No. 9700253

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

D&PL Technology Holding Corporation

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED 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 TWENTY 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 CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE , OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

'DP 20B'

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 fifteenth day of November, in the year two thousand two.

PLANT VARIETY PROTECTION OFFICE · U.S. DEPARTMENT OF AGRICULTURE

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

9700253

REPRODUCE LOCALLY. *Include form number and edition date on all reproductions.*

OMB APPROVED NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE DIVISION

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(INSTRUCTIONS ON REVERSE)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)
~~Delta and Pine Land Company d/b/a Deltapine Seed~~ D&PL Technology Holding Corporation

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO.
DPX 9621

3. VARIETY NAME
DP 20B

4. ADDRESS (street and no. or R.F.D. no., city, state, ZIP, and country)
~~100 MAIN STREET~~, SCOTT, MS 38772
P.O. Box 157

Address as of Jul 2002 per assignment

5. PHONE (include area code)
(601) 742-4133

6. FAX (include area code)
(601) 742-3182

FOR OFFICIAL USE ONLY

PVPO NUMBER 9700253

FILING
DATE 4/4/97
TIME ☐ AM ☐ PM

FEES RECEIVED
Filing and Examination Fee: $ 2450.00
Date APR 04 1997
Certificate Fee $ 320.00
Date 7/25/02

7. GENUS AND SPECIES NAME
Gossypium hirsutum

8. FAMILY NAME *(Botanical)*
Malvaceae

9. CROP KIND NAME *(Common Name)*
Cotton

10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.)
Corporation

11. IF INCORPORATED, GIVE STATE OF INCORPORATION
Delaware ?

12. DATE OF INCORPORATION
October 19, 1978 ?

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS.

Dr. Harry Collins
P.O. Box 157
Scott, MS 38772

PHONE (include area code): (601) 742-4133
FAX (include area code): (601) 742-3182

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED *(Follow INSTRUCTIONS on reverse)*

a. ☒ Exhibit A. Origin and Breeding History of the Variety
b. ☒ Exhibit B. Statement of Distinctness
c. ☒ Exhibit C. Objective Description of the Variety
d. ☐ Exhibit D. Additional Description of the Variety
e. ☒ Exhibit E. Statement of the Basis of the Applicant's Ownership
f. ☒ Voucher Sample (2,500 viable untreated seeds or for tuber propagated varieties verification that tissue culture will be deposited and maintained in a public repository)
g. ☒ Filing and Examination Fee as prescribed in 97.175 of the regulations, made payable to "Treasurer of the United States" (Mail to PVPO)

15. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act)?*
☐ YES (If "yes", answer items 16 and 17 below) ☒ NO (If "no", skip to item 18 below)

16. DOES THE APPLICANT SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☐ NO

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

18. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?
☒ YES (If "yes", give names of countries and dates) ☐ NO

U.S. - February, 1997

19. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, 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(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT (Owner(s)) — CAPACITY OR TITLE: Director of Research-New Technologies — DATE 3/25/97

NAME (Please Print or Type): William V. Hugie

SIGNATURE OF APPLICANT (Owner(s)) — CAPACITY OR TITLE: Vice President/Director of Research — DATE 3-25-97

NAME (Please Print or Type): Harry B. Collins

SD-470 (04-95) Editions of Forms LS-470 (31/86), CSSD-470 (5/89), and SD-470 (06-93) are to be destroyed.

CONTINUED ON REVERSE

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) Completed application form signed by the owner; (2) completed Exhibits A, B, C, E; (3) at least 2,500 viable untreated seeds, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in a public repository prior to issuance of a certificate; (4) check drawn on a U.S. bank, payable to "Treasurer of the United States" in the amount specified for filing and examination. *(See Section 97.175 of the Regulations and Rules of Practice.)* Partial applications will be held in the PVPO for not more than 30 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Blvd., Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount specified in 97.175 for issuance of the Certificate.

Plant Variety Protection Office
Telephone: (301) 504-5518

ITEM

14a. 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) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified.

14b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety 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 are clear differences;
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.

14c. Exhibit C forms are available from the PVPO for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.

14d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.

14e. Section 52(4) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. The applicant may be the actual breeder, the employee of the breeder, the owner through purchase or inheritance, etc.

15. 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 this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No' has been specified, the applicant may change the choice. (See P.L. 103-349 for additional information.)

18. See section 41, 42, and 43 of the Act and section 97.175 of the regulations for eligibility requirements.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment is specified in section 97.175 of the regulations. *(See section 101 of the Act, and sections 97.130, 97.131, 97.175(h) of Regulations and Rules of Practice.)*

To avoid conflict with other variety names in use, the applicant should check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center–East, Beltsville, MD 20705. Telephone: (301) 504-8089.

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EXHIBIT A
DELTAPINE SEED'S APPLICATION FOR DP 20^B

ORIGIN AND BREEDING HISTORY

DP 20^B was developed by the backcross breeding method. The donor parent was a line with insertion 531 of construct PV-GHBK06 containing a *Bacillus thuringiensis* var. *kurstaki* pesticide protein developed by the Monsanto Company. Seed of non-transgenic recurrent parent DP 20 was provided to Monsanto under an agreement which stipulated that the Bt gene be introduced into this germplasm and the transgenic germplasm would be returned to Deltapine Seed. The F_1 cross was made in Monsanto's greenhouse in St. Louis, MO. The BC_1, BC_2 and BC_3 crosses were made in Delta and Pine Land's greenhouse in Scott, MS. BC_3F_1 plants were grown at Scott, MS. BC_3F_2 plants were grown in Puerto Rico during the winter of 1994-95.

BC_3F_3 progeny rows were grown at Scott, MS in the summer of 1995. Progeny rows were tested for trueness to type of the recurrent parent DP 20. Those true to type and also containing the "Bt Gene" in a homozygous form were bulked to form the variety DP 20^B. Seed was increased in South Africa during the winter of 1995-96.

DP 20^{B-} was evaluated across the cotton belt in replicated research and ASTR (Agronomic Services Trials-Replicated) trials in 1996. Separate isolated increases of DP 20^{B-} were grown in 1996.

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DELTAPINE SEED'S APPLICATION FOR DP 20^{B}

STATEMENT OF UNIFORMITY AND STABILITY

DP 20^{B} has been observed over several generations and appears to be uniform and stable. Less than 2% of the plants do not contain the gene insertion 531 of construct PV-GHBK04 of Bacillus thuringiensis var. kurstaki pesticide which imparts resistance to several Lepidopteran insects.

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EXHIBIT B
DELTAPINE SEED'S APPLICATION FOR DP 20^B

NOVELTY STATEMENT

DP 20^B most nearly resembles its recurrent parent DP20. The principle difference between DP 20^B and DP20 is that DP 20^B contains, in more than 98% of its plants, the gene of Insertion 531 of construct PV-GHBK04 containing a Bacillus thuringiensis var. kurstaki pesticide protein imparting resistance to Lepidopteran insects. Gin Turnout from ASTR trials is 1.0 units higher than DP20 and lint percent values from research plots is .5 units higher. Fiber length is .01 units longer and micronaire .1 unit lower than measurements from DP20. All other fiber properties, plant type and plant map data are similar.

The donor parent for DP 20^B was Coker 312 with the following transgenic insertion.

phenotype: Lepidopteran insect resistance
constructs: PV-GHBK04
genotype:

- promoter: CMoV - A 0.6 Kb 35S promoter region of cauliflower mosaic virus
- gene: *cryIA* © - FL *B.t.k.* - a 3.6 Kb gene encoding the full length *Bacillus thuringiensis* insect control protein.
- 3' non-translated region: E9 3' - the 0.7 Kb 3' non-translated region of the pea rbcS-E9 gene *Agrobacterium tumefaciens* T-DNA.

selectable marker:

- promoter 35S - A 0.35 Kb 35S promoter region of cauliflower mosaic virus.
- gene: NPt II - the 0.83 Kb neomycin phosphotransferase type II gene that confers kanamycin resistance.
- 3' non-translated region: NOS 3' - from the nopaline synthase gene of *Agrobacterium tumefaciens* T-DNA.

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EXHIBIT (COTTON)

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U.S. DEPARTMENT OF AGRICULTURE
PLANT VARIETY PROTECTION OFFICE, AMS, USDA
NATIONAL AGRICULTURAL LIBRARY Bldg., Rm. 500
10301 BALTIMORE Blvd.
BELTSVILLE, MD 20705

OBJECTIVE DESCRIPTION OF VARIETY
COTTON (Gossypium spp.)

ME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
Delta and Pine Land Company d/b/a Deltapine Seed	DPX 9621	DP 20B

DRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)	FOR OFFICIAL USE ONLY
100 MAIN STREET, SCOTT, MS 38772	PVPO NUMBER 9700253

ace the appropriate data that describes the varietal characteristic of this variety in the space provided. Characteristics described, cluding numerical measurements, should represent those that are typical for the variety. Royal Horticultural Society or any recognized lor fan may be used to determine plant colors. Characters marked with an asterisk * indicate necessary characters to be measured.

ECIFIC VARIETIES USED FOR COMPARISON AS CHECK VARIETIES IN THIS APPLICATION: Use standard regional check varieties which are adapted to your area. One of the comparison varieties must be the most similar variety used in Exhibit B.

DP 20 2. _____ 3. _____

. SPECIES:

X G. hirsutum L. ____ G. barbadense L.

. AREA(S) OF ADAPTATION: (A = Adapted, NA = Not Adapted, NT = Not Tested)

A Eastern A Delta A Central A Blacklands

NT Plains NT Western A Arizona NT San Joaquin

Other (Specify) _____

GENERAL: Characteristics which are known to be variable but are still useful for a meaningful description of the variety.

	Application Variety	Comparison Variety 1	Comparison Variety 2	Comparison Variety 3
Plant Habit: Spreading, Intermediate, Compact	COMPACT	COMPACT		
Foliage: Sparse, Intermediate, Dense	INTERMEDIATE	INTERMEDIATE		
Stem Lodging: Lodging, Intermediate, Erect	INTERMEDIATE	INTERMEDIATE		
Fruiting Branch: Clustered, Short, Normal	NORMAL	NORMAL		
Growth: Determinate, Intermediate, Indeterminate	INTERMEDIATE	INTERMEDIATE		
Leaf Color: Greenish yellow, Light green, Dark green	LIGHT GREEN	LIGHT GREEN		

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GENERAL: (continued)

Boll Shape: Length less than width, Length equal to width, Length more than width	~~more than width~~	~~more than width~~		
Boll Breadth: Broadest at base, Broadest at middle	broadest at middle	broadest at middle		

MATURITY: (50 % Open Bolls; Preferred Method; Describe Method If Different Method Was Used)

	Application Variety	Comparison Variety 1	Comparison Variety 2	Comparison Variety 3
Date of 50 % open bolls	Sep-9	Sep-8		

PLANT:

	Application Variety	Comparison Variety 1	Comparison Variety 2	Comparison Variety 3
Cm to 1st Fruiting Branch (from cotyledonary node)	__.__	__.__	__.__	__.__
No. of Nodes to 1st Fruiting Branch (excluding cotyledonary node)	4.8	4.7	__.__	__.__
Mature Plant Height cm (from cotyledonary node to terminal)	94.0	93.0	___.__	___.__

LEAF: Upper most, fully expanded leaf.

	Application Variety	Comparison Variety 1	Comparison Variety 2	Comparison Variety 3
Type: Normal, Sub Okra, Okra, Super Okra	Normal	Normal		
Pubescence: Absent, Sparse, Medium Dense OR Trichomes/sq. cm Bottom surface excluding veins	Sparse	Sparse		
Nectaries: Present or Absent	Present	Present		

STEM PUBESCENCE: Glabrous, Intermediate, Hairy

Application Variety	Comparison Variety 1	Comparison Variety 2	Comparison Variety 3
Intermediate	Intermediate		

GLANDS: (Gossypol) Absent, Sparse, Normal, More Than Normal

	Application Variety	Comparison Variety 1	Comparison Variety 2	Comparison Variety 3
Leaf:	Normal	Normal		
Stem:	Normal	Normal		
Calyx Lobe: (normal is absent)	Normal	Normal		

FLOWER:

	Application Variety	Comparison Variety 1	Comparison Variety 2	Comparison Variety 3
Petals: Cream, Yellow	Cream	Cream		
Pollen: Cream, Yellow	Cream	Cream		
Petal Spot: Present, Absent	Absent	Absent		

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*10. SEED:

	Application Variety	Comparison Variety 1	Comparison Variety 2	Comparison Variety 3
Seed Index (g/100 seed, fuzzy basis)	9.2	9.6		
Lint Index (g lint/100 seeds)				

*11. BOLL:

	Application Variety	Comparison Variety 1	Comparison Variety 2	Comparison Variety 3
Lint Percent (X Picked ___ Pulled)	37.8	37.0		
OR				
Gin Turnout (x Picked ___ Stripped)	34.3	33.2		
Number of Seeds per Boll				
Grams Seed Cotton per Boll				
Number of Locules per Boll				
Boll Type (Stormproof, Storm Resistant, Open)	Open	Open		

2. FIBER PROPERTIES:

Specify Method (HVI or other): HVI

	Application Variety	Comparison Variety 1	Comparison Variety 2	Comparison Variety 3
* Length (inches, 2.5% SL)	1.144	1.13		
* Uniformity (%)	83	83		
* Strength, T1 (g/tex)	29.2	29.0		
* Elongation, E1 (%)	6.5	6.4		
* Micronaire	4.2	4.3		
Fineness (Source ___)				
Yarn Tenacity (cN/tex, 27 tex)				
Yarn Strength (lbs. 22's)				

DISEASES: (NT = Not Tested, S = Susceptible, MS = Moderately Susceptible, MR = Moderately Resistant, R = Resistant)

NT Alternaria macrospora

NT Anthracnose

NT Ascochyta Blight

NT Bacterial Blight (Race 1)

NT Bacterial Blight (Race 2)

NT Bacterial Blight (Race ___)

NT Diplodia Boll Rot

Other (specify)

NT Fusarium Wilt

NT Phymatotrichum Root Rot

NT Pythium (specify species) ___

NT Rhizoctonia solani

NT Southwestern Cotton Rust

NT Thielayiopsis basicola

NT Verticillium Wilt

4. NEMATODES, INSECTS AND PESTS: (NT = Not Tested, S = Susceptible, MS = Moderately Susceptible, MR = Moderately Resistant, R = Resistant)

NT Root-Knot Nematode

NT Boll Weevil

R Bollworm

NT Cotton Aphid

NT Cotton Fleahopper

NT Cotton Leafworm

NT Cutworm (specify species) _____

NT Fall Armyworm

___ Other (specify) _____

NT Reniform Nematode

NT Grasshopper (specify species) _____

NT Lygus (specify species) _____

R Pink Bollworm

NT Spider Mite (specify species) _____

NT Stink Bug (specify species) _____

NT Thrips (specify species) _____

R Tobacco Bud Worm

. COMMENTS: Present any additional information that cannot adequately be described in 1 through 13 which significantly distinguishes your variety.

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DELTAPINE SEED'S APPLICATION FOR DP 20[B]

EXPLANATION OF TRIALS

Replicated research trials—Replicated trials conducted by research. A variety or line was replicated 4 times within each trial. Individual plots consisted of 2 rows by 50 feet and were harvested by a modified research picker and weights recorded. Samples were taken from each plot, ginned and fiber tested using HVI. AGROBASE was used to analyze all data.

ASTR Trials—Agronomic Service Trials/Replicated are replicated strip trials conducted across the cotton belt by Deltapine Seed's Agronomic Services. Lines and varieties were replicated 2 to 3 times within each trial. Individual plot size ranges form 4 to 8 rows between 400 to 1200 feet long. Plant map data is taken during the season and summarized using the University of California "Cotton Plant Mapper" program by Dick Plant and Tom Kerby. Plots were harvested with farmers machinery, weighed with modified boll bugies, and a 15 to 20 lb samples taken from each plot. Samples were ginned to get gin turnout and fiber samples were sent USDA Cotton Classing Office for fiber testing. Data analysis was performed using JUMP.

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Table 1
1996 Average Across 6 Tests[1]—Replicated Research Trials

Variety	Yield Lint #/A	Yield % of DP 20	Lint %	Str g/tex	Len	Mic	UR	E1
DP 9621	**1444**	**105**	**37.8**	**29.24**	**1.14**	**4.2**	**83.5**	**6.5**
DP 20	1375	100	37.0	29.04	1.13	4.3	83.2	6.4

DP20B
AAA
08 Apr 2002

[1] 1996- (2)Scott, MS; Hartsville, SC; (2)Casa Grande, AZ; Wisner, La

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Over 44 AST's in 1996 - Using SAS Least Square Means

		Lint (lbs/A)		Turnout %		Loan Value (cents/lb)		Crop Value ($/Acre)	
Variety	N	LS Mean	Std Error	LS Mean	Std Error	LS Mean	Std Error	LS Mean	Std Error
DPX9621	29	979	25	34.31	0.24	52.05	0.42	681.90	10.67
DP20	59	929	16	33.24	0.17	52.53	0.30	651.19	4.90
Average	**44**	**836**	**21**	**33.77**	**0.21**	**52.29**	**0.36**	**584.19**	**7.78**
CV %		**12.6**		**3.7**		**4.2**		Calculated Value	

Crop value calculated considering differences in premiums for fiber quality and grade using $0.70 per pound as an average.

DP20B
AAA
08AM 2002

Fiber Quality Summary - Across 44 AST/Rs Over All Regions*

		Staple		Strength		Micronaire		Leaf Grade		Color Grade	
Variety	N	LS Mean	Std. Error	LS Mean	Std. Error	LS Mean	Std. Error	LS Mean	Std. Error	LS Mean	Std. Error
DPX9621	29	35.9	0.2	28.0	0.3	3.85	0.05	3.0	0.2	97.4	0.6
Deltapine 20	59	35.3	0.1	27.8	0.2	4.03	0.04	3.1	0.1	96.6	0.4
Average	**44**	**35.6**	**0.1**	**27.9**	**0.2**	**3.94**	**0.04**	**3.1**	**0.1**	**97.0**	**0.5**
C.V.%		**2.2**		**4.5**		**6.2**		**27.3**		**3.1**	

*Sorted by Micronaire in ascending order.

Values are significantly different from each other if their difference is larger than the sum of their std. errors.

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Final Growth Summary - Across 42 AST/Rs Over All Regions*

Average Date of Evaluation September 13, 1996

		Height (in)		Total Nodes(#)		Veg. Nodes (#)		Fruiting Nodes (#)		HNR	
Variety	N	LS Mean	Std. Error	LS Mean	Std. Error	LS Mean	Std. Error	LS Mean	Std. Error	LS Mean	Std. Error
Deltapine 20	58	36.5	0.4	20.5	0.2	4.7	0.1	16.0	0.2	1.79	0.02
DPX9621	30	37.1	0.5	20.8	0.2	4.8	0.1	16.2	0.2	1.80	0.02
Average	**44.0**	**36.8**	**0.5**	**20.6**	**0.2**	**4.8**	**0.1**	**16.1**	**0.2**	**1.79**	**0.02**
C.V.%		**8.0**		**5.7**		**7.9**		**6.9**		**7.5**	

DP20B
AAA
08 Apr 2002

*Sorted by Vegetative Nodes in ascending order.

Values are significantly different from each other if their difference is larger than the sum of their std. errors.

Final Yield Position Summary - Across 42 AST/Rs Over All Regions*

Average Date of Evaluation September 13, 1996

		Bolls Per Plant		% FP1		%FP2		%FP2<		%Vegetative	
Variety	N	LS Mean	Std. Error	LS Mean	Std. Error	LS Mean	Std. Error	LS Mean	Std. Error	LS Mean	Std. Error
Deltapine 20	58	12.8	0.3	56.6	0.9	25.7	0.6	10.9	0.6	6.8	0.7
DPX9621	30	15.5	0.5	52.1	1.3	26.3	0.8	10.6	0.9	11.0	0.9
Average	**44**	**14.2**	**0.4**	**54.4**	**1.1**	**26.0**	**0.7**	**10.7**	**0.7**	**8.93**	**0.81**
C.V.%		**18.9**		**12.9**		**17.7**		**44.2**		**54.1**	

*Sorted by %FP1 in descending order.

Values are significantly different from each other if their difference is larger than the sum of their std. errors.

Final Retention and Maturity Summary - Across 42 AST/Rs Over All Regions*

Average Date of Evaluation September 13, 1996

		#Nodes 95% Zone		% Ret. FB1-5		% Ret. 95% Zone		FBCB		Date 50% Open	
Variety	N	LS Mean	Std. Error	LS Mean	Std. Error	LS Mean	Std. Error	LS Mean	Std. Error	LS Mean	Std. Error
Deltapine 20	58	17.1	0.1	53.8	1.2	56.3	0.9	8.4	0.1	8-Sep	0.4
DPX9621	30	17.1	0.2	64.2	1.7	51.9	1.3	7.9	0.2	9-Sep	0.6
Average	**44**	**17.1**	**0.1**	**59.0**	**1.5**	**54.1**	**1.1**	**8.2**	**0.1**	**10-Sep**	**0.5**
C.V.%		**5.6**		**17.7**		**13.0**		**10.9**		**1.2**	

*Sorted by Date of 50% Open in ascending order.

FBCB = Fruiting Branch with first position cracked boll.

Values are significantly different from each other if their difference is larger than the sum of their std. errors.

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EXHIBIT E

DELTAPINE SEED'S APPLICATION FOR DP 20^B

STATEMENT OF OWNERSHIP

Deltapine Seed, by agreement of breeder, is the owner of the cultivar DP 20^B through an understanding with Monsanto Company. DP 20^B is a cultivar which carries a proprietary gene, owned by the Monsanto Company, encoding an insect toxin in the background of a Deltapine Seed cultivar.