

2006 TOBACCO VARIETY INFORMATION

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New Varieties for 2007

- NC 196** (Gold Leaf Seed and Raynor Seed Company) was developed by Dr. Earl Wernsman at North Carolina State University. It met minimum standards in 2002. NC 196 is a high yielding, relatively late maturing variety with excellent quality. It has resistance to races 1 and 3 of the most common root knot nematode. It is susceptible to tobacco mosaic virus. The black shank rating is 16 and the Granville wilt rating is 31.
- PVH 1118** (F. W. Rickard Seeds). Tested as **RX 118**. It met the minimum standards in 2004. It is a moderate yielding variety with excellent quality. In tests in North Carolina it yielded 2,930 pounds per acre in 2005, which was slightly above the test average of 2,831 pounds per acre. Its ratings for resistance to black shank and Granville wilt are very high. Resistance to black shank for both of these varieties is predominately from the Ph gene
- Spt. 225** (Speight Seed Farms) It met minimum standards in 2003. Speight 225 is a moderate yielding variety similar to Speight 168. The black shank rating is a 8 and the Granville wilt resistance is rated as 8. Available from Speight Seed Farms and Cross Creek Seeds in 2007.
- Spt. 227** (Speight Seed Farms) It met minimum standards in 2003. Speight 227 is a moderate yielding variety similar to Speight 168. The black shank rating is a 4 and the Granville wilt resistance is rated as 11. Available from Speight Seed Farms and Cross Creek Seeds in 2007.
- Spt. 234** (Speight Seed Farms) It met minimum standards in 2004. Speight 234 is a moderate yielding variety similar to Speight 168. The black shank rating is a 13 and the Granville wilt resistance is rated as 14. Available from Speight Seed Farms and Cross Creek Seeds in 2007.

Seed Company Contact Information

Cross Creek Seed	PH: 910 904 1888	http://www.goldleafseed.com/us/index.php
Gold Leaf Seed Company	PH: +1 (800) 281-2541	http://www.crosscreekseed.com/
F. W. Rickard Seed Company	PH: +1 800 344 0630	http://www.rickardseed.com/
ProfiGen do Brasil Ltda	PH: (55)(51) 3704-9244	http://www.profigen.com/
Raynor Seed Company	PH: (252) 446-5229	

GROWERS ARE ENCOURAGED TO PLANT ONLY A LIMITED ACREAGE OF ANY NEW VARIETY UNTIL MORE INFORMATION AND EXPERIENCE BECOMES AVAILABLE FROM A WIDER RANGE OF SOIL AND CLIMATIC CONDITIONS.

Based on a County Agent survey of tobacco seedling producers the following estimates of percent of the Georgia tobacco crop planted in 2005: NC 71 (61%); NC 297 (7%); NC 72 (4%); CC 27 (4%); K 326 (11%); Spt G 70 (1%); NC 299 (7%); K 394 (1.7%); NC 102 (1%); and less than 1% each for the following NC 291 (0.4%); K 346 (0.2%); NC 55 (0.2%).

Variety Selection

All tobacco varieties undergo rigorous testing before being released for commercial production. This testing includes small plot trials on experiment stations, warehouse evaluations, determination of chemical and physical properties, and finally on-farm testing to evaluate how the potential variety performs in a commercial situation. A variety must meet certain quality standards before being released. Thus farmers can be assured that any variety that is released has been thoroughly evaluated before seed are made available for commercial planting.

Each farmer may have different requirements for the variety to be grown on his farm. Ease of growing and curing, disease and nematode resistance and market acceptance should be taken into account when selecting a variety. Since disease and nematode infestations on a farm can seriously limit variety selection, farmers should attempt to keep their fields free of these problems. Crop rotation is necessary on most farms to reduce losses from soil-borne diseases and nematodes.

Growers should not depend solely on varietal resistance to prevent losses from diseases and nematodes. Crop rotations and appropriate chemicals should be a part of every tobacco program no matter which variety is grown. In severely infested fields, there will usually be some loss to black shank with any variety. Chemicals are available to reduce black shank damage. Three year or longer crop rotation is a proven means of reducing black shank losses. Rotation among a group of black shank resistant varieties will prolong resistance of any one variety. This practice is most valuable where crop rotations are shortest. Nematode-resistant varieties have resistance only to races 1 and 3 of Southern root-knot nematode. Losses to peanut, Javanese and race 2 or 4 of Southern root-knot nematodes have been increased by short-term rotations, growing varieties resistant to races 1 and 3 of Southern root-knot nematode and improper use of nematicides. Rotating tobacco with nematode-resistant crops and effective use of nematicides are essential to preventing losses to nematodes.

Several agronomic characteristics may assist in the selection of a variety. Yield, quality, sucker habits, height, leaf spacing, leaf size and maturity characteristics are available. Some characteristics may be more affected by cultural practices than by varietal differences.

2006 Official Flue-Cured Tobacco Variety Evaluation

Tobacco varieties play a discerning role in yield and quality improvement programs. Moreover, a vital part of any breeding program is the appropriate testing and evaluation of new tobacco varieties. Important characteristics of these varieties are yield, disease resistance, desirable plant qualities, ease of handling, and market acceptability. For a variety to be recommended it must be superlative in one or more and contain a balance of the remainder of the factors. For instance, for a variety to have an excellent yield and poor disease resistance or to yield well and have poor cured quality is undesirable.

The Regional Variety Test is conducted to obtain data on yield, disease resistance, quality as judged by physical appearance, and chemical analysis for quality characteristics. Once this information is analyzed, the desirable varieties and breeding lines in these tests advance to the Official Variety Test for further evaluation under growing and marketing conditions in Georgia.

As in previous years, we have included the Regional Farm Test so that when varieties are selected from this test the extension service will have a second data set to use in making recommendations to growers.

2006 Official Flue-Cured Tobacco Variety Evaluation

The 2006 Official Variety Test and Regional Small Plot Test consisted of 40 and 39 entries respectively while the Farm Test had 14 entries. These tests were conducted at the University of Georgia Bowen Farm on an Ocilla loamy coarse sand. All transplants were treated with the low labeled rate of Actigard and Admire for Tomato spotted wilt virus (TSWV). The test was mechanically transplanted on April 4 with 22 plants per field plot and replicated three times. Fertilization consisted of 500 lbs/acre of 6-6-18 at first cultivation, 500 lbs/acre 6-6-18 at second cultivation, and an additional 120 lbs/acre of 15.5-0-0 at lay-by for a total of 80 lbs/acre of nitrogen.

Cultural practices, harvesting, and curing procedures were uniformly applied and followed the current University of Georgia recommendations. Data collected included plant stand, yield in lbs/A, value/A in dollars, dollars per hundred weight, grade index, number of leaves/plant, plant height in inches, and days to flower. In addition, leaf chemical determinations consisted of total alkaloids, total soluble sugars, and the ratio of sugar to total alkaloids.

Results and Discussion

The 2006 Official Variety and Farm Test produced excellent yields and good quality even through dry conditions from March to June. The test benefitted from the application of Telone II applied, at the recommended rate, in October 2005 with good soil conditions. In addition, Actigard was applied at the recommended rate two weeks after transplanting and again at the first visible symptoms of TSWV on non-treated check plants in an adjacent test. The non-treated check at the Bowen Farm had 40% TSWV as compared to less than 6% TSWV in the variety tests which received the standard greenhouse treatments of Actigard/Admire plus the two field sprays of Actigard. Also, the Telone II treatment controlled the Root-Knot nematodes that plagued the variety tests in 2005. Eight irrigations of 0.75 inches each supplied a good percentage of early and mid-season moisture and enhanced yields. Even with uniform irrigation and prevailing west winds, the test had some variability west to east due to the east side being sandy and drier.

Yield ranged from 1691 lbs/A for NC 2326 to 3829 lbs/A for NC 72. Value was different with NC 2326 bringing in 1578 dollars/A compared to 4715 dollars/A for K 730. NC 72 at \$91.9/CWT was the lowest priced while NC 55 at \$128.2 had the best price per CWT. Likewise, NC 55 had the highest grade index at 78.7 with NC 2326 coming in low at 61.3. Plant heights were average in the low to middle thirty inches. The number of days to flower usually between 65 and 75 were in the high 80's due to application of Actigard which delayed growth at the beginning of the season. Leaf chemistry was good with sugars averaging in the middle teens and alkaloids from 2 to 3 percent. The Official Variety test data are displayed in Tables 1 and 2 and the Farm test data are displayed in Table 3.

Disease resistance ratings for selected released varieties are presented in Table 4. Pedigree, year of release and sponsor of selected varieties are presented in Table 5. Agronomic and economic information on released varieties grown on-farm in Lanier County are presented in Tables 6 & 7.

Table 1. Yield, Value, Price Index, Grade Index and Agronomic Characteristics of Released Varieties Evaluated in the 2006 Official Flue-Cured Variety Test at the University of Georgia, Tifton, GA.

Variety	Yield lb/A	Value \$/A	Price ¹ Index \$/CWT	Grade ² Index	Number Leaves/ Plant	Plant Ht. (inch)	Days to Flower	% Total Alkaloid	% Reducing Sugar	Ratio RS/TA
NC 2326	1691	1578	92.8	61.3	17	31.3	69	3.65	13.4	3.7
NC 95	3572	3798	108.1	71.9	22	37.7	79	3.69	14.1	3.8
C 371 Gold	2862	3206	113.7	74.0	19	31.3	84	3.98	12.6	3.2
K 326 GL	3242	3498	108.2	72.2	19	30.9	85	3.72	13.4	3.6
K 326 CC	2951	3075	103.8	70.8	20	32.3	86	3.21	14.4	4.5
K 326 R	3144	3594	114.4	73.7	20	33.3	87	2.64	16.8	6.4
K 730	3760	4715	124.7	77.1	21	33.4	81	2.89	15.8	5.5
NC 71	3152	3747	117.5	75.0	19	31.2	87	3.30	13.6	4.1
NC 72	3829	3515	91.9	68.9	19	33.0	87	3.20	14.1	4.4
NC 297	3712	4553	124.6	75.0	20	32.3	86	3.49	16.7	4.8
NC 810	3078	3432	111.6	73.8	18	30.0	88	3.10	12.2	3.9
NC 55	2917	3740	128.2	78.7	20	31.6	87	3.37	14.4	4.3
NC 291	3086	3049	100.4	70.5	21	33.7	88	3.50	15.3	4.4
NC 299	3152	3705	118.8	74.3	21	33.8	84	3.17	16.2	5.1
NC 196	2459	2729	115.0	72.9	18	30.6	88	2.95	17.2	5.8
NC 102	2013	2288	110.6	71.4	20	31.5	88	3.66	13.7	3.7
NC 471	2642	2954	111.8	71.7	18	30.9	88	3.87	12.3	3.2
GL 350	2515	2762	113.4	71.6	18	31.1	87	3.33	13.7	4.1
GL 939	2991	3463	116.1	73.1	19	30.7	87	3.63	15.3	4.2
GL 390	2579	2922	113.6	71.8	20	31.7	87	3.96	10.4	2.6
GL 330	3089	3850	123.3	75.9	21	32.1	87	3.80	15.1	4.0
CC 13	3480	3889	112.2	73.8	18	29.8	88	3.65	12.3	3.4
CC 700	2949	3878	132.1	76.7	20	32.1	87	2.88	15.4	5.3
CC 27	3342	3855	115.6	75.3	20	32.4	88	3.64	12.7	3.5
RX 118	2751	3467	126.4	77.2	20	33.6	88	2.94	15.1	5.1

Table 1. Yield, Value, Price Index, Grade Index and Agronomic Characteristics of Released Varieties Evaluated in the 2006 Official Flue-Cured Variety Test at the University of Georgia, Tifton, GA (continued).

Variety	Yield lb/A	Value \$/A	Price ¹ Index \$/CWT	Grade ² Index	Number Leaves/ Plant	Plant Ht. (inch)	Days to Flower	% Total Alkaloid	% Reducing Sugar	Ratio RS/TA
RX 116	3559	3821	107.6	72.8	18	33.1	78	4.00	14.8	3.7
RX 123	3604	3972	110.3	69.7	19	31.2	83	3.61	14.4	4.0
Speight H20	3187	3426	106.6	70.7	19	33.1	87	3.56	13.7	3.8
Speight 210	3261	3542	108.6	71.7	18	28.4	86	3.69	15.4	4.2
Speight 179	3216	3858	119.4	75.2	18	29.5	88	3.69	11.7	3.2
Speight 235	2397	2780	112.7	74.0	18	30.3	88	3.96	12.4	3.1
Speight 225	2333	2609	110.4	70.5	18	30.9	88	3.35	13.8	4.1
Speight 227	2835	3137	110.4	71.5	19	31.9	88	2.79	17.0	6.1
Speight 234	3062	3175	102.3	70.0	18	30.9	87	3.56	14.3	4.0
Speight 236	2991	3784	124.5	73.5	18	30.9	88	2.93	11.9	4.1
Speight 168	2978	3550	116.8	71.1	19	32.6	88	3.13	16.0	5.1
Speight 220	2660	2497	93.9	66.3	20	31.1	88	3.37	14.5	4.3
Speight H12	3570	4148	116.4	72.8	20	34.1	81	4.10	10.4	2.5
Speight H10	3496	4025	115.8	73.3	21	36.2	81	4.50	10.3	2.3
Speight H9	3136	3387	107.0	70.5	21	34.9	80	4.32	12.0	2.8
CH 1*	3398	3396	102.8	71.8	20	30.6	85	2.86	16.3	5.7
CH 3*	3464	4046	117.2	75.8	21	35.7	86	2.91	16.4	5.6

LSD@0.05

¹Price Index based on two year average (2005-2006) prices for U.S. government grades.

²Numerical values ranging from 1-99 for flue-cured tobacco based on equivalent government grades - higher the number, higher the grade.

* unreleased variety

Table 2. Comparison of Certain Characteristics for Released Varieties Evaluated in the 2006 Official Flue-Cured Tobacco Variety Test at the University of Georgia, Tifton, GA

Variety	Yield lb/A	Value \$/A	Price ¹ Index \$/CWT	Grade ² Index	Number Leaves/ Plant	Plant Ht. (inch)	Days to Flower	% Total Alkaloids	% Reducing Sugars	Ratio RS/TA
Three Year Average 2003 / 2004 / 2006										
NC 2326	2226	2759	123	56	19	37.1	69	3.8	11.3	2.8
NC 95	2660	3352	129	45	20	35.7	76	3.8	10.5	2.7
C 371 G	2157	2727	130	60	19	33.3	84	3.3	10.1	3.0
K 326 GL	2864	3895	140	63	20	34.2	83	2.8	15.0	5.7
NC 71	2772	3878	139	64	20	34.3	85	3.1	14.5	4.8
NC 72	2765	3457	131	60	19	34.4	84	3.0	13.1	4.9
NC 810	2564	3440	134	60	20	33.4	86	3.2	10.8	3.4
NC 297	2977	4149	143	62	21	36.6	83	3.5	12.8	3.6
NC 55	2234	2995	135	62	20	30.9	85	3.3	12.9	3.9
NC 291	2678	3324	126	60	21	36.3	83	3.5	13.7	4.0
Speight H20	2669	3498	134	57	20	37.8	83	3.5	12.1	3.2
Speight 210	2668	3558	136	59	20	34.2	83	3.5	14.6	4.1
Speight 179	2616	3337	131	61	20	34.0	85	3.4	11.4	3.2
Speight 168	2184	2695	122	55	20	34.6	84	3.2	10.6	3.6
Speight 220	2557	3051	124	57	20	33.8	86	3.3	12.1	3.7
Two Year Average 2004 & 2006										
NC 2326	2196	2346	105	52	17	32.9	66	3.8	10.9	2.1
NC 95	2468	2918	124	47	20	38.2	76	3.7	9.2	2.5
C 371 G	2351	2663	114	57	18	32.1	80	3.4	8.8	2.5
K 326	3163	3885	124	59	19	33.0	79	3.0	13.8	4.8
K 730 ³	2969	4239	149	75	22	34.9	87	2.8	15.9	5.6
NC 71	2855	3546	121	59	19	33.2	81	3.0	13.8	4.6
NC 72	2980	3214	113	58	19	32.5	82	3.3	10.2	3.6
NC 297	3149	3968	128	58	20	34.8	81	3.5	13.7	3.9
NC 810	2479	2826	115	56	18	31.1	83	3.2	10.0	3.2

Table 2. Comparison of Certain Characteristics for Released Varieties Evaluated in the 2006 Official Flue-Cured Tobacco Variety Test at the University of Georgia, Tifton, GA (continued)

Two Year Average 2004 & 2006										
Variety	Yield lb/A	Value \$/A	Price ¹ Index \$/CWT	Grade ² Index	Number Leaves/ Plant	Plant Height (inches)	Days to Flower	% Total Alkaloids	% Reducing Sugars	Ratio RS/TA
NC 55	2324	2773	120	60	19	29.7	81	3.3	12.6	3.8
NC 291	2648	2632	103	54	21	35.4	82	3.6	12.0	3.4
NC 196	2033	2391	123	59	19	34.2	83	3.0	14.0	4.7
NC 102	2043	2479	115	57	20	32.0	82	3.2	12.7	4.1
GL 350	2460	2928	120	59	19	34.5	81	3.0	12.5	4.2
GL 939	2345	2718	112	55	19	32.1	81	3.2	14.6	4.7
CC 27	2523	2917	117	59	19	34.1	82	3.3	10.1	3.1
Speight H20	2873	3444	122	58	19	36.1	80	3.6	11.8	3.1
Speight 210	2919	3483	118	55	19	32.7	80	3.5	14.1	4.1
Speight 179	2902	3275	112	56	19	33.5	82	3.5	10.6	2.7
Speight 225	2158	2484	114	55	19	33.9	80	3.1	10.8	3.5
Speight 227	2480	2746	111	54	19	32.9	82	3.3	13.3	4.3
Speight 168	2310	2487	102	52	19	33	82	3.2	11.2	3.8
Speight 220	2557	3051	124	57	20	33.8	86	3.3	10.9	3.4

¹Price Index based on two-year average (2005-2006) prices for U.S. government grades.

²Numerical values ranging from 1-99 for flue-cured tobacco based on equivalent grades - higher the number, higher the grade.

³Data from 2003 and 2006

Researched by Stevan S. LaHue and M. G. Stephenson, under project S1-71 and supported by grants from the Georgia Tobacco Commission.

Table 3. Yield, Value, Price Index, Grade Index and Agronomic Characteristics of Released Varieties Evaluated in the 2006 Farm Test at the University of Georgia, Tifton, GA.

Variety	Yield lb/A	Value \$/A	Price ¹ Index \$/CWT	Grade ² Index	Number Leaves/ Plant	Plant Height (inches)	Days to Flower	% Total Alkaloids	% Reducing Sugars	Ratio RS/TA
NC 2326	2235	1846	82.4	62.2	16	33.2	71	4.26	11.4	2.7
NC 95	2780	2226	80.2	61.3	20	31.7	74	3.65	15.6	4.3
OX 1117	2875	2753	98.2	70.4	18	32.4	85	3.24	14.4	4.4
NC TG 138	2745	2473	91.9	65.5	19	28.8	85	3.04	16.6	5.5
CU 87	3160	2460	78.2	61.0	20	33.2	81	4.10	14.0	3.4
RX 409	2592	2259	87.2	66.2	19	27.1	85	3.66	12.0	3.3
RX 452	3504	3304	93.7	68.1	21	33.8	88	3.24	16.6	5.1
Speight 240	3057	3129	102.9	70.4	21	35.6	88	3.95	11.3	2.9
ULT 219	2888	3026	103.1	70.0	18	33.0	88	3.38	14.7	4.3
RJR 37	4140	4145	99.9	71.5	21	37.9	78	2.91	15.9	5.5
Speight 229	3239	2828	86.8	64.2	20	33.7	74	4.02	13.7	3.4
XP 257	2817	2760	99.4	70.9	23	35.6	81	3.31	14.9	4.5
XP 201	3422	3093	90.6	65.6	20	33.6	81	3.33	12.7	3.8
CU 105	2949	2608	88.1	65.4	21	34.5	81	3.86	12.2	3.2
LSD -0.05	871.15	870.81	16.34	6.93						

Conducted on an Ocilla loamy sand soil fertilized with 1000 lbs/a of 6-6-18 and 120 lbs/a 16-0-0 with plants spaced 20-22 inches apart in 44-inch rows.

¹Price Index based on two-year average (2005-2006) prices for U.S. government grades.

²Numerical values ranging from 1-99 for flue-cured tobacco based on equivalent grades - higher the number, higher the grade.

Researched by Stevan S. LaHue and M. G. Stephenson, under project S1-71 and supported by grants from the Georgia Tobacco Commission.

Table 4. Disease Resistance of Selected Released Tobacco Varieties

Variety	Black Shank	Php gene	Granville Wilt	Nematode Resistance	Virus Resistance
CC 13	H		H	TCN/RKN	TMV
CC 27	H		H	TCN/RKN	TMV
CC37	R		R	TCN/RKN	TMV
CC 700	R		-	RKN	S
Coker 371 Gold	H	Php	M	S	S
GL 330	M		L	RKN	S
GL 350	H		H	RES	S
GL 737	M		M	RKN S	S
GL 939	R		R	R	S
GL 973	H	Php	L	S	S
K 149	L		H	RKN	S
K 326	L		M	RKN	S
K 346	M		M	RKN	S
K 358	L		M	RKN	S
K 394	M		L	S	S
K 399	H		H	RKN	S
K 730	L		M	RKN	S
McNair 944	M		L	S	S
NC 27 NF	L		H	RKN	S
NC 37 NF	L		H	RKN	S
NC 55	L		L	RKN	PVY, ETCH
NC 60	H		M		
NC 71	H	Php	L	RKN	S
NC 72	H	Php	M	RKN	S
NC 79	M		L	RKN	S
NC 95	L		H	RKN	S
NC 100	L		L	RKN	TMV& PVY
NC 102	H	Php	M	TCN & RKN	TMV/TEV/PVY
NC 196	H	Php	L	RKN	S
NC 291	H	Php	L	RKN	PVY, ETCH
NC 297	H	Php	M	RKN	TMV
NC 299	H	Php	L	TCN & RKN	S
NC 471	H	Php	H	RKN	TMV
NC 606	M-H		M-H	RKN	S
NC 810	R		R	RKN	S
NC 567	L		L	RKN	TMV
NC 810	H		H	RKN	S
NC 2326	L		L		S

Table 4. Disease Resistance of Selected Released Tobacco Varieties. (Continued)

Variety	Black Shank	Php gene	Granville Wilt	Nematode	Virus Resistance
OX 940	M		M	S	S
OX 414NF	M		L	RKN	S
PVHO3	L		M	RKN	TMV
PVHO9	L		H	RKN	TMV
PVH 1118	H	Php	M	RKN	S
RG 17	L		M	RKN	S
RG 22	M		M	RKN	S
RG 81	L		L	RKN	S
RGH 4	M		H	RKN	TMV
RGH 51	H	Php	L	RKN	S
RS 1410	M		M	RKN	S
Speight G-28	M		M	RKN	S
Speight G-70	M		M	RKN	S
Speight 102	M		L	RKN	S
Speight 168	H	Php	H	RKN	S
Speight 179	H	Php	H	RKN	S
Speight 190	M-H		H	RKN	S
Speight 210	H		H	RKN	S
Speight 220	H		H	RKN	S
Speight 225	H		H	RKN	S
Speight 227	H		H	RKN	S
Speight 234	H	Php	H	RKN	S
Speight 235	R		R	RKN	S
Speight 236	R		R	RKN	S
Speight-H20	H	Php	H	RKN	TMV
Speight-NF 3	H		H	RKN	TMV
VA 116	L		L	S	S

L = Low to no resistance; M = Moderate to fair resistance; H = High resistance.

RES = Resistant; S = Susceptible; ? = Specific Resistance Not Determined

Php gene = Php gene used to provide complete and equal resistance to 0; however, they are moderately susceptible to race1 and may require fungicide treatments.

Nematode RKN = resistance to Root Knot Nematode (*M. incognita*, races 1 & 3)

TCN = resistance to Tobacco Cyst Nematode

FUSARIUM WILT There appears to be a great variation among varieties to Fusarium wilt.

However, we do not have sufficient data to make recommendations. Root-knot nematode resistant varieties may help in that root-knot tends to increase Fusarium wilt.

Table 5. Pedigree, Year of Release and Sponsor of Selected Varieties.

Variety	Yr of Release	Pedigree	Sponsor
NC 2326	1965	(HicksX9102)(Hicks)Hicks)Hicks)	NC
NC 95	1961	(C-139XBel.4-30)X(C-139XHicks)	NC
CC 13	2005	F1 Hybrid	CC
CC 27	2003	F1 Hybrid	CC
CC 37	2006	F1 Hybrid	CC
CC 700	2005	F1 Hybrid	CC
Coker 371 Gold	1986	(G-28X354)X(CB139XF-105)(G-28X34)XNC82	GL
GL 330	2005	McNair 926 X 80241	GL
GL 350	2003	F1 Hybrid	GL
GL 737	1999	NC 1071 x Coker 319.	GL
GL 939	1992	McNair 92 X 80241	GL
GL 973	2000	F1 Hybrid	GL
K 149	1988	([G-28x354]x[CB-139xF-105]x[G-28X354])McNair 399	GL
K 326	1981	McNair 225(McNair30 X NC95)	GL
K 346	1988	McNair 926 X 80241	GL
K 358	1987	McNair 926 X 80241	GL
K 394	1983	Speight G-28 X McNair 944	GL
K 399	1979	(C-139 X C-319) X NC 95	GL
K 730	1989	(McNair 926 X 80241)	GL
NC 27 NF	1985	(C-319 X NC TG-21) X C-319	NC
NC 37 NF	1987	(C-319 X NC TG-21) X NC 82	NC
NC 55	1994	(K 326 X DH 1220) X (K 326 X Coker 371-Gold)	GL
NC 60	1985	McNair 944 X Speight G-28	NC
NC 71	1995	F1 Hybrid	GL
NC 72	1996	F1 Hybrid	GL
NC 100	1998	F1 Hybrid	NC
NC 102	2001	F1 Hybrid	GL
NC 196	2002	F1 Hybrid	NC
NC 291	1997	F1 Hybrid	NC
NC 297	1998	F1 Hybrid	CC
NC 299	2001	F1 Hybrid	GL
NC 471	2003	F1 Hybrid	Raynor
NC 606	1998	NC 729 X NC 82	NC
NC 810	2000	OX 2101 X NC 729	CC
OX 940	1992	(G-28 X Coker 347) X Coker 48	OX
OX 414NF	1997	NC 37 NF X K 346	OX
PVHO3	1998	F1 Hybrid	Rickard
PVHO9	1998	F1 Hybrid	Rickard

Table 5. Pedigree, Year of Release and Sponsor of Selected Varieties. (Continued)

Variety	Yr of Release	Pedigree	Sponsor
RG 17	1993	K 326 X K 399	Rickard
RG 22	1990	McNair 373 X Coker 51	Rickard
RG 81	1994	K 326 X K 399	Rickard
RGH 4	1994	Hybrid	Rickard
RGH 51	1998	F1 Hybrid	Rickard
RS 1410	1999	F1 Hybrid	Profigen
RX 116	2004	F1 Hybrid	Rickard
RX 123	2005	F1 Hybrid	Rickard
PVH 1118	2004	F1 Hybrid	Rickard
Speight 168	1996	Coker 371 Gold X Speight G-118	SPT
Speight 179	1997	C 371 G X SPG 28	SPT
Speight 190	1998	SP 116 X 346	SPT
Speight 210	2000	(SP 116 X G-126) (K 346 X G-28)	SPT
Speight 220	2002	(K 346 X SP 117) (SP 116 X K 346)	SPT
Speight-225	2003	(SP 168 X K 346) (SPA 95 X SP 168)	SPT
Speight-227	2003	(SP 151 X K 346) (SP 202 X K 346)	SPT
Speight-234	2004	SP 168 X K 346)	SPT
Speight-235	2005	(SP 168 X SP190) X (SP 197 X SP 178)	SPT
Speight 236	2005	(SP 168 X SP190) X (SP 197 X SP 178)	SPT
Speight H-2O	1999	F1 Hybrid	SPT
Speight NF 3	1996	SP NF1 X NC 0007	SPT
VA 116	1989	NC 82 X C 319	GL
CC	Cross Creek Seed Company, Inc.	Reams	Reams Seed Company
CU	Clemson University	RG	R.G Seed Company
GL	Gold Leaf Seed Co.	Rickard	F. W. Rickard Seeds
NC	NC Agricultural Research Service	SPT	Speight Seed Farms, Inc.
	NCAgricultural Research Service	VA	Virginia Polytechnic Institute and State University
OX	(Oxford Station)		
Raynor	Raynor Seed Company		

Table 6. Yield, Grade Index, Price Index, and Value per Acre of the 2006 Regional Farm Test (lines in their last year of testing before approval for release), Paul Folsom Farm, Lanier County.

Variety	Pedigree	Yield	Grade Index	Price Index	Value
		lb/A	1-99	\$/lb	\$/A
1. NC 2326	(Hicks X 9102)(Hicks)Hicks)Hicks)	2104	51.0	65.8	1364
2. NC 95	(C-139 X Bel. 4-30) X (C-139 X Hicks)	2056	59.3	81.4	1675
3. OX 1117	(K 326 X OX 2022)	2124	68.3	104.0	2209
4. NC TG 138	Hybrid	2364	57.3	82.2	1943
5. CU 87	(SPT 168 X PD 474)	2172	54.1	68.2	1481
6. RX 409	Hybrid	1992	53.7	66.5	1325
7. RX 452	Hybrid	2408	62.6	87.9	2116
8. Spt 240	(SP 168 X SP 190)(SP 168 X SP 117)	2080	60.0	64.4	1339
9. ULT 219	Hybrid	2400	66.2	103.5	2485
10. RJR 37	Hybrid	2256	60.1	80.9	1826
11. Spt 229	(K 149 X SP 117)(K 149 X SP 151)	2192	55.8	74.0	1622
12. XP 257	Hybrid	2072	46.8	60.4	1251
13. XP 201	Hybrid	2140	62.9	96.2	2059
14. CU 105	SPT 68 X PD 474	2344	55.9	74.6	1750

Grade Index is a numerical value ranging from 1-99 for flue-cured tobacco based on equivalent grades - the higher the number the higher the grade.

Price Index is based on a two year floating average (2005-2006)price for U. S. government grades.