No. 7600062

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Gallatin Valley 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, 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

'Sugar Snap'

PLANT VARIETY PROTECTION OFFICE · UNITED STATES 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* 11th *day of* April *in the year of our Lord one thousand nine hundred and* seventy-seven

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

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 SUGAR SNAP	2. KIND NAME Snap Pea (a new class)	FOR OFFICIAL USE ONLY PV NUMBER 7600062
3. GENUS AND SPECIES NAME Pisum sativum L.	4. FAMILY NAME *(Botanical)* Leguminosae 5. DATE OF DETERMINATION 1969	FILING DATE 3·26·76 TIME 8 A.M. ~~P.M.~~ FEE RECEIVED $ 250.00 $ 250.00 $ 250.00 BALANCE DUE $ — $ — $ —
6. NAME OF APPLICANT(S) Gallatin Valley Seed Co.	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)* P O Box 167 Twin Falls, Idaho 83301	8. TELEPHONE AREA CODE AND NUMBER (208)733-8222
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)* Corporation	10. STATE OF INCORPORATION Montana	11. DATE OF INCORPORATION 9/28/22

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

Same As Above

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.

March 8 1976
(DATE)

Calvin R. Lamborn
(SIGNATURE OF APPLICANT)

March 8 1976
(DATE)

[signature]
(SIGNATURE OF APPLICANT)

00001

RECEIVED
MAR 26 1976
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.

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8. 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] Surface: 1 = SHINY 2 = DULL

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

[0 6] CM. LENGTH

[1 4] MM. WIDTH (Between sutures)

[0 7] 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
	NOT								

NOT TESTED, BECAUSE THIS VARIETY IS EDIBLE PODDED

SEEDS (Dry, Mature):

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

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

[2] Surface: 1 = SHINY 2 = DULL

[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

[5] Secondary Color: 10 = GRAY 11 = BLACK

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

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

[2 2] GRAMS PER 100 SEEDS

RECEIVED
MAY 6 1976
U. S. DEPARTMENT
AMS, GRAIN DIV.
PVPO

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

[2] FUSARIUM WILT Race I

[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

[ ] OTHER (Specify) _____

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

[1] APHIDS

[ ] OTHER (Specify) _____

12. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Leafiness	Mammoth Melting Sugar	Fresh Seed Color	Hyalite
Leaf Color	Mammoth Melting Sugar	Mature Seed Color	Hyalite
Pod Color	Hyalite	Seed Shape	R S 87 (drum shape)
Pod Shape	RS 87 (Tight Pod)	Plant Habit	Mammoth Melting Sug

COMMENTS:

00006

6-47

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)
Gallatin Valley Seed Co

ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*
P O Box 167 Twin Falls, Idaho 83301

VARIETY NAME OR TEMPORARY DESIGNATION
SUGAR SNAP (H477-2)

FOR OFFICIAL USE ONLY
PVPO NUMBER 7600062

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:

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

2. MATURITY:

[1][6] Node number of first bloom: [0][7][0] No. of days to processing [1][5][5][0] Heat Units

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

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

3. PLANT HEIGHT:

[1][6][0] CM. HIGH

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

[2][0] Cm. *Taller* than . . . . . [5] } 4 = WANDO 5 = ALDERMAN WR 6 = AUSTRIAN WINTER

4. VINE:

[2] 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] Internodes: 1 = STRAIGHT 2 = ZIG ZAG [2][4] 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 [2] 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

7. FLOWER COLOR:

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

Exhibit A 1

AN ACCOUNT OF ORIGIN AND DESCRIPTION OF OUR NEW VEGETABLE

"SNAP - PEAS"

During my first year with Gallatin Valley Seed Co., (1969), Dr. M.C. Parker then Research Director, explained to me his many research projects. Among these projects, was a plant breeding program to reduce parchment and strings in edible-pod peas. He had about abandoned the project because the pods with less parchment or strings were more distorted in shape and therefore less desirable.

Dr. Parker later showed to me a mutant rogue found in peas, called a "tight-pod". I examined this rogue to learn why the pods were "tight". I was surprised to find that its pod walls were about twice as thick as other peas. The thought then came to me, if the pod walls of edible-pod peas were twice as thick, perhaps, they would not become distorted when the parchment and strings were reduced.

This tight-podded rogue also had good quality shelled peas; whereas, the standard edible - pod peas have very objectionable flavors once the seeds start to develop. It appeared feasible that a cross between this rogue and a standard edible-pod pea might produce a thick-pod without distortion and having good quality shelled peas.

The fall of 1969, I made hand pollinated crosses between Mammoth Melting Sugar (a standard edible pod variety) and RS 87 (a tight podded rogue selected from Hyalite).

Subsequent generations were grown in the green house and field. In 1971, single plant selections were made. Later H477-2 was chosen as the best line, and now has been named, "Sugar Snap". As of fall 1975, we had increased the seed of Sugar Snap to 3,400 pounds.

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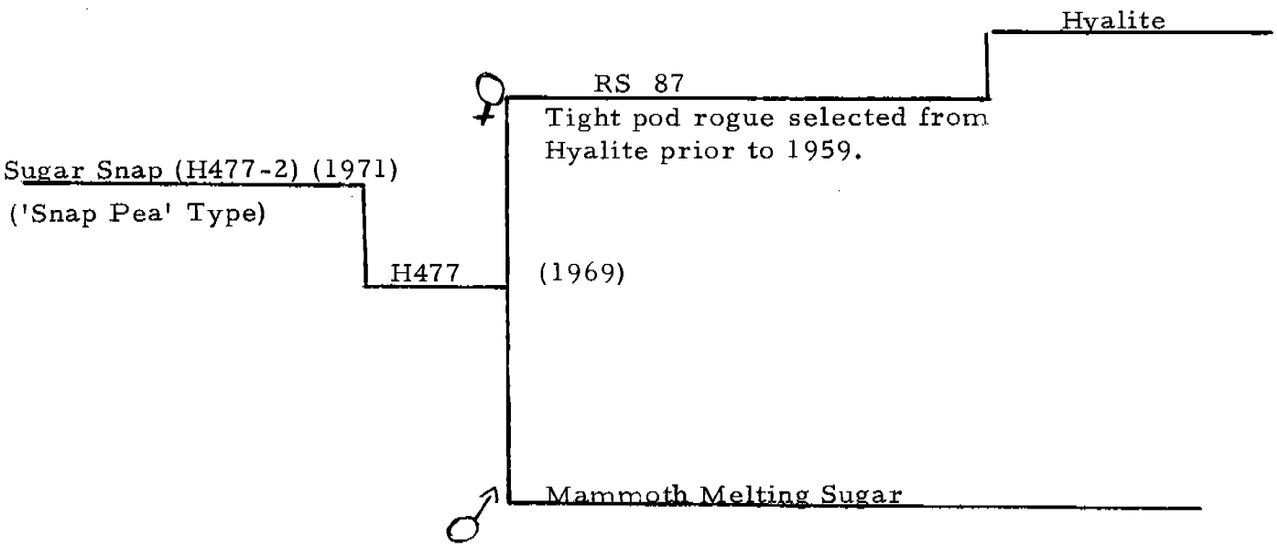
Exhibit A 2

Pedigree Chart For Sugar Snap



Data complied from breeding records
of Gallatin Valley Seed Co.

Exhibit B

Botanical Description of Sugar Snap

Sugar Snap is a new class of peas which is different enough from the standard edible-pods and shelled peas to be considered a new vegetable. It has thick, crisp pod walls without parchment. The pods are tight and free from distortion. When a pod is bent, it will snap like a fresh snap bean pod; hence, we are calling this new class, "snap-peas". These peas can be used as a multi-purpose vegetable. The pods and peas together are exceptional. The peas can be shelled out and used alone. One pod wall is as thick or thicker than the whole standard edible-pod. These pod walls become the center of attraction in a green salad. They also can be cooked like standard edible-pods.

Our Sugar Snap can be used from the slab-pod stage up to where the pod starts to become netted. Most people prefer the pods which have well developed peas in them.

The texture and flavor of these pods have turned out even better than what we had anticipated. The crisp but tender pods are juicy and a delight to chew. The pod wall is sweeter and has a more enjoyable flavor than the standard edible-pods. The peas have a flavor similar to good quality shelled peas, which is quite different from the pod wall. As one chews these pods, he may detect the flavor of the pod wall, or the peas, or perhaps a changing combination of the two flavors.

The pods of Sugar Snap are very good either fresh or cooked. The are very suited for freezing, but not for canning. A good way to cook them is to " stir-fry" them in hot oil just long enough for the pods to change to a darker green in color. If they are over-cooked, the pod wall and peas taste more near the same and some of the uniquness of different flavors are lost.

In a once over harvest, as is done in a commercial operation, a considerable increase in yield of usable product would be expected. The pod walls surrounding the standard sized peas more than equals the volume of the shelled peas. The slab pods which are not recovered in a normal operation can also equal the volume of the shelled peas. These peas would therefore about triple the yield of useable product over standard peas.

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Exhibit D

Data Indicative of Novelty

Sugar Snap is most similar to its parent Mammoth Melting Sugar in vine type. It has long internodes with a tall indeterminate vine. Both varieties are free of parchment in their pod walls , but develop strings along the sutures of their pods.

Sugar Snap differs from Mammoth Melting Sugar in that the cotyledons are green and wrinkled as compared to yellow and smooth.

Sugar Snap also differs from Mammoth Melting Sugar and all other current varieties in that it has thick pod walls.

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Statement of Basis of Applicant's Ownership

The undersigned specifies that Gallatin Valley Seed Co., applicant is the employer of the breeder responsible for the development of the subject plant variety of this application, namely Sugar Snap, (a new class of edible pod peas).

GALLATIN VALLEY SEED CO

(per) Calvin R. Lamborn
Calvin R. Lamborn

(Title) Research Director

(Date) March 8, 1976

Exhibit E

b

Hartwig:

TERRA-VIG 717 from Variety 'Semmes' — MISS. A.E.S.

TERRA-VIG 616 from Variety 'Pickett' — ARKANSAS CAVINESS

Enclosed are revised Application Forms and revised Soybean Exhibit C Forms to be used with future applications.

~~We need~~

If possible, We would like to have additional information for Items 7, 8, 9 & disease reaction (Item 19) for the subject varieties.

Data on Snap Peas.

Sugar Snap Peas

Jack Donavon
214-886-2872

1400 CULVER ST.
COMMERSE, TEXAS 75428

Send Exhibits A, B, C
To ~~[illegible]~~

SUGAR SNAP 7600062

A, B, C

1029

8500128 SNAPPY

8300165 SUPER SUGAR MEL

8300164 STRINGLESS SUGAR SNAP

8300163 SUGAR DAPPY

8200147 SWEET SNAP

8100123 SUGAR RAE

8100112 SUGAR MEL

8100122 SUGAR BON