No. 7300095

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Pure Line Seeds, 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

'Aspen'

PLANT VARIETY PROTECTION OFFICE · U.S. DEPARTMENT OF AGRICULTURE

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 first day of* May *in the year of our Lord one thousand nine hundred and* seventy-five

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

FORM GR-470
(2-12-71)

UNITED STATES DEPARTMENT OF AGRICULTURE
CONSUMER AND 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: Aspen	2. KIND NAME: pea	FOR OFFICIAL USE ONLY PVPO NUMBER: 73095
3. GENUS AND SPECIES NAME: Pisum sativium	4. FAMILY NAME *(Botanical)*: Leguminasae 5. DATE OF DETERMINATION: June 8, 1973	FILING DATE: 6·13·73 TIME: 12:00 ~~A.M.~~ P.M. FEE RECEIVED: $250.00 CHARGES:
6. NAME OF APPLICANT(S): Pure Line Seeds, Inc.	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*: Box 91, Moscow, Idaho 83843	8. TELEPHONE AREA CODE AND NUMBER: 882-4422 (208)
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: 1948

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

Richard D. Williams
Pure Line Seeds, Inc.
Box 91
Moscow, Idaho 83843

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 12A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52, P.L. 91-577)*
- [X] 12B. Exhibit B, Botanical Description of the Variety
- [X] 12C. Exhibit C, Objective Description of the Variety - Do not have form from PVPO
- [X] 12D. Exhibit D, Data Indicative of Novelty
- [X] 12E. Exhibit E, Statement of the Basis of Applicant's Ownership

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. *(See Section 52, P.L. 91-577).*

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), P.L. 91-577) (If "Yes," answer 14B and 14C below.)* [ ] YES [XX] 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?

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

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 (P.L. 91-577).

Pure Line Seeds, Inc.

6-8-73 (DATE) — (SIGNATURE OF APPLICANT)

6-8-73 (DATE) — (SIGNATURE OF APPLICANT)

73095

Exhibit A

Origin and Breeding History of the Variety

Aspen originated from a hand pollinated cross between Dark Skin Perfection and B 104-3-1. Dark Skin Perfection is a freezing variety developed many years ago by Canners Seed Corporation and is sold by all pea seed companies under various names. B 104-3-1 is line of peas developed at Oregon State University by Dr. James Baggett and is a resistant to Enation Mosaic Virus and Powdery Mildew (Erysphe polygoni). It also possesses some tolerance to Western Pea Streak.

This cross was made in 1963 at Moscow, Idaho in trial grounds operated by Pure Line Seeds. Pure line selections of this variety were made in the F2, F3, F4, F5 and F6 generations. The genetic make up of the plant was stabilized in the F6 generation and the variety has been tested in small field tests and small plots in Washington, Minnesota, Oregon and Wisconsin.

This variety throws a tall slender rogue which appears at blooming stage and is 20% or more taller than the main crop. The frequency of this rogue is one in 100,000 plants.

Verified copy
4.8.75

Exhibit B

Botanical Description of the Variety

Aspen is a 30-32 inch in height dark green freezing variety with a determinate growth habit. The pods are normally borne double at each peduncle with the first blooming node showing a higher percentage of doubles than Dark Skin perfection. The pods are blunt, 3-1/4 inches in length with 7-9 peas per pod. The seed is wrinkled, green and cream in color and normally about 2220 seeds per pound.

Aspen matures to freezing stage (100 tenderometer) in about 69 days or 1570 heat units. This variety is one day earlier in maturity than Dark Skin Perfection. Aspen is also resistant or highly tolerant to Enation Mosaic Virus and Powdery Mildew with some tolerance to Western Pea Streak.

Verified copy
4.8.75

RECEIVED JUN 13 1973 U.S. DEPARTMENT OF AGRICULTURE AMS, PVPO

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and $50.00 fee to U.S. Dept. of Agriculture, Consumer and Marketing Service, Grain Division, Hyattsville, Maryland 20782. Retain one copy for your files. All items on the face of the form are self-explanatory unles noted below.

ITEM

5 Insert the date the applicant determined that he had a new variety.

12a 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.

12b 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.

12c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.

12d Provide complete data indicative of novelty. Seed and plant specimens may be submitted and seeds submitted may be sterile. Where possible, include photographs of plant comparisons, chemical tests, etc.

12e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

FORM APPROVED. OMB NO. 40-R3712

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

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

EXHIBIT C
(Pea)

OBJECTIVE DESCRIPTION OF VARIETY

PEA (*PISUM SATIVUM*)

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(S)
PURE LINE SEEDS, INC.

ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*)
P.O. Box 91
Moscow, Idaho 83843

FOR OFFICIAL USE ONLY
PVPO NUMBER 73095
VARIETY NAME OR TEMPORARY DESIGNATION
ASPEN

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:

[ ] 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 ..... [ ]
[1][2] No. of days *Later* than ..... [1]

69

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

4. PLANT HEIGHT:

[0][7][7] CM. HIGH

[0][4] Cm. *Shorter* than ..... [2]
[ ][ ] 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

[2] 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

[2][0] NUMBER OF NODES

[0][8] 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

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

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

7. STIPULES:

[2] 1 = LACKING 2 = PRESENT

[1] 1 = NOT CLASPING 2 = CLASPING

[1] 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:

4

[1] 1 = MONOCOLOR 2 = BICOLOR

[1] Venation [1] Standard [1] Wing [1] Keel

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

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9. PODS:

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

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

[3] 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

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

[0 8] CM. LENGTH [2 5] MM. WIDTH (Between sutures) [0 8] 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

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

[1] Surface: 1 = SHINY 2 = DULL

SEEDS (Mature, Dry): WRN

[2] Color: 1 = MONOCOLOR 2 = BICOLOR

[7] Primary Color:

[5] Secondary 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 = 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 0] GRAMS PER 100 SEED

11. SEED SIEVE SIZE DISTRIBUTION (95 - 100) Tenderometer: AVE = 4.15

Sieve (%):	1	2	3	4	5	6	7	8
	2	8	18	27	35	10		

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 [2] POWDERY MILDEW [0] BACTERIAL BLIGHT

[0] MOSAIC [2] PEA ENATION MOSAIC [0] YELLOW BEAN MOSAIC

[ ] OTHER (Specify) Some tolerance to Western Pea Streak

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	Dark Skin Perfection	Fresh Seed Color	Dark Skin Perfection
Leaf Color	Dark Skin Perfection	Mature Seed Color	Dark Skin Perfection
Pod Color	Dark Skin Perfection	Seed Shape	Dark Skin Perfection
Pod Shape	Dark Skin Perfection	Plant Habit	Dark Skin Perfection

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.

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Exhibit E

Statement of Applicants Ownership

Pure Line Seeds, Inc; Box 91; Moscow, Idaho; believes it is the sole original and first breeder of the Aspen variety of pea seed for which it solicits a certificate of protection.

Verified copy
J.S.750

Application No. 73095
Pea - "Aspen"

Exhibit D

"Aspen" most closely resembles "Dark Skin Perfection" but is resistant or highly tolerant to pea enation mosaic and powdery mildew and is tolerant to western pea streak.

Richard D. Williams
Pure Line Seeds, Inc.

EXHIBIT A

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