No. 7300048

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Dessert Seed Company, Inc.

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

ONION

'Red Creole PRR'

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* ninth *day of* January *in the year of our Lord one thousand nine hundred and* seventy-five

Attest:

S. A. Rollin

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Earl L. Butz

Secretary of Agriculture

12A. GENEOLOGY

1962 Crossed Pink root susceptible ~~White~~ Red Creole with Pink root resistant Red Burgundy.

1963 F-1 plants grown seed to seed and backcrossed to Red Creole.

1964 Backcross plants grown seed to seed and selfed in small cages using Fly Pollinators.

1965 Selfed backcross seed planted in Pink Root infested soil selected resistance plants.

1966 Resistant plants were crossed with Red Creole to increase uniformity & dry matter seed to seed.

1967 Selfed backcross seed planted in Pink root infested soil selected resistance plants and selfed.

1968 Planted selfed seed in pink rooted infested soil and selected for resistance.

1969 Planted resistance bulbs in 12' x 24' screen cages used Bee Pollinator and harvested 4 pounds of seed.

1970 Seed from 12' x 24' cage planted for increase of bulbs in Pink root~~ed~~ infested soil.

1971 Bulbs planted for small increase plot.

1972 Seed planted in increase off 5 acres for Harvest June 1973.

There are no identifiable genetic variants.

12B. COMPARED WITH COMMERICAL RED CREOLE.

It is resistant to the Texas strain of Pink root Pyrenochaeta Terrestris. It has a much higher percentage of single centers less prone to doubling and splitting and more red color as during each selection the bulbs were cut for single center and better color. It is a few day's earlier maturing.

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-16
(2-1-73)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C
(Onions)

OBJECTIVE DESCRIPTION OF VARIETY

ONIONS (ALLIUM CEPA L.)

REFERENCES: *See Reverse.*

NAME OF APPLICANT(S)

Dessert Seed Company, Inc.

ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*)

P.O. Box 181
El Centro, Calif. 92243

FOR OFFICIAL USE ONLY

PVPO NUMBER
73048

VARIETY NAME OR TEMPORARY DESIGNATION
Red Creole PRR

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. TYPE:

[1] 1 = BULB 2 = BUNCHING [ ] 1 = SHORT DAY 2 = LONG DAY

[0][0] TO [3][7] DEGREES MEAN LATITUTE - ADAPTATION RANGE

[2] Maturity (days): 1 = EARLY (75 - 90) 2 = MEDIUM (100 - 120) 3 = LATE (> 130)

2. PLANT

[6][5] CM. HEIGHT ABOVE SOIL LINE TO HIGHEST POINT OF ANY FOLIAGE

[0][9] CM. TALLER THAN Red Creole (Comparable variety)

[0][0] CM. SHORTER THAN Red Creole (Comparable variety)

[2] 1 = ERECT (Spartan Gem) 2 = INTERMEDIATE 3 = FLOPPY (Epoch)

3. LEAF:

[6][0] CM. LONG (before maturity yellowing begins)

[3][0] MM. WIDE [3][5] MM. THICK AT MIDLENGTH OF LONGEST LEAF

[3] Color: 1 = LIGHT GREEN (Early Grano) 2 = MEDIUM GREEN (Yellow Bermuda) 3 = BLUE GREEN (Australian Brown U.C. No. 1)

[4] Bloom: 1 = NONE - glossy 2 = LIGHT (Early Grano) 3 = MEDIUM (Crystal Wax) 4 = HEAVY (California Early Red)

4. SHEATH:

[4][0] MM. COLUMN LENGTH (Height from soil line to base of lowest succulent leaf) [1][5] MM. DIAMETER AT MIDLENGTH

[9][0] Scape: CM. FROM SOIL LINE TO BASE OF INFLORESCENCE

[3][0] Scape: MM. DIAMETER AT MIDLENGTH

5. INFLORESCENCE:

Umbel (for seed production)

[10] MAXIMUM NO. PER PLANT [2] MINIMUM NO. PER PLANT [6] AVERAGE NO. PER PLANT

[8][0] MM. DIAMETER [2] 1. COMPACT 2 = LOOSE/OPEN 3 = SHAGGY

[2] Spathe: 1 = LONG BEAK 2 = SHORT BEAK [2] Flower Color: 1 = WHITE 2 = GREEN 3 = BRIGHT GREEN

[6] MM. ANTHER LENGTH

[1] Anther Color: 1 = LIGHT GREEN 2 = DARK GREEN 3 = YELLOW 4 = PALE YELLOW 5 = CHOCOLATE 6 = RED

[2] Pollen Viability: 1 = STERILE 2 = FERTILE [2] Sepal Shape: 1 = LONG POINTED 2 - ROUND SHORT

4

Onion No. 7300048 'Red Creole PRR'

D. 'Red Creole PRR' most closely resembles 'Red Creole' but is resistant to pink root. and larger and Deeper color.

12E.

All this work and breeding was done on Dessert Seed Research Farm under Dr. Jones supervision who is head of our Research Program and under contract to Dessert Seed Company.

6. BULB:

[2 0] AVERAGE NUMBER BULBS PER METER

[1] Size (Harvest): 1 = SMALL (Red Creole) 2 = MEDIUM (Australian Brown U.C. No. 1) 3 = LARGE (Early Grano)

[6] Shape (see attached chart): 1 = GLOBE (White Sweet Spanish) 2 = DEEP GLOBE (Abundance) 3 = FLT. GLOBE (Australian Brn. U.C. No. 1) 4 = TOP SHAPE (Texas Grano 502) 5 = DEEP FLAT (Granex) 6 = THICK FLAT (Ebenezer) 7 = FLAT (Crystal Wax) 8 = TORPEDO-LONG OVAL (Italian Red)

[0 4] CM. HEIGHT ÷ [0 7] CM. DIAMETER = .57 SHAPE INDEX

[2] 1 = INVAGINATE 2 = EVAGINATE

[0 3] Color (Skin): 01 = BROWN (Australian Brn. U.C. No. 1) 02 = PURPLISH RED (Itanian Red) 03 = BUFF RED (Red Creole) 04 = PINKISH YELLOW (Ebenezer) 05 = BROWNISH YELLOW (Mt. Danvers) 06 = DEEP YELLOW (Brigham Yellow Globe) 07 = MEDIUM YELLOW (Early Yellow Globe) 08 = PALE YELLOW (Yellow Bermuda) 09 = WHITE (White Sweet Spanish) 10 = OTHER (Specify) _____

[1] Color (Interior): 1 = PINK 2 = RED 3 = PURPLISH-RED 4 = WHITE 5 = CREAM 6 = LIGHT GREEN-YELLOW 7 = DARK GREEN-YELLOW

[2] Scales: 1 = FEW (Crystal Wax) 2 = MEDIUM (Australian Brown U.C. No. 1) 3 = MANY (Sweet Spanish)

[2] Scales: 1 = THICK (Australian Brown U.C. No. 1) 2 = MEDIUM (Red Creole) 3 = THIN (Crystal Wax)

[2] Scale Retention: 1 = VERY GOOD (Australian Brn. U.S. No. 1) 2 = GOOD (Ebenezer) 3 = FAIR (Red Wethersfield) 4 = POOR (Crystal Wax)

[3] Pugence: 1 = MILD (Early Grano) 2 = MEDIUM (Crystal Wax) 3 = STRONG (White Creole)

[1] Storage: 1 = GOOD (Ebenezer) 2 = FAIR (Yellow Globe Danvers) 3 = POOR (Crystal Wax)

7. DISEASE RESISTANCE (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

[ ] BLACK MOLD [ ] NECK ROT [ ] PURPLE BLOTCH [ ] SMUT

[ ] MILDEW [X] PINK ROOT [ ] SMUDGE [ ] YELLOW DWARF

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

[0] THRIP [ ] OTHER (Specify) _____

9. INDICATE A VARIETY THAT MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Leaf Height	Red Creole	Flower Ball	Red Creole
Leaf Color	" "	Bulb Color	Little Dark Red Creole
Leaf Bloom/Wax	" "	Bulb Size	Little larger Red Cre
Flower Stalk	" "	Bulb Shape	Red Creole
Maturity at Same Location	" "		

REFERENCES

Jones, H. A. and Mann, L. K. 1963 – Onions and Their Allies, Interscience Publishers, Inc., New York

USDA Misc. Pub. No. 435, 1941 – Descriptions of Types of Principal American Varieties of Onions

Hayward, H. E., 1938 – The Structure of Economic Plants, McMillan, New York (Reprint 1967)

Ag Research, 7 (8):8 – Feb. 1959 – Branding Onion Outcasts

Salem, I. A. 1966 – Inheritance of Onion Bulb Shape, Iowa St. University – PhD thesis

FORM GR-470
(12-15-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION Red Creole PRR	2. KIND NAME Onion	FOR OFFICIAL USE ONLY PV NUMBER 73048
3. GENUS AND SPECIES NAME Allium Cepa	4. FAMILY NAME *(Botanical)* Liliaceae 5. DATE OF DETERMINATION MAY 1972 per phone 1/9/75	FILING DATE 1-19-73 TIME 12 — P.M. FEE RECEIVED $ 250 / $ 250 / $ 250 BALANCE DUE $ 00.00 / $ 00.00 / $ 00.00
6. NAME OF APPLICANT(S) Dessert Seed Company	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)* P.O. Box 181 1st & Ross Avenue	8. TELEPHONE AREA CODE AND NUMBER 714-352-2081
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)* Dessert Seed Company, Inc.	10. STATE OF INCORPORATION California	11. DATE OF INCORPORATION

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

A. M. Dessert
c/o Dessert Seed Company, Inc.
P.O. Box 181
El Centro, California 92243

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, Botanical Description of the Variety
- [ ] 13C. Exhibit C, Objective Description of the Variety
- [ ] 13D. Exhibit D, Data Indicative of Novelty
- [ ] 13E. Exhibit E, Statement of the Basis of Applicant's Ownership

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 [X] NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? [ ] YES [X] NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? [ ] FOUNDATION [ ] REGISTERED [ ] CERTIFIED

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.

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.

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

9-13-73 (DATE) — A. M. Dessert Vice Pres (SIGNATURE OF APPLICANT)

(DATE) — (SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and $250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (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 Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.

13a 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.

13b 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.

13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.

13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.

13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.