

No.

930079



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Annhems Seed Corporation

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.)

GARDEN PEA

'Captain'



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 29th day of September in the year of our Lord one thousand nine hundred and ninety-five.

Attest:

Marsha A. Hamber

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Paul Gilchristman
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).

| | | | |
|---|--|--|--|
| 1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) NUNHEMS SEED CORPORATION | | 2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO. Nun 1889 | 3. VARIETY NAME Captain ^{RWS 8-16-95} 9300079 |
| 4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP) 221 East Main Street Lewisville, Idaho 83431 | | 5. PHONE (Include area code) (208) 754-8666 | FOR OFFICIAL USE ONLY PVPO NUMBER 9300079 F I L I N G Date January 8, 1993 Time 1:10 <input type="checkbox"/> A.M. <input checked="" type="checkbox"/> P.M. F E E S Filing and Examination Fee: \$ 2150.00 Date January 4, 1993 R E C E I V E Certificate Fee: \$ 250.00 D Date August 11, 1995 |
| 6. GENUS AND SPECIES NAME Pisum Sativum | 7. FAMILY NAME (Botanical) Leguminosae | | |
| 8. CROP KIND NAME (Common Name) Garden Pea | 9. DATE OF DETERMINATION November 24, 1992 | | |
| 10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) Corporation | | | |
| 11. IF INCORPORATED, GIVE STATE OF INCORPORATION Delaware | 12. DATE OF INCORPORATION February 14, 1936 | | |
| 13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Hank Mende 221 East Main Street Lewisville, Idaho 83431 (208) 754-8666 PHONE (Include area code): | | | |

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 12-29-92.

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)
 NO RWS 4-17-95

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 OFFICE MANAGER | DATE 12-29-92 |
| 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

~~NUN 1889~~ Captain RWS
8-16-95

~~NUN 1889~~ Captain is the result of a cross made in 1980 between 7705-32 (which became the variety "Booster") and Spirit.

Booster is a full season freezer variety which is resistant to Fusarium common wilt, powdery mildew and Enation virus. Booster sets double pods with 8-9 seeds per pod. It is a full season variety. Spirit is a variety developed by Pure Line Seed Company which is resistant to Fusarium wilt, race 5 and 6.

The cross (X10053) was made in order to develop a variety similar to Booster but with Fusarium oxysporum wilt race 5 and 6 resistance. The generations were advanced via single seed descent until the F6 generation which was grown at Lewisville, Idaho in 1983. Single plant selections were then made based on plant type. These were grown out in single plant rows in 1984 and also grown out in Race 5 and 6 wilt infected fields near Mt. Vernon, Washington. Selection 10053-9 was found to be resistant to race 6 and resistant or segregating to race 5 wilt. Single plant selections were again made in 1984 in the F7. These selections were tested for race 5 and 6 resistance in the infected fields near Mt. Vernon in 1985 and 1986. They were also tested in the greenhouse against pure cultures of race 5 and 6 in

those same years. Several selections were resistant to both strains. Nun 1889 resulted from one of these selections, 10053-9-2. From 1986-92, the variety was advanced, trialed and increased. In these years, powdery mildew resistance was observed. Also, Fusarium root rot tolerance was observed when grown in the NSC root rot nursery at Lewisville, Idaho. In 1992 a high level of Aphanomyces tolerance was observed when Nun 1889 was grown in the root rot trials of the University of Wisconsin and Minnesota.

In 1990, 1991, and 1992 field performance of the variety proved to be outstanding. In 1990, single plants of the variety were randomly selected and grown out in single plant rows to establish uniform breeders seed. Following the 1992 trial season, a decision was made to apply for Plant Variety Protection. The variety is true breeding and uniform with no known off-types.

EXHIBIT B

NOVELTY STATEMENT

~~NUN 1889~~ *Captain RWS*
8-16-95

Captain
~~NUN 1889~~ is a full season darkskin variety with resistance to race 1, 5 & 6 Fusarium oxysporum wilt. It is also resistant to powdery mildew and tolerant to Fusarium solani and Aphanomyces euticles root rot.

NUN 1889 is most similar to "Booster" and "9000 Freezer" both of which varieties were developed by Nunhems Seed Corporation. Nun 1889 differs from those two varieties in being 1-3 days later maturing and in having resistance to Race 5 and 6 Fusarium wilt. Also, both Booster and 9000 F are resistant to Enation virus which Nun 1889 is not.

In addition to the above two varieties, there are a number of race 5 and 6 resistant varieties somewhat similar to Nun 1889. None of them, to our knowledge, are resistant to powdery mildew nor have the high tolerance level to Fusarium and Aphanomyces root rots.

9300079

8. PODS:

2 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) _____
 1 Surface: 1 = SMOOTH 2 = ROUGH 1 Surface: 1 = SHINY 2 = DULL
 3 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 6 MM. WIDTH (Between sutures) 0 9 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 3 | 1 0 | 1 9 | 2 9 | 2 5 | 1 4 | 0 0 | 0 0 | 4 0 1 |

SEEDS (Dry, Mature):

2 Shape: 1 = FLATTENED 2 = ANGULAR 3 = OVAL 4 = ROUNDED
 3 Surface: 1 = SMOOTH 2 = DIMPLED 3 = WRINKLED 2 Surface: 1 = SHINY 2 = DULL
 1 Color Pattern: 1 = MONOCOLOR 2 = MOTTLED 3 = STRIPED 4 = DOTTED
 4 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
 2 Secondary Color: 10 = GRAY 11 = BLACK
 1 Hilum Floor Color: 1 = WHITE 2 = TAN 3 = BLACK 1 Cotyledon Color: 1 = GREEN 2 = YELLOW 3 = ORANGE
 1 7 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"/> DOWNY MILDEW |
| <input type="checkbox"/> 0 ASCOCHYTA BLIGHT | <input type="checkbox"/> 2 POWDERY MILDEW | <input type="checkbox"/> BACTERIAL BLIGHT |
| <input type="checkbox"/> 0 MOSAIC | <input type="checkbox"/> 1 PEA ENATION MOSAIC | <input type="checkbox"/> YELLOW BEAN MOSAIC |
| <input type="checkbox"/> 2 Resistant to Race 5 & 6 Fusarium wilt <input type="checkbox"/> 1 Susceptible to Bean Leaf Roll Virus | | |
| <input type="checkbox"/> 2 OTHER (Specify) <u>Tolerant to Fusarium & Aphanomyces Root Rot</u> | | |

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

0 APHIDS 0 OTHER (Specify) _____

12. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED

| CHARACTER | NAME OF VARIETY | CHARACTER | NAME OF VARIETY |
|------------|-----------------|-------------------|-----------------|
| Leafiness | Booster | Fresh Seed Color | Booster |
| Leaf Color | Booster | Mature Seed Color | Booster |
| Pod Color | Booster | Seed Shape | Booster |
| Pod Shape | Booster | Plant Habit | 9000 F |

COMMENTS: This variety is intended for use by the food processing industry.

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EXHIBIT E

STATEMENT OF THE BASIS OF APPLICANT'S OWNERSHIP

~~NUN 1889~~
Captain RWS
8-16-95

Captain

~~NUN 1889~~ was developed by Dr. David E. Polson as an employee of Nunhems Seed Corporation. There are no other companies or individuals party to its development. Thus, Nunhems Seed Corporation is the sole owner of the variety.



9300079

nunhems

Nunhems Seed Corporation
P.O. Box 18
221 E. Main St.
Lewisville, ID 83431
Phone: 208-754-8666
Fax: 208-754-8669

12 December, 1995

Plant Variety Protection Office
NAL Building Room 500
10301 Baltimore Blvd.
Beltsville, MD 20705-2351

Attention: Marsha Stanton, Ph D

Dear Dr. Stanton:

Please be advised that Nunhems Seed Corporation will be liquidated effective 31 December, 1995.

This being the case; we wish to transfer the following PVP registrations to our parent company in Holland. The following is the new assignee:

Nunhems Zaden B.V.
P.O. Box 4005
6080AA Haelen
The Netherlands
Attention: Lex Welles

The varieties to be assigned are as follows:

| PVP Registration # | Variety | Kind | Year of Expiration |
|--------------------|----------|------|--------------------|
| 8200169 | 77 EP | Pea | 2001 |
| 9300078 | Scepter | Pea | 2013 |
| 9300079 | Captain | Pea | 2013 |
| 8700051 | 9000 F | Pea | 2005 |
| 8900230 | Applause | Pea | 2010 |
| 9300076 | Point | Pea | 2013 |
| 8900222 | Ava | Pea | 2010 |
| 9400082 (Pending) | Targhee | Pea | |
| 7800059 | 9888 F | Pea | 1996 |
| 9100213 | Modus | Bean | 2010 |
| 9100212 | Fesca | Bean | 2010 |

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USDA-AMS-PVPO

Our understanding is that the fee for transfer of ownership is \$25.00 per variety. Enclosed please find our check in the amount of \$275.00.

Please cancel PVP rights on the following registrations effective 31 December, 1995.

8000065, 7600015, 7500104, 7500090, 8000064, 7800060,
7600013, 7600016, 7800061, 8900224, 8900225, 8900223,

Yours truly,

Hank Mende
Director of Administration