No. 7300072

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Agricultural Experiment Station
Auburn University

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, 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.)

MUSKMELON

'Chilton'

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* 20th *day of* October *in the year of our Lord one thousand nine hundred and* seventy-seven

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

FORM GR-470
(12-15-72)

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

FORM APPROVED
OMB NO. 40-R2712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION	2. KIND NAME	FOR OFFICIAL USE ONLY
Chilton	Muskmelon	PV NUMBER 73072
3. GENUS AND SPECIES NAME	4. FAMILY NAME *(Botanical)*	FILING DATE 3-9-73 / TIME 8:30 A.M.
Cucumis melo	Cucurbitaceae	FEE RECEIVED $ 250.00 / BALANCE DUE $ 3-9-73
—	5. DATE OF DETERMINATION 4-1-72	$ 250.00 / $ 4-29-77
		$ 250.00 / $ 9-9-77

6. NAME OF APPLICANT(S)	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*	8. TELEPHONE AREA CODE AND NUMBER
Dept. of Horticulture Auburn University Agr. Exp. Sta.	Auburn University Auburn, Alabama 36830	205 826-4862

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*	10. STATE OF INCORPORATION	11. DATE OF INCORPORATION
State Univ. Agr. Exp. Sta.	Alabama	1872

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

D. Y. Perkins, Head, Department of Horticulture Auburn University, Auburn, Alabama 36830

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, Botanical Description of the Variety

[X] 13C. Exhibit C, Objective Description of the Variety

[X] 13D. Exhibit D, Data Indicative of Novelty

[X] 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.

8/9/73
(DATE)

Donald Y. Perkins
(SIGNATURE OF APPLICANT)
D. Y. Perkins, Head, Dept. of Horticulture

8-9-73
(DATE)

Joseph D. Norton
(SIGNATURE OF APPLICANT)
J. D. Norton, Professor, Breeder

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PV No. 73072

Exhibit A

Origin and History of the Chilton Variety

1. 'Chilton' is an inbred line from the cross Southland x P.I. 140471 as shown in the pedigree (see attached leaflet No. 84, Auburn Univ. Agr. Exp. Sta., Chilton - A High Quality Fruit for the Commercial Market). Following the cross, a backcrossing and disease screening program was followed with selection of disease resistant seedlings and high quality fruit. Thus, Chilton originated from a program of backcrossing and inbreeding to obtain resistance to gummy stem blight (*Mycosphaerella citrullina*, downy mildew (*Pseudoperonospora cubensis*), and powdery mildew (*Spherotheca fuliginea*).

2. Pure line selections were made in progeny from the third backcross based on disease resistance and fruit quality. Yield tests were made at five locations in Alabama and 22 locations in the Southern Region for four years (See attached leaflet No. 84).

3. The genetic makeup of the variety was stabalized in the fifth generation. (see attached leaflet No. 84).

PV No. 73072

REVISED
Exhibit B

1. Name : Chilton

2. Botanical Description of Variety

Plant: The vine is trailing with hirsute stems; leaves shallowly fine lobed with the lobes more or less rounded at the apex. Upper leaf surface grayish green 1 GY 3/2 1/. Lower leaf surface, scabrous, moderate olive green 2.5 GY 4/3. Mature leaf length 5 inches, width 5 inches.

Flower: Flowers staminate, pistillate and perfect. Pistillate and perfect flowers emerge 10 to 14 days after first staminate flowers appear. Staminate flowers length 0.5 inch, width 1.0 inch; pistillate and perfect flowers length 2.0 inches, width 1.0 inch. Petal color vivid yellow 2.5 Y 8/12.

Fruit Exterior: Fruit mostly round some round oval; slightly ribbed with an extra heavy medium net. Fruit firm; weight 2½ pounds; size 5-6 inches diameter. Color dark orange yellow 10 YR 5/6. Rind thickness 0.5 inch.

Fruit Interior: Flesh melting, tender juicy, sweet (12.92 soluble solids), excellent delicious flavor; thickness 1 3/4 - 2 inches. Typically 3 locules, 115 - 125 seeds per locule.

1/ Nickerson color fan, maximum chroma, 40 hues, Nickerson Color Company, Inc.

2/ Baush and Lomb Refractometer 0 - 25 scale.

PV No. 73072

EXHIBIT D

VARIETY MOST SIMILAR TO 'CHILTON' AND HOW THESE VARIETIES DIFFER

1. Similarities:

The 'Chilton' variety is most similar to the 'Gulfstream' variety. These similarities in plant vigor, fruit shape, rind color, flesh aroma, flesh flavor, and flesh color are described in "Muskmelon Application No. 73072, 'Chilton'", Exhibit B, Botanical Description of Variety. Both varieties produce high yields of high quality fruit as indicated in the release publications (a, c).

2. Differences:

'Chilton' differs from 'Gulfstream' in total soluble solids, yield and weight of fruit (c). The netting thoroughly covers the entire fruit including both ribs and sutures of 'Chilton'; however, the netting is not extensive on the sutures of 'Gulfstream'. The leaf surfaces of 'Chilton' are scaborous; 'Gulfstream' leaf surfaces are pubescent (a, b, c).

3. Information Cited and Attached

a. Norton, Joseph D. 1972. Chilton, A High Quality Fruit for the Commercial Market. Auburn University Agr. Exp. Sta. Cir. 84.

b. Norton, Joseph D. 1973. Muskmelon Application No. 73072, 'Chilton', Exhibit B, Botanical Description of Variety.

c. Norton, Joseph D., H. M. Bryce, C. C. Carlton, K. C. Short, J. E. Barrett, M. H. Hollingsworth, and C. A. Brogden. 1976. New Cantaloupes Suited for Commercial Production. Auburn University Agr. Exp. Sta. Highlights of Agr. Res. Vol. 23, No. 4.

PV No. 73072

Exhibit E

Statement of Applicants Ownership of 'Chilton' Variety

The Department of Horticulture, Auburn University Agricultural Experiment Station, Auburn University, Auburn, Alabama believes it is the sole original and first breeder of the Chilton variety of Muskmelon for which it solicits a certificate of protection.

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.

FORM GR-470-38
(6-76)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
BELTSVILLE, MARYLAND 20705

OBJECTIVE DESCRIPTION OF VARIETY

Muskmelon (Cucumis melo L.)

NAME OF APPLICANT(S)

D. Y. Perkins

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

Department of Horticulture, Auburn University
Auburn, Alabama 36830

VARIETY NAME OR TEMPORARY DESIGNATION

Chilton

FOR OFFICIAL USE ONLY

PVPO NUMBER 73072

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.

1. TYPE:

[5] 1 = PERSIAN 2 = HONEY DEW 3 = CASABA 4 = CRENSHAW 5 = COMMON OR SUMMER
6 = OTHER _____

2. AREA OF BEST ADAPTATION IN U.S.A.

[1] 1 = SOUTHEAST 2 = NORTHEAST/NORTHCENTRAL 3 = SOUTHWEST 4 = MOST AREAS

3. MATURITY (FROM SEEDING TO HARVEST):

[0][7][5] DAYS
[1][4] NO. DAYS EARLIER THAN . . . . . [3] 1 = FORDHOOK GEM (EARLY) 2 = DELICIOUS 51 (MIDSEASON) 3 = HONEY DEW (LATE)
[0][2] NO. DAYS LATER THAN . . . . . [4] 4 = OTHER *(Specify)* Hales Best

4. PLANT:

[1] 1 = ANDROMONOECIOUS 2 = MONOECIOUS 3 = GYNOECIOUS 4 = OTHER _____
[1] 1 = VINE 2 = SEMI-BUSH 3 = BUSH

5. LEAF (MATURE BLADE OF THIRD LEAF)

[1] SHAPE: 1 = ORBICULAR 2 = OVATE 3 = RENIFORM
[2] 1 = NOT LOBED 2 = SHALLOWLY LOBED 3 = DEEPLY LOBED
[3] 1 = LIGHT GREEN (HONEY DEW) 2 = MEDIUM GREEN 3 = DK. GREEN (RIO GOLD)
[1][2][7] mm LENGTH [1][2][7] mm WIDTH
[3] SURFACE: 1 = PUBESCENT 2 = GLABROUS 3 = SCABROUS

6. FRUIT (AT EDIBLE MATURITY):

[1][3] cm LENGTH [1][3] cm DIAMETER [1][1][3][5] gm WEIGHT
[3] SHAPE: 1 = OBLATE 2 = OVAL 3 = ROUND 4 = ELONGATE-CYLINDRICAL 5 = SPINDLE 6 = ACORN
[2] SURFACE: 1 = SMOOTH 2 = NETTED 3 = CORRUGATED 4 = WARTED
[2] BLOSSOM SCAR: 1 = OBSCURE 2 = CONSPICOUS
[2] RIBS: 1 = ABSENT 2 = PRESENT
[0][9] NO. RIBS PER FRUIT [0][2][0] mm RIB WIDTH AT MEDIAL [2] RIBS: 1 = SMOOTH 2 = NETTED

SUTURES:

[1] 1 = SHALLOW (GOLDEN DELIGHT) 2 = MEDIUM 3 = DEEP (HACKENSACK)
[2] 1 = SMOOTH 2 = NETTED
[3] SHIPPING QUALITY: 1 = POOR (HOME GARDEN) 2 = FAIR (SHORT DISTANCE SHIPPING) 3 = EXCELLENT (LONG DISTANCE SHIPPING)

[1] FRUIT ABSCISE: 1 = WHEN RIPE 2 = WHEN OVERRIPE 3 = DO NOT ABSCISS

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1 p. m. dw

7. RIND NET:

3	1 = ABSENT 2 = SPARSE 3 = ABUNDANT
2	DISTRIBUTION: 1 = SPOTTY 2 = COVERS ENTIRE FRUIT
2	COARSENESS: 1 = FINE 2 = MEDIUM COARSE 3 = VERY COARSE
3	INTERLACING: 1 = NONE 2 = SOME 3 = COMPLETE
1	INTERSTICES: 1 = SHALLOW 2 = MEDIUM DEEP 3 = DEEP

8. RIND TEXTURE:

3 1 = SOFT 2 = FIRM 3 = HARD

25 mm THICKNESS AT MEDIAL

9. RIND COLOR (AT EDIBLE MATURITY):

COLORS: (SELECT TWO WHEN NECESSARY, i.e., CREAMY YELLOW 0204)

01 = WHITE 02 = CREAM 03 = BUFF 04 = YELLOW 05 = GOLD 06 = GREEN 07 = ORANGE 08 = BRONZE
09 = BROWN 10 = GRAY 11 = BLACK 12 = OTHER *(Specify)* None

0407 PRIMARY COLOR
0010 NET COLOR
0012 MOTTLING COLOR
0407 FURROW (SUTURE) COLOR

RIND COLOR (AT FULL MATURITY)

0007 PRIMARY COLOR
0010 NET COLOR
0012 MOTTLING COLOR
0007 FURROW (SUTURE) COLOR

10. FLESH (AT EDIBLE MATURITY):

COLORS: (SELECT TWO WHEN NECESSARY, i.e., CREAMY YELLOW 23)

1 = WHITE 2 = CREAM 3 = YELLOW 4 = GREEN 5 = ORANGE 6 = SALMON 7 = PINK
8 = OTHER *(Specify)* _____

05 COLOR NEAR CAVITY
05 COLOR IN CENTER
05 COLOR NEAR RIND
13 REFRACTOMETER % SOLUABLE SOLIDS (CENTER OF FLESH)
07 % SOLUABLE SOLIDS FOR CHECK VARIETY *(Specify variety* Hales Best *)*
2 AROMA: 1 = ABSENT 2 = FAINT 3 = STRONG
2 FLAVOR: 1 = MILD 2 = SOMEWHAT SPICY 3 = VERY SPICY

11. SEED CAVITY:

51 mm LENGTH
51 mm WIDTH
1 SHAPE IN X-SECTION: 1 = CIRCULAR 2 = TRIANGULAR

12. SEEDS:

375 NO. PER FRUIT
236 gm PER 1,000

13. DISEASE RESISTANCE * (0 = UNTESTED, 1 = SUSCEPTIBLE, 2 = RESISTANT)

0	BACTERIAL WILT	0	ROOT ROT	0	CROWN BLIGHT	0	MELON RUST
2	POWDERY MILDEW	0	VERTICILLUM WILT	0	SULPHUR BURN	0	SCAB
0	WATERMELON MOSAIC	2	DOWNY MILDEW	0	FUSARIUM WILT	2	ROOT KNOT (NEMATODE)
0	ANTHRACNOSE	0	CUCUMBER MOSAIC	0	SQUASH MOSAIC	0	OTHER _____
				2	OTHER Gummy Stem Blight	0	OTHER _____

* STATE GENUS, SPECIES, AND RACES WHEN KNOW, UNDER ITEM 16.

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14. INSECT RESISTANCE: (0 = UNTESTED, 1 = SUSCEPTIBLE, 2 = RESISTANT)

0	APHID	0	PICKLE WORM	0	DARKLING GROUND-BEETLE	0	BANDED CUCUMBER BEETLE
0	MITE	0	WESTERN SPOTTED CUCUMBER BEETLE	0	MELON LEAFHOPPER		OTHER *(Specify)*
0	MELON WORM	0	WESTERN STRIPED CUCUMBER BEETLE	0	MELON LEAFMINER		

15. NAME A VARIETY THAT MOST CLOSELY RESEMBLES THAT SUBMITTED FOR THE FOLLOWING CHARACTERISTICS:

CHARACTER	VARIETY	CHARACTER	VARIETY
DAYS MATURITY	Hales Best	FRUIT SHAPE	Gulfstream
PLANT VIGOR	Gulfstream	RIND COLOR	Gulfstream
PLANT HABIT	PMR #45	FLESH AROMA	Gulfstream
FRUIT NETTING	PMR #45	FLESH FLAVOR	Gulfstream
FRUIT SIZE	PMR #45	FLESH COLOR	Gulfstream

16. ADDITIONAL INFORMATION AND COMMENTS: