



# 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 (7 U.S.C. 2322, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PEA

'Dante'



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 21st day of December in the year of our Lord one thousand nine hundred and seventy-eight

Attest:

*Samuel H. Keen*  
Commissioner

Plant Variety Protection Office  
Grain Division  
Agricultural Marketing Service

*Bob Berglund*  
Secretary of Agriculture

**APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE**

INSTRUCTIONS: See Reverse.

1a. TEMPORARY DESIGNATION OF VARIETY <u>XPF 98</u>		1b. VARIETY NAME <u>DANTE</u> #4 12/1/78		FOR OFFICIAL USE ONLY	
2. KIND NAME <u>Pea</u>		3. GENUS AND SPECIES NAME <u>Pisum sativum</u>		PV NUMBER <u>7800094</u>	FILING DATE <u>8-2-78</u>
4. FAMILY NAME (BOTANICAL) <u>Leguminosae</u>		5. DATE OF DETERMINATION <u>July, 1976</u>		TIME <u>10:30</u> <b>A.M.</b>	FEE RECEIVED <u>\$ 250.00</u>
6. NAME OF APPLICANT(S) <u>Asgrow Seed Company</u>		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) <u>Kalamazoo, Michigan 49001</u>		DATE <u>8-2-78</u>	DATE <u>8-2-78</u>
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) <u>Corporation</u>		10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION <u>Delaware</u>		DATE <u>10-3-78</u>	8. TELEPHONE AREA CODE AND NUMBER <u>(616) 385-6605</u>
11. DATE OF INCORPORATION <u>March 22, 1968</u>		12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers: <u>John A. Batcha</u> <u>Asgrow Seed Company</u> <u>Unit 9630-190-1</u> <u>7000 Portage Rd.</u> <u>Kalamazoo, MI 49001</u>			

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

15. Does the applicant(s) agree to the publication of his/her (their) name(s) and address in the Official Journal?  YES  NO

16. The applicant(s) declare(s) 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) 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.

July 18, 1978  
(DATE)

John A. Batcha  
(SIGNATURE OF APPLICANT)  
John A. Batcha

(DATE)

(SIGNATURE OF APPLICANT)

**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, National Agricultural Library, 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 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 or published or the certificate has been issued. However, if the applicant specifies "NO", he may change his choice. (See Section 180.15 of the Regulations and Rules of Practice.)

Asgrow Seed Company

Pea, ~~XPF98~~

DANTE

7/12/12/1/78

7800094

EXHIBIT A - ORIGIN AND BREEDING HISTORY

The original cross to produce this variety was made November, 1972. Parentage was Puget x <sup>Fusarium wilt</sup> a Race 5 resistant breeding line. The variety was produced through a backcross program, making six backcrosses, testing each generation for Race 5 resistance and using only resistant plants to cross onto Puget. <sup>Fusarium wilt</sup>

In 1975, a large number of single vine selections were made and the progenies grown in 1976. These progenies were observed and compared for uniformity. Only those progenies not differing from Puget were saved, and these progenies were tested for resistance to Race 5. <sup>Fusarium wilt</sup> Only resistant lines were kept for further increase and testing.

Evaluation trials and seed increases were made in 1977 and 1978 with the designation XPF98 assigned in February, 1978.

DANTE

~~XPF98~~ is uniform and stable. Uniformity was established in 1976 trials.

Stability has been established in trials and increases since that time where

DANTE ~~XPF98~~ has been found uniform with variants within commercially acceptable limits.

July 18, 1978

Asgrow Seed Company

Pea, XPF98

DANTE *JKF* 12/1/78

7800094

EXHIBIT B - NOVELTY STATEMENT

To our knowledge, the variety most similar to XPF98 is Puget. Comparative characteristics which make XPF98 a distinct variety include but may not be restricted to the following:

~~DANTE~~  
~~XPF98~~ is resistant to Fusarium Wilt race 5 and Puget is susceptible.

~~DANTE~~  
~~XPF98~~ was tested in an infected field near Mt. Vernon, Washington in both 1976 and 1977. It has been tested repeatedly in the laboratory and all tests prove that ~~XPF98~~ is resistant while Puget is susceptible.

~~DANTE~~  
Puget and ~~XPF98~~ are virtually identical in all other respects.

July 18, 1978



78-94

**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

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

VARIETY NAME OR TEMPORARY DESIGNATION

~~XPP98~~ DANTE 8/7 12/1/78

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

Kalamazoo, MI 49001

FOR OFFICIAL USE ONLY

PVPO NUMBER

7800094

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    4 = HEAVY     1 = NOT MARBLED    2 = MARBLED (Alaska)

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)    4

8. PODS:

7800094

2 Shape: 1 = STRAIGHT 2 = SLIGHTLY CURVED  2 End: 1 = POINTED (Alderman) 2 = BLUNT (Alaska)  
 3 = CURVED  
 3 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  
 5 Borne: 1 = SINGLE 2 = DOUBLE 3 = SINGLE AND DOUBLE 4 = SINGLE, DOUBLE, & TRIPEE  
 5 = DOUBLE & TRIPLE 6 = TRIPLE 7 = OTHER (Specify) \_\_\_\_\_  
 0  8 CM. LENGTH  1  4 MM. WIDTH (Between sutures)  0  8 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
0	5	1	0	2	9	4	0	1
1	6							3.52

SEEDS (Dry, Mature):

2 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  
 2 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  
 1 Hilum Floor Color: 1 = WHITE 2 = TAN  1 Cotyledon Color: 1 = GREEN 2 = YELLOW 3 = ORANGE  
 3 = BLACK

1  9 GRAMS PER 100 SEEDS

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

<input type="checkbox"/> 2 FUSARIUM WILT	<input type="checkbox"/> 2 NEAR-WILT	<input type="checkbox"/> 0 DOWNY MILDEW
<input type="checkbox"/> 0 ASCOCHYTA BLIGHT	<input type="checkbox"/> 1 POWDERY MILDEW	<input type="checkbox"/> 0 BACTERIAL BLIGHT
<input type="checkbox"/> 0 MOSAIC	<input type="checkbox"/> 0 PEA ENATION MOSAIC	<input type="checkbox"/> 0 YELLOW BEAN MOSAIC
<input type="checkbox"/> 2 OTHER (Specify) <u>Fusarium Wilt Race 5</u>		

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	Puget
Leaf Color	"	Mature Seed Color	"
Pod Color	"	Seed Shape	"
Pod Shape	"	Plant Habit	"

COMMENTS: