No. 7200053

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Unilever, Limited

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 fifteen 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 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.)

PEA

'Colworth Swan'

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* 30th *day of* September *in the year of our Lord one thousand nine hundred and* seventy-four

Attest:

L. E. Rollin

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Earl L Butz

Secretary of Agriculture

FORM GR-470
(2-12-71)

UNITED STATES DEPARTMENT OF AGRICULTURE
CONSUMER AND 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 COLWORTH SWAN	2. KIND NAME GREEN PEA	FOR OFFICIAL USE ONLY PVPO NUMBER 72053	
3. GENUS AND SPECIES NAME PISUM SATIVUM L.	4. FAMILY NAME *(Botanical)* LEGUMINOSAE	FILING DATE 11/2/71	TIME 2:30 ~~A.M.~~ P.M.
	5. DATE OF DETERMINATION 1966	FEE RECEIVED $50.00	CHARGES
6. NAME OF APPLICANT(S) UNILEVER LIMITED	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)* PO Box 68 Unilever House LONDON EC4P 4BQ		8. TELEPHONE AREA CODE AND NUMBER 01-353-7474
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)* LIMITED COMPANY	10. STATE OF INCORPORATION -		11. DATE OF INCORPORATION -

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

Mr L F Kline Jr
390 Park Avenue
New York
N.Y. 10022
USA

Telephone Number -
AC 212-688-6000

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [x] 12A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52, P.L. 91-577)*
- [x] 12B. Exhibit B, Botanical Description of the Variety
- [ ] 12C. Exhibit C, Objective Description of the Variety
- [x] 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).

(DATE) _____ (SIGNATURE OF APPLICANT) for and on behalf of Unilever Limited

(DATE) _____ (SIGNATURE OF APPLICANT) Assistant Secretary

R F Taylor

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FORM GR-470 (REVERSE)

U. S. DEPARTMENT OF AGRICULTURE
RECEIVED
JUN 9 1971
C&MS GRAIN DIVISION

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 unles 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.

U. S. DEPARTMENT OF AGRICULTURE
RECEIVED
JUN 9 1971
C&MS GRAIN DIVISION

Question 12

Exhibit A

Developed from the cross DSPX Kelva made in 1960. The breeding method was hybridisation followed by single plant selection until the F5 generation. After this stage, bulk selection and rogueing was adopted. Annual multiplication carried out by the breeder to produce a selected nuclear mother stock of approximately 1/2 ton.

Occasional tall, late flowered rogues appeared up to F6, but the line is now completely stable.

Exhibit B

Plant characteristics (data taken over 3 years) c.p. Jade as control

Seed wt (per 1000 seeds) 220-224 gms	(Jade 245)
Wrinkled ,green colour	
66 days sowing - first flower	(Jade 70)
First flowering node 8-10	(Jade 11-12)
70 cms tall at maturity	(Jade 88 cms)
Mainly two pods per node, occasionally singles	
5-9 peas per pod	(Jade 5-9)
13-15 pods per plant - pointed in shape	(Jade 10-12)

Pod characters - length 8.8 cms. breadth 1.5 cms width 1.4 cms
(Jade " 8.3 " 1.5 " 1.2 ")

Pod and foliage colour similar to Jade

Exhibit D*

Standard freezing pea variety - no novelty involved.

* See letter 10.26.73, attached.

72053

DATA ex PVRO TRIALS 1971 - SWAN & KELVEDON WONDER

CHARACTER	COLWORTH SWAN	KELVEDON WONDER
Stem length	96.1	85.5
1st. flowering node number	10.2	9.8
Number leaflets	4.2	4.1
Number pods at 2nd. flower node	1.3	1.5
Pod length	79.3	85.7
Pod breadth	13.5	13.3
Seeds + ovules	7.7	9.1
Green seed wt. per 100 pods	320 gms.	320 gms.
Green seed sieve size	5.7	6.1
1000 seed wt. dry	237 grms.	290 gms.
Pod curvature	Slight	Slight
Pod Tip	Pointed	Pointed
Marbling on stipoles	Slight	Medium

LEVER BROTHERS COMPANY
(INCORPORATED)
LEVER HOUSE • 390 PARK AVENUE, NEW YORK, N. Y. 10022 • MURRAY HILL 8-6000

October 26, 1973

Mr. Herbert H. Fisher
Plant Variety Protection Office
Grain Division
6525 Belcrest Road
Hyattsville, Maryland 20782

Dear Mr. Fisher:

Re: Application No. 72053, Pea, "COLWORTH SWAN"

Reference is made to your letter on the above matter. As requested the following is a revised Exhibit D for our application:

EXHIBIT D

On information and belief the variety most closely resembling "Colworth Swan" is "Jade".

"Colworth Swan" may be distinguished from "Jade" as follows:

Plant Characteristics	"Colworth Swan"	"Jade"
Seed Weight (per 1000 seeds) grams	220-224	245
First flower from sowing-days	66	70
First flowering node	8-10	11-12
Height at Maturity-centimeters	70	88
Pods per plant	13-15	10-12
Pod length-centimeters	8.8	8.3
Pod breadth-centimeters	1.5	1.5
Pod width-centimeters	1.4	1.2

It is respectfully submitted that the above comparison data clearly distinguishes the pea of the present application, i.e., Colworth Swan, from the closest prior art "Jade".

. . . /

In accordance with your second request "Colworth Swan" was placed on the United Kingdom Index on February 10, 1969. Enclosed is a copy of a confirmatory letter from the United Kingdom Ministry of Agriculture, Fisheries and Food and a copy of the relevant page of the Plant Varieties and Seeds Gazette, both attest to this fact.

All requests having been fully complied with this application is considered to be in condition for allowance and an early notice to that effect is earnestly solicited.

Respectfully submitted,

LEVER BROTHERS COMPANY

Arnold Grant
Reg. No. 23,052

AG/ab

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-14
(10-2-72)

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

EXHIBIT C
(Pea)

OBJECTIVE DESCRIPTION OF VARIETY

PEA (*PISUM SATIVUM*)

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(S)
UNILEVER LIMITED

ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*)
PO BOX 68
UNILEVER HOUSE
LONDON EC4P 4BQ ENGLAND

FOR OFFICIAL USE ONLY

PVPO NUMBER
72053

VARIETY NAME OR TEMPORARY DESIGNATION
Colworth Swan

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:

[2] 1 = TALL (Internodes straight)
2 = DWARF (Internodes zigzag)

[2] 1 = GARDEN 2 = FIELD 3 = EDIBLE-PODDED

2. SEASON:

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

3. MATURITY:

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[0][6] No. of days *Earlier* than ..... [4]
[0][0] No. of days *Later* than ..... [3]

1 = ALASKA WR 2 = THOMAS LAXTON WR 3 = LITTLE MARVEL
4 = WANDO 5 = ALDERMAN WR 6 = AUSTRIAN WINTER

4. PLANT HEIGHT:

[0][7][8] CM. HIGH

[8][2] Cm. *Shorter* than ..... [5]
[3][3] Cm. *Taller* than ..... [4]

1 = ALASKA WR 2 = THOMAS LAXTON WR 3 = LITTLE MARVEL
4 = WANDO 5 = ALDERMAN WR 6 = AUSTRIAN WINTER

5. VINE:

[1] Habit: 1 = DETERMINATE 2 = INDETERMINATE

[2] Stockiness: 1 = SLIM (Alaska) 2 = MEDIUM (Thomas Laxton WR) 3 = HEAVY (Alderman)

[2] Branching: 1 = NONE (Alaska) 2 = 1 - 2 BRANCHES (Little Marvel) 3 = MORE THAN 2 BRANCHES (Dwarf Gray Sugar)

[1] Node Color: 1 = GREEN 2 = RED BLOTCH

[1][7] NUMBER OF NODES

[0][6] CM. INTERNODE LENGTH (Just below 1st flowering node)

6. LEAFLETS:

[3] Color: 1 = LIGHT GREEN (Alaska WR) 2 = MED. GREEN (Thomas Laxton WR) 3 = DARK GREEN (Alderman) 4 = OTHER (Specify) _____

[3] Wax: 1 = NONE 2 = LIGHT 3 = MEDIUM 4 = HEAVY

[1] Marbling: 1 = NONE 2 = MARBLED (Alaska)

[3] Number of leaflet pairs: 1 = NOT PAIRED 2 = ONE 3 = TWO 4 = THREE OR MORE

7. STIPULES:

[2] 1 = LACKING 2 = PRESENT

[1] 1 = NOT CLASPING 2 = CLASPING

[2] 1 = NOT MARBLED 2 = MARBLED

[3] Size (Compared with leaflets): 1 = SMALLER 2 = SAME 3 = LARGER

[2] Color (Compared with leaflets): 1 = LIGHTER 2 = SAME 3 = DARKER

8. FLOWER COLOR:

[1] 1 = MONOCOLOR 2 = BICOLOR

6

[2] Venation [1] Standard [1] Wing [2] Keel

1 = WHITE 2 = GREENISH 3 = LAVENDER 4 = PURPLE
5 = RED 6 = OTHER (Specify) _____

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MINISTRY OF
AGRICULTURE, FISHERIES AND FOOD
Murray House, Vandon Street, LONDON S.W.1
Telegrams: Plantvarof London S.W.1
Telepone: TATE *Gallery* 2611, *ext.*

Our reference: AF 11/14 and 15
Your reference:

RECEIVED
PATENTS DEPT.
-7 FEB 1969

4th February, 1969

Dear Sirs,

Index of Names of Plant Varieties

Peas - COLWORTH SWAN and COLWORTH TERN

I refer to your applications submitted for the addition of the names Colworth Swan and Colworth Tern to the pea section of the Index.

The Variety Classification Unit at Cambridge has now informed us that the trials for these varieties have been completed and that they have been shown to be distinct. It has therefore been decided to add these names to the Index with effect from 10th February, 1969.

A notice to this effect will be published in the No. 49, February edition of the Plant Varieties and Seeds Gazette.

Yours faithfully,

E.V. Thornton

Miss E.V. Thornton

Messrs. Unilever Ltd.,
Patents Department,
Unilever House,
London,
E.C.4.

H. A. S. Doughty
White House Lane
Huntingdon Rd
Cambridge, CB 3 0LE

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9. PODS:

[2] Shape: 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = CURVED

[1] End: 1 = POINTED (Alderman) 2 = BLUNT (Alaska)

[3] Color: 1 = LIGHT GREEN (Alaska WR) 2 = MEDIUM GREEN 3 = DARK GREEN (Alderman) 4 = OTHER (Specify) _____

[1] Surface: 1 = SMOOTH 2 = ROUGH

[2] 1 = SHINY 2 = DULL

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

[0 8] CM. LENGTH [1 4] MM. WIDTH (Between sutures) [7] NUMBER OF SEEDS PER POD

10. SEEDS (95 - 100 Tenderometer):

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

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

[3] 7/4 5/7/73 Surface: 1 = SMOOTH 2 = DIMPLED 3 = WRINKLED

[1] Surface: 1 = SHINY 2 = DULL

SEEDS (Mature, Dry):

[1] Color: 1 = MONOCOLOR 2 = BICOLOR

[7] 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)

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

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

[1] Hilum Floor Color: 1 = WHITE 2 = TAN 3 = BLACK

[3] Cotyledon Color: 1 = YELLOW 2 = ORANGE 3 = GREEN

[2 2] GRAMS PER 100 SEED

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

Sieve (%): [5]1 [8]2 [2 0]3 [2 5]4 [2 1]5 [2 1]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 [0] NEAR-WILT [0] DOWNY MILDEW

[0] ASCOCHYTA BLIGHT [0] POWDERY MILDEW [0] BACTERIAL BLIGHT

[0] MOSAIC [0] PEA ENATION MOSAIC [0] YELLOW BEAN MOSAIC

[ ] OTHER (Specify) _____

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	DARK SKINNED PERFECTION	Fresh Seed Color	JADE
Leaf Color	JADE	Mature Seed Color	DARK SKINNED PERFECTION
Pod Color	KELVA	Seed Shape	SCOUT
Pod Shape	KELVA	Plant Habit	JADE

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.

Plant Varieties & Seeds Gazette

NUMBER 49, FEBRUARY 1969

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Notice is hereby given, in accordance with the provisions of section 20(4) of the Plant Varieties and Seeds Act 1964, that the names of the following varieties have been added to the barley section of the Index with effect from 30th January, 1969, and to the pea and French bean sections with effect from 10th February, 1969.

Spring Barley	Peas	French beans
PIRKKA	COLWORTH SWAN	BONVERT
	COLWORTH TERN	CORENE
	DOT	GREENSTAR
	HISTON MINI	SIMPLO
	TARGET	TRUGREEN
	VIKING	

STATUTORY PERFORMANCE TRIALS

APPLICATIONS

The following notice of applications for Statutory Performance Trials is published in accordance with the provisions of Regulation 11(a) and (b) of the Plant Varieties (Performance Trials) Regulations 1966:

Reference No. of Application	*Name and Address of Applicant*	*Name of Variety or Breeder's Reference*	*Unless previously exempted restrictions on advertisement and sale apply until:*
Spring Barley			
AFP 2/70	Deutscher Saatgut-Handelsbetrieb (DSG), Berlin, Berlin-Treptow, Moosdorfstr. 7–9, Germany	ELGINA	30th June 1971
Winter Wheat			
AFP 1/60	Rothwell Plant Breeders Ltd., Field House, Grimsby, Lincolnshire	*FIRLBECK 22229	30th June 1971

*Previously advertised in the No. 44 September and the No. 46 November 1968 editions as PILOT

STATUTORY PERFORMANCE TRIALS

APPLICATIONS WITHDRAWN

Notice is hereby given in accordance with the provisions of Regulations 11(f) and (g) of the Plant Varieties (Performance Trials) Regulations 1966 that the performance trials on the following varieties are deemed not to have begun and that the applications for the submission of the varieties for performance trials are deemed to have been withdrawn on the dates quoted:

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PEA #7200053 'COLWORTH SWAN'

Excerpt from letter dated December 15, 1971

13D: Exhibit E:

The applicant, Unilever Limited, is the owner of the variety by viture of an assignment from the actual breeders, the breeders being full-time employees of Unilever Limited and employed in the Plant Products Division of Unilevers research laboratories at Colworth House, Sharnbrook, Bedfrod, England.