

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, IMPORTING 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

'Sunder'



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:

Edward M. Lee
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

W. B. Bryan
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 Freezer 76-110		1b. VARIETY NAME Sounder		FOR OFFICIAL USE ONLY PV NUMBER 8000096	
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, 1976		FEE RECEIVED \$ 500.00 \$ 250.00	DATE 5/5/80 8/25/80
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)

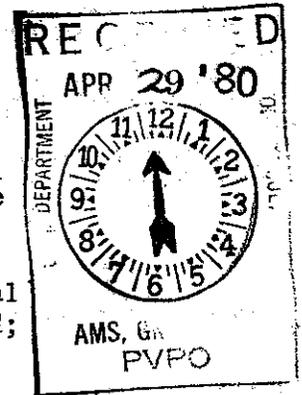
Charles Green, Administrative Assistant
 for Rogers Brothers Seed Company
 (SIGNATURE OF APPLICANT)

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.



SOUNDER

8000096

Exhibit A

Origin and Breeding History of the Variety

Sounder is a late maturing freezing pea that was derived from the following hand pollinated crosses:

Rogers Bros. Fr. 70115 x (Aurora x WSU* H1008)

*WSU - Washington State University

The final cross of Sounder was made during the winter of 1970-71 and the following series of selections were subsequently made:

<u>Year</u>	<u>Generation</u>	<u>Plot</u>	<u>Harvested</u>
1971	f ₁	712322	Bulked
1971-72	f ₂	Winter Increase	Bulked
1972	f ₃	721777	4 single plant selections
1973	f ₄	ST-73-180	3 single plant selections
1974	f ₅	P-74-244BA	2 single plant selections
1975	f ₆	ST-75-059	3 single plant selections
1976	f ₇	76110	12 oz. bulk, plus 4-singles

The bulk harvest of plot 76110 was increased in 1977 as plot 77449. Four pounds of seed was harvested plus 3 single plot selections. This 4# was subsequently increased for release as the initial production seed stock for the variety Sounder. The single plant selections have been increased and will be held in reserve as stock maintenance pure lines for the variety.

No variant plant types have been noted in the breeding history of Sounder. However, during a winter increase operating in the f₈ generation of the original Sounder line, a slight field mixture occurred. Some mixture types occurring from this were a few slightly taller plants, and a few semi leafless types. These were carefully rogued and few, if any, mix types remain. However, the original line will be replaced with the pure lines mentioned above, just as soon as they can be increased to the required quantity.

SOUNDER

Exhibit B (Revised)

Statement of Novelty

Sounder most closely resembles the varieties Dark Skin Perfection and Parlay, except: Sounder is two days later maturing than Dark Skin Perfection and produces triple pods on 15% of the nodes, while Dark Skin Perfection only produces one and two pods per node. The multiple podding habit of Sounder more closely resembles the pod setting habit of the variety Parlay, but Parlay sets up to five pods per node while Sounder seldom sets more than three and Sounder has a more open type foliage and is one day earlier than Parlay. Sounder is resistant to Fusarium oxysporum races #5 and #6, while Dark Skin Perfection is not resistant to either of these races and Parlay is resistant to race #6 only.



FORM GR-470-14
(3-78)

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) ROGERS BROTHERS SEED COMPANY		VARIETY NAME OR TEMPORARY DESIGNATION SOUNDER
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 8000096

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:

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 NUMBER OF NODES
Will supply data in Sept. 1980

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 2 End: 1 = POINTED (Alderman) 2 = BLUNT (Alaska)
 3 = CURVED
 2 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
 4 Borne: 1 = SINGLE 2 = DOUBLE 3 = SINGLE AND DOUBLE 4 = SINGLE, DOUBLE, & TRIPEE
 5 = DOUBLE & TRIPLE 6 = TRIPLE 7 = OTHER (Specify) _____
 7 4 ^{MM} LENGTH 1 4 ^{MM} WIDTH (Between sutures) 7 0 ^{NO. SEEDS PER POD}

9. SEEDS (95-100 Tenderometer):

3 Color: 1 = LIGHT GREEN 2 = GREEN 3 = DARK GREEN 4 = OTHER (Specify) _____
 Seive: % 0 4 0 9 1 1 2 2 3 1 1 9 0 4 0 0 4 4 0 ^{AVERAGE}

SEEDS (Dry, Mature):

1 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
 5 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 1 Cotyledon Color: 1 = GREEN 2 = YELLOW 3 = ORANGE
 1 8 GRAMS PER 100 SEEDS

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

2 FUSARIUM WILT NEAR-WILT DOWNY MILDEW
 0 ASCOCHYTA BLIGHT 2 POWDERY MILDEW BACTERIAL BLIGHT
 0 MOSAIC PEA ENATION MOSAIC YELLOW BEAN MOSAIC
 2 OTHER (Specify) Fusarium oxysporum-wilt Race #5 & Race # 6

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	Puget	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

COMMENTS:

Exhibit D

Additional Description of the Variety

Sounder is a late maturing freezing pea variety which reaches prime table stage in 91 days at Twin Falls, Idaho. Sounder has a determinate vine and the pod set is determinate as well. The vine height of Sounder is approximately 7 inches shorter than Dark Skin Perfection and 3 inches shorter than Parlay, yet it is a vigorous growing variety and is well suited to more humid areas because of its shorter vine.

Because of its resistance to ~~Fusarium wilt~~ race #5 and race #6, Sounder has had most of its testing in the Puget Sound area of Western Washington where these diseases are a serious problem. During the 1979 season, Sounder yielded 115% of Dark Skin Perfection at Mt. Vernon, Washington, grown in plots that were free of Fusarium wilt race #5 and #6. Sounder was also tested at two locations in Minnesota, Waseca and Becker, and expressed good tolerance to common pea root rot and the yield and performance potential looked very good.

Sounder is also resistant to powdery mildew which is a particularly important asset to a late maturing variety.