No. 200500180

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

D&PL Technology Holding Company, LLC

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 [illegible]HT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR [illegible]RTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE [illegible] PURPOSE , OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE [illegible], OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT [illegible] BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

'DP 6226 BG/RR Acala'

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 fourteenth day of February, in the year two thousand and six.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

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

FORM APPROVED - OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

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 OWNER: D&PL Technology Holding Company, LLC.

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME: 03L120BR

3. VARIETY NAME: DP 6226 BG/RR Acala

4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country):
PO Box 157
100 Main Street
Scott, Mississippi 38772
USA

5. TELEPHONE (include area code): (662) 742-4141

6. FAX (include area code): (662) 742-3182

PVPO NUMBER: 200500180

FILING DATE: MARCH 14, 2005

7. IF THE OWNER IS NOT A "PERSON" GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.): Limited Liability Company

8. IF INCORPORATED, GIVE STATE OF INCORPORATION: Delaware

9. DATE OF INCORPORATION: February 29, 1996

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers)
Delta and Pine Land Company
Kelly Casavechia
P.O. Box 157
Scott, MS 38772

FILING AND EXAMINATION FEE: $ 3,652.00 DATE 3/14/05

CERTIFICATION FEE: $ 768.00 DATE 1/9/06

11. TELEPHONE (include area code): (662) 742-4141

12. FAX (include area code): (662) 742-3182

13. E_MAIL: kelly.h.casavechia@deltaandpine.com

14. CROP KIND (Common Name): Cotton

15. GENUS AND SPECIES NAME OF CROP: Gossypium hirsutum

16. FAMILY NAME (Botanical): Malvacae

17. IS THE VARIETY A FIRST GENERATION HYBRID? ☐ YES ☒ NO

18. 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 (Optional)
- e. ☒ Exhibit E. Statement of the Basis of the Owner'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 an approved public repository)
- g. ☒ Filing and Examination Fee ($2,450), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)

19. DOES THE OWNER SPECIFY THAT SEED OF THIS VATIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act)
☐ YES (If "yes", answer items 20 and 21 below) ☒ NO (If "no", go to item 22)

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☐ YES ☐ NO

21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. O OTHER COUNTRIES?
☐ YES ☒ NO
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)

23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)?
☒ YES ☐ NO
IF YES, GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)

24. The owners 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 owner(s) is(are) the owner 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 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

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

SIGNATURE OF OWNER		SIGNATURE OF OWNER	
Lawrence Burdett		William V. Hugie	
NAME (Please print or type)		NAME (Please print or type)	
Lawrence Burdett		William V. Hugie	
CAPACITY OR TITLE	DATE	CAPACITY OR TITLE	DATE
Cotton Breeder	Mar 7, 2005	Vice President/Director of Research	MAR. 9, 2005

Instructions

200500180

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) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, 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 an approved public repository; (4) check drawn on a U.S. bank for $2,705 ($320 filing fee and $2,385 examination fee), payable to "Treasurer of the United States" (*See Section 97.6 of the Regulations and Rules of Practice* .) Partial applications will be held in the PVPO for not more than 90 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 Avenue, 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 paybable to "Treasurer of the United States" in the amount of $320 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office
Telephone: (301) 504-5518
FAX: (301) 504-5291
Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

ITEM

18a. Give:
(1) the genealogy, including public and commercial varieites, 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

18b. 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 realted 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; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.

18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.

18d. 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*.

18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.

19. 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 Regulations and Rules of Practice, Secion 97.103*).

22. *See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.*

23. *See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.*

21. CONTINUED FROM FRONT *(Please provide a statement as to the limitation and sequence of generations that may be certified.)*

22. CONTINUED FROM FRONT *(Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)*

23. CONTINUED FROM FRONT *(Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of th variety is protected by intellectual property right (Plant Breeder's Right or Patent).)*
Bollgard® with Roundup Ready® cotton
THESE SEEDS ARE COVERED UNDER U. S. PATENTS 5,633,435; 5,500,365; 5,424,200; 5,359,142; 5,352,605; 5,530,196; 5,322,938; 5,196,525; 5,188,642; 5,164,316; 4,940,835; 5,717,084; 5,728,925; and 5,804,425.

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 or owner's representative 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 or any modification of owner's name 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 the Regulations and Rules of Practice.)*

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed/ls-sd.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to repond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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EXHIBIT A

DELTA AND PINE LAND COMPANY'S APPLICATION FOR DP 6226 BG/RR Acala

ORIGIN AND BREEDING HISTORY

1. GENEALOGY

DP 6226 BG/RR Acala is a Bollgard®/Roundup Ready® (BG/RR) selection of DP 6211 Acala developed using a backcross breeding program. The transgenic BG and RR genes were introduced by crossing DP 6211 Acala to a BG/RR donor, DP 50-118. This was followed by 3 generations of backcrossing to the recurrent parent DP 6211 Acala. This transgenic development program was conducted in a greenhouse environment and plants were selected for the presence of the BG and the Roundup® herbicide gene at all stages in the development process.

LINE 531, introduced into DP 6226 BG/RR Acala, (commercialized under the trade name Bollgard®) of construct PV-GHBK06 containing a Bacillus thuringiensis var. kurstaki pesticide protein was developed by using recombinant DNA techniques to introduce the insect protection gene cry2Ab2 from Bacillus thuringiensis, which encodes the protein Cry2Ab2.

LINE 1445, introduced into DP 6226 BG/RR Acala, was developed by using recombinant DNA techniques to introduce a resistant version of the gene EPSPS which encodes the enzyme: 5-enolpyruvylshikimate-3-phosphate synthase (EPSPS). This modified EPSPS was originally isolated from the common soil borne microorganism *Agrobacterium sp.* Strain CP4 and confers to LINE 1445 resistance or tolerance to the herbicide glyphosate [formulation of glyphosate, N (phosphonomethyl) glycine] commercialized under the trade name Roundup®. The Monsanto Company developed both LINE 531 and LINE 1445 insertion events.

2. SELECTIONS AND MULTIPLICATION

1997 – 2000

The initial cross and 3 subsequent backcrosses to DP 6211 through the BC_3F_1 generation were made at the Delta and Pine Land Company greenhouse facility at Scott, MS. The BC_3F_1 generation was self-pollinated in the greenhouse to produce BC_3F_2 Seed.

2001/2002

The BC_3F_2 seed was planted in Costa Rica. The population was sprayed with Roundup® herbicide to select for the presence of the RR gene. All individual plants in the population were tested for the presence of the BG and RR genes. Plants expressing both the BG and RR genes were self-pollinated to maintain purity. Self-pollinated bolls were bulk harvested.

2002

The BC_3F_3 plant selections made in Costa Rica were planted, plant to row in Scott, MS. The individual lines were sprayed with Roundup® herbicide to select for the presence of the RR gene and tested using PCR techniques to determine if they were homozygous for both the BG and RR genes, all heterozygous lines were destroyed before flowering. All remaining lines were fiber tested and those with superior fiber were harvested for seed increase.

2003

The individual lines were planted in Scott, MS for increase. The individual lines were sprayed with Roundup® herbicide to select for the presence of the RR gene and tested using PCR techniques to determine if they were homozygous for both the BG and RR genes, all heterozygous lines were destroyed before flowering. The individual lines were also planted in the San Joaquin Valley of California (SJV) at two locations for selection purposes. Selection pressure was exerted on the individual lines for superior fiber traits, similar plant structure and yield. Three lines of similar plant type and superior fiber quality were identified and DP 6226 BG/RR Acala was constituted from the seed increases grown at Scott, MS. No off-types were observed in any of the lines.

2003/2004

DP 6226 BG/RR Acala was sent to Costa Rica for an additional seed increase. DP 6226 BG/RR Acala was sprayed with Roundup® herbicide to insure purity of the RR gene. PCR techniques were employed to confirm the BG and RR genes were homozygous and no other transgenes were present in the variety. DP 6226 BG/RR Acala appeared quite uniform in Costa Rica. The increase was bulk harvested and returned to the United States.

2004

DP 6226 BG/RR Acala was entered into the first year of the San Joaquin Valley Acala Board testing program, included in five replicated tests in the SJV and Arizona (to provide data on yield and fiber, Plant Variety Protection and prove the efficacy of the homozygous BG and RR genes). DP 6222 RR Acala was increased in the SJV. No off-types were observed in the increase or replicated tests.

The variety has been maintained in its current form for the last 1.5 years and 2 increase generations. It is propagated by seed. No off-types were observed in this variety during the final seed increase generations.

STATEMENT ON UNIFORMITY AND STABILITY

DP 6226 BG/RR Acala has been observed every generation since the winter of 2003/2004 and has shown to be uniform and stable for 2 generations over 1.5 years. Less than 2% of the plants do not contain both LINE 531 and LINE 1445 insertion events.

EXHIBIT B

DELTA AND PINE LAND COMPANY'S APPLICATION FOR DP 6226 BG/RR Acala

STATEMENT OF DISTINCTNESS

DP 6226 BG/RR Acala is a mid to full maturity Acala picker-type upland variety.

DP 6226 BG/RR Acala is different from many other picker-type varieties in that its plants carry the gene insertion 1445 of a construct developed by the MONSANTO COMPANY which causes these plants to be tolerant to the herbicide Roundup® (glyphosate) and the gene insertion 531 (Bollgard®) of a construct developed by the MONSANTO COMPANY which causes these plants to be tolerant to certain lepidopteran insects.

Acala Riata RR® was used as the most similar variety because it has many agronomic and adaptive characteristics in common with DP 6226 BG/RR Acala. In comparing DP 6226 BG/RR Acala to Acala Riata RR®, the most distinguishing characteristics are lint percent, fiber length, and Seed Index.

Novelty of DP 6226 BG/RR Acala is claimed on the following characteristics, for which there are significant differences from the comparison variety, at the 5% level of probability or less.

Trait	DP 6226 BG/RR Acala	Acala Riata RR®	Reference Table
Lint Percent	0.403	0.413	Table C1
Fiber length	1.19	1.16	Table C1
Seed Index	13.5	12.5	Table C2
Pink Bollworm	Resistant	Susceptible	Observation

Supporting Tables:

Table	Information	Years
C1.	Head to Head Fiber Comparisons	2004
C2.	Head to Head Agronomic Comparisons	2004

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EXHIBIT C (COTTON)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

OBJECTIVE DESCRIPTION OF VARIETY
COTTON (*Gossypium* spp.)

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
D&PL TECHNOLOGY HOLDING COMPANY, LLC.	03L120BR	DP 6226 BG/RR Acala

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

P.O. Box 157
100 N. Main Street
Scott, Mississippi 38772

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

SPECIFIC 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.

Variety 1. Acala Riata RR® Variety 2. _____ Variety 3 _____.

*1. SPECIES:

_X__ *G. hirsutum* L. _____ *G. barbadense* L.

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

NT _Eastern	NT _Delta	NT _Central	____Blacklands
NT _Plains	NT _Western	_ NA _Arizona	_X__ San Joaquin
____Other (Specify): _____			

3. 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	___ Spreading __	Intermediate _	_____	_____
Foliage: Sparse, Intermediate, Dense	_ Intermediate _	__ Intermediate ___	_____	_____
Stem Lodging: Lodging, Intermediate, Erect	__ Intermediate __	__ Intermediate __	_____	_____
Fruiting Branch: Clustered, Short, Normal	____ Normal ____	____ Short _____	_____	_____

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3. GENERAL: (continued)

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Growth: Determinate, Intermediate, Indeterminate	_ Intermediate _	___ Intermediate __	_____	_____
Leaf Color: Greenish yellow, Light green, Medium green, Dark green	___ Dark green ___	___ Dark green __	_____	_____
Boll Shape: Length less than width, Length equal to width, Length more than width	Length equal to width	Length equal to width	_____	_____
Boll Breadth: Broadest at base, Broadest at middle	Broadest at middle	Broadest at middle	_____	_____

*4. MATURITY: (50 % Open bolls; Preferred method; Describe method if different method was used.)

Date of 50 % open bolls	_____	_____	_____	_____

5. PLANT:

Cm to 1st Fruiting Branch: (from cotyledonary node)	___13.2_____	_____15.8_____	_____	_____
No. of Nodes to 1st Fruiting Branch: (excluding cotyledonary node)	____5.0_____	_____5.4_____	_____	_____
Mature Plant Height cm: (from cotyledonary node to terminal)	__111.6_____	_____127.5____	_____	_____

*6. LEAF: Upper most, fully expanded leaf.

Type: Normal, Sub Okra, Okra, Super Okra	___Normal____	___Normal____	_____	_____
Pubescence: Absent, Sparse, Medium, Dense **OR** Trichomes/cm^2 (Bottom surface excluding veins)	___ Medium _____	___ Medium _____	_____	_____
Nectaries: Present or Absent	____ Present _____	____ Present _____	_____	_____

*7. STEM PUBESCENCE:

Glabrous, Intermediate, Hairy	____ Intermediate __	___ Intermediate _____	_____	_____

*8. GLANDS: (Gossypol) Absent, Sparse, Normal, More Than Normal

Leaf:	___ Normal _____	___ Normal _____	_____	_____
Stem:	___ Normal _____	___ Normal _____	_____	_____
Calyx Lobe: (normal is absent)	___ Normal _____	___ Normal _____	_____	_____

*9. FLOWER:

Petals: Cream, Yellow	___ Cream ____	___ Cream ____	_____	_____
Pollen: Cream, Yellow	___ Cream ____	___ Cream ____	_____	_____
Petal Spot: Present, Absent	___ Absent ____	___ Absent ____	_____	_____

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*10. SEED:

Seed Index: (g/100 seed, fuzzy basis)	13.5	12.5		
Lint Index: (g lint/100 seeds)	9.3	9.1		

*11. BOLL:

Lint Percent: _X__ Picked _____ Pulled	40.3	41.3		
OR				
Gin Turnout: _____ Picked _____ Stripped				
Number of Seeds per Boll	26.8	31.9		
Grams Seed Cotton per Boll	5.6	6.3		
Number of Locules per Boll				
Boll Type: (Stormproof, Storm Resistant, Open)	___ Open	___ Open		

12. FIBER PROPERTIES:

Specify Method (HVI or other): ____ HVI _____

* **Length:** (inches, 2.5% SL)	1.19	1.16		
* **Uniformity:** (%)	84.4	84.0		
* **Strength**, T1 (g/tex)	33.3	32.7		
* **Elongation**, E1 (%)	12.0	12.0		
* **Micronaire:**	4.2	4.1		
Fineness (Source_____)				
Yarn Tenacity: (cN/tex, 27 tex)				
Yarn Strength: (lbs. 22's)				

13. 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 _Fusarium Wilt

_ NT _Phymatotrichum Root Rot

_ NT _Pythium (specify species)

_ NT _Rhizoctonia solani

_ NT _Southwestern Cotton Rust

_ NT _Thielayiopsis basicola

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13. DISEASES : (continued)

_ NT _Diplodia Boll Rot

_ MR _Verticillium Wilt

_____Other (specify)_____

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

NT _Root-Knot Nematode

NT _Boll Weevil

NT _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 (Observation)

NT __Spider Mite (specify species):_____

NT __Stink Bug (specify species):_____

NT __Thrips (specify species):_____

NT _Tobacco Bud Worm

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

S&T-470-8 (6-98) designed by the Plant Variety Protection Office using Word Perfect 6.0a. Replaces LS-470-8 (3-83), which is obsolete.

Table C1. Head to Head Fiber Comparisons of DP 6226 BG/RR Acala with Acala Riata RR®

					Lint Percent		Micronaire		Length		Uniformity Ratio	
Year	Experiment	Rep	City	State	DP 6226 BG/RR Acala	Acala Riata RR®	DP 6226 BG/RR Acala	Acala Riata RR®	DP 6226 BG/RR Acala	Acala Riata RR®	DP 6226 BG/RR Acala	Acala Riata RR®
2004	42CG0726	1	Casa Grande	AZ	0.395	0.420	4.7	4.5	1.18	1.14	84.9	81.8
2004	42CG0726	2	Casa Grande	AZ	0.405	0.431	4.4	4.5	1.20	1.14	84.4	84.5
2004	42CG0726	3	Casa Grande	AZ	0.407	0.432	4.4	4.6	1.18	1.13	86.1	83.4
2004	42VI0730	1	Visalia	CA	0.400	0.423	3.9	3.7	1.19	1.16	85.3	84.0
2004	42VI0730	2	Visalia	CA	0.381	0.395	3.3	3.2	1.25	1.20	85.0	83.6
2004	42VI0730	3	Visalia	CA	0.416	0.395	3.7	3.8	1.21	1.20	83.5	84.3
2004	42VI0730	4	Visalia	CA	0.400	0.404	4.2	3.9	1.25	1.21	84.9	85.2
2004	42VI0730	5	Visalia	CA	0.370	0.381	3.7	3.5	1.23	1.19	84.9	85.0
2004	42VI0730	6	Visalia	CA	0.391	0.412	4.1	4.3	1.24	1.17	84.2	85.8
2004	42YU0714	1	Yuma	AZ	0.427	0.418	4.8	4.6	1.10	1.14	82.0	84.6
2004	42YU0714	2	Yuma	AZ	0.420	0.420	4.3	4.1	1.11	1.13	83.2	84.2
2004	42YU0714	3	Yuma	AZ	0.420	0.425	4.3	4.4	1.12	1.14	83.8	81.8
Average					**0.403**	**0.413**	**4.2**	**4.1**	**1.19**	**1.16**	**84.4**	**84.0**
No. Tests					**12**		**12**		**12**		**12**	
Difference					-0.0103		0.06		0.026		0.33	
F ratio - Analysis of Variance					5.643		1.329		6.434		0.428	
Probability of difference - F test					0.037		0.273		0.028		0.527	
Significant					S		NS		S		NS	

Values in red are derived from the Analysis of Variance routine in the EXCEL - ANALYSIS TOOL PAK add-in

Table C1 continued. Head to Head Fiber Comparisons of DP 6226 BG/RR Acala with Acala Riata RR®

					Strength		Elongation		Fiber Maturity	
Year	Experiment	Rep	City	State	DP 6226 BG/RR Acala	Acala Riata RR®	DP 6226 BG/RR Acala	Acala Riata RR®	DP 6226 BG/RR Acala	Acala Riata RR®
2004	42CG0726	1	Casa Grande	AZ	34.2	34.5	11.3	11.4	87.0	87.0
2004	42CG0726	2	Casa Grande	AZ	36.8	37.3	11.3	11.1	87.0	87.0
2004	42CG0726	3	Casa Grande	AZ	36.2	36.1	11.7	11.5	86.0	87.0
2004	42VI0730	1	Visalia	CA	35.7	31.5	13.2	12.1	86.0	86.0
2004	42VI0730	2	Visalia	CA	33.5	29.7	13.9	13.2	86.0	86.0
2004	42VI0730	3	Visalia	CA	34.0	33.4	12.0	12.6	85.0	85.0
2004	42VI0730	4	Visalia	CA	32.0	30.6	14.0	13.6	85.0	85.0
2004	42VI0730	5	Visalia	CA	30.8	31.0	12.1	13.3	85.0	85.0
2004	42VI0730	6	Visalia	CA	34.8	31.8	12.5	11.3	82.0	82.0
2004	42YU0714	1	Yuma	AZ	29.4	31.6	10.3	11.8	87.0	87.0
2004	42YU0714	2	Yuma	AZ	31.4	35.9	10.8	10.8	86.0	86.0
2004	42YU0714	3	Yuma	AZ	31.4	28.9	10.6	11.0	85.0	85.0
Average					**33.3**	**32.7**	**12.0**	**12.0**	**85.6**	**85.7**
No. Tests					**12**		**12**		**12**	
Difference					0.66		0.00		-0.08	
F ratio - Analysis of Variance					0.811		0.000		1.000	
Probability of difference - F test					0.387		0.991		0.339	
Significant					NS		NS		NS	

Values in red are derived from the Analysis of Variance routine in the EXCEL - ANALYSIS TOOL PAK add-in

Table C2. Head to head agronomic comparisons of DP 6226 BG/RR Acala with Acala Riata RR®

					Cm to 1st Fruiting Branch		No. of Nodes to 1st Fruiting Branch		Mature Plant Height cm		Seed Index	
Year	Experiment	Rep	City	State	DP 6226 BG/RR Acala	Acala Riata RR®	DP 6226 BG/RR Acala	Acala Riata RR®	DP 6226 BG/RR Acala	Acala Riata RR®	DP 6226 BG/RR Acala	Acala Riata RR®
2004	42CG0726	1	Casa Grande	AZ	15.2	14.0	5.8	5.0	120.4	122.9	14.1	12.3
2004	42CG0726	2	Casa Grande	AZ	16.3	16.9	5.8	6.6	109.7	127.5	14.1	13.5
2004	42CG0726	3	Casa Grande	AZ	12.4	12.6	6.0	6.8	104.6	132.1	13.6	11.9
2004	42VI0728	1	Visalia	CA							12.4	11.1
2004	42VI0728	2	Visalia	CA							13.0	11.9
2004	42VI0728	3	Visalia	CA							14.7	10.8
2004	42VI0728	4	Visalia	CA							13.5	11.7
2004	42VI0728	5	Visalia	CA							13.3	13.2
2004	42VI0728	6	Visalia	CA							14.2	13.3
2004	42YU0713	1	Yuma	AZ	12.1	14.2	4.2	4.4			12.9	13.4
2004	42YU0713	2	Yuma	AZ	11.7	20.8	4.4	5.6			13.1	12.5
2004	42YU0713	3	Yuma	AZ	11.5	16.3	4.0	4.0			13.6	13.9
Average					**13.2**	**15.8**	**5.0**	**5.4**	**111.6**	**127.5**	**13.5**	**12.5**
No. Tests					6		6		3		12	
Difference					-2.58		-0.37		-15.92		1.08	
F ratio - Analysis of Variance					6.608		6.608		18.513		10.141	
Probability of difference - F test					0.157		0.268		0.159		0.009	
Significant					NS		NS		NS		S	

Values in red are derived from the Analysis of Variance routine in the EXCEL - ANALYSIS TOOL PAK add-in

Table C2 continued. Head to Head Agronomic Comparisons of DP 6226 BG/RR Acala with Acala Riata RR®

					Lint Index		Number of Seed per Boll		Grams of Seed cotton per boll	
Year	Experiment	Rep	City	State	DP 6226 BG/RR Acala	Acala Riata RR®	DP 6226 BG/RR Acala	Acala Riata RR®	DP 6226 BG/RR Acala	Acala Riata RR®
2004	42CG0725	1	Casa Grande	AZ	9.3	8.9	30.6	35.6	6.1	6.5
2004	42CG0725	2	Casa Grande	AZ	9.3	9.5	24.6	34.8	4.8	6.6
2004	42CG0725	3	Casa Grande	AZ	9.2	8.9	32.3	35.2	6.3	6.2
2004	42VI0728	1	Visalia	CA						
2004	42VI0728	2	Visalia	CA						
2004	42VI0728	3	Visalia	CA						
2004	42VI0728	4	Visalia	CA						
2004	42VI0728	5	Visalia	CA						
2004	42VI0728	6	Visalia	CA						
2004	42YU0713	1	Yuma	AZ	9.3	9.3	23.9	26.2	5.2	5.9
2004	42YU0713	2	Yuma	AZ	9.3	7.8	23.6	30.8	5.2	5.7
2004	42YU0713	3	Yuma	AZ	9.5	9.9	25.6	28.8	5.8	6.7
Average					**9.3**	**9.1**	**26.8**	**31.9**	**5.6**	**6.3**
No. Tests					6		6		6	
Difference					0.25		-5.14		-0.68	
F ratio - Analysis of Variance					6.608		6.608		6.608	
Probability of difference - F test					0.408		0.009		0.043	
Significant					NS		S		S	

Values in red are derived from the Analysis of Variance routine in the EXCEL - ANALYSIS TOOL PAK add-in

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

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

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
D&PL TECHNOLOGY HOLDING COMPANY, LLC.	**03L120BR**	**DP 6226 BG/RR Acala**
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) **P.O. BOX 157** **SCOTT, MISSISSIPPI 38772**	5. TELEPHONE *(Include area code)* **662.742.4141**	6. FAX (Include area code) **662.742.3182**
	7. PVPO NUMBER 200500180	

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. **If no, please explain.** [X] YES [ ] NO

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? **If no, give name of country.** [X] YES [ ] NO

10. Is the applicant the original owner? [X] YES [ ] NO **If no, please answer one of the following:**

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?
[ ] YES [ ] NO **If no, give name of country**

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?
[ ] YES [ ] NO **If no, give name of country**

11. Additional explanation on ownership *(If needed, use the reverse for extra space)*:

DP 6226 BG/RR Acala contains a proprietary gene, patented by the Monsanto Company and licensed to D&PL, which encodes a protein which provides tolerance to glyphosate herbicide in cotton cultivars.

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) ot the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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