No. 7800026

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

A. L. Tozer, Ltd.

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, [illegible]PORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VA[illegible] THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (84 [illegible]1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

LETTUCE

'Tania'

PLANT VARIETY PROTECTION OFFICE · U.S. DEPARTMENT OF AGRICULTURE

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* 15th *day of* March *in the year of our Lord one thousand nine hundred and* seventy-nine

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

FORM GR-470
(1-76)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
PLANT VARIETY PROTECTION OFFICE
NATIONAL AGRICULTURAL LIBRARY
BELTSVILLE, MARYLAND 20705

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1a. TEMPORARY DESIGNATION OF VARIETY	1b. VARIETY NAME Tania	FOR OFFICIAL USE ONLY PV NUMBER 7800026
2. KIND NAME Lettuce	3. GENUS AND SPECIES NAME Lactuca sativa	FILING DATE 2-14-78 TIME 3:30 A.M. (P.M.)
4. FAMILY NAME (BOTANICAL) Compositae	5. DATE OF DETERMINATION 16 December 1976	FEE RECEIVED $ 250.00 $ 250.00 $ 250.00 DATE 2-14-78 2-14-78 12-18-78
6. NAME OF APPLICANT(S) A.L.Tozer Ltd.,	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)* Pyports, Downside Bridge Road, Cobham, Surrey KT11 3EH, United Kingdom.	8. TELEPHONE AREA CODE AND NUMBER 09326-2059

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)* Limited Company	10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION England	11. DATE OF INCORPORATION 1944

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:
Joseph Harris Company, Inc., Moreton Farm, Rochester, N.Y., 14624

Telephone: 716-594-9411

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [X] 13B. Exhibit B, Novelty Statement.
- [X] 13C. Exhibit C, Objective Description of the Variety *(Request form from Plant Variety Protection Office.)*
- [X] 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 [X] 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

15. Does the applicant(s) agree to the publication of his/her (their) name(s) and address in the Official Journal? [X] YES [ ] NO

16. The applicant(s) declare(s) 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) 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.

FOR AND ON BEHALF OF
A. L. TOZER LTD.

Peter R. Lawson
(SIGNATURE OF APPLICANT)
JOSEPH HARRIS COMPANY, INC. DIRECTOR 1

14 April 1977
(DATE)

April 22, 1977
(DATE)

Joseph Harris
(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, National Agricultural Library, 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 commerical 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 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 or published or the certificate has been issued. However, if the applicant specifies "NO", he may change his choice. (See Section 180.15 of the Regulations and Rules of Practice.)

13A. Exhibit A:

Origin and Breeding History of the Variety.

'Tania' is derived from a single plant selection, the seeds of which had a tan colour, from the F_7 generation of a cross between the butterhead variety 'Mildura' and a crisp-head line Imperial 45634-M originally from Dr. T.W. Whitaker, USDA, La Jolla, California via The National Vegetable Research Station, Wellesbourne, England made in 1961.

Sister selections from the F_7 generation gave rise to the white seeded variety 'Diana' which was released to growers in England in 1975 and is protected by a Grant of Plant Breeders' Rights No.965 dated 1974.

Both parents carry genes for resistance to various races of the downy mildew fungus Bremia lactucae. Therefore the F_4, F_5, F_6 and F_7 generations were tested with various isolates of the fungus and only resistant individuals were selected to go forward to the next generation.

The variety 'Tania' - like 'Diana' has four resistant genes for Bremia resistance R_3, R_4, R_7 and R_8 using the system of gene nomenclature put forward by Crute and Johnson.

(Crute I.R. and A. G. Johnson. The genetic relationship between races of Bremia lactucae and cultivars of Lactuca sativa. Ann. appl. Biol. (1976) 83; 125-137.)

Two further generations have taken place and 'Tania' appears stable and uniform for tan seed colour, mildew resistance and all other characters.

13B. Exhibit B:

Novelty Statement.

HG 5/25/78

'Tania' is distinct from the variety 'Diana' which it most closely resembles in having seeds with brown seed coats whereas Diana is white seeded.

FORM GR-471
(4-3-72)

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

EXHIBIT C

OBJECTIVE DESCRIPTION OF VARIETY
(LETTUCE)

INSTRUCTIONS: See reverse.

NAME OF APPLICANT(S)
A.L.Tozer Ltd.,

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)
Pyports, Downside Bridge Road, Cobham, Surrey, England.

FOR OFFICIAL USE ONLY
PVPO NUMBER
297 - 1 - 7800026
VARIETY NAME OR TEMPORARY DESIGNATION

Place the appropriate number that describes the varietal character of this variety in the boxes below.

1. PLANT TYPE: [5 0]
10 = CUTTING (Leaf) 20 = STALK
50 = BUTTERHEAD 60 = LATIN
70 = OTHER (Specify) _____

30 = COS
31 = SELF-CLOSING GROUP
32 = LOOSE-CLOSING GROUP

40 = CRISPHEAD
41 = IMPERIAL GROUP
42 = GREAT LAKES GROUP
43 = VANGUARD
44 = NEW YORK GROUP

2. SEED COLOR: [4]
1 = WHITE 2 = BLACK 3 = YELLOW 4=Tan

3. ANTHOCYANIN: [1]
1 = ABSENT 2 = PRESENT

4. LEAF CONTAINING ANTHOCYANIN: [ ]
1 = COVERED 2 = SPOTTED 3 = ALONG MARGIN 4 = ABSENT 5 = OTHER (Specify) _____

5. LEAF SURFACE TEXTURE: [2]
1 = SMOOTH 2 = BLISTERED

6. LEAF SURFACE REFLECTANCE: [2]
1 = DULL 2 = GLOSSY 3 = OTHER (Specify) _____

7. LEAF MARGIN: [2]
1 = STRAIGHT 2 = WAVY
3 = CURLED

[2]
1 = ENTIRE 2 = DENTATE 3 = INCISED
4 = DEEPLY INCISED 5 = OTHER (Specify) _____

8. LEAF SHAPE: [1]
1 = ROUNDED 2 = POINTED

[1]
1 = BROADER THAN LONG 2 = LONGER THAN BROAD 3 = OTHER (Specify) _____

9. LEAF COLOR: (See reverse.) [7]
1 = RED 2 = REDDISH-BROWN 3 = YELLOW 4 = YELLOWISH-GREEN 5 = GREYISH-GREEN
6 = BLUE-GREEN 7 = DARK-GREEN 8 = VERY DARK GREEN

10. HEADS: [1]
1 = SPHERICAL 2 = FLATTENED 3 = ELONGATE
4 = POINTED 5 = NON-HEADING

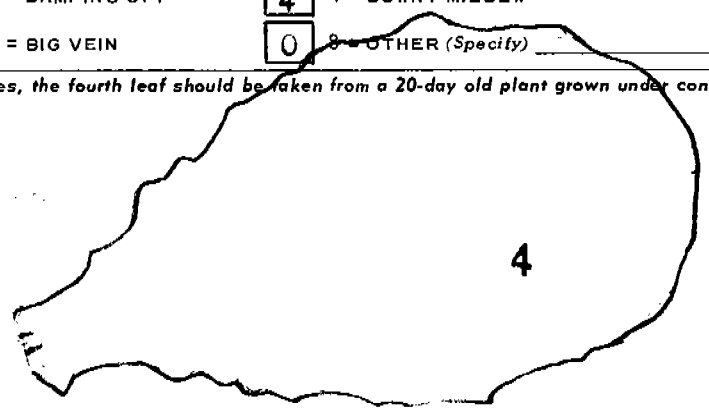
11. PLANT SIZE: (See reverse.) [2]
1 = SMALL 2 = MEDIUM 3 = LARGE

12. CULTURE: [1]
1 = SUMMER CROP 2 = WINTER CROP 3 = NOT SPECIFIC 4 = UNDER GLASS 5 = OTHER (Specify) _____

13. SIZE OF 10-DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT (Growth Chamber) **AT 25° C.:** (Place a zero in first box (i.e. [0 2]) when size is 9 mm. or less.)
[1 0] mm. LENGTH OF SEEDLING [2 0] mm. LENGTH OF COTYLEDON [0 9] mm. WIDTH OF COTYLEDON

14. DISEASE RESISTANCE TO: (Enter zeroes in box(es) where there is no special disease resistance.)
[0] 1 = TIPBURN [0] 2 = MOSAIC [0] 3 = DAMPING OFF [4] 4 = DOWNY MILDEW
[0] 5 = SCLEROTINIA ROT [0] 6 = BROWN BLIGHT [0] 7 = BIG VEIN [0] 8 = OTHER (Specify) _____

15. OUTLINE THE FOURTH LEAF: (For standardization purposes, the fourth leaf should be taken from a 20-day old plant grown under constant light.)



13D. Exhibit D:

Additional Description of the Variety, Tania.

'Tania' is a dark green butterhead lettuce, Lactuca sativa and has light brown or tan seed coat colour.

'Tania' is similar to Diana in plant growth characteristics but is quite different from Dark Green Boston.

'Tania' has large broad cotyledons with no anthocyanin and no anthocyanin develops on exposure to cool conditions. 'Tania' is slightly darker green than Dark Green Boston.

The leaves are slightly blistered and the surface profile of the outer leaves is fairly flat.

'Tania' makes a marketable head from two to four days earlier and is seven days later in bolting than Dark Green Boston. The plant size of 'Tania' is approximately 3-4 cm. larger and the head size approximately 8 cm. larger than Dark Green Boston.

At flowering there is a terminal button, otherwise no fasciation is present in the flowering shoot.

'Tania' like Diana has resistance to a number of races of Bremia lactucae while Dark Green Boston has no resistance.

16. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY
Leaf color	Dark Green Boston - Diana
Leaf pigmentation	Dark Green Boston - Diana
Leaf shape	Diana
Plant size	Diana
Head size	Diana

VARIETY	NO. OF DAYS TO HEAD MATURITY UNDER WINTER CROPPING	LOCATION	NO. OF DAYS TO HEAD MATURITY UNDER SUMMER CROPPING	LOCATION	NO. OF DAYS TO SEED STALK EMERGENCE UNDER SUMMER CROPPING	LOCATION
Submitted			74	southern England	87	southern England
Similar			74	southern England	87	southern England
Name of similar variety →	Diana					

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for completing this form:

1. C. M. Rodenburg, 1960, Varieties of Lettuce, An International Monograph, Institunt Voor de Veredeling van Tuinbouwgewassen, Wageningen, Holland.

2. L. L. Morse, 1930, Field Notes on Lettuce, published by Ferry-Morse Seed Co.

LEAF COLOR: Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following lettuce varieties may be used as a guide to identify the eight colors listed on the form.

Color	Variety
Red	"Salad Trim"
Reddish-brown	"Ruby"
Yellow	"Salad Bowl"
Yellowish-green	"Oakleaf"
Greyish-green	"White Boston"
Bluish-green	"Bibb"
Dark-green	"Imperial" group
Very dark green	"Deer Tongue"

PLANT SIZE: The following varieties may be used as a guide to identify the plant type size:

TYPE	COMPARABLE VARIETIES		
	SMALL	MEDIUM	LARGE
Cutting (leaf)	Boston-Curled	Prize Head	Grand Rapids
Stalk (stem)	Celtuce	--	--
Cos	Express	Parris Island	Giant White
Crisphead	Mignonette	Hanson (Merit)	Climax
Butterhead	Tom Thumb	Big Boston	Mammoth Butter
Latin	Sucrine	Creole	Deer Tongue

2 PHOTOS IN
BINDER
AB 12-14-87

United States Department of Agriculture
Agricultural Research Service
Northern Plains Area National Seed Storage Laboratory
1111 South Mason Street
Fort Collins, CO 80521-4500
Telephone: 970 495-3200
Fax: 970 221-1427

February 14, 1997

Marian R. Minnifield, Secretary
Plant Variety Protection Office
NAL Building, Room 500
10301 Baltimore Boulevard
Beltsville, Maryland 20705-2351

Subject: Expired PVPO's; disposition of

1. The following expired PVPO's have been transfered to the NPGS. Our records have been changed accordingly.

Serial Number		PVP Number
101862	01	PVP 7800029
102219	01	PVP 7800010
102675	01	PVP 7800088
102676	01	PVP 7400011
103506	01	PVP 7800084
103507	01	PVP 7900016
103508	01	PVP 7800082
103840	01	PVP 7900017
103842	01	PVP 7900067
104549	01	PVP 7700106
104551	01	PVP 7100046
314988	01	PVP 9500276
101863	01	PVP 7800026
102222	01	PVP 7800078
102226	01	PVP 7800091
101854	01	PVP 7200134
102214	01	PVP 7605014
102216	01	PVP 7900011
102217	01	PVP 7800095
102218	01	PVP 7800093
102220	01	PVP 7800097
102221	01	PVP 7800042

United States Department of Agriculture
Agricultural Research Service
Northern Plains Area National Seed Storage Laboratory
1111 South Mason Street
Fort Collins, CO 80521-4500
Telephone: 970 495-3200
Fax: 970 221-1427

102673	01	PVP 7800059
103502	01	PVP 7800096
103503	01	PVP 7800074
103509	01	PVP 7900044
103510	01	PVP 7900047
103838	01	PVP 7500042
103843	01	PVP 7300101
101859	01	PVP 7200132
102227	01	PVP 7700085
103511	02	PVP 7800028
103839	01	PVP 7900049
103845	01	PVP 7900048
104548	02	PVP 7800057
104550	01	PVP 7800024

Sincerely,

GENE KEYS
Data Coordinator