The kernels are typical of Soft Red Winter wheats add produce flour well suited to the soft wheat trade except where lots are low in test weight due to rust or other factors.

It is, however, well adapted in this area for use on mosaic infested soils. In the Coastal Plain, it is completely unadapted, like Knox, being too distinct in its winter habit.

Thorne has excellent resistance to mosaic. It is, however, moderately susceptible to mildew and very susceptible to rust.

Thorne is from a Portage x Fulcaster cross made at Ohio's Agricultural Experiment Station in 1917. It wasn't distributed until 1937.

Seneca (C.I.12529) is very similar to Thorne, being a sister selection . It is reported to have a higher test weight and a stiffer straw than Thorne. Seneca was first distributed from the Ohio Agricultural Experiment Station in 1950.

Wakeland (C.I.13382) is an early, short strawed type of intermediate winter habit.

It has produced well not only in North Carolina, but ranks higher in tests throughout the South Atlantic States. It has fair resistance to leaf rust and mildew, but only partial resistance to mosaic. It probably should not be used where the latter disease is prevalent.

Wakeland is from a cross of Frondosa x (Redhart 3 - Noll 28)-5464 x Hardired. It was first tested as selection 3855.

OATS

With the exception of Forkedeer and LeConte, all of the oat varieties described in this bulletin are related through one common parent, Victoria. This variety has been widely used in the development of crown rust and smut resistant varieties adapted to the southern states. Unfortunately, all varieties with rust resistance from this source are susceptible to Victoria blight. Suregain is resistant to blight but gets its rust resistance from other sources. Blight has made susceptible varieties less valuable in the deep South or in this area when seeded early. Seeded according to recommended dates (see Extension Circular 399), little trouble has occurred from this disease. It could conceivably occur following extremely mild falls, such as prevailed in 1956.

Arlington (C.I.4657) is of intermediate winter habit with sufficient hardiness for the Piedmont and Coastal Plain and in the Mountain area except in severe winters. It is vigorous and has the highest grain record of any variety in the Piedmont and Coastal Plain. Its straw, however, is heavy and takes more power to combine than some of the shorter varieties. It is excellent for grazing or forage. The kernels are large, plump, awnless, reddish yellow and of good test weight.

Arlington has good resistance to mosaic, to certain races of smut and crown rust.

Arlington is from a cross of (Lee-Victoria)x Fulwin developed by the Cereal Crops Research Branch, A.R.S., U.S.D.A. It was first released in North Carolina in 1950.

Fulgrain (C.I.4389) is a very early variety of intermediate to spring growth habit. It has a stiff straw which is medium in height and an ideal combine type. The grains are plump, red and of good test weight.

Fulgrain is resistant to some races of crown rust, to smut and to mosaic. It is susceptible to blight.

Fulgrain is from a cross of Victoria x Fulgrain (Strain 1), the original Fulgrain variety coming from one of Big Boy and Navarro. The newer Fulgrain is similar to the old variety except in having the disease resistance of Victoria. It was developed by the Coker's Pedigreed Seed Company of Hartsville, South Carolina.

Victorgrain 48-93 (C.I.7125) is an early variety of intermediate growth habit. Its straw is medium short and stands well. It has excellent kernel qualities.

It is resistant to mosaic and to some races of crown rust and smut, but susceptible to blight.

Victorgrain is a selection from the same cross as the newer strain of Fulgrain. Victorgrain 48-93 is a reselection from Victorgrain but is believed by the breeders to be from a chance hybrid between Victorgrain and old Fulgrain (Strain 3). Like Fulgrain, it was developed by the Coker's Pedigreed Seed Company of Hartsville, South Carolina.

Fulwood (C.I.6584) is of intermediate spring habit and early in maturity. It is short and easy to combine. It produces grain of good test weight. In many respects, it is similar to Fulgrain. It does, however, tiller more profusely and is slightly more winter hardy. In tests reported here, it has the highest yield record of any of the early varieties.

Fulwood is resistant to mosaic and to some races of crown rust and smut. It is susceptible to blight.

Fulwood was developed by T. W. Wood and Sons of Richmond, Virginia.

Woodgrain is similar to Fulwood and from the same source.

Suregrain (C.I.7155) has an intermediate to spring habit of growth and is somewhat less winter hardy than is Victorgrain. The straw is short and moderately stiff. It matures two to three days earlier than Victorgrain. The kernels are plump, light red and bear very few awns.

Suregrain has better rust resistance than other varieties listed and, in addition, has good resistance to blight and to smut. It is moderately susceptible to mosaic. In official variety tests, it has done very well in the Coastal Plain.

Suregrain is from a three-way cross of (Arlington x Delair) x Trispernia. It was developed by the Coker's Pedigreed Seed Company of Hartsville, South Carolina, and released in the fall of 1957.

Moregrain (C.I.7229) is an early variety of intermediate growth habit. Its straw is medium short and stands well. It is excellent for early grazing. Moregrain is resistant to blight and to most of the prevalent races of crown rust and smut. It is moderately resistant to mosaic.

Moregrain is from a cross of (Arlington-Delair x Trispernia) x (Bond-Fulghum x Victorgrain). Like Victorgrain, Fulgrain and Suregrain, it was developed by the Coker's Pedigreed Seed Company.

BARLEY

Barley is a minor grain crop in the state, but one that is growing in popularity as a feed grain. Between 1935 and 1957, the harvested acreage expanded from approximately 9,000 to 67,000 acres. During this period, there has been a change in type of barley grown. In the thirties, it was largely hooded barley with a limited acreage of bearded varieties. Beginning about 1940, the shift was to awnless types, the first of which was Sunrise. Later, Sunrise was replaced by Colonial, Calhoun, Marconee and Davie.

These awnless types are easy to handle but lack certain desirable characteristics of the earlier types. Reference is made especially to test weight of varieties like Davidson (bearded) and to the smut resistance of Davidson and the hooded varieties, Iredell and Hooded 26. Efforts are underway to incorporate higher test weight and smut resistance into new varieties.

Colonial 2 (C.I.8062) is intermediate in winter growth habit. It is an awnless variety except for short awnlets on the center rows of kernels. It is medium in maturity and produces grain of fair test weight.

Colonial 2 is susceptible to races of mildew now prevalent. It has some tolerance to leaf rust, but is completely susceptible to scald. It was the highest producing variety in the state until the mid-fifties, since then scald has greatly reduced its yield and quality. It does well in the Piedmont and Coastal Plain except where scald is prevalent. It has been fairly satisfactory in the mountains, but is not so hardy as Hudson.

Colonial 2 is a reselection from Colonial (C.I.7570) which came from a cross of Sunrise x Davidson. It was developed at the North Carolina Agricultural Experiment Station and released in 1950.

Davie (C.I.9170) is intermediate to spring in habit and is about one week earlier in maturity than is Colonial 2. Its straw is not as strong as is that of Colonial, but the head type and quality of grain are about equal to it.

Resistance to leaf rust and mildew and fair resistance to scald makes Davie a valuable variety. It is adapted to the Piedmont and Coastal Plain but is not sufficiently hardy for the Mountain area.

Davie is from a cross of Sunrise x Bolivia. It was developed by the North Carolina Agricultural Experiment Station and released in 1953.

Marconee (C.I.8107) has an awnless type head except for very short awn points on the center row of kernels, some of which terminate in a sessile hood. It is medium early in maturity. Its straw is only fair in strength. The grain has low test weight.

Marconee has excellent mildew resistance but is susceptible to leaf rust and scald.

Marconee is from a cross of Hooded x Wong and was developed by the Marrett Seed Company of Westminister, South Carolina.

Wong (C.I.6728) is a winter barley. It has shown fair adaptation in the Mountain and Piedmont areas, but not in the Coastal Plain. The heads are awnleted, the same extending about one inch beyond the tip of the head. Straw strength is good; grain quality fair.

Wong has excellent resistance to mildew but is very susceptible to scald and to local races of leaf rust.

Wong was developed by Cornell University from a cross of Orel x unnamed variety from China.

Interpreting Yield Differences. The L.S.D. value may be used to test the significance of the difference between any two variety means as long as the comparison to be made is not chosen solely on the basis of rank differences.

For example, if varieties differing widely in rank are chosen for comparison because of their rank differences, the chance of calling a difference significant when in fact there is not a real variety difference is much greater than when comparing random mean differences

Selecting a Variety. Variety selection should be based on average yields of at least three years. More valid comparisons are obtained from an average of more than one year's data, because information is collected from a wider variety of environmental and climatic conditions. For this reason, three and five year averages are given along with the one-year information.

In selecting a variety to plant, yield usually receives first consideration. It should be remembered, however, that other characteristics may be as important as yield itself. Such characteristics as disease resistance, winter hardiness, lodging resistance, height of straw, ease of harvesting, maturity, and market quality, are all essential and should be considered. Information on criteria not recorded here is available from county agricultural agents and vocational agriculture teachers.

CHARACTERISTICS OF OAT VARIETIES*

Variety	Rust Resistance	Smut Resistance	Blight Resistance	Mosaic Resistance	Maturity	Winter Hardiness	Lodging Resistance	Amount of Straw	Test Weight per Bushel
Arlington	Fair	Good	Poor	Good	Medium	Good	Fair	Heavy	Good
Victorgrain 48-93	Fair	Good	Poor	Good	Early	Fair	Good	Medium	Good
Fulgrain	Fair	Good	Poor	Good	Early	Fair	Good	Light	Good
Fulwood	Fair	Good	Poor	Good	Early	Good	Good	Light	Good
Forkedeer	Poor	Poor	Good	Good	Late	Excellent	Fair	Medium	Good
Woodgrain	Fair	Good	Poor	Good	Early	Fair	Good	Light	Good
Suregrain	Good	Excellent	Good	Poor	Early	Poor	Good	Light	Good
Moregrain	Good	Good	Good	Fair	Early	Fair	Good	Light	Good

CHARACTERISTICS OF BARLEY VARIETIES*

Variety	Loose Smut Resistance	Mildew Resistance	Rust Resistance	Scald Resistance	Lodging Resistance	Winter Hardiness	Maturity	Amount of Straw	Test Weight per Bushel
Colonial 2	Poor	Poor	Poor	Poor	Good	Fair	Medium	Light	Good
Davie	Poor	Fair	Excellent	Fair	Fair	Fair	Early	Light	Fair

*These characterizations based upon all available observations.

CHARACTERISTICS OF WHEAT VARIETIES*

Variety	Leaf Rust Resistance	Mildew Resistance	Mosaic Resistance	Maturity	Winter Hardiness	Late Spring Freeze Tolerance	Lodging Resistance	Height of Straw	Test Weight per Bushel
Atlas 50	Fair	Good	Poor	Medium	Fair	Fair	Good	Medium	Fair
Atlas 66	Good	Fair	Poor	Medium	Fair	Fair	Good	Medium	Fair
Coker 47-27	Fair	Poor	Poor	Medium	Fair	Fair	Good	Tall	Good
Anderson	Good	Fair	Fair	Medium	Good	Good	Good	Tall	Good
Thorne	Poor	Poor	Good	Late	Excellent	Good	Fair	Tall	Good
Seneca	Poor	Poor	Good	Late	Excellent	Good	Fair	Tall	Good
Knox	Excellent	Good	Good	Early	Good	Poor	Good	Short	Good
Taylor 49	Fair	Poor	Good	Medium	Good	Fair	Fair	Medium	Good
Wakeland	Good	Good	Poor	Early	Fair	Fair	Good	Short	Good

*These characterizations based upon all available observations.

PERFORMANCE OF BARLEY VARIETIES

5-Year Average 1956-1960 - PIEDMONT

Variety	Acre Yield Bu.
Colonial x Bolivia-1341	44.1
Colonial 2	43.7
Davie	41.8

PERFORMANCE OF BARLEY VARIETIES

3-Year Average 1958-1960 - PIEDMONT

Variety	*Acre Yield Bu.	**Acre Yield Bu.	†Acre Yield Bu.
Colonial 2	51.6	63.2	57.4
Calhoun x Bolivia 954	48.9	62.4	55.7
Davie	45.1	58.6	51.9
Colonial x Bolivia-1341	45.1	54.4	49.8

*Average of 10 Official Variety Tests
**Average of 3 Breeder Tests
†Average of 10 Official Variety Tests and 3 Breeder Tests

PERFORMANCE OF BARLEY VARIETIES

PIEDMONT - 1960

Summary of Cleveland, Davie, Iredell and Union County Locations

Variety	Acre Yield Bu.	Test Weight Lbs./Bu.
Colonial 2	64.3	41.4
Calhoun x Bolivia-954	57.6	44.6
Davie	56.9	42.8
Colonial x Bolivia-1341	53.0	44.9
C.I.2524 x Calh.3 x Va.5124-Sel.1903	51.6	43.0
Taylor's 502-4255	48.4	42.5
Va.59-37-3	47.9	40.9
Davie x Harbine-1487	43.8	44.4
Kenbar x Davie-392	43.6	46.1
Va.59-40-25	40.6	40.6
Harbine	34.3	46.1
Rogers	25.4	44.7
L.S.D. 5% Level	6.4	

PERFORMANCE OF OAT VARIETIES

5-Year Average 1956-1960 - PIEDMONT

Variety	Acre Yield Bu.
Fulwood	56.4
Arlington	54.3
Victorgrain 48-93	46.5

PERFORMANCE OF OAT VARIETIES

3-Year Average 1958-1960 - PIEDMONT

Variety	*Acre Yield Bu.	**Acre Yield Bu.	†Acre Yield Bu.
Letoria x(C1-SF)-64	58.8	80.6	69.7
Moregrain	55.9	--	--
Fulwood	51.5	94.8	73.2
Arlington	46.0	91.8	68.9
Victorgrain 48-93	41.9	74.8	58.4

*Average of 9 Official Variety Tests
**Average of 3 Breeder's Test
†Average of 9 Official Variety Tests and 3 Breeder's Tests

PERFORMANCE OF OAT VARIETIES

PIEDMONT - 1960

Summary of Cleveland, Davie, Iredell and Union County Locations

Variety	Acre Yield Bu.
Arl. x(Wt.-Cl^2-SF)	57.0
Letoria x(Cl-SF)-64	51.8
Moregrain 59-67	48.1
Moregrain 59-89	47.1
C.I.7413: Arl.x [Win.x Cl^2-SF): Md.232	47.1
Moregrain BRS	45.9
Coker 59-17	45.0
C.I.7417: Arl.x [Win.x(Cl^2-SF)]: Md.251	42.3
Fulwood	38.5
Arlington	37.2
Earlygrain	30.4
Sel.455	29.9
C.I.7309 [Wintok x(Cl-SF]x Imp.Garry Md.2725	28.2
Victorgrain 48-93 BRS	26.9
C.I.7307 [Atl. x(Cl-SF)]x Imp. Garry Md.370	20.1
L.S.D. 5% Level	5.0

PERFORMANCE OF WHEAT VARIETIES

5-Year Average 1956-1960 - PIEDMONT

Variety	Acre Yield Bu.
Thorne	38.6 ~~38.0~~
Taylor 49	37.9
Seneca	37.9
Anderson	37.3
Wakeland	35.7
Coker 47-27	34.7
Knox	34.5
Atlas 66	33.0

PERFORMANCE OF WHEAT VARIETIES

3-Year Average 1958-1960 - Piedmont

Variety	*Acre Yield Bu.	**Acre Yield Bu.	†Acre Yield Bu.
Taylor 49	38.6	45.6	42.1
Seneca	37.7	-	-
Anderson	37.4	39.5	38.5
Dual	36.8	-	-
Thorne	36.8	-	-
Wakeland	36.3	39.5	37.9
Coker 47-27	36.3	-	-
Knox	34.3	41.7	38.0
Atlas 66	34.2	39.0	36.6

*Average of 10 official Variety Tests
**Average of 3 Breeder Tests
†Average of 10 official Variety Tests and 3 Breeder Tests

PERFORMANCE OF WHEAT VARIETIES

PIEDMONT - 1960

Summary of Cleveland, Davie, Iredell and Union County Locations

Variety	Acre Yield Bu.	Test Weight Lbs./Bu.
Anderson	40.2	59.0
Taylor 49	39.5	56.7
Ky.37 x(Chan.)x 6317-1916	39.3	57.4
Wakeland	38.9	57.4
T1123-3-20	38.7	56.5
Wakeland 215	36.7	56.4
Dual	36.7	56.4
Thorne	36.7	55.9
Seneca	36.6	57.9
(Ky.37 x Chan.)x(MHP x At.66)-2273	36.5	55.8
Coker 47-27 BRS	35.4	57.9
C.I.12651 x At.66-Sel.4049	35.3	57.8
Atlas 66	35.1	55.7
(Ky.37 x Chan.)x Knox-3626	34.5	57.0
(Ky.37 x Chan.)x Knox-1696	34.1	56.1
(At.66 x C.I.12651)x(Prog. x Chan.)-2844	34.0	54.4
Knox	33.6	58.1
Coker 59-11	33.3	56.1
Coker 59-36	33.2	57.3
(Taylor x 12651)x Knox-1916	32.9	58.4
(Ky.37 x Chan.)x(MHP x At.66)-2273	31.1	55.8
L.S.D. 5% Level	3.4	

PERFORMANCE OF BARLEY VARIETIES

5-Year Average 1956-1960 - COASTAL PLAIN

Variety	Acre Yield Bu.
Colonial x Bolivia-1341	35.7
Colonial 2	34.6
Davie	29.8

PERFORMANCE OF BARLEY VARIETIES

3-Year Average 1958-1960 - COASTAL PLAIN

Variety	*Acre Yield Bu.	**Acre Yield Bu.	†Acre Yield Bu.
Colonial 2	32.3	57.9	45.1
Colonial x Bolivia-1341	32.0	50.4	41.2
Calhoun x Bolivia-954	30.4	60.5	45.5
Davie	25.3	56.5	40.9

*Average of 7 Official Variety Tests
**Average of 3 Breeder Tests
†Average of 7 Official Variety Tests and 3 Breeder Tests

PERFORMANCE OF BARLEY VARIETIES

COASTAL PLAIN - 1960

Summary of Nash, Wayne, and Robeson County Locations

Variety	Acre Yield Bu.	Test Weight Lbs./Bu.
Kenbar x Davie-392	30.9	39.9
Colonial x Bolivia-1341	30.3	43.1
Calhoun x Bolivia-954	28.8	42.7
Colonial 2	27.9	38.6
C.I.2524 x Calh.3 x Va.5124-Sel.1903	26.7	41.4
Davie x Harbine-1487	25.8	43.0
Harbine	24.2	42.9
Taylor's 502-4255	22.4	38.1
Davie	21.1	38.7
Va.59-37-3	16.4	37.2
Rogers	13.9	42.9
Va.59-40-25	10.2	40.7
L.S.D. 5% Level	5.2	

PERFORMANCE OF OAT VARIETIES

5-Year Average 1956-1960 - COASTAL PLAIN

Variety	Acre Yield Bu.
Fulwood	67.1
Arlington	62.5
Woodgrain	62.0
Victorgrain 48-93	56.5

PERFORMANCE OF OAT VARIETIES

3-Year Average 1958-1960 - COASTAL PLAIN

Variety	*Acre Yield Bu.	**Acre Yield Bu.	†Acre Yield Bu.
Suregrain	65.6	--	--
Moregrain	63.7	--	--
Fulwood	63.6	71.0	67.3
Arlington	59.9	65.9	62.9
Woodgrain	59.6	--	--
Victorgrain 48-93	53.6	56.3	55.0

*Average of 7 Official Variety Tests
**Average of 3 Breeder Tests
†Average of 7 Official Variety Tests and 3 Breeders Tests

PERFORMANCE OF OAT VARIETIES

COASTAL PLAIN - 1960

Summary of Nash, Wayne and Robeson County Locations

Variety	Acre Yield Bu.
Letoria x(Cl$_2$SF)-64	78.7
Arl.x(Wt.-Cl^2-SF)	77.9
C.I.7417: Arl. x [Win.x (Cl^2-SF):Md.251	72.0
Suregrain	71.0
Arlington	67.9
Coker 59-17	67.8
C.I.7413: Arl. x[Win.x (Cl^2-SF):Md.232	65.5
Fulwood	65.5
Moregrain BRS	63.8
Moregrain 59-67	62.6
Moregrain 59-89	61.9
C.I.5919 x Vict.48-93: Sel.455	59.2
C.I.7309 [Wintok x(Cl-SF)x Imp.Garry: Md.2725	57.1
Woodgrain	56.7
Victorgrain 48-93 BRS	54.0
C.I.7307 [Atl. x(Cl-SF)x Imp.Garry: Md.370	51.3
L.S.D. 5% Level	9.9

PERFORMANCE OF WHEAT VARIETIES

5-Year Average 1956-1960 - COASTAL PLAIN

Variety	Acre Yield Bu.
Wakeland	36.8
Atlas 66	35.9
Coker 47-27	35.4
Taylor 49	34.5
Anderson	32.8

PERFORMANCE OF WHEAT VARIETIES

3-Year Average 1958-1960 COASTAL PLAIN

Variety	Acre Yield Bu.
Wakeland	38.8
Coker 47-27	36.5
Atlas 66	36.0
Taylor 49	33.7
Anderson	31.2

PERFORMANCE OF WHEAT VARIETIES

COASTAL PLAIN - 1960

Summary of Nash, Wayne, and Robeson County Locations

Variety	Acre Yield Bu.	Test Weight Lbs./Bu.
Wakeland 215	44.2	60.4
Coker 59-11	43.8	59.7
Coker 47-27	42.6	60.2
Wakeland	42.5	60.2
(Ky.37 x Chan.)x 6317-1916	39.5	59.6
Atlas 66	39.4	59.1
(Ky.37 x Chan.)x Knox-3626	38.6	58.7
Coker 59-36	37.4	58.8
(At.66 x C.I.12651)x(Prog. x Chan.)-2844	36.7	57.2
(Ky.37 x Chan.)-6595	35.4	59.9
C.I. 12651 x At.66-Sel.4049	34.0	59.1
Thorne	33.8	58.2
Seneca	33.7	59.3
Anderson	33.7	59.7
Taylor 49	33.2	58.3
(Ky.37 x Chan.)x Knox-1696	32.8	58.9
T1123-3-20	32.3	58.1
(Taylor x 12651)x Knox-1916	31.3	60.4
Dual	27.7	57.5
(Ky.37 x Chan.)x(MHP x At.66)-2273	27.0	58.4
Knox	24.0	61.0
L.S.D. 5% Level	4.4	