No. 7400020

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

PEA

'Conway'

Attest:

S. J. Rollin

Commissioner
Plant Variety Protection Office
U. S. Dept. of Agriculture
Agricultural Marketing Service

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* 16th *day of* May *in the year of our Lord one thousand nine hundred and* seventy-four

Earl L. Butz

Secretary of Agriculture

FORM GR-470
(12-15-72)

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

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION Conway	2. KIND NAME Garden Pea	FOR OFFICIAL USE ONLY PV NUMBER 7400020
3. GENUS AND SPECIES NAME Pisum sativum	4. FAMILY NAME *(Botanical)* Leguminosae	FILING DATE 9.24.73 / TIME 10:00 A.M.
	5. DATE OF DETERMINATION June 1971	FEE RECEIVED $ 250.00 / $ 250.00 / $ 250.00 / BALANCE DUE $ 0.00 / $ — / $ —
6. NAME OF APPLICANT(S) W. Brotherton Seed Co., Inc.	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)* P. O. Box 906, Moses Lake, Washington 98837	8. TELEPHONE AREA CODE AND NUMBER 509-765-5131
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)* Corporation	10. STATE OF INCORPORATION Washington	11. DATE OF INCORPORATION 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., President or
Harley B. Brotherton, Vice-President
W. Brotherton Seed Co., Inc.
P. O. Box 906
Moses Lake, Washington
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, Botanical Description of the Variety

[X] 13C. Exhibit C, Objective Description of the Variety

[X] 13D. Exhibit D, Data Indicative of Novelty

[X] 13E. Exhibit E, Statement of the Basis of Applicant's Ownership

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

The applicant declares 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) of this sexually-reproduced novel plant variety believes 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 is informed that false representation herein can jeopardize protection and result in penalties.

W. Brotherton Seed Co., Inc.
By: Wilber Brotherton, 3rd., President
(SIGNATURE OF APPLICANT)

Wilber Brotherton, 3rd.
(SIGNATURE OF APPLICANT)

Sept 19, 1973
(DATE)

(DATE)

RECEIVED
SEP 24 '73
OF AGRICULTURE
AMS, GRAIN DIV.
PVPO

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, 6525 Belcrest Road, Hyattsville, Maryland 20782. (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 Insert the date the applicant determined that he had a new variety based on the definition in Section 41_(a) of the Act and decision is made to increase the seed.

13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.

13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.

13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.

13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.

13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

Exhibit A.
Origin and Breeding History of the Variety

1. "Conway" was obtained from a hand pollinated cross between "Puget" and a variety which was resistant to Fusarium oxysporum Race 5 obtained under the designated name of "Peru II". This was obtained from Mr. Morris Crampton of the Dept. of Scientific and Industrial Research, New Zealand. The line "Peru II" is a tall, indeterminate, late, (23rd node), round, yellow-seeded variety. Several plants of which were resistant to Race 5 when grown in the greenhouse in 1968. A description of Puget may be found in the W. Brotherton Seed Co. Variety Description 1968,(see attached copy).

2. From the F_2 generation, the progenies from this cross were screened for seed characteristics and vine type. Only those plants with green, wrinkled seed and determinate vine types were selected and screened for resistance to the Fusarium oxysporum Race 5. "Conway" 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 New Zealnd in the winter of 1971-1972, in Washington in the summer of 1972, and in Arizona in the winter of 1972-1973.

3. "Conway" has been quite uniform during increase. Variability seemed confined chiefly to a variability in the node on which first flowering appears, namely 16th to 19th node with the vast majority blooming on the 17th and 18th nodes. Rogueing in this variety has been necessary only for the removal of a mixture of an early variety which got in during a winter increase period. This mixture is easily found in that it blooms several days earlier than "Conway" is taller and has only 1 or 2 flowers per truss whereas "Conway" is later, shorter, and consistantly 2 to 4 flowers per truss.

Exhibit B
Botanical Description of the Variety

"Conway" is a late determinate vined freezing pea very similar to the variety Puget.
"Conway" is a medium vine length (63cm) with relatively short and heavy internodes which is only slightly ~~taller~~ shorter than Puget. "Conway" has the multipoded habit of bearing 2 to 3 pods on each peduncle. The pods are slightly shorter than those of Puget and the green peas at canning stage are quite indestinguishable from those of Puget.
"Conway" differs from Puget primarily in that it reaches maturity generally 3 to 5 days later and that it is resistant to Fusarium oxysporum Race 5, a wilt disease of peas that has become prevelant in the Skagit Valley growing area of Washington State.

FORM GR-470-14
(10-2-72)

FORM APPROVED. OMB NO. 40-R3712

EXHIBIT C
(Pea)

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

OBJECTIVE DESCRIPTION OF VARIETY

PEA *(PISUM SATIVUM)*

INSTRUCTIONS: *See Reverse.*

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, Washington 98837

FOR OFFICIAL USE ONLY
PVPO NUMBER 7400020
VARIETY NAME OR TEMPORARY DESIGNATION

Place the appropriate number that describes the varietal character of this variety 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:

[2] 1 = ~~TALL~~ (Internodes straight)
2 = ~~DWARF~~ (Internodes zigzag)

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

2. SEASON:

[2] Node number of first bloom: 1 = EARLY (8 - 12th node) 2 = MIDSEASON (13 - 24th node) 3 = LATE (Greater than 24th node)

3. MATURITY:

[ ][ ] No. of days *Earlier* than ..... [ ]
[0][1] No. of days *Later* than ..... [5]

1 = ALASKA WR 2 = THOMAS LAXTON WR 3 = LITTLE MARVEL
4 = WANDO 5 = ALDERMAN WR 6 = AUSTRIAN WINTER

4. PLANT HEIGHT:

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

[~~0~~][8] = 08 Cm. *Shorter* than ..... [5]
[ ][ ] Cm. *Taller* than ..... [ ]

1 = ALASKA WR 2 = THOMAS LAXTON WR 3 = LITTLE MARVEL
4 = WANDO 5 = ALDERMAN WR 6 = AUSTRIAN WINTER

5. 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)

[1] Node Color: 1 = GREEN 2 = RED BLOTCH

[1][8] NUMBER OF NODES

[0][5] CM. INTERNODE LENGTH (Just below 1st flowering node)

6. LEAFLETS:

[3] 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

[2] Marbling: 1 = NONE 2 = MARBLED (Alaska)

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

7. 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

8. FLOWER COLOR:

[1] 1 = MONOCOLOR 2 = BICOLOR

[2] Venation [2] Standard [2] Wing [2] Keel

1 = WHITE 2 = GREENISH 3 = LAVENDER 4 = PURPLE
5 = RED 6 = OTHER (Specify) _____

4

74-20

FORM GR-470-14 (REVERSE)

RECEIVED SEP 24 1973

9. PODS:

[2] Shape: 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = CURVED

[2] End: 1 = POINTED (Alderman) 2 = BLUNT (Alaska)

[2] Color: 1 = LIGHT GREEN (Alaska WR) 2 = MEDIUM GREEN 3 = DARK GREEN (Alderman) 4 = OTHER (Specify) _____

[1] Surface: 1 = SMOOTH 2 = ROUGH

[2] 1 = SHINY 2 = DULL

[6] Borne: 1 = SINGLE 2 = DOUBLE 3 = SINGLE AND DOUBLE 4 = SINGLE, DOUBLE, & TRIPLE 5 = DOUBLE & TRIPLE 6 = TRIPLE 7 = OTHER (Specify) _____

[0 6] CM. LENGTH [1 5] MM. WIDTH (Between sutures) [0 6] NUMBER OF SEEDS PER POD

10. SEEDS (95 - 100 Tenderometer):

[3] Color: 1 = LIGHT GREEN (Perfection Canner) 2 = GREEN (Little Marvel) 3 = DARK GREEN (Dark Skin Perfection) 4 = OTHER (Specify) _____

[3] Shape: 1 = FLATTENED 2 = ANGULAR 3 = OVAL 4 = ROUNDED

[3] Surface: 1 = SMOOTH 2 = DIMPLED 3 = WRINKLED

[1] Surface: 1 = SHINY 2 = DULL

SEEDS (Mature, Dry):

[1] Color: 1 = MONOCOLOR 2 = BICOLOR

[7] Primary Color: 1 = CREAMY-WHITE (Mammoth Melting Sugar) 2 = YELLOW (Arthur) 3 = CREAM & GREEN (Thomas Laxton) 4 = YELLOW 5 = LIGHT GREEN (Alderman) 6 = MEDIUM GREEN (Little Marvel)

[7] Secondary Color: 7 = DARK GREEN (Dark Skin Perfection) 8 = BLUE-GREEN (Alaska WR) 9 = BROWN 10 = RED 11 = GRAY 12 = BLACK

[1] Color Pattern: 1 = SPLASHED 2 = MOTTLED 3 = STRIPED 4 = FLECKED 5 = DOTTED

[1] Hilum Floor Color: 1 = WHITE 2 = TAN 3 = BLACK

[3] Cotyledon Color: 1 = YELLOW 2 = ORANGE 3 = GREEN

[2 2] GRAMS PER 100 SEED

11. SEED SIEVE SIZE DISTRIBUTION (95 - 100) Tenderometer): AVE. 4.09

Sieve (%): [0 2] 1 [1 0] 2 [1 5] 3 [2 5] 4 [4 6] 5 [0 2] 6 [ ] 7 [ ] 8

12. PLANT REACTION: (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

[0] 1 = DROUGHT (Wando) [0] 2 = COLD (Alaska) [0] 3 = HEAT (Wando)

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

[2] FUSARIUM WILT [0] NEAR-WILT [0] DOWNY MILDEW

[0] ASCOCHYTA BLIGHT [1] POWDERY MILDEW [0] BACTERIAL BLIGHT

[0] MOSAIC [0] PEA ENATION MOSAIC [0] YELLOW BEAN MOSAIC

[2] OTHER (Specify) Fusarium oxysporum Race 5

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

[0] APHIDS [ ] OTHER (Specify) _____

15. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED

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

REFERENCES: The following publication may be used as a reference aid for the standardization of character descriptions and terms:

1. Shoemaker, D. N., 1934. Descriptions of Types of Principal American Varieties of Garden Peas. U.S.D.A. Miscellaneous Publication, No. 170.
2. Hedrick, V. P., 1928. The Vegetables of New York. New York Agricultural Experiment Station. Vol. 1., Part 1.
3. Wade, B. L., 1943. A Key to Pea Varieties. U.S.D.A. Circular No. 676.

Nickerson's or any recognized color fan may be used to determine color of the described variety.

REVISED NOVEMBER 7, 1973

Exhibit D Attachment To Application No. 7400020, Pea, CONWAY

Data Indicative of Novelty:

The novelty of this variety (CONWAY) formerly designated NZ-2 grown as an experimental line in our breeding program, is based on the following characteristics:

"CONWAY" most closely resembles the variety "PUGET" than any other variety: CONWAY, is resistant to fusarium oxysisporum Race 5 whereas PUGET is susceptible, and CONWAY is 4 or 5 days later in maturity than PUGET.

Exhibit E.
Statement of the Basis of Applicant's Ownership

W. Brotherton Seed Co., Inc is the employer of the actual breeder of this variety (Conway), the breeder being Harley B. Brotherton.

W. Brotherton Seed Co., Inc.
By: Wilber Brotherton 3rd.

Wilber Brotherton 3rd, Pres.