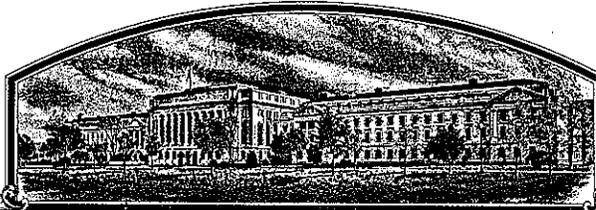


No.

8100100



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Royal Sluis

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

BEAN

'Nomara'



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 25th day of July in the year of our Lord one thousand nine hundred and eighty-four.

Attest:

Kenneth Herd
Commissioner
Plant Variety Protection Office
Livestock, Meat, Grain & Seed Division
Agricultural Marketing Service

John R. Block
Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

INSTRUCTIONS: See Reverse.

1a. TEMPORARY DESIGNATION OF VARIETY Nomara		1b. VARIETY NAME Nomara		FOR OFFICIAL USE ONLY	
2. KIND NAME Dwarf Snap Bean		3. GENUS AND SPECIES NAME Phaseolus vulgaris		PV NUMBER 8100100	
4. FAMILY NAME (BOTANICAL) Leguminosa		5. DATE OF DETERMINATION October 1977		FILING DATE 4/23/81	TIME 11:30 A.M. P.M.
6. NAME OF APPLICANT(S) ROYAL SLUIS, Kon. Zaaizaadbedrijven Gebr. Sluis B.V.		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) P.O. Box 22 1600 AA Enkhuizen Holland		FEE RECEIVED \$ 500.00	DATE 4/23/81
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.)		10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION		8. TELEPHONE AREA CODE AND NUMBER 02280-2741	
11. DATE OF INCORPORATION		12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: J.G. Timmerman ROYAL SLUIS P.O. Box 22 - 1600 AA Enkhuizen (Holland)		13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED: <input checked="" type="checkbox"/> 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.) <input checked="" type="checkbox"/> 13B. Exhibit B, Novelty Statement. <input checked="" type="checkbox"/> 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.) <input checked="" type="checkbox"/> 13D. Exhibit D, Additional Description of the Variety.	

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 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

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? YES NO (If "Yes," give name of countries and dates.)
Holland - December 14, 1978 **France - December 13, 1979**
Germany - December 10, 1979 **U.K. - December 31, 1979**

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? YES NO (If "Yes," give name of countries and dates.)

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? YES NO

17. The applicant(s) declare(s) that a viable sample of basic seed 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 Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

December 16, 1981
 (DATE)

J.G. Timmerman
 (SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

DWARF SNAP BEAN Nomara

=====

Exhibit A Pedigree

Nomara is derived from a Lud Ludibel type own parentline and an own parentline with a sturdier planttype, and more concentrated podsetting.

Line selection has been carried out for several years. Nomara appears to be stable and uniform through several generations of selfing, and during the seed increase program. *See letter from applicant dated Feb. 10, 1983.*

Exhibit B Novelty Statement

Nomara is most similar to Lud. It differs from Lud in having a sturdier planttype and a more concentrated podsetting.

Nomara has a slower seed development than Lud.

Exhibit D Additional Description

Nomara is a green podded dwarf snap bean, round podded and stringless. Pods are small compared with U.S.A. standard varieties, but very uniformly maturing.

It produces a high percentage of pods in the sieve sizes 2 and 3, with an average cross section of 6-9 mm and a podlength of approx. 10 cm.

Nomara is resistant to Anthracnose race α , β , δ and Common Bean Mosaic Virus race N.Y. 15, N.L. 1 type strain, N.L. 4 Mexican strain and Florida strain.

8100100



ROYAL SLUIS

KONINKLIJKE ZAAZAADBEDRIJVEN GEBROEDERS SLUIS B.V.

USDA, AMS
Livestock, Poultry, Grain &
Seed Division
Nat. Agric. Library Building
BELTSVILLE, Maryland 20705

POSTBOX 22, 1600 AA ENKHUIZEN
HOLLAND

U.S.A.

Attn.: mr. Robert J. Snyder

10th February 1983

Dear mr. Snyder,

Subject: Bean Application No. 8100100 'Nomara'

*Addendum
Exhibit A*

Please amend Exhibit A as follows:

Line selection has been carried out during 8 generations. 'Nomara'
In the last 4 generations no variants have been found, so ~~Flaveol~~ *cut 10/2/83*
appears to be stable and uniform through 4 generations of selfing
and during the seed increase program.

Concerning evidence of differences with Lud, we can inform you
that we need more time to specify the differences quantitatively
In our 1983 trials we will carry out the necessary measurements.
An extension till October 1983 will be sufficient.

Yours sincerely,

ROYAL SLUIS


J.G. Timmerman
Marketing dept.

8100100



ROYAL SLUIS

KONINKLIJKE ZAAIZAADBEDIJVEN GEBROEDERS SLUIS B.V.

USDA, AMS
Livestock, Poultry, Grain &
Seed Division
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BELTSVILLE, Maryland 20705

POSTBOX 22, 1600 AA ENKHUIZEN
HOLLAND

U.S.A.

Addendum to Exhibit B
CRS

Attn.: mr. Robert J. Snyder

14 october 1983

Dear mr. Snyder,

Subject: Bean application No. 8100100 Nomara

In our 1983 trials we found the following differences between Nomara. Figures concern a midseason planting in Enkhuizen and a midseason planting in Wageningen.

A. % sieve size distribution at optimum maturity

1. trial 1983 Enkhuizen Holland (august 10 and 11)
2. trial 1983 Wageningen Holland (august 15)

sieve size	Nomara	Lud	Nomara	Lud
1	0	11 (+ 6)	4	14
2	59 (+ 5) ²⁾	55 (+ 5)	55	48
3	33 (+ 3)	28 (+ 4)	36	35
4	8 (+ 2)	6 (+ 1)	5	3
5	0	0	0	0
6	0	0	0	0

Trial 1) was mechanically harvested 4 plots of 2 rows of
4 m. length of each variety

Trial 2) was handharvested, 25 plants of each variety

1) sieve size referres to sizes, mentioned in question 6 of
form LPGS - 470 - 12 (2 - 79). (Objective description of
variety bean).

Addendum to Exhibit B

2) the figures between brackets give the highest and lowest deviation of the four replications.

B. In both trials we recorded the number of pods with constrictions in sieve size 3. We took a random sample of 100 pods in each replication.

<u>Enkhuizen</u>		<u>Wageningen</u>	
<u>Nomara</u>	<u>Lud</u>	<u>Nomara</u>	<u>Lud</u>
12	39		
14	36	14	37
8	24		
13	31		

We hope this information is sufficient to process the application.

Yours sincerely,

ROYAL SLUIS


 J.G. Timmerman
 dept. marketing

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) ROYAL SLUIS, Kon. Zaaizaadbedr. Gebroeders Sluis B.V.	FOR OFFICIAL USE ONLY	
	PVPO NUMBER	8100100
ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) P.O. Box 22 1600 AA Enkhuizen Holland	VARIETY NAME OR TEMPORARY DESIGNATION	
	Nomara	

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 Hort. Society Colour Chart. The location of test area is Enkhuizen Holland. 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

<input type="text"/> <input type="text"/>	No. days earlier than	<input type="text"/>	} 1 = Tendercrop 3 = Kinghorn Wax 5 = Michelite 62 7 = Bush Blue Lake 290
.....	Same as	<input type="text"/>	
<input type="text" value="0"/> <input type="text" value="1"/>	No. days later than	<input type="text" value="8"/>	

- 2 = Kentucky Wonder
 - 4 = White Kidney
 - 6 = Dwarf Horticultural
 - 8 = Other (specify below)
- Smilo

3. PLANT:

1 = Determinate 2 = Indeterminate

cm height

<input type="text"/> <input type="text"/>	cm shorter than	<input type="text"/>	} comparison variety from above
.....	Same as	<input type="text" value="8"/>	
<input type="text"/> <input type="text"/>	cm taller than	<input type="text"/>	

cm spread Number primary branches near base

<input type="text" value="0"/> <input type="text" value="1"/>	cm narrower than	<input type="text" value="8"/>	} comparison variety from above
.....	width same as	<input type="text"/>	
<input type="text"/> <input type="text"/>	cm wider than	<input type="text"/>	

Branching habit:
1 = compact 2 = open

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

3. PLANT: (Cont'd)

2 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) _____

Days to 50% bloom

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

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

1	2	3	4	5	6
	63	32	5	-	-

3 sieve 1 0 cm length 0 7 mm width 0 7 mm thickness

4 sieve cm length mm width mm thickness

5 sieve cm length mm width mm thickness

6 sieve 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
- 2 Constrictions: 1 = none 2 = slight 3 = deep
- 3 Pod flesh: 1 = light 2 = medium 3 = dark
- 1 1 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
- 3 Seed development (Snap Bean): 1 = slow 2 = medium 3 = fast
- 1 Machine harvest: 1 = adapted 2 = not adapted
- 0 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
- 1 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:

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



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

2 1 = truncate ends 2 = rounded ends

1 7 gm/100 seed

gm/100 seed lighter than

gm/100 seed same as 8

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)
race α, β, δ (Alpha, Beta and Delta)

0 Fuscous blight

0 Rust (specify race below)

0 Red node virus

0 Powdery mildew

0 Pod mottle virus

0 Fusarium root rot

2 Bean common mosaic virus (specify strain below)
N.Y. 15

0 Pythium root rot

1 Mosaic mottle N.L. 1 type str.

0 Rhizoctonia root rot

1 Black root N.L. 4 Mexican str.

0 Pythium wilt

0 Bean yellow mosaic virus

0 Angular leaf spot

0 Curly top

0 Bacterial wilt

0 Other (specify below)

1 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)

2 Heat

1 Cold

2 Drought

0 Air pollution

13. COMMENTS: