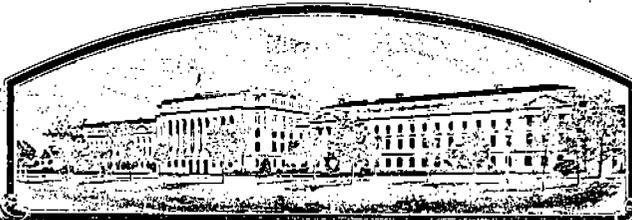


No.



7300103

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

COTTON

'Deltapine 61'



*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 20th day of November in  
the year of our Lord one thousand nine  
hundred and seventy-four*

*Attest*

*S. J. Rollins*

*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 <b>DELTAPINE 61</b>		2. KIND NAME <b>COTTON</b>		FOR OFFICIAL USE ONLY	
				PV NUMBER <b>73103</b>	
3. GENUS AND SPECIES NAME <b>GOSSYPIUM HIRSUTUM</b>		4. FAMILY NAME (Botanical) <b>MALVAECAE</b>		FILING DATE <b>6-28-73</b>	TIME <b>11:00</b> A.M.
		5. DATE OF DETERMINATION <b>OCTOBER 1966</b>		FEE RECEIVED \$ <b>250.00</b>	BALANCE DUE \$ <b>0.00</b>
				\$ <b>250.00</b>	\$ <b>0.00</b>
				\$ <b>250.00</b>	\$ <b>0.00</b>
6. NAME OF APPLICANT(S) <b>DELTA &amp; PINE LAND COMPANY</b>		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) <b>SCOTT, MISSISSIPPI 38772</b>		8. TELEPHONE AREA CODE AND NUMBER <b>607742-3351</b>	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) <b>CORPORATION</b>			10. STATE OF INCORPORATION <b>MISSISSIPPI</b>		11. DATE OF INCORPORATION <b>APRIL 29, 1886</b>

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

**EARLY C. EWING, JR.  
DELTA & PINE LAND COMPANY  
SCOTT, MISSISSIPPI 38772**

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.

MAY 14, 1973  
(DATE)

June 2, 1973  
(DATE)

**DELTA & PINE LAND COMPANY**  
*Early C. Ewing, Jr.*  
(SIGNATURE OF APPLICANT)  
**Early C. Ewing, Jr., Vice President**  
*Elmer L. Gilbert*  
(SIGNATURE OF APPLICANT) **1**  
**Elmer L. Gilbert**

EXHIBIT ADELTA & PINE LAND COMPANY'S APPLICATION FOR DELTAPINE 61

## Origin and Breeding History:

Deltapine 61 originated from a single plant selection in 1966 out of Deltapine Strain 5916-022-14-21. 5916 was a cross made in 1959 between Deltapine Smooth Leaf and Fox 4-4205. The Fox 4-4205 was released as Deltapine 45. Deltapine 61 was tested under the abbreviated designation Deltapine 5916-610 or Deltapine 16-610. Deltapine 61 was planted in 3 rep Increase Progenys row in 1967 and progeny tested in 1968 in both Arizona and Mississippi. This variety hereinafter tested under the designation Deltapine 16-610.

The variety has been carefully selected over a number of generations as explained in the first of the section in that the characters described in "Exhibit D" are demonstratively repeated in each generation within the variations caused by environmental differences. In order to assure this stability, plants of this variety are reselected at frequent intervals, grown in progeny rows, checked in progeny tests and variety reconstituted by bulking lines which are characteristic of the variety. This variety hereinafter tested under the designation Deltapine 16-610.

EXHIBIT D

Revision of Delta & Pine Land Company's Exhibit D for  
Deltapine 61 (73103)

June 13, 1974

DATA INDICATIVE OF NOVELTY

Deltapine 61 most closely resembles Deltapine 16 except that it has outyielded it from 14 to 16% at three locations--Friendly Corners, Arizona, Table 1; Brawley, California, Table 2; and Marana, Arizona, Table 3. This yield increase is related to its appreciably higher lint percentage (plus 1-2%) (Tables 1, 2, 3, 6, 8) and the fact that it is slightly more vigorous and less determinate (Tables 1, 2 Plant Height and Leafiness). The seed are slightly smaller than Deltapine 16 (Table 6). Its micronaire is slightly higher. Its fiber properties compare with those of Deltapine 16 as follows:

(Tables 1, 2, 3, 4, 6, 7, 8)

Staple Length (Digital Fibrograph)	Same
Length Uniformity (Digital Fibrograph)	Same
Tensile Strength (Stelometer)	Same
Micronaire	0.2 - 0.3 higher

Agronomically it has a stiffer stalk, more resistant to lodging, slightly taller and seed cotton will hold in the open boll as well as Deltapine 16. It is tolerant of Verticillium wilt (Verticillium albo atrium).

Deltapine 61 from several tests was spun in comparison with Deltapine 16 by the Spinning Test Laboratory of Courtaulds Limited, Manchester, England. These tests (on 32's yarn) showed that its CSP averaged slightly less than Deltapine 16 but these differences were small.

Data on all measured characteristics is given in the enclosed tables. Except as shown above, these data do not reveal other differences.

Date June 13, 1974  
Signed Early C. Ewing, Jr.  
Early C. Ewing, Jr., Vice President

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

EXHIBIT C  
 (Cotton)

OBJECTIVE DESCRIPTION OF VARIETY  
 COTTON (GOSSYPIMUM SPP.)

DELTA & PINE LAND COMPANY

SCOTT, MISSISSIPPI 38772

FOR OFFICIAL USE ONLY

PVPO NUMBER

73103

VARIETY NAME OR TEMPORARY DESIGNATION

DELTAPINE 61

Enter the appropriate number that describes the varietal character of this variety in the boxes below.  
 Place zeros in first box (e.g., 0389) or 09) when number is either 99 or less or 9 or less.

1. SPECIES: 1 = GOSSYPIMUM HIRSUTUM 2 = GOSSYPIMUM BARBADENSE

2. ADAPTATION (0 = Not Tested, 1 = Not Adapted, 2 = Adapted):

2 DELTA 2 CENTRAL 1 HIGH PLAINS 2 EL PASO AREA  
 2 SAN JOAQUIN OTHER (Specify)

3. MATURITY (Based on Boll):

100 DAYS OF DAYS EARLIER THAN ..... 1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213  
 100 DAYS OF DAYS LATER THAN ..... 2 4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1  
 7 = LANKART 57 8 = OTHER (Specify)

4. GROWTH HABIT:

2 1 = SPREADING 2 = INTERMEDIATE 3 = COMPACT 1 1 = FOLIAGE SPARSE 2 = DENSE  
 3 = OTHER (Specify)

5. PLANT HEIGHT:

100 CM. SHORTER THAN ..... 1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213  
 100 CM. TALLER THAN ..... 2 4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1  
 7 = LANKART 57 8 = OTHER (Specify)

6. MAIN STEM:

3 1 = LAX 2 = ASCENDING 3 = ERECT 5 CM. TO FIRST FRUITING BRANCH 3 NO. OF NODES TO FIRST FRUITING BRANCH  
 (from cotyledonary node)

7. LEAF:

12 CM. WIDTH OF WIDEST LEAVES AT MATURITY

8. LEAF PUBESCENCE:

2 2 = SMOOTH LEAF (DELTAPINE SMOOTH LEAF) 3 = PUBESCENT (STONEVILLE 213)  
 4 = HEAVY PUBESCENCE (H<sub>1</sub> OR H<sub>2</sub>) 5 = OTHER (Specify)

9. LEAF COLOR:

2 1 = VIRESCENT YELLOW 2 = LIGHT GREEN 3 = DARK GREEN (Acala-442) 4 = RED  
 5 = OTHER (Specify)

10. LEAF TYPE:

1 1 = NORMAL 2 = OKRA 3 = SUPER OKRA 4 = OTHER (Specify)

11. FLOWER:

2 1 = NECTARILESS 2 = NECTARIED

7 Petals: 1 = CREAM 2 = YELLOW 1 Pollen: 1 = CREAM 2 = YELLOW

12. FRUITING BRANCH TYPE:

3 1 = CLUSTER 2 = SHORT 3 = NORMAL 2 1 = DETERMINATE 2 = INDETERMINATE

13. GOSSYPOL CONDITION:

3 1 = CLANDLESS 2 = REDUCED GLANDS 3 = NORMAL GLANDS 1 1 = NORMAL BUD GOSSYPOL  
 4 = OTHER (Specify) 2 = HIGH BUD GOSSYPOL

14. SEEDS:

100 ± 2 SEED INDEX (Fuzzy seed basis) 2 Seed Fuzz: 1 = SPARSE (GREGG 35) 2 = MODERATE (DPL-16)  
 3 = HEAVY (ACALA SJ-1) 4 = OTHER (Specify)



EXHIBIT B

DELTAPINE 61 (73103) Revised Statement of Exhibit B

BOTANICAL DESCRIPTION

This is a variety of upland cotton Gossypium hirsutum. It has an erect, many branched stem, a vigorous root system, medium sized, medium green colored smooth leaf, flower corrolas and anthers are cream colored, bolls obovate and opening fully, linters are gray and seed are dark brown.

The leaves are smooth grading 7 on Delta & Pine Land Company's scale from 2 hairy to 8 very smooth (Tables 1-8).

Date May 17, 1974

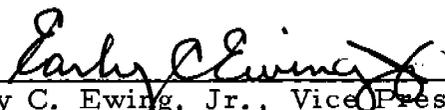
  
\_\_\_\_\_  
Early C. Ewing, Jr., Vice President

EXHIBIT E (Amendment)

DELTA & PINE LAND COMPANY'S APPLICATION FOR DELTAPINE 61 (73103)

Delta & Pine Land Company is the owner of plant variety protection rights to the variety Deltapine 61 (73103). The breeder is an employee of the company and has executed an assignment of Plant Variety Rights to the Company.

DATE: November 1, 1973

SIGNED: *Early C. Ewing, Jr.*  
Early C. Ewing, Jr.  
Vice President