



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

J. H. Lambright

**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 MASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

'Lambright GL-N'

*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 27th day of June in
the year of our Lord one thousand nine
hundred and seventy-five*

Attest:

J. J. Rollin
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Earl L. Butz
Secretary of Agriculture



APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1. VARIETY NAME OR TEMPORARY DESIGNATION Lambright GL-N	2. KIND NAME Upland Cotton Nectariless & Glandless	FOR OFFICIAL USE ONLY	
		PV NUMBER 7500028	
3. GENUS AND SPECIES NAME Genus Gossypium	4. FAMILY NAME (Botanical) Gossypium Hirsutum L.	FILING DATE 10.4.74	TIME 2 P.M.
		FEE RECEIVED \$ 250 \$ 250 \$ 250	BALANCE DUE \$ — \$ — \$ —
5. DATE OF DETERMINATION 1972	6. NAME OF APPLICANT(S) J.H. Lambright	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) Route 2, Slaton, Texas 79364	8. TELEPHONE AREA CODE AND NUMBER 806-996-2866
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.)		10. STATE OF INCORPORATION	11. DATE OF INCORPORATION

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

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)

13B. Exhibit B, Botanical Description of the Variety

13C. Exhibit C, Objective Description of the Variety

13D. Exhibit D, Data Indicative of Novelty

13E. Exhibit E, Statement of the Basis of Applicant's Ownership

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? (See Section 83(a). (If "Yes," answer 14B and 14C below.) YES NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? YES NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? FOUNDATION REGISTERED CERTIFIED

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

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

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

September 28, 1974
(DATE)

(DATE)

J. H. Lambright
(SIGNATURE OF APPLICANT)

1
(SIGNATURE OF APPLICANT)

Exhibit A, Origin and Breeding History of the
Lambright GL-N Cotton Variety

The 'Lambright GL-N' is a Nectariless and Glandless cotton variety, that has been developed through a back-cross breeding program, by J.H. Lambright, from a cross made at Iguala Mexico in 1970, by using the Lambright GL-5 glandless variety, and pollen furnished by the Texas Agricultural Experiment Station at Lubbock Texas, from the CA-1786 variety, of which is a Nectariless and Glandless cotton variety.

Pedigree: Lambright 123-BR-1 X Delcerro
 X Lambright X-15-5 X CA-852
 X Lambright GL-5 X CA-1786
 F₅ Progeny

The Lambright 123-BR-1 being an upland short staple stormproof, and the Del Cerro a longer staple loose lock cotton. The Lambright X-15-5 a normal glanded variety, and the CA-852 a glandless cotton, the Lambright GL-5 a glandless cotton, and the CA-1786 a Nectariless and glandless variety.

The Lambright 123-BR-1 cotton showed Bacterial Blight resistance to all 4 races of a mixture of, race 1, race 2, and variant 5 and 6 of *Xanthomonas Malvacearum*, conducted by the Texas Agricultural Experiment Station at Lubbock Texas in 1965.

By using the facilities at Iguala Mexico for winter increase, allowing two generations each year for selection and reproduction, in 1972 when all plants were free of gossypol and nectar glands, is when I first determined I had a new variety of cotton.

The stability of the 'Lambright GL-N' is being maintained by removing from 1 to 3 taller plants per acre, and and with less than, 1 to 10,000 plants of nectarid and/or gossypol glanded plants to be removed at this time.

The Special Botanical Characteristics of the, 'Lambright GL-N' cotton variety, are the absence of both the internal lysigenous pigmented gossypel bearing glands, and the 4 sets of external nectar bearing glands, that are found in all normal glanded cotton varieties, as it passes through the seedling, flowering, and fruiting stages.

The Lambright GL-N Variety, is annual plants, of medium height, medium to early in maturity, medium size main stem, erect, good root system, with determinant type growth, production equal or near commercial glanded varieties, with occasional vegetative branching, normal to short fruiting branches, creating a conical form, medium to small 3 to 5 lobe leaves, dark green in color, medium pubescence, 1 percent of plants glabrous (smooth), 1 percent heavy pubescence (hairy), foliage light, the flowers are of medium size, 5 petals, and are born singly, the corolla is light creamy yellow in color, 60 percent of flowers have light cream colored pollen, 40 percent have deep cream colored pollen, the fruit is small in size, round to round ovoid in shape, 4 and 5 locks, with short beak, 72 bells seed cotton per lb.. the seed are small in size, 4,350 seed per lb.. ovoid in shape, dark in color, linters very sparse, lint percent 40 percent, stempreef, the typical range of fiber properties are, lint length of 1 1/16 inch, pressley strength of 85,000 lbs. P.S.I., micronaire reading of 4.1, 115 to 120 days to maturity. Resistant to race 1, and 2 of bacterial blight, susceptible to verticillium and fusarium wilt.

The nectar glands when present on a variety excrete a sweetish liquid, of which is an attractant, and supplies nourishment for bees, moths, and various other insects. One nectar gland known as the floral nectary is a narrow band located on the inside of the calyx, near the base, this gland produces very fine hairs that supplies the nectar for the flower, which is found near the base on the inside of the flower, (not visible for visual observation), 1 set of 3 glands are found inside the bract, near the base of the calyx, 1 set of 3 glands are found on the outside at the base of each bract, and from 1 to 3 nectarid glands are found on the large veins on the under side of the foliage leaves.

With the absence of the internal lysigenous pigmented gossypol bearing glands, and with only the recessive genes $gl_2 gl_2 gl_3 gl_3$ genes present, which are the glandless bearing genes only, all parts of the Lambright GL-N plants are free of the nectar and gossypol bearing glands of which are obvious and easily noticeable on all normal glanded cotton plants, as they pass through the seedling, flowering, and fruiting stages.

OBJECTIVE DESCRIPTION OF VARIETY
COTTON (*GOSSYPIUM SPP.*)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S) <p style="text-align: center; margin: 0;">J. H. Lambright</p> ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) <p style="text-align: center; margin: 0;">Route 2, Slaton, Texas 79364</p>	<p style="text-align: center; margin: 0;">FOR OFFICIAL USE ONLY</p> PVPO NUMBER <p style="text-align: center; margin: 0; font-size: 1.2em;">7500028</p> VARIETY NAME OR TEMPORARY DESIGNATION <p style="text-align: center; margin: 0; font-size: 1.2em;">Lambright GL-N</p>
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Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g., or) when number is either 99 or less or 9 or less.

1. SPECIES:

<input checked="" type="text" value="1"/>	1 = GOSSYPIUM HIRSUTUM	2 = GOSSYPIUM BARBADENSE
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2. AREA(S) OF ADAPTION (0 = Not Tested, 1 = Not Adapted, 2 = Adapted):

<input type="text" value="0"/> EASTERN	<input type="text" value="0"/> DELTA	<input type="text" value="0"/> CENTRAL	<input checked="" type="text" value="2"/> HIGH PLAINS	<input type="text" value="0"/> EL PASO AREA
<input type="text" value="0"/> WESTERN LOW HOT VALLEYS	<input type="text" value="0"/> SAN JOAQUIN	<input type="text" value=""/> OTHER (Specify) _____		

3. MATURITY (50% Open Boll):

<input type="text" value="0"/> <input type="text" value="5"/>	NO. OF DAYS EARLIER THAN	<input type="text" value="7"/>	1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213 4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1 7 = LANKART 57 8 = OTHER (Specify) _____
<input type="text" value="0"/> <input type="text" value="0"/>	NO. OF DAYS LATER THAN	<input type="text" value="4"/>	

4. PLANT HABIT:

<input checked="" type="text" value="2"/> 1 = SPREADING	2 = INTERMEDIATE	3 = COMPACT	<input type="text" value="1"/>	1 = FOLIAGE SPARSE	2 = DENSE
			<input type="text" value="3"/>	3 = OTHER (Specify) _____	

5. PLANT HEIGHT:

<input type="text" value="0"/> <input type="text" value="0"/>	CM. SHORTER THAN	<input type="text" value="4"/>	1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213 4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1 7 = LANKART 57 8 = OTHER (Specify) _____
<input type="text" value="0"/> <input type="text" value="5"/>	CM. TALLER THAN	<input type="text" value="7"/>	

6. MAIN STEM:

<input checked="" type="text" value="3"/> 1 = LAX	2 = ASCENDING	3 = ERECT	<input type="text" value="8"/>	8 cm 99H	<input type="text" value="3"/>	NO. OF NODES TO FIRST FRUITING BRANC (from cotyledonary node)
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7. LEAF: 10cm 99H **8. LEAF PUBESCENCE:**

<input type="text" value="4"/> CM. WIDTH OF WIDEST LEAVES AT MATURITY	<input checked="" type="text" value="3"/>	1 = GLABROUS (HAIRS AS SPARSE AS D ₂ SMOOTH) 2 = SMOOTH LEAF (DELTAPINE SMOOTH LEAF) 3 = PUBESCENT (STONEVILLE 213) 4 = HEAVY PUBESCENCE (H ₁ OR H ₂) 5 = OTHER (Specify) _____
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9. LEAF COLOR:

<input checked="" type="text" value="3"/> 1 = VIRESCENT YELLOW	2 = LIGHT GREEN	3 = DARK GREEN (Acala-442)	4 = RED
5 = OTHER (Specify) _____			

10. LEAF TYPE:

<input checked="" type="text" value="1"/> 1 = NORMAL	2 = OKRA	3 = SUPER OKRA	4 = OTHER (Specify) _____
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11. FLOWER:

<input checked="" type="text" value="1"/> 1 = NECTARILESS	2 = NECTARIED		
Petals: <input checked="" type="text" value="1"/> 1 = CREAM	2 = YELLOW	Pollen: <input checked="" type="text" value="1"/> 1 = CREAM	2 = YELLOW

12. FRUITING BRANCH TYPE:

<input checked="" type="text" value="3"/> 1 = CLUSTER	2 = SHORT	3 = NORMAL	<input type="text" value="1"/>	1 = DETERMINATE	2 = INDETERMINATE
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13. GOSSYPOL CONDITION:

<input checked="" type="text" value="1"/> 1 = GLANDLESS	2 = REDUCED GLANDS	3 = NORMAL GLANDS	<input type="text" value="0"/>	1 = NORMAL BUD GOSSYPOL	5
4 = OTHER (Specify) _____			<input type="text" value="2"/>	2 = HIGH BUD GOSSYPOL	

14. SEEDS:

<input type="text" value="1"/> <input type="text" value="0"/> <input type="text" value="6"/> ± <input type="text" value="1"/> <input type="text" value="2"/>	SEED INDEX (Fuzzy seed basis)	<input type="text" value="1"/>	Seed Fuzz:	1 = SPARSE (GREGG 38)	2 = MODERATE (DPL-16)
			<input type="text" value="3"/>	3 = HEAVY (ACALA SJ-1) 4 = OTHER (Specify) _____	

Exhibit D. Data Indicative of Novelty
 Lambright GL-N Cotton Variety

The Lambright GL-N, is most similiar to its one parent, Lambright 123-BR-1, except the Lambright GL-N is a Nectariless and Glandless Cotton Variety, and the Lambright 123 -BR-1 is a normal Glanded Cotton, with both the Nectar and Gossypol glands present. The GL-N has .10 inch longer lint (1.06 vs .96 inches), .5 higher micronaire, (4.0 vs 3.5), has 10,500 lbs. stronger fiber, (85,000 vs 74,500 lbs.).

Exhibit E, Statement of the Basis of
 Applicants Ownership

I hereby declare that the foregoing statements, and information being submitted, are true and correct to the best of my knowledge and belief.

And that, I am the Originator, Breeder, and rightful owner, of the following varieties of cotton being submitted for plant variety protection at this time.

Lambright GL-5, Cotton Variety

Lambright GL-N, Cotton Variety

This Day, September 28, 1974

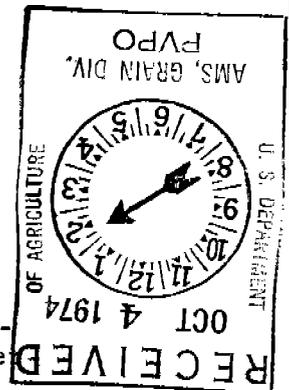
Signed, J. H. Lambright

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and \$250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- 5 Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.
- 13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.
- 13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.
- 13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.
- 13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.
- 13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.



15. BOLLS:

2 Locules: 1 = 3-4
2 = 4-5

1 Pitted: 1 = NONE
2 = FINELY
3 = COURSELY

2 Type: 1 = STORMPROOF (WESTBURN 70)
2 = STORM RESISTANT (LANKART 57)
3 = OPEN (DELTAPINE 16)

3 NO. SEEDS PER BOLL

400 LINT PERCENT

130 MM. DIAMETER 34.9 mm 89

522 GRAMS SEED COTTON PER BOLL

2 Breadth: 1 = BROADER AT BASE
2 = BROADER AT MIDDLE

3 Shape: 1 = LENGTH < WIDTH
2 = LENGTH = WIDTH
3 = LENGTH > WIDTH

16. BRACTEOLAS:

2 Breadth: 1 = LENGTH < WIDTH 2 = LENGTH = WIDTH 3 = LENGTH > WIDTH

2 Teeth: 1 = FINE 2 = COURSE

3 Teeth: 1 = 3-4 2 = 4-5 3 = 5-7 4 = 8-10

17. YIELD: Compared to--

100 PERCENT LESS THAN

000 PERCENT MORE THAN

4 } 1 = COKER 2 = DELTAPINE 16 3 = STONEVILLE 213
 7 } 4 = PAYMASTER-111 5 = ACALA 1517-70
6 = ACALA 7 = LANKART 57

18. FIBER LENGTH (Complete one or more of the following and give the means):

043 SPAN LENGTH 50% 106 SPAN LENGTH 2.5% U.H.M. LENGTH

MEAN LENGTH 34 STAPLE LENGTH 32nd INCHES

UNIFORMITY RATIO (MEAN/U.H.M.) 46 UNIFORMITY INDEX (50% SPAN/2.5% SPAN)

19. FIBER STRENGTH AND ELONGATION:

085 1,000 P.S.I. 067 ELONGATION E₁ 223 STILOMETER T₀

410 MICRONAIRE READING 102 YARN STRENGTH (Give test method) *lb. 22 yarn* STILOMETER T₁

20. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

<input checked="" type="checkbox"/> 1 VERTICILLIUM WILT	<input type="checkbox"/> 1 FUSARIUM WILT	<input type="checkbox"/> 0 ROOT KNOT NEMATODE	<input checked="" type="checkbox"/> 2 BACTERIAL BLIGHT (Race 1)
<input checked="" type="checkbox"/> 2 BACTERIAL BLIGHT (Race 2)	<input type="checkbox"/> 0 ASCOCHYTA BLIGHT	<input type="checkbox"/> 0 PHYMATOTRICHUM ROOT ROT	<input type="checkbox"/> 0 RHIZOCTONIA
<input type="checkbox"/> 0 ANTHRACNOSE	<input type="checkbox"/> 0 RUST	<input type="checkbox"/> OTHER (Specify)	

21. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

<input type="checkbox"/> 0 BOLL WEEVIL	<input type="checkbox"/> 0 APHID	<input type="checkbox"/> 0 FLEAHOPPER	<input type="checkbox"/> 0 LEAFWORM
<input type="checkbox"/> 0 FALL ARMYWORM	<input type="checkbox"/> 0 GRASSHOPPER	<input type="checkbox"/> 0 LYGUS	<input type="checkbox"/> 0 PINK BOLLWORM
<input type="checkbox"/> 0 STINKBUG	<input type="checkbox"/> 0 THRIP	<input type="checkbox"/> 0 CUTWORM	<input type="checkbox"/> 0 SPIDERMITE
<input type="checkbox"/> OTHER (Specify)			

REFERENCES: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

- (1) Brown, Harry B., and J. O. Ware, 1958, Cotton, McGraw-Hill Book Company, Inc., New York.
- (2) Lewis, C. F., and H. H. Ramey, Jr., 1971, 1970 Regional Cotton Variety Tests, ARS 34-130, United States Department of Agriculture.

COLORS: Nickerson's or any recognized color fan may be used to determine flower color of the described variety.