No. 7700058

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Keystone Seed Company

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT ETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT AT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN

'Conquest'

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* July *in the year of our Lord one thousand nine hundred and* seventy-seven

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

FORM GR-470
(2-12-71)

UNITED STATES DEPARTMENT OF AGRICULTURE
CONSUMER AND 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 ~~2324~~ Conquest	2. KIND NAME Bean	FOR OFFICIAL USE ONLY PVPO NUMBER 7700058
3. GENUS AND SPECIES NAME Phaseolus vulgaris	4. FAMILY NAME *(Botanical)* Leguminosae	FILING DATE 4-11-77 / TIME 1:30 A.M. P.M.
	5. DATE OF DETERMINATION January 1977	FEE RECEIVED $750.00 / CHARGES —
6. NAME OF APPLICANT(S) Keystone Seed Co., Inc.	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)* P. O. Box 1438, Hollister, Ca. 95023	8. TELEPHONE AREA CODE AND NUMBER 408 637 - 5781

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)* Corporation	10. STATE OF INCORPORATION Delaware	11. DATE OF INCORPORATION 10/19/76

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

Albert E. Braun
Keystone Seed Co., Inc.
P. O. Box 1438
Hollister, Ca. 95023

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 12A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52, P.L. 91-577)*
- [X] 12B. Exhibit B, Botanical Description of the Variety
- [X] 12C. Exhibit C, Objective Description of the Variety
- [X] 12D. Exhibit D, Data Indicative of Novelty
- [X] 12E. Exhibit E, Statement of the Basis of Applicant's Ownership

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. *(See Section 52, P.L. 91-577).*

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), P.L. 91-577) (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 [X] NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed?

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

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 (P.L. 91-577).

3/10/77
(DATE)

James A. Chaney
(SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

00001

APPLICATION FOR PLANT VARIETY PROTECTION

BUSH BEAN VARIETY ~~2324~~ Conquest Set 770711

Exhibit A

Origin and Breeding History of the Variety

Conquest ~~2324~~ originated from a hand pollinated cross of Gallagreen x Rebel in 1970. The variety appeared to be stabilized by the 5th generation.

Rebel was developed by Keystone Seed Company from a cross of Provider x Harvester. The round pods of Rebel are very straight and pod set is concentrated from center to high in the plant. Color of pods is medium green.

Gallagreen is a Tendercrop type developed by Gallatin Valley Seed Co. Plants have a heavy structure and high pod setting ability. The long round pods tend to set in the lower part of the plant and they may have some curvature. Color of pods is deeper green than Rebel.

Selections in Conquest ~~2324~~ were started in the F-2 generation for a type of plant resembling Rebel but having longer pods.

The plant type, starting from the F-2 resembled Rebel more than Gallagreen, except that pods were longer and there was more variation in height of plants. Selections were made in the F-3 and F-4 for uniformity of plant size, maximum pod length, pod straightness, concentrated pod set, early maturity and yield potential. Variation was not wide for any of these characteristics.

Pure line selections, based on the above characteristics, were made in the F-5 and the 6th generation was evaluated in summer plantings in California and winter plantings in Florida. Performance and plant habit were the same in both locations, except that plants were slightly larger in Florida and maturity was earlier. There was no practical difference between the 5th and 6th generations and it appears that the variety was stabilized in the 5th generation.

The pods of ~~2324~~ Conquest are round to slightly oval in cross-section, but off type flat podded plants occur with the same frequency as found in most commercial bush bean varieties. The frequency of the flat podded plant was 4/1000 by the 3rd generation and doubled in the next generation. To minimize the flat podded mutant, rogueing is required.

APPLICATION FOR PLANT VARIETY PROTECTION

BUSH BEAN VARIETY ~~2324~~ Conquest 7700711

Exhibit B

Botanical Description of the Variety

~~2324~~ Conquest is similar in plant characteristics to Rebel but more vigorous and producing longer pods when grown in San Benito County, California.

The seeds of ~~2324~~ Conquest are white with a faint vein-like undercoat pattern. Around the hilum there is a slight tint of yellow pigment. The seed shape is elliptical in hilar view; oval in cross-section; and oval to slightly kidney shaped in side view.

The seedling stage is normal for white seeded bush beans. The hypocotyl is slightly green and anthocyanin pigment is absent.

~~2324~~ Conquest is a determinate, erect bush snapbean which performs well in spring and summer plantings in California, Wisconsin, Pennsylvania, and in fall and winter plantings in Florida. It matures 4 days earlier than Gallagreen and 1 to 2 days later than Rebel when grown in California. In winter plantings in Florida, ~~2324~~ Conquest matures in the same number of days as Rebel. Days to green pod maturity from spring plantings in California were 72 in 1975, but there is great variation from year to year. In 1976, 78 days elapsed from seeding to first harvest. In September plantings in Florida, pods were ready for fresh market in 51 days.

~~2324~~ Conquest is a vigorous plant with strong stem structure. Height and spread are about the same dimensions. When grown side by side in California, ~~2324~~ Conquest is a larger plant than Rebel.

Conquest ~~2324~~	Rebel
Average height 50 cm.	Average height 45 cm.
Standard deviation 6.8 cm.	Standard deviation 6.9 cm.
Average width 50 cm.	Average width 41 cm.
Standard deviation 3.6 cm.	Standard deviation 3.0 cm.

The flowers of Conquest ~~2324~~ are white and the terminal raceme averages 9.9 cm. in length with a standard deviation of 2.2 cm. The terminal raceme of Rebel averages 8.8 cm. in length with a standard deviation of .75 cm. Lower racemes are much shorter on both varieties. The number of flowers on the terminal raceme of Conquest ~~2324~~ averages 6 with a range of 3 - 9 while in Rebel the average is 4 with a range of 3 - 8. The number of primary branches in Conquest ~~2324~~ and Rebel ranges from 1 to 3. The number of internodes on the main stalk between primary leaf and base of terminal inflorescence is predominatly 5 for Conquest ~~2324~~ and 4 for Rebel, but in both varieties there is a range from 4 to 5. The center leaflets of mature plants are approximately the same size in Conquest ~~2324~~ and Rebel.

Conquest ~~2324~~	Rebel
Leaflet length 13.7 cm.	Leaflet length 13.4 cm.
Standard deviation .7 cm.	Standard deviation .9 cm.
Leaflet width 11.3 cm.	Leaflet width 11.6 cm.
Standard deviation .7 cm.	Standard deviation .7 cm.

The pods of both Conquest ~~2324~~ and Rebel are concentrated from the center to high in the plant. Pods of Conquest ~~2324~~ are longer than Rebel in all sieve sizes.

	~~2324~~ Conquest		Rebel	
Sieve Size	length	standard deviation	length	standard deviation
2	10.5 cm.	1.5 cm.	9.3 cm.	.75 cm.
3	12.3 cm.	1.2 cm.	10.5 cm.	.75 cm.
4	13.9 cm.	1.2 cm.	12.0 cm.	.89 cm.

	Conquest ~~2324~~		Rebel	
Sieve Size	length	standard deviation	length	standard deviation
5	15.3 cm.	0.9 cm.	13.2 cm.	.90 cm.
6	16.4 cm.	1.1 cm.	14.5 cm.	.52 cm.

The average number of marketable pods per plant is 14.7 with a standard deviation of 4.4 for Conquest ~~2324~~ and 10.5 with a standard deviation of 4.5 for Rebel when grown side by side in California at a spacing of 5 plants/foot.

The pods of Conquest ~~2324~~ range from round in cross-section to slightly oval with a difference of 1 mm. between thickness and width. Pods of both varieties are mostly straight, but at times there may be slight curvature in Conquest ~~2324~~.

The color of the 4 sieve pod of Conquest ~~2324~~ is approximately the same as Rebel when measured by spectral reflectance. The tristimulus values and trichromatic coefficients are as follows:

	Conquest ~~2324~~		Rebel
X	20.654	X	22.424
Y	23.689	Y	26.621
Z	12.741	Z	14.631
x = .36		x = .35	
y = .41		y = .42	

The dominant wave length for Conquest ~~2324~~ is 568 nm. and for Rebel 566 nm. The excitation purity of the 4 sieve pod is 40% for Conquest ~~2324~~ and 36% for Rebel. There is a slight difference in brightness as shown by the Y values but this is not noticeable to the eye.

The difference in length of pods is significant for all sieve sizes at the 5% probability. The difference in height is not significant, while the difference in width is significant. Leaflet size is not significant. Pods per plant is significant at the 10% level. Difference in length of terminal racemes is not significant at the 5% level.

References:

Color: Principles of Color Technology
Billmeyer and Saltzman
Bausch and Lamb Operations Manual

Statistics: Statistical Methods, G. W. Snedecor
5th edition

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)
Keystone Seed Co., Inc.

ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*)
P. O. Box 1438
Hollister, Ca. 95023

FOR OFFICIAL USE ONLY

PVPO NUMBER 7700058

VARIETY NAME OR TEMPORARY DESIGNATION
#2324 Conquest 1st 770711

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.:

[3] 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*):

[7|2] GREEN PODS [|] GREEN SHELLS [9|5] DRY SEEDS

[0|4] NO. DAYS EARLIER THAN --------- [1]
[0|2] NO. DAYS LATER THAN ---------- [8]

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

4. PLANT:

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

[0|5|0] CM. HEIGHT OR LENGTH OF VINE FROM PRIMARY LEAF NODE

[0|0|3] NUMBER PRIMARY BRANCHES PER MAIN STALK

[5|0] 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|2] CM. LENGTH OF FIRST INTERNODE ABOVE PRIMARY LEAF

[0|7] MM. STALK DIAMETER ABOVE FIRST TRIFOLIATE LEAF

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

[3] Size: 1 = SMALL (*Earliwax*) 2 = MEDIUM 3 = LARGE (*Tendercrop*) [10] CM. PETIOLE LENGTH (*To basal leaflets of first trifoliate leaf*)

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

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

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

FORM GR-470-12 (PAGE 2 OF 3 PAGES)

6. FLOWERS:

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

[2] Racemes: 1 = LONG 2 = MEDIUM 3 = SHORT [6] NUMBER FLOWERS PER RACEME

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

[2] 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 5] CM. LENGTH [1 0] MM. WIDTH *(Between sutures)* [0 9] MM. THICKNESS [1 1] 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

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

[2] Surface: 1 = SHINY 2 = DULL

[1] Surface: 1 = SMOOTH 2 = BLISTERED

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

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

[15] MM. SPUR LENGTH

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

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

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

[6] NUMBER OF SEEDS PER POD

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

[14] 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: [ ] 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)*_____

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

[1] 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)*_____

[2] 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:

[1] 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

[37] GM. WEIGHT PER 100 SEEDS

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

[0 6] MM. WIDTH *(Dorsal to ventral)*

[0 5] MM. THICKNESS *(Side to side)*

00009

[1 3] MM. LENGTH

[0 1 2] WIDTH / THICKNESS X 10

7700058

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):*

1	RUST *(Specify race)* some races not identified	0	ANGULAR LEAF SPOT
0	BACTERIAL WILT	2	COMMON BEAN MOSAIC
0	ANTHRACNOSE	1	YELLOW BEAN MOSAIC
0	SOUTHERN BEAN MOSAIC	1	FUSARIUM ROOT ROT
0	CURLY TOP	2	N.Y. 15 BEAN MOSAIC
0	POWDERY MILDEW	0	BEAN MOSAIC VIRUS 4
1	HALO BLIGHT	0	FUSCOUS BLIGHT
0	ALFALFA MOSAIC VIRUS	0	ALFALFA MOSAIC VIRUS 2
0	POD MOTTLE VIRUS	0	RED NODE VIRUS
0	ROOT KNOT NEMATODE	0	OTHER *(Specify)*

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

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

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

[2] 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.

APPLICATION FOR PLANT VARIETY PROTECTION

BUSH BEAN VARIETY ~~2324~~ Conquest

Exhibit D

Data Indicative of Novelty

Novelty is based on the unique combination of the following characters:

770911 Conquest ~~2324~~ most closely resembles Rebel, except: (1) pods are longer, (2) more pods are produced per plant (3) market maturity is 1 to 2 days earlier.

(see exhibit B - 1&7 770921)

APPLICATION FOR PLANT VARIETY PROTECTION

BUSH BEAN VARIETY ~~2324~~ Conquest

Exhibit E

Statement of Applicant's Ownership

Keystone Seed Co., Inc., believes it is the sole, original and first breeder of ~~2324~~ Conquest variety of bush bean for which it solicits a certificate of protection.

Jet 7707A

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 Polinin

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. Hahn

Notary Public
My Commission Expires: [illegible]

7700058

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 3 1990
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

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