

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 *seventeen* 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 (7 U.S.C. 2642, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PEA

'Duke'



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 11th day of September in the year of our Lord one thousand nine hundred and eighty.

Attest:

Samuel H. Case
 Commissioner
 Plant Variety Protection Office
 Grain Division
 Agricultural Marketing Service

W. B. Bayard
 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 Canner 69315		1b. VARIETY NAME Duke		FOR OFFICIAL USE ONLY	
				PV NUMBER 8000097	
2. KIND NAME Garden Pea		3. GENUS AND SPECIES NAME Pisum Sativum		FILING DATE 5/5/80	TIME 8:00 A.M.
4. FAMILY NAME (BOTANICAL) Leguminosae		5. DATE OF DETERMINATION Fall 1969		FEE RECEIVED \$ 500.00 \$ 250.00	DATE 5/5/80 8/11/80
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 1647, 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 1647, 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.

April 24, 1980
 (DATE)

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

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.

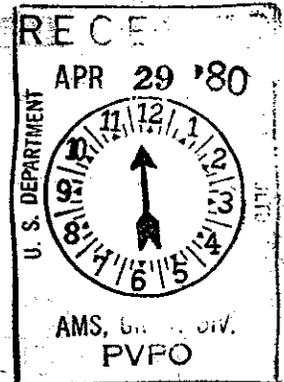


Exhibit AOrigin and Breed History of the Variety

Duke is a late maturing canning pea that was derived from the following hand pollinated crosses:

Target* x OSU Line "C"**

*Target - Is an early maturing canning variety developed by Rogers Brothers Seed Company.

**OSU Line "C" - An Enation mosaic virus resistant breeding line released by Oregon State University.

The final cross of this pedigree was made during the winter of 1963-64 and the following series of selections were subsequently made:

<u>Year</u>	<u>Generation</u>	<u>Plot</u>	<u>Harvested</u>
1964	f ₁	Greenhouse	Bulked
1964	f ₂	641135	Bulked
1965	f ₃	651289B	3 single plant selections
1966	f ₄	66903	5 single plant selections
1967	f ₅	671303	2 single plant selections
1968	f ₆	67881	15 oz. bulk

The bulk harvest of 15 oz. of seed from plot 67881 was planted as plot 69315. 6 single plot selections were harvested from plot 69315 in the f₇ generation and one of these has subsequently been increased as the basic production seed stock. During the f₉ increase generation of the basic seed stock, four single plant selections were harvested and these have subsequently been increased and placed in reserve as pure line seed stocks to maintain the variety..

Several shorter, slightly earlier off-type plants were present in the original 69315 increase which was discarded. There have been no off-type plants reported in the pure line selection taken from the original increase line and it is believed to be uniform for type and genetically stable.

DUKE

8000097

Exhibit B

Novelty Statement

The variety Duke very closely resembles the variety Canjoy, however Duke is resistant to Enation Mosaic virus while Canjoy is not. Also, Duke has better color uniformity of the pea and has typically been less susceptible to seed coat growth cracks.

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION
NATIONAL AGRICULTURAL LIBRARY
BELTSVILLE, MARYLAND 20705
OBJECTIVE DESCRIPTION OF VARIETY
PEA (*PISUM SATIVUM*)

NAME OF APPLICANT(S) ROGERS BROTHERS SEED COMPANY		VARIETY NAME OR TEMPORARY DESIGNATION DUKE
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) P. O. Box 1647 Idaho Falls, ID 83401		FOR OFFICIAL USE ONLY PVPO NUMBER 8000097

Place the appropriate number that describes the varietal character in the boxes below.
Place a zero in first box (e.g. 089 or 09) when number is either 99 or less or 9 or less.

1. TYPE:

1 = GARDEN 2 = FIELD 3 = EDIBLE-PODDED

2. MATURITY:

At Twin Falls

Node number of first bloom: No. of days to processing Heat Units

No. of days Earlier than } 1 = ALASKA WR 2 = THOMAS LAXTON WR 3 = LITTLE MARVEL

No. of days Later than } 4 = WANDO 5 = ALDERMAN WR 6 = AUSTRIAN WINTER

3. PLANT HEIGHT:

CM. HIGH

Cm. Shorter than } 1 = ALASKA WR 2 = THOMAS LAXTON WR 3 = LITTLE MARVEL

Cm. Taller than } 4 = WANDO 5 = ALDERMAN WR 6 = AUSTRIAN WINTER

4. VINE:

Habit: 1 = DETERMINATE 2 = INDETERMINATE Stockiness: 1 = SLIM (Alaska) 3 = HEAVY (Alderman)
2 = MEDIUM (Thomas Laxton WR)

Branching: 1 = NONE (Alaska) 2 - 1-2 BRANCHES (Little Marvel) 3 = MORE THAN 2 BRANCHES (Dwarf Gray Sugar)

Internodes: 1 = STRAIGHT 2 = ZIG ZAG Will collect data during 1980.
NUMBER OF NODES

5. LEAFLETS:

Color: 1 = LIGHT GREEN (Alaska WR) 2 = MED. GREEN (Thomas Laxton WR) 3 = DARK GREEN (Alderman)
4 = OTHER (Specify)

Wax: 1 = NONE 2 = LIGHT 3 = MEDIUM 1 = NOT MARBLED 2 = MARBLED (Alaska)
4 = HEAVY

Number of leaflet pairs: 1 = NOT PAIRED 2 = ONE 3 = TWO 4 = THREE OR MORE

6. STIPULES:

1 = LACKING 2 = PRESENT 1 = NOT CLASPING 2 = CLASPING

1 = NOT MARBLED 2 = MARBLED Size (Compared with leaflets): 1 = SMALLER 2 = SAME
3 = LARGER

Color (Compared with leaflets): 1 = LIGHTER 2 = SAME 3 = DARKER

7. FLOWER COLOR:

VENATION STANDARD WING KEEL 1 = WHITE 2 = GREENISH 3 = LAVENDER
4 = PURPLE 5 = RED
6 = OTHER (Specify)

8. PODS:

1 Shape: 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = CURVED 2 End: 1 = POINTED (Alderman) 2 = BLUNT (Alaska)
 1 Color: 1 = LIGHT GREEN (Alaska WR) 2 = MEDIUM GREEN 3 = DARK GREEN (Alderman) 4 = OTHER (Specify) _____
 1 Surface: 1 = SMOOTH 2 = ROUGH 2 Surface: 1 = SHINY 2 = DULL
 2 Borne: 1 = SINGLE 2 = DOUBLE 3 = SINGLE AND DOUBLE 4 = SINGLE, DOUBLE, & TRIPEE
 5 = DOUBLE & TRIPLE 6 = TRIPLE 7 = OTHER (Specify) _____
 2 3 ~~3~~ ^{7.6 cm} ~~3~~ ^{JEF 800620} LENGTH 1 4 MM. WIDTH (Between sutures) 0 8 NO. SEEDS PER POD

9. SEEDS (95-100 Tenderometer):

1 Color: 1 = LIGHT GREEN 2 = GREEN 3 = DARK GREEN 4 = OTHER (Specify) _____
 Seive: %

1	2	3	4	5	6	7	8	AVERAGE
0	5	1	3	1	5	2	9	3
3	9	1						

SEEDS (Dry, Mature):

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

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

<input type="checkbox"/> 2 FUSARIUM WILT	<input type="checkbox"/> 0 NEAR-WILT	<input type="checkbox"/> 0 DOWNY MILDEW
<input type="checkbox"/> 0 ASCOCHYTA BLIGHT	<input type="checkbox"/> 2 POWDERY MILDEW	<input type="checkbox"/> 0 BACTERIAL BLIGHT
<input type="checkbox"/> 0 MOSAIC	<input type="checkbox"/> 2 PEA ENATION MOSAIC	<input type="checkbox"/> 0 YELLOW BEAN MOSAIC
<input type="checkbox"/> OTHER (Specify) _____		

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	Canjoy	Fresh Seed Color	Canjoy
Leaf Color	Canjoy	Mature Seed Color	Canjoy
Pod Color	Canjoy	Seed Shape	Canjoy
Pod Shape	Canjoy	Plant Habit	Canjoy

COMMENTS:

APR 29 1980

DUKE

8000097

Exhibit D

Additional Descriptive Data for the Variety

Duke is a late maturing canning pea variety with a determinate vine and pod set and produces mostly two pods per node with none producing three or more pods.

Duke has a typical perfection type vine with a compact growth habit, yet has a moderate foliage canopy because of the relatively small leaves.