



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:
Delta and Pine Land Company

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 *eighteen* 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, 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 (1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

'Deltapine 62'



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, D.C. this 30th day of December in the year of our Lord one thousand nine hundred and eighty-two

Attest:
Kenneth A. Egan
Acting
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

John R. Block
Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

INSTRUCTIONS: See Reverse.

1a. TEMPORARY DESIGNATION OF VARIETY 61-732		1b. VARIETY NAME Deltaoine 62		FOR OFFICIAL USE ONLY PV NUMBER 8200111	
2. KIND NAME Cotton		3. GENUS AND SPECIES NAME Gossypium		FILING DATE 4/23/82	TIME XXXX 12:30 P.M.
4. FAMILY NAME (BOTANICAL) Malvaceae		5. DATE OF DETERMINATION 1-1-80		FEE RECEIVED \$ 500.00 \$ 250.00	DATE 4/23/82 11/29/82
6. NAME OF APPLICANT(S) Delta and Pine Land Company		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) P. O. Box 77, First Tennessee Bldg. Memphis, Tennessee 38101		8. TELEPHONE AREA CODE AND NUMBER (602) 836 2739	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (<i>Corporation, partnership, association, etc.</i>) Corporation		10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION Delaware		11. DATE OF INCORPORATION - -	
12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: Lawrence Burdett P. O. Box 1006 Casa Grande, Arizona 85222					

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, Novelty Statement.
- 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- 13D. Exhibit D, Additional Description of the Variety,

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.) cl 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

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? YES NO (If "Yes," give name of countries and dates.)

15b. HAVE RIGHTS SEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? YES NO (If "Yes," give name of countries and dates.)

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? YES NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) 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 Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

3/11/82
(DATE)

Elmer L. Gilbert
(SIGNATURE OF APPLICANT)

3/11/82
(DATE)

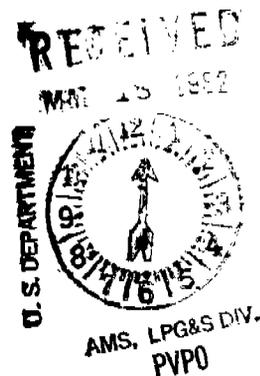
Lawrence Burdett
(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (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 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- 13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.
- 14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety **has either** been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- 15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.



8200111

EXHIBIT A

DELTA AND PINE LAND COMPANY'S APPLICATION FOR DELTAPINE 62

Origin and Breeding History

Deltapine 62 originated from a single plant selection in 1977, from Deltapine 61. Deltapine 61 was derived from a single plant selection out of experimental strain 5916-022-14-22. 5916-022-14-22 was selected from a cross between Deltapine Smooth-leaf and Fox 4-4205 made in 1959. Deltapine 62 has been tested under the designations 61-732, Deltapine 732 and Deltapine 62. In 1978, Deltapine 62 was planted in two Three Replication increase Progeny Row tests. In 1979, 1980 and 1981, Deltapine 62 was entered in tests with eight replications in Casa Grande, Arizona and Brawley, California, conducted by Delta and Pine Land Company.

Deltapine 62 has proven to be phenotypically uniform and genetically homogeneous. It has maintained its' varietal characteristics in all locations and all years tested.

8200111

EXHIBIT B

DELTA AND PINE LAND COMPANY'S APPLICATION FOR DELTAPINE 62

Deltapine 62 most nearly resembles Deltapine 61 from which it was directly selected. Deltapine 62's novelty is exhibited in the following table containing three years averages (1979, 1980, 1981) from Exhibit B and one year (1980) averages from Exhibit C.

DELTA AND PINE LAND COMPANY'S APPLICATION FOR DELTAPINE 62Novelty Statement

Deltapine 62 compared with Deltapine 61 is novel for the following reasons based on differences summarized in the preceding table.

<u>From Exhibit B</u>	<u>Deltapine 62</u>	<u>Deltapine 61</u>	<u>Di fference</u>
Lint Yield (lb./ac.)	1513	1452	+61 * 1
Strength, T ₁	24.9	24.2	+0.7 *
<u>From Exhibit C</u>			
Seed Index	11.8	10.8	+1.0 ***

- Differences followed by one, two or three asterisks are significant at the .05, .01 and .001 levels respectively.

SUMMARY DATA FROM EXHIBIT B AND EXHIBIT C1. Data from Table B1a and B1b.
(Three years testing)

	<u>Del tapine 62</u>	<u>Del tapine 61</u>	<u>Difference</u>
Lint Yield (lbs./ac.)	1513	1452	+61 * 1
Percent Lint Yield of Del tapine 61	104	100	+4.0
Lint Percent	33.4	33.7	-0.3
Strength, T ₁	24.9	24.2	+0.7 *
2.5% Span Length (inches)	1.12	1.11	+0.01
Length Uniformity Index	82.3	82.1	0.2
Micronaire Index	4.7	4.7	-0-

2. Data from Exhibit C
(One year testing)

Plant Height (cm)	95	98.3	-3.3
Length of First Fruiting Branch (cm)	12.3	10.9	+1.4
Node to First Fruiting Branch	6.5	6.6	-0.1
Seeds per Boll	30.9	32.5	-1.6
Diameter of Boll (cm)	3.5	3.4	+0.1
Width of Widest Leaves at Maturity (cm)	12.8	12.1	+0.7
Seed Index	11.8	10.8	+1.0 ***

1. Differences followed by one, two or three asterisks are significant at the .05, .01 and .001 levels respectively.

15. BOLLS:

2 **Locules:** 1 = 3-4 **Table C 15 a** **Table B1** **Table C 15 b**
 a 2 = 4.5 NO. SEEDS PER BOLL LINT PERCENT MM. DIAMETER

Pitted: 1 MINOR
 2 = FINELY **GRAMS SEED COTTON PER BOLL** **Breadth:** 1 = BROADER AT BASE
 3 = COURSELY *88th 11/2/82* 2 = BROADER AT MIDDLE

Type: 1 = STORMPROOF (WESTBURN 70) **Shope:** 1 = LENGTH < WIDTH
 2 STORM RESISTANT (LANKART 57) 2 = LENGTH = WIDTH
 3 = OPEN (DELTAPINE 16) 3 = LENGTH > WIDTH

16. BRACTEOLES:

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

Teeth: 1 FINE 2 = COURSE **Teeth:** 1 = 3-4 2 = 5-7 8-10
 4 OTHER (Specify) _____

17. YIELD: Compared to- **Table B 1**

PERCENT LESS THAN a } 1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213
 4 = PAYMASTER 111 5 = ACALA 1517-70
 PERCENT MORE THAN a 3 } 6 = ACALA SJ-1 7 = LANKART 57

18. FIBER LENGTH (Complete one or more of the following and give the means): **Table B 1**

SPAN LENGTH 50% STAPLE LENGTH 32nd INCHES

UNIFORMITY RAT10 (MEAN/U.H.M.) UNIFORMITY INDEX (50% SPAN/2.5% SPAN)

19. FIBER STRENGTH AND ELONGATION: **Table B 1**

1,000 P.S.I. ELONGATION E₁ STILOMETER T₁

MICRONAIRE READING YARN STRENGTH (Give test method)

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

VERTICILLIUM WILT FUSARIUM WILT a 2 ROOT KNOT NEMATODE BACTERIAL BLIGHT (Race 1)

BACTERIAL BLIGHT (Race 2) ASCOCHYTA BLIGHT a 0 PHYMATOTRICHUM ROOT ROT RHIZOCTONIA

ANTHRACNOSE c 0 RUST OTHER (Specify) _____

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

BOLL WEEVIL APHID a 0 FLEAHOPPER LEAFWORM

FALL ARMYWORM GRASSHOPPER a 0 LYGUS a 0 PINK BOLLWORM

c 0 STINKBUG c 0 THRIP a 0 CUTWORM SPIDERMITE

c 0 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.