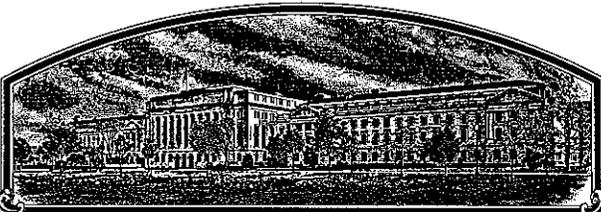


No.

8100034



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Rogers Brothers 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, 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.)

SNAPE BEAN

'Goldie'



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 23rd day of September in the year of our Lord one thousand nine hundred and eighty-two

Attest:

Kenneth P. Evans

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

John R. Block
Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
 AGRICULTURAL MARKETING SERVICE
 LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

FORM APPROVED
 OMB NO. 40-R3822

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 WAX 72-223		1b. VARIETY NAME GOLDIE		FOR OFFICIAL USE ONLY PV NUMBER 8100034	
2. KIND NAME SNAP BEAN		3. GENUS AND SPECIES NAME Phaseolus vulgaris		FILING DATE 12/18/80	TIME 9:30 ^{A.M.} P.M.
4. FAMILY NAME (BOTANICAL) LEGUMINOSEAE		5. DATE OF DETERMINATION FALL, 1973		FEE RECEIVED \$ 500.00 \$ 250.00	DATE 12/18/80 8/12/82
6. NAME OF APPLICANT(S) ROGERS BROTHERS SEED COMPANY		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) P. O. Box 80 IDAHO FALLS, ID 83401		8. TELEPHONE AREA CODE AND NUMBER (208) 522-0143	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation			10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION Delaware		11. DATE OF INCORPORATION Feb. 25, 1975
12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: Mr. Charles Green, Administrative Assistant ROGERS BROTHERS SEED COMPANY P. O. Box 80, Idaho Falls, ID 83401					

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)

13B. Exhibit B, Novelty Statement.

13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)

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.)

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.

NOV. 25, 1980
 (DATE)

Charles Green
 (SIGNATURE OF APPLICANT)
 for Rogers Brothers Seed Company

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, 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

- 5 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.
- 13a 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.
- 13b 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 differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 13d 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.
- 14a 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.)
- 15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

DEC 18 1980

GOLDIE

EXHIBIT A

ORIGIN AND BREEDING HISTORY OF VARIETY

GOLDIE, an early to mid-season wax podded garden bean variety was derived from the following sequence of hand pollinated crosses:

(Earliwax x Gallatin 50) x (Geneva Wax WB6-11)

Earliwax is an early maturing wax podded variety, Gallatin 50 is a mid to late season green podded, white seeded Tendercrop type, and Geneva Wax WB6-11 is a wax podded Puregold Wax type.

The above cross was completed during the Fall of 1968 and the selection sequence was as follows:

YEAR	GENERATION	PLOT	HARVESTED
1969	f ₂	691259	Bulked
1970	f ₃	701409-B	4 Single Plants
1970-71	f ₄	701409-BA	Greenhouse Increase
1971	f ₅	711471	4# 6 oz.
1972	f ₆	72223	No Seed Saved
1973	f ₆	73437-C	34#

The 34 pound increase of ST. 73437-C has been increased during subsequent generations and is the parentage of the present production of GOLDIE. Single plant selections have been taken from the St. 73437-C line and are currently being increased as purelines and will be used to maintain the genetic and varietal purity of the variety.

A flat podded variant type plant has occurred in the increase population of GOLDIE at a frequency of approximately one flat pod plant per 8,000 plants.

GOLDIE

EXHIBIT A (Supplement)

ORIGIN AND BREEDING HISTORY OF VARIETY

Please add the following statement:

The bean variety GOLDIE has been grown and observed for at least three generations since the final selection and is to the best of our knowledge genetically stable and uniform for type, except for the occasional flat pod plant as previously stated.



GOLDIE

EXHIBIT B

NOVELTY STATEMENT - (Revised 12/29/81)

GOLDIE is most similar to the wax bean variety Earliwax except GOLDIE has a 1 cm longer pod, has slower seed development and is three days later in maturity. The leaf color of GOLDIE is darker than Earliwax, more closely resembling the 139A-B color charts of the Royal Horticultural Society as compared to the leaves of Earliwax which more closely resemble the 137A color chart.

GOLDIE differs from the wax bean variety Gabriella in as much as the average pod length for Gabriella is 10 cm as compared to 12.6 cm for GOLDIE in Idaho trials. In addition, Gabriella has the ARE gene resistance to anthracnose while GOLDIE does not.

(The following supplemental statement should be added to Exhibit A for the Goldie PVP application):

The bean variety GOLDIE has been field or plot grown in the field each year since 1972, a total of 10 years, and to the best of our knowledge, is genetically stable and uniform for type.

Exhibit A
addendum
ck

GOLDIE

EXHIBIT B

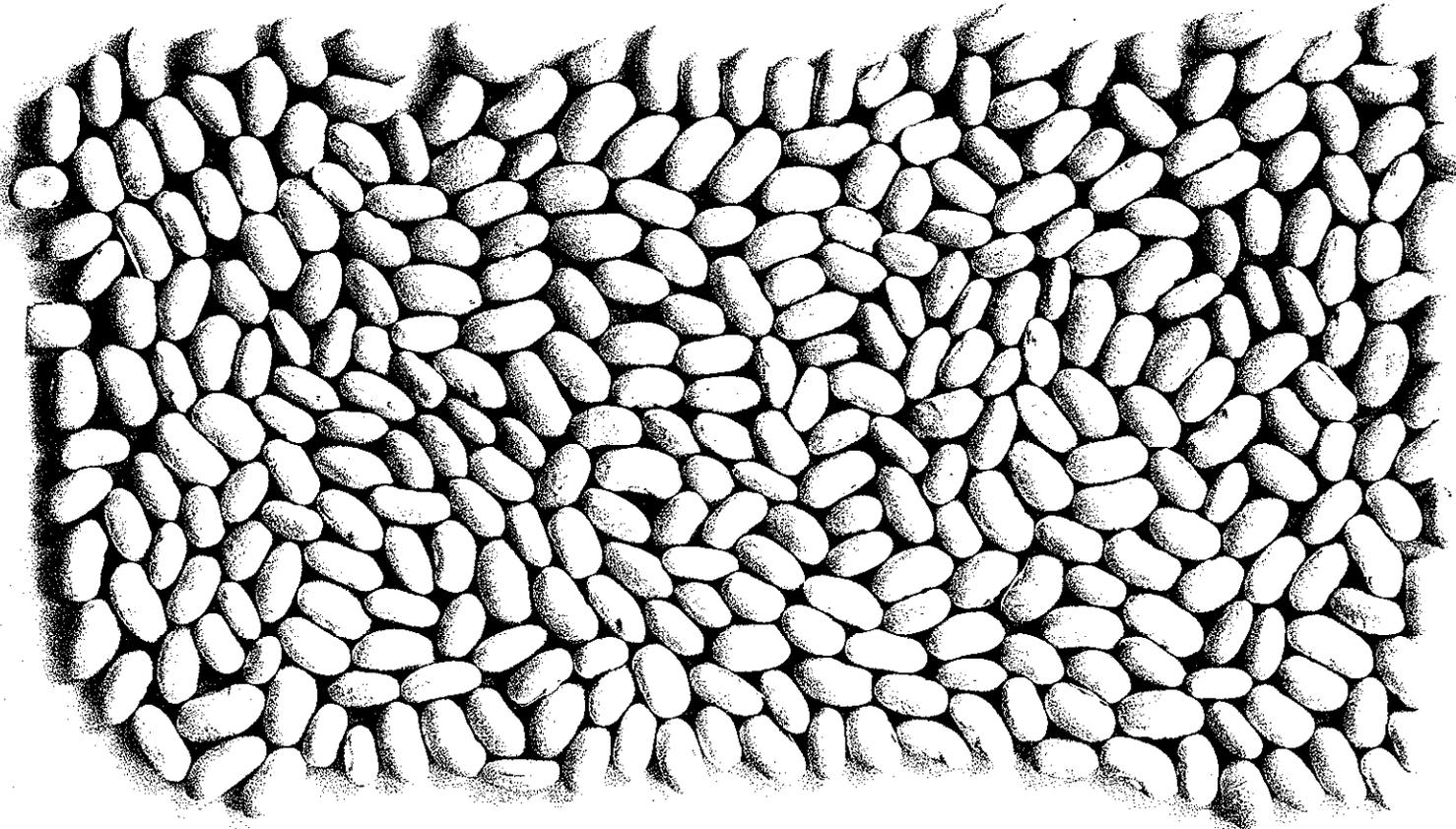
SUPPLEMENT TO NOVELTY STATEMENT - 7-12-82

The variety GOLDIE differs from the wax podded variety, Goldjuwel in that the seed of GOLDIE is larger, longer and more cylindrical/kidney shaped, while Goldjuwel has a more round to oval shape with rounded ends. The ends of the GOLDIE seeds are more flat to truncated. There are approximately 1,700 seeds of GOLDIE per pound, while there are approximately 2,075 seeds per pound of Goldjuwel.

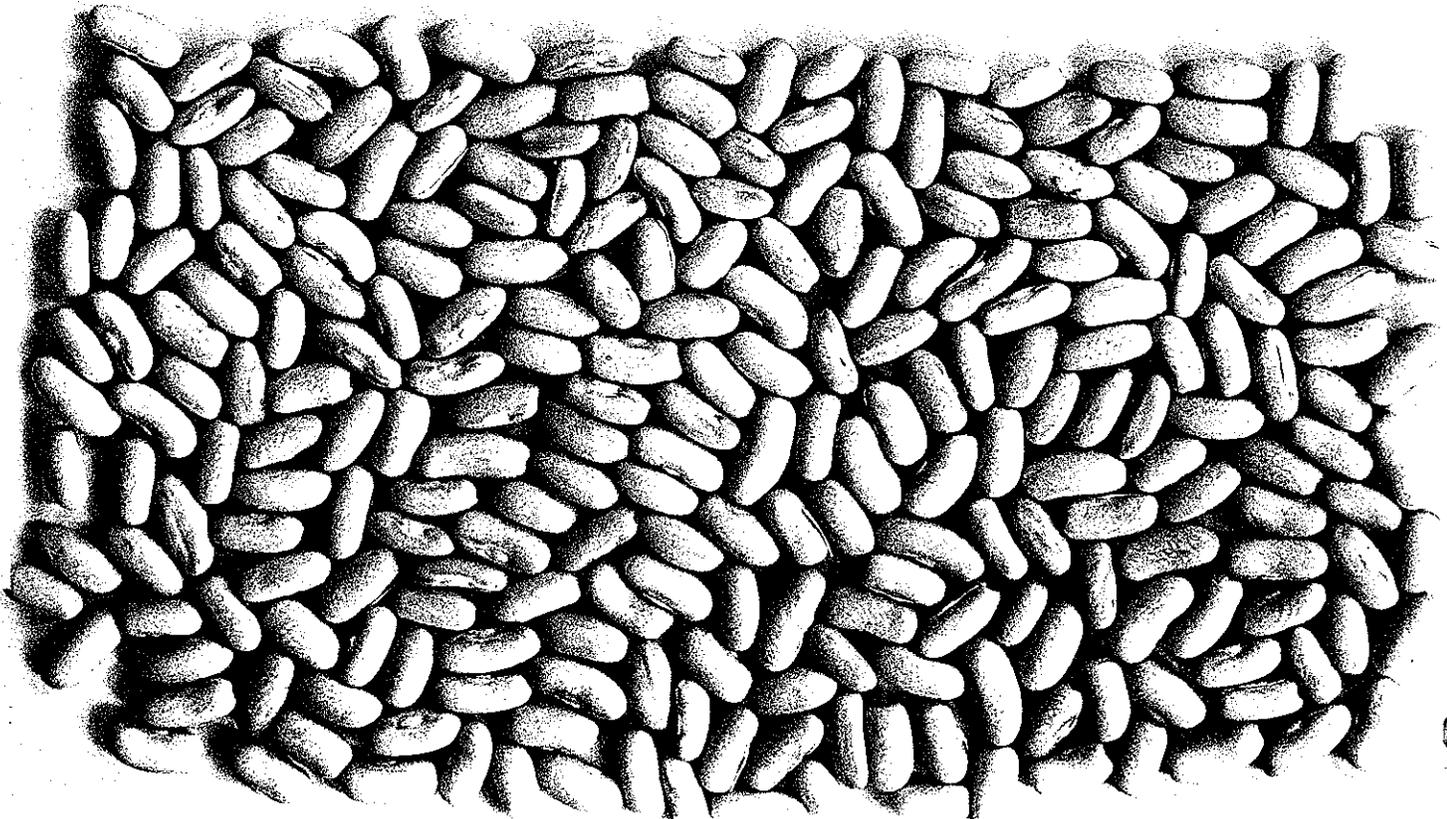
= 26.7g/100 seed

= 22g/100 seed

GOLDJUWEL



GOLDIE



GOLDIE

EXHIBIT B

NOVELTY STATEMENT - SUPPLEMENT

Following is a comparative data for pod length and days to canning for the varieties GOLDIE and Earliwax:

A - POD LENGTH:

Ten normal plants were selected from field-grown plots of GOLDIE and Earliwax during the summer of 1980. The longest pod from each plant was measured and the average length for each set of 10 pods were as follows:

GOLDIE ----- 12.6 (S.O = 1.0)

EARLIWAX ----- 11.6 (S.O = 0.5)

B. - DAYS TO CANNING: (Twin Falls, Idaho)

VARIETY	DAYS TO CANNING							
	1973	1974	1975	1976	1977	1979	1980	
GOLDIE	55	60	63	71	64	70	66	\bar{X} 64
EARLIWAX	54	55	61	66	61	69	64	\bar{X} 61

GOLDIE

EXHIBIT B (Supplement)

NOVELTY STATEMENT

Please add the following statement:

Based upon the color chart of the Royal Horticultural Society, London, the leaf color of GOLDIE most closely matches the 146-A of the Yellow-Green group. The Royal Horticultural Society color rating for Earliwax is not available at this time, but is believed to most closely resemble the 146-B of the Yellow-Green group.

RECEIVED
MAY 12 1954
U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.
PLANT INDUSTRY DIVISION
PLANT INTRODUCTION STATION

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) ROGERS BROTHERS SEED COMPANY	FOR OFFICIAL USE ONLY
	PVPO NUMBER 8100034
ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) P. O. Box 80 IDAHO FALLS, ID 83401	VARIETY NAME OR TEMPORARY DESIGNATION GOLDIE

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 _____

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

No. days later than

- 1 = Tendercrop
- 3 = Kinghorn Wax
- 5 = Michelite 62
- 7 = Bush Blue Lake 290

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

3. PLANT:

1 = Determinate 2 = Indeterminate

cm height

cm shorter than

..... Same as

cm taller than

comparison variety from above

cm spread

Number primary branches near base

cm narrower than

..... width same as

comparison variety from above

Branching habit:
1 = compact 2 = open

cm wider than

Main stalk: 1 = brittle 2 = wiry

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

1 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 2 Days to 50% bloom

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

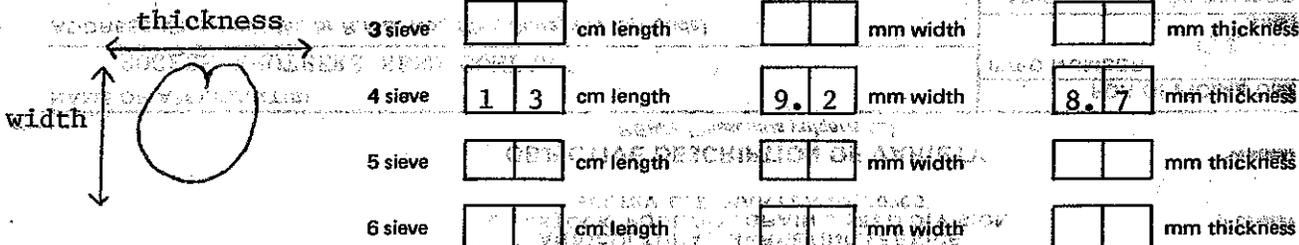
5 Exterior color: 1 = light green (as light or lighter than Bountiful)
2 = medium green
3 = dark green (as dark or darker than Bush Blue Lake 290)
4 = light yellow (Brittlewax)
5 = golden yellow (Cherokee Wax)
6 = green-red variegated (Horticultural)
7 = other (specify) _____

% 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
	50		45	5	



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

2 Constrictions: 1 = none 2 = slight 3 = deep

2 Pod flesh: 1 = light 2 = medium 3 = dark

1 0 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

2 Seed development (Snap Bean): 1 = slow 2 = medium 3 = fast

1 Machine harvest: 1 = adapted 2 = not adapted

6 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) Earliwax
(6) Other (specify) _____

7. SEED COAT COLOR:

1 1 = Monochrome 2 = Polychrome 2 1 = shiny 2 = dull

11 Primary color: 1 = white 2 = yellow 3 = buff 4 = tan

none Secondary color: 5 = brown 6 = pink 7 = red 8 = purple
9 = blue 10 = black 11 = other (specify) off white to light grey

none Color Pattern: 1 = none 2 = splashed 3 = mottled 4 = striped 5 = flecked 6 = dotted

none 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)

none 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

1 Side view:



1 = oval to oblong

2 = round

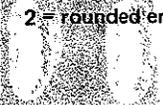
3 = reniform

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

1

1 = truncate ends

2 = rounded ends



2 5

gm/100 seed

0 5

gm/100 seed lighter than

8

gm/100 seed same as

comparison variety from page one

0 4

gm/100 seed heavier than

7

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

Anthraxnose (specify race below)

0

Fuscos blight

0

Rust (specify race below)

0

Red node virus

0

Powdery mildew

0

Pod mottle virus

1

Fusarium root rot

2

Bean common mosaic virus (specify strain below)

0

Pythium root rot

0

Mosaic mottle

0

Rhizoctonia root rot

0

Black root

0

Pythium wilt

2

Bean yellow mosaic virus

0

Angular leaf spot

0

Curly top

0

Bacterial wilt

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

Other (specify below)

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

0

Heat

0

Cold

0

Drought

0

Air pollution

13. COMMENTS:

DEC 18 1980

GOLDIE

EXHIBIT D

ADDITIONAL DESCRIPTION OF THE VARIETY

The bean variety GOLDIE has an erect, compact bush with small leaves, thus resulting in a rather open type bush. The pods are held well off the ground with a concentrated pod set. Most of the pods are produced near the periphery of the plant which makes it well adapted to mechanical harvest. The snapped pods average 12.6 cm in length and are straighter and smoother than the pods of Earliwax and other wax pod varieties of comparable type and maturity. At prime canning stage there is a high yield of slim pods, of 24/64 inch diameter (4 sieve) or smaller, with only about 20% of the pods being larger than this.

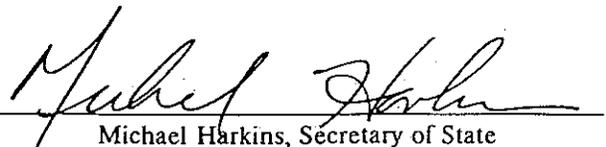
State of Delaware



Office of Secretary of State

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE
DO HEREBY CERTIFY THAT "ROGERS BROTHERS SEED COMPANY", FILED A
CERTIFICATE OF AMENDMENT, CHANGING ITS CORPORATE TITLE TO "ROGERS
NK SEED CO.", ON THE TWENTY-SIXTH DAY OF DECEMBER, A.D. 1990, AT 10:01
O'CLOCK A.M.




Michael Harkins, Secretary of State

AUTHENTICATION:



DATE: 10/08/1991

DO NOT WRITE IN THIS SPACE

AMENDED
STATEMENT AND DESIGNATION
BY
FOREIGN CORPORATION

ROGERS NK SEED CO.

_____, a corporation
organized and existing under the laws of Delaware,
and which is presently qualified for the transaction of intrastate business in the
State of California, makes the following statements and/or designation:

That the name of the corporation has been changed to that hereinabove set forth
and that the name relinquished at the time of such change was _____

ROGERS BROTHERS SEED COMPANY

ROGERS NK SEED CO.
(Name of Corporation)

William B. Albers
(Signature of corporate officer)

William B. Albers, President
(Typed name and title of officer signing)

INSTRUCTIONS:

1. If this Amended Statement shows a change of corporate name, there must be attached to this Amended Statement a certificate of an authorized public official of the state or place of incorporation, that such change of name was made in accordance with the laws of that state or place.
2. For filing this Amended Statement there is a fee of \$15.00.

Office of the Secretary of State

I, WILLIAM T. QUILLEN, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THAT THE SAID "ROGERS NK SEED CO.", FILED A CERTIFICATE OF AMENDMENT, CHANGING ITS NAME TO "ROGERS SEED CO.", THE FIFTH DAY OF MAY, A.D. 1994, AT 9-00 CLOCK A.M.



William T. Quillen

William T. Quillen, Secretary of State

0810041 8320

AUTHENTICATION: 7120759

DATE: 05 10 94

CERTIFICATE OF AMENDMENT
OF
CERTIFICATE OF INCORPORATION
OF
ROGERS NK SEED CO.

Adopted in accordance with the provisions
of Section 242 of the General Corporation
Law of the State of Delaware

EFFECTIVE DATE: June 1, 1994

We, Willem van Overschot, President, and Richard B. Geller, Secretary, of Rogers NK Seed Co., a corporation existing under the laws of the State of Delaware, do hereby certify as follows:

FIRST: The Certificate of Incorporation of the corporation was filed on 2/27/75.

SECOND: The Certificate of Incorporation of said corporation has been amended as follows:

By striking out the whole of Article I thereof as it now exists and inserting in lieu and instead thereof, a new Article I, reading as follows:

ARTICLE I

Name

The name of the Corporation is ROGERS SEED CO.

THIRD: Such amendment has been duly adopted in accordance with the provisions of the General Corporation Law of the State of Delaware, by the unanimous written consent of all of the stockholders entitled to vote in accordance with the provisions of Section 228 of the General Corporation Law of the State of Delaware.

FOURTH: See attached Written Consent of Sole Shareholder and Board of Directors' Resolution.

IN WITNESS WHEREOF, we have signed this certificate this 13th day of April,
1994.

Willem van Overschot
Willem van Overschot, President

Richard B. Geller
Richard B. Geller, Secretary

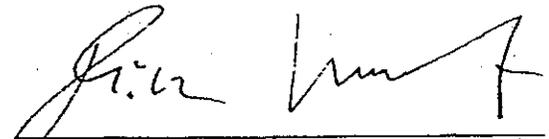
ROGERS NK SEED CO.

WRITTEN CONSENT OF SOLE SHAREHOLDER

SANDOZ CORPORATION, owner of all of the issued and outstanding shares of ROGERS NK SEED CO., hereby consents, pursuant to Section 228 of the Delaware General Corporation Law, to the adoption of the following resolution as and for the act of the shareholder:

RESOLVED, that SANDOZ CORPORATION, as sole shareholder, approves the amendment to Article I of the Certificate of Incorporation of ROGERS NK SEED CO., changing its name to **ROGERS SEED CO.**

Dated: April 22, 1994



Heinz P. Imhof,
Chief Executive Officer
Sandoz Corporation

06 18 31

01

ROGERS NK SEED CO.

RESOLUTION

RESOLVED, that according to Section 242 of the General Corporation Law of the State of Delaware, that Article I of the Certificate of Incorporation be amended, effective June 1, 1994, to read as follows: The name of the Corporation is **ROGERS SEED CO.**; and, further,

RESOLVED, that the appropriate officers of Rogers NK Seed Co. be, and they hereby are, authorized to take any and all further action and execute and deliver any and all further documents that may be necessary or desirable in order to carry out and effectuate fully the purposes set forth in the foregoing resolution.

ADOPTED UNANIMOUSLY BY THE BOARD
MARCH 31, 1994

Richard B. Geller
Richard B. Geller, Secretary

State of Delaware
Office of the Secretary of State PAGE 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"ROGERS SEED CO.", A DELAWARE CORPORATION,
WITH AND INTO "NOVARTIS SEEDS, INC." UNDER THE NAME OF "NOVARTIS SEEDS, INC.", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-FIFTH DAY OF JUNE, A.D. 1997, AT 9 O'CLOCK A.M.

A CERTIFIED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS FOR RECORDING.



Edward J. Freel

Edward J. Freel, Secretary of State

0829320 8100M
971211787

AUTHENTICATION: 8531908
06-26-97

DATE:

20

STATE OF DELAWARE
 SECRETARY OF STATE
 DIVISION OF CORPORATIONS
 FILED 09:00 AM 06/25/1997
 971211787 - 0829320

**CERTIFICATE OF MERGER
 OF
 ROGERS SEED CO.
 INTO
 NOVARTIS SEEDS, INC.**

The undersigned corporation organized and existing under and by virtue of the General Corporation Law of Delaware,

DOES HEREBY CERTIFY:

FIRST: That the name and state of incorporation of each on the constituent corporations of the merger is as follows:

NAME	STATE OF INCORPORATION
Novartis Seeds, Inc.	Delaware
Rogers Seed Co.	Delaware

SECOND: That an Agreement and Plan of Merger between the parties to the merger has been approved, adopted, certified, executed and acknowledged by each of the constituent corporations in accordance with the requirements of section 251 of the General Corporation Law of Delaware

THIRD: That the name of the surviving corporation is Novartis Seeds, Inc.

FOURTH: That the Certificate of Incorporation of Novartis Seeds, Inc., a Delaware corporation which will survive the merger, shall be the Certificate of Incorporation of the surviving corporation.

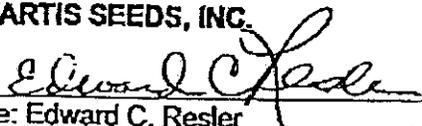
FIFTH: That the executed Agreement and Plan of Merger is on file at the principal place of business of the surviving corporation, the address of which is 7500 Olson Memorial Highway, Golden Valley, MN 55427.

SIXTH: That a copy of the Agreement and Plan of Merger will be furnished by the surviving corporation, on request and without cost, to any stockholder of any constituent corporation.

SEVENTH: That this Certificate of Merger shall be effective on July 1, 1997.

Dated June 23, 1997

NOVARTIS SEEDS, INC.

By: 
 Name: Edward C. Resler
 Title: Vice President & General Counsel