

No.

8800011



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 *eighteen* 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 (7 U.S.C. 2321 ET SEQ.)

BEAN

'Trueblue'



In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D. C. this 31st day of May in the year of our Lord one thousand nine hundred and ninety-one.

Attest:

Kenneth A. Evans
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Ed Madison
Secretary of Agriculture

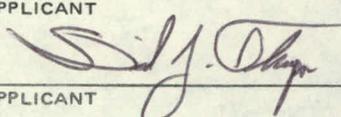
U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

FORM APPROVED: OMB NO. 0581-0055

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

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

1. NAME OF APPLICANT(S) FERRY-MORSE SEED COMPANY		2. TEMPORARY DESIGNATION FM-177		3. VARIETY NAME TRUEBLUE	
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) 555 CODONI AVENUE P. O. BOX 4938 MODESTO, CALIFORNIA 95352		5. PHONE (Include area code) 209/579-7333		FOR OFFICIAL USE ONLY VPVO NUMBER 8800011	
6. GENUS AND SPECIES NAME PHASEOLUS VULGARIS L.		7. FAMILY NAME (Botanical) LEGUMINOSAE		FILING DATE October 22, 1987 TIME 1:30 <input type="checkbox"/> A.M. <input checked="" type="checkbox"/> P.M.	
8. KIND NAME (GARDEN) BEAN		9. DATE OF DETERMINATION 24 APRIL 1987		FEES RECEIVED AMOUNT FOR FILING \$ 1800 ⁰⁰ DATE October 15, 1987 AMOUNT FOR CERTIFICATE \$ 200. ⁰⁰ DATE May 10, 1991	
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) CORPORATION				11. IF INCORPORATED, GIVE STATE OF INCORPORATION CALIFORNIA	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS DAVID J. THOMPSON FERRY-MORSE SEED COMPANY P.O. BOX 4938 MODESTO, CALIFORNIA 95352				12. DATE OF INCORPORATION 4 APRIL 1986	
14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED a. <input checked="" type="checkbox"/> Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.) b. <input checked="" type="checkbox"/> Exhibit B, Novelty Statement. c. <input checked="" type="checkbox"/> Exhibit C, Objective Description of Variety (Request form from Plant Variety Protection Office.) d. <input checked="" type="checkbox"/> Exhibit D, Additional Description of Variety. e. <input checked="" type="checkbox"/> Exhibit E, Statement of the Basis of Applicant's Ownership.					
15. 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) of the Plant Variety Protection Act.) <input type="checkbox"/> Yes (If "Yes," answer items 16 and 17 below) <input checked="" type="checkbox"/> No					
16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? N/A <input type="checkbox"/> Foundation <input type="checkbox"/> Registered <input type="checkbox"/> Certified		
18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.? <input type="checkbox"/> Yes (If "Yes," give date) <input checked="" type="checkbox"/> No					
19. HAS THE VARIETY BEEN RELEASED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES? <input type="checkbox"/> Yes (If "Yes," give names of countries and dates) <input checked="" type="checkbox"/> No					
20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable. The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) 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(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.					
SIGNATURE OF APPLICANT 				DATE 11 MAY 1987	
SIGNATURE OF APPLICANT				DATE	

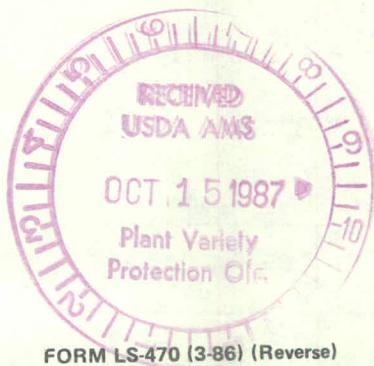
INSTRUCTIONS

General: Send an original copy of the application and exhibits, at least 2,500 viable seeds (*furnish only untreated seed*), and \$1,800 fee (\$200 filing fee and \$1,600 examination fee) to the U. S. Department of Agriculture, Agricultural Marketing Service, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (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

- 9 Give the date the applicant determined that he had a new variety based on (1) the definition in Section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 14a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.
- 14b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 14c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 14d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 14e Section 52(4) of the Plant Variety Protection Act requires applicants to furnish a statement of the basis of the applicant's ownership. The applicant may be the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.
- 15 If "Yes" is specified (*seed of this variety be sold by variety name only as a class of certified seed*) the applicant may **NOT** reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "No," he may change his choice. (See Section 180.16 of the Regulations and Rules of Practice.)
- 19 See Sections 41 (i,j) and 42 of the Plant Variety Protection Act and Section 180.7 of the Regulations and Rules of Practice for eligibility requirements.

NOTE: All information submitted in support of an application becomes PUBLIC INFORMATION once the certificate is issued. (See Section 180.17 of the Regulations and Rules of Practice.)



VARIETY: TRUEBLUE (formerly FM-177(formerly 1D-X2037-AMs(C)L(W)2(GH)Ms))

Exhibit A: Origin and Breeding History of the Variety

TRUEBLUE originated as a F_5 single plant selection, following the pedigree method of breeding, from the cross of BBL-92 as the seed parent and Bounty as the pollinator; the cross was designated 1D-X2037. The cross was made in the field in the summer of 1979 at Sun Prairie, Wisconsin. One F_1 plant of 1D-X2037 was planted in the greenhouse in Sun Prairie in the spring of 1980, and the resulting F_2 seed was designated 1D-X2037-A.

F_2 seed of 1D-X2037-A was planted in a progeny row on June 20, 1980, in the field at Sun Prairie, Wisconsin. On September 2, 1980, the row was rated very good for its Blue Lake pod character, heavy yield and midseason maturity; nine F_2 selections were made in the row and the resulting F_3 seed was bulk-massed as 1D-X2037-AMs.

1D-X2037-AMs F_3 seed was planted in a 60 foot double row plot in San Juan Bautista, California, in the summer of 1981. On September 2, 1981, the plot was rated very good and noted in addition for its medium slim (sieve -4 to sieve-5), round to creaseback and medium dark green pods. Twenty-one F_3 selections were made in the row; the seed was held separate and designated 1D-X2037-AMs(C)A to Y.

F_4 seed from each selection was planted in progeny rows in Sun Prairie, Wisconsin, on May 20, 1982. On July 30, 1982, the progeny row 1D-X2037-AMs(C)L was rated very good, but noted to be still segregating for pod curviness. Two F_4 selections were taken from the row; the F_5 seed from each was held separately as 1D-X2037-AMs(C)L(W)1 and 2.

1D-X2037-AMs(C)L(W)2 F_5 seed was advanced another generation in the greenhouse in the fall of 1982 at San Juan Bautista; no selection pressure was applied to the 15 plants and their seed was bulk-massed. The resulting 1 oz. of F_6 seed was redesignated FM-177.

F_6 seed of FM-177 was increased to the F_7 generation at San Juan Bautista, California, in the summer of 1983 in a 10 foot double row plot. The row was rated very good to excellent and noted for its heavy yield on a medium tall, upright plant with six inch pods holding a sieve-4 to sieve-5 diameter with good straightness and smoothness. The row was uniform for type and maturity (no off types were rogued from the row); F_7 seed was bulk-massed from the row for further evaluation and seed increase.

In 1984 FM-177 was evaluated in Wisconsin, New York, Oregon, and Tennessee and seed-increased to the F_8 generation in California. In all trials the line was rated excellent to outstanding and noted for its consistent good germination and good stand establishment; heavy yield on a frugal plant type; uniformly 6", medium dark green, smooth, straight, sieve-4 to -5, round to creaseback pods, with immature green seed color. Two 30 foot-double row plots in California were uniform for type; no off types were observed; and the F_8 seed was bulk-massed for further intensive testing and seed-increase.

In 1985 FM-177 was grown in replicated trials in Wisconsin, and evaluated additionally in New York, Oregon, Tennessee, and Hancock, Wisconsin. The line continued to be rated very good to outstanding and noted for consistent behavior over a wide range of conditions with good vine holding ability of sieve size and interior quality of pods. Two 400 foot double beds of seed increased were again grown at San Juan Bautista, California; the plants were uniform for type and maturity and no off types were noted. F₉ seed was bulkmassed from the two beds.

In the spring of 1986 the decision was made to further evaluate the line in pilot plantings with processing cooperators as well as in our own plots in Wisconsin, New York, Tennessee, and Oregon with further seed increase in San Juan Bautista, California. Consistently good seed quality and consistent performance were again noted. In one acre of increase in California, 16 flat-podded, 14 oval-podded plants were rogued from approximately 90,000 plants, indicating good stability of the line. FM-177 was considered uniform, stable, and reproducible as a new variety through time and across generations. F₁₀ seed was harvested as stock for the line.

The decision to introduce FM-177 as a new variety was made on April 24, 1987, and was named Trueblue.

VARIETY: TRUEBLUE (Formerly FM-177 (formerly
1D-X2037-AMs(C)L(W)2(GH)Ms)

Exhibit B: Data Indicative of Novelty

Trueblue is most similar to the variety Bounty, but is distinct from Bounty in having a narrower crosswall to crosswall thickness and a narrower, straighter seed, while Bounty has a wider crosswall to crosswall pod thickness and a wider, more reniform seed (see seed photograph).

Experimental Design: Plants of each variety to be compared were grown in rows side by side. Row length was 20 foot with plants spaced two inches apart in row and rows 30 inches apart in Wisconsin and 40 inches center to center of double row beds in California. When pods reached full diameter and advanced seed development could be felt in the pod, 1 full pod (no missing seed) was harvested and measured from each plant, up to 100 plants maximum. The measured pods were allowed to dry to provide the seed for seed width measurements.

With a significant departure from a normal distribution of the data (D-Agostino procedure), a non-parametric test, the Mann-Whitney U-test, was applied to test for significance of difference between the compared varieties.

TRIAL 1. Sun Prairie, Wisconsin. Seed planted in the field on June 20, 1985. One hundred pod and seed measurements per variety.

	<u>Pod Thickness (mm)</u>		<u>Seed Width (mm)</u>	
	<u>Bounty</u>	<u>Trueblue</u>	<u>Bounty</u>	<u>Trueblue</u>
Mean	12.3	11.5	4.9	4.3
s	0.98	0.89	0.40	0.25
Actual				
Observed range	10.-14.	9.-13.	4.-6.	4.-5.25
95% Confidence				
Interval	10.4-14.3	9.7-13.3	4.1-5.7	3.8-4.8
C	7.97	7.74	8.12	5.81
Difference				
of Means		0.80		0.60
<u>Mann-Whitney Test</u>				
Test Criterion (U)		2639.5		1030.5
Normal Deviate (z)		5.77		9.69
Probability		<.001		.001

TRIAL 2. Sun Prairie, Wisconsin. Seed planted in the field on June 3, 1986. Seventy pod measurements per variety and one hundred seed measurements per variety.

	<u>Pod Thickness (mm)</u>		<u>Seed Width (mm)</u>	
	<u>Bounty</u>	<u>Trueblue</u>	<u>Bounty</u>	<u>Trueblue</u>
Mean	10.9	10.4	6.0	5.6
s	0.83	0.77	0.26	0.31
Actual				
Observed range	8.-13.	8.-12.	5.5-6.7	5.-6.
95% Confidence Interval	9.3-12.6	8.9-11.9	5.5-6.5	5.0-6.2
C	7.61	7.40	4.33	5.54
Difference of Means		0.50		0.40
<u>Mann-Whitney Test</u>				
Test Criterion (U)		1713.5		2119.5
Normal Deviate (z)		3.07		7.05
Probability		.0011		<.001

TRIAL 3. San Juan Bautista, California. Seed planted in the field on July 10, 1986. One hundred pod and seed measurements per variety.

	<u>Pod Thickness (mm)</u>		<u>Seed Width (mm)</u>	
	<u>Bounty</u>	<u>Trueblue</u>	<u>Bounty</u>	<u>Trueblue</u>
Mean	12.7	12.0	5.7	4.9
s	0.60	0.72	0.36	0.35
Actual				
Observed range	11.-14.	10.-13.	5.-6.5	4.5-6.
95% Confidence Interval	11.5-13.9	10.6-13.4	5.0-6.4	4.2-5.6
C	4.72	6.00	6.31	7.14
Difference of Means		0.70		0.80
<u>Mann-Whitney Test</u>				
Test Criterion (U)		2794.0		925.5
Normal Deviate (z)		5.40		9.95
Probability		<.001		<.001

3. PLANT: (Cont'd)

Pod position: 1 = low 2 = high 3 = scattered

Bush form (illustrated below):



1 = spherical bush form

2 = stem bush form

3 = wide bush form

4 = high bush form

5 = other (specify) _____

4. LEAVES:

1 = smooth 2 = wrinkled

1 = dull 2 = glossy

Size: 1 = small (Earliwax) 2 = medium 3 = large (Tendercrop)

Color: 1 = light green (as light or lighter than Bountiful) 2 = medium green
3 = dark green (as dark or darker than Bush Blue Lake 290)

5. FLOWERS:

Color: 1 = white 2 = cream 3 = pink 4 = lilac 5 = purple 6 = Other (specify) _____

Days to 50% bloom

6. FRESH PODS: (Edible maturity, average for 20 pods)

Exterior color: 1 = light green (as light or lighter than Bountiful)
2 = medium green
3 = dark green (as dark or darker than Bush Blue Lake 290)
4 = light yellow (Brittlewax)
5 = golden yellow (Cherokee Wax)
6 = green-red variegated (Horticultural)
7 = other (specify) _____

% Sieve size distribution at optimum maturity for non-flat pods

Note:

- 1 = 4.76 mm to 5.76 mm
- 2 = 5.76 mm to 7.34 mm
- 3 = 7.34 mm to 8.34 mm
- 4 = 8.34 mm to 9.53 mm
- 5 = 9.53 mm to 10.72 mm
- 6 = 10.72 mm or larger

1	2	3	4	5	6
4%	10%	11%	38%	37%	10%

3 sieve	<input type="text" value="1"/> <input type="text" value="2"/>	cm length	<input type="text" value="0"/> <input type="text" value="9"/>	mm width	<input type="text" value="0"/> <input type="text" value="8"/>	mm thickness
4 sieve	<input type="text" value="1"/> <input type="text" value="2"/>	cm length	<input type="text" value="0"/> <input type="text" value="9"/>	mm width	<input type="text" value="0"/> <input type="text" value="9"/>	mm thickness
5 sieve	<input type="text" value="1"/> <input type="text" value="5"/>	cm length	<input type="text" value="1"/> <input type="text" value="0"/>	mm width	<input type="text" value="1"/> <input type="text" value="1"/>	mm thickness
6 sieve	<input type="text" value="1"/> <input type="text" value="5"/>	cm length	<input type="text" value="1"/> <input type="text" value="1"/>	mm width	<input type="text" value="1"/> <input type="text" value="2"/>	mm thickness

6. FRESH PODS: (Cont'd)

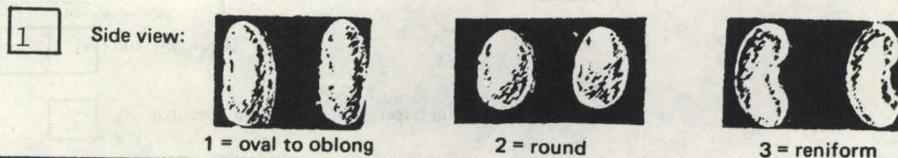
- 3 Cross section pod shape: 1 = flat 2 = oval 3 = round 4 = heart
- 1 Creaseback: 1 = present 2 = absent
- 3 Pubescence: 1 = none 2 = sparse 3 = considerable
- 2 Spur: 1 = straight 2 = slightly curved 3 = curved
- 2 Constrictions: 1 = none 2 = slight 3 = deep
- 2 Pod flesh: 1 = light 2 = medium 3 = dark
- 1 5 mm spur length
- 2 Fiber: 1 = none 2 = sparse 3 = considerable
- 6 Number of seeds per pod
- 1 Surface: 1 = smooth 2 = rough
- 2 Suture string: 1 = present 2 = absent
- 1 Seed development (Snap Bean): 1 = slow 2 = medium 3 = fast
- 1 Machine harvest: 1 = adapted 2 = not adapted
- 2 Pod flavor: (1) Standard (Tendercrop)
 (2) Mild Blue Lake (BBL 274)
 (3) Strong Blue Lake (Pole FM1)
 (4) Mild Romano (Roma)
 (5) Strong Romano (Pole Romano)
 (6) Other (specify) _____

7. SEED COAT COLOR:

- 1 1 = Monochrome 2 = Polychrome 2 1 = shiny 2 = dull
- 1 Primary color: } 1 = white 2 = yellow 3 = buff 4 = tan
- 0 Secondary color: } 5 = brown 6 = pink 7 = red 8 = purple
 9 = blue 10 = black 11 = other (specify) _____
- 1 Color Pattern: 1 = none 2 = splashed 3 = mottled 4 = striped 5 = flecked 6 = dotted
- 0 Secondary color location: 1 = hilar ring 2 = ventral surface
 3 = sides 4 = dorsal surface
 5 = not restricted to any area 6 = combination of location (specify below) _____
- 1 Hilar ring on colored seeds: 1 = absent 2 = narrow 3 = butterfly shaped

8. SEED SHAPE AND SIZE:

- 1 Hilum view: 1 = elliptical 2 = oval 3 = round 2 Cross section: 1 = elliptical 2 = oval 3 = cordate 4 = round



8. SEED SHAPE AND SIZE: (Cont'd)

2 1 = truncate ends 2 = rounded ends

2 8 gm/100 seed

2 gm/100 seed lighter than 8

gm/100 seed same as

comparison variety from page one

gm/100 seed heavier than

9. ANTHOCYANIN: (1 = absent 2 = present)

1 Flowers

1 Stems

1 Pods

1 Seeds

1 Leaves

10. DISEASE RESISTANCE (0 = not tested 1 = susceptible 2 = resistant):

2 Anthracnose (specify race below)
gamma

0 Fuscous blight

2 Rust (specify race below)
race 45

0 Red node virus

0 Powdery mildew

0 Pod mottle virus

0 Fusarium root rot

2 Bean common mosaic virus (specify strain below)
New York 15

0 Pythium root rot

2 Mosaic mottle

0 Rhizoctonia root rot

2 Black root

0 Pythium wilt

0 Bean yellow mosaic virus

0 Angular leaf spot

0 Curly top

0 Bacterial wilt

0 Other (specify below)

0 Halo blight (specify race below)

11. INSECT RESISTANCE: (0 = not tested 1 = susceptible 2 = resistant)

0 Aphids

0 Root knot nematode

0 Leaf hopper

0 Seed corn maggot

0 Lygus

0 Thrips

0 Pod borer

0 Weavils

0 Other (specify below)

12. PHYSIOLOGICAL RESISTANCE: (0 = not tested 1 = susceptible 2 = resistant)

0 Heat

0 Cold

0 Drought

0 Air pollution

13. COMMENTS:



VARIETY: Trueblue (formerly FM-177(formerly 1D-X2037-AMs(C)L(W)2(GH)Ms))

Exhibit D: Botanical Description of the Variety

Germination and emergence is at a moderate rate with good seedling vigor. Very uniform and consistent emergence over a wide range of conditions is characteristic of Trueblue. Time of flowering is midseason; mature pod diameter is reached in late midseason.

Plants are upright, medium in height, slightly spreading. Foliage is medium to medium dark, Leaves are deltoid ovate, acuminate with rounded or truncated bases. Leaves are medium large of moderate number, with medium smooth surface, and slender petioles. Inflorescences arise from the apex and leaf axils and contain 4 to 8 white flower buds. Stems are medium in thickness. Pods are borne under the foliage, but off the ground.

Pods are 12 to 16cm in length, averaging 15cm at peak maturity. Pods of Trueblue obtain their mature diameter slowly; the mature suture to suture width (+ 11mm) is reached first, while the crosssectional thickness continues to widen during seed maturation. Seed and side wall fiber development is notably slow. Pods hold their straightness well and seldom miss setting a full complement of seed under a wide range of conditions. Pod surface is generally smooth; pod shape holds to a round shape until maturing to a thicker than wider condition; spurs are medium in length; and color is a uniform medium dark green. Pod flesh is firm, the seed cavities are small, and interior color is medium dark.

Seed are a dull white, oblong, oval in crosssection, with no reniform tendency. The seed coat is quite tight, the micropyle openings are very small, and imbibition is slower than for most white seeded garden beans.

8800011

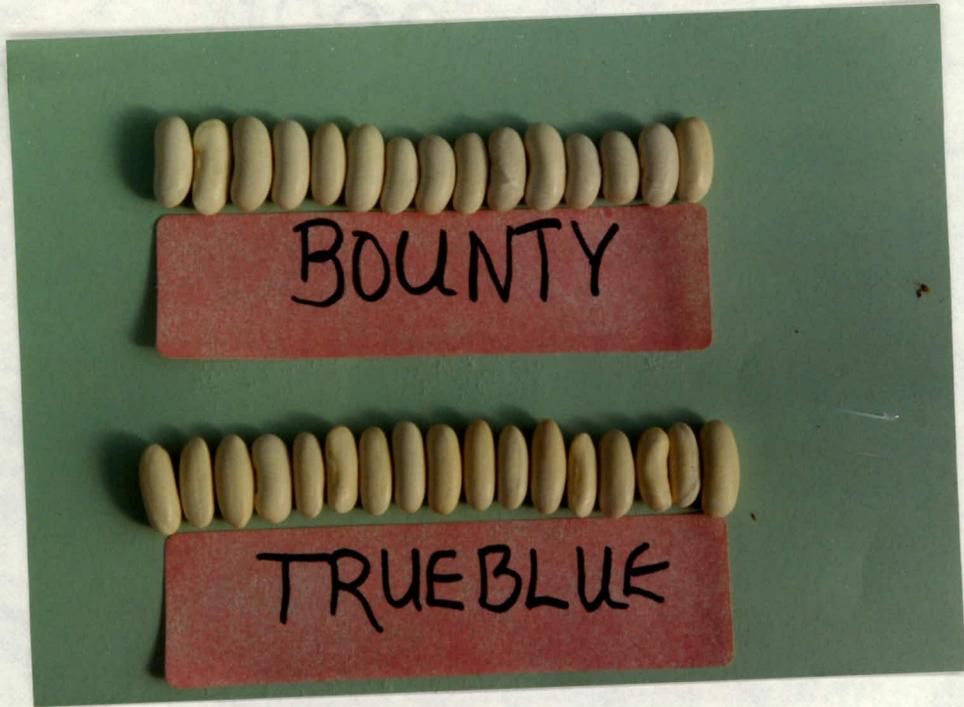


EXHIBIT "E"

Plant Variety Protection Application

No: 8800011

ASSIGNMENT

I, 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, Bean, TRUEBLUE 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 6th day of May, 1987.

BREEDER

George C. Emery

12
12/72

EXHIBIT "E"

Plant Variety Protection Application

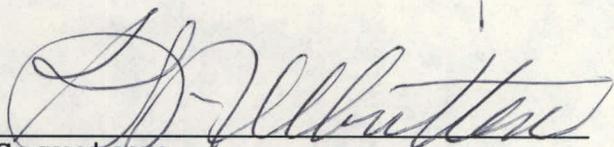
No: 8800011

STATEMENT OF OWNERSHIP

I, George R. Allbritten, Secretary of Ferry-Morse Seed Company do hereby certify that Ferry-Morse Seed Company is the breeder and owner of that certain variety namely, Bean, Trueblue

for which an application for Plant Variety Protection has been filed.

In witness whereof I have executed this statement of ownership and caused the Ferry-Morse Corporate Seal to be affixed this 27 day of April, 1990.


Secretary

SEAL