

No.

9800306



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

DEKALB Genetics Corporation

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 PURPOSE, 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, FIELD

'MF1113B'

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 tenth day of March, in the year two thousand three.

Attest:

Paul M. Jakowski

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE
 AGRICULTURAL MARKETING SERVICE
 SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

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).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

1. NAME OF APPLICANT(S) <i>(as it is to appear on the Certificate)</i>		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
DEKALB Genetics Corporation			MF1113B
4. ADDRESS <i>(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)</i>		5. TELEPHONE <i>(include area code)</i>	FOR OFFICIAL USE ONLY PVPO NUMBER 9800306
3100 Sycamore Road DeKalb, IL 60115		(815) 758-3461	
		6. FAX <i>(include area code)</i>	FILING DATE 5/28/1998
		(815) 758-4106	FILING AND EXAMINATION FEE: \$ 2450.00 DATE 5-28/98
7. GENUS AND SPECIES NAME	8. FAMILY NAME <i>(Botanical)</i>	CERTIFICATION FEE: \$ 320.00 DATE 2/5/03	
Zea Mays	Gramineae		
9. CROP KIND NAME <i>(Common name)</i>			
Corn			
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION <i>(corporation, partnership, association, etc.) (Common name)</i>			
Corporation			
11. IF INCORPORATED, GIVE STATE OF INCORPORATION		12. DATE OF INCORPORATION	
Delaware		June 15, 1988	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS			14. TELEPHONE <i>(include area code)</i>
Dr. Tim Kain, Patent Scientist Monsanto Company 3100 Sycamore Road DeKalb IL 60115 Ph. 815-758-9281 Fax 815-758-4106 trkain@monsanto.com			
			15. FAX <i>(include area code)</i>
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED <i>(Follow instructions on reverse)</i>			
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety <i>(Optional)</i> e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Applicant's Ownership f. <input checked="" type="checkbox"/> Voucher Sample <i>(2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in an approved public repository)</i> g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" <i>(Mail to PVPO)</i>			
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? <i>(See Section 83(a) of the Plant Variety Protection Act)</i>			
<input type="checkbox"/> YES <i>if "yes," answer items 18 and 19 below</i> <input checked="" type="checkbox"/> NO <i>if "no," go to item 20</i>			
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?		19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?	
<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		<input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?			
<input checked="" type="checkbox"/> YES <i>if "yes," give names of countries and dates</i> <input type="checkbox"/> NO			
U.S. February 1998			
21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.			
The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, 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 <i>(Owner(s))</i>		SIGNATURE OF APPLICANT <i>(Owner(s))</i>	
R. Mark Lawson			
NAME <i>(Please print or type)</i>		NAME <i>(Please print or type)</i>	
R. Mark Lawson			
CAPACITY OR TITLE	DATE	CAPACITY OR TITLE	DATE
Director Research	5/27/98		

SMS 3/15/02

EXHIBIT AOrigin and Breeding History

MF1113B

MF1113B was selected for long ear length, greater testweight, better silking, and greater combining ability.

Summer 1988	The inbred line LH132 (a Holden's Foundation Seeds, Inc. inbred) was crossed to 8F036, a proprietary DEKALB Genetics Corporation inbred (nursery book row number 2090). <i>8F036 is derived from public line B73.</i>
Winter 1988	S0 was grown (nursery book row number 73).
Summer 1989	S1 was grown (nursery book row numbers G541-G550).
Summer 1991	S2 was grown ear-to-row (nursery book row numbers 4575-4578).
Winter 1991	S2 was grown ear-to-row (nursery book row number 1501).
Summer 1993	S3 was grown ear-to-row (nursery book row numbers 3584-3587).
Winter 1993	S4 was grown ear-to-row and designated corn inbred MF1113B (nursery book row numbers 1204-1206).

Statement of Stability and Uniformity

Corn inbred MF1113B was coded in 1993 and has been reproduced and judged stable for the past four (4) years by self pollination. Inbred MF1113B is uniform for all traits observed.

Statement of Variants

MF1113B shows no variants other than what would normally be expected due to environment or that would occur for almost any character during the course of repeated sexual reproduction.

JMS 1/7/03

EXHIBIT BStatement of Distinctness

DEKALB Genetics Corporation believes that MF1113B is most similar to inbred WDDQ1, a proprietary inbred of DEKALB Genetics Corporation.

MF1113B and WDDQ1 differ most significantly for the following traits:

Qualitative Data for MF1113B vs. WDDQ1

TRAIT	MF1113B	WDDQ1
Ear Position	Pendant	Upright
Cob Color	Pink 5 R 6/6	Red 5 R 3/8
Glume Color	Red 2.5 R 5/8	Green 5 GY 4/8

Isozyme Profile Data for MF1113B vs. WDDQ1

LOCUS	ISOZYME ALLELES	
	MF1113B	WDDQ1
Acp-1	2	2
Adh-1	4	4
Cat-3	9	9
Got-1	4	4
Got-2	4	2
Got-3	4	4
Idh-1	4	4
Idh-2	4	4
Mdh-1	6	6
Mdh-2	3.5	3.5
Mdh-3	16	16
Mdh-4	12	12
Mdh-5	12	12
Pgm-1	9	9
Pgm-2	4	4
6-Pgd-1	3.8	3.8
6-Pgd-2	5	5
Phi-1	4	4

MF1113B differs from WDDQ1 at the Got-2 locus

United States Department of Agriculture, Agricultural Marketing Service
Science Division, Plant Variety Protection Office
National Agricultural Library Building, Room 500
Beltsville, MD 20705

OBJECTIVE DESCRIPTION OF VARIETY
CORN (*Zea mays* L.)

Name of Applicant(s) DEKALB Genetics Corporation		Variety Seed Source	Variety Name or Temporary Designation MF1113B																															
Address (Street & No., or R.F.D. No., City, State, Zip Code and Country) 3100 Sycamore Road, DeKalb, IL, 60115, U.S.A.			FOR OFFICIAL USE																															
			PVPO Number	9800306																														
Place the appropriate number that describes the varietal characters typical of this inbred variety in the spaces below. Right justify whole numbers by adding leading zeroes if necessary. Completeness should be striven for to establish an adequate variety description. Traits designated by a '*' are considered necessary for an adequate variety description and must be completed.																																		
<p>COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices; describe #25 and #26 in Comments section):</p> <table border="0"> <tr> <td>01=Light Green</td> <td>06=Pale Yellow</td> <td>11=Pink</td> <td>16=Pale Purple</td> <td>21=Buff</td> </tr> <tr> <td>02=Medium Green</td> <td>07=Yellow</td> <td>12=Light Red</td> <td>17=Purple</td> <td>22=Tan</td> </tr> <tr> <td>03=Dark Green</td> <td>08=Yellow-Orange</td> <td>13=Cherry Red</td> <td>18=Colorless</td> <td>23=Brown</td> </tr> <tr> <td>04=Very Dark Green</td> <td>09=Salmon</td> <td>14=Red</td> <td>19=White</td> <td>24=Bronze</td> </tr> <tr> <td>05=Green-Yellow</td> <td>10=Pink-Orange</td> <td>15=Red & White</td> <td>20=White Capped</td> <td>25=Variegated (Describe)</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>26=Other (Describe)</td> </tr> </table>					01=Light Green	06=Pale Yellow	11=Pink	16=Pale Purple	21=Buff	02=Medium Green	07=Yellow	12=Light Red	17=Purple	22=Tan	03=Dark Green	08=Yellow-Orange	13=Cherry Red	18=Colorless	23=Brown	04=Very Dark Green	09=Salmon	14=Red	19=White	24=Bronze	05=Green-Yellow	10=Pink-Orange	15=Red & White	20=White Capped	25=Variegated (Describe)					26=Other (Describe)
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<p>STANDARD INBRED CHOICES (Use the most similar (in background and maturity) of these to make comparisons based on grow-out trial data):</p> <table border="0"> <tr> <td>Yellow Dent Families:</td> <td>Yellow Dent (Unrelated):</td> <td>Sweet Corn:</td> </tr> <tr> <td>Family Members</td> <td>Co109, ND246,</td> <td>C13, Iowa5125, P39, 2132</td> </tr> <tr> <td>B14 CM105, A632, B64, B68</td> <td>Oh7, T232</td> <td>Popcorn:</td> </tr> <tr> <td>B37 B37, B76, H84</td> <td>W117, W153R</td> <td>SG1533, 4722, HP301, HP7211</td> </tr> <tr> <td>B73 N192, A679, B73, NC268</td> <td>W182BN</td> <td></td> </tr> <tr> <td>C103 Mo17, Va102, Va35, A682</td> <td>White Dent:</td> <td>Pipecorn:</td> </tr> <tr> <td>Oh43 A619, MS71, H99, Va26</td> <td>CI66, H105, Ky228</td> <td>Mo15W, Mo16W, Mo24W</td> </tr> <tr> <td>WF9 W64A, A554, A654, Pa91</td> <td></td> <td></td> </tr> </table>					Yellow Dent Families:	Yellow Dent (Unrelated):	Sweet Corn:	Family Members	Co109, ND246,	C13, Iowa5125, P39, 2132	B14 CM105, A632, B64, B68	Oh7, T232	Popcorn:	B37 B37, B76, H84	W117, W153R	SG1533, 4722, HP301, HP7211	B73 N192, A679, B73, NC268	W182BN		C103 Mo17, Va102, Va35, A682	White Dent:	Pipecorn:	Oh43 A619, MS71, H99, Va26	CI66, H105, Ky228	Mo15W, Mo16W, Mo24W	WF9 W64A, A554, A654, Pa91								
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1. TYPE: (describe intermediate types in Comments section)			Standard Inbred Name B73																															
* 2 1=Sweet 2=Dent 3=Flint 4=Flour 5=Pop 6=Ornamental 7=Pipecorn			2																															
2. REGION WHERE DEVELOPED IN THE U.S.A.:			Standard Seed Source NCRPIS																															
* 2 1=Northwest 2=Northcentral 3=Northeast 4=Southeast 5=Southcentral 6=Southwest 7=Other			2																															
3. MATURITY (In Region Best Adaptability; show Heat Unit formula in "Comments" section):			DAYS HEAT UNITS																															
* 0 7 0 1 4 7 6. 0 From emergence to 50% of plants in silk			0 7 5 1 5 3 2. 0																															
* 0 7 0 1 4 6 2. 0 From emergence to 50% of plants in pollen			0 7 5 1 5 1 8. 0																															
-- -- -- 0 0 6 9. 0 From 10% to 90% pollen shed			-- -- -- 0 0 7 6. 0																															
(*) -- -- -- -- -- . _ _ From 50% silk to optimum edible quality			-- -- -- -- -- . _ _																															
0 5 5 1 1 1 0. 0 From 50% silk to harvest at 25% moisture			0 5 8 1 2 6 7. 5																															
4. PLANT:			Standard Deviation Sample Size																															
* 1 9 8. 6 cm Plant Height (to tassel tip)			1.556 20																															
* 0 7 1. 7 cm Ear Height (to base of top ear node)			2.051 20																															
0 1 3. 9 cm Length of Top Ear Internode			1.838 20																															
Average Number of Tillers																																		
* 1. 4 Average Number of Ears per Stalk			0.495 20																															
4 Anthocyanin of Brace Roots: 1=Absent 2=Faint 3=Moderate 4=Dark			4																															
Application Variety Data		Page 1	Standard Inbred Data																															

Application Variety Data			Page 2	Standard Inbred Data				
5. LEAF:			Standard Deviation	Sample Size	Standard Deviation		Sample Size	
*	0 0	7. 9 cm Width of Ear Node Leaf	0.212	20	0 0	9. 2	0.619	140
*	0 7	2. 8 cm Length of Ear Node Leaf	10.607	20	0 7	9. 6	2.756	140
*		5. 9 Number of leaves above top ear	0.141	10	5. 6		0.483	70
	3 3	3. 7 degrees Leaf Angle (measure from 2nd leaf above ear at anthesis to stalk above leaf)	5.233	20	2 3	7	6.631	140
*	0 1	Leaf Color (Munsell code 5 GY 5/10)			0 3	(Munsell code 5 GY 3/4)		
	3	Leaf Sheath Pubescence (Rate on scale from 1=none to 9=peach fuzz)			6			
	3	Marginal Waves (Rate on scale from 1=none to 9=many)			4			
	1	Longitudinal Creases (Rate on scale from 1=none to 9=many)			2			
6. TASSEL:			Standard Deviation	Sample Size	Standard Deviation		Sample Size	
*	6. 0	Number of Primary Lateral Branches	0.354	20	8. 1		1.698	140
	2 7	5 Branch Angle from Central Spike	2.192	20	2 4	0	5.380	140
*	4 0	1 cm Tassel Length (from top leaf collar to tassel tip)	0.919	20	3 6	9	5.090	140
	5. 0	Pollen Shed (Rate on scale from 0=male sterile to 9=heavy shed)			6. 2			
	1 1	Anther Color (Munsell code 2.5 R 7/6)			2 2	(Munsell code 2.5 GY 8/6)		
	1 4	Glume Color (Munsell code 2.5 R 5/8)			0 2	(Munsell code 5 GY 4/8)		
	1	Bar Glumes (Glume Bands): 1=Absent 2=Present			1			
7a. EAR (Unhusked Data):					0 5 (Munsell code 2.5 GY 8/6)			
*	0 5	Silk Color (3 days after emergence) (Munsell code 2.5 GY 8/6)			0 2	(Munsell code 5 GY 4/8)		
	0 2	Fresh Husk Color (25 days after 50% silking) (Munsell code 5 GY 4/8)			2 1	(Munsell code 2.5 Y 8/4)		
	2 1	Dry Husk Color (65 days after 50% Silking) (Munsell code 2.5 Y 8/4)			3			
*	3	Position of Ear at Dry Husk Stage: 1=Upright 2=Horizontal 3=Pendent			6			
	1	Husk Tightness (Rate on scale from 1=very loose to 9=very tight)			3			
	2	Husk Extension (at harvest): 1=Short (ears exposed) 2=Medium (<8 cm) 3=Long (8-10 cm beyond ear tip) 4=Very Long (>10 cm)						
7b. EAR (Husked Ear Data):			Standard Deviation	Sample Size	Standard Deviation		Sample Size	
*	1 8	1 cm Ear Length	1.273	10	1 3	6	0.680	70
*	3 8	0 mm Ear Diameter at mid-point	1.414	10	4 3	5	1.193	70
	1 0	8. 8 gm Ear Weight	17.395	20	1 2	5. 6	22.451	140
*	1 5	2 Number of Kernel Rows	0.000	10	1 7	3	0.743	70
	2	Kernel Rows: 1=Indistinct 2=Distinct			2			
	2	Row Alignment: 1=Straight 2=Slightly Curved 3=Spiral			2			
	0 8	2 cm Shank Length	1.414	20	0 8	1	1.361	140
	2	Ear Taper: 1=Slight 2=Average 3=Extreme			2			
Application Variety Data					Standard Inbred Data			

Note: Use chart on first page to choose color codes for color traits.

Application Variety Data			Page 3	Standard Inbred Data		
8. KERNEL (Dried):			Standard Deviation	Sample Size		
1	0.0 mm Kernel Length		0.566	10	1	1.0
0	7.0 mm Kernel Width		0.000	10	0	7.1
0	3.4 mm Kernel Thickness		0.000	10	0	3.9
3	4.0 % Round Kernels (Shape Grade)		4.845	500g	3	0.0
	1 Aleurone Color Pattern: 1=Homozygous 2=Segregating				1	
(*)	1 9 Aleurone Color (Munsell code Lighter Than 2.5 Y 9/2)				1	9 (Munsell code 2.5 Y 9/2) Lighter Than
*	0 7 Hard Endosperm Color (Munsell code 2.5 Y 8/10)				0	7 (Munsell code 2.5 Y 8/10)
*	0 3 Endosperm Type: 1=Sweet (sul) 2=Extra Sweet (sh2) 3=Normal Starch 4=High Amylose Starch 5=Waxy Starch 6=High Protein 7=High Lysine 8=Super Sweet (se) 9=High Oil 10=Other				0	3
1	9.2 gm Weight per 100 Kernels (unsized sample)		1.945	200 seeds	2	4.4
						3.170
						1400 seeds
9. COB:			Standard Deviation	Sample Size		
*	2 2.0 mm Cob Diameter at mid-point		0.000	10	2	5.7
	1 1 Cob Color (Munsell code 5 R 6/6)				1	4 (Munsell code 5 R 3/8)
10. DISEASE RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); leave blank if not tested; leave Race or Strain Options blank if polygenic):						
A. Leaf Blights, Wilts, and Local Infection Diseases						
4	Anthracnose Leaf Blight (<i>Colletotrichum graminicola</i>)				7	
5	Common Rust (<i>Puccinia sorghi</i>)				5	
	Common Smut (<i>Ustilago maydis</i>)				7	
6	Eyespot (<i>Kabatiella zeae</i>)				7	
6	Goss's Wilt (<i>Clavibacter michiganense</i> spp. <i>nebraskense</i>)				7	
2	Gray Leaf Spot (<i>Cercospora zeae-maydis</i>)				2	
4	Helminthosporium Leaf Spot (<i>Bipolaris zeicola</i>) Race 2				8	Race 2
4	Northern Leaf Blight (<i>Exserohilum turcicum</i>) Race 1				5	Race 1
4	Southern Leaf Blight (<i>Bipolaris maydis</i>) Race 0				3	Race 0
	Southern Rust (<i>Puccinia polysora</i>)					
6	Stewart's Wilt (<i>Erwinia stewartii</i>)				3	
	Other (Specify) _____					
B. Systemic Diseases						
4	Corn Lethal Necrosis (MCMV and MDMV)				3	
9	Head Smut (<i>Sphacelotheca reiliana</i>)				7	
	Maize Chlorotic Dwarf Virus (MCDV)					
	Maize Chlorotic Mottle Virus (MCMV)					
	Maize Dwarf Mosaic Virus (MDMV) Strain _____					Strain _____
	Sorghum Downy Mildew of Corn (<i>Peronosclerospora sorghi</i>)					
	Other (Specify) _____					
C. Stalk Rots						
	Anthracnose Stalk Rot (<i>Colletotrichum graminicola</i>)					
	Diplodia Stalk Rot (<i>Stenocarpella maydis</i>)					
	Fusarium Stalk Rot (<i>Fusarium moniliforme</i>)					
	Gibberella Stalk Rot (<i>Gibberella zeae</i>)					
	Other (Specify) _____					
D. Ear and Kernel Rots						
	Aspergillus Ear and Kernel Rot (<i>Aspergillus flavus</i>)					
	Diplodia Ear Rot (<i>Stenocarpella maydis</i>)					
	Fusarium Ear and Kernel Rot (<i>Fusarium moniliforme</i>)					
	Gibberella Ear Rot (<i>Gibberella zeae</i>)					
	Other (Specify) _____					
Application Variety Data				Standard Inbred Data		

Note: Use chart on first page to choose color codes for color traits.

Application Variety Data	Page 4	Standard Inbred Data																																																																																																																																											
<p>11. INSECT RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); leave blank if not tested):</p> <table border="0"> <thead> <tr> <th></th> <th>Standard Deviation</th> <th>Sample Size</th> <th>Standard Deviation</th> <th>Sample Size</th> </tr> </thead> <tbody> <tr> <td>- Banks Grass Mite (<i>Oligonychus pratensis</i>)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>- Corn Earworm (<i>Helicoverpa zea</i>)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Leaf-Feeding</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Silk Feeding :</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> mg larval wt.</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>- Ear Damage</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>- Corn Leaf Aphid (<i>Rhopalosiphum maidis</i>)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>- Corn Sap Beetle (<i>Carpophilus dimidiatus</i>)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>- European Corn Borer (<i>Ostrinia nubilalis</i>)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6 1st Generation (Typically Whorl Leaf Feeding)</td> <td></td> <td>3</td> <td></td> <td></td> </tr> <tr> <td>5 2nd Generation (Typically Leaf Sheath-Collar Feeding)</td> <td></td> <td>4</td> <td></td> <td></td> </tr> <tr> <td> Stalk Tunneling :</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> cm tunneled/plant</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>- Fall Armyworm (<i>Spodoptera frugiperda</i>)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Leaf-Feeding</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Silk-Feeding :</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> mg larval wt.</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>- Maize Weevil (<i>Sitophilus zeamaze</i>)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>- Northern Rootworm (<i>Diabrotica barberi</i>)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>- Southern Rootworm (<i>Diabrotica undecimpunctata</i>)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>- Southwestern Corn Borer (<i>Diatraea grandiosella</i>)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Leaf Feeding</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> Stalk Tunneling :</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> cm tunneled/plant</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>- Two-spotted Spider Mite (<i>Tetranychus urticae</i>)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>- Western Rootworm (<i>Diabrotica virgifera virgifera</i>)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>- Other (Specify)</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Standard Deviation	Sample Size	Standard Deviation	Sample Size	- Banks Grass Mite (<i>Oligonychus pratensis</i>)					- Corn Earworm (<i>Helicoverpa zea</i>)					Leaf-Feeding					Silk Feeding :					mg larval wt.					- Ear Damage					- Corn Leaf Aphid (<i>Rhopalosiphum maidis</i>)					- Corn Sap Beetle (<i>Carpophilus dimidiatus</i>)					- European Corn Borer (<i>Ostrinia nubilalis</i>)					6 1st Generation (Typically Whorl Leaf Feeding)		3			5 2nd Generation (Typically Leaf Sheath-Collar Feeding)		4			Stalk Tunneling :					cm tunneled/plant					- Fall Armyworm (<i>Spodoptera frugiperda</i>)					Leaf-Feeding					Silk-Feeding :					mg larval wt.					- Maize Weevil (<i>Sitophilus zeamaze</i>)					- Northern Rootworm (<i>Diabrotica barberi</i>)					- Southern Rootworm (<i>Diabrotica undecimpunctata</i>)					- Southwestern Corn Borer (<i>Diatraea grandiosella</i>)					Leaf Feeding					Stalk Tunneling :					cm tunneled/plant					- Two-spotted Spider Mite (<i>Tetranychus urticae</i>)					- Western Rootworm (<i>Diabrotica virgifera virgifera</i>)					- Other (Specify)					
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<p>12. AGRONOMIC TRAITS:</p> <p>3 Stay Green (at 65 days after anthesis) (Rate on a scale from 1=worst to 9=excellent.)</p> <p>0 0. 0 % Dropped Ears (at 65 days after anthesis)</p> <p>0 0. 0 % Pre-anthesis Brittle Snapping</p> <p>0 0. 0 % Pre-anthesis Root Lodging</p> <p>0 2. 0 % Post-anthesis Root Lodging (at 65 days after anthesis)</p> <p>4 9 5 8. 7 Kg/ha Yield of Inbred Per Se (at 12-13% grain moisture)</p>																																																																																																																																													
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<p>REFERENCES:</p> <p>Butler, D.R. 1954. A System for the Classification of Corn Inbred Lines. PhD Thesis, Ohio State University.</p> <p>Emerson, R.A., G.W. Beadle, and A.C. Fraser. 1935. A Summary of Linkage Studies in Maize. Cornell A.E.S., Mem. 180.</p> <p>Farr, D.F., G.F. Bills, G.P. Chamuris, A.Y. Rossman. 1989. Fungi on Plant and Plant Products in the United States. The American Phytopathological Society, St. Paul, MN.</p> <p>Inglett, G.E. (Ed.) 1970. Corn: Culture, Processing, Products. Avi Publishing Company, Westport, CT.</p> <p>Jugenheimer, R.W. 1976. Corn: Improvement, Seed Production, and Uses. John Wiley & Sons, New York.</p> <p>McGee, D.C. 1988. Maize Diseases. APS Press, St. Paul, MN. 150 pp.</p> <p>Munsell Color Chart for Plant Tissues. Macbeth. P.O. Box 230. Newburgh, N.Y. 12551-0230</p> <p>The Mutants of Maize. 1968. Crop Science Society of America. Madison, WI.</p> <p>Shurtleff, M.C. 1980. Compendium of Corn Diseases. APS Press, St. Paul, MN. 105 pp.</p> <p>Sprague, G.F., and J.W. Dudley (Editors). 1988. Corn and Corn Improvement, Third Edition. Agronomy Monograph 18. ASA, CSSA, SSSA, Madison, WI.</p> <p>Stringfield, G.H. Maize Inbred Lines of Ohio. Ohio A.E.S., Bul. 831. 1959.</p> <p>U.S. Department of Agriculture. 1936, 1937. Yearbook.</p>																																																																																																																																													
<p>COMMENTS (eg. state how heat units were calculated, standard inbred seed source, and/or where data was collected. Continue in Exhibit D):</p> <p>Heat Unit Calculation: $GDU = \frac{\text{Daily Max Temp } (<=86^{\circ}F) + \text{Daily Min Temp } (>=50^{\circ}F) - 50^{\circ}F}{2}$</p> <p>Page 2, Section 6, Tassel: Anther Color, Tan (22)- Determined as Green-Yellow with anthocyanin present.</p> <p>Page 2, Section 7a, Ear: Silk Color, Tan (22) - Determined as Green-Yellow with anthocyanin present.</p>																																																																																																																																													

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

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).

**EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP**

1. NAME OF APPLICANT(S) DEKALB Genetics Corporation	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME MF1113B
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 3100 Sycamore Road DeKalb, IL 60115	5. TELEPHONE (include area code) (815) 758-3461	6. FAX (include area code) (815) 758-4106
7. PVPO NUMBER		9800306

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.

YES NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?
If no, give name of country _____

YES NO

10. Is the applicant the original owner? YES NO If no, please answer the following:

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?
 YES NO If no, give name of country _____

b. If original rights to variety were owned by a company, is the original owner(s) a U.S. based company?
 YES NO If no, give name of country _____

11. Additional explanation on ownership (if needed, use reverse for extra space):

MF1113B was originated and developed by a breeder employed by DEKALB Genetics Corporation. By agreement between DEKALB Genetics Corporation and the breeder, all rights to any invention, discovery, or development are assigned to DEKALB Genetics Corporation. No rights to such invention, discovery, or development are retained by the breeder.

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 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.

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