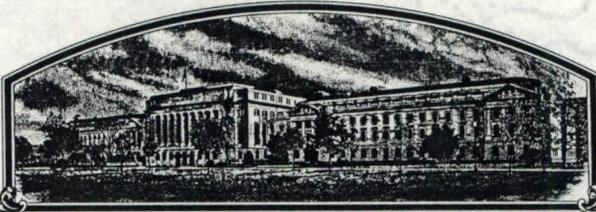


No.

8400132



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

## van Waveren-Planzenzucht GmbH

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 (T. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN

'Evergreen'

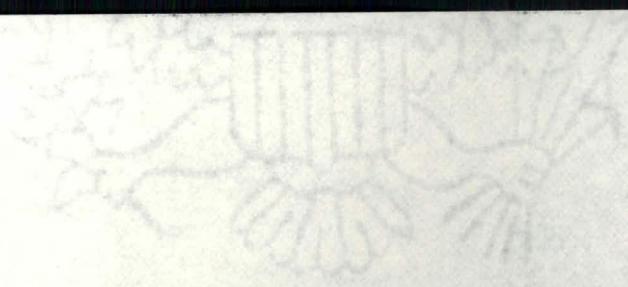
In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D. C. this 31st day of December in the year of our Lord one thousand nine hundred and eighty-six.

Attest:

*Kenneth H. Evans*  
Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

*Richard E. Lyng*  
Secretary of Agriculture





1986



U.S. DEPARTMENT OF AGRICULTURE  
 AGRICULTURAL MARKETING SERVICE  
 LIVESTOCK, MEAT, GRAIN & SEED DIVISION

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) van Waveren-Pflanzenzucht GmbH		2. TEMPORARY DESIGNATION WAV 876		3. VARIETY NAME EVERGREEN	
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) Postfach 39-42 D-3400 Göttingen/West Germany		5. PHONE (Include area code) 0551-781084		FOR OFFICIAL USE ONLY VPVO NUMBER 8400132	
6. GENUS AND SPECIES NAME Phaseolus vulgaris L.		7. FAMILY NAME (Botanical) Fabaceae		FILING DATE 7/18/84 TIME 8:30 <input checked="" type="checkbox"/> A.M. <input type="checkbox"/> P.M.	
8. KIND NAME Bush beans		9. DATE OF DETERMINATION 1983		FEES RECEIVED AMOUNT FOR FILING \$ 1,800 DATE 7/18/84 AMOUNT FOR CERTIFICATE \$ 200. <sup>00</sup> DATE November 24, 1986	
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) private limited liability company				11. IF INCORPORATED, GIVE STATE OF INCORPORATION	
11. IF INCORPORATED, GIVE STATE OF INCORPORATION				12. DATE OF INCORPORATION	

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS  
 Dr. Martin Schnock, c/o van Waveren-Pflanzenzucht GmbH, Postfach 3942,  
 D-3400 Göttingen/West Germany

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED

- a.  Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)  
 b.  Exhibit B, Novelty Statement  
 c.  Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)  
 d.  Exhibit D, Additional Description of the Variety

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.)  
 Yes (If "Yes," answer items 16 and 17 below)  No

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?  
 Yes  No

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?  
 Foundation  Registered  Certified

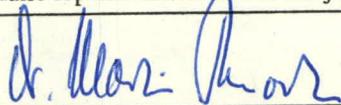
18. DID THE APPLICANT(S) FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?  
 Yes (If "Yes," give date)  
 No

19. HAS THE VARIETY BEEN OFFERED FOR SALE OR MARKETED IN THE U.S. OR OTHER COUNTRIES?  
 Yes (If "Yes," give names of countries and dates)  
 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 23 May 1984
SIGNATURE OF APPLICANT (Radwitz) (Dr. Martin Schnock)	DATE 23 May 1984 <b>1</b>

## INSTRUCTIONS

\$1,800 \$200 \$1,600

**General:** Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$1,000 fee (~~\$500 filing fee and \$500 examination fee~~) to U.S. Department of Agriculture, Agricultural Marketing Service, Livestock, Meat, Grain and Seed Division, 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.
- 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.)
- 16 See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

Attachment 14 A

EVERGREEN (WAV 876)

Exhibit A: Origin and Breeding History of bush bean variety WAV 876.  
Gebealogy: Crossbreeding and subsequent selection (Pedigree methode)

1973: CASCADE x EARLYBIRD

1974-1978: F<sub>1</sub> - F<sub>7</sub>

Selection were made for virus (N.Y.: strain) pod colour, flavour with BBL characters, bush type and general appearance.

1979-1982: F<sub>8</sub> - F<sub>12</sub> besides further selections, yield and performance trials were made

1983, 5th Jan.: Application for variety protection in Bundesrepublik under the registration number BB 674

"I have personally observed crop production fields and variety trials of 'Evergreen' and testify it has proven to be stable and uniform" Antonius 10/3/86

1. Now we have more than three generation of reproduction and the variety confirms stability in USA and Germany and no variants occur. Mr. Steve Antonius from Maffey Seed Company will make his statement in this matter too, after three years multiplication.

from: 10/16/86 letter from Schnock  
AB 10/23/86

Substituted 9-11-82

I am pleased to send you a copy of the book "The Art of the State of the Union" by Richard Nixon. It is a collection of his speeches and is a very good read. I hope you will enjoy it.

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Attachment 14 B

Exhibit B, Novelty Statement

EVERGREEN (WAV 876)

The most similar variety is AMITY.

It differs from EVERGREEN especially by the difference in electrophoresis examinations (see attached photos and the certificate of Landwirtschaftliche Untersuchungsanstalt, Hameln, BRD).

Other differences to the varieties AMITY, METORIT and BRILLIANT see below:

	Plant		Pod		pod colour	Coll.res.	maturity
	height	spread	length	diameter	(RHS)	(alpha-lambda)	
			cm	cm			
EVERGREEN	48	38	13-14	0,95	137 A	S	67
AMITY	47	40	14-15	1,01	137 C	S	66
METORIT	45	40	15-16	1,07	143 A	R	65
BRILLIANT (=EARLYBIRD)	45	40	15-17	1,11	143 A	R	65

2. Pod color was taken with the Royal Horticultural Society Colour Chart. Amity and Evergreen were grown next to each other under the same condition and 50 pods out of the sieve size 5 were compared. We always observe in any location a darker pod color, more straightness and slenderness with Evergreen than with Amity.

from 10/16/86 letter from Schnock  
AB 10/23/86

44-100-100-100

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WAV 876

WAV 876 is distinguished from EARLYBIRD by its upright bush, darker coloured leaves and pods. Pods are more slender and straight, less in Diameter than EARLYBIRD and medium early maturity. WAV 876 is resistant against Colletotrichum lindemuthianum race  $\alpha, \beta$  and Common bean virus N.Y. 15.

Yield and performance trial 1983

		yield to/ha	bean/ plant ratio	plant- high cm	P O D length cm	diameter cm	colour 1-9	Textur 1-9	Flavour
<b>AC(4-29-86)</b>									
<b>EVERGREEN</b>	WAV 876	13.82	38.6	48	13.9	0.95	6.8	7.4	4.8
	BLISS	13.50	51.1	50	15.2	0.99	4.5	7.4	
<b>AMITY</b>	WAV 518	17.32	46.2	47	14.2	1.01	5.6	7.8	5.7
	PROVIDER	13.65	52.2	46	13.8	0.98	3.8	6.2	
<b>ACCORD</b>	WAV 269	14.74	47.8	52	15.8	1.06	4.2	5.0	6.3
<b>EARLYBIRD</b>	BRILLIANT	15.15	41.9	50	14.9	1.11	4.0	6.7	4.7
							9=dark 1=pale	9 = best	9 = best

810018

1910  
1911  
1912  
1913  
1914

#

Substituted 9-21-86 78

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION  
BELTSVILLE, MARYLAND 20705

EXHIBIT C  
(Bean)

OBJECTIVE DESCRIPTION OF VARIETY  
BEAN (*Phaseolus vulgaris* L.)

<b>NAME OF APPLICANT(S)</b> van Waveren-Pflanzenzucht GmbH  <b>ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code)</b> P. O. Box 3942  D-3400 Göttingen /West Germany	<b>FOR OFFICIAL USE ONLY</b> PVPO NUMBER
	<b>VARIETY NAME OR TEMPORARY DESIGNATION</b> EVERGREEN - WAV 876

Place numbers in the boxes (e.g.    ) for the characters that best describe this variety. Measured data should be for SPACED PLANTS. Ranges may also be given. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: Royal Horticultural Society Colour Chart. The location of test area is Rosdorf/BRD Newman/California. Please answer questions appropriate for your variety if the information is available.

1. TYPE:

1 = Field (dry-edible)      2 = Garden

2. MARKET MATURITY:

Days to edible pods        Days to green shells  
  Days to dry seeds  
    Heat units to edible pods          Heat units to green shells  
    Heat units to dry seeds  
 No. days earlier than .....  }  
 ..... Same as ..  } 1 = Tendercrop      2 = Kentucky Wonder  
 .....      3 = Kinghorn Wax      4 = White Kidney  
 .....      5 = Michelite 62      6 = Dwarf Horticultural  
 .....      7 = Bush Blue Lake 290      8 = Other (specify below)

No. days later than .....

3. PLANT:

1 = Determinate      2 = Indeterminate

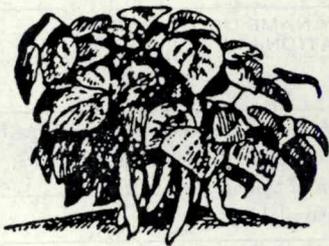
cm height  
 cm shorter than .....  }  
 Same as ..  } comparison variety from above  
 cm taller than .....  }  
  cm spread        Number primary branches near base  
 cm narrower than .....  }  
 width same as ...  } comparison variety from above  
 cm wider than .....  }  
 Main stalk: 1 = brittle      2 = wirey       Branching habit: 1 = compact      2 = open  
 1 = stout      2 = thin

5

3. PLANT: (Cont'd)

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

4 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 1 = smooth 2 = wrinkled

1 1 = dull 2 = glossy

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

2 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:

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

4  7 Days to 50% bloom (USA)

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

?  1 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, 5	11, 4	16, 5	29, 2	35, 7	2, 8

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

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6. FRESH PODS: (Cont'd)

- 3 Cross section pod shape: 1 = flat 2 = oval 3 = round 4 = heart
- 2 Creaseback: 1 = present 2 = absent
- 2 Pubescence: 1 = none 2 = sparse 3 = considerable
- 2 Spur: 1 = straight 2 = slightly curved 3 = curved
- 1 Constrictions: 1 = none 2 = slight 3 = deep
- 2 Pod flesh: 1 = light 2 = medium 3 = dark
- 1  4 mm spur length
- 1 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) \_\_\_\_\_

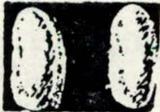
7. SEED COAT COLOR:

- 1 1 = Monochrome 2 = Polychrome  1 1 = shiny 2 = dull
- 1 Primary color: } 1 = white 2 = yellow 3 = buff 4 = tan
- 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
- 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)
- Hilar ring on colored seeds: 1 = absent 2 = narrow 3 = butterfly shaped

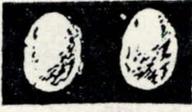
8. SEED SHAPE AND SIZE:

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

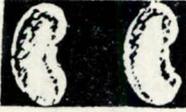
1 Side view:



1 = oval to oblong



2 = round



3 = reniform

7

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

2 1 = truncate ends    2 = rounded ends

2  2 gm/100 seed

gm/100 seed lighter than .....  7

gm/100 seed same as ....

gm/100 seed heavier than .....

} comparison variety from page one

**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):**

1 Anthracnose (specify race below) \_\_\_\_\_

0 Rust (specify race below) \_\_\_\_\_

0 Powdery mildew

0 Fusarium root rot

0 Pythium root rot

0 Rhizoctonia root rot

0 Pythium wilt

0 Angular leaf spot

0 Bacterial wilt

0 Halo blight (specify race below) \_\_\_\_\_

0 Fuscous blight

0 Red node virus

0 Pod mottle virus

2 Bean common mosaic virus (specify strain below)  
Nystrain 15

0 Mosaic mottle

0 Black root

0 Bean yellow mosaic virus

0 Curly top

0 Other (specify below) \_\_\_\_\_

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

0 Aphids

0 Leaf hopper

0 Lygus

0 Pod borer

0 Root knot nematode

0 Seed corn maggot

0 Thrips

0 Weavils

0 Other (specify below) \_\_\_\_\_

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

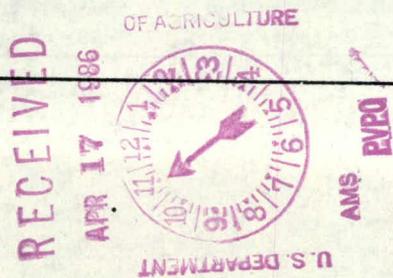
0 Heat

0 Cold

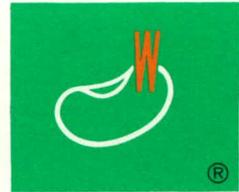
0 Drought

0 Air pollution

**13. COMMENTS:**



**VAN WAVEREN-PFLANZENZUCHT  
GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG**



BUNDESREPUBLIK  
DEUTSCHLAND  
TELEFON: (0551) 781084  
TELEX: <78902-0>  
96843 WAVERN D

VAN WAVEREN-PFLANZENZUCHT GMBH · POSTFACH 3942 · 3400 GÖTTINGEN

Ab 17.4.1986  
**neue  
Rufnummer:  
78 90 2-0**

Auftrags-Annahme:  
78 90 2-38 u. 39  
(in direkter Durchwahl)

**D-3405 ROSDORF 1**

IHR ZEICHEN

IHRE NACHRICHT VOM

UNSER ZEICHEN

TAG

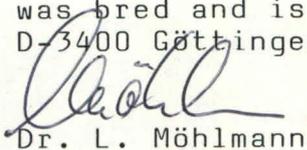
11th April 1986

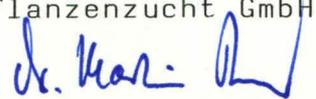
Exhibit E: Declaration - Section 52 (4) PVP

We herewith declare that the bush bean variety

EVERGREEN - Appl. no. 8400132

was bred and is owned by van Waveren-Pflanzenzucht GmbH,  
D-3400 Göttingen.

  
Dr. L. Möhlmann

  
Dr. M. G. Schnock

MITGLIED DER KWS-GRUPPE

GESCHÄFTSFÜHRER: DR. LUDWIG MÖHLMANN · JÜRGEN SCHNEEMANN  
BANKEN: DEUTSCHE BANK AG, GÖTTINGEN (BLZ 260 700 72) · DRESDNER BANK AG, GÖTTINGEN (BLZ 260 800 24)  
COMMERZBANK AG, GÖTTINGEN (BLZ 260 400 30) · BHF-BANK, HANNOVER (BLZ 250 202 00)

SITZ DER GESELLSCHAFT UND REGISTERGERICHT GÖTTINGEN HRB 462

**KWS**



9

AMERICAN OVERSEAS AIRWAYS CORPORATION  
COMMUNICATIONS SECTION

*Handwritten scribble*

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