TOBACCO PRODUCTION

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VARIETY SELECTION

The choice of variety should be based on the needs of each field and the total production system being used. No single variety is best for all growers. A variety may perform well with one grower, but prove unsatisfactory to a neighbor. The following table shows the percent of acres planted to popular varieties grown in South Carolina.

VARIETIES PLANTED AND PERCENTAGE OF ACREAGE, 1998-2005

TREATMENT	1999	2000	2001	2002	2003	2004	2005	2006
K346	27	13	20	30	24	21	25	40
GL350	--	--	--	--	--	--	24	12
K149	3	3	7	8	8	5	3	12
K326	26	23	16	13	13	9	5	9
NC71	26	37	18	16	21	24	12	9
SP168	1	2	7	7	8	8	7	8
K394	5	5	5	3	4	2	4	3
NC72	3	9	7	6	5	7	3	3
GL939	0	1	2	3	4	1	5	2
NC297	--	--	7	9	7	9	3	2

In selecting a variety, growers are advised to pay attention to disease problems present in a field. (See section on disease management in this publication). Other factors to consider are yield and quality of cured leaf. Relative difference in the quality index may serve as a guide. Ground suckers and handling characteristics are also important considerations. When trying a variety for the first time, plant a limited acreage. Experience is still the best indication of variety suitability for each grower. New varieties may be released after the date for printing this publication. Contact your local Extension agent for updated information.

Growers may choose to select two or more varieties with varying maturities to help extend harvest for better utilization of curing barns.

NEW VARIETIES FOR 2007

The following varieties have been tested and have met the standards of the Flue-Cured Tobacco Variety Evaluation Committee. Please refer to the tobacco variety test table for complete information on varieties. Growers are cautioned to plant limited acreage of varieties that they do not have experience with.

New varieties for 2007 include:

NC 196 – A hybrid developed by NC State University. The hybrid has excellent yield and quality, and will be sold by Gold Leaf Seed. The hybrid has a rating of 29 for race 0+1 black shank, and has the ph gene. The hybrid has a resistance rating of 17 for bacterial wilt, and has root knot nematode resistance.

SP 225 – A variety developed by Speight Seed Farms. The variety is a cross of (SP 168 x K 346) and (SPA 95 x SP 168), and has average yields and excellent quality. The variety has resistance to race 0+1 black shank with a rating of 11, and does not have the ph gene. A rating of 4 is stated for bacterial wilt resistance. The variety has root knot nematode resistance, and will be sold by Cross Creek Seed.

SP 227 – The variety is a cross of (SP 151 x K 346) and (SP 202 x K 346) with moderate yields and excellent quality. The variety has a resistance rating of 17 for race 0+1 black shank, and does not have the ph gene. The variety has a resistance rating of 4 to bacterial wilt, and has root knot nematode resistance. The variety will be sold by Cross Creek Seed.

New varieties for 2006 include:

NC 471 – A hybrid from NC State University will be sold by Raynor Seed and Gold Leaf Seed. This hybrid is a moderate yielder of good quality tobacco. The hybrid has a black shank disease resistance of 10 for Race 0+1, and has the ph gene. The variety has a bacterial wilt rating of 18, and is resistant to root knot nematodes.

PVH 1118 – A hybrid from Rickard Seed Company that has good yields of excellent quality tobacco. The hybrid has a 26 rating for race 0+1 black shank, and has a bacterial wilt rating of 24. The hybrid has root knot nematode resistance.

SP 234 – The variety is a cross of (SP 168 x 346). The variety was developed by Speight Seed Farms and has good yields of good quality tobacco. The variety has a black shank rating of 24 for race 0+1, and has a bacterial wilt rating of 19. The line has the ph gene for black shank, and has root knot nematode resistance.

Varieties released in 2005 include:

CC 27 – A hybrid from Cross Creek Seed. The variety has excellent yields and good quality with good black shank and bacterial wilt resistance. The variety also has tobacco mosaic resistance.

GL 350 – A hybrid from Gold Leaf. The variety has good yields and quality with excellent black shank and excellent bacterial wilt resistance. The variety has resistance to both races of black shank.

NC 299 – A hybrid from Cross Creek Seed. The variety has good yields and medium quality with good black shank and bacterial wilt resistance.

SP 220 – A cross of (SP 116 and SP 117) x K346 from Speight Seed Farms. The variety has good yields and medium quality with excellent black shank and bacterial wilt resistance.

NON-FLOWERING VARIETIES

Non-flowering varieties do not premature flower and offer potential for more effective sucker control. Recently released varieties like Speight NF 3 have good quality if properly managed. **Good management of non-flowering varieties means topping in a timely fashion at approximately 20 harvestable leaves to ensure good quality**.

REMEMBER THE FOLLOWING ABOUT NON-FLOWERING VARIETIES:

·Less premature flowering, less labor for topping & suckering.
·Less priming grades.
·Top as soon as 20 harvestable leaves are obtained.
·Small suckers are easier to control.
·Delayed topping will extend budworm problems later into the season.
·May require 10-20 lb additional nitrogen per acre.

TOBACCO VARIETY TEST, 2004-2006 CONDUCTED AT PEE DEE RESEARCH AND EDUCATION CENTER, FLORENCE, SC

VARIETY	YIELD LB/A	QI[1]	PRICE $/CWT	VALUE $/A	DISEASE RESISTANCE[3]					LEAVES/ PLANT	PLANT HT	DAYS TO FLOWER
					BS RACE 0+1	ph[4] gene	BW	FW	RK			
CC27[5]	3021	78	127	3805	32	N	15	73	R	21	39	65
C371G	2264	79	125	2834	33	Y	27	69	S	20	38	63
GL350	2535	78	122	3110	20	N	17	39	R	19	40	63
GL939	2563	80	126	3282	36	N	20	19	R	21	38	62
K149	2631	76	114	2987	31	N	13	36	R	21	39	65
K326	3011	79	130	3911	45	N	35	50	R	21	39	63
K346	2828	76	123	3475	23	N	25	27	R	20	39	63
K394[2]	2792	68	110	3071	31	N	42	70	S	21	39	67
K399	2514	77	124	3090	27	N	18	65	R	20	37	64
K730	2580	76	124	3173	51	N	18	51	R	20	39	62
NC71	2944	77	127	3704	28	Y	30	59	R	20	37	64
NC72	2923	78	126	3647	32	Y	25	65	R	20	40	64
NC102[5]	2941	77	130	3770	34	Y	23	61	R	20	37	67
NC196	3003	79	128	3856	29	N	17	86	R	20	38	66
NC291	3147	79	128	4017	31	Y	35	67	R	20	36	63
NC297[5]	2922	75	121	3523	34	Y	27	69	R	21	38	64
NC299	3160	80	130	4082	34	Y	17	62	R	21	39	63
NC471[5]	2454	74	107	2382	10	Y	18	64	R	20	40	66
NC606	2396	80	130	3118	24	N	21	21	R	20	39	63
NC810	2346	81	129	3000	20	N	8	59	R	21	37	67
PVH1118	2359	81	131	3084	26	Y	24	82	R	20	39	63
RGH4[5]	2729	81	128	3472	37	N	21	42	R	19	38	65
RGH51	2684	77	123	3311	38	Y	35	66	R	19	38	62
SP168	2564	82	133	3525	19	Y	16	52	R	19	39	63
SP210	2460	78	121	2889	33	N	14	36	R	20	39	64
SP220	2530	79	127	3213	22	N	5	34	R	20	38	66
SP225	2316	77	119	2741	11	N	4	41	R	20	38	63
SP227	2520	78	124	3103	17	N	4	43	R	21	39	64
SP234	2418	76	121	2907	24	Y	19	71	R	19	39	63
SPH2O[5]	2368	73	116	2724	30	Y	23	21	R	19	39	65
SPNF3	2489	78	126	3115	24	N	18	18	R	21	38	67

[1] QI = Quality Index based on government grade on a scale of 1-100 with 100 as best.

[2] 2004-2005 Data

[3] Disease Resistance based on regional data (compiled by Mark Pullen). Lower numbers indicate higher resistance. BS = Black Shank, BW = Bacterial Wilt, FW = Fusarium wilt, RK = Root Knot nematode, S = Sensitive, R = Resistance to southern root knot nematode (Meloidogyne incognita) only.

[4] Varieties that contain the ph gene are immune to race 0 of the black shank fungus

[5] Tobacco mosaic resistant variety