No. 9400242

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

United AgriSeeds, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, 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 TWENTY 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 CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, 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.)

CORN

'ML606'

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, D.C. this thirtieth day of November in the year of our Lord one thousand nine hundred and ninety-five.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Office, OIRM, Room 404-W, Washington, D.C. 20250; and to the Office of Management and Budget, Paperwork Reduction Project (OMB #0581-0055), Washington, 20250.

FORM APPROVED: OMB 0581-0055, Expires 1/31/91

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) *(as it is to appear on the Certificate)*: United AgriSeeds, Inc.
2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO.:
3. VARIETY NAME: ML606
4. ADDRESS *(street and no. or R.F.D. no., city, state, and ZIP)*: 1562 Taylor Ave. Marshalltown, Ia 50158
5. PHONE *(include area code)*: 515-752-4626

FOR OFFICIAL USE ONLY

PVPO NUMBER: 9400242

FILING — Date: July 19, 1994 — Time: ☐ A.M. ☐ P.M.

FEES RECEIVED — Filing and Examination Fee: $ 2,325.00 — Date: July 19, 1994 — Certificate Fee: $ 300.00 — Date: 10/24/95

6. GENUS AND SPECIES NAME: Zea mays
7. FAMILY NAME *(Botanical)*: Gramineae
8. CROP KIND NAME *(Common Name)*: Corn, Dent
9. DATE OF DETERMINATION: 12/87
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION *(Corporation, partnership, association, etc.)*: Corporation
11. IF INCORPORATED, GIVE STATE OF INCORPORATION: Massachusetts
12. DATE OF INCORPORATION: 8/28/81
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS:

John Rombach
United AgriSeeds, Inc.
1562 Taylor Ave.
Marshalltown, Ia 50158

PHONE *(include area code)*: 515-752-4626

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED *(Follow INSTRUCTIONS on reverse)*

- a. ☒ Exhibit A, Origin and Breeding History of the Variety
- b. ☒ Exhibit B, Novelty Statement.
- c. ☒ Exhibit C, Objective Description of Variety.
- d. ☐ Exhibit D, Additional Description of Variety.
- e. ☒ Exhibit E, Statement of the Basis of Applicant's Ownership.
- f. ☒ Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office _____
- g. ☒ Filing and Examination Fee. (2,325) made payable to "Treasurer of the United States."

15. 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) of the Plant Variety Protection Act.)* ☐ YES *(If "YES," answer items 16 and 17 below)* ☒ NO *(If "NO," skip to item 18 below)*

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☐ YES ☐ NO

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?

☐ YES *(If "YES," through* ☐ Plant Variety Protection Act ☐ Patent Act. Give date _____ *)*
☒ NO

19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?

☒ YES (If "YES," give names of countries and dates) U.S., August, 1993
☐ NO

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request 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 Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT *(Owner(s))*	CAPACITY OR TITLE	DATE
[signature]	Manager, Product Development	7/14/94
SIGNATURE OF APPLICANT *(Owner(s))*	CAPACITY OR TITLE	DATE

Exhibit A

9400242

Origin and Breeding History
Dent Corn
ML606

ML606 PARENTAGE LK2 & LH38

LK2 is a proprietary line of (H99xVa26)H99 parentage

Winter 79-80	Cross parents to form F_1 in Hawaii.
Summer 1980	Self F_1 to produce F_2 population (S_0 plants) at Marshalltown.
Winter 80-81	Approximately 200 S_0 plants were grown in 10 rows in Hawaii and self-pollinated. 100 S_1 ears were saved.
Summer 1981	100 S_1 ear-rows were grown at Marshalltown and 8 ears self-pollinated in each row. 104 S_2 ears were saved.
Winter 81-82	104 S_2 ear-rows were grown in Hawaii and 6 ears self-pollinated in each row. 169 S_3 ears were saved.
Summer 1982	169 S_3 ear-rows were grown at Marshalltown and 5 ears self-pollinated in each row. 121 S_4 ears were saved.
Summer 1983	121 S_4 ear-rows were grown at Marshalltown and 4 ears self-pollinated in each row. 13 S_5 ears were saved.
Winter 83-84	13 S_5 ear-rows were grown in Hawaii and 4 ears self-pollinated in each row. 13 S_6 ears were saved.
Summer 1984	13 S_6 ear-rows were grown at Marshalltown and 4 ears self-pollinated in each row. 5 S_7 ears were saved.
Summer 1985	13 S_7 ear-rows were grown at Marshalltown and 4 ears self-pollinated in each row. 5 S_8 ears were saved.
Winter 85-86	5 S_8 ear-rows were grown in Hawaii and 4 ears self-pollinated in each row. 5 S_9 ears were saved.
Summer 1986	5 S_9 ear-rows were grown at Marshalltown and 4 ears self-pollinated in each row. 3 S_{10} ears were saved.
Summer 1987	3 S_{10} ear-rows were grown at Marshalltown and 8 ears self-pollinated in each row. The ears from one row were bulked and named ML606.

ML606 appears stable and uniform after 12 generations of selfing. No off-type has been exhibited in evaluation.

Exhibit A - Addendum
ML606

The selection criteria used represents the breeder's preference to select progeny for plants and ears that are generally less diseased than others, have acceptable agronomic characteristics such as resistance to lodging and have the ability to make a good female and/or male parent in a hybrid production field. No specific standards are used and selection criteria depends upon a breeder's personal preference for plant, ear and kernel characteristics.

EXHIBIT B - NOVELTY STATEMENT

"ML606" is most similar to A682. "ML606" reaches 50% silk approximately 40 heat units later than A682. "ML606" has salmon anthers vs. green anthers for A682. "ML606" has approximately 2 more kernel rows per ear than A682. "ML606" has earnode leaves approximately 10 cm. longer than A682. "ML606" has a white cob vs. a red cob for A682.

ML606 (1993)	REPETITIONS																MEAN	STD DEV	t STAT	t.05 CONF LVL
Tassel Tip Height	180.00	170.00	195.00	180.00	195.00	175.00	205.00	195.00	195.00	165.00	180.00	190.00	185.00	155.00	165.00	CM	182.00 CM	14.12 CM	1.325	2.120
Ear Height	70.00	60.00	55.00	45.00	40.00	70.00	65.00	65.00	60.00	75.00	60.00	60.00	55.00	55.00	70.00	CM	60.33 CM	9.54 CM	2.086	2.228
Internode Length	16.00	25.00	15.00	21.00	18.00	19.00	17.00	17.00	18.00	17.00	15.00	14.00	17.00	18.00	16.00	CM	17.53 CM	2.70 CM	1.832	2.120
Earnode Leaf Widest Pt.	11.00	8.00	9.00	10.00	9.00	11.00	10.00	9.00	10.00	10.00	11.00	11.00	10.00	10.00	10.00	CM	9.93 CM	0.88 CM	2.665	2.228
Earnode Leaf Length	68.00	51.00	69.00	67.00	68.00	77.00	79.00	85.00	82.00	78.00	77.00	82.00	66.00	75.00	83.00	CM	73.80 CM	8.98 CM	4.595	2.228
# of Leaves	3.00	4.00	4.00	5.00	4.00	6.00	5.00	6.00	6.00	6.00	6.00	6.00	6.00	5.00	7.00		5.27	1.10	1.353	2.228
# Lateral Branches	6.00	6.00	5.00	7.00	5.00	7.00	5.00	8.00	9.00	6.00	10.00	6.00	3.00	9.00	6.00		6.53	1.85	1.697	2.120
Tassel Length	37.00	41.00	34.00	40.00	39.00	41.00	39.00	40.00	32.00	41.00	42.00	37.00	38.00	40.00	43.00		38.93 CM	2.96 CM	5.294	2.120
Shank Length	4.00	2.00	3.50	1.50	4.50	1.50	2.00	3.00	6.00	4.00	6.00	2.00	2.50	2.50	3.00	CM	3.20 CM	1.46 CM	3.207	2.110
Ear Length	13.00	10.50	13.00	9.50	14.00	10.00	14.00	18.50	17.50	14.50	14.00	13.00	13.50	14.50	12.50	CM	13.47 CM	2.43 CM	3.792	0.000
Ear Diameter-Midpoint	40.00	35.00	40.00	40.00	40.00	35.00	40.00	40.00	35.00	40.00	35.00	40.00	35.00	45.00	40.00	MM	38.67 MM	2.97 MM	4.737	2.080
Ear Weight	91.00	60.00	94.00	53.00	108.00	54.00	118.00	93.00	101.00	99.00	99.00	88.00	60.00	120.00	88.00	GM	88.40 GM	21.96 GM	1.323	2.080
# of Rows	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	12.00	14.00	12.00	12.00	12.00	14.00	12.00		13.33	0.98	5.398	2.080
Kernel Length	11.00	10.00	11.00	11.00	11.00	11.00	11.00	9.00	10.00	10.00	11.00	12.00	11.00	11.00	11.00	MM	10.73 MM	0.70 MM	3.008	2.110
Kernel Width	9.00	8.00	9.00	9.00	8.00	10.00	9.00	6.00	8.00	9.00	9.00	9.00	8.00	8.00	8.00	MM	8.47 MM	0.92 MM	0.821	2.110
Kernel Thickness	3.00	4.00	5.00	3.00	3.00	4.00	3.00	4.00	4.00	3.00	4.00	3.00	4.00	4.00	3.00	MM	3.60 MM	0.63 MM	1.418	2.110
Weight/100 kernels	23.00	16.00	23.00	22.00	32.00	27.00	24.00	23.00	24.00	22.00	33.00	17.00	17.00	25.00		GM	23.43 GM	4.99 GM	0.767	4.303
Cob Diameter-Midpoint	23.00	22.00	21.00	25.00	21.00	24.00	24.00	24.00	25.00	27.00	25.00	23.00	25.00	23.00		MM	23.71 MM	1.68 MM	2.280	2.101

CONTROL A682 (1993)	REPETITIONS																MEAN	STD DEV
Tassel Tip Height	190.00	185.00	195.00	180.00	165.00	190.00	190.00	185.00	190.00	185.00	195.00	190.00	190.00	195.00	190.00	CM	187.67 CM	7.53 CM
Ear Height	60.00	70.00	75.00	60.00	65.00	75.00	65.00	75.00	65.00	55.00	65.00	65.00	65.00	75.00	65.00	CM	66.67 CM	6.17 CM
Internode Length	22.00	26.00	15.00	19.00	16.00	22.00	17.00	25.00	22.00	25.00	14.00	19.00	17.00	18.00	20.00	CM	19.80 CM	3.76 CM
Earnode Leaf Widest Pt.	7.00	9.00	9.00	9.00	7.00	10.00	8.00	10.00	11.00	8.00	10.00	5.00	8.00	9.00	10.00	CM	8.67 CM	1.54 CM
Earnode Leaf Length	57.00	63.00	52.00	54.00	49.00	52.00	60.00	65.00	59.00	64.00	69.00	63.00	69.00	65.00	64.00	CM	60.33 CM	6.30 CM
# of Leaves	5.00	4.00	4.00	5.00	4.00	4.00	5.00	6.00	4.00	6.00	5.00	5.00	5.00	5.00	5.00		4.80	0.68
# Lateral Branches	4.00	7.00	5.00	3.00	5.00	8.00	5.00	7.00	8.00	5.00	4.00	6.00	5.00	5.00	5.00		5.47	1.46
Tassel Length	43.00	45.00	40.00	45.00	44.00	39.00	49.00	47.00	47.00	43.00	52.00	50.00	46.00	44.00	49.00	CM	45.53 CM	3.60 CM
Shank Length	5.50	5.50	1.00	1.50	5.50	5.50	6.50	8.00	6.00	7.50	4.50	8.50	5.50	5.00		CM	5.43 CM	2.11 CM
Ear Length	16.00	15.50	17.50	17.50	17.00	17.00	16.00	18.00	17.00	16.50	13.50	18.50	13.50	16.50		CM	16.43 CM	1.48 CM
Ear Diameter-Midpoint	35.00	30.00	35.00	35.00	35.00	30.00	35.00	35.00	35.00	35.00	35.00	35.00	30.00	35.00		MM	33.93 MM	2.13 MM
Ear Weight	64.00	72.00	78.00	95.00	84.00	79.00	84.00	101.00	84.00	77.00	52.00	104.00	50.00	76.00		GM	78.57 GM	15.92 GM
# of Rows	10.00	12.00	12.00	12.00	12.00	10.00	12.00	10.00	12.00	12.00	12.00	12.00	10.00	10.00			11.29	0.99
Kernel Length	10.00	10.00	10.00	11.00	10.00	9.00	10.00	10.00	11.00	9.00	10.00	11.00	9.00	9.00	10.00	MM	9.93 MM	0.70 MM
Kernel Width	9.00	8.00	9.00	9.00	9.00	9.00	10.00	9.00	10.00	7.00	9.00	8.00	8.00	8.00	9.00	MM	8.73 MM	0.80 MM
Kernel Thickness	5.00	4.00	4.00	3.00	5.00	4.00	4.00	4.00	3.00	6.00	4.00	3.00	3.00	4.00	4.00	MM	4.00 MM	0.85 MM
Weight/100 kernels	25.00	24.00	26.00	24.00	33.00	31.00	22.00	23.00	26.00	21.00	23.00	22.00	22.00			GM	24.77 GM	3.59 GM
Cob Diameter-Midpoint	25.00	23.00	22.00	20.00	23.00	23.00	24.00	21.00	22.00	24.00	23.00	22.00	21.00			MM	22.30 MM	1.39 MM

MARSHALLTOWN, IA 1993

9400242

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ML606
(1994)

	REPETITIONS																						MEAN		STD DEV		t STAT	t.05 CONF LVL
Tassel Tip Height	200.00	220.00	220.00	225.00	220.00	230.00	200.00	220.00	215.00	225.00	220.00	220.00	215.00	220.00	200.00	175.00	215.00	225.00	230.00	195.00	CM	214.50	CM	13.76	CM	3.924	2.030
Ear Height	75.00	60.00	65.00	55.00	65.00	50.00	60.00	70.00	80.00	70.00	70.00	75.00	80.00	75.00	70.00	70.00	65.00	70.00	70.00	70.00	CM	66.75	CM	7.93	CM	2.102	2.030
Internode Length	13.00	12.00	13.00	15.00	8.00	10.00	12.00	11.00	9.00	13.00	12.00	13.00	13.00	11.00	11.00	10.00	12.00	13.00	12.00	12.00	CM	11.75	CM	1.62	CM	0.209	2.030
Earnode Leaf Widest Pt.	9.00	10.00	9.00	10.00	10.00	9.00	9.00	9.00	8.00	10.00	9.00	8.00	10.00	10.00	10.00	8.00	9.00	9.00	7.00	6.00	CM	9.10	CM	0.95	CM	2.956	2.030
Earnode Leaf Length	87.00	81.00	67.00	68.00	77.00	83.00	78.00	85.00	81.00	81.00	81.00	77.00	85.00	74.00	90.00	77.00	72.00	77.00	74.00	64.00	CM	78.85	CM	10.69	CM	4.380	2.030
# of Leaves	6.00	6.00	5.00	5.00	5.00	7.00	6.00	6.00	6.00	7.00	6.00	6.00	7.00	7.00	5.00	5.00	5.00	6.00	6.00	5.00		5.85		0.75		2.084	2.030
# Lateral Branches	5.00	4.00	5.00	5.00	8.00	6.00	3.00	8.00	5.00	6.00	9.00	9.00	9.00	7.00	6.00	4.00	10.00	5.00	6.00	6.00		6.30		1.95		5.411	2.030
Tassel Length	43.00	37.00	42.00	45.00	34.00	38.00	44.00	40.00	41.00	42.00	46.00	32.00	44.00	45.00	41.00	38.00	43.00	41.00	45.00	41.00	CM	41.00	CM	3.85	CM	7.871	2.030
Branch Angle from Central Spike	40.00	30.00	20.00	30.00	20.00	25.00	20.00	30.00	25.00	40.00	30.00	25.00	45.00	30.00	25.00	35.00	15.00	15.00	30.00	45.00	CM	28.75	CM	8.87	CM	5.472	2.030
Shank Length	4.00	1.00	2.00	2.00	4.00	3.00	4.00	5.00	7.00	3.00		2.00	1.00	3.00		2.00		3.00	2.00		CM	3.00	CM	1.55	CM	#DIV/0!	2.030
Ear Length	10.00	13.00	13.00	15.00	10.00	13.00	13.00	14.00	12.00	12.00	14.00	10.00	13.00	14.00	11.00	11.00	12.00	13.00	14.00	11.00	CM	12.40	CM	1.50	CM	15.820	2.030
Ear Diameter-Midpoint	34.00	35.00	35.00	37.00	34.00	38.00	33.00	34.00	35.00	35.00	34.00	35.00	38.00	38.00	38.00	37.00	37.00	38.00	37.00	34.00	MM	35.60	CM	1.57	CM	2.618	2.030
Ear Weight	83.00	115.00	117.00	134.00	84.00	127.00	89.00	129.00	97.00	102.00	102.00	55.00	107.00	122.00	107.00	101.00	107.00	120.00	118.00	87.00	GM	103.15	CM	22.24	CM	3.996	2.030
# of Rows	14.00	14.00	12.00	14.00	12.00	14.00	12.00	12.00	14.00	12.00	12.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	12.00		13.30		0.99		10.278	2.030
Kernel Length	12.00	12.00	13.00	12.00	11.00	10.00	12.00	11.00	11.00	8.00	11.00	12.00	11.00	10.00	12.00	12.00	12.00	12.00	11.00	11.00	MM	11.35	MM	0.93	MM	5.184	2.050
Kernel Width	9.00	9.00	8.00	8.00	8.00	9.00	9.00	9.00	9.00	7.00	8.00	8.00	9.00	8.00	9.00	8.00	8.00	9.00	8.00	8.00	MM	8.40	MM	0.60	MM	0.673	2.050
Kernel Thickness	3.00	4.00	3.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00	3.00	4.00	3.00	3.00	4.00	4.00	3.00	3.00	5.00	4.00	MM	3.65	MM	0.59	MM	2.075	2.050
Weight/100 kernels	29.00	28.00	26.00	25.00	28.00	22.00	32.00	26.00	27.00	20.00	27.00	26.00	25.00	25.00	28.00	28.00	27.00	26.00	31.00	29.00	GM	26.55	GM	2.70	GM	3.580	2.050
Cob Diameter-Midpoint	26.00	26.00	27.00	27.00	29.00	26.00	24.00	27.00	24.00	29.00	28.00	28.00	28.00	28.00	27.00	29.00	28.00	27.00	26.00	28.00	MM	27.10	MM	1.45	MM	4.926	2.050

A682
(1994)

	REPETITIONS																						MEAN		STD DEV	
Tassel Tip Height	200.00	185.00	220.00	180.00	195.00	200.00	195.00	190.00	190.00	200.00	210.00	205.00	200.00	185.00	205.00	190.00	200.00	205.00	210.00	205.00	CM	198.00	CM	9.12	CM
Ear Height	45.00	70.00	65.00	65.00	65.00	70.00	70.00	65.00	55.00	60.00	70.00	55.00	55.00	65.00	55.00	60.00	65.00	55.00	65.00	55.00	CM	61.50	CM	6.90	CM
Internode Length	13.00	11.00	10.00	12.00	12.00	11.00	14.00	13.00	10.00	10.00	11.00	13.00	13.00	11.00	12.00	12.00	10.00	11.00	12.00	12.00	CM	11.65	CM	1.18	CM
Earnode Leaf Widest Pt.	9.00	8.00	8.00	9.00	8.00	9.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	9.00	8.00	8.00	8.00	9.00	8.00	CM	8.40	CM	0.50	CM
Earnode Leaf Length	65.00	70.00	65.00	67.00	64.00	67.00	68.00	72.00	68.00	65.00	58.00	74.00	67.00	75.00	62.00	66.00	66.00	71.00	67.00	65.00	CM	67.00	CM	3.96	CM
# of Leaves	5.00	5.00	6.00	6.00	6.00	5.00	5.00	6.00	6.00	6.00	5.00	6.00	6.00	5.00	4.00	6.00	6.00	5.00	4.00	5.00		5.35		0.87	
# Lateral Branches	4.00	5.00	1.00	4.00	4.00	3.00	3.00	4.00	4.00	2.00	4.00	5.00	3.00	4.00	0.00	2.00	3.00	5.00	3.00	0.00		3.12		1.50	
Tassel Length	49.00	39.00	49.00	52.00	50.00	51.00	48.00	51.00	49.00	50.00	51.00	53.00	52.00	53.00	51.00	51.00	47.00	46.00	52.00	51.00	CM	49.75	CM	3.14	CM
Branch Angle from Central Spike	35.00	40.00	45.00	55.00	60.00	30.00	35.00	35.00	25.00	40.00	50.00	60.00	50.00	50.00	45.00	65.00	60.00	55.00	45.00	50.00	CM	46.50	CM	11.01	
Shank Length																					CM	#DIV/0!	CM	#DIV/0!	CM
Ear Length	21.00	19.00	20.00	18.00	17.00	21.00	20.00	19.00	20.00	18.00	19.00	20.00	21.00	19.00	21.00	21.00	20.00	18.00	20.00	18.00	CM	19.50	CM	1.24	CM
Ear Diameter-Midpoint	40.00	37.00	35.00	38.00	35.00	38.00	35.00	35.00	35.00	35.00	28.00	30.00	28.00	33.00	31.00	30.00	29.00	29.00	30.00	31.00	CM	33.10	CM	3.67	CM
Ear Weight	154.00	132.00	136.00	138.00	102.00	158.00	126.00	114.00	123.00	104.00	105.00	140.00	131.00	138.00	163.00	159.00	118.00	108.00	217.00	140.00	GM	135.10	GM	26.84	GM
# of Rows	10.00	12.00	10.00	10.00	10.00	10.00	10.00	8.00	10.00	10.00	10.00	10.00	10.00	12.00	10.00	10.00	8.00	10.00	10.00	10.00		10.00		0.92	
Kernel Length	10.00	10.00	10.00	10.00	10.00	9.00	9.00	10.00	9.00	9.00											MM	9.80	MM	0.62	MM
Kernel Width	10.00	7.00	10.00	9.00	9.00	8.00	8.00	8.00	8.00	8.00											MM	8.60	MM	0.97	MM
Kernel Thickness	3.00	3.00	4.00	4.00	4.00	5.00	5.00	5.00	4.00	5.00											MM	4.20	MM	0.79	MM
Weight/100 kernels	34.00	27.00	33.00	36.00	30.00	39.00	29.00	32.00	26.00	27.00											GM	31.30	GM	4.27	GM
Cob Diameter-Midpoint	25.00	25.00	25.00	24.00	25.00	26.00	24.00	24.00	23.00	24.00											MM	24.50	MM	0.85	MM

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Formula Used to Calculate Standard Deviation:

$$Standard\ Deviation = \sqrt{\frac{\Sigma (V_i - \overline{x})^2}{N-1}}$$

$\overline{x}$ = sample mean
N = sample size
V_i = the ith item

Formula Used to Calculate t Statistic:

$$S^2\ Pooled = \frac{(N_1-1)(SD_1)^2 + (N_2-1)(SD_2)^2}{(N_1+N_2-2)}$$

$$S\ Pooled = \sqrt{S^2\ Pooled}$$

$$t\ Statistic = \frac{\overline{x}_1 - \overline{x}_2}{S\ Pooled \sqrt{\frac{1}{N_1} + \frac{1}{N_2}}}$$

$\overline{x}$ = sample mean
SD = standard deviation
N = sample size

* t Statistic compared to value at t.05 confidence level.
* Measurements taken in inches are converted to centimeters using a conversion factor of 2.54.

Formula Used to Calculate Heat Units:

$$U.S.\ Heat\ Units\ (Growing\ Degree\ Days) = \frac{Tmax + Tmin}{2} - 50°F$$

Tmax = Maximum Daily Temperature. If Tmax is greater than 86 degrees F, then Tmax is equal to 86 degrees F.
Tmin = Minimum Daily Temperature. If Tmin is less than 50 degrees F, then Tmin is equal to 50 degrees F.

FORM GR-470-28
(2-16-74)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
COMMODITIES SCIENTIFIC SUPPORT DIVISION
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Corn)

OBJECTIVE DESCRIPTION OF VARIETY

CORN (ZEA MAYS)

NAME OF APPLICANT(S)
United AgriSeeds, Inc.

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)
1562 Taylor Ave.
Marshalltown, Ia 50158

FOR OFFICIAL USE ONLY

PVPO NUMBER
9400242

VARIETY NAME OR TEMPORARY DESIGNATION
ML606

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 = SWEET 2 = DENT 3 = FLINT 4 = FLOUR 5 = POP 6 = ORNAMENTAL

2. REGION WHERE BEST ADAPTED IN THE U.S.A.:

[2] 1 = NORTHWEST 2 = NORTHCENTRAL 3 = NORTHEAST 4 = SOUTHEAST
5 = SOUTHCENTRAL 6 = SOUTHWEST 7 = MOST REGIONS

3. MATURITY (In Region of Best Adaptability):

(Under "Comments" (pg. 3) state how heat units were calculated)

[7][7] DAYS FROM EMERGENCE TO 50% OF PLANTS IN SILK — [1][5][1][9] HEAT UNITS

[ ][ ] DAYS FROM 50% SILK TO OPTIMUM EDIBLE QUALITY — [ ][ ][ ][ ] HEAT UNITS

[ ][ ] DAYS FROM 50% SILK TO HARVEST AT 25% KERNEL MOISTURE — [ ][ ][ ][ ] HEAT UNITS

4. PLANT:

[1][8][2] CM. HEIGHT (To tassel tip)

[0][6][0] CM. EAR HEIGHT (To base of top ear)

[1][8] CM. LENGTH OF TOP EAR INTERNODE

Number of Tillers:

[1] 1 = NONE 2 = 1–2 3 = 2–3 4 = > 3

Number of Ears Per Stalk:

[2] 1 = SINGLE 2 = SLIGHT TWO-EAR TENDENCY
3 = STRONG TWO-EAR TENDENCY 4 = THREE-EAR TENDENCY

Cytoplasm Type:

[1] 1 = NORMAL 2 = "T" 3 = "S" 4 = "C" 5 = OTHER (Specify) _____

5. LEAF (Field Corn Inbred Examples Given):

Color:

[2] 1 = LIGHT GREEN (HY) 2 = MEDIUM GREEN (WF9) 3 = DARK GREEN (B14) 4 = VERY DARK GREEN (K166)

Angle from Stalk (Upper half):

[2] 1 = < 30° 2 = 30–60° 3 = > 60°

Sheath Pubscence:

[1] 1 = LIGHT (W22) 2 = MEDIUM (WF9)
3 = HEAVY (OH26)

Marginal Waves:

[2] 1 = NONE (HY) 2 = FEW (WF9) 3 = MANY (OH7L)

Longitudinal Creases:

[2] 1 = ABSENT (OH51) 2 = FEW (OH56A)
3 = MANY (PA11)

Width:

[1][0] CM. WIDEST POINT OF EAR NODE LEAF

Length:

[0][7][4] CM. EAR NODE LEAF

[0][5] NUMBER OF LEAVES PER MATURE PLANT

8

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6 TASSEL:

[0 7] NUMBER OF LATERAL BRANCHES

Branch Angle from Central Spike:

[2] 1 = < 30° 2 = 30–40° 3 = > 45°

Penduncle Length:

[1 0] CM FROM TOP LEAF TO BASAL BRANCHES

Pollen Shed:

[2] 1 = LIGHT (WF9) 2 = MEDIUM 3 = HEAVY(KY21)

[6] Anther Color: } 1 = YELLOW 2 = PINK 3 = RED 4 = PURPLE 5 = GREEN
[5] Glume Color: } 6 = OTHER (Specify) Salmon

Pollen Restoration for Cytoplasms (o = Not Tested, 1 = Partial, 2 = Good)

[0] "T" [0] "S" [0] "C" [ ] OTHER (Specify Cytoplasm and degrees of restoration) _____

7. EAR (Husked Ear Data Except When Stated Otherwise):

[1 3] CM LENGTH [3 9] MM. MID-POINT DIAMETER [8 8] GM. WEIGHT

Kernel Rows:

[2] 1 = INDISTINCT 2 = DISTINCT [1 3] NUMBER

[1] 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = SPIRAL

Silk Color (Exposed at Silking Stage):

[1] 1 = GREEN 2 = PINK 3 = SALMON 4 = RED

Husk Color:

[1] FRESH } 1 = LIGHT GREEN 2 = DARK GREEN 3 = PINK
[6] DRY } 4 = RED 5 = PURPLE 6 = BUFF

Husk Extention: (Harvest Stage)

[2] 1 = SHORT (Ears Exposed) 2 = MEDIUM (Barely Covering Ear)
3 = LONG (8–10CM Beyond Ear Tip)
4 = VERY LONG (> 10 CM)

Husk Leaf:

[2] 1 = SHORT (< 8 CM) 2 = MEDIUM (8–15 CM)
3 = LONG (> 15 CM)

Shank:

[0 3] CM LONG [5] NO. OF INTERNODES

Position at Dry Husk Stage:

[1] 1 = UPRIGHT 2 = HORIZONTAL 3 = PENDENT

Taper:

[1] 1 = SLIGHT 2 = AVERAGE 3 = EXTREME

Drying Time (Unhusked Ear):

[ ] 1 = SLOW 2 = AVERAGE 3 = FAST

8. KERNEL (Dried):

Size (From Ear Mid-Point):

[1 1] MM LONG [0 8] MM. WIDE [0 4] MM. THICK

Shape Grade (% Rounds)

[1] 1 = < 20 2 = 20–40 3 = 40–60 4 = 60–80 6 = > 80

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8. KERNEL (Dried):

[1] Pericarp Color: 1 = COLORLESS 2 = RED-WHITE 3 = TAN 4 = BRONZE 5 = BROWN 6 = LIGHT RED 7 = CHERRY RED 8 = VARIEGATED (Describe) _____

[1] Aleurone Color: 1 = HOMOZYGOUS 2 = SEGREGATING (Describe) _____

[5] 1 = WHITE 2 = PINK 3 = TAN 4 = BROWN 5 = BRONZE 6 = RED 7 = PURPLE 8 = PALE PURPLE 9 = VARIEGATED (Describe) _____

[3] Endosperm Color: 1 = WHITE 2 = PALE YELLOW 3 = YELLOW 4 = PINK-ORANGE 5 = WHITE CAP.

Endosperm Type:

[3] 1 = SWEET (su1) 2 = EXTRA SWEET (sh2) 3 = NORMAL STARCH 4 = HIGH AMYLOSE STARCH 5 = WAXY STARCH 6 = HIGH PROTEIN 7 = HIGH LYSINE 8 = OTHER (Specify) _____

[2][3] GM. WEIGHT /100 SEEDS (Unsized Sample)

9. COB:

[2][4] MM. DIAMETER AT MID-POINT

Strength:

[2] 1 = WEAK 2 = STRONG

Color:

[1] 1 = WHITE 2 = PINK 3 = RED 4 = BROWN 5 = VARIEGATED 6 OTHER (Specify) _____

10. DISEASE RESISTANCE (0 = Not Tested, 1 = Susceptible, 2 = Resistant):

[0] STALK ROT (Diplodia)
[0] NORTHERN LEAF BLIGHT
[0] SOUTHERN RUST
[0] BACTERIAL LEAF BLIGHT
[ ] OTHER (Specify)
[0] STALK ROT (Fusarium)
[0] SOUTHERN LEAF BLIGHT
[0] CORN SMUT
[0] MAIZE DWARF MOSAIC
[0] STALK ROT (Gibberella)
[0] SMUT
[0] BACTERIAL WILT
[0] STUNT

11. INSECT RESISTANCT (0 = Not Tested, 1 = Susceptible, 2 = Resistant):

[0] CORNBORER
[0] ROOTWORM (Northern)
[0] ROOTWORM (Southern)
[0] EARWORM
[0] ROOTWORM (Western)
[0] OTHER (Specify) _____
[0] SAPBEETLE
[0] APHID

12. VARIETIES MOST CLOSELY RESEMBLING THAT SUBMITTED FOR THE CHARACTERS GIVEN:

CHARACTER	VARIETY	CHARACTER	VARIETY
Maturity	A682	Kernel Type	
Plant Type	A682	Quality (Edible)	
Ear Type	A682	Usage	

REFERENCES:

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The Mutants of Maize. 1968. Crop Science Society of America. Madison, Wisconsin

Stringfield, G.H. Maize Inbred Lines of Ohio. Ohio A.E.S. Bul. 831. 1959

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COMMENTS:

Exhibit E
Statement of the Basis of Applicants Ownership

The variety ML606, for which Plant Variety Protection is being sought, was developed by breeders employed by United AgriSeeds, Inc. United AgriSeeds, Inc. believes it is the sole, original, and first breeder of the ML606 variety of dent corn for which it solicits a certificate of protection.