No. 7800038

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

W. Brotherton Seed Company, Inc.

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 APPLI-ANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EX- OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, RTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT 542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PEA

'Sussex'

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* 22nd *day of* June *in the year of our Lord one thousand nine hundred and* seventy-eight

Attest:

Acting
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

FORM GR-470
(1-76)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
PLANT VARIETY PROTECTION OFFICE
NATIONAL AGRICULTURAL LIBRARY
BELTSVILLE, MARYLAND 20705

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1a. TEMPORARY DESIGNATION OF VARIETY	1b. VARIETY NAME	FOR OFFICIAL USE ONLY
~~SUSSEX~~ WS 5/22/78	SUSSEX	PV NUMBER 7800038
2. KIND NAME: Garden Pea	3. GENUS AND SPECIES NAME: Pisum Sativum	FILING DATE 3-17-78 / TIME 3:00 A.M. P.M.
4. FAMILY NAME (BOTANICAL): Leguminosae	5. DATE OF DETERMINATION: June 1971	FEE RECEIVED $ 250.00 / DATE 3-17-78 $ 250.00 / 3-17-78 $ 250.00 / 3-17-78

6. NAME OF APPLICANT(S)	7. ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*)	8. TELEPHONE AREA CODE AND NUMBER
W. Brotherton Seed Co. Inc.	P. O. Box 906 Moses Lake, WA. 98837	509-765-5131

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (*Corporation, partnership, association, etc.*)	10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION	11. DATE OF INCORPORATION
Corporation	Washington Feb. 1955	Feb. 1955

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

Wilber Brotherton, 3rd. or Harley Brotherton
W. Brotherton Seed Co. Inc.
P. O. Box 906
Moses Lake, WA. 98837

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [x] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [x] 13B. Exhibit B, Novelty Statement.
- [x] 13C. Exhibit C, Objective Description of the Variety *(Request form from Plant Variety Protection Office.)*
- [x] 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 [X] NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? [ ] YES [X] NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? [ ] FOUNDATION [ ] REGISTERED [ ] CERTIFIED

15. Does the applicant(s) agree to the publication of his/her (their) name(s) and address in the Official Journal? [X] YES [ ] NO

16. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically 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.

24 Feb 1978 (DATE) — Wilber Brotherton 3rd Pres (SIGNATURE OF APPLICANT)

(DATE) — (SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and $250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, National Agricultural Library, 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 commerical 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 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 or published or the certificate has been issued. However, if the applicant specifies "NO", he may change his choice. (See Section 180.15 of the Regulations and Rules of Practice.)

Exhibit A. Origin and Breeding History of the Variety

1. SUSSEX originated in Moses Lake, Washington from a hand-pollinated cross between NUGGET and PUGET and a backcross to NUGGET. These crosses were started in 1970 and completed in 1971. A description of both these varieties can be found in the 1978 W. Brotherton Seed Co., Inc. brochure.

2. From the F_2 generation, the progenies of this backcross were screened for seed characteristics and vine type. In the F_2 generation only those plants with light green canner colored seed, uniform plant habit, and season (14 node) were selected. SUSSEX was selected in the F_5 generation as the most promising, and after further testing by the staff of W. Brotherton Seed Co. for commercial suitability was increased in Arizona in the winter of 1975-76 and Washington in the summers of 1976 and 1977.

3. Due to the ~~percentage~~ parentage HF 5/22/78 of this variety, SUSSEX has been quite uniform during increase. Variability seemed confined to the node on which first flowering appeared. Only those plants of the earlier types, namely 14th node were selected and purelined. The later types (15th & 16th) were discarded.

EXHIBIT B. "Sussex"

Application No. 7800038

"Sussex" most closely resembles the variety "Nugget" but differs in the following characteristics. "Sussex" is about 21 cm. shorter than "Nugget" in vine height. "Sussex" is much more determinate in vine and pod habit than "Nugget". "Sussex" also differs from "Nugget" in the fact that "Sussex" bears two to three pods per peduncle while "Nugget" bears one to two pods per peduncle.

4/19/78

Exhibit ~~D~~ B. Data Indicative of Novelty.

The novelty of this variety (SUSSEX) formally designated CANNER 504 when grown as an experimental line in our breeding program, is based on the following characteristics:

1. Multipodded habit

2. Mid season Early PERFECTION type canner

3. Determinate plant habit

4. Small sieve size

Neither parent or as far as we know, no other variety exhibits these combined characteristics.

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-14
(5-15-74)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C
(Pea)

OBJECTIVE DESCRIPTION OF VARIETY

PEA *(PISUM SATIVUM)*

NAME OF APPLICANT(S)
W. Brotherton Seed Co. Inc.

ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*
P. O. Box 906
Moses Lake, WA. 98837

VARIETY NAME OR TEMPORARY DESIGNATION
SUSSEX

FOR OFFICIAL USE ONLY
PVPO NUMBER 7800038

Place the appropriate number that describes the varietal character in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. TYPE:

[1] 1 = GARDEN 2 = FIELD 3 = EDIBLE-PODDED

2. MATURITY:

[14] Node number of first bloom: [0][6][8] No. of days to processing [1][4][3][0] Heat Units

[0][4] No. of days *Earlier* than . . . [5] 1 = ALASKA WR 2 = THOMAS LAXTON WR 3 = LITTLE MARVEL

[1][0] No. of days *Later* than . . . . [1] 4 = WANDO 5 = ALDERMAN WR 6 = AUSTRIAN WINTER

3. PLANT HEIGHT:

[0][6][3] CM. HIGH

[3][5] Cm. *Shorter* than . . . . . [5] 1 = ALASKA WR 2 = THOMAS LAXTON WR 3 = LITTLE MARVEL

[0][6] Cm. *Taller* than . . . . . [1] 4 = WANDO 5 = ALDERMAN WR 6 = AUSTRIAN WINTER

4. VINE:

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

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

[2] Internodes: 1 = STRAIGHT 2 = ZIG ZAG [1][8] NUMBER OF NODES

5. LEAFLETS:

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

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

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

6. STIPULES:

[2] 1 = LACKING 2 = PRESENT [1] 1 = NOT CLASPING 2 = CLASPING

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

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

7. FLOWER COLOR:

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

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(5-15-74)

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(Pea)

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W. Brotherton Seed Co. Inc.

ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*
P. O. Box 906
Moses Lake, WA. 98837

VARIETY NAME OR TEMPORARY DESIGNATION
SUSSEX

FOR OFFICIAL USE ONLY
PVPO NUMBER 7800038

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

D 4/19/78

Exhibit ~~B~~. Botanical Description of the Variety.

SUSSEX is a determinate early PERFECTION canning variety.

SUSSEX is similar to NUGGET in the fact that it is a small sieve canner, but differs by being more determinate, shorter (SUSSEX - 63 cm & NUGGET - 84 cm) and bears 2 - 3 pods per peduncle.

SUSSEX is similar to PUGET in the fact that they both are multi-podded and have very similar plant types. The main difference is that SUSSEX of course is a canner and PUGET a freezer and SUSSEX is 8 cm. shorter.