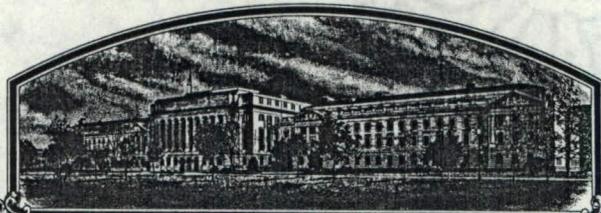


No.

8500079



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

## NPI AgService Corporation

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 (P.L. 85-625, T. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

GARDEN BEAN

'EZ Harvest'



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 *29th* day of *May* in the year of our Lord one thousand nine hundred and eighty-seven.

Attest:

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

*Richard E. Lyng*  
Secretary of Agriculture



193



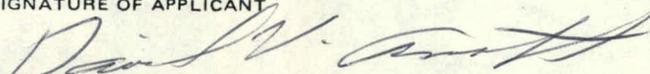
U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

FORM APPROVED: OMB NO. 0581-0055

**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) NPI AgService		2. TEMPORARY DESIGNATION AS-28		3. VARIETY NAME EZ Harvest	
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) 5240 Gaffin Rd. SE Salem, OR 97301		5. PHONE (Include area code) (503) 581-8899		FOR OFFICIAL USE ONLY VPVO NUMBER 8500079	
6. GENUS AND SPECIES NAME Phaseolus vulgaris L.		7. FAMILY NAME (Botanical) Leguminosae		FILING DATE 3/6/85 TIME 2:30 <input type="checkbox"/> A.M. <input checked="" type="checkbox"/> P.M.	
8. KIND NAME Garden bean		9. DATE OF DETERMINATION 8/15/1984 <i>per letter 12/9/86 via</i>		FEES RECEIVED AMOUNT FOR FILING \$ 1,800 DATE 3/6/85 AMOUNT FOR CERTIFICATE \$ 200.00 DATE April 28, 1987	
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) Corporation				12. DATE OF INCORPORATION 1971	
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Oregon				12. DATE OF INCORPORATION 1971	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Greg Loberg NPI AgService 5240 Gaffin Rd. SE Salem, OR 97301 PHONE (Include area code): (503) 581-8899					
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 				DATE 2/22/85	
SIGNATURE OF APPLICANT				DATE	

## INSTRUCTIONS

**General:** Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$1,800 fee (\$200 filing fee and \$1,600 examination fee) to 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 section 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.



## EXHIBIT A Origin and Breeding History of the Variety

'EZ HARVEST' *mm*

<"AS-28"> originated as an individual plant selected from a population of crosses involving diverse bush Blue Lake types of beans. The parentage is undocumented but is known to include Oregon State University and other Oregon-adapted parents.

A pedigree selection method of breeding was followed until genetic stability was reached in 1983. Observation for phenotypic trueness at four locations in 1984 has demonstrated good uniformity among locations and good stability compared to 1983. In addition, two planting dates at one location and four dates overall in 1984 showed the presence of stability and uniformity across time of planting.

Early generation selection criteria included maturity, bush form, leaf size and color, and pod position, harvestability, dimensions, and raw quality. Specifically, "AS-28" was chosen for earliness, erectness, medium-sized dark-green leaves, concentrated and relatively high pod sets, easily harvested pods, and pods with short spurs, round cross-sections, medium sieve sizes, medium lengths, smoothness, firmness, Blue Lake flavor, and low interocular cavitations. NPI AgService maintains that "AS-28" is stable and consistent for these characteristics.



8500028

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**ADDENDUM****Exhibit B - NOVELTY STATEMENT**

'EZ Harvest' most closely resembles 'EZ Pick', but differs by reaching optimum green harvest at least five days earlier (Table 2). Both varieties reach optimum green harvest when about 50% of the pods are in sieve sizes 1-4. By harvesting over a range of time preceding and extending beyond optimum for these varieties when planted on the same day, time of optimum harvest can be determined directly or accurately predicted.

Table 4 further demonstrates differences in maturity by illustrating that 'EZ Harvest' reaches first bloom 2-4 days earlier than 'EZ Pick'.



Table 2. Comparison of 'EZ Pick' and 'EZ Harvest' for time of optimum green harvest.

'EZ Pick'			'EZ Harvest'		
Harvest Date	Sieve size 1-4 (%)	Optimum <sub>1</sub> Harvest	Harvest Date	Sieve size 1-4 (%)	Optimum <sub>1</sub> Harvest
<u>Corvallis, OR, planted 29 April 1985<sup>2</sup></u>					
7-13	77	7-18	7-10	54	7-12
7-15	64		7-12	49	
7-17	53		7-15	32	
<u>Corvallis, OR, planted 22 May 1985<sup>2</sup></u>					
7-27	63	7-29	7-22	47	7-21
7-29	50		7-25	23	
<u>Salem, OR, planted 16 May 1986<sup>3</sup></u>					
7-28	67	8-1	7-28	21	7-26
7-30	63		7-30	20	
7-31	51		7-31	16	
8-4	48		8-4	6	
<u>Salem, OR, planted 12 June 1986<sup>4</sup></u>					
8-11	100 <sup>5</sup>	8-20	8-11	73	8-13
8-13	88		8-13	46	
8-15	-- <sup>6</sup>		8-15	22	
8-18	62		8-18	12	

<sup>1</sup> Optimum harvest is the time when 50% of the pods are in sieve sizes 1-4. In the processing industry, this is normally a visual estimate that can be very reliable with experience in the variety and the effect of the environment. Consequently, while some dates of optimum harvest are predictions, they should be considered accurate due to the experience of the evaluator.

<sup>2</sup> Replicated 4 times.

<sup>3</sup> Replicated 3 times.

<sup>4</sup> Replicated 2 times.

<sup>5</sup> No pods were larger than sieve 4.

<sup>6</sup> Unaccounted error invalidates this number.

GL:jb  
12-9-86

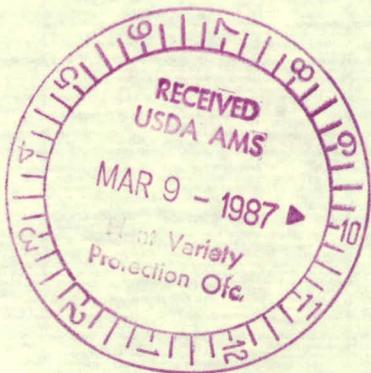


8500079

Table 4. Comparison of 'EZ Pick' and 'EZ Harvest' for time of beginning bloom in 1986.

Planting date	Date of first flower	
	'EZ Pick'	'EZ Harvest'
<u>Salem, OR</u>		
5-16	7-6	7-2
5-28	7-14	7-12
<u>Janesville, WI</u>		
5-5	6-20	6-17
6-26	7-31	7-29

GL:de  
03-04-87



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) NPI AgService	<b>FOR OFFICIAL USE ONLY</b>	
	PVPO NUMBER	8500079
	VARIETY NAME OR TEMPORARY DESIGNATION	(AS-28) EZ HARVEST

ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code)  
5240 Gaffin Rd. SE  
Salem, OR 97301

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 Salem Oregon . 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
- 2 = Kentucky Wonder
- 3 = Kinghorn Wax
- 4 = White Kidney
- 5 = Michelite 62
- 6 = Dwarf Horticultural
- 7 = Bush Blue Lake 290
- 8 = Other (specify below)
- 9 = Oregon State Univ. 58
- 10 = Tempo
- 11 = Bush Blue Lake 274

3. PLANT:

1 = Determinate      2 = Indeterminate

- 12 = Smilo
- 13 = Sprite

cm height

cm shorter than .....

Same as ..

cm taller than .....

cm spread

-  Number primary branches near base

cm narrower than .....

width same as ...

cm wider than .....

comparison variety from above

Branching habit:  
1 = compact    2 = open

Main stalk: 1 = brittle    2 = wirey

1 = stout    2 = thin

8200053

6

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

VAlk per letter 2  
12/20/85

1 = truncate ends    2 = rounded ends

2  9 gm/100 seed

0  5 gm/100 seed lighter than .....  1

gm/100 seed same as ....  3

0  5 gm/100 seed heavier than .....  2



- 1. BBL 274
- 2. BBL 290
- 3. Galamore

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):

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

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)  
BV<sub>1</sub>

0 Pythium root rot

0 Mosaic mottle

0 Rhizoctonia root rot

0 Black root

0 Pythium wilt

1 Bean yellow mosaic virus

0 Angular leaf spot

0 Curly top

0 Bacterial wilt

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

2 Halo blight (specify race below)  
tolerance

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 Weevils

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:

"AS-28" is 3-4 days earlier than "AS-52" at green harvest and 5cm shorter. Both cultivars are particularly distinguished by extremely easy pod removal at green harvest (see novelty statement). "AS-28" exhibits few pod imperfections and has a relatively erect bush form for an Oregon-adapted bush Blue Lake type of bean.

## EXHIBIT D Additional Description of Variety

NPI AgService believes that the easy pod removal characteristic at green harvest of <sup>1EZ HARVEST 1AL</sup> "AS-28" offers an unique new opportunity to minimize mechanical harvest loss, reduce cullage, and improve processing plant efficiency.

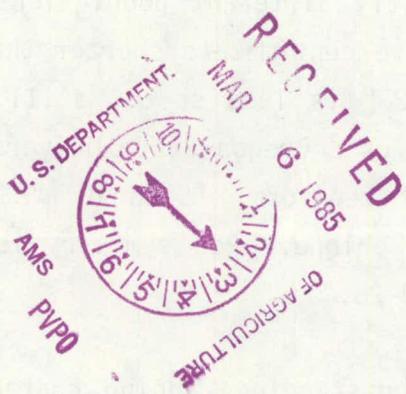
Mechanical harvest during 1984 at two locations demonstrated that, in comparison to cultivars in use in western Oregon, "AS-28" was harvested with fewer broken pods, leaves, and stems. With larger field trials in 1985, we intend to further demonstrate that this translates into higher processing efficiency.

In addition to easily removed pods, several plant type factors contribute to the potential for lower trash and broken beans during mechanical harvest. This bean stands quite erectly, with the pods fairly clustered and positioned relatively high in the bush. Also, the interweaving of vines is less than in many beans, so that the vines more readily break away from the mechanical harvester as the pods are detached.

Because "AS-28" and "AS-52" possess the same novelty and are quite similar, a direct comparison would be useful. Both lines originated as individual plants selected from similar but slightly different populations. "AS-28" is up to four days earlier and about five centimeters shorter than "AS-52." "AS-52" is extremely erect, while "AS-28" is less so but still distinctly more erect than, for example, currently used Oregon State University beans. Seed of "AS-52" tends to be slightly reniform. Seed of "AS-28" shows little such tendency, and is generally oblong. Pod symmetry is very good in both lines but slightly better in "AS-28."

Several pod qualities give this bean outstanding canning characteristics. Excellent pod symmetry, consisting of few crease-backed and flattened pods, minimizes undesirable fiber content in the can. "Flats" also tend to be lighter in color, which detracts from appearance to the consumer. Pod color is comparable to Bush Blue Lake 290 and includes good interior color. Texture, firmness, and smoothness grade highly in this bean. Interlocular cavitation is very low, which enhances slicing properties, especially in the French-cut style. Pod length is medium, in comparison to a longer pod which slows the slicing operation and a shorter pod which produces more waste ends during slicing. Pods are generally straight.

8210028



'EZ.HARVEST' <sup>102</sup>

Pods of <"AS-28"> contain seeds exhibiting immature white seedcoat, as described by J.R. Baggett (see 1984 J. Amer. Soc. Hort. Sci. 109 (5): 601-604). Normal green immature seedcoat seems more desirable and the breeding program at NPI AgService is directed toward that objective.

The testing program for "AS-28" will be expanded outside of the Pacific Northwest in 1985. As data is generated, more will be known of this bean's adaptation to other areas, as well as its susceptibility or resistance to diseases, insects, and environmental stresses.

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**U.S. DEPARTMENT**  
**AMS**  
**EVPO**  
**RECEIVED**  
**MAR 6 1985**  
**U.S. DEPARTMENT OF AGRICULTURE**



A circular stamp containing the numbers 1 through 10 arranged in a circle. An arrow points from the center towards the number 10.

## ADDENDUM

## Exhibit D - ADDITIONAL DESCRIPTION OF VARIETY

Like 'EZ Pick', 'EZ Harvest' demonstrates a very low pod detachment force (PDF). 'EZ Harvest' also resembles 'Bush Blue Lake 290' but differs by exhibiting a much lower PDF. For two locations in 1986, PDF for 'EZ Harvest', 'EZ Pick', and 'Bush Blue Lake 290' averaged .33 kg, .38 kg, and 1.43 kg, respectively (Table 3).

1900

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO  
CHICAGO, ILLINOIS  
OFFICE OF THE PRESIDENT  
CHICAGO, ILLINOIS

CHICAGO, ILLINOIS

CHICAGO, ILLINOIS

CHICAGO, ILLINOIS

CHICAGO, ILLINOIS

Table 3. Pod detachment force (PDF) comparisons for 'EZ Harvest' and 'EZ Pick' versus 'Bush Blue Lake 290'.<sup>1</sup>

Variety	Salem, OR <sup>2</sup>			Pratum, OR <sup>3</sup>			Overall Mean PDF
	PDF <sup>4</sup>	SE	Prob. Level <sup>5</sup>	PDF <sup>4</sup>	SE	Prob. Level <sup>5</sup>	
	kg.			kg.			kg.
'EZ Harvest'	.27	.16	.001	.38	.17	.001	.33
'BBL 290'	1.57	.36	--	1.29	.27	--	1.43
'EZ Pick'	.28	.17	.001	.48	.22	.001	.38
'BBL 290'	1.57	.36	--	1.29	.27	--	1.43

<sup>1</sup> Measurement of PDF has been previously described by Showalter (1969) in the Proceedings of the Florida State Horticultural Society, volume 81, pages 116-118.

<sup>2</sup> Planted 5 May 1986, n = 60.

<sup>3</sup> Planted 12 June 1986, n = 60.

<sup>4</sup> Mean PDF determined with a digital force gauge of .01 kg. resolution.

<sup>5</sup> A statistical probability level of .01 or less indicates a high probability that the two means are different.

GL:jb  
12-9-86





EXHIBIT E

*'EZ HARVEST' var*

< "AS-28" > was developed by Roy Schulbach, who is exclusively and contractually employed by NPI AgService as a plant breeder, and who has assigned all rights of ownership to that company.



8200073



4

# NPI SEED INC.

Oregon Division  
5240 Gaffin Road, S.E.  
Salem, Oregon 97301  
United States of America  
503 581-8899  
TELEX: 15-1654 NPISEED  
FAX: 503 581-9021

January 7, 1988

Plant Variety Protection Agency  
USDA National Agricultural Library Bldg, Room 500  
Beltsville, MD 20705

Subject: Request for Corporate Name Assignment

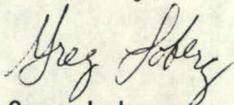
Our company has undergone two name changes in the last few years, from Agriculture Service Corp. to NPI AgService, and now to NPI Seed Inc.

On behalf of NPI Seed Inc., I request that ownership of the following varieties be assigned to NPI Seed Inc. in order to reflect these changes:

'Premier'	no. 8200150
'Tempo'	no. 8500205
'EZ Pick'	no. 8500080
'EZ Harvest'	no. 8500079 ✓

Our remittance is enclosed.

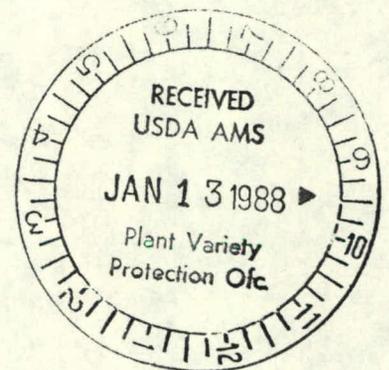
Sincerely,



Greg Loberg  
Research Manager  
Oregon Division

GL:jb

Enc.





8500079

ASSIGNMENT

KNOW ALL MEN BY THESE PRESENTS:

That NPI AGSERVICE CORPORATION, an Oregon corporation (hereinafter designated "Assignor"), for and in consideration of the sum of Ten Dollars (\$10.00), the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration paid, pursuant to the terms of that certain merger between Assignor and NPI SEED INC., a Delaware corporation (hereinafter designated "Assignee"), effective as of March 4, 1987, hereby sells, assigns transfers, conveys and sets over unto Assignee all of the right, title and interest of Assignor, in and to Assignor's Certificate of Plant Variety Protection for its "EZ Pick" garden bean, number 8,500,080, issued May 29, 1987 (hereinafter the "EZ Pick PVP Certificate").

Assignor shall, as a part of its responsibilities under this Assignment, deliver to Assignee all records and documents, including applications and correspondence, relating to the EZ Pick PVP Certificate, together with all collateral documents held by or available to the Assignor.

This Assignment is an absolute assignment and is not made for security purposes.

IN WITNESS WHEREOF, Assignor has executed this Assignment this 17th day of August, 1989.

NPI AGSERVICE CORPORATION, an  
Oregon corporation

By: *John D. Huld*  
Its: Director

100-1000



8500079

ASSIGNMENT

KNOW ALL MEN BY THESE PRESENTS:

That NPI SEED INC., a Delaware corporation (hereinafter designated "Assignor"), for and in consideration of the sum of Ten Dollars (\$10.00), the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration paid, pursuant to the terms of that certain Agreement for Purchase and Sale of Intangible Assets, dated of even date herewith, by and between Assignor, as Seller, and ROGERS BROTHERS SEED COMPANY, a Delaware corporation (hereinafter designated "Assignee"), as Buyer, hereby sells, assigns transfers, conveys and sets over unto Assignee all of the right, title and interest of Assignor, in and to Assignor's Certificate of Plant Variety Protection Certificate for its "EZ Harvest" garden bean, number 8,500,079, issued May 29, 1989 (hereinafter the "EZ Harvest PVP Certificate").

Assignor shall, as a part of its responsibilities under this Assignment, deliver to Assignee all records and documents, including applications and correspondence, relating to the EZ Harvest PVP Certificate, together with all collateral documents held by or available to the Assignor.

This Assignment is an absolute assignment and is not made for security purposes.

IN WITNESS WHEREOF, Assignor has executed this Assignment this 17<sup>th</sup> day of August, 1989.

NPI SEED INC., a Delaware corporation

By: *Erin B. Hill*  
Its: director

97-2-185



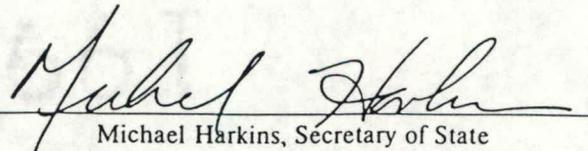
# State of Delaware



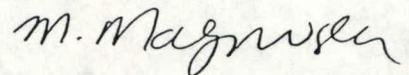
## Office of Secretary of State

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



8661



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

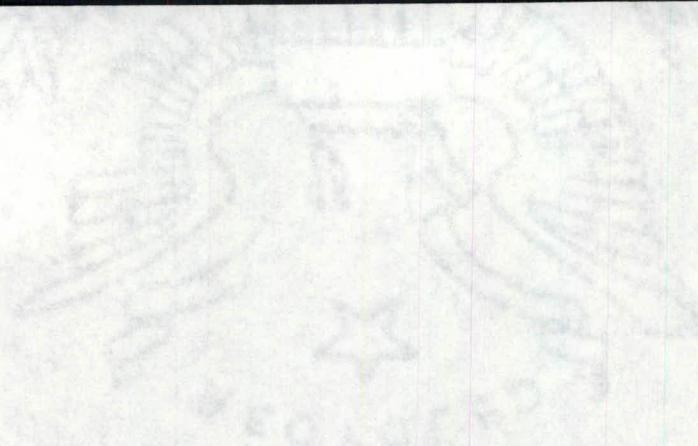
(Signature of corporate officer)

William B. Albers, President

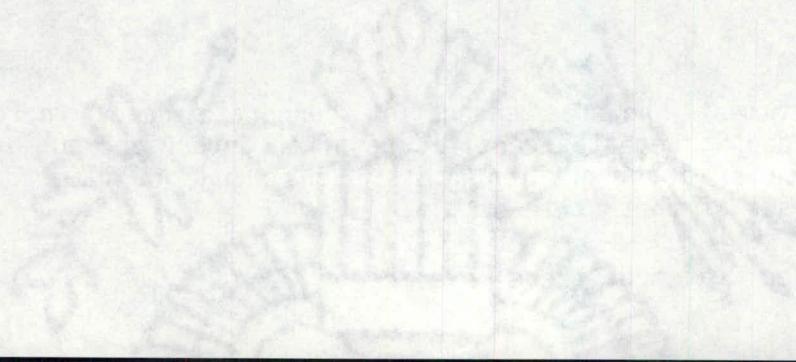
(Typed name and title of officer signing)

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.



4002



Office of the Secretary of State

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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

0810041 8320

AUTHENTICATION: 7120759

944080001

DATE: 05-16-94

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**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 13<sup>th</sup> day of April, 1994.

Willem van Overschot  
Willem van Overschot, President

Richard B. Geller  
Richard B. Geller, Secretary

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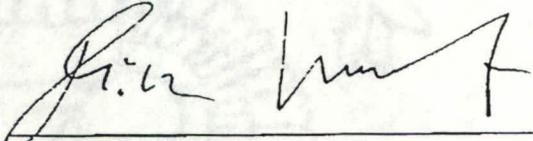
ROGERS NK SEED CO.

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.**

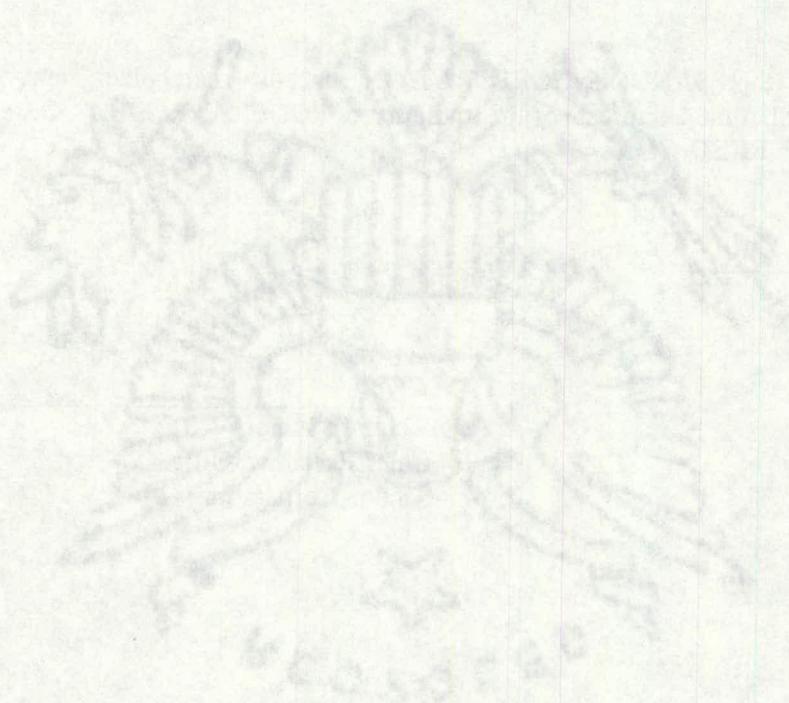
Dated: April 22, 1994

  
Heinz P. Imhof,  
Chief Executive Officer  
Sandoz Corporation

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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

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971211787

AUTHENTICATION: 8531908  
06-26-97

DATE:



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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:

<u>NAME</u>	<u>STATE OF INCORPORATION</u>
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: Edward C. Resler  
Name: Edward C. Resler  
Title: Vice President & General Counsel

