No. 7500077

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Asgrow 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

'Aska'

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, DC *this* 19th *day of* July *in the year of our Lord one thousand nine hundred and* seventy-six

Attest:

S. Rollin

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

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 Aska (XP C55)	2. KIND NAME Pea	FOR OFFICIAL USE ONLY PV NUMBER 7500077
3. GENUS AND SPECIES NAME Pisum sativum	4. FAMILY NAME *(Botanical)* Leguminosae	FILING DATE 3·13·75 TIME 10 A.M.
	5. DATE OF DETERMINATION 1973	FEE RECEIVED $ 250 $ 250 $ 250 BALANCE DUE $ — $ — $ —
6. NAME OF APPLICANT(S) Asgrow Seed Company	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)* Kalamazoo, Michigan 49001	8. TELEPHONE AREA CODE AND NUMBER (616) 382-4000

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)* Corporation	10. STATE OF INCORPORATION Delaware	11. DATE OF INCORPORATION March 22, 1968

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

~~Allen R. Trotter~~ John A. Batcha
Asgrow Seed Company
Kalamazoo, Michigan 49001 4/1/76

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 [ ] 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 10, 1975
(DATE)

Allen R. Trotter
(SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

AMENDED EXHIBIT A

ORIGIN AND BREEDING HISTORY FOR ASKA (XP-C55)

1964 Original cross-Alsweet x M163.

1965 F_1 grown at ARC.
F_2 grown in fall and winter at SEBS.

1966 F_3 grown. Single vine selections made.

1967 F_4 grown. Reselected.

1968 F_5 grown. Small increase.

1969 F_6 grown.

1970 F_7 grown. Reselected. Small increase.

1971 F_8 grown. Yield trial.

1972 Yield trials. Small increase.
Further increase in Mexico.

1973 Yield trials. Trials throughout company.
Increase. Designated XP-C55

1974 Yield trials. Trials throughout company.
Increase and production.

236 single vine selections made. These will be planted on a progeny basis. Each progeny to be evaluated for type and any off-type will be removed completely. Balance of progenies will be harvested as a bulk and this will become our basic stock seed.

This line segregated normally in early generations but has been uniform and stable for the past several years. The progeny tests in 1975 proved that the line is truly homozygous and breeding true.

J. D. Atkin
January 8, 1976

7500077

EXHIBIT B

BOTANICAL DESCRIPTION OF ASKA (XP-C55) PEA

Aska is a small sieve, triple podded, Alaska type canner pea. This is quite similar to regular Alaska type peas except it will set a fair number of triple pods and even occasional fours under favorable growing conditions.

Aska flowers on about the 10th node and reaches 100 tenderometer in about 1160 heat units. The number of days to processing varies from area to area and year to year. However, Aska, under Twin Falls conditions, is about two days later than Alaska WR.

The plant is indeterminate, with a slim, non-branching stem. The internodes are straight. There are two leaflet pairs which are light green in color, have a light wax coating and are marbled.

The non-clasping stipules are the same color as the leaflets and are marbled. The stipules are larger than the leaflets but are the same color. The flower color is white.

The light green pods are straight with blunt end and the pod surface is smooth and shiny. The pods are borne as single, double, triple and even a few fours under good growing conditions.

At 95-100 tenderometer the sieve size averages about 2.2 (3 year average). In 1974 it was 2.06. The dry seeds are round, smooth and have a dull surface. The seed color is blue-green and there is no color pattern. The hilum color is tan and the cotyledon color green.

Aska has been tested and is resistant to Wilt. There is no reason to believe that it is especially resistant to aphids or other insects.

Aska, in summary, is a rather typical Alaska type pea except it is double and triple podded whereas most Alaskas are single or single and double podded.

Exhibit B is written from several years experience and is thus rather generalized due to the fact that conditions vary from year to year. Exhibit C is compiled from results of a one year replicated trial planted especially for PVP measurements where varieties can be compared in side by side plantings. Exhibits B and C therefore, compliment each other and may vary slightly.

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.

RECEIVED
MAR 13 1975
U. S. DEPARTMENT OF AGRICULTURE

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)
ASGROW SEED COMPANY

ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*

VARIETY NAME OR TEMPORARY DESIGNATION
Aska (XP-C55)

FOR OFFICIAL USE ONLY

PVPO NUMBER 7500077

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:

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

2. MATURITY:

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

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

[0][2] No. of days *Later* than . . . . [1] 4 = WANDO 5 = ALDERMAN WR 6 = AUSTRIAN WINTER

3. PLANT HEIGHT:

[0][4][5] CM. HIGH

[0][1] Cm. *Shorter* than . . . . . [1] 1 = ALASKA WR 2 = THOMAS LAXTON WR 3 = LITTLE MARVEL

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

4. VINE:

[2] Habit: 1 = DETERMINATE 2 = INDETERMINATE [1] Stockiness: 1 = SLIM (Alaska) 2 = MEDIUM (Thomas Laxton WR) 3 = HEAVY (Alderman)

[1] 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 [1][4] NUMBER OF NODES

5. LEAFLETS:

[1] Color: 1 = LIGHT GREEN (Alaska WR) 2 = MED. GREEN (Thomas Laxton WR) 3 = DARK GREEN (Alderman) 4 = OTHER (Specify)

[2] Wax: 1 = NONE 2 = LIGHT 3 = MEDIUM 4 = HEAVY [2] 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 [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

7. FLOWER COLOR:

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

8. PODS:

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

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

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

[1] Surface: 1 = SMOOTH 2 = ROUGH

[1] 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) _____

[0 5] CM. LENGTH [1 1] MM. WIDTH (Between sutures) [0 6] NO. SEEDS PER POD

9. SEEDS (95–100 Tenderometer):

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

Seive: %	1	2	3	4	5	6	7	8	AVERAGE
	30	37	30	03					206

SEEDS (Dry, Mature):

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

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

[2] Surface: 1 = SHINY 2 = DULL

[1] Color Pattern: 1 = MONOCOLOR 2 = MOTTLED 3 = STRIPED 4 = DOTTED

[6] 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 3 = BLACK

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

[1 9] 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	[0] 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)

[0] APHIDS [ ] OTHER (Specify) _____

12. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Leafiness	M163	Fresh Seed Color	M163
Leaf Color	M163	Mature Seed Color	M163
Pod Color	M163	Seed Shape	M163
Pod Shape	M163	Plant Habit	M163

COMMENTS:

AMENDED EXHIBIT D

PROOF OF NOVELTY OF ASKA (XP-C55) PEA

Aska is an Alaska type pea that differs from practically all other Alaskas in that it is double and triple podded whereas most Alaskas are single or single and double podded. Aska most nearly resembles M163 and Cameo which can also be double and triple podded.

Aska differs from the other two in that it has a considerably taller plant. In the PVP planting in 1974 and 1975, the three varieties were growing in adjacent rows. On July 4, 1974, pictures were taken of all three varieties and it is easy to see that Aska is considerably taller. The pictures are enclosed. Data from 1974 and 1975 PVP plantings is as follows:

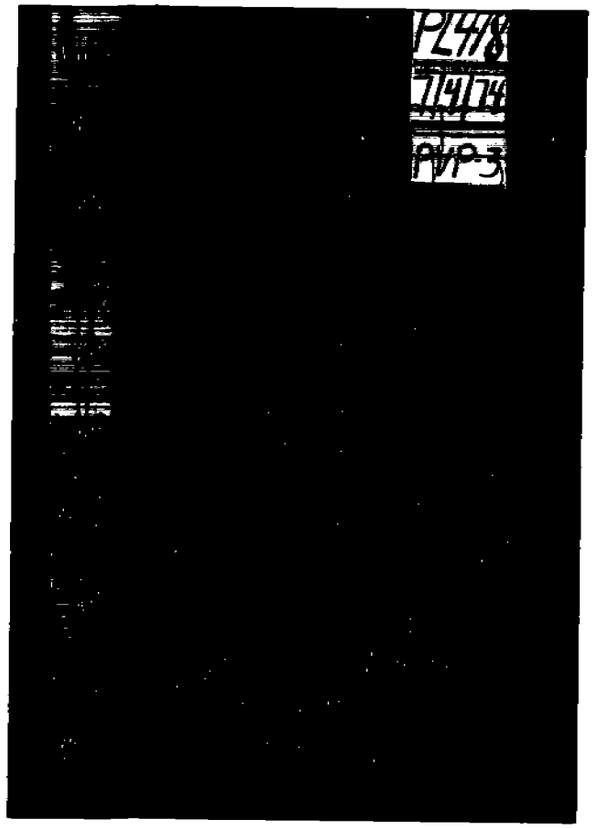
YEAR	ASKA	CAMEO	M163
1974	45	35	40
1975	74	63	65

In addition to the above data and the pictures submitted,the three varieties have been compared in four different plantings in 1974 and also 1975. In all comparisons, the varieties were grown in adjacent plots or in close proximity. Aska was observed to be considerably taller than the other varieties in all comparisons.

Aska differs from the other two varieties in that it is much more resistant to root rot at Twin Falls. The three pictures enclosed illustrate this point. Aska plants are healthy whereas several M163 and Cameo plants are dead. Cameo has been observed for only one year but M163 plots can be distinguished every year by the root rot infection.

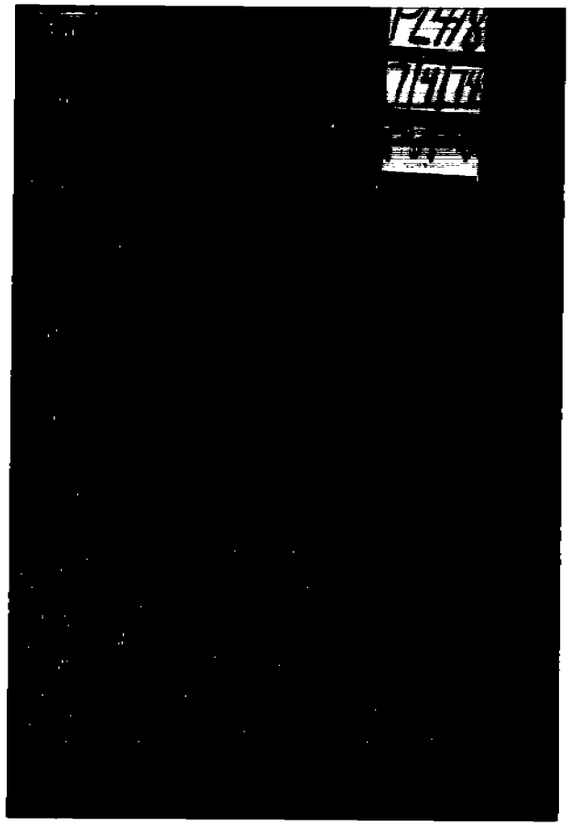
To our knowledge, there are only three small sieve, triple podded, Alaska peas maturing at about 1160 heat units. Aska differs very significantly from both in that it is taller and more resistant to root rot.

XP-C55
ASKA



7500077

M163



7310011

CAMEO

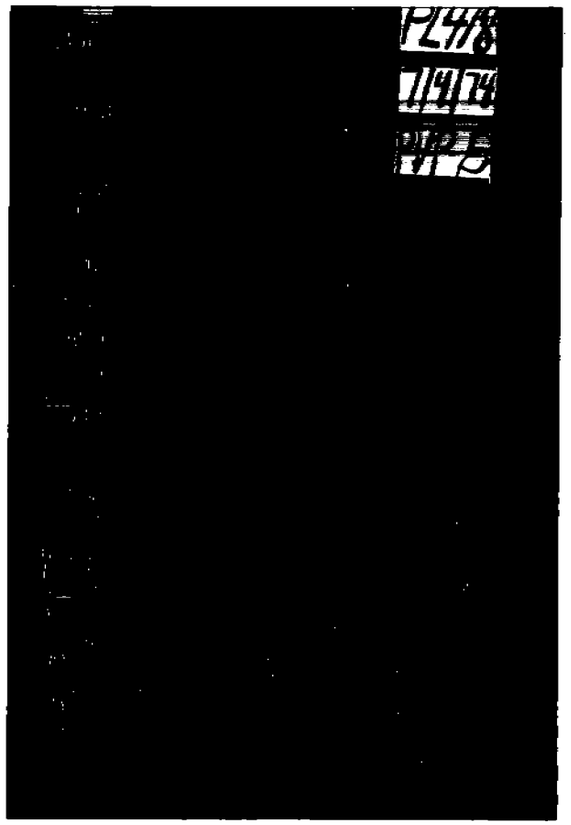


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EXHIBIT E

Statement of the Basis of Applicant's Ownership

Pea, Aska

Pea, Aska (XP C55), was originated and developed by Dr. C. G. Briggs and Dr. John D. Atkin, Asgrow Plant Breeders. By agreement between employee and Asgrow Seed Company, all rights to any invention, discovery, or development made by an employee are assigned to the company. No rights to such invention, discovery, or development are retained by the employee.