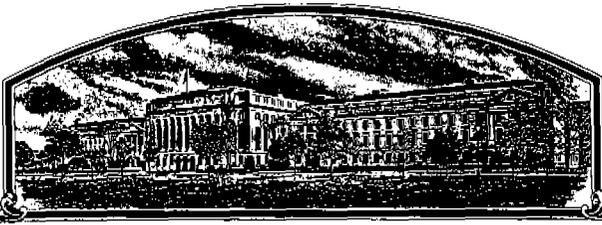


No.



8200110

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Tommy Bolack

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. ALL SEED OF THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (34 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CAYENNE PEPPER

'Orange Cayenne'

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 19th day of August in the year of our Lord one thousand nine hundred and eighty-two.

Attest:

Kenneth H. Ew
Acting
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

John R. Block
Secretary of Agriculture



APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1. NAME OF APPLICANT(S) <i>Tommy Bolack</i>		2. TEMPORARY DESIGNATION	3. VARIETY NAME <i>Orange Cayenne</i>
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) <i>RT 3 Box 47 Farmington New Mexico 87401</i>		5. PHONE (Include area code) <i>505-325-7823</i>	FOR OFFICIAL USE ONLY PVPO NUMBER 8200110
6. GENUS AND SPECIES NAME <i>Capsicum annuum</i>	7. FAMILY NAME (Botanical)		FILING DATE <i>4/26/82</i> TIME <i>12:30</i> <input type="checkbox"/> A.M. <input checked="" type="checkbox"/> P.M.
8. KIND NAME <i>Cayenne pepper</i>	9. DATE OF DETERMINATION <i>Oct 15, 1978</i>		FEES RECEIVED AMOUNT FOR FILING <i>500.00</i> DATE <i>4/26/82</i> AMOUNT FOR CERTIFICATE <i>250.00</i> DATE <i>7/16/82</i>
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.)			12. DATE OF INCORPORATION
11. IF INCORPORATED, GIVE STATE OF INCORPORATION			

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED

- a. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.) *file # 820524*
- b. Exhibit B, Novelty Statement *attached 824 820623*
- c. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- d. Exhibit D, Additional Description of the Variety

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

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) FILE FOR PROTECTION OF THE VARIETY IN THE U.S. OR OTHER COUNTRIES? Yes (If "Yes," give names of countries and dates) No

19. HAVE RIGHTS BEEN GRANTED IN THE U.S. OR OTHER COUNTRIES? Yes (If "Yes," give names of countries and dates) 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 <i>Tommy Bolack</i>	DATE <i>3-25-82</i>
SIGNATURE OF APPLICANT	DATE <i>1</i>

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. Department of Agriculture, Agricultural Marketing Service, Livestock, Meat, 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

- 9 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.
- 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.
- 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 differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 14c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 14d 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.
- 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 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.*)
- 16 See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.



Exhibit A - Orange Cayenne

The Orange Cayenne was discovered as a single plant, by me in a planting field at Red Cayenne, in the fall of 1977. This plant was transplanted into the greenhouse for seed production. Seeds produced while in the field were tested, yielding around sixty percent true. This seed was discarded.

Seeds were saved from self pollination of the isolated plant, which were then planted in an isolated plot in the spring of 1978. Approximately ninety eight percent of these proved true. In the fall of 1978 three of the true plants were transplanted into the greenhouse next to the parent plant and seed saved from these four was base seed.

In 1979 isolated plantings from base seed proved ninety nine percent true. One of these true plants was moved to the greenhouse to replace one plant that had died. In 1980 the parent plant died. Saving of base seed and isolated plantings continued in 1980 and 1981 having the same results.

Exhibit A - Orange Cayenne

In 1981 Burpee Seed Co. tested a sample of my base seed in trial and obtained the same uniformity as I had. The few variations which I have found (presently less than 1%) tend to be a light orange approaching yellow. (Benjamin Moore Paint color YL-25). None have even matured red, and with the small amount of variation in color, I feel that the Orange Cayenne, after five generations is separate and as stable as any other market variety.

At present one of the base seed groups is STILL alive. Recently plantings from 1981 base seed have been made. Several of these will be transplanted to the base seed area for future seed and testing.

June 20, 1982

Tommy Helack

Exhibit B - Novelty STATEMENT

Orange Cayenne

The Orange Cayenne is most similar to the Red Cayenne, Cayenne Long Red, or Long Red Cayenne, as these three names are used to describe the same variety.

The way in which the Orange Cayenne differs from the Red Cayenne is that upon maturity the fruit turns bright orange; (Benjamin Moore Paint color #OP-7). The Red Cayenne upon maturity turns a bright red.

I feel this difference establishes novelty. As part of this exhibit I submit Benjamin Moore color reference and two color photographs of the Orange Cayenne.

June 20, 1982

Tommy Baluch

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN & SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

OBJECTIVE DESCRIPTION OF VARIETY
PEPPER (*Capsicum* spp.)

NAME OF APPLICANT(S) <i>Tommy Bolack</i>	TEMPORARY DESIGNATION	VARIETY NAME <i>Orange Cayenne</i>
ADDRESS (Street and No., or R. F. D. No., City, State, and Zip Code) <i>RT 3 Box 47 Farmington N.M. 87401</i>	FOR OFFICIAL USE ONLY	
	PVPO NUMBER <i>8200110</i>	

Place the appropriate number that describes the varietal character of this variety in the boxes below. Characteristics described, including numerical measurements should represent those which are TYPICAL for the variety. Fill unused columns with zeroes (e.g.,

when number is 99). The location of the test area is *B. Secure Ranch*

Please answer questions appropriate for your variety if the information is available.

COMPARISON VARIETIES

- 1 = Yolo Wonder L
- 2 = Pimiento Perfection
- 3 = Mexican Chili
- 4 = Anaheim Chili

- 5 = Cayenne Long Red
- 6 = Cubanelle
- 7 = Jalapeño
- 8 = Serrano

- 9 = Sweet Cherry
- 10 = Floral Gem
- 11 = Sweet Banana
- 12 = Tabasco
- 13 = Other (Specify)

1. SPECIES:

1 = *C. annuum* 2 = *C. frutescens* 3 = *C. baccatum* 4 = *C. chinense* 5 = Other (Specify)

2. MARKET MATURITY:

<input type="text" value="60"/>	Days from transplanting until mature green stage	<input type="text" value="085"/>	Days from direct seed until mature green stage
<input type="text" value="80"/>	Days from transplanting until mature red or yellow stage	<input type="text" value="095"/>	Days from direct seed until mature red or yellow stage
From transplanting:			
<input type="text" value=""/>	Days earlier than c	} Comparison varieties	
<input checked="" type="checkbox"/>	Same as <input type="text" value="5"/>		
<input type="text" value=""/>	Days later than c		
From direct seed:			
<input type="text" value="05"/>	Days earlier than <input type="text" value="5"/>	} Comparison varieties	
<input type="text" value=""/>	Same as c		
<input type="text" value=""/>	Days later than c		

3. PLANT:

1 Habit: 1 = Compact 2 = Spreading 3 = Other (Specify) _____

cm Height

cm Shorter than a

Same as Comparison varieties

cm Taller than a

3. PLANT (Continued):

cm Width
 cm Narrower than } Comparison varieties
 Same as }
 cm Wider than }
 mm Length of third internode (from soil surface)
 Basal branches: 1 = None 2 = Few (2-3) 3 = Many (over 3)

 Branch flexibility: 1 = Willowy (Cayenne Long Red) 2 = Rigid (Yolo Wonder L)

4. LEAVES:

Foliage color: 1 = Light Green 4 = Purple Leaf and stem pubescence:
 2 = Medium Green 5 = Other (Specify) 1 = Absence (Yolo Wonder L)
 3 = Dark Green _____ 2 = Moderate (Serrano)
 _____ _____ 3 = Heavy (Chili Piquin)
 Mature shape: 1 = Lanceolate 2 = Elliptic
 Mature size: 1 = Small (Tabasco) 2 = Medium (Anaheim Chili) 3 = Large (Yolo Wonder L)

5. FLOWER:

Calyx lobe number
 Petal number
 Corolla color: 1 = White 2 = Purple 3 = Other (Specify) _____
 Corolla throat markings color: 1 = Yellow-(tan) 2 = Purple 3 = Other (Specify) _____
 Anther color: 1 = Yellow 2 = Purple
 Style length: 1 = Less than stamen 2 = Same as stamen 3 = Exceed stamen
 Flower number per leaf axil: 1 = One 2 = Two or more
 Self-incompatibility: 1 = Absent 2 = Present
 Cytoplasmic male sterility: 1 = Absent 2 = Present

6. FRUIT:

E 1 Group: 1 = Bell (Yolo Wonder L) 8 = Small hot (Serrano)
 2 = Pimien-to (Pimiento Perfection)-- 9 = Cherry (Sweet Cherry)
 3 = Ancho (Mexican Chili) 10 = Short wax (Floral Gem)
 4 = Anaheim Chili (Sandia) 11 = Long wax (Sweet Banana)
 5 = Cayenne (Cayenne Long Red) 12 = Tabasco (Tabasco)
 6 = Cuban (Cubanelle) 13 = Other (Specify) _____
 7 = Jalapeño (Jalapeño)
 Pungency: 1 = Sweet (Yolo Wonder L) 2 = Hot (Jalapeño)
 Immature color: 1 = Light Green (Cubanelle) 5 = Yellow (Yellow Belle)
 2 = Medium Green (Long Thin Cayenne) 6 = Purple (Violetta)
 3 = Dark Green (Yolo Wonder L) 7 = Ivory (Twiggy)
 4 = Very Dark Green (Ancho Chili) 8 = Other (Specify) _____
 Mature color: 1 = Red (Yolo Wonder L) 5 = Ivory
 2 = Orange 6 = Green (Permagreen)
 3 = Orange-yellow (Golden Calwonder) 7 = Salmon
 4 = Brown (Mulatto) 8 = Lemon Yellow

6. FRUIT (Continued):

2 Surface smoothness: 1 = Smooth (Yolo Wonder L) 2 = Rough (Long Thin Cayenne)
 9E7 820623
 2 Calyx shape: 1 = Cup-shaped 2 = Saucer-shaped
 2 Position: 1 = Upright (Santaka) 2 = Pendent (Jalapeño)
 2 Base shape: 1 = Cupped (Yolo Wonder L) 2 = Rounded (Jalapeño)
 1 Apex shape: 1 = Pointed (Long Thin Cayenne) 2 = Blunt (Yolo Wonder L)
 1 Flesh thickness: 1 = Thin (Long Thin Cayenne) 2 = Medium (Anaheim Chili) 3 = Thick (Yolo Wonder L)
 9E7 126623
 0 8 cm Length
 0 1 cm Shorter than 5
 Same as
 cm Longer than
 0 1 0 mm Diameter of fruit at calyx attachment *AVY*
 g weight per fruit
 3 Fruit shape: 1 = Bell (Yolo Wonder L) 2 = Conical (Pimiento)
 3 = Elongate (Long Thin Cayenne) 4 = Oblong (Jalapeño)
 5 = Oblate (Sunnybrook) 6 = Globe (Red Cherry)
 Fruit set: 1 = Scattered 2 = Concentrated
 to E 1 Number of locules (range)
 2 Pedicel length: 1 = Short (Yolo Wonder L) 2 = Long (Anaheim Chili)
 1 Pedicel shape: 1 = Straight 2 = Curved
 W Pedicel Thickness: 1 = Slender (Cayenne) 2 = Thick (Yolo Wonder L)

7. SEED:

1 Seed color: 1 = Yellow 2 = Purple
 8 1 /1000 seeds *grain 5*

8. ANTHOCYANIN (1 = Absent, 2 = Present):

Leaf 1 Stem 1 Node 2 calyx Pedicel 2 Seedling Hypocotyl
 Fruit *Trace*

9. DISEASE REACTION (0 = Not tested, 1 = Susceptible, 2 = Resistant):

a 0 Cucumber mosaic virus 0 Bacterial spot (*Xanthomonas vesicatoria*)
 0 Curly top virus 0 Cercospora leaf spot (*Cercospora capsici*)
 0 Pepper mottle virus 0 Phytosphthora root rot (*Phytophthora capsici*)
 c 1 Potato Y virus 1 Ripe rot (*Vermicularia capsici*)
 0 Tobacco etch virus 0 Southern blight (*Sclerotium rolfsii*)
 2 Tobacco mosaic virus 0 Verticillium wilt (*Verticillium dahliae*)
 0 Anthracnose (*Gloeosporium piperatum*) 0 Nematode (*Meloidogyne incognita acrita*)
 0 Other (Specify) _____ *E 1*

10. INDICATE THE VARIETY MOST CLOSELY RESEMBLING THE APPLICATION VARIETY FOR THE FOLLOWING:

CHARACTER	VARIETY	CHARACTER	VARIETY
Maturity	Red Cayenne	Fruit shape	Red Cayenne
Plant habit	Red Cayenne	Immature fruit color	Yolo Wonder
Leaf color	Red Cayenne	Mature fruit color	Yolo Wonder
Leaf shape	Red Cayenne	Pungency	Red Cayenne

11. COMMENTS:

