



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Morrison Brothers 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 (STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PEA

'Taurus'

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 26th day of July in the year of our Lord one thousand nine hundred and seventy-four

Attest:

L. J. Rollin
 Commissioner
 Plant Variety Protection Office
 Grain Division
 Agricultural Marketing Service

Earl L. Buttz

Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1. VARIETY NAME OR TEMPORARY DESIGNATION Taurus	2. KIND NAME Pea	FOR OFFICIAL USE ONLY	
		PVPO NUMBER 73084	
3. GENUS AND SPECIES NAME Pisum Sativum	4. FAMILY NAME (Botanical) Leguminosae	FILING DATE 4-16-73	TIME 3:00 P.M.
	5. DATE OF DETERMINATION June, 1971	FEE RECEIVED \$ 250.⁰⁰	CHARGES —
6. NAME OF APPLICANT(S) MORRISON BROS. SEED CO.	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) E. 7509 Sprague Avenue Spokane, Washington 99213	8. TELEPHONE AREA CODE AND NUMBER 509 924-1404	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation		10. STATE OF INCORPORATION Washington	11. DATE OF INCORPORATION 1924

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

MORRISON BROS. SEED CO.
P.O. Box 13066
Spokane, Washington 99213

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- 12A. Exhibit A, Origin and Breeding History of the Variety (See Section 52, P.L. 91-577)
- 12B. Exhibit B, Botanical Description of the Variety
- 12C. Exhibit C, Objective Description of the Variety
- 12D. Exhibit D, Data Indicative of Novelty
- 12E. Exhibit E, Statement of the Basis of Applicant's Ownership

The applicant declares 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. (See Section 52, P.L. 91-577).

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), P.L. 91-577) (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?

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes 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 (P.L. 91-577).

March 29, 1973

(DATE)

MORRISON BROS. SEED CO.

Bruce Tain
BRUCE TAIN (SIGNATURE OF APPLICANT)

(SIGNATURE OF APPLICANT)

INSTRUCTIONS



GENERAL: Send an original copy of the application, exhibits and \$50.00 fee to U.S. Dept. of Agriculture, Consumer and Marketing Service, Grain Division, Hyattsville, Maryland 20782. Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

5 Insert the date the applicant determined that he had a new variety.

12a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.

12b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.

12c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.

12d Provide complete data indicative of novelty. Seed and plant specimens may be submitted and seeds submitted may be sterile. Where possible, include photographs of plant comparisons, chemical tests, etc.

12e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

TAURUS

EXHIBIT A

This canning type pea was developed as a result of a multiple cross.

Perfection 11 was crossed with a breeding line, Wisconsin 709. The progeny of this cross were then back-crossed with Perfection 11. Progeny of this back-cross were then advanced to the F₆ generation where they were then single plant selected. These single plants were then crossed with the standard variety Nuggett. Progeny of this cross were then advanced to the F₅ generation where they were again single plant selected for the following characters: pod length, high ovule count, berry color and vine type. These F₅ generation selections were then advanced to the F₈ generation where they were then bulk selected because of vine height uniformity problems. These bulk selections were then increased to their present quantities over a three-year period. During the past three generations no variants have been observed which is evidence of varietal stability.

TAURUS

EXHIBIT B

*(TAURUS) comparison to (PERFECTION 11)

- SEASON * 72 days to canning, first bloom on 16th node
 65 days to canning, first bloom on 13th or 14th node
- VINE * 30 inches tall, dark green, determinate
 29 to 30 inches tall, medium green, determinate
- PODS * 3 3/4 inches, medium green, blunt, ^{straight} 1, 2, 3 podded
 3 1/4 inches long, blunt, straight, double podded
- BERRIES * 8 to 9 peas per pod with a range of sizes from 1's
 through 6 sieve at 100 tenderometer
 7 to 8 peas per pod with a range of sizes from 1's
 through 6 sieve at 100 tenderometer
- SEED * Wrinkled, light green to yellow green, 2200 to 2400
 seeds per pound
 Wrinkled, medium green, 2000 to 24000 seeds per pound
- HEAT UNITS * Approximately 1620 at 100 tenderometer
 Approximately 1450 at 100 tenderometer

*Average sieve sizes at 100 tenderometer TAURUS

<u>Sieve-size</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6 and over</u>
Percentage	5	14	30	35	14	2

Average sieve sizes at 100 tenderometer PERFECTION 11

<u>Sieve size</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6 and over</u>
Percentage	5	11	29	35	15	5

TAURUS

EXHIBIT D

Data indicative of novelty

Novelty is based on the unique combination of the following characters:

Taurus is similar to its one parent Perfection 11 except, it is (1) a later maturity pea by 7 days (2) it has a 12% greater yield potential (3) it has a higher average ovule count per pod. (4) it bears its pods more toward the top of the plant (5) it has a definite advantage in that it has a slower increase in tenderometer reading from 90 to 120 than does Perfection 11.

Perfection 11 is, to the best of our knowledge, the variety most similar to Taurus.

TAURUS

EXHIBIT E

Statement of Applicant's Ownership

MORRISON BROS. SEED CO. of Spokane, Washington, is the employer of the breeder of this variety. We also believe that we are the sole, original, and first breeder of the Taurus variety of peas for which it solicits a certificate of protection.

9. PODS:

1 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) _____

2 Surface: 1 = SMOOTH 2 = ROUGH 2 1 = SHINY 2 = DULL

4 Borne: 1 = SINGLE 2 = DOUBLE 3 = SINGLE AND DOUBLE 4 = SINGLE, DOUBLE, & TRIPLE 5 = DOUBLE & TRIPLE 6 = TRIPLE 7 = OTHER (Specify) _____

0 ~~9~~ ⁷ CM. LENGTH 1 9 MM. WIDTH (Between sutures) 0 8 NUMBER OF SEEDS PER POD

10. SEEDS (95 - 100 Tenderometer):

1 Color: 1 = LIGHT GREEN (Perfection Canner) 2 = GREEN (Little Marvel) 3 = DARK GREEN (Dark Skin Perfection) 4 = OTHER (Specify) _____

3 Shape: 1 = FLATTENED 2 = ANGULAR 3 = OVAL 4 = ROUNDED

2 ³ Surface: 1 = SMOOTH 2 = DIMPLED 3 = WRINKLED 1 Surface: 1 = SHINY 2 = DULL

SEEDS (Mature, Dry):

2 Color: 1 = MONOCOLOR 2 = BICOLOR

3 Primary Color: } 1 = CREAMY-WHITE (Mammoth Melting Sugar) 2 = YELLOW (Arthur) 3 = CREAM & GREEN (Thomas Laxton)
4 = YELLOW 5 = LIGHT GREEN (Alderman) 6 = MEDIUM GREEN (Little Marvel)

4 Secondary Color: } 7 = DARK GREEN (Dark Skin Perfection) 8 = BLUE-GREEN (Alaska WR) 9 = BROWN 10 = RED
11 = GRAY 12 = BLACK

2 Color Pattern: 1 = SPLASHED 2 = MOTTLED 3 = STRIPED 4 = FLECKED 5 = DOTTED

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

1 ~~1~~ ²⁰ GRAMS PER 100 SEED

11. SEED SIEVE SIZE DISTRIBUTION (95 - 100) Tenderometer):

Sieve (%): 0 5 ¹ 1 4 ² 3 0 ³ 3 5 ⁴ 1 4 ⁵ 0 2 ⁶ ⁷ ⁸

12. PLANT REACTION: (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

0 1 = DROUGHT (Wando) 0 2 = COLD (Alaska) 0 3 = HEAT (Wando)

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

2 FUSARIUM WILT 1 NEAR-WILT 0 DOWNY MILDEW

0 ASCOCHYTA BLIGHT 0 POWDERY MILDEW 0 BACTERIAL BLIGHT

0 MOSAIC 0 PEA ENATION MOSAIC 0 YELLOW BEAN MOSAIC

1 OTHER (Specify) Fusarium oxysporum f. pisi race 5

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

0 APHIDS OTHER (Specify) _____

15. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Leafiness	Perfection 11	Fresh Seed Color	326 Perfection
Leaf Color	do	Mature Seed Color	Thomas Laxton
Pod Color	do	Seed Shape	do
Pod Shape	do	Plant Habit	Nuggett

REFERENCES: The following publication may be used as a reference aid for the standardization of character descriptions and terms:

1. Shoemaker, D. N., 1934. Descriptions of Types of Principal American Varieties of Garden Peas. U.S.D.A. Miscellaneous Publication, No. 170.
2. Hedrick, V. P., 1928. The Vegetables of New York. New York Agricultural Experiment Station. Vol. 1., Part 1.
3. Wade, B. L., 1943. A Key to Pea Varieties. U.S.D.A. Circular No. 676.

* Nickerson's or any recognized color fan may be used to determine color of the described variety.

(REVERSE)

9. PODS:

1 Shape: 1 = STRAIGHT 2 = SLIGHTLY CURVED 1 End: 1 = POINTED (Alderman) 2 = BLUNT (Alaska)
 2 Color: 1 = LIGHT GREEN (Alaska WR) 2 = MEDIUM GREEN 3 = DARK GREEN (Alderman)
 2 Surface: 1 = SMOOTH 2 = ROUGH 2 1 = SHINY 2 = DULL
 4 Borne: 1 = SINGLE 2 = DOUBLE 3 = SINGLE AND DOUBLE 4 = SINGLE, DOUBLE, & TRIPLE 5 = DOUBLE & TRIPLE
 6 = TRIPLE 7 = OTHER (Specify) _____
 8 2 CM. LENGTH 1 9 MM. WIDTH (Between sutures) 0 8 NUMBER OF SEEDS PER POD

10. SEEDS (95 - 100 Tenderometer):

1 Color: 1 = LIGHT GREEN (Perfection Canner) 2 = GREEN (Little Marvel) 3 = DARK GREEN (Dark Skin Perfection)
 4 = OTHER (Specify) _____
(4) 3 Shape: 1 = FLATTENED 2 = ANGULAR 3 = OVAL 4 = ROUNDED
 1 Surface: 1 = SMOOTH 2 = DIMPLED 3 = WRINKLED 1 Surface: 1 = SHINY 2 = DULL
SEEDS (mature, dry):
 2 Color: 1 = MONOCOLOR 2 = BICOLOR
 3 Primary Color: 1 = CREAMY-WHITE (Mammoth Melting Sugar) 2 = YELLOW (Arthur) 3 = CREAM & GREEN (Thomas Laxton)
 4 Secondary Color: 4 = YELLOW 5 = LIGHT GREEN (Alderman) 6 = MEDIUM GREEN (Little Marvel)
 2 Color Pattern: 7 = DARK GREEN (Dark Skin Perfection) 8 = BLUE-GREEN (Alaska WR) 9 = BROWN 10 = RED
 1 Hilum Floor Color: 1 = WHITE 2 = TAN 3 = BLACK (2) 1 Cotyledon Color: 1 = YELLOW 2 = ORANGE 3 = GREEN
 1 7 GRAMS PER 100 SEED

11. SEED SIEVE SIZE DISTRIBUTION (95 - 100) Tenderometer):

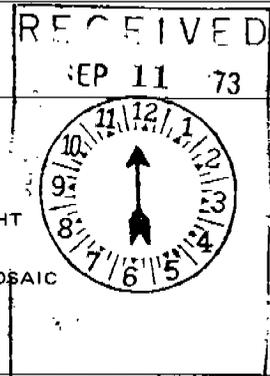
Sieve (%) 0 5 ¹ 1 4 ² 3 0 ³ 3 5 ⁴ 1 4 ⁵ 0 2 ⁶ 0 0 ⁷ 0 0 ⁸

12. PLANT REACTION: (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

0 1 = DROUGHT (Wando) 0 2 = COLD (Alaska) 0 3 = HEAT (Wando)

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

2 FUSARIUM WILT 1 NEAR-WILT 0 DOWNY MILDEW
 0 ASCOCHYTA BLIGHT 0 POWDERY MILDEW 0 BACTERIAL BLIGHT
 0 MOSAIC 0 PEA ENATION MOSAIC 0 YELLOW BEAN MOSAIC
 0 OTHER (Specify) _____



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

0 APHIDS 1 OTHER (Specify) Fusarium Oxysporium Pisi Race 5

15. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Leafiness	Perfection 11	Fresh Seed Color	326 Perfection
Leaf Color	Perfection 11	Mature Seed Color	Thomas Laxtons
Pod Color	Perfection 11	Seed Shape	Thomas Laxtons
Pod Shape	Perfection 11	Plant Habit	Nuggett

OBJECTIVE DESCRIPTION OF VARIETY
PEA (*PISUM SATIVUM*)

NAME OF APPLICANT (S) MORRISON BROS. SEED COMPANY	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) E. 7509 Sprague Avenue P. O. Box 13066 Spokane, Washington 99213	PVPO NUMBER 73084
	VARIETY NAME OR TEMPORARY DESIGNATION TAURUS

Place the appropriate number that describes the varietal character of this variety 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:

<input type="text" value="1"/> 1 = Internodes straight <input type="text" value="1"/> 2 = Internoded zigzag	<input type="text" value="1"/> 1 = GARDEN 2 = FIELD 3 = EDIBLE-PODDED
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2. SEASON:

Node number of first bloom: 1 = EARLY (8 - 12th node) 2 = MIDSEASON (13 - 24th node) 3 = LATE (Greater than 24th node)

3. MATURITY:

<input type="text" value="0"/> <input type="text" value="3"/> No. of days Earlier than ... <input type="text" value="1"/> <input type="text" value="2"/> No. of days Later than ...	<input type="text" value="5"/> <input type="text" value="2"/>	1 = ALASKA WR 2 = THOMAS LAXTON WR 3 = LITTLE MARVEL 4 = WANDO 5 = ALDERMAN WR 6 = AUSTRIAN WINTER
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4. PLANT HEIGHT:

<input type="text" value="0"/> <input type="text" value="6"/> <input type="text" value="6"/> CM. HIGH <input type="text" value="1"/> <input type="text" value="1"/> Cm. Shorter than ... <input type="text" value="1"/> <input type="text" value="9"/> Cm. Taller than ...	<input type="text" value="2"/> <input type="text" value="1"/>	1 = ALASKA WR 2 = THOMAS LAXTON WR 3 = LITTLE MARVEL 4 = WANDO 5 = ALDERMAN WR 6 = AUSTRIAN WINTER
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5. VINE:

<input type="text" value="1"/> Habit: 1 = DETERMINATE 2 = INDETERMINATE <input type="text" value="1"/> Branching: 1 = NONE (Alaska) 2 = 1 - 2 BRANCHES (Little Marvel) 3 = MORE THAN 2 BRANCHES (Dwarf Gray Sugar) <input type="text" value="1"/> Node Color: 1 = GREEN 2 = RED BLOTCH <input type="text" value="5"/> <input type="text" value="8"/> CM. INTERNODE LENGTH (Just below 1st flowering node)	<input type="text" value="3"/> Stockiness: 1 = SLIM (Alaska) 3 = HEAVY (Alderman) 2 = MEDIUM (Thomas Laxton WR) <input type="text" value="1"/> <input type="text" value="6"/> NUMBER OF NODES
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6. LEAFLETS:

<input type="text" value="3"/> Color: <input type="text" value="3"/> Wax: 1 = NONE 2 = LIGHT 3 = MEDIUM 4 = HEAVY <input type="text" value="4"/> Number of leaflet pairs: 1 = NOT PAIRED 2 = ONE 3 = TWO 4 = THREE OR MORE	1 = LIGHT GREEN (Alaska WR) 2 = MED. GREEN (Thomas Laxton WR) 3 = DARK GREEN (Alderman) 4 = OTHER (Specify) _____ <input type="text" value="2"/> Marbling: 1 = NONE 2 = MARBLED (Alaska)
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7. STIPULES:

<input type="text" value="2"/> 1 = LACKING 2 = PRESENT <input type="text" value="2"/> 1 = NOT MARBLED 2 = MARBLED <input type="text" value="2"/> Color (Compared with leaflets): 1 = LIGHTER 2 = SAME 3 = DARKER	<input type="text" value="1"/> 1 = NOT CLASPING 2 = CLASPING <input type="text" value="3"/> Size (Compared with leaflets): 1 = SMALLER 2 = SAME 3 = LARGER
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8. FLOWER COLOR:

<input type="text" value="1"/> 1 = MONOCOLOR 2 = BICOLOR <input type="text" value="2"/> Venation <input type="text" value="1"/> Standard <input type="text" value="1"/> Wing <input type="text" value="1"/> Keel	1 = WHITE 2 = GREENISH 3 = LAVENDER 4 = PURPLE 5 = RED 6 = OTHER (Specify) _____
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