No. 7600059

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Agrigenetics Corporation, Vegetable Products Group

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 (P.L. 91-577, 84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN

'Lakeland'

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* 26th *day of* January *in the year of our Lord one thousand nine hundred and* seventy-eight.

Attest:

Kenneth A. Ka

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

John R. Block

Secretary of Agriculture

76-59 =
'LAKELAND'

EXHIBIT A

ORIGIN & BREEDING HISTORY OF THE VARIETY EXP. 195 BEAN

1971 'LAKELAND' (Exp. 195) originated from a cross between Early Gallatin and Bush Blue Lake 290 with the resultant F_1 crossed to Wondergreen.

1972 The F_1 seed from the above cross was grown in the greenhouse and bulked.

1972 The F_2 seed harvested from the greenhouse was planted in the field. Seed was bulk harvested from the entire row.

1972 The F_3 seed was planted in the greenhouse in the fall and seed was again bulk harvested.

1973 The F_4 seed was planted in the field and seed from a single plant was harvested.

1974 The F_5 seed from the single plant was grown in the greenhouse and seed harvested was bulked.

1974 The F_6 seed was then sent to Twin Falls, Idaho for further increase.

1975 The F_7 seed was increased to a total of 130 pounds. A total of 25 single plants was selected for individual progeny rows in 1976. All off-type plants will be rogued and discarded; the rest are to be bulked for pure seed of the variety.

'LAKELAND' (Exp. 195) is stable for all normal descriptive characteristics. A low number of variants will occur due to mutation, outcrossing or mechanical mixture. These will be prevented by following the above procedure.

NORTHRUP, KING & CO.
1500 JACKSON ST., N.E., MINNEAPOLIS, MINN. 55413

76-59

= LAKELAND

EXHIBIT A
ADDENDUM

The low number of variants referred to in Exhibit A occur at the rate of 1 plant per 4,000. Such off-type plants are removed from seed increase fields by roguing.

F-167

FORM GR-470
(12-15-72)

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

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION EXP. 195 = 'LAKELAND'	2. KIND NAME SNAPBEAN	FOR OFFICIAL USE ONLY PV NUMBER 7600059
3. GENUS AND SPECIES NAME per letters of 5/17/83 and 7/7/83 Phaseolus vulgaris	4. FAMILY NAME *(Botanical)* Leguminosae	FILING DATE 3.11.76 / TIME 11:00 A.M.
	5. DATE OF DETERMINATION August, 1974	FEE RECEIVED $ 250.00 / BALANCE DUE $ 3-11-76 $ 250.00 / $ 9-19-77 $ 250.00 / $ 12-19-77
6. NAME OF APPLICANT(S) Northrup, King & Company	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)* P. O. Box 959 Minneapolis, MN 55440	8. TELEPHONE AREA CODE AND NUMBER 612/781-8011

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*	10. STATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation	Minnesota	1896

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

Allenby White
Northrup, King & Company
P. O. Box 959
Minneapolis, MN 55440

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

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

[XX] 13B. Exhibit B, Botanical Description of the Variety

[XX] 13C. Exhibit C, Objective Description of the Variety

[XX] 13D. Exhibit D, Data Indicative of Novelty

[XX] 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 [XX] 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.

March 8, 1976
(DATE)

Allenby R White
(SIGNATURE OF APPLICANT)

1

(DATE)

(SIGNATURE OF APPLICANT)

96/11/C

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.

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EXHIBIT B

BOTANICAL DESCRIPTION OF THE VARIETY EXP. 195 BEAN = 'LAKELAND'

I. Seed.

Seeds are white. Seed coat is shiny with a vein like pattern undercoat present. Hilar ring is not present. Seed shape is oval with an oval cross section. Seed weight is similar to BBL 290 with 29 grams per 100 seeds.

II. Flowering.

Exp. 195 will begin flowering in 21 days, very similar to BBL 290. Flower color is white.

III. Fruiting.

Pod set is concentrated in time and in upper two-thirds of plant. Pods are round, very straight with a smooth surface. Pod color is very dark green with firm flesh and slow seed development. Pod spur is exceptionally long - 10 mm. There are normally 11 usable pods per plant and at least three pods per node depending upon yield level.

IV. Mature Plant.

Exp. 195 is a determinate erect bush with a very compact, upright plant habit. Plant width averages from 17 - 21 inches compared to BBL 290 averaging from 28 - 31 inches in width. Leaves are smooth, taper pointed with a very dark green color unlike 290 with a medium green foliage.

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-12
(11-15-72)

EXHIBIT C
(Bean)

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

OBJECTIVE DESCRIPTION OF VARIETY

BEAN *(PHALEOLUS VULGARIS)*

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(S)
Northrup, King & Company

ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*
P. O. Box 959
Minneapolis, MN 55440

FOR OFFICIAL USE ONLY

PVPO NUMBER 76-59

VARIETY NAME OR TEMPORARY DESIGNATION
EXP. 195 = LAKELAND

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. TYPE:

[1] 1 = SNAPBEAN 2 = GREEN SHELL 3 = DRY EDIBLE 4 = MULTIPURPOSE

2. SEASON AND REGION OF ADAPTABILITY IN THE U.S.:

[2] Grows best during: 1 = SPRING 2 = SUMMER 3 = FALL 4 = WINTER

[6] Best adapted in: 1 = NORTHWEST 2 = NORTHCENTRAL 3 = NORTHEAST 4 = SOUTHEAST 5 = SOUTHWEST 6 = MOST REGIONS

3. MATURITY *(Days from seeding to first harvest):*

[5][6] GREEN PODS [ ][ ] GREEN SHELLS [ ][ ] DRY SEEDS

[ ][ ] NO. DAYS EARLIER THAN --------- [ ]
[0][3] NO. DAYS LATER THAN ---------- [7]

1 = TENDERCROP 2 = KENTUCKY WONDER 3 = KINGHORN WAX
4 = WHITE KIDNEY 5 = MICHELITE 62 6 = DWARF HORTICULTURAL
7 = BUSH BLUE LAKE 8 = OTHER *(Specify)*

4. PLANT:

[1] 1 = DETERMINATE, ERECT BUSH 2 = DETERMINATE, SPRAWLING BUSH 3 = DETERMINATE, SEMIPOLE 4 = INDETERMINATE, POLE

[0][4][4] CM. HEIGHT OR LENGTH OF VINE FROM PRIMARY LEAF NODE

[0][0][5] NUMBER PRIMARY BRANCHES PER MAIN STALK

[5][3] CM. SPREAD

[1] Branching habit: 1 = COMPACT 2 = OPEN

[0][5] NUMBER INTERNODES ON MAIN STALK BETWEEN PRIMARY LEAF AND BASE OF TERMINAL INFLORESCENCE

[0][7] CM. LENGTH OF FIRST INTERNODE ABOVE PRIMARY LEAF

[0][2] MM. STALK DIAMETER ABOVE FIRST TRIFOLIATE LEAF

[2] Main stalk: 1 = BRITTLE 2 = WIREY [1] 1. STOUT 2. THIN

[2] Flower position:
[2] Pod Position:
1 = LOW, CONCENTRATED 2 = HIGH, CONCENTRATED 3 = SCATTERED

5. LEAVES:

[1] 1 = SMOOTH 2 = WRINKLED [2] 1 = DULL 2 = GLOSSY [2] Thickness: 1 = THIN 2 = MEDIUM 3 = THICK

[2] Size: 1 = SMALL *(Earliwax)* 2 = MEDIUM 3 = LARGE *(Tendercrop)* [4] CM. PETIOLE LENGTH *(To basal leaflets of first trifoliate leaf)*

[2] Tip shape of center leaflet: 1 = ROUNDED 2 = TAPER POINTED 3 = SHARP POINTED

[1] PUBESCENCE - Dorsal:
[2] PUBESCENCE - Ventral:
1 = NONE 2 = SLIGHT 3 = CONSIDERABLE

[3] Color: 1 = LIGHT GREEN *(Bountiful)* 2 = MEDIUM GREEN 3 = DARK GREEN *(Bush Blue Lake)*

5

'LAKELAND'
76-59

6. FLOWERS:

[1] Color: 1 = WHITE 2 = CREAM 3 = PINK 4 = LILAC 5 = PURPLE 6 = OTHER *(Specify)*_____

[3] Racemes: 1 = LONG 2 = MEDIUM 3 = SHORT [3] NUMBER FLOWERS PER RACEME

7. FRESH PODS: *(Edible maturity, averages for 10 pods)*

[3] Color: 1 = LIGHT GREEN *(Bountiful)* 2 = MEDIUM GREEN *(Tendergreen)* 3 = DARK GREEN *(Wade)* 4 = LIGHT YELLOW *(Brittlewax)* 5 = GOLDEN YELLOW *(Cherokee Wax)* 6 = GREEN-RED VARIAGATED *(Horticultural)* 7 = OTHER *(Specify)* _____

[1 4] CM. LENGTH [1 1] MM. WIDTH *(Between sutures)* [0 9] MM. THICKNESS [1 2] WIDTH / THICKNESS X 10

[4] Cross section pod shape: 1 = FLAT 2 = OVAL 3 = CREASEBACK 4 = ROUND

[1] Curvature: 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = CURVED

[2] Pubescence: 1 = NONE 2 = SPARSE 3 = CONSIDERABLE

[1] Constrictions: 1 = NONE 2 = SLIGHT 3 = DEEP

[2] Spur: 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = CURVED

[1] Surface: 1 = SHINY 2 = DULL

[1] Surface: 1 = SMOOTH 2 = BLISTERED

[2] Pod flesh: 1 = LIGHT 2 = DARK

[1] Pod flesh: 1 = FIRM 2 = WATERY

[10] MM. SPUR LENGTH

[2] Suture string: 1 = PRESENT 2 = ABSENT

[1] Fiber: 1 = NONE 2 = SPARSE 3 = CONSIDERABLE

[1] Seed development: 1 = SLOW 2 = MEDIUM 3 = FAST

[6] NUMBER OF SEEDS PER POD

[18] NUMBER PODS PER PLANT *(Once over harvest)*

[11] NUMBER MARKETABLE PODS PER PLANT *(Once over harvest)*

[1] Machine harvest: 1 = ADAPTED 2 = NOT ADAPTED

8. SEED COAT COLOR:

[1] 1 = MONOCHROME 2 = POLYCHROME

[1] 1 = SHINY 2 = DULL

[1] Primary color:
[0] Secondary color:
1 = WHITE 2 = YELLOW 3 = BUFF 4 = TAN
5 = BROWN 6 = PINK 7 = RED 8 = PURPLE
9 = BLUE 10 = BLACK 11 = OTHER *(Specify)*_____

[0] Color pattern: 1 = SPLASHED 2 = MOTTLED 3 = STRIPED 4 = FLECKED 5 = DOTTED

[0] Secondary color location:
1 = HILAR RING
2 = HILAR SURFACE
3 = STROPHIOLE
4 = MICROPYLE
5 = SIDES
6 = DORSAL SURFACE
7 = NOT RESTRICTED TO ANY AREA
8 = COMBINATION OF LOCATIONS *(Specify)*_____

[1] Hilar ring: 1 = NOT PRESENT 2 = NARROW 3 = BUTTERFLY SHAPED

[2] Vein-like under coat pattern: 1 = ABSENT 2 = PRESENT

9. SEED SHAPE AND SIZE:

[2] Hilum view: 1 = ELLIPTICAL 2 = OVAL 3 = ROUND

[1] Side view: 1 = OVAL 2 = ROUND 3 = KIDNEY 4 = TRUNCATE ENDS

[2] Cross section: 1 = ELLIPTICAL 2 = OVAL 3 = CORDATE 4 = ROUND

[29] GM. WEIGHT PER 100 SEEDS

[2] Classification: 1 = PEA 2 = MEDIUM 3 = MARROW 4 = KIDNEY 5 = PINTO

[0 5] MM. WIDTH *(Dorsal to ventral)*

[0 4] MM. THICKNESS *(Side to side)*

[1 1] MM. LENGTH

[1 2 5] WIDTH / THICKNESS X 10

 'LAKELAND' 76-59

10. ANTHOCYANIN: *(1 = Absent 2 = Present):*

[1] FLOWERS [1] STEMS [1] PODS [1] SEEDS [1] LEAVES

11. DISEASE RESISTANCE *(0 = Not tested; 1 = Susceptible; 2 = Resistant):*

[0] RUST *(Specify race)* _____
[0] BACTERIAL WILT
[0] ANTHRACNOSE
[0] SOUTHERN BEAN MOSAIC
[0] CURLY TOP
[0] POWDERY MILDEW
[0] HALO BLIGHT
[0] ALFALFA MOSAIC VIRUS
[0] POD MOTTLE VIRUS
[0] ROOT KNOT NEMATODE
[0] ANGULAR LEAF SPOT
[0] COMMON BEAN MOSAIC
[0] YELLOW BEAN MOSAIC
[0] FUSARIUM ROOT ROT
[0] N.Y. 15 BEAN MOSAIC
[0] BEAN MOSAIC VIRUS 4
[0] FUSCOUS BLIGHT
[0] ALFALFA MOSAIC VIRUS 2
[0] RED NODE VIRUS
[0] OTHER *(Specify)* _____

12. INSECT RESISTANCE: *(0 = Not tested; 1 = Susceptible; 2 = Resistant)*

[0] APHIDS
[0] POD BORER
[0] THRIPS
[0] SEED CORN MAGGOT
[0] LEAF HOPPERS
[0] LYGUS
[0] WEAVILS
[0] OTHER *(Specify)* _____

13. PHYSIOLOGICAL RESISTANCE: *(0 = Not tested; 1 = Susceptible; 2 = Resistant)*

[0] HEAT [0] COLD [0] DROUGHT [0] OTHER *(Specify)* _____

REFERENCES: The following publications may be used as a reference in completing this form:

1. Beans of New York. Vol. 1 Part II of Vegetables of New York. U.P. Hedrick et al. J. B. Lyon Company, Albany, N.Y. 1931.
2. Yarnell, S. H., Cytogenetics of the Vegetable Crops IV. Legumes. Bot. Rev. 31:247 - 330. 1965.
3. USDA Yearbook of Agriculture. 1937.

COLOR: Nickerson's or any recognized color fan may be used to determine the colors.

76-59

'LAKELAND'

EXHIBIT D

DATA INDICATIVE OF NOVELTY FOR EXP. 195 BEAN

Novelty is based on the following unique characters:

Exp. 195 most closely resembles BBL 290 except it displays (1) - more erect growth habit tending to sprawl less; (2) - pod color is dark green to almost gray; (3) - spur length is 5 mm longer compared to BBL 290.

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NORTHRUP KING CO.
1500 JACKSON STREET N.E., MINNEAPOLIS, MN 55413

Seedsmen since 1884

ALLENBY L. WHITE - VICE PRESIDENT RESEARCH & MARKET DEVELOPMENT

TELEX 29-0143
TWX 910-576-3420
PHONE 612-781-8011

Plant Variety Protection Office
Grain Division, AMS, USDA
6525 Belcrest Road
Hyattsville, Maryland 20782

August 24, 1977

Subject: Bean Application No. 7600059 (Exp. 195) = LAKELAND

Gentlemen:

In accordance with the suggestions contained in your letter of November 17, 1976, we have now obtained additional data comparing Exp. 195 with BBL290 for plant height and for spur length.

We believe these data support our claims in Exhibit D in which we state that, when compared to BBL290, Exp. 195 has "more erect growth habit tending to sprawl less" and that "spur length is 5 mm longer compared to BBL290."

The data describing growth habit probably needs some explanation. The figures given in centimeters describe length of stems and not plant height. The greater length of stems for BBL290 indicate its "sprawling" tendency. Our Exp. 195, by contrast, has shorter and more erect stems.

Also in your November 17, 1976 letter, you suggested that we provide more exact information on the claim in Exhibit D concerning the pod color of Exp. 195. Using the Munsell color chart for plant tissue, we obtained the following readings:

Exp. 195	7.5GY (5/4 to 5/6)
Exp. 290	5.0GY (6/6 to 6/8)

Sincerely,

NORTHRUP KING CO.

Allenby L. White

Allenby L. White

sam
Enc.

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NOTICE: Northrup King Co. warrants that seeds sold have been labeled as required under State and Federal Seed Laws and that they conform to the label description. No liability hereunder shall be asserted unless the buyer or user reports to the warrantor within a reasonable period after discovery (not to exceed 30 days), any conditions that might lead to a complaint. OUR LIABILITY ON THIS WARRANTY IS LIMITED IN AMOUNT TO THE PURCHASE PRICE OF THE SEEDS.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE FACE HEREOF.

F-867

ANALYSIS OF VARIANCE FOR TWO GROUPS
DATA FOR SPUR LENGTH (MM)

195 DATA	290 DATA
10	12
6	15
8	16
9	10
10	11
9	12
7	15
5	17
4	10
10	12
12	13
17	9
10	12
11	14
9	15
8	12
10	17
11	20
12	21
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18	12
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11	15
12	12
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17	15
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17	7
8	20
1	16
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17	14
18	12
7	13
10	9
12	7
16	17
15	6

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LAKELAND'
GARDEN BEAN.

7	17
8	12
14	11
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11	19
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7	12
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10	17
9	14
11	17
12	16
13	12
11	11
12	10
10	9
11	7
9	12
5	17
7	18
8	21
10	12
11	13
15	15
17	17
15	9
13	11
12	10
13	12
10	13
17	15
19	12
23	17

MEAN	10	13
VARIANCE	7.73	3.05
STANDARD DEVIATION	4.21	3.61
COEF OF VARIATION	2.11	7.79

OVERALL MEAN	11
FRATIO	914.00
LSD	7.82

11

'LAKELAND' GARDEN BEAN

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ANALYSIS OF VARIANCE FOR TWO GROUPS
DATA FOR STEM LENGTH (CM)

195 DATA	290 DATA
21	35
30	40
32	42
26	30
25	28
34	49
21	28
26	35
21	42
31	18
31	35
30	35
21	28
20	39
18	40
26	41
19	46
17	48
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28	37
19	29

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LAKELAND'
GARDEN BEAN'

20	28
17	23
28	22
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29	35
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27	39
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27	41
29	37
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17	50
18	45
29	41
39	38
40	35
22	37
27	28
28	32
26	31
21	37
31	28
30	27

MEAN	25	36
VARIANCE	2.31	2.22
STANDARD DEVIATION	5.68	7.23
COEF OF VARIATION	2.74	0.07

OVERALL MEAN	30
FRATIO	696.00
LSD	13.09

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M6-59

LAKELAND
GARDEN BEAN

NORTHRUP, KING CO.
1500 JACKSON ST., N.E., MINNEAPOLIS, MINN. 55413

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'LAKELAND'

EXHIBIT D
ADDENDUM

The standard error of mean differences between the varieties BL290 and Exp. 195 follow:

EXP. 195 & BL290

	$S_{\bar{X}1\bar{X}2}$	N
Plant Height	2.3	20
Width of Canopy	1.9	20
Stalk Diameter	.51	20
Pod Length	.93	20
Pod Width	0	20
Pod Thickness	.77	20
Length of Pod Spur	.55	20

$S_{\bar{X}1\bar{X}2}$ indicates the standard error of mean differences between the varieties Exp. 195 and BL290, for the various characteristics listed. N indicates the sample size. Level of significance was at .05.

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76-59

'LAKELAND'

EXHIBIT E

STATEMENT OF THE BASIS OF APPLICANTS OWNERSHIP

Northrup, King and Company; Minneapolis, Minnesota; believes it is the sole, original and first breeder of the snapbean variety, Exp. 195 from germ plasm sources cited in Exhibit A of this application. Northrup, King and Company believes that this variety is novel as defined by the Plant Variety Protection Act.

AGRIGENETICS CORPORATION
VEGETABLE PRODUCTS GROUP
Research Office
1120 - 220th Street West
Farmington, Minnesota 55024
(612) 463-4646

July 7, 1983

Ms. Rose Broome
Examiner
Plant Variety Protection Office
USDA/AMS
National Agricultural Library Bldg.
Beltsville, MD 20705

Dear Mr. Broome:

In reply to your letter of June 29, 1983 I state, on behalf of Agrigenetics Corporation and on the assurances of Ed Ayen, Marketing Manager that neither Northrup King or Agrigenetics has ever marketed the below three varieties under any other name but the names given you.

Those names are: Exp. 163 = 'Paymaster'
Exp. 116-0 = 'Triumph'
Exp. 195 = 'Lakeland'

I am sorry for any inconvenience and I hope this takes care of this matter.

Sincerely,

Keith Zary

Dr. Keith W. Zary
Pea & Bean Breeder

KWZ/sma

NOTICE: Agrigenetics Corporation warrants that seeds sold have been labeled as required under State and Federal Seed Laws and that they conform to the label description. No liability hereunder shall be asserted unless the buyer or user reports to the warrantor within a reasonable period after discovery (not to exceed 30 days), any conditions that might lead to a complaint. OUR LIABILITY ON THIS WARRANTY IS LIMITED IN AMOUNT TO THE PURCHASE PRICE OF THE SEEDS.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE FACE HEREOF.

AGRIGENETICS CORPORATION
VEGETABLE PRODUCTS GROUP
Research Office
1120 - 220th Street West
Farmington, Minnesota 55024
(612) 463-4646

June 17, 1983

Ms. Rose Broom
Examiner
Plant Variety Protection Office
National Agricultural Library Building
Beltsville, MD 20705

Dear Ms. Broom:

In reply to our telephone conversation of this week, find enclosed a memo from our marketing manager, Ed Ayen, stating that 'Triumph', 'Green Genes', and 'Paymaster' have been marketed only by their varietal names. I asked Ed to confirm this, as he better than anyone in our company would know this. As a result, I can state that these varieties have not been marketed under any other names except those given to them - specifically 'Triumph', 'Green Genes', and 'Paymaster'.

Sincerely,

Keith W. Zary

Dr. Keith W. Zary
Pea & Bean Breeder

KWZ/sma

enclosure

cc: Pete Bonucci

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AGRIGENETICS CORPORATION
VEGETABLE PRODUCTS GROUP
Research Office
1120 - 220th Street West
Farmington, Minnesota 55024
(612) 463-4646

May 17, 1983

Mr. Kenneth H. Evans
Acting Commissioner
Plant Variety Protection Office
USDA/AMS
National Agricultural Library Bldg.
Beltsville, MD 20705

Dear Mr. Evans:

Enclosed are plant variety protection certificates for beans Exp. 163, Exp. 116-0, and Exp. 195. We wish to amend these certificates to reflect the varietal names we have given them. Exp. 195 is now 'Lakeland'; Exp. 163 is now 'Paymaster'; Exp. 116-0 is now 'Triumph'. I have enclosed a check for $30.00 to cover the costs involved. If there are further costs or requirements, please inform me.

Yours sincerely,

Keith W. Zary

Dr. Keith W. Zary
Pea & Bean Breeder

KWZ/sma

enclosures

cc: Pete Bonucci

NOTICE: Agrigenetics Corporation warrants that seeds sold have been labeled as required under State and Federal Seed Laws and that they conform to the label description. No liability hereunder shall be asserted unless the buyer or user reports to the warrantor within a reasonable period after discovery (not to exceed 30 days), any conditions that might lead to a complaint. OUR LIABILITY ON THIS WARRANTY IS LIMITED IN AMOUNT TO THE PURCHASE PRICE OF THE SEEDS.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE FACE HEREOF.

NORTHRUP KING CO.
P.O. BOX 959, MINNEAPOLIS, MINN. 55440

Seedsmen since 1884

PHONE 612-781-8011

Dr. Bernard M. Leese
Plant Variety Protection
Office
National Agricultural Library Bldg.
AMS, USDA
Beltsville, Maryland 20705

April 21, 1980

Dear Dr. Leese:

'Triumph' 'Paymaster' 'Lakeland' per K. Zaing 5/17/83 letter

This is to certify that we have transferred our ownership of the snapbeans, Exp. 116-0, Green Genes, Exp. 163, and Exp. 195, for which certificates have been issued, and for the pending application on Exp. 121, to:

Sun Seeds Inc.
P. O. Box 20762
Bloomington, MN 55420

Enclosed is a check for $25.00 to cover the transfer costs.

Sincerely,

NORTHRUP KING CO.

Robert W. Romig

Robert W. Romig
Vice-President
Research

sas

19

NOTICE: Northrup King Co. warrants that seeds sold have been labeled as required under State and Federal Seed Laws and that they conform to the label description. No liability hereunder shall be asserted unless the buyer or user reports to the warrantor within a reasonable period after discovery (not to exceed 30 days), any conditions that might lead to a complaint. OUR LIABILITY ON THIS WARRANTY IS LIMITED IN AMOUNT TO THE PURCHASE PRICE OF THE SEEDS.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE FACE HEREOF.

F-705

PLANT VARIETY PROTECTION CERTIFICATE

ASSIGNMENT

The Sunseeds Division of Agrigenetics Corporation, a Delaware corporation having a place of business at 3575 Mitchell Lane, Boulder, Colorado 80301 ("Agrigenetics"), represents that it is the owner of the entire right, title and interest in and to the plant variety protection certificates and applications for plant variety protection certificates shown below.

For good and valuable consideration, receipt of which is hereby acknowledged, Agrigenetics hereby assigns to UF Genetics, Inc., a Delaware corporation having a place of business at 9800 Fairview Road, Hollister, California 95024, Agrigenetics' entire right, title and interest in and to the following plant variety protection certificates and applications therefore, together with all Agrigenetics' rights to the sexually reproduced plants that are the subject of such certificates and applications:

I. Registered Certificates

Title	Certificate Number	Date
Empress	7900045	4/15/82
9014	Ap8100174	9/28/81
9293	Ap8100175	9/28/81
9400	Ap8200007	10/22/81
Paymaster	7600058	12/7/77
Lakeland	7600059	1/26/78
Triumph	7600061	12/30/77
Broker's Choice	8100175	4/28/83
Profit Maker	8100174	4/28/83
Shannon	8200007	4/28/83
Sunrise	7100029	6/24/74
Lake Shasta	7100030	8/12/74
Lake Erie	7100031	8/12/74
Rebel	7100033	9/30/74
Lake Superior	7100034	5/21/74
Miami	7100036	2/28/74
Lake Geneva	7200068	5/21/74
Scanion	7300001	11/15/74
Picoverde	7300016	4/10/73
Raider	7400069	7/26/74

Lake Largo	7400104	9/30/74
Lake Seneca	7500096	11/24/75
Chaparral	7600052	5/16/77
Costaverde	7600053	8/24/77
Gustoverde	7600054	8/24/77
Mesaverde	7600055	5/31/77
Conquest	7700058	7/26/77
Commander	7900067	7/26/79
Keygold	8000111	10/16/80
Snapbean, Exp.163	7600058	12/7/77
Snapbean, Exp.195	7600059	1/6/78
'Green Genes' Bean	7600060	12/7/77
Snapbean, Exp.116-0	7600061	12/30/77
Mikado (AVX 450)	Ap8400037	12/30/83
Mystro	8500064	4/16/85

II. Pending Certificate Applications

Title	Application Number	Filing Date
Cajun Queen	Pending	--
Mendota	Pending	--
Sunset	Pending	--
Alpine	Pending	--
Polaris	Pending	--

AGRIGENETICS CORPORATION

By: Murray Polinsin

Title: Executive Vice President

COMMONWEALTH OF MASSACHUSETTS)

County of Suffolk)

On this 30th day of April, 1986, before me appeared Murray Johnson, the person who signed this instrument, who acknowledged that he signed it as a free act on behalf of Agrigenetics Corporation.

Susan J. Hoberty

Notary Public
My Commission Expires: [illegible]

From Technology To Life

P.O. Box 1438, 2320 Technology Parkway, Building 11 Suite A, Hollister, CA 95024-1438 USA 408/636-9505 TWX 910-3720254

June 7, 1988

Kenneth H. Evans, Commissioner
Plant Variety Protection Office
National Agriculture
Library Building, Room 500
Beltsville, MD 20705

Re: Change of Assignment.

Dear Mr. Evans:

This letter is in reference to your correspondence to me, dated July 14, 1987. I wish to make it clear that this change of assignment is to indicate a name change only, from U.F. Genetics, Inc. to Sunseeds Genetics, Inc.

Also, in reference to 'Mystro' tomato, have Item 1 read Sunseeds Genetics, Inc. and issue the certificate to Sunseeds Genetics, Inc.

Enclosed please find a check in the amount of $170.00 to cover the cost of changing the certificates.

Title	Certificate No.	Date
Empress	7900045	4/15/82
9014	Ap8100174	9/28/81
9293	Ap8100175	9/28/81
9400	Ap8200007	10/22/81
Paymaster	7600058	12/7/77
Lakeland	7600059	1/26/78
Triumph	7600061	12/30/77
Broker's Choice	8100175	4/28/83
Profit Maker	8100174	4/28/83
Shannon	8200007	4/28/83
Sunrise	7100029	6/24/74
Lake Shasta	7100030	8/12/74
Lake Erie	7100031	8/12/74
Rebel	7100033	9/30/74
Lake Superior	7100034	5/21/74

Title	Certificate No.	Date
Miami	7100036	2/28/74
Lake Geneva	7200068	5/21/74
Scanion	7300001	11/15/74
Picoverde	7300016	4/10/73
Raider	7400069	7/26/74
Lake Largo	7400104	9/30/74
Lake Seneca	7500096	11/24/75
Chaparral	7600052	5/16/77
Costaverde	7600053	8/24/77
Gustoverde	7600054	8/24/77
Mesaverde	7600055	5/32/77
Conquest	7700058	7/26/77
Commander	7900067	7/26/79
Keygold	8000111	10/16/80
Snapbean, Exp. 163	7600058	12/7/77
Snapbean, Exp. 195	7600059	1/6/78
'Green Genes' Bean	7600060	12/7/77
Snapbean, Exp. 116-0	7600061	12/30/77
Mikado (AVX 450)	Ap8400037	12/30/83

Sincerely,

Gene Hookstra

Gene Hookstra
Vice President, Research

GH/mo

enc: Check
Copy of Correspondence from K.H. Evans

7600059

BILL OF SALE AND ASSIGNMENT

FOR VALUE RECEIVED, Sunseeds Genetics Inc, a Delaware Corporation, with its principal offices at 2320 Technology Parkway, Hollister, California, ("Sun") does hereby sell, transfer, assign and convey to Rogers Brothers Seed Company, a Delaware Corporation with principal offices at 1755 Westgate Drive, Boise, Idaho, ("Rogers") the following:

1. All Suns intangible assets relating to its pea, snap pea, garden bean, runner bean, cow pea, dry bean, and lima bean business ("Products").

2. All plant variety protection rights and all plant variety protected materials along with the rights to use the names thereof including all varieties listed on Schedule A attached hereto and incorporated herein by this reference.

3. All proprietary plant varieties and all other proprietary information relating thereto which are related to Products.

4. All patents, patent application and patent applications relating to the Products.

5. All research property relating to Products including notebooks, findings, pedigrees, records of experiments and their results, seed stocks, know how, techniques, all other proprietary information in whatever form stored, germ plasm, the germ plasm uses, seed samples and their coding and indexing methods.

6. All trademarks, trade names, service marks and copyrights which apply to the Products excluding any name which includes the corporate name of Sun and its affiliates.

7. Any and all other intangible assets and property rights relating to Products not specifically mentioned herein.

RECEIVED
JUN 1 9 1989
Variety
Protection Of

SUNSEEDS GENETICS, INC.
PLANT VARIETY PROTECTION - USA
AS OF 8/10/88

Variety	Cert #	Issued	Expires	Issued To
Peas				
Alpine	8500101	09/27/85	09/27/03	Sunseeds, A Div. of Agri.
Blizzard	8700022	06/30/87	06/30/05	Sunseeds Genetics, Inc.
Mendota	AP 8500163	05/30/85		
Polaris	AP 8600017	11/12/85		
Sunset	8300074	04/30/84	04/30/02	Agrigenetics Corporation
Titania	AP 8200008	10/26/81		
Beans				
Brokers Choice	8100175	04/28/83	04/28/01	Agrigenetics Corporation
Conquest	7700058	07/26/77	07/26/94	Keystone Seed Co., Inc.
Empress	7900045	04/15/82	04/15/00	Agrigenetics Corporation
Green Genes	7600060	12/07/77	12/07/94	Northrup King
Keygold	8000111	10/16/80	10/16/97	Keystone Seed Co., Inc.
Lake Erie	7100031	08/12/74	08/12/91	Keystone Seed Co., Inc.
Lake Geneva	7200068	05/21/74	05/21/91	Keystone Seed Co., Inc.
Lake Largo	7400104	09/30/74	09/30/91	Keystone Seed Co., Inc.
Lake Seneca	7500096	11/24/75	11/24/92	Keystone Seed Co., Inc.
Lake Shasta	7100030	08/12/74	08/12/91	Keystone Seed Co., Inc.
Lake Superior	7100034	05/21/74	05/21/91	Keystone Seed Co., Inc.
Lakeland	7600059	01/26/78	01/26/95	Agrigenetics Corporation
Miami	7100036	02/28/74	02/28/91	Keystone Seed Co., Inc.
Mikado (AVX 450)	8400037	03/31/87	03/31/05	Sunseeds Genetics, Inc.
Paymaster	7600058	12/07/77	12/07/94	Agrigenetics Corporation
Profit Maker	8100174	04/28/83	04/28/01	Agrigenetics Corporation
Raider	7400069	07/26/74	07/26/91	Keystone Seed Co., Inc.
Rebel	7100033	09/30/74	09/30/91	Keystone Seed Co., Inc.
Shannon	8200007	04/28/83	04/28/01	Agrigenetics Corporation
Sunrise	7100029	06/24/74	06/24/91	Keystone Seed Co., Inc.
Triumph	7600061	12/30/77	12/30/94	Agrigenetics Corporation

AP = PVP applied for

SCHEDULE A

DATED this the 26 day of May, 1989.

SUNSEEDS GENETICS INC:

BY [signature]
its: Executive Vice President

ATTEST:
[signature]

State of CALIFORNIA)
)ss
County of SAN BENITO)

On this 26th day of May, 1989, before me, the undersigned Notary Public, personally appeared WILLIAM FRAZIER and ROBERT VAN MARTER known to me to be the EXECUTIVE V.P. and V.P. OF FINANCE respectively of the corporation that executed the instrument, and acknowledged to me that such corporation executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal, the day and year in this certificate first above written.

OFFICIAL SEAL
CINDY J. ACTIS
NOTARY PUBLIC - CALIFORNIA
SAN BENITO COUNTY
My Comm. Expires Aug. 7, 1991

Cindy J. Actis
Notary Public
Residing at: Hollister, CA
My commission expires: 8/7/91