



# 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

'Andes'

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 22nd day of June in  
the year of our Lord one thousand nine  
hundred and seventy-eight

Attest:

*Samuel C. Lee*  
Acting  
Commissioner  
Plant Variety Protection Office  
Grain Division  
Agricultural Marketing Service

*W. B. Dwyer*  
Secretary of Agriculture



UNITED STATES DEPARTMENT OF AGRICULTURE  
 AGRICULTURAL MARKETING SERVICE  
 LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

FORM APPROVED  
 OMB NO. 40-R3822

**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 <b>XP-C3019</b>		1b. VARIETY NAME <b>ANDES 7/5/25/78</b>		FOR OFFICIAL USE ONLY PV NUMBER <b>7800044</b>	
2. KIND NAME <b>Garden Pea</b>		3. GENUS AND SPECIES NAME <b>Pisum sativum</b>		FILING DATE <b>3-23-78</b>	TIME <b>3:00</b> <input checked="" type="radio"/> A.M. <input type="radio"/> P.M.
4. FAMILY NAME (BOTANICAL) <b>Leguminosae</b>		5. DATE OF DETERMINATION <b>July, 1972</b>		FEE RECEIVED \$ <b>500.00</b>	DATE <b>3-23-78</b>
				\$ <b>250.00</b>	<b>5-22-78</b>
6. NAME OF APPLICANT(S) <b>Asgrow Seed Company</b>		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) <b>Kalamazoo, Michigan 49001</b>		8. TELEPHONE AREA CODE AND NUMBER <b>(616) 385-6605</b>	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) <b>Corporation</b>			10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION <b>Delaware</b>		11. DATE OF INCORPORATION <b>March 22, 1968</b>
12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: <b>John A. Batcha; Asgrow Seed Company; Unit 9630-190-1; Kalamazoo, Michigan 49001</b>					

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.)  
**Germany, October 2, 1975.**

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

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 10, 1978  
 (DATE)

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

## 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.

EXHIBIT A - Origin and Breeding History of XP-C3019

ANDES XP-C3019 The original cross, Nugget x B104, was made in the summer of 1964, and ANDES XP-C3019 has been developed by straight selection from this cross. Single plant selections were made through the F<sub>8</sub> in 1972. During the summer of 1972, it was determined that this was a unique line worthy of increase and further evaluation; the line was designated ANDES XP-C3019. Tests have been made in Asgrow laboratories and field plots for resistance to Fusarium Wilt, Near Wilt, and Powdery Mildew. Tests for resistance to enation were conducted by the Oregon State University.

The first increase was made in Florida during the winter of 1972-1973. Since that time, the line has been increased and refined through mass selection. In 1975, progenies were grown and carefully evaluated several times during the growing season as a final test of homozygosity. There was very little variation between the progenies, but any progeny suspect in any way at any inspection was eliminated. When the seed matured, the field was harvested as a bulk and this has become our Breeder's Seed.

ANDES XP-C3018 is to our knowledge, a stable, true breeding line. We have found no variants in the Breeder's Seed.

A history by generations is as follows:

F <sub>1</sub>	C64538 - 15	Grown in Florida Winter of 1964 - 1965
F <sub>2</sub>	R651011	S.V.S. made
F <sub>3</sub>	R66318	Reselected S.V.S. #2
F <sub>4</sub>	R67441	Reselected S.V.S. #1
F <sub>5</sub>	R681065	Small increase
F <sub>6</sub>	69 T 1 & 2	Tested for enation resistance - O.S.U.
F <sub>6</sub> + 1	E713510	Ebnet trials

EXHIBIT B - Novelty Statement Concerning ~~XP-C3019~~ <sup>ANDES</sup> Pea

The commercial pea variety most similar to ~~XP-C3019~~ <sup>ANDES</sup> to our knowledge is Trojan. Comparative characteristics which make ~~XP-C3019~~ <sup>ANDES</sup> a different variety include, but are not restricted to, the following:

1. ~~XP-C3019~~ <sup>ANDES</sup> is resistant to Near Wilt - Trojan is susceptible.
2. ~~XP-C3019~~ is resistant to Powdery Mildew - Trojan is susceptible.
3. ~~XP-C3019~~ is resistant to enation - Trojan is susceptible.

Actually, there are no varieties really similar to ~~XP-C3019~~ <sup>ANDES</sup>. The combination of disease resistances found in ~~XP-C3019~~ <sup>ANDES</sup> is to our knowledge found in no commercial variety. Relatively few commercial varieties are resistant to Near Wilt and very few are resistant to Powdery Mildew or enation.

Trojan, Sybo, ~~ANDES~~ Early Perfection 3040, and Columbia are listed as being similar to ~~XP-C3019~~ <sup>ANDES</sup> in different characters in No. 12 of Exhibit C. All of these varieties are susceptible to Powdery Mildew. In addition, there are differences in plant type, season of maturity, sieve size, and other easily recognized characters which could be cited. ~~XP-C3019~~ <sup>ANDES</sup> is truly a unique variety.

OBJECTIVE DESCRIPTION OF VARIETY

PEA (PISUM SATIVUM)

NAME OF APPLICANT(S) <b>Asgrow Seed Company</b>	VARIETY NAME OR TEMPORARY DESIGNATION <b>ANDES <del>7/7</del> 5/25/78 XP-C3019</b>
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) <b>Kalamazoo, Michigan 49001</b>	FOR OFFICIAL USE ONLY PVPO NUMBER <b>7800044</b>

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)

