

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Americana Seeds, Inc.

**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 (P.L. 75-269, 7 U.S.C. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'CX 290'



*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 7th day of December in
the year of our Lord one thousand nine
hundred and seventy-seven*

Attest:

R. D. Rollin
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Bob Bergland
Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1a. TEMPORARY DESIGNATION OF VARIETY CX 290	1b. VARIETY NAME CX 290	FOR OFFICIAL USE ONLY	
		PV NUMBER 7600056	
2. KIND NAME Soybean	3. GENUS AND SPECIES NAME Glycine max	FILING DATE 3.9.76	TIME 11:00 A.M.
		FEE RECEIVED \$ 250.00 \$ 250.00 \$ 250.00	DATE 3.9.76 5.26.76 11.14.77
4. FAMILY NAME (BOTANICAL) Leguminosae	5. DATE OF DETERMINATION January, 1975		
6. NAME OF APPLICANT(S) Americana Seeds, Inc.	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) 1600 Oregon Street Muscatine, Iowa 52761	8. TELEPHONE AREA CODE AND NUMBER (319) 264-4719	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation		10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION Wisconsin	11. DATE OF INCORPORATION 1914

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:
Francis X. Murphy, Legal Division
Pfizer Inc.
235 East 42nd Street
New York, New York 10017

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- 13B. Exhibit B, Novelty Statement.
- 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- 13D. Exhibit D, Additional Description of the Variety.

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 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? FOUNDATION REGISTERED CERTIFIED

15. Does the applicant(s) agree to the publication of his/her (their) name(s) and address in the Official Journal? YES NO

16. The applicant(s) declare(s) 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) 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 Act.

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

Sept. 15, 1977
(DATE)

(DATE)

AMERICANA SEEDS, INC.

(SIGNATURE OF APPLICANT)

By: *William B. Trent, Jr.*

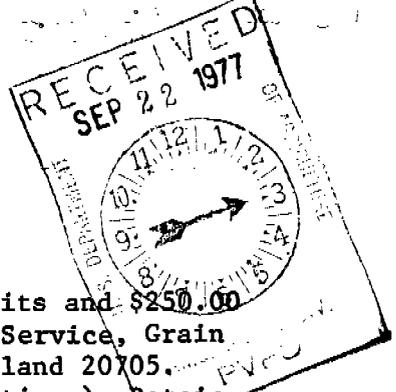
(SIGNATURE OF APPLICANT)

William B. Trent, Jr., General Counsel

00001

OK 9/15/77

INSTRUCTIONS



GENERAL: Send an original copy of the application, exhibits and fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, National Agricultural Library, Beltsville, Maryland 20705. (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 Give the date the applicant determined that he had a new variety based on (1) the definition in Section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 13a Give (1), the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. (2), the details of subsequent stages of selection and multiplication. (3), the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4), evidence of stability.
- 13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties; (1) identify these varieties and state all differences objectively; (2) Attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form for all characteristics, for which you have adequate data.
- 13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe; such as; plant habit, plant color, disease resistance, etc.
- 14A If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled or published or the certificate has been issued. However, if the applicant specifies "NO", he may change his choice. (See Section 180.15 of the Regulations and Rules of Practice.)

Origin and Breeding History of the Variety
Chippewa 64 x Amsoy 5143 (c) 1 (b) 2

- 1966 Obtained parental stock seed from U.S.D.A., Urbana, Illinois
- 1967 Hand crossed F₁ seed obtained
- 1968 F₁ growouts - produce F₂ seed
- 1968-69 F₂ grown in Hawaii
- 1969 F₃ individual plant selected, labeled Chippewa 64 x Amsoy 5143 (c) 1 (b) 2
- 1969-70 Sent 50 grams of this single plant Chippewa 64 x Amsoy 5143 (c) 1 (b) 2 to Hawaii for winter increase. Obtained 450 grams of F₄ seed for further selection and increase.
- 1971 Off type hilum colors (yellow 1/2%, buff 1%) and gray pubescent plants (1%) rogued. Balance of increase retained for further increase and testing
- 1972 Tested F₅ in preliminary trials at two locations
- 1973 Tested Chippewa 64 x Amsoy 5143 (c) 1 (b) 2 in replicated trials at three locations. One quarter acre increase block established to produce breeders seed.
- 1974 Tested Chippewa 64 x Amsoy 5143 (c) 1 (b) 2 in replicated trials at six locations. Ten acres of increase established to produce Foundation seed
- 1975 Tested Chippewa 64 x Amsoy (c) 1 (b) 2 at twelve locations in replicated trials. Yield performance and other agronomic attributes good to excellent. Major increase done and variety trial number of E 5143 changed to CX 290.

During last 3 increases, no further evidence of hilum color variants or gray pubescent lines noted. Also, other claimed characteristics breeding true to type; hence, Variety assumed to be stable.

760056

Exhibit B
Clemens CX 290

Botanical Description of the Variety

- 1 - Special characteristics of variety from seed planting to fruiting stage - None
- 2 - Mature plant and seed characteristics

Variety	Hilum	Pod	Pubescent	Plant	Plant	Phytophthora	Yield	Avg.	Maturity	Lodging	
	Color	Color	Color	Height	Type						Rating
Chippewa 64 x Amsoy 5143 (c) 1 (b) 2	Br	Br	T	39	Med bush	Field Tolerant	39.8	56.1	48.0	9-21	1.8
Amsoy 71	Y	Tn	G	39	Med thin	Resistant				9-14	2.1
Wayne	Bl	Br	T	42	Med bush	Field Tolerant	38.4	54.5	46.5	9-24	2.3

00003

OBJECTIVE DESCRIPTION OF VARIETY
SOYBEAN (GLYCINE MAX)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S) Pfizer Genetics Inc.	FOR OFFICIAL USE ONLY	
	PVPO NUMBER	7600056
	VARIETY NAME OR TEMPORARY DESIGNATION	CX 290
ADDRESS (Street and No., or R.F.D. No.; City, State, and ZIP Code) P.O. Box 99 Beaman, Iowa 50609		

Place the appropriate number that describes the varietal character of this variety in the boxes below.

1. SEED SHAPE:					
<input checked="" type="checkbox"/> 1	1 = SPHERICAL	2 = SPHERICAL FLATTENED	3 = ELONGATE	4 = OTHER (Specify)	
2. SEED COAT COLOR: SHADE:					
<input checked="" type="checkbox"/> 1	1 = YELLOW	2 = GREEN	3 = BROWN	4 = BLACK	<input checked="" type="checkbox"/> 2 1 = LIGHT 2 = MEDIUM 3 = DARK
	5 = OTHER (Specify)				
3. SEED COAT LUSTER:			4. SEED SIZE		
<input checked="" type="checkbox"/> 2	1 = DULL	2 = SHINY	<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 8	GRAMS PER 100 SEEDS
5. HILUM COLOR: SHADE:					
<input checked="" type="checkbox"/> 3	1 = BUFF	2 = YELLOW	3 = BROWN	4 = GRAY	5 = IMPERFECT BLACK
	6 = BLACK	7 = OTHER (Specify)			<input checked="" type="checkbox"/> 2 1 = LIGHT 2 = MEDIUM 3 = DARK
6. COTYLEDON COLOR:			7. LEAFLET SIZE (See Reverse):		
<input checked="" type="checkbox"/> 1	1 = YELLOW	2 = GREEN	<input checked="" type="checkbox"/> 2	1 = SMALL	2 = MEDIUM 3 = LARGE
8. LEAFLET SHAPE:					
<input checked="" type="checkbox"/> 1	1 = OVATE	2 = OBLONG	3 = LANCEOLATE	4 = ELLIPTICAL	5 = OTHER (Specify)
9. LEAF COLOR (See reverse):				10. FLOWER COLOR:	
<input checked="" type="checkbox"/> 2	1 = LIGHT GREEN	2 = MEDIUM GREEN	3 = DARK GREEN	<input checked="" type="checkbox"/> 2	1 = WHITE 2 = PURPLE 3 = OTHER (Specify)
11. POD COLOR:			12. POD SET:		
<input checked="" type="checkbox"/> 2	1 = TAN	2 = BROWN	3 = BLACK	<input checked="" type="checkbox"/> 1	1 = SCATTERED 2 = CONCENTRATED
13. PLANT PUBESCENCE COLOR: SHADE:					
<input checked="" type="checkbox"/> 2	1 = GRAY	2 = BROWN	3 = OTHER (Specify)	<input checked="" type="checkbox"/> 2	1 = LIGHT 2 = MEDIUM 3 = DARK
14. PLANT TYPES (See Reverse):			15. PLANT HABIT:		
<input checked="" type="checkbox"/> 3	1 = SLENDER	2 = BUSHY	3 = INTERMEDIATE	<input checked="" type="checkbox"/> 2	1 = DETERMINATE 2 = INDETERMINATE 3 = OTHER (Specify)
16. HYPOCOTYL COLOR:			17. SEED PROTEIN:		
<input checked="" type="checkbox"/> 2	1 = GREEN	2 = PURPLE	<input type="checkbox"/>	No Data	
			<input type="checkbox"/>	1 = A	2 = B
18. NUMBER OF DAYS TO FLOWERING (Place a zero in first box (e.g. 09) when days are 9 or less.)		19. MATURITY GROUP:			
No Data		<input checked="" type="checkbox"/> 4	1 = 00	2 = 0	3 = I 4 = II 5 = III
			6 = IV	7 = V	8 = VI 9 = VII 10 = VIII
20. SIZE OF 10 DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT (Growth Chamber) AT 25° C. (Place a zero in first box (e.g. 02) when size is 9 mm. or less.)					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MM. LENGTH OF SEEDLING		MM. LENGTH OF COTYLEDON		MM. WIDTH OF COTYLEDON	
				No Data	
21. DISEASE: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)					
<input type="checkbox"/> BACTERIAL PUSTULE	<input type="checkbox"/> SOYBEAN CYST	<input type="checkbox"/> DOWNY MILDEW	<input type="checkbox"/> PURPLE STAIN	<input type="checkbox"/> POD AND STEM BLIGHT	<input type="checkbox"/> ROOT KNOT
<input type="checkbox"/> FROGEYE	<input type="checkbox"/> STEM CANKER	<input checked="" type="checkbox"/> PHYTO-PHTHORA	<input type="checkbox"/> BROWN STEM ROT	<input type="checkbox"/> TARGET SPOT	<input type="checkbox"/> BROWN SPOT
<input type="checkbox"/> BUD BLIGHT	<input type="checkbox"/> WILDFIRE	<input type="checkbox"/> RHIZOCTONIA ROT	<input type="checkbox"/> OTHER (Specify)	00004	

MAR 22 '76

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant shape	Wayne	Petiole angle	Wayne
Leaf shape	Wayne	Seed size	Wayne
Leaf color	Wilkin	Seed shape	Wayne
Leaf surface	Wayne	Seedling pigmentation	Amsoy 71

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY:

VARIETY	NO. OF DAYS TO MATURITY	LODGING SCORE	PLANT HEIGHT	LEAF SIZE		CONTENT		AVERAGE NO. OF PODS PER PLANT	IODINE NO.
				Width	Length	Protein	Oil		
Submitted	130	2.3	40	80 cm	120cm	42.3	21.4%	--	--
Name of similar variety Wayne	132	2.7	42	75 cm	125cm	41.8	21.3	--	--

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for completing this form:

1. Scott, Walter O. and Samuel R. Aldrich, 1970, Modern Soybean Production, The Farmer Quarterly.
2. Norman, A. G., 1963, The Soybean: Genetics, Breeding, Physiology, Nutrition, Management.
3. McKie, J. W., and K. L. Anderson, 1970, The Soybean Book.

LEAF COLOR: Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following Soybean varieties may be used as a guide to identify the colors listed on the form.

COLOR	VARIETY
Light Green	"Ada"
Medium Green	"Wilkin"
Dark Green	"Swift"

LEAF SIZE: The following varieties may be used as a guide to identify the relative size leaves.

SIZE	VARIETY
Small	"Amsoy"
Medium	"Bonus"
Large	"Anoka"

PLANT TYPE: The following varieties may be used as a guide to identify the plant type.

TYPE	VARIETY
Slender	"Vansoy"
Intermediate	"Wirth"
Bushy	"Adelphia"

Exhibit D
Data Indicative of Novelty

CX 290 most nearly resembles the variety Wayne. It differs significantly in the following traits:

1. Wayne has a black hilum on the seed coat, CX 290 has a brown hilum.
2. In Iowa State trials, Wayne is 3 inches taller than CX 290.
3. Wayne matures three days later than CX 290.
4. In Iowa State trials, Wayne has a lodging rating of 2.3, CX 290 has a rating of 1.8.
5. In Iowa State trials 1974 and 1975, CX 290 outyields Wayne by 1.5 bushels per acre.



PFIZER INC., 235 EAST 42ND STREET, NEW YORK, N.Y. 10017

LEGAL DIVISION
PATENT SECTION

CABLE ADDRESS:
PFIZERSUB NEW YORK
TELEX:
234088 RCA
420440 ITT
62422 WUJ
177667 TRT

October 1, 1984

Honorable Commissioner Plant Variety
Protection Office, Grain Division
National Agriculture Library Bldg., Rm. 500
Beltsville, Maryland 20705

Attn: Mr. Kenneth Evans

Dear Sir:

As we discussed earlier by telephone we would like to
order a certified copy of Plant Variety Protection Certificate
No. 7600056. A check for \$14.00, which is \$2.00 per page, is
enclosed. Thank you for your help in this matter.

Very truly yours,

James H. Monroe
James H. Monroe

JHM:EM
Enc.



PFIZER INC.
NEW YORK, N.Y. 10017

NY01471468

NOV 10 10 5 84

AMOUNT
14.00

EXACTLY *****14 DOLLARS AND 00CENTS

PAY TO THE ORDER OF THE USA

WACHOVIA BANK & TRUST COMPANY
FISHER BUILDING

PFIZER INC.
98391
James H. Monroe
AUTHORIZED SIGNATURE

⑆00471468⑆⑆05310952⑆⑆013569⑆⑆06949⑆⑆ 76-56

78000000
#1500056

Exhibit E
Statement of the Basis of Applicant's Ownership

Ownership rights were granted to Pfizer Genetics Inc. by Americana Seed Company, Muscatine, Iowa by License agreement.

BALES

ALSO
CONCENTRATION,

THIS

EX 290'

OTHER DIMERS

MO. DA YEAR
09 22 84

EXACTLY*****5 DOLLARS AND 00CENTS

AMOUNT
5.00

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OF

TREASURER OF THE USA

98063

PFIZER INC.

00000

WACHOVIA BANK & TRUST COMPANY
GREENSBORO N.C.

L. W. Murray
AUTHORIZED SIGNATURE

⑈00467606⑈ ⑆053109521⑆013569 069491⑈

IN THE PLANT VARIETY PROTECTION OFFICE

U.S. Certificate 7600056

Assignment Branch

Honorable Commissioner Plant Variety Protection Office,
Grain Division
Baltsville, Md. 20705

Sir:

Transmitted herewith for recording is an original
assignment of the above-identified certificate. A check
additional copies

Return to Pfizer Inc.

James Monroe 9/27/84 Pfizer Inc.

Return what exactly?

check & assignment is outside of folder

fully submitted,

James H. Murray
James H. Murray

According to Mr. Henry of [unclear]
[unclear] [unclear] [unclear] [unclear] [unclear] [unclear]
[unclear] [unclear] [unclear] [unclear] [unclear] [unclear]
[unclear] [unclear] [unclear] [unclear] [unclear] [unclear]

According to [unclear] [unclear] [unclear] [unclear]
rights [unclear] [unclear] [unclear] [unclear] [unclear] [unclear]
by [unclear] [unclear] [unclear] [unclear] [unclear] [unclear]

Now since the [unclear] [unclear] [unclear] [unclear]
belongs to [unclear] [unclear] [unclear] [unclear] [unclear] [unclear]
PFIZER cannot reassign rights,

DB

212-593-2369

Called James Monroe Pfizer and informed
him that the certificate belonged to Americana not Pfizer.
He will send information showing Pfizer acquired
Americana. We will hold this for his documentation.

J. Evans 9/18/84
1:45

assignment and check returned
J. Evans 9/27/84