

No.

9200102



# 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 *eighteen* 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 (AT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PEA

'Encore'

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, D.C. this 30th day of September in the year of our Lord one thousand nine hundred and ninety-two.

Attest:

*Kenneth H. Evans*

Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

*Edward Madigan*  
Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

# APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

<b>1. NAME OF APPLICANT(S) (as it is to appear on the Certificate)</b> ASGROW SEED COMPANY		<b>2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO.</b> XP F256	<b>3. VARIETY NAME</b> ENCORE
<b>4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP)</b> 7000 Portage Road 9652-190-18 Kalamazoo, MI 49001		<b>5. PHONE (Include area code)</b> 616-384-2353	<b>FOR OFFICIAL USE ONLY</b> PVPO NUMBER 9200102
<b>6. GENUS AND SPECIES NAME</b> Pisum sativum	<b>7. FAMILY NAME (Botanical)</b> Leguminosae		<b>FILING</b> Date: Feb. 3, 1992 Time: <input type="checkbox"/> A.M. <input type="checkbox"/> P.M.
<b>8. CROP KIND NAME (Common Name)</b> Pea	<b>9. DATE OF DETERMINATION</b> August 1988		<b>FEES</b> Filing and Examination Fee: \$ 2150 Date: Feb 3, 1992 Certificate Fee: \$ 250.00 Date: August 14, 1992
<b>10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.)</b> Corporation			
<b>11. IF INCORPORATED, GIVE STATE OF INCORPORATION</b> Delaware	<b>12. DATE OF INCORPORATION</b> March 22, 1968		
<b>13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS</b> Kathy L. Ward 9652-190-18 Kalamazoo, MI 49001			
PHONE (Include area code): 616-384-2353			

**14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on reverse)**

- a.  Exhibit A, Origin and Breeding History of the Variety
- b.  Exhibit B, Novelty Statement.
- c.  Exhibit C, Objective Description of Variety
- d.  Exhibit D, Additional Description of Variety
- e.  Exhibit E, Statement of the Basis of Applicant's Ownership.
- f.  Seed Sample (2,500 viable untreated seeds) Date Seed Sample mailed to Plant Variety Protection Office January 24, 1992
- g.  Filing and Examination Fee (\$2,150) made payable to "Treasurer of the United States"

**15. 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) of the Plant Variety Protection Act.)**  
 YES (If "YES," answer items 16 and 17 below)  NO (If "NO" skip to item 18 below)

**16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?**  YES  NO

**17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?**  
 FOUNDATION  REGISTERED  CERTIFIED

**18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?**  
 YES (If "YES," through  Plant Variety Protection Act  Patent Act. Give date \_\_\_\_\_)  
 NO

**19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?**  
 YES (If "YES," give names of countries and dates) Spain 10/91  
 NO

**20. The applicant(s) declare(s) that a viable sample of basic seeds 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 Protection Act.  
 Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT (Owner(s)) 	CAPACITY OR TITLE Asgrow Vegetable Research Administration Manager	DATE 1-24-92
SIGNATURE OF APPLICANT (Owner(s))	CAPACITY OR TITLE	DATE

## INSTRUCTIONS

**GENERAL:** To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed Exhibits A,B,C,E; (3) at least 2,500 viable untreated seeds; (4) check, drawn on a U.S. bank, payable to "Treasurer of the United States" in the amount of \$2,150 (\$250 filing fee and \$1,900 examination fee). (See section 180.175 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for 30 days, then returned to the applicant as unfiled. Mail application and other requirements to: Plant Variety Protection Office, AMS, USDA, Rm. 500, NAL Building, 10301 Baltimore Blvd., Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the Application are self-explanatory unless noted below. Corrections on the Application form and Exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a Certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$250 for issuance of the Certificate.

**Plant Variety Protection Office**  
**Telephone: 301/344-2518**

### ITEM

9. Give the date when there has been at least a tentative determination that the variety has been sexually reproduced with recognized characteristics, whether or not the novelty of those characteristics has been determined. [See section 41(d) of the Plant Variety Protection Act (Act).]
- 14a. 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. (See sections 41 and 52 of the Act.)
- 14b. 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 are clear differences; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons which clearly indicate novelty.
- 14c. Exhibit C forms are available from the PVPO; specify crop kind. Fill in the Exhibit C (Objective Description of Variety form) to describe your variety.
- 14d. Optional additional characteristics and/or photographs: Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 14e. Section 52(4) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. The applicant may be the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.
15. 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 this affirmative decision after the variety has either been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified the applicant may change the choice. (See section 180.16 of the Regulations and Rules of Practice.)
19. See sections 41 (i, j) and 42 of the Act and section 180.7 of the Regulations and Rules of Practice for eligibility requirements.

### **NOTES:**

It is the responsibility of the applicant/owner to keep the PVPO informed of any change of address or change of ownership or assignment during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment is \$25. [See section 101 of the Act, and sections 180.130, 180.131, 180.132, and 180.175(h) of the Regulations and Rules of Practice.]

To avoid conflict with other variety names in use, the applicant should check the variety names proposed by contacting: Seed Branch, AMS, USDA, Rm. 213, Building 306, Beltsville Agricultural Research Center -- East, Beltsville, MD 20705. Telephone: 301/344-2089.

## EXHIBIT A

## Origin and Breeding History of Encore (XPF256) Garden Pea

Encore was developed at Asgrow's Western Breeding Station (WBS), Twin Falls, Idaho, by pedigree selection from a BC1 population as follows:

- 9-28-82 Planted the powdery mildew resistant variety 9888 and Bolero afila in the greenhouse at WBS; crosses made.
- 4-19-83 Planted F1 in the field at WBS; allowed to self.
- 11-21-85 Planted Bolero and F2 population from above in the greenhouse at WBS. Selected powdery mildew resistant plants and crossed to Bolero.
- 4-4-86 BC1 planted in the field at WBS; allowed to self.
- 7-15-86 BC1F2 population planted in the greenhouse at WBS; selected individual plants with resistance to powdery mildew.
- 11-18-86 BC1F3 selection planted in the greenhouse at WBS; harvested as individual plants. Field and greenhouse evaluations confirmed the line was uniform and breeding true for powdery mildew resistance.
- 4-7-87 BC1F4 selection planted in the field at WBS; selected individual plants.
- 4-8-88 BC1F5 selection planted in the field at WBS under the number R881352. Observations during the growing season indicated the line was uniform and breeding true. All subsequent increases of Encore trace to the bulk of R881352.
- 4-17-89 BC1F5+1 planted in the field at WBS under the number F89366. Observations during the growing season confirmed the line is uniform and breeding true.
- 3-21-90 Planted F89366 in the field at WBS under the number F90536. Harvested as individual plants.
- 4-3-91 Planted ~200 individual progenies in the field at WBS under the number F91763. Observations again confirmed the line was uniform and breeding true.

Observations confirm Encore is uniform and stable within commercially acceptable limits. As is true with other garden pea varieties a small percentage of variants or offtypes can occur within commercially acceptable limits for almost any characteristic during the course of repeated multiplications.

## EXHIBIT B

## Novelty Statement Concerning Encore (XP-F256) Garden Pea

Encore is a full season, large sieve freezer variety. To our knowledge the variety most similar to Encore is Bolero. Comparative characteristics that distinguish the two include, but may not be limited to, resistance to powdery mildew: Bolero is susceptible whereas Encore has "er" gene resistance.

FCRM GR-470-14  
(5-15-74)

UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
GRAIN DIVISION  
HYATTSVILLE, MARYLAND 20782  
**OBJECTIVE DESCRIPTION OF VARIETY**  
PEA (*PISUM SATIVUM*)

EXHIBIT  
(Pca)

NAME OF APPLICANT(S)	VARIETY NAME OR TEMPORARY DESIGNATION
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	Encore
	FOR OFFICIAL USE ONLY
	PVPO NUMBER 9200102

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)



9200102

Asgrow Seed Company  
PVP Application  
January 24, 1992

**EXHIBIT E**

**STATEMENT OF THE BASIS OF APPLICANT'S OWNERSHIP**

ENCORE (XP F256) was developed by Dr. David M. Webster, Asgrow Plant Breeder. 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.