No. 7300068

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Asgrow Seed Company

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

'Gusto 45'

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* 11th *day of* March *in the year of our Lord one thousand nine hundred and* eighty.

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

AMENDED

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 3-30-73 ~~XP 750~~ GUSTO 45	2. KIND NAME Muskmelon ~~Cantaloupe~~ RJS	FOR OFFICIAL USE ONLY PVPO NUMBER 73068
3. GENUS AND SPECIES NAME Cucumis melo	4. FAMILY NAME (Botanical) Cucurbitaceae	FILING DATE 3-8-73 TIME 3:30 A.M.
	5. DATE OF DETERMINATION 1967	FEE RECEIVED $250 CHARGES 12-5-77 $250.00 1-9-80 $250.00
6. NAME OF APPLICANT(S) Asgrow Seed Company	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) Kalamazoo, Michigan 49001	8. TELEPHONE AREA CODE AND NUMBER (616) 382-4000

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation	10. STATE OF INCORPORATION Delaware	11. DATE OF INCORPORATION March 22, 1968

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

OK — RJS
~~Mr. John A. Batcha~~
Asgrow Seed Company
9620-190-1
Kalamazoo, Michigan 49001

~~Mr. Allen R. Foster~~

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

[X] 12C. Exhibit C, Objective Description of the Variety

RJS

[X] 12D. Exhibit D, Data Indicative of Novelty

[X] 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 [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?

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).

February 28, 1973
(DATE)

John A. Batcha
(SIGNATURE OF APPLICANT)
John A. Batcha
Assistant to the President

(DATE)

(SIGNATURE OF APPLICANT)

1

Plant Variety Protection Application
Asgrow Seed Company
Cantaloupe - ~~XP-750~~ CUSTO 45
February 28, 1973

EXHIBIT A

ORIGIN AND BREEDING HISTORY OF THE VARIETY

1951	Parent A. PMR 95 x PMR 45 Parent B. PMR 95 x SR 91 Each parent reselected through F_4 generation.	
1959	(A) (PMR 95 x PMR 45) x PMR 95 X (B) PMR 45 x SR 91	
1960	F1	
1961	F2	
1962	F3	
1964	F4	
1965	F5	
1966	F6	Stock seed increase begun
1967		Evaluation
1968	F7	Further seed stock increase.
1969		Further evaluation.
1970		Further evaluation.
1971		Further evaluation.
1972		Further evaluation

Evaluations made of this variety since 1967 indicates it is stable. VARIANTS ARE WELL WITHIN COMMERCIAL LIMITS. AS WITH SOME COMMERCIAL VARIETIES WHEN PRODUCED UNDER WEATHER STRESS CONDITIONS, SOME FRUIT CAN BE SLIGHTLY ELONGATED, NET CAN BE SPARSE AND MATURITY SOMEWHAT DELAYED. RJS

Asgrow Seed Company
subsidiary of The Upjohn Company

Kalamazoo, Michigan 49001

#73068

March 6, 1979

EXHIBIT A SUPPLEMENT

RJS

Robert J. Snyder
Examiner, Plant Variety
Protection Office, National Agri. Library Bldg.
Beltsville, Maryland 20705

Dear Mr. Snyder:

The following information is supplied concerning your letter of January 12, 1979 relating to application 73068 Cantaloupe Gusto 45.

During the selection process involved in the development of Gusto 45 there were several objectives. We were interested in developing an improved shipping type melon which had acceptable fruit quality and greater disease resistance. Characteristics which were evaluated and considered were shape, net, sutures, rind toughness, shipping quality, flavor and resistance to cantaloupe diseases.

Please contact me should you require further information.

Sincerely,

John A. Batcha

John A. Batcha, Manager
Inventory Management

JAB/rb

Plant Variety Protection Application
Asgrow Seed Company
Cantaloupe - ~~XP 750~~ EUSTO 45
February 28, 1973

EXHIBIT B

BOTANICAL DESCRIPTION OF THE VARIETY.

A cultivar of cucumis melo var. reticulatus. It is andromonoecious. Vine vigorous. Fruit is oval, heavily netted with few distinct sutures. Fruit cavity is small and dry. Flesh is thick and orange in color. Fruit dehisces from vine while flesh is still firm and the seed cavity is dry.

Plant Variety Protection Application 7300068
Asgrow Seed Company
Cantaloupe - Gusto 45
October 20, 1978

Exhibit B RJS

Novelty Statement

To our knowledge the variety most similar to Gusto 45 is No. 45SJ. The characteristic which distinguish Gusto 45 from No. 45SJ includes but is not restricted to the following.

Gusto 45 is tolerant to two races of powdery mildew (RACES 1 AND 2) RJS found in the Imperial valley of California while No. 45SJ is susceptable to one of them. (RACE 2). Adjacent plantings in 1978 in 10 locations in areas showed a marked contrast in the two varities when the disease was present. Foliage of Gusto 45 was green and healthy while No.45SJ was infected. This infection affected No. 45SJ to the extent that fruit set beyond the crown set was reduced and marketable fruit production was reduced. Yield of marketable fruit in 10 different trials was as follows:

Number of Marketable Fruits per 100 Foot Plot

Plot Number	Gusto 45	No. 45SJ
1	246	220
2	312	214
3	301	231
4	285	237
5	320	245
6	327	198
7	279	223
8	298	200
9	314	241
10	277	235
Average	301	224

The article "Cantaloupes 6 & 7" by Thomas W. Whitaker and Glen N. Davis published February 1946 in the Southern Seedsman describes the presence of two strains of powdery mildew in the Imperial valley of California.

FORM GR-470 38
(6-76)

FORM APPROVED: OMB NO. 40-R3712

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): Asgrow Seed Company

ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code): Kalamazoo, Michigan 49001

VARIETY NAME OR TEMPORARY DESIGNATION: Gusto 45

FOR OFFICIAL USE ONLY

PVPO NUMBER: 73068 RFS

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.

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

3. MATURITY (FROM SEEDING TO HARVEST):

[ ][ ][ ] DAYS
[ ][ ] NO. DAYS EARLIER THAN . . . . . [ ] 1 = FORDHOOK GEM (EARLY)
2 = DELICIOUS 51 (MIDSEASON)
[ ][ ] NO. DAYS LATER THAN . . . . . [ ] 3 = HONEY DEW (LATE)
4 = OTHER (Specify) _____

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)

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

6. FRUIT (AT EDIBLE MATURITY):

[ ][ ] cm LENGTH [ ][ ] cm DIAMETER [ ][ ][ ][ ] 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
[1] RIBS: 1 = ABSENT 2 = PRESENT
[ ][ ] NO. RIBS PER FRUIT [ ][ ][ ] mm RIB WIDTH AT MEDIAL [ ] 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

5

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:

2 1 = SOFT 2 = FIRM 3 = HARD [ ][ ] 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)* _____

05	PRIMARY COLOR
03	NET COLOR
	MOTTLING COLOR
	FURROW (SUTURE) COLOR

RIND COLOR (AT FULL MATURITY)

0204	PRIMARY COLOR
03	NET COLOR
	MOTTLING COLOR
	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 04 COLOR NEAR RIND

-- REFRACTOMETER % SOLUABLE SOLIDS (CENTER OF FLESH)

-- % SOLUABLE SOLIDS FOR CHECK VARIETY *(Specify variety* _____ *)*

AROMA: 1 = ABSENT 2 = FAINT 3 = STRONG

FLAVOR: 1 = MILD 2 = SOMEWHAT SPICY 3 = VERY SPICY

11. SEED CAVITY:

[ ][ ][ ] mm LENGTH [ ][ ] mm WIDTH

[ ] SHAPE IN X-SECTION: 1 = CIRCULAR 2 = TRIANGULAR

12. SEEDS:

[ ][ ][ ] NO. PER FRUIT [ ][ ][ ] 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	0	DOWNY MILDEW	0	FUSARIUM WILT	0	ROOT KNOT (NEMATODE)
0	ANTHRACNOSE	0	CUCUMBER MOSAIC	0	SQUASH MOSAIC		OTHER _____
					OTHER _____		OTHER _____

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

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	0	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	45 SJ	FRUIT SHAPE	A 45 SJ
PLANT VIGOR	"	RIND COLOR	"
PLANT HABIT	"	FLESH AROMA	"
FRUIT NETTING	"	FLESH FLAVOR	"
FRUIT SIZE	"	FLESH COLOR	"

16. ADDITIONAL INFORMATION AND COMMENTS:

Plant Variety Protection Application
Asgrow Seed Company
Cantaloupe - ~~XP-750~~ GUSTO 45
February 28, 1973

EXHIBIT E

STATEMENT OF THE BASIS OF APPLICANTS OWNERSHIP.

The new plant variety, Cantaloupe ~~XP-750~~ GUSTO 45, was developed under the investigation, support, and corporate objectives of Asgrow Seed Company (a subsidiary of The Upjohn Company) utilizing contributive parent stocks and facilities owned or controlled by the company.