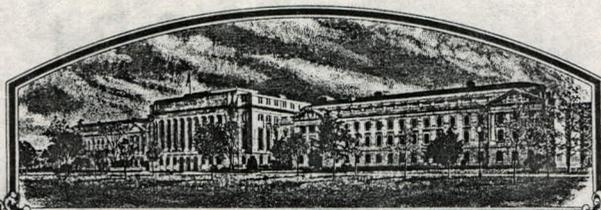


No.

8800089



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

PEA

'Genie'

CORRECTED CERTIFICATE

**Original grant November 30, 1988.
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 28th day of February in the year of our Lord one thousand nine hundred and eighty-nine.*

Attest:

Kenneth E. Swan
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Clayton Yentler
Secretary of Agriculture



1968



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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

FORM APPROVED: OMB NO. 0681-0055

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

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).

1. NAME OF APPLICANT(S) Gallatin Valley Seed Co., a division of Rogers Brothers Seed Company		2. TEMPORARY DESIGNATION HP328-1-1-16	3. VARIETY NAME 'Genie'
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) P. O. Box 4727 Boise, ID 83711-0727		5. PHONE (Include area code) 208/322-7272	FOR OFFICIAL USE ONLY PVPO NUMBER 8800089
6. GENUS AND SPECIES NAME <u>Pisum sativum</u>	7. FAMILY NAME (Botanical) Leguminosae		FILING DATE <u>Feb. 17, 1988</u> TIME <u>1:30</u> <input type="checkbox"/> A.M. <input checked="" type="checkbox"/> P.M.
8. KIND NAME Freezer Pea	9. DATE OF DETERMINATION 1985		FEES RECEIVED AMOUNT FOR FILING \$ <u>1800.00</u> DATE <u>Feb. 9, 1988</u> AMOUNT FOR CERTIFICATE \$ <u>200.00</u> DATE <u>Sept. 19, 1988</u>
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 Delaware			12. DATE OF INCORPORATION 2-25-75
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Gallatin Valley Seed Co., a division of Rogers Brothers Seed Company P.O. Box 4727 Boise, ID 83704 PHONE (Include area code): 208/322-7272			

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 Variety (Request form from Plant Variety Protection Office.)
- d. Exhibit D, Additional Description of Variety.
- e. 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.) 2/2-9/1988 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) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?
 Yes (If "Yes," give date)
 No

19. HAS THE VARIETY BEEN RELEASED, 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 <u>Calvin Lamborn</u>	DATE <u>Jan. 28 1988</u>
SIGNATURE OF APPLICANT <u>Alfred E Hill</u>	DATE <u>Feb. 5, 1988</u>

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.)

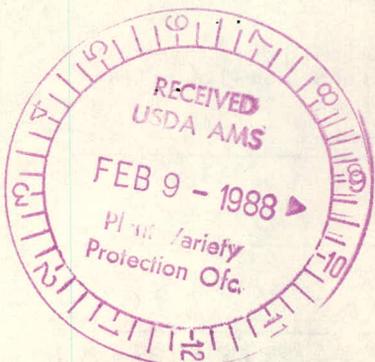
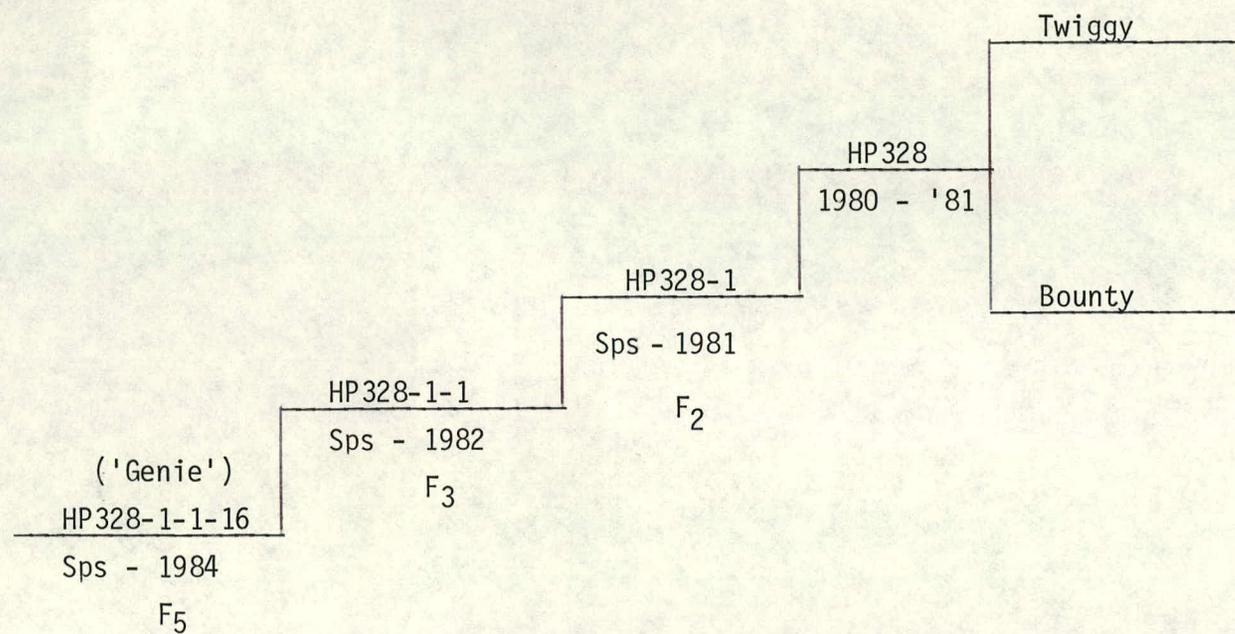


Exhibit 14A.

Pedigree Chart For: 'Genie' (HP328-1-1-16)
By: Gallatin Valley Seed Co.

January 28, 1988



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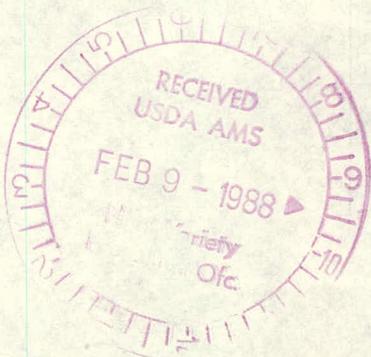


Exhibit 14A. (continued)

January 28, 1988

Origin and Breeding History of 'Genie'

'Genie' is the result of a hand-pollinated cross between 'Twiggy' (♀) and 'Bounty' (♂) in 1980. Both parental lines were developed by Gallatin Valley Seed Co. 'Genie' was selected as a single plant selection in 1984. It has been observed for stability since then. The only variants observed have been a trace of albino and varigate mutants at a rate of less than one per thousand.

Trial sales will begin in 1988 with 27,185 pounds to be trialed.

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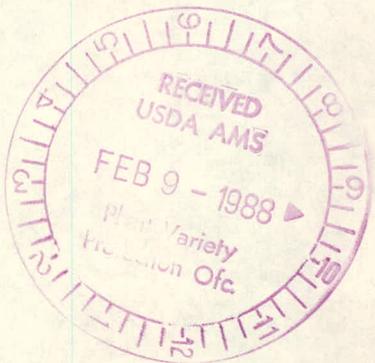
Exhibit 14B.

January 28, 1988

Data Indicative of Novelty

'Genie' is most similar to 'Bounty', but differs in having no leaflets (only tendrils and stipules), whereas 'Bounty' has normal foliage.

9800089



8. PODS:

1 Shape: 1 - STRAIGHT 2 - SLIGHTLY CURVED 2 End: 1 - POINTED (Alderman) 2 - BLUNT (Alaska)
 1 Shape: 3 - CURVED
 2 Color: 1 - LIGHT GREEN (Alaska WR) 2 - MEDIUM GREEN 3 - DARK GREEN (Alderman)
 2 Color: 4 - OTHER (Specify) _____
 1 Surface: 1 - SMOOTH 2 - ROUGH 2 Surface: 1 - SHINY 2 - DULL
 3 Borne: 1 - SINGLE 2 - DOUBLE 3 - SINGLE AND DOUBLE 4 - SINGLE, DOUBLE, & TRIPEE
 3 Borne: 5 - DOUBLE & TRIPLE 6 - TRIPLE 7 - OTHER (Specify) _____
 0 8 CM. LENGTH 1 2 MM. WIDTH (Between sutures) 0 8 NO. SEEDS PER POD

9. SEEDS (95-100 Tenderometer):

2 Color: 1 - LIGHT GREEN 2 - GREEN 3 - DARK GREEN 4 - OTHER (Specify) _____
 Seive: % 0 3 1 2 2 4 2 6 2 2 1 1 0 2 0 0 3 9 3 AVERAGE

SEEDS (Dry, Mature):

4 Shape: 1 - FLATTENED 2 - ANGULAR 3 - OVAL 4 - ROUNDED
 3 Surface: 1 - SMOOTH 2 - DIMPLED 2 Surface: 1 - SHINY 2 - DULL
 3 Surface: 3 - WRINKLED
 1 Color Pattern: 1 - MONOCOLOR 2 - MOTTLED 3 - STRIPED 4 - DOTTED
 4 Primary Color: 1 - CREAMY-WHITE 2 - CREAM & GREEN 3 - LIGHT GREEN 4 - MEDIUM GREEN
 0 Secondary Color: 5 - DARK GREEN 6 - BLUE-GREEN 7 - YELLOW 8 - BROWN 9 - RED
 0 Secondary Color: 10 - GRAY 11 - BLACK
 2 Hilum Floor Color: 1 - WHITE 2 - TAN 1 Cotyledon Color: 1 - GREEN 2 - YELLOW 3 - ORANGE
 3 4 GRAMS PER 100 SEEDS

10. DISEASE: (0 = Not Tested; 1 = Susceptible; 2 = Resistant) (3) Tolerant

2 FUSARIUM WILT (Race 1) 0 NEAR-WILT 0 DOWNY MILDEW
 0 ASCOCHYTA BLIGHT 2 POWDERY MILDEW 0 BACTERIAL BLIGHT
 0 MOSAIC 0 PEA ENATION MOSAIC 0 YELLOW BEAN MOSAIC
 3 OTHER (Specify) Pea Leaf Roll Virus

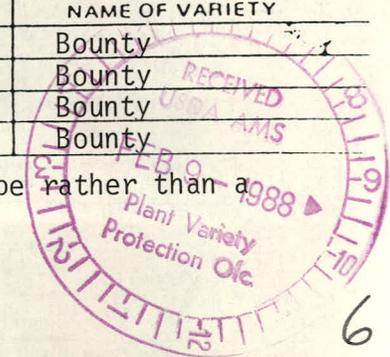
11. INSECT: (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

0 APHIDS OTHER (Specify) _____

12. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Leafiness	Bounty	Fresh Seed Color	Bounty
Leaf Color	Bounty	Mature Seed Color	Bounty
Pod Color	Bounty	Seed Shape	Bounty
Pod Shape	Bounty	Plant Habit	Bounty

COMMENTS: 'Genie' differs from 'Bounty' in that it is an Afille type rather than a normal leaf type.



8800089

Exhibit 14D.

January 28, 1988

Additional Description of 'Genie'

'Genie' is a 16 - 17 node, afilea freezer. Pods are born predominately as doubles, and with 8 - 10 peas per pod. The average sieve size is 3.9.

'Genie' is resistant to Race 1 (Fusarium Wilt), Powdery Mildew, and tolerant to Pea Leaf Roll Virus.

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Exhibit 14E.

January 28, 1988

Statement of The Basis of Applicants Ownership

'Genie' (HP328-1-1-16) is the result of a hand-pollinated cross between Twiggy (♀) and 'Bounty' (♂). All selections and increases in the development of 'Genie' have been made by Gallatin Valley Seed Co., the owner.

9300088

10/10/88

Department of Agriculture

Washington, D.C. 20250
Telephone: (202) 720-1000
Fax: (202) 720-1000



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
Michael Harkins, Secretary of State
AUTHENTICATION: *M. Wagner*
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.



1998

State of Delaware

Office of the Secretary of State

PAGE 1

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 O'CLOCK A.M.



William T. Quillen

William T. Quillen, Secretary of State



1991

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



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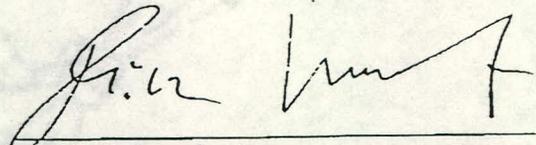
ROGERS NK SEED CO.

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



1998

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



1998

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.



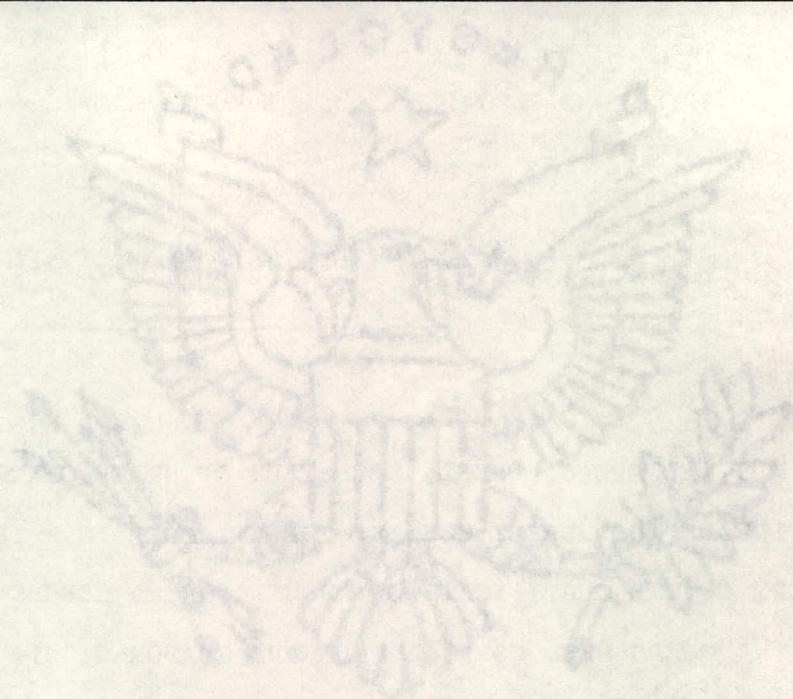
Edward J. Freel

Edward J. Freel, Secretary of State

0829320 8100M
971211787

AUTHENTICATION: 8531908
06-26-97

DATE:



1998

RECYCLED PAPER

STATE OF DELAWARE
 SECRETARY OF STATE
 DIVISION OF CORPORATIONS
 FILED 09:00 AM 06/25/1997
 971211767 - 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.

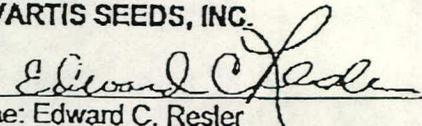
FIFTH: That the executed Agreement and Plan of Merger is on file at the principal place of business of the surviving corporation, the address of which is 7500 Olson Memorial Highway, Golden Valley, MN 55427.

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



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