No. 7300030

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Morrison 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, 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

'Aries'

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* 9th *day of* May *in the year of our Lord one thousand nine hundred and* seventy-four

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	2. KIND NAME	FOR OFFICIAL USE ONLY	
~~Orion~~ ARIES	Pea	PVPO NUMBER 73030	
3. GENUS AND SPECIES NAME	4. FAMILY NAME *(Botanical)*	FILING DATE	TIME
	Leguminosae	11/20/72	3:00 P.M.
Pisum Sativum	5. DATE OF DETERMINATION	FEE RECEIVED	CHARGES
	5/70	$ 750.00	—

6. NAME OF APPLICANT(S)	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*	8. TELEPHONE AREA CODE AND NUMBER
Morrison Bros. Seed Co.	E. 7509 Sprague Ave. Spokane, Wash. Zip-99213	509-924-1404

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

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

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

[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 [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?

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).

11/14/72
(DATE)

MORRISON BROS. SEED CO.
(SIGNATURE OF APPLICANT)
BRUCE TAINIO

(DATE)

(SIGNATURE OF APPLICANT)

FORM GR-470 (REVERSE)

RECEIVED NOV 20 1972 U.S. DEPARTMENT OF AGRICULTURE AMS, GRAIN DIV. 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.

73030

ARIES
~~ORION~~

EXHIBIT A

This canning type pea was developed by crossing Gem with Perfection Multnomah. Progeny of this cross were advanced to the F_3 generation where it was then single plant selected. These single plants were then back crossed with Gem. The progeny of this back cross were advanced to the F_4 generation where they were single plant selected on the basis of plant height, early blooming and pod ovule color. These selections were increased to the F_7 generation, where they were bulk selected for uniformity of character. Bulk selections were then made for each of three consecutive generations following. This F_{10} generation material was then increased over a two year period, where it was again single plant selected in 1970 because of uniformity problems. These single plant selections were then increased to their present quantities. This genetic make-up of this variety is stabilized and for the past five generations no variants have been observed.

ITEM 12B

*(~~Orion~~ ARIES) Comparison to early perfection II

Season:	*Sixty-four (64) days to canning, first bloom on 13th node.
	Sixty-eight (68) days to canning, first bloom on 13th or 14th node.
Vine:	* 24" to 26" tall, medium green, determinate growth.
	30" to 32" inches tall, medium green determinate growth.
Pods	*3 1/2 inches long, blunt, straight, double.
	3 1/2 inches long, blunt, double.
Berries:	*Medium green, sieve sizes ranging from 1^s through 6^s. (8) eight peas per pod.
Heat Units:	* Approximately 1400 at 100 tenderometer.
	Approximately 1475 at 100 tenderometer.

73030

EXHIBIT D

Under 1971 and 1972 trial conditions at the Pea Growing Research Organisations, trials in Peterborough, England, this variety yielded 120% of their standard Dark Skin Perfections. Also it was the highest yielding variety in their trials.

This variety is also earlier and short in vine length than Perfection II, and has the feature that it will not elongate and have excessive vine growth under high moisture conditions.

Example:

	Normal	High Moisture
Dark Skin Perfection	30"	36" to 40"
Perfection 11	30"	38" to 40"
~~Orion~~ ARIES	25"	26"

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

(1) ~~Orion~~ ARIES is 5 to 8 inches shorter than Perfection II

(2) ~~Orion~~ ARIES will not produce excessive vine under high moisture conditions.

(3) ~~Orion~~ ARIES will produce about 15% more peas at canning stage than does Perfection II.

(4) ~~Orion~~ ARIES has a high degree of tolerance to Fusarium Oxysporium pisi, Race 2 whereas Perfection 11 does not.

Perfection 11 is, to the best of our knowledge, the variety most similar to ~~Orion~~ ARIES.

ITEM 12E

Morrison Bros. Seed Co., of Spokane, Washington is the employer of the breeder of this variety. We also believe that we are the sole original, and first breeder of the ~~Orion~~ ARIES variety of peas, for which it solicits a certificate of Protection.

FORM APPROVED. OMB NO. 40-R3712

EXHIBIT C
(Pea)

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

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

OBJECTIVE DESCRIPTION OF VARIETY

PEA *(PISUM SATIVUM)*

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(S)
MORRISON BROS. SEED CO.

ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*
E. 7509 Sprague, Spokane, Washington 99213

FOR OFFICIAL USE ONLY

PVPO NUMBER
73030

VARIETY NAME OR TEMPORARY DESIGNATION
ARIES
~~Orson~~ 767

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] 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:

[0][8] No. of days *Earlier* than ..... [5]
[0][2] No. of days *Later* than ..... [2]

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

4. PLANT HEIGHT:

[0][6][3] CM. HIGH

[2][2] Cm. *Shorter* than ..... [4]
[1][8] Cm. *Taller* than ..... [3]

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

[3] 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

[1][3] NUMBER OF NODES

[ ][ ] CM. INTERNODE LENGTH (Just below 1st flowering node) "Cannot supply at this time

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)

28 [3] 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

[2] Size (Compared with leaflets): 1 = SMALLER 2 = SAME 3 = LARGER

[2] Color (Compared with leaflets): 1 = LIGHTER 2 = SAME 3 = DARKER

8. FLOWER COLOR:

[1] 1 = MONOCOLOR 2 = BICOLOR

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

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

4

9. PODS:

[1] 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) _____

[2] Surface: 1 = SMOOTH 2 = ROUGH

[1] 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 9] CM. LENGTH [1 5] MM. WIDTH (Between sutures) [0 8] NUMBER OF SEEDS PER POD

10. SEEDS (95 - 100 Tenderometer):

[1] Color: 1 = LIGHT GREEN (Perfection Canner) 2 = GREEN (Little Marvel) 3 = DARK GREEN (Dark Skin Perfection) 4 = OTHER (Specify) _____

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

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

[2] Surface: 1 = SHINY 2 = DULL

~~SEEDS (Mature, Dry):~~

[2] Color: 1 = MONOCOLOR 2 = BICOLOR

[6] Primary 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)

[5] Secondary Color: 7 = DARK GREEN (Dark Skin Perfection) 8 = BLUE-GREEN (Alaska WR) 9 = BROWN 10 = RED 11 = GRAY 12 = BLACK

[2] Color Pattern: 1 = SPLASHED 2 = MOTTLED 3 = STRIPED 4 = FLECKED 5 = DOTTED

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

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

[1 6] GRAMS PER 100 SEED

11. SEED SIEVE SIZE DISTRIBUTION (95 - 100) Tenderometer): AVE 3.59

Sieve (%):	1	2	3	4	5	6	7	8
	05	11	29	35	15	05	00	00

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 [0] POWDERY MILDEW [0] BACTERIAL BLIGHT

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

[0] OTHER (Specify) _____

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

[0] APHIDS [0] OTHER (Specify) _____

15. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Leafiness	Perfection 3040	Fresh Seed Color	Perfection II
Leaf Color	Perfection II	Mature Seed Color	Perfection 3040
Pod Color	Perfection II	Seed Shape	Perfection 3040
Pod Shape	Perfection II	Plant Habit	Perfection 326

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.

September 1, 1983

Dr. Kenneth H. Evans
PVP Office
National Agriculture Library Bldg.
Suite 500
Beltsville, MD 20705

Re: Assignment to Asgrow seed Company

Dear Dr. Evans:

Be advised that the Plant Variety Protection (PVP) number written in Morrison Brothers Seed Company's Assignment to Asgrow Seed Company dated December 21, 1982 is incorrect. The correct PVP number for Leo is #7400053. The Assignment incorrectly lists #7400033 as the PVP number for Leo.

Very truly yours,

MORRISON BROTHERS SEED COMPANY

Robert A. Ritter
President

RAR:llc

ASSIGNMENT OF

REGISTRATION RIGHTS

Assignment made December 21st, 1982, by MORRISON BROS. SEED COMPANY, a Washington corporation having its general offices at Spokane, Washington, hereinafter referred to as Assignor and ASGROW SEED COMPANY, a Delaware corporation, having its general offices at Kalamazoo, Michigan, hereinafter referred to as Assignee.

Now, therefore, for valuable consideration, the receipts of which is hereby acknowledged, the Assignor hereby assigns to Assignee its entire rights, title and interest in all U.S.A. and Foreign Plan Variety Protection and Registration rights including the following varieties:

U.S. Plan Variety Protection #7400033
VARIETY: Leo
DATE: November 20, 1974
TERM: 17 years

U.S. Plan Variety Protection #7200067
VARIETY: Alsweet II
DATE: June 19, 1974
TERM: 17 years

U.S. Plan Variety Protection #7300030
VARIETY: Aries
DATE: May 9, 1974
TERMS: 17 years

U.S. Plant Variety Protection #7300084
VARIETY: Taurus
DATE: July 26, 1974
TERM: 17 years

U.S. Plant Variety Protection #7300008
VARIETY: Small Sieve Alsweet
DATE: May 9, 1974
TERM: 17 years

U.K. Plant Breeder's Rights Grant #1002
VARIETY: Taurus
DATE: February 17, 1975
TERMS: 15 years

U.K. Plant Breeder's Rights Grant #1003
VARIETY: Aries
DATE: February 17, 1975
TERMS: 15 years

IN WITNESS WHEREOF the Assignor has executed this instrument.

MORRISON BROS. SEED COMPANY

By Robert A. Ritter
ROBERT A. RITTER
Its President

STATE OF WASHINGTON)
: ss.
County of Spokane)

On this 21st day of December, 1982, before me personally appeared Robert A. Ritter, to me known to be the President of the corporation that executed the within and foregoing instrument and acknowledged said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that he is authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Sherry Reynolds
Notary Public in and for the State of Washington, residing at Spokane.

Asgrow Seed Company
subsidiary of The Upjohn Company

Kalamazoo, Michigan 49001

August 11, 1983

Dr. Kenneth H. Evans
Acting Commissioner
Plant Variety Protection Office
National Agricultural Library Building
Suite #500
Beltsville, MD 20705

Dear Dr. Evans:

Asgrow Seed Company acquired the United States Plant Variety Protection rights from Morrison Brothers Seed Company for the following varieties:

Leo	#7400073
Alsweet II	#7200067
Aries	#7300030
Taurus	#7300084
Small Sieve Alsweet	#7300008

CORRECTED PER ROBERT A. RITTER'S LETTER OF SEPT. 1, 1983
RJS 9/23/83

Please arrange to have new copies of certificates issued showing Asgrow Seed Company to be the owner.

The original assignment of Registration Rights is included.

Very truly yours,

John A. Batcha

John A. Batcha

mga
Encl.

Dr. Evans called John Batcha today 8/19/83. They will send a correction & required fee ($5/certificate).
RJS 8/19/83

ASSIGNMENT OF

REGISTRATION RIGHTS

Assignment made December 21st, 1982, by MORRISON BROS. SEED COMPANY, a Washington corporation having its general offices at Spokane, Washington, hereinafter referred to as Assignor and ASGROW SEED COMPANY, a Delaware corporation, having its general offices at Kalamazoo, Michigan, hereinafter referred to as Assignee.

Now, therefore, for valuable consideration, the receipts of which is hereby acknowledged, the Assignor hereby assigns to Assignee its entire rights, title and interest in all U.S.A. and Foreign Plan Variety Protection and Registration rights including the following varieties: 5 RPS.

U.S. Plan Variety Protection #7400023
VARIETY: Leo
DATE: November 20, 1974
TERM: 17 years

U.S. Plan Variety Protection #7200067
VARIETY: Alsweet II
DATE: June 19, 1974
TERM: 17 years

U.S. Plan Variety Protection #7300030
VARIETY: Aries
DATE: May 9, 1974
TERMS: 17 years

U.S. Plant Variety Protection #7300084
VARIETY: Taurus
DATE: July 26, 1974
TERM: 17 years

U.S. Plant Variety Protection #7300008
VARIETY: Small Sieve Alsweet
DATE: May 9, 1974
TERM: 17 years

U.K. Plant Breeder's Rights Grant #1002
VARIETY: Taurus
DATE: February 17, 1975
TERMS: 15 years

U.K. Plant Breeder's Rights Grant #1003
VARIETY: Aries
DATE: February 17, 1975
TERMS: 15 years

IN WITNESS WHEREOF the Assignor has executed this instrument.

MORRISON BROS. SEED COMPANY

By Robert A. Ritter
ROBERT A. RITTER
Its President

STATE OF WASHINGTON)
: ss.
County of Spokane)

On this 21st day of December, 1982, before me personally appeared Robert A. Ritter, to me known to be the President of the corporation that executed the within and foregoing instrument and acknowledged said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that he is authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Sherry Reynolds
Notary Public in and for the State of Washington, residing at Spokane.