No. 7700083

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Ferry-Morse 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 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

'Early Blue'

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* 28th *day of* September *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
(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	2. KIND NAME	FOR OFFICIAL USE ONLY
Early Blue	Snap Bean	PV NUMBER 7700083
3. GENUS AND SPECIES NAME	4. FAMILY NAME *(Botanical)*	FILING DATE 7-7-77 / TIME 9:00 A.M. P.M.
Phaseolus vulgaris L.	Leguminosae	FEE RECEIVED $ 250.00 / BALANCE DUE $ 7-7-77
	5. DATE OF DETERMINATION: 17 August 1972	$ 250.00 / $ 7-7-77
		$ 250.00 / $ 9-19-77

6. NAME OF APPLICANT(S)	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*	8. TELEPHONE AREA CODE AND NUMBER
FERRY-MORSE SEED COMPANY Dr. George C. Emery, Breeder	P.O. Box 100 111 FERRY-MORSE WAY MOUNTAIN VIEW, CALIFORNIA 94042	(415) 967-6973

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	California	7 April 1969

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

Mr. D. V. Brondyke, Executive Vice President
Ferry-Morse Seed Company
P.O. Box 100, 111 Ferry-Morse Way
Mountain View, California 94042

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 [X] 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.

6 June 1977
(DATE)

Ferry-Morse Seed Company
(SIGNATURE OF APPLICANT)
by: D V Brondyke
Executive Vice Pres.

(DATE)

(SIGNATURE OF APPLICANT)

00001

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.

VARIETY: Early Blue (formerly E4203 (formerly 1C-X721Ms(R)R(GH)Ms(R)2(MT)Ms (C)D,AJ,BE(C)Ms(F)Ms(C)Ms))

EXHIBIT A: Origin and Breeding History of the Variety

Early Blue was selected as a single plant selection, involving the pedigree method of breeding, from a cross (1C-X721) made in 1968 between the pedigreed line, 1C-X25Ms(V)A(GH)Ms(C)A(GH)Ms as the seed parent and O.S.U. 58R as the pollen parent.

F_2 seed was massed from several F_1 plants in the greenhouse in 1969 and planted in Oregon in the summer of 1970. The progeny was noted to have excellent Blue Lake pod color and quality, and was very early maturing yet with good holding ability. F_3 seed was harvested individually from 16 single plant selections and planted in the greenhouse for a seed increase in the winter of 1970-71. The resulting F_4 seed was planted in progeny rows in Oregon in 1971. F_5 seed was harvested separately from two selections of the F_4 progeny row of the "R" F_2 selection. These F_5 plants of each selection were found resistant to the New York strain of Common Bean Mosaic (BV-1A) and F_6 seed was harvested in the greenhouse in the winter of 1971-72. F_6 plants of the "R-2" F_4 selection stood out well in their performance under Oregon conditions in 1972, and the decision was made to increase the line as a possible new variety on August 17, 1972. F_6 seed of the "R-2" F_4 selection had also been planted in California in 1972, and from this California progeny row fifty F_6 single plants were selected and F_7 seed from the remaining 289 plants was bulk-massed. F_7 seed from the bulk-mass was increased to the F_8 generation in Florida in the winter of 1972-73. The resulting F_8 Florida-grown seed was increased to the F_9 generation in California in the summer of 1973; from approximately 3000 plants, 3 flat podded plants were rogued. The F_9 seed from the "R-2" F_6 bulk-mass was redesignated as E4203 and planted in commercial trials in Oregon in 1974. E4203 was outstanding for earliness while maintaining a high yield potential and good Blue Lake quality.

Individual F_7 progeny rows of the fifty F_6 single plant selections were grown in California in 1973; The R-2-D,AJ,AF, and BE rows were noted to have fuller pods than the other rows, uniform pod color and freedom from off-type plants. F_8 seed was harvested separately from each of these 4 rows and increased to the F_9 generation in Florida in the winter of 1973-74. The F_9 Florida-grown seed was increased to the F_{10} generation in California in the summer of 1974; no off-types were noted or rogued from among 41,000 total plants of the 4 progenies and at the same time the lines were observed to be indistinguishable in trials in Oregon, Wisconsin, and New York. F_{10} seed of the 4 progenies was bulk-massed and used as foundation seed for E4203. E4203 was named Early Blue in the summer of 1976.

20 May 1977

VARIETY: Early Blue (formerly E4203 (formerly 1C-X721Ms(R)R(GH)Ms(R)2(MT)Ms (C)D,AJ,AF,BE(C)Ms(F)Ms(C)Ms))

EXHIBIT B: Botanical Description of the Variety

Seed germination and emergence are rapid, and early seedling growth vigorous. Time of flowering is 7 to 10 days earlier than Tendercrop, and one to 2 days earlier than Oregon 58. The period of flowering is quite concentrated. The pods reach their mature diameter one to two days earlier than Oregon 58, and seven to ten days before Tendercrop under Oregon conditions. Seed and fiber development are relatively slow, with seed development advancing slightly more rapidly than fiber development. Seed development in Early Blue is slightly more rapid than in Oregon 58.

Plants are determinate, bush, medium erect, medium tall, with a medium wide spread; the mature plant is similar to Oregon 58, but is shorter and wider than Tendercrop. The foliage color is similar to Oregon 58, but much darker than Tendercrop. The leaflets are deltoid ovate, acuminate, with rounded or truncate bases. Inflorescences arising from the apex and leaf axils contain 4 to 8 white flower buds. Pods are borne medium to high in the plant, but occasionally touch the soil.

The stringless pods are 15 to 17 centimeters in length, slightly round oval to slightly crease-back, 10 mm. in width (suture to suture), and 12 mm. in thickness. The neck (4 cm. from stem attachment to center of first seed) is medium long, and the spur (14 cm.) is medium in length. The pod surface is slightly rough and essentially non-pubescent. The pod color is dark to medium dark green from the suture to the non-suture side of the pod. Compared to Tendercrop, the pods are 2 centimeters longer, are less crease-back, and are darker green with a more waxy surface.

The seeds are white, round in cross-section, oblong, and are smaller in size than Tendercrop.

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) Ferry-Morse Seed Company
Dr. George C. Emery, Plant Breeder

ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*)
P.O. Box 100
111 Ferry-Morse Way
Mountain View, California 94042

FOR OFFICIAL USE ONLY

PVPO NUMBER 7700083

VARIETY NAME OR TEMPORARY DESIGNATION
Early Blue

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

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

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

[4][9] GREEN PODS [ ][ ] GREEN SHELLS [ ][ ] DRY SEEDS

[ ][5] NO. DAYS EARLIER THAN --------- [1]
[ ][0] 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:

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

[0][3][1] CM. HEIGHT OR LENGTH OF VINE FROM PRIMARY LEAF NODE

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

[3][7] CM. SPREAD

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

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

[0][1] CM. LENGTH OF FIRST INTERNODE ABOVE PRIMARY LEAF

[0][6] MM. STALK DIAMETER ABOVE FIRST TRIFOLIATE LEAF

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

[3] Flower position:
[3] 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

[2] Size: 1 = SMALL (*Earliwax*) 2 = MEDIUM 3 = LARGE (*Tendercrop*)

[13] 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

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

20 May 1977

VARIETY: Early Blue (formerly E4203 (formerly 1C-X721Ms(R)R(GH)Ms(R)2(MT)Ms (C)D,AJ,BE(C)Ms(F)Ms(C)Ms))

EXHIBIT D: Data Indicative of Novelty

Early Blue most closely resembles the variety Oregon 58. It is distinct from Oregon 58 by having an earlier flowering date and a seed shorter in length. Measurements below were obtained from a planting made January 27, 1975 in a greenhouse held at 68° Fahrenheit minimum temperature at Columbus, Wisconsin.

	Early Blue	Oregon 58	$\bar{d}$	$s_{\bar{d}}$
A. Days to first open flower	38	40	2.3	.458
B. Seed length	12.2 mm.	13.7 mm.	1.5	.307

7700083

EXHIBIT "E"

Plant Variety Protection Application

No: _____

ASSIGNMENT

I, DR. GEORGE C. EMERY, agree and hereby do transfer and assign to FERRY-MORSE SEED COMPANY all of my rights, title, and interest in and to that certain variety namely, Snap Bean, Early Blue, for which application for Plant Variety Protection Certificate has been filed. This agreement shall be binding on my administrators, successors and assigns.

In Witness Whereof, I have executed this agreement this _____ day of May 24, 1977.

BREEDER

George C. Emery

George C. Emery

00008 12/72

ASSIGNMENT OF INTELLECTUAL PROPERTY

WHEREAS, HARRIS MORAN SEED COMPANY, a corporation duly organized and existing under the laws of the State of Maryland, having its principal place of business at 4511 Willow Road, Suite 3, Pleasanton, California 94588 ("**Assignor**"), has, pursuant to that certain Bill of Sale and Assignment dated as of June 30, 1997, transferred to FERRY-MORSE SEED COMPANY (CALIFORNIA), a corporation duly organized and existing under the laws of the State of California, having its principal place of business at 555 Codoni Avenue, P.O. Box 4938, Modesto, California 95352-4938 ("**Assignee**"), all of the intellectual property Assignor had adopted, used and was using as of the effective date of this Assignment, including without limitation, the intellectual property represented by the United States Plant Variety Protection Certificates of Assignor identified on Schedule A hereto (collectively, the "**Property**"); and

WHEREAS, on the date hereof, Assignee has changed its name to "Harris Moran Seed Company";

NOW, THEREFORE, effective by this instrument as of the close of business on June 30, 1997, and for good and valuable consideration, receipt of which is hereby acknowledged, Assignor hereby assigns to Assignee any and all right, title and interest worldwide in and to the Property and any and all recordations thereof, including, but not limited to, the use of the Property in any manner, all benefit of any and all prior use of the Property, and any and all rights to initiate claims or proceedings for past, present or future infringements of Assignor's rights, title and interest in and to the Property.

Dated: as of June 30, 1997

HARRIS MORAN SEED COMPANY

By: _____
Philip Ashcraft, President

NEWY01A:171511:1:09/26/97
26757-1

ENDORSED
FILED
In the office of the Secretary of State
of the State of California

JUN 30 1997

BILL JONES, Secretary of State

CERTIFICATE OF AMENDMENT

OF THE

ARTICLES OF INCORPORATION

OF

FERRY-MORSE SEED COMPANY (CALIFORNIA)

(a California corporation)

To the Secretary of State
State of California

Pursuant to the provisions of the General Corporation Law of the State of California, the undersigned officers of FERRY-MORSE SEED COMPANY (CALIFORNIA), a California corporation (the "Corporation"), do hereby certify as follows:

1. The name of the Corporation is Ferry-Morse Seed Company (California).

2. Article One of the Corporation's Articles of Incorporation, which relates to the name of the Corporation, is hereby amended in its entirety to read as follows:

One. The name of this Corporation is:
HARRIS MORAN SEED COMPANY.

3. The amendment herein provided for has been approved by the Corporation's Board of Directors.

4. The amendment herein provided for was approved by the written consent of the Corporation's sole shareholder in accordance with the provisions of Section 902 of the California General Corporation Law. The total number of outstanding shares of the corporation is 5,000.

IN WITNESS WHEREOF, each of the undersigned does hereby declare under the penalty of perjury that he or she signed the foregoing Certificate of Amendment as of June 30,

1997, in the Town of Modesto, State of California, in the official capacity set forth beneath his or her signature and that the statements set forth in this certificate are true of his or her own knowledge.

Yves Queste, President

Helen Andritsakis, Secretary

NEWY01A:163794:1:06/25/97
26757-1

A493976

State of California

SECRETARY OF STATE

OFFICE OF THE SECRETARY OF STATE

VB

3 PAGES

I, *BILL JONES*, Secretary of State of the State of California, hereby certify:

That the attached transcript has been compared with the record on file in this office, of which it purports to be a copy, and that it is full, true and correct.

IN WITNESS WHEREOF, I execute this certificate and affix the Great Seal of the State of California this

JUN 30 1997

THE GREAT SEAL OF THE STATE OF CALIFORNIA
EUREKA

Bill Jones

Secretary of State

SEC/STATE FORM CE-107 (REV. 4/97)

97 35085