

No.

8900185



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**Wilmorin, S.A.**

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

'Vilbel'



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 30th day of June in the year of our Lord one thousand nine hundred and ninety-two.

Attest:

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

*Edward Madigan*  
Secretary of Agriculture

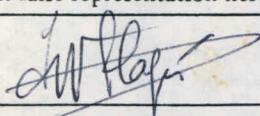
U.S. DEPARTMENT OF AGRICULTURE  
 AGRICULTURAL MARKETING SERVICE

FORM APPROVED: OMB NO. 0681-0055

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) Vilmorin, S.A.		2. TEMPORARY DESIGNATION Vilbel	3. VARIETY NAME Vilbel
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) La Menitre 49250 Beaufort en Vallee France		5. PHONE (Include area code) 41-47-52-51	<b>FOR OFFICIAL USE ONLY</b> PVPO NUMBER 8900185
6. GENUS AND SPECIES NAME <u>Phaseolus vulgaris L.</u>		7. FAMILY NAME (Botanical) Leguminosea	FILING DATE Apr. 19, 1989 TIME <input type="checkbox"/> A.M. <input type="checkbox"/> P.M.
8. KIND NAME snap bean		9. DATE OF DETERMINATION 1986	AMOUNT FOR FILING \$ 1800 <sup>00</sup> DATE Apr. 19, 1989
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) Corporation			AMOUNT FOR CERTIFICATE \$ 200. DATE June 22, 1992
11. IF INCORPORATED, GIVE STATE OF INCORPORATION France			12. DATE OF INCORPORATION 1742
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Donald D. Jeffery Foley & Lardner, Schwartz, Jeffery, Schwaab, Mack, Blumenthal & Evans P.O. Box 299 Alexandria, Virginia 22313 PHONE (Include area code): (703) 836-9300			
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 type="checkbox"/> No		17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <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 J. N. PLAGES 		DATE 14/04/89	
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.)



**EXHIBIT A**

The novel variety 'Vilbel' results from the cross-breeding of a snap bean variety 'Brunot' with the 'Ernaneg' line of snap beans owned by Vilmorin.

All morphological characteristics of the variety Vilbel have continuously remained stable and uniform since the eleventh generation (F<sub>11</sub>) in 1979 and continuing to the present. Multiplication occurred between the fifteenth (F<sub>15</sub>) and twentieth (F<sub>20</sub>) generations, and continuous propagation has been made since then. The physiological characteristics of the variety, including its resistance to virus 1 and anthracnose, were set at the eleventh generation and have remained stable and uniform since then. Quantitative yields are reproducible and have been verified each year on Vilmorin's premises and on other official demonstration sites.

No variant has been observed since the eleventh generation (F<sub>11</sub>).

**EXHIBIT B**

'Vilbel' is, according to the applicant's best information, most similar to 'Brunot.' 'Vilbel' differs from 'Brunot' in various important characteristics, including the following. 'Vilbel' has pink flowers, whereas 'Brunot' has violet flowers. The precocity of 'Vilbel' is later than that of 'Brunot.' The 'Vilbel' pod is about 1 cm longer than that of 'Brunot.' The seeds of 'Vilbel' are black, while the 'Brunot' seeds are brown. The average diameter of the 'Vilbel' pod ranges from 8-9 mm, while the average diameter of the 'Brunot' pod ranges from 9 to 10.5 mm.

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.)

NAME OF APPLICANT(S) VILMORIN	FOR OFFICIAL USE ONLY
	PVPO NUMBER 8900185
ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) La Méniltré - 49250 BEAUFORT EN VALLEE	VARIETY NAME OR TEMPORARY DESIGNATION VILBEL

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: \_\_\_\_\_ . The location of test area is La Méniltré FRANCE  
 . 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

Base temperature of 10°

Heat units to dry seeds

No. days earlier than .....   }  
 ..... Same as ..   }  
  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 290      8 = Other (specify below)  
BRUNOT

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 .....   }

1 Main stalk: 1 = brittle      2 = wirey       1 = stout      2 = thin

1 Branching habit:  
 1 = compact      2 = open

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:

2 1 = smooth 2 = wrinkled

1 = dull 2 = glossy

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

3 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:

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

4  3 Days to 50% bloom

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

3 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
	10	30	35	25	

3 sieve  1  4 cm length  mm width  mm thickness

4 sieve  1  7 cm length  mm width  mm thickness

5 sieve  2  0 cm length  mm width  mm thickness

6 sieve  2  1 cm length  mm width  mm thickness

6. FRESH PODS: (Cont'd)

- 3 Cross section pod shape: 1 = flat 2 = oval 3 = round 4 = heart
- 2 Creaseback: 1 = present 2 = absent
- 1 Pubescence: 1 = none 2 = sparse 3 = considerable
- 2 Spur: 1 = straight 2 = slightly curved 3 = curved
- 1 Constrictions: 1 = none 2 = slight 3 = deep
- 3 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
- 2 Machine harvest: 1 = adapted 2 = not adapted
- 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
- 10 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)
- 1 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  
 3 = round 4 = round



6

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

2 1 = truncate ends 2 = rounded ends

3  8 gm/100 seed

0  2 gm/100 seed lighter than .....  8

gm/100 seed same as ....

gm/100 seed heavier than .....

comparison variety from page one

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

2 Flowers  2 Stems  1 Pods  1 Seeds  1 Leaves

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

<input type="checkbox"/> 2 Anthracnose (specify race below) type STRAIN	<input type="checkbox"/> 0 Fuscous blight
<input type="checkbox"/> 0 Rust (specify race below)	<input type="checkbox"/> 0 Red node virus
<input type="checkbox"/> 0 Powdery mildew	<input type="checkbox"/> 0 Pod mottle virus
<input type="checkbox"/> 0 Fusarium root rot	<input type="checkbox"/> 2 Bean common mosaic virus (specify strain below) TYPE STRAIN
<input type="checkbox"/> 0 Pythium root rot	<input type="checkbox"/> 2 Mosaic mottle
<input type="checkbox"/> 0 Rhizoctonia root rot	<input type="checkbox"/> 1 Black root
<input type="checkbox"/> 0 Pythium wilt	<input type="checkbox"/> 0 Bean yellow mosaic virus
<input type="checkbox"/> 0 Angular leaf spot	<input type="checkbox"/> 0 Curly top
<input type="checkbox"/> 0 Bacterial wilt	<input type="checkbox"/> 0 Other (specify below)
<input type="checkbox"/> 1 Halo blight (specify race below) STRAINS 1 and 2	

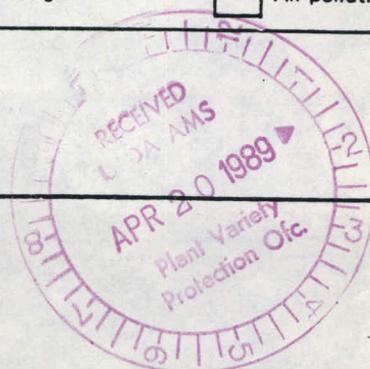
11. INSECT RESISTANCE: (0 = not tested 1 = susceptible 2 = resistant)

<input type="checkbox"/> 0 Aphids	<input type="checkbox"/> 0 Root knot nematode
<input type="checkbox"/> 0 Leaf hopper	<input type="checkbox"/> 0 Seed corn maggot
<input type="checkbox"/> 0 Lygus	<input type="checkbox"/> 0 Thrips
<input type="checkbox"/> 0 Pod borer	<input type="checkbox"/> 0 Weevils
	<input type="checkbox"/> 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:



8900185

EXHIBIT D Additional Description of the Variety

The attached photograph illustrates the configuration and coloration of the mature Vilbel snap bean.



## EXHIBIT E Statement of the Basis of Applicant's Ownership

Ownership of this snap bean variety Vilbel is the result of an assignment by Jean Noel Plages, residing at 29 Chemin des Airaultas - 49250 Beaufort en Vallee, of all rights in the variety to Vilmorin, S.A., the assignment being executed on the 23rd of December 1988.