No. 7400007

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Speight Seed Farms, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS PART OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

TOBACCO

'Speight G-15'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington *this* 11th *day of* April *in the year of our Lord one thousand nine hundred and* seventy-seven

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

FORM GR-470
(2-71)

UNITED STATES DEPARTMENT OF AGRICULTURE
CONSUMER AND MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB. NO.

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION: SPEIGHT G-15	2. KIND NAME: FLU-CURED TOBACCO	FOR OFFICIAL USE ONLY — PVPO NUMBER: 7400007
3. GENUS AND SPECIES NAME: NICOTIANA TOBACUM	4. FAMILY NAME: SOLANACEAL-NIGHTSHADE	FILING DATE: 8·17·73 — TIME: 3:00 P.M.
	5. DATE OF DETERMINATION: DECEMBER, 1972	FEE RECEIVED: $750.00 — CHARGES: —
6. NAME OF APPLICANT(S): SPEIGHT SEED FARMS, INC.	7. ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*): ROUTE 1, P. O. BOX 507, WINTERVILLE, N. C. 28590	8. TELEPHONE AREA CODE AND NUMBER: (919)756-0718
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (*Corporation, partnership, association, etc.*) CORPORATION	10. STATE OF INCORPORATION: NORTH CAROLINA	11. DATE OF INCORPORATION: 1-1-72

12. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 12A. Exhibit A, Origin and Breeding History of the Variety (*See Section 52, P.L. 91-577*)
- [X] 12B. Exhibit B, Botanical Description of the Variety
- [X] 12C. Exhibit C, Objective Description of the Variety
- [X] 12D. Exhibit D, Particulars of Trial Performance
- [X] 12E. Exhibit E, Statement of the Basis of Applicant's Ownership

The applicant declares that a viable sample of basic seed that is planted to produce the variety commercially will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable. (*See Section 52, P.L. 91-577*).

13A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? (*See Section 142, P.L. 91-577*) (*If "Yes," answer 13b and 13c below.*) [X] YES [ ] NO

13B. Does the applicant(s) specify that this variety be limited as to number of generations? [X] YES [ ] NO

13C. If "Yes" to 13B, how many generations of production beyond breeder seed? three generations foundation, registered, certified

14. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

M. L. Grimsley
Speight Seed Farms, Inc.
P. O. Box 507
Winterville, N. C. 28590

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is entitled to protection under the provisions of Section 42 and is distinct, uniform, and stable as required in Section 41 of the Plant Variety Protection Act (P.L. 91-577).

8-14-73 (DATE) — M. L. Grimsley (SIGNATURE OF APPLICANT)

(DATE) — (SIGNATURE OF APPLICANT)

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12-A

Exhibit-A---ORIGIN & BREEDING HISTORY OF THE VARIETY

Name: SPEIGHT G-15

letter 2/18/77

Pedigree: NC-95 X G-41

1. In July of 1960 we crossed Fla. 222 on NC-95. The results of this cross were numbered F-12. After some years of individual plant selections from F-12 we ended up with the variety Speight G-41. This variety was released and did very well. It had the characteristics of NC-95 except that the leaves were some narrower.

2. In 1965 we crossed G-41 on NC-95. The results from this cross (G-41 X NC-95) were numbered K-15. It was grown and selected in our disease infested nursery through the fifth generation. Out of these individual plant selections came a selection numbered K-15-G, which in its sixth generation was named Speight G-15.

3. Variants during this period were mostly one off-type plant, which was a narrow stringy-type plant, that was easily selected away from. There were a few tall variants with large fan shaped leaves spaced wide apart that had to be selected out. The type we selected for was more of a Hicks or NC-2326 type plant being clean of bottom suckers and a shade lighter green in color than NC-2326 or Hicks. Leaves were some broader in the top of the plant than NC-2326 or Hicks.

4. Speight G-15 became stable in its fifth generation and was tested in the N.C. Official Variety Testing program and by Speight Seed Farms for one year before entering it into the regional small plot testing program. During the same years it was being tested on Speight Seed Farms and by some tobacco farmers in larger crops. G-15 was found to be true to type and stable in all of these tests.

Signed: M. L. Grimsley

M. L. Grimsley

Title: Breeder

74-7

Speight Seed Farms, Inc.

BREEDERS, REGISTERED AND CERTIFIED SEED
TOBACCO SEED – SOYBEANS – HYBRID CORN
BOX 507 ● PHONE (919) 756-0718
WINTERVILLE, N. C. 28590

EXHIBIT 12 B BOTTANICAL DESCRIPTION OF THE VARIETY
NAME:SPEIGHTS G-15
PEDIGREE:N.C.95xG-41

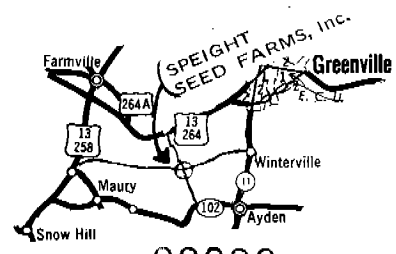
1. G-15 most closely resembles NC=95 but differs by producing approximately 1 less leaf per plant(17.2vs 18.0),Leaves are about .3 of an inch narrower(10.7 vs 11.0 in.)Bottom leaves are slightly longer(22.2 vs 21.8 in.)Flowering and maturity dates are approximately the same.Seeds are slightly larger in size than N.C.-95.
2. Plant heights are approximately the same.Leaves grow more upright(35 to 45 degrees)and at maturity the leaves tend to hang horizontally.Speight G-15 produces less ground and axial leaf suckers.Leaves are some puckered during growing season but less puckered than N.C.95.Flower heads are more open,but its yields are some less than N.C.95.Leaf quality is some better,with more lemon color than N.C.95.Black Shank and Bacterial Wilt Resistance are some higher in N.C.95.~~Brown~~ Brown Spot and Root Knot Tolerance are similiar.

N.C.OFFICIAL VARIETY TEST-THREE YEAR AVERAGE-1973,1974,1975

Variety	Yield lbs/A	Grade Index	Days to Flower	Leaves per Plant	Height p/plant	Ground suckers	B.Shank Index
NC-95	2736	48	62	18.0	42	1.2	20.2
G-15	2596	51	62	17.2	42	0.5	33.9

Variety	Width of leaf,inches			Length of Leaf,inches		
	5th Leaf	10th Leaf	15th Leaf	5th Leaf	10th Leaf	15thLea
NC-95	8.8	11.0	11.9	20.2	23.0	21.8
G-15	8.7	10.7	11.6	20.2	23.0	22.2

KNOWN ORIGIN QUALITY SPEIGHT'S SEEDS ADAPTABILITY



GOOD SEED OF AN ADAPTED VARIETY IS THE FOUNDATION OF A GOOD CROP

FORM GR-470-31
(12-16-74)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

OBJECTIVE DESCRIPTION OF VARIETY

Tobacco (Nicotiana tabacum)

NAME OF APPLICANT(S)

SPEIGHT SEED FARMS, Inc.

ADDRESS (Street, Box No. or R.F.D. No., City, State, and Zip Code)

Box 507
Winterville, North Carolina 28590

VARIETY NAME OR TEMPORARY DESIGNATION

SPEIGHT G-15

FOR OFFICIAL USE ONLY

PVPO NUMBER

7400007

Place the appropriate number that describes the varietal character in the boxes below.
Place a zero in first box (e.g. 0 8 9 or 0 9 when number is either 99 or less or 9 or less.

1. CLASS:

1 = FLUE-CURED 2 = FIRE-CURED 3 = AIR-CURED 4 = CIGAR FILLER 5 = CIGAR BINDER 6 = CIGAR WRAPPER
7 = MISCELLANEOUS-DOMESTIC 8 = FOREIGN-CIGAR LEAF 9 = FOREIGN-NON-CIGAR LEAF

AIR-CURED: 1 = BURLEY 2 = MARYLAND 3 = DARK AIR-CURED

STANDARD VARIETIES

01 = NC 95 02 = NC 2326 03 = COKER 319 04 = HICKS 05 = SPEIGHT G-28 06 = SC 58
07 = K, 151 08 = BURLEY 21 09 = BURLEY 49 10 = Ky 10 11 = MARYLAND 609 12 = Ky 165
13 = Pembel 69 14 = HAVANA 503 15 = FLORIDA 17 16 = OTHER

2. MATURITY (Transplant to 50% plants 1 Fl.) (Select code from Standard Varieties listed above)

6 2 NO. OF DAYS

0 DAYS EARLIER THAN . . . 0 1

0 DAYS LATER THAN 0 1

3. SEEDING TO TRANSPLANTING (Select code from Standard Varieties listed above)

7 5 NO. OF DAYS

3 DAYS EARLIER THAN . . . 0 1

DAYS LATER THAN . . . . .

4. PLANT HEIGHT (After topping) (Select code from Standard Varieties listed above)

8 7 CM TALL

0 CM SHORTER THAN 0 1

0 CM TALLER THAN 0 1

5. LEAF SIZE (At leaf maturity) (Select code from Standard Varieties listed above)

LENGTH

5 1 . 3 CM 5TH LEAF
CM SHORTER THAN . . . . .
0 0 CM LONGER THAN 0 1

5 8 . 4 CM 10TH LEAF
CM SHORTER THAN . . . . .
0 . 0 CM LONGER THAN 0 1

5 6 . 4 CM 15TH LEAF
CM SHORTER THAN . . .
3 0 CM LONGER THAN . . . 0 1

WIDTH

2 2 . 1 CM 5TH LEAF
3 . 0 CM NARROWER THAN . . . 0 1
CM WIDER THAN . . . . . .

2 7 . 2 CM 10TH LEAF
2 . 2 CM NARROWER THAN . . . 0 1
CM WIDER THAN . . . . . .

2 9 . 5 CM 15TH LEAF
0 . 7 CM NARROWER THAN 0 1
CM WIDER THAN . . . .

6. LEAF YIELD (Select code from Standard Varieties listed above)

2 9 0 8 KG/HA

4 % LESS THAN 0 1

% MORE THAN . . . . . .

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FORM SR-470-31 (page 3)

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13. DISEASE (0 = Not tested, 1 = Susceptible, 2 = Resistant)

8	POTATO VIRUS Y	1	TMV
0	NEMATODE ROOT ROT (LESION, SPECIES)	2	ROOT KNOT NEMATODE
0	TOBACCO ETCH VIRUS	0	OZONE AIR POLLUTION
	OTHER (Specify)		OTHER (Specify)

NOTE: (under "Comments", give comparative reaction with a standard variety appropriate for each disease tested and indicate if disease reaction of the variety exceeds, equals or is less than that of the standard).

14. LEAF CONSTITUENTS (Give data for described and standard variety):

VARIETY	NICOTINE %	NOR NICOTINE %	TOTAL NITROGEN %	REDUCING SUGARS % (FLUE-CURED)
SUBMITTED	3.53	28	221	1436
STANDARD	340	27	230	1366
NAME OF STANDARD VARIETY				

15. VARIETIES MOST CLOSELY RESEMBLING THAT DESCRIBED FOR THE CHARACTERS GIVEN:

CHARACTER	VARIETY	CHARACTER	VARIETY
MATURITY	NC-95	LEAF TIP SHAPE	NC-95
LEAF LENGTH	NC-95	VENATION PATTERN	NC-95
LEAF WIDTH	NC-95	LEAF SURFACE	NC-95
LEAF CARRIAGE	NC-95	LEAF MARGIN	NC-2326
PETIOLE ANGLE	NC-95	LEAF COLOR	NC-95
LEAF SHAPE	NC-95	PLANT FORM	NC-95

16. COMMENTS (For increasing accuracy of description)

Speight G-15 most closely resembles NC-95,but differs by producing approximately one less leaf per plant.Bottom leaves are slightly longer and narrower than NC-95.Internodes are wider and produce less ground and leaf axial suckers.Yields are lower,but leaf quality is better and has more Lemon color than NC-95.

SUMMARY OF DISEASE RESISTANCE 1974 and 1975 Average

VARIETY	Black Shank	Root Knot	Bacterial Wilt Index	Brown Spot Index
NC-95	20.2	Res.	21	.12885
G-15	33.9(Less than)	Res.(Equal)	27(Less than)	.13887(Equal)

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Speight Seed Farms, Inc.

BREEDERS, REGISTERED AND CERTIFIED SEED
TOBACCO SEED – SOYBEANS – HYBRID CORN
BOX 507 ● PHONE (919) 756-0718
WINTERVILLE, N. C. 28590

EXHIBIT 12 D PARTICULARS OF TRIAL PERFORMANCES OF Speight G-15

NAME: Speight G-15
PEDIGREE: NC-95xG-41
RELEASE: December 1973

Speight G-15 most closely resembles NC-95, but differs by producing approximately 1 less leaf per plant(17.2vs18.0), bottom leaves are slightly longer(22.2vs21.8). All leaves are .3 of an inch narrower (11.6vs11.9), and are less puckered. Internodes are wider(3.3vs2.7). Less ground suckers(0.5vs1.2). Less Leaf Axial suckers(20.8vs23.6). Produces lower yields(2596vs2736 lbs/acre), but does have Higher Quality Leaf or Grade Index(51vs 48) Less Black Shank Resistance (33.9vs20.2). Flower heads are more open.

N.C. OFFICIAL VARIETY TEST-THREE YEAR AVERAGE-1973,1974,1975

Variety	Yield lbs/A	Grade Index	Days to Flower	Leaves per/plant	Height of Plant	Ground Suckers	Black Shank Index
NC-95	2736	48	62	18.0	42 in.	1.2	20.2
G-15	2596	51	62	17.2	42 in.	0.5	33.9

N.C. OFFICIAL VARIETY TEST - Three year average- 1972,1973,1974

		PRICE					Bacterial Wlt
NC-95	2574	$89.17	61	17.9	41 in.	2.2	21
G-15	2390	$89.17	61	16.5	40 in.	1.3	27

	WIDTH OF LEAF inINCHES			LENGHTH OF LEAF in INCHES		
	5th Leaf	10th Leaf	15thLeaf	5th Leaf	10th Leaf	15thLeaf
NC-95	8.8	11.0	11.9	20.2	23.0	21.8
G-15	8.7	10.7	11.6	20.2	23.0	22.2

KNOWN ORIGIN QUALITY SPEIGHT'S SEEDS ADAPTABILITY

GOOD SEED OF AN ADAPTED VARIETY IS THE FOUNDATION OF A GOOD CROP

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Speight Seed Farms, Inc.

BREEDERS, REGISTERED AND CERTIFIED SEED
TOBACCO SEED – SOYBEANS – HYBRID CORN
BOX 507 ● PHONE (919) 756-0718
WINTERVILLE, N. C. 28590

EXHIBIT 12-E STATEMENT OF BASIS OF APPLICANTS OWNERSHIP

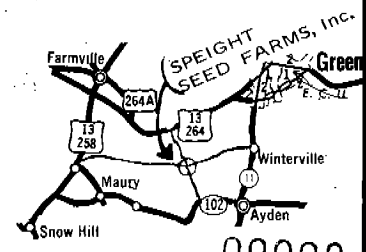
NAME: SPEIGHT G-15
PEDIGREE: NC-95xG-41
RELEASE: December 1973

Speight Seed Farms, Inc. of Winterville, North Carolina, hereby believe that we are the first and only breeder of the tobacco variety or line, Speight G-15 and hereby solicit a Certificate of Protection.

M. L. Grimsley

Marcus L. Grimsley
Plant Breeder

KNOWN ORIGIN QUALITY SPEIGHT'S SEEDS ADAPTABILITY



GOOD SEED OF AN ADAPTED VARIETY IS THE FOUNDATION OF A GOOD CROP

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GROUPING.

STANDARD VARIETIES

01 = NC 95 | 02 = NC 2326 | 03 = COKER 319 | 04 = HICKS | 05 = SPEIGHT G-28 | 06 = SC 58
07 = Ky 151 | 08 = BURLEY 21 | 09 = BURLEY 49 | 10 = Ky 10 | 11 = MARYLAND 609 | 12 = Ky 165
13 = Pennbel 69 | 14 = HAVANA 503 | 15 = FLORIDA 17 | 16 = OTHER _____

RECEIVED JAN 28 1977 DEPARTMENT

7. LEAF NUMBER (Select code from Standard Varieties listed above)

TOPPED NORMAL:

[1 7 2] NO. PER PLANT

[1 7 2] NO. OF LEAVES > 40.6 CM

[8 7] CM HEIGHT OF LAST LEAF > 40.6 CM

NOT TOPPED:

[2 1 2] NO. OF LEAVES OR NODES TO "CROWFOOD" FROM 1ST HARVESTABLE LEAF

8. INTERNODES (Topped) (Select code from Standard Varieties listed above)

[6 4] MM LENGTH [ ] MM SHORTER THAN ..... [ ] [6] MM LONGER THAN ..... [0 1]

9. LEAF CHARACTERISTICS:

PETIOLE ANGLE:

[4 5] DEGREES [2] GROUPING: 1 = < 35° 2 = 35–45° 3 = 46–65° 4 = > 65°

LEAF CARRIAGE

[3] 1 = ARCHED (DROOPING) 2 = HORIZONTAL 3 = UPRIGHT

LEAF COLOR (At topping or when 50% of plants with 1 flower)

[2] 1 = LIGHT GREEN 2 = GREEN 3 = DARK GREEN 4 = YELLOW–GREEN 5 = YELLOW

LEAF SHAPE:

[3] 1 = BROADER THAN LONG 2 = LENGTH EQUALS WIDTH 3 = LONGER THAN BROAD

[2] 1 = BROADEST AT MIDDLE 2 = BELOW MIDDLE 3 = ABOVE MIDDLE

TIP SHAPE

[2] 1 = ACUTE 2 = ACUMINATE 3 = OBTUSE

VENATION PATTERN:

[2] 1 = SQUARE 2 = ANGULAR

LEAF SURFACE

[2] 1 = SMOOTH (HICKS) 2 = PUCKERED (NC 95)

LEAF MARGIN

[2] 1 = WAVY 2 = NOT WAVY [2] 1 = RECURVED 2 = NOT RECURVED

10. FLOWERS:

[2] COLOR: 1 = WHITE 2 = PINK 3 = RED 4 = OTHER _____

FLOWER HEAD HABIT:

[2] 1 = CLOSED (NC 95) 2 = INTERMEDIATE 3 = OPEN (HICKS)

11. PLANT FORM

[2] 1 = PYRAMIDAL 2 = COLUMNAR 3 = OTHER (Specify) _____

12. GROUND SUCKERS:

[0 5] NO. PER PLANT

13. DISEASE (0 = Not tested, 1 = Susceptible, 2 = Resistant)

[2] BLACK SHANK (RACES) _____
[0] BLACK ROOT ROT
[1] BLUE MOLD
[0] WILDFIRE (SPECIES) _____
[0] BLACKFIRE

[2] FUSARIUM WILT (NICOTIANA)
[0] FUSARIUM WILT (BATATAS)
[0] FROGEYE
[ ] BROWN SPOT Tolerant
[2] BACTERIAL WILT

00005