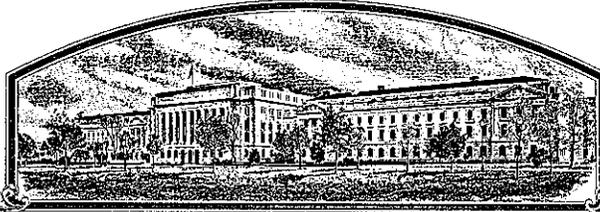


No.

8200186



# 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 *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 OF 1930, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PEA

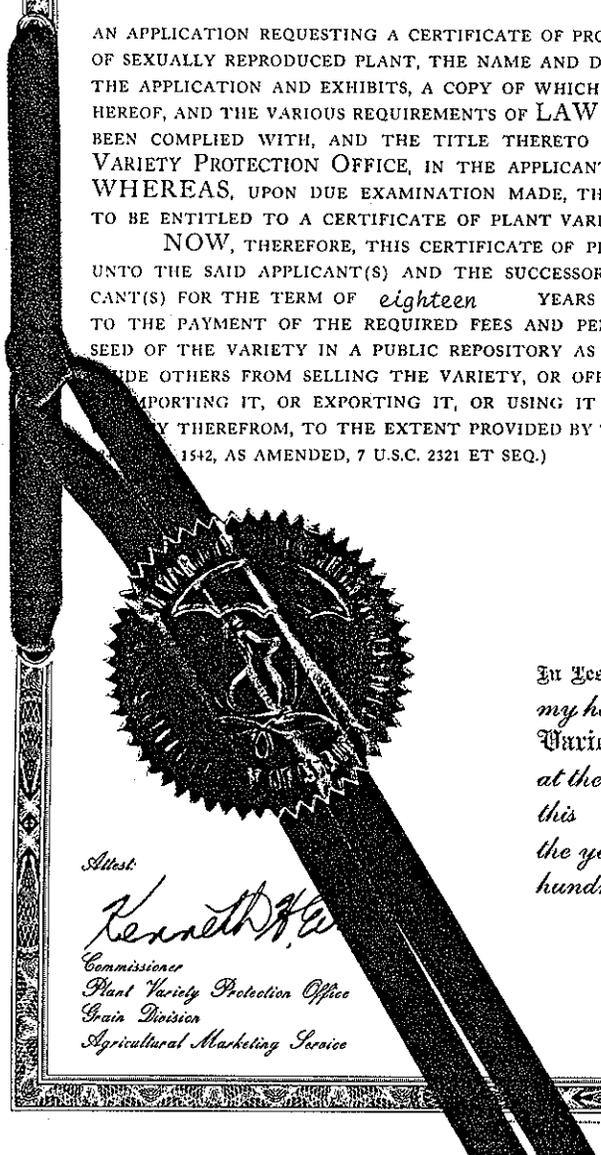
'Sundance'

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 27th day of October in the year of our Lord one thousand nine hundred and eighty-three.

Attest:

*Kenneth H. ...*  
Commissioner  
Plant Variety Protection Office  
Grain Division  
Agricultural Marketing Service

*John R. Block*  
Secretary of Agriculture



**APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE**

(Instructions on reverse)

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1. NAME OF APPLICANT(S) <b>Pure Line Seeds, Inc.</b>		2. TEMPORARY DESIGNATION <b>SUNDANCE</b>		3. VARIETY NAME <b>SUNDANCE</b>	
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) <b>Box 8866, Moscow, Idaho 83843</b>			5. PHONE (Include area code) <b>208-882-4422</b>		
6. GENUS AND SPECIES NAME <b>Pisum sativum</b>			7. FAMILY NAME (Botanical) <b>Leguminosae</b>		
8. KIND NAME <b>Pea</b>			9. DATE OF DETERMINATION <b>July 31, 1978</b>		
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) <b>Corporation</b>				FILING DATE <b>9/27/82</b> TIME <b>3:00</b> <input type="checkbox"/> A.M. <input checked="" type="checkbox"/> P.M.	
11. IF INCORPORATED, GIVE STATE OF INCORPORATION <b>Washington</b>				AMOUNT FOR FILING \$ <b>500.00</b> DATE <b>9/27/82</b>	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS <b>Richard S. Lowe, Pure Line Seeds, Inc., Box 8866, Moscow, Idaho 83843</b>				AMOUNT FOR CERTIFICATE \$ <b>250.00</b> DATE <b>9/27/82</b>	
12. DATE OF INCORPORATION <b>1948</b>				FEE RECEIVED	

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED

a.  Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)

b.  Exhibit B, Novelty Statement

c.  Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)

d.  Exhibit D, Additional Description of the Variety

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.)

Yes (If "Yes," answer items 16 and 17 below)  No

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?

Yes  No

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?

Foundation  Registered  Certified

18. DID THE APPLICANT(S) FILE FOR PROTECTION OF THE VARIETY IN THE U.S. OR OTHER COUNTRIES?

**United Kingdom, November 1981**  Yes (If "Yes," give names of countries and dates)

No

19. HAVE RIGHTS BEEN GRANTED IN THE U.S. OR OTHER COUNTRIES?

**In process**  Yes (If "Yes," give names of countries and dates)

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 <i>R. S. Lowe</i>	DATE <b>9-20-82</b>
SIGNATURE OF APPLICANT <i>Donald H. Balinghake</i>	DATE <b>9/20/82 1</b>

## 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. Department of Agriculture, Agricultural Marketing Service, Livestock, Meat, 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.

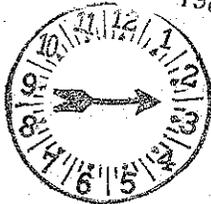
### Item

- 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 differences are significant; 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.
- 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.*)
- 16 See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

GPO 890-698

RECEIVED

SEP 23 1982



**ASSIGNMENT OF CERTIFICATES PLANT VARIETY PROTECTION  
AS COLLATERAL SECURITY**

PURE LINE SEEDS, INC., a Washington corporation (hereinafter "Borrower"), for valuable consideration, receipt of which is acknowledged, hereby assigns and transfers, for collateral security purposes, to U.S. BANK OF WASHINGTON, NATIONAL ASSOCIATION (hereinafter "Bank"), and grants to Bank a security interest in all of Borrower's right, title and interest in, to and under the following Certificates of Plant Variety Protection issued to Borrower by the United States Department of Agriculture, Agriculture Marketing Service, Plant Variety Protection Office:

Plant Variety No.	Crop Kind	Name of Variety	Applicant	Status, All Occs	Cert. Issue Date	Record:
770002	Pea	Banff	Pure Line Seeds	I	6/7/77	696
7700023	Pea	Kodiak	Pure Line Seeds	I	6/7/77	697
7900099	Pea	Tahoe	Pure Line Seeds	I	1/2/80	991
8200186	Pea	Sundance	Pure Line Seeds	I	10/27/83	1541
8300015	Pea	Arctic	Pure Line Seeds	I	3/26/84	1561
8400031	Pea	Misty	Pure Line Seeds	I	12/21/84	1756
8500041	Pea	Sunfire	Pure Line Seeds	I	12/27/85	1923
8500042	Pea	Early Sweet 41	Pure Line Seeds	I	10/31/85	1924
8500043	Pea	Bold	Pure Line Seeds	I	10/31/85	1925
8900065	Pea	Sun-Up	Pure Line Seeds	I	3/29/91	2792
8900067	Pea	Sentry	Pure Line Seeds	I	7/31/19	2794

Together with all extensions and renewals of the foregoing Certificates, together with all goodwill associated with said Certificates and together with all proceeds thereof regardless of the form thereof and however evidenced. The foregoing Certificates of Plant Variety Protection and related rights and proceeds are hereinafter referred to as "the Collateral."

Borrower further agrees that its assignment of and grant of a security interest in the Collateral shall be subject to and governed by the following terms and conditions:

- 1. INDEBTEDNESS SECURED.** The assignment and security interest granted above shall secure all past, present and future indebtedness of Borrower to Bank, including all interest thereon, whether direct or indirect, absolute or contingent, including, but not limited to, indebtedness

EXHIBIT AORIGIN AND BREEDING HISTORY OF THE VARIETY

1. Sundance originated during the fall of 1974 from a hand pollinated hybridization using the pedigree method between an F<sub>3</sub> triple podding Fusarium wilt race 5 resistant selection made during the early development of the variety Tahoe (male parent) and an F<sub>3</sub> selection from the Pure Line Seeds breeding line 31590 (female parent).

2. The breeding line 31590 was a cross between the varieties Green Arrow and Puget. This breeding line was used because it had triple pods which were pointed, with an average of 10 seeds per pod.

Subsequent generations (F<sub>2</sub> - F<sub>8</sub>) were selected for podding habit and high ovule number while being tested for Fusarium wilt races 1, 5 and 6. All three tests demonstrated homozygous resistance to all three strains of wilt.

In 1979 a 20 plant bulk in the 8th generation was made for seed stock increase.

This variety was stabilized in the 7th generation. Field observations have indicated a very uniform and stable variety since that time.

EXHIBIT BDATA INDICATIVE OF NOVELTY

Novelty is based on the unique combination of the following characters:

Sundance is a triple and quadruple podding freezing variety most closely resembling the variety Tahoe but differs by being one day later and has pointed pods whereas Tahoe has blunt pods.

**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*)**

**EXHIBIT C**  
(Pea)

NAME OF APPLICANT(S) <b>Pure Line Seeds, Inc.</b> ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) <b>Box 8866, Moscow, Idaho 83843</b>	VARIETY NAME OR TEMPORARY DESIGNATION <b>SUNDANCE</b> <hr/> <b>FOR OFFICIAL USE ONLY</b> PVPO NUMBER <b>8200186</b>
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Place the appropriate number that describes the varietal character in the boxes below.  
 Place a zero in first box (e.g.    or   ) when number is either 99 or less or 9 or less.

**1. TYPE:**

1 = GARDEN      2 = FIELD      3 = EDIBLE-PODDED

**2. MATURITY:**

<input type="text" value="14"/> Node number of first bloom:	<input type="text" value="0"/> <input type="text" value="7"/> <input type="text" value="1"/> No. of days to processing	<input type="text" value="1"/> <input type="text" value="6"/> <input type="text" value="1"/> <input type="text" value="0"/> Heat Units:
<input type="text" value="0"/> <input type="text" value="0"/> No. of days <i>Earlier</i> than	<input type="text" value="5"/> } 1 = ALASKA WR      2 = THOMAS LAXTON WR      3 = LITTLE MARVEL	
<input type="text" value="1"/> <input type="text" value="4"/> No. of days <i>Later</i> than	<input type="text" value="3"/> } 4 = WANDO      5 = ALDERMAN WR      6 = AUSTRIAN WINTER	

**3. PLANT HEIGHT:**

<input type="text" value="0"/> <input type="text" value="6"/> <input type="text" value="5"/> CM. HIGH	
<input type="text" value="2"/> <input type="text" value="0"/> Cm. <i>Shorter</i> than	<input type="text" value="1"/> } 1 = ALASKA WR      2 = THOMAS LAXTON WR      3 = LITTLE MARVEL
<input type="text" value="1"/> <input type="text" value="0"/> Cm. <i>Taller</i> than	<input type="text" value="3"/> } 4 = WANDO      5 = ALDERMAN WR      6 = AUSTRIAN WINTER

**4. VINE:**

<input type="text" value="1"/> Habit: 1 = DETERMINATE      2 = INDETERMINATE	<input type="text" value="3"/> Stockiness: 1 = SLIM (Alaska)      2 = MEDIUM (Thomas Laxton WR)      3 = HEAVY (Alderman)
<input type="text" value="2"/> Branching: 1 = NONE (Alaska)      2 = 1-2 BRANCHES (Little Marvel)      3 = MORE THAN 2 BRANCHES (Dwarf Gray Sugar)	
<input type="text" value="2"/> Internodes: 1 = STRAIGHT      2 = ZIG ZAG	<input type="text" value="2"/> <input type="text" value="1"/> NUMBER OF NODES

**5. LEAFLETS:**

<input type="text" value="3"/> Color: 1 = LIGHT GREEN (Alaska WR)      2 = MED. GREEN (Thomas Laxton WR)      3 = DARK GREEN (Alderman)      4 = OTHER (Specify)	
<input type="text" value="3"/> Wax: 1 = NONE      2 = LIGHT      3 = MEDIUM      4 = HEAVY	<input type="text" value="2"/> 1 = NOT MARBLED      2 = MARBLED (Alaska)
<input type="text" value="3"/> Number of leaflet pairs: 1 = NOT PAIRED      2 = ONE      3 = TWO      4 = THREE OR MORE	

**6. STIPULES:**

<input type="text" value="2"/> 1 = LACKING      2 = PRESENT	<input type="text" value="1"/> 1 = NOT CLASPING      2 = CLASPING
<input type="text" value="2"/> 1 = NOT MARBLED      2 = MARBLED	<input type="text" value="3"/> Size (Compared with leaflets): 1 = SMALLER      2 = SAME      3 = LARGER
<input type="text" value="2"/> Color (Compared with leaflets): 1 = LIGHTER      2 = SAME      3 = DARKER	

**7. FLOWER COLOR:**

<input type="text" value="2"/> VENATION <input type="text" value="1"/> STANDARD <input type="text" value="1"/> WING <input type="text" value="1"/> KEEL	1 = WHITE      2 = GREENISH      3 = LAVENDER 4 = PURPLE      5 = RED 6 = OTHER (Specify)
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8. PODS:

2 Shape: 1 = STRAIGHT 2 = SLIGHTLY CURVED  1 End: 1 = POINTED (Alderman) 2 = BLUNT (Alaska)  
 3 = CURVED  
 3 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  
 7 Borne: 1 = SINGLE 2 = DOUBLE 3 = SINGLE AND DOUBLE 4 = SINGLE, DOUBLE, & TRIPLE  
 5 = DOUBLE & TRIPLE 6 = TRIPLE 7 = OTHER (Specify) triple & quadruple  
 8  1/2 CM. LENGTH  1  4 MM. WIDTH (Between sutures)  1  0 NO. SEEDS PER POD

9. SEEDS (95-100 Tenderometer):

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

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

SEEDS (Dry, Mature):

2 Shape: 1 = FLATTENED 2 = ANGULAR 3 = OVAL 4 = ROUNDED  
 3 Surface: 1 = SMOOTH 2 = DIMPLED  2 Surface: 1 = SHINY 2 = DULL  
 3 = WRINKLED  
 1 Color Pattern: 1 = MONOCOLOR 2 = MOTTLED 3 = STRIPED 4 = DOTTED  
 2 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  
 1 Secondary Color: 10 = GRAY 11 = BLACK  
 2 Hilum Floor Color: 1 = WHITE 2 = TAN  1 Cotyledon Color: 1 = GREEN 2 = YELLOW 3 = ORANGE  
 3 = BLACK  
 2  0 GRAMS PER 100 SEEDS

10. 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  1 PEA ENATION MOSAIC  0 YELLOW BEAN MOSAIC  
 2 OTHER (Specify) Fusarium Wilt Races 5 & 6

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

0 APHIDS  0 OTHER (Specify) \_\_\_\_\_

12. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Leafiness	Tahoe	Fresh Seed Color	Tahoe
Leaf Color	Tahoe	Mature Seed Color	Tahoe
Pod Color	Tahoe	Seed Shape	Tahoe
Pod Shape	Green Arrow	Plant Habit	Tahoe

COMMENTS: