



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, 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 (P.L. 57-1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PEA

'Dinos'



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:

Samuel R. Love
 Commissioner
 Plant Variety Protection Office
 Grain Division
 Agricultural Marketing Service

J. B. Bay
 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 XP-F106		1b. VARIETY NAME DINOS <i>JE7 800818</i>		FOR OFFICIAL USE ONLY PV NUMBER 8000118	
2. KIND NAME Garden Pea		3. GENUS AND SPECIES NAME Pisum sativum		FILING DATE 5/12/80	TIME 3:30 P.M.
4. FAMILY NAME (BOTANICAL) Leguminosae		5. DATE OF DETERMINATION 1978 August		FEE RECEIVED \$ 500.00 \$ 250.00	DATE 5/12/80 8/4/80
6. NAME OF APPLICANT(S) Asgrow Seed Company		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) Kalamazoo, MI 49001 9620-190-1		8. TELEPHONE AREA CODE AND NUMBER 616-385-6605	
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 March 22, 1968
12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: John A. Batcha Asgrow Seed Company 9620-190-1 Kalamazoo, MI 49001					

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.)
 United Kingdom February 12, 1979
 France December 5, 1979

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? YES NO (If "Yes," give name of countries and dates.)
JE7 800606

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.

March 18, 1980

(DATE)

John A. Batcha

(SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

MAY 1 2 1980

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.

DINOS
EXHIBIT A: Origin and Breeding History of ~~XP-F106~~ Garden Pea

The original cross made in 1970 was Recette x Fo377 and ~~XP-F106~~ *DINOS* has been developed by straight selection from that cross. In 1976 a small increase was made from a promising F₆ family and in 1978 following observation, yield trials and further increase, this line was designated ~~XP-F106~~. *DINOS*

The basic stock seed of ~~XP-F106~~ *DINOS* was produced in 1978 from approximately 200 progenies derived from single vine selections. These progenies were very uniform. Any progenies suspected of being off-type were eliminated.

Observations indicate ~~XP-F106~~ *DINOS* is uniform and stable.

JEAP00818

EXHIBIT B: Novelty Statement Concerning ~~XP-F106~~ ^{DINOS} Garden Pea.

~~XP-F106~~ ^{DINOS} is unique in that it is very late, very small in sieve size and multiple-podded with a high berry count per pod. To our knowledge, the commercial variety most similar to ~~XP-F106~~ ^{DINOS} is Ivy. Comparative characteristics that make ~~XP-F106~~ ^{DINOS} a distinct variety include, but are not necessarily restricted to the following:

1. ~~XP-F106~~ ^{DINOS} is one or two days earlier to processing maturity than Ivy.
2. The fresh berry size is about 0.3 sieve size smaller for ~~XP-F106~~ than Ivy.
3. There are three flowers per node on ~~XP-F106~~ ^{DINOS} compared to two flowers per node on Ivy.
4. There are generally three pods per node on ~~XP-F106~~ ^{DINOS} and two pods per node on Ivy.
5. The pods of ~~XP-F106~~ ^{DINOS} are about 8 cm. long, curved and pointed; the pods of Ivy are 2 cm. shorter, relatively straight and blunt.
6. The number of seeds per pod averages about ten for ~~XP-F106~~ ^{DINOS} and eight for Ivy.

SEA 800818



Asgrow Seed Company

80-118

Transfer of Plant Variety Protection Act Rights

Asgrow Seed Company, a Delaware Corporation with its principle place of business at 2605 E. Kilgore Road, Kalamazoo MI 49001, is the owner of the Plant Variety Protection Act Certificates and applications for certificates listed on and attached as Exhibit A to this document (the "Certificates and Applications").

For good and valuable consideration, receipt of which is hereby acknowledged, Asgrow hereby transfers all of its right, title and interest in and to the Certificates and Applications and to all rights relating thereto under the Plant Variety Protection Act to Seminis Vegetable Seeds, Inc., a California corporation, whose principle place of business is at 1905 Lirio Street, Saticoy, CA 93007-4206.

Dated: January 31, 1997

Asgrow Seed Company

By: Norman A Braksik
Norman A. Braksik
President

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*)

NAME OF APPLICANT(S)

Asgrow Seed Company

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

Kalamazoo, MI 49001
9620-190-1

VARIETY NAME OR TEMPORARY DESIGNATION

~~XP P106~~

DINOS 387800818

FOR OFFICIAL USE ONLY

PVPO NUMBER 8000118

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:

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

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:

Shape: 1 = STRAIGHT 2 = SLIGHTLY CURVED End: 1 = POINTED (Alderman) 2 = BLUNT (Alaska)
 3 = CURVED
 Color: 1 = LIGHT GREEN (Alaska WR) 2 = MEDIUM GREEN 3 = DARK GREEN (Alderman)
 4 = OTHER (Specify) _____
 Surface: 1 = SMOOTH 2 = ROUGH Surface: 1 = SHINY 2 = DULL
 Borne: 1 = SINGLE 2 = DOUBLE 3 = SINGLE AND DOUBLE 4 = SINGLE, DOUBLE, & TRIPEE
 5 = DOUBLE & TRIPLE 6 = TRIPLE 7 = OTHER (Specify) _____
 CM. LENGTH MM. WIDTH (Between sutures) NO. SEEDS PER POD

9. SEEDS (95-100 Tenderometer):

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

SEEDS (Dry, Mature):

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

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

FUSARIUM WILT NEAR-WILT DOWNY MILDEW
 ASCOCHYTA BLIGHT POWDERY MILDEW BACTERIAL BLIGHT
 MOSAIC PEA ENATION MOSAIC YELLOW BEAN MOSAIC
 OTHER (Specify) _____

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

APHIDS OTHER (Specify) _____

12. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Leafiness	Wando	Fresh Seed Color	Ivy
Leaf Color	Sultan	Mature Seed Color	Ivy
Pod Color	Wando	Seed Shape	Ivy
Pod Shape	Recette	Plant Habit	Wando

COMMENTS: