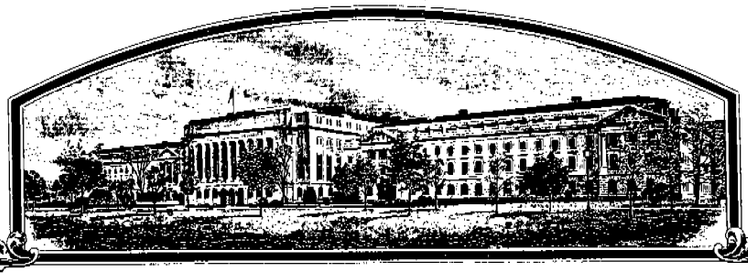

No. 7500073

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Asgrow 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, 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 (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN

'Stretch'

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* fifth *day of* March *in the year of our Lord one thousand nine hundred and* seventy-six

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

7500073
J. D. Atkin
February 21, 1975

EXHIBIT A

ORIGIN AND BREEDING HISTORY OF ~~XP-B45~~ 'STRETCH'

1966 Original cross-Harvest King x Orbit, made in greenhouse in spring.
F_1 grown in field at ARC during summer
F_2 grown in Florida in the fall.

1967 F_3 grown at ARC. Single vine selections made.

1968 F_4 grown at ARC. Reselected

1969 F_5 grown at ARC. Reselected. Bulk saved.

1970 F_6 selections grown and evaluated. Small increase.

1971 Tested in yield trial. Small increase. Mass selected for uniform type. Desig. XP-B45.

1972 Tested in yield trial.
Small increase and mass selected.

1973 Tested in yield trials throughout company. Sampled outside company. Increase. 300 single vine selections made.

1974 Tested in yield trials throughout company. Sampled outside company. Increase.

Planted the 300 SVS on a single progeny basis. All progenies were evaluated for trueness to type and all progenies saved were very similar. Any progeny thought to be different was removed completely. The seed from remaining progenies was harvested as a bulk, and this has become our basic seed stock.

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 ~~XP-B45~~ STRETCH	2. KIND NAME Garden Bean	FOR OFFICIAL USE ONLY PV NUMBER 7500073
3. GENUS AND SPECIES NAME Phaseolus vulgaris	4. FAMILY NAME *(Botanical)* Leguminosea	FILING DATE 3.13.75 / TIME 10 A.M.
	5. DATE OF DETERMINATION 1971	FEE RECEIVED $ 250 / $ 250 / $ 250 / BALANCE DUE $ — / $ — / $ —
6. NAME OF APPLICANT(S) Asgrow Seed Company	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)* Kalamazoo, Michigan 49001	8. TELEPHONE AREA CODE AND NUMBER (616) 382-~~4000~~ 6606 RJS
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 March 22, 1968

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

Allen R. Trotter
Asgrow Seed Company
Kalamazoo, Michigan 49001

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [X] 13B. Exhibit B, Botanical Description of the Variety
- [X] 13C. Exhibit C, Objective Description of the Variety
- [X] 13D. Exhibit D, Data Indicative of Novelty
- [X] 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 [X] 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.

3/10/75 (DATE) — Allen R. Trotter (SIGNATURE OF APPLICANT)

(DATE) — (SIGNATURE OF APPLICANT)

7500073

EXHIBIT B

BOTANICAL DESCRIPTION OF ~~XP-B45~~ 'STRETCH' SNAP BEAN

~~XP-B45~~ 'STRETCH' is an extremely early round podded snap bean. It is about one or two days earlier than Harvest King and Olympia and about seven to nine days earlier than Early Gallatin, Eagle and etc. The plant is medium in size and fairly stiff and upright but not as good as Eagle or Checkmate. The plant is quite open with relatively few branches rather than thick and bushy. The leaves are large and dark green .

The pods are round, dark green and only medium in length. The pods are generally very straight and quite smooth. The interior flesh holds very well even when the seed is maturing rather than to break down to give a hollow pod. ~~XP-B45~~ 'STRETCH' has many Blue Lake characteristics and this is especially evident in the pods which have firm, dark green flesh and a Blue Lake flavor. The pods are not as free of fiber as Eagle, BBL 274 and etc.,but they are still very low in fiber as compared to other extremely early varieties. The pods at Twin Falls should be harvested at approximately 40-50% sieve size five and over.

The flowers and seeds are white. The seed is fairly large, usually averaging between 80 and 90 seeds per ounce. Genetic seed quality is extremely good and tests in cold, wet conditions prove that this variety has not only very fine germination, but also the ability to emerge quickly and grow when other varieties fail.

~~XP-B45~~ 'STRETCH' has been tested and found susceptible to Anthracnose, Curly Top and Halo Blight but is resistant to Common Bean Mosaic and New York 15 Bean Mosaic. The line is listed as resistant to cold. This is a relative thing and could very well be listed as tolerant. Several reports have been received from commercial trials stating the ~~XP-B45~~ 'STRETCH', under adverse conditions, emerged earlier and produced healthy plants whereas, other varieties had poor, slow emergence and the plants remained stunted during cool weather. ~~XP-B45~~ 'STRETCH' also is resistant to adverse conditions at blossom time in that it consistently produces a uniform rather than a split set.

Exhibit B is written from several years experience and is thus rather generalized due to the fact that conditions vary from year to year. Exhibit C is compiled from results of a one year replicated trial planted especially for PVP measurements where varieties can be compared in side by side plantings. Exhibits B and C therefore, compliment each other and may vary slightly.

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-12 (10-2-72)

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)
ASGROW SEED COMPANY

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

FOR OFFICIAL USE ONLY

PVPO NUMBER
7500073

VARIETY NAME OR TEMPORARY DESIGNATION
~~XP-B45~~ 'STRETCH'

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*):

[6][1] GREEN PODS [ ][ ] GREEN SHELLS [ ][ ] DRY SEEDS

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

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

[0][0][4] NUMBER PRIMARY BRANCHES PER MAIN STALK

[5][0] CM. SPREAD

[0][4] NUMBER INTERNODES ON MAIN STALK BETWEEN PRIMARY LEAF AND BASE OF TERMINAL INFLORESCENCE

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

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

[0][8] MM. STALK DIAMETER ABOVE FIRST TRIFOLIATE LEAF

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

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

5. LEAVES:

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

[3] Size: 1 = SMALL (*Earliwax*) 2 = MEDIUM 3 = LARGE (*Tendercrop*) [12] CM. PETIOLE LENGTH (*To basal leaflets of first trifoliate leaf*)

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

[2] PUBESCENCE - Dorsal:
[2] PUBESCENCE - Ventral:
1 = NONE 2 = SLIGHT 3 = CONSIDERABLE 4

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

2500073 ~~XP-B45~~ 'STRETCH'

6. FLOWERS:

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

[1] Racemes: 1 = LONG 2 = MEDIUM 3 = SHORT [4] 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 2] CM. LENGTH [0 9] MM. WIDTH *(Between sutures)* [1 0] MM. THICKNESS [0 9] WIDTH / THICKNESS X 10

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

[2] 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

[2] 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

[12] 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

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

[ ] 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

[ ] 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

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

9. SEED SHAPE AND SIZE:

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

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

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

[32] GM. WEIGHT PER 100 SEEDS

[4] 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)*

[1 3] MM. LENGTH

[0 1 2] WIDTH / THICKNESS X 10

3500073 ~~XP-B45~~ 'STRETCH'

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]	ANGULAR LEAF SPOT
[0]	BACTERIAL WILT	[2]	COMMON BEAN MOSAIC
[1]	ANTHRACNOSE	[0]	YELLOW BEAN MOSAIC
[0]	SOUTHERN BEAN MOSAIC	[0]	FUSARIUM ROOT ROT
[1]	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)*

[0] HEAT [2] 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.

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.

RE
MA 13 1975
U.S. DEPARTMENT

AMENDED

EXHIBIT D

7500073

PROOF OF NOVELTY OF ~~XP-B45~~ 'STRETCH'

~~XP-B45~~ 'STRETCH' is earlier than practically any other variety of bean and this difference is sufficient to put it in a rather limited class. It most nearly resembles Harvest King and resembles Salem and Olympia in season of maturity.

The pod shape, length and color of ~~XP-B45~~ 'STRETCH' and Harvest King are somewhat similar but a very significant difference between the two varieties is in seed quality. Asgrow has developed an objective test to determine seed quality in beans. The test consists of raising and lowering the moisture content of the seed in alternate cycles and determining the percent of whole cotyledons in a germination test. The test simulates conditions often encountered during seed harvest or planting dry seed in wet soils. The results of this test are expressed numerically. An extremely poor variety could rate down to nearly zero and an extremely good variety could rate up to nearly 100. The data from 1973 tests on all four early varieties are given in the following table:

% SEEDS WITH WHOLE COTYLEDONS RJS

	~~XP-B45~~ 'STRETCH'	HARVEST KING	SALEM	OLYMPIA
1973 Rep I	90	43	42	7
II	82	43	55	12
III	94	26	40	8
IV	86	39	52	7
V	88	39	39	4
1973 Mean	88	38	46	8

EACH REP REPRESENTS A DIFFERENT SEED LOT SAMPLE.

RJS — PER TELEPHONE CALL TO DR. AITKIN 10/29/75

Although all four varieties were not entered in the replicated trials in any one year except 1973, relative results have been very consistent in that ~~XP-B45~~ 'STRETCH' has been extremely high, Harvest King and Salem somewhat lower and Olympia very poor.

~~XP-B45~~ 'STRETCH' has a greater tendancy to be crease back then Harvest King as measured by the width/thickness index. The further this index is below 1.0 the more crease back the pods. Following are data from 1973 and 1974 yield trials:

~~XP-B45~~ 'STRETCH' Harvest Date	W/T Index	HARVEST KING Harvest Date	W/T Index
7/30/73	.95	8/2/73	1.02
8/1/73	.93	8/4/73	1.09
8/3/73	.94	8/6/73	1.01
8/6/73	.91	8/8/73	.97
8/8/73	.87	8/10/73	.97
1973 Mean	.92	1973 Mean	1.01
7/31/74	.97	8/1/74	.96
8/2/74	.94	8/3/74	1.02
8/5/74	.96	8/5/74	.97
8/7/74	.95	8/7/74	.99
8/9/74	.91	8/9/74	.99
1974 Mean	.95	1974 Mean	.99
2 Year Mean	.93	2 Year Mean	1.00

A final rather distinct difference between ~~XP-B45~~ 'STRETCH' and Harvest King but one where it is difficult to obtain accurate objective data is regarding plant type. Harvest King is more compact and upright whereas ~~XP-B45~~ 'STRETCH' has a more open plant type that has a greater tendancy to sprawl on the ground.

APPLICATION No. 7500073

BEAN ~~'XP-B45'~~ 'STRETCH'

AMENDED EXHIBIT D

PROOF OF NOVELTY OF ~~XP-B45~~ 'STRETCH'

CLARIFICATION OF SEED QUALITY STATEMENTS IN ORIGINAL EXHIBIT D

The figures in the original table are the percentages of perfect seedlings in a germination test following treatments of the seed which cause transverse cracking of cotyledons in susceptible varieties. Only seedlings which have no abnormalities are counted. Any seedling with any visible crack in a cotyledon is not counted. This test is very consistent in distinguishing between ~~XP-B45~~ 'STRETCH' and Harvest King.

Additional new information:

There is considerable difference in foliage color. Harvest King and ~~XP-B45~~ 'STRETCH' were planted on June 6, 1975 in adjacent rows in our trials at Twin Falls. Average color was judged on August 16 by using Royal Horticulture Society color charts. The results are as follows:

VARIETY	AVERAGE COLOR
Harvest King	144 A
~~XP-B45~~ 'STRETCH'	137 C

There is also considerable difference in seed maturity. The two plots listed above were compared on September 18, 1975. Many of the leaves and pods on Harvest King were still green whereas practically 100% of the leaves had been shed from ~~XP-B45~~ 'STRETCH' plants and all of the pods were dry.

J. D. Atkin
October 16, 1975

OCT 20 1975

7500073

EXHIBIT E

Statement of the Basis of Applicant's Ownership

Bean ~~XP-B45~~ 'STRETCH'

Bean ~~XP-B45~~ 'STRETCH' was originated and developed by Dr. C. G. Briggs and Dr. John Atkin, both Asgrow plant breeders. By agreement between employee and Asgrow Seed Company, all rights to any invention, discovery, or development made by an employee are assigned to the company. No rights to such invention, discovery, or development are retained by the employee.