No. 8600056

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Nickerson American Plant Breeders, 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 eighteen 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 TY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT T. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'AP 2190'

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* 31st *day of* October *in the year of our Lord one thousand nine hundred and* eighty-six.

Attest:

Kenneth A. Evans

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Richard E. Lyng

Secretary of Agriculture

APPROVAL EXPIRES 4-30-85

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
WAREHOUSE & SEED DIVISION

FORM APPROVED: OMB NO. 0581-0055

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 on reverse)

1. NAME OF APPLICANT(S): Nickerson American Plant Breeders

2. TEMPORARY DESIGNATION:

3. VARIETY NAME: AP 2190

4. ADDRESS *(Street and No. or R.F.D. No., City, State, and Zip Code)*: 5201 Johnson Drive, P.O. Box 2925, Mission, KS 66205

5. PHONE *(Include area code)*: (913) 384-4940

FOR OFFICIAL USE ONLY

PVPO NUMBER: 8600056

6. GENUS AND SPECIES NAME: Glycine max

7. FAMILY NAME *(Botanical)*: Leguminosae

FILING — DATE: 1/21/86 — TIME: 10:55 ☑ A.M. ☐ P.M.

8. KIND NAME: Soybean

9. DATE OF DETERMINATION: January 1981

FEES RECEIVED — AMOUNT FOR FILING: $ 1800 — DATE: 12/23/85 — AMOUNT FOR CERTIFICATE: $ 200.00 — DATE: September 5, 1986

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: Delaware

12. DATE OF INCORPORATION: April 1, 1983

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS:
Wayne Ellingson, Director of Soybean Research
AgriPro Seeds
Rt. 2, Hwy 30 East
Ames, Iowa 50010

PHONE *(Include area code)*: (515) 232-0691

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED

a. ☒ Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*

b. ☒ Exhibit B, Novelty Statement

c. ☒ Exhibit C, Objective Description of the Variety *(Request form from Plant Variety Protection Office.)* MS 8/26/86

d. ☒ Exhibit D, Additional Description of the Variety

e. ☒ EXHIBIT E, OWNERSHIP STATEMENT MS

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

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) FILE FOR PROTECTION OF THE VARIETY IN THE U.S.? ☐ Yes *(If "Yes," give date)* ☒ No

19. HAS THE VARIETY BEEN OFFERED FOR SALE OR MARKETED IN THE U.S. OR OTHER COUNTRIES?
A small quantity of seed was sold in the spring of 1985.
☒ Yes *(If "Yes," give names of countries and dates)* ☐ 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.

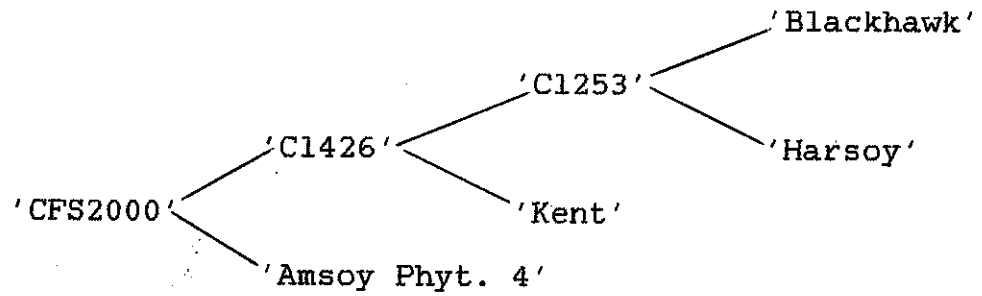
SIGNATURE OF APPLICANT: Wayne Ellingson — DATE: August 6, 1985

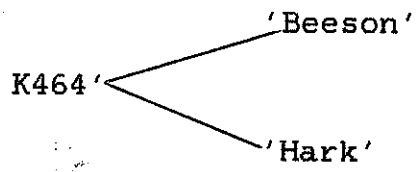
SIGNATURE OF APPLICANT: Robert E. Hemer — DATE: 12-17-85

FORM WA-470 (3-84) (Formerly LMGS-470 (8-83) which is obsolete.)

"EXHIBIT A"
ORIGIN AND BREEDING HISTORY OF 'AP 2190'

1. AP 2190 originated in Iowa from a hand pollinated cross of 'CFS2000' * 'K464'. CFS2000 and K464 were derived as follows:





The cross was made during the summer of 1974. The F1 generation was grown in a Puerto Rico winter nursery during the fall and winter of 1974-75. The F2-F5 generations were grown in Iowa during the summers of 1975-78. Early generations were advanced using a modified single seed decent technique. Single plants of the cross were selected and the seed planted during the summer of 1979.

2. In 1981, single plants of the variety were reselected and grown in progeny rows in 1982. Only rows conforming to a standard were harvested and bulked.

   The genetic make-up of the variety was stabilized in the sixth generation (1978). The variety has remained stable and the sole purpose for reselection was for beginning multiplication for commercial seed stock production. The variety was not essentially changed, but only mixtures removed that occurred during yield testing.

3. AP 2190 has been in yield tests since 1980. See the attached for 1981-84 data. AP 2190 has been tested under the experimental designation 74022-NNS Y034-80, 74022-80-Y034 OR EX034.

4. Discernible variants are not an inherent component of the variety.

"EXHIBIT B"
(No. 860056, 'AP 2190')

Novelty is based on the unique combination of the following characters:

AP 2190 is most similar to Wells and Wells II. However, AP 2190 differs in seed coat luster, peroxidase reaction, and Phytophthora root rot resistance (Wells II only).

1. AP 2190 has a shiny seed coat luster where Wells and Wells II have dull.

2. AP 2190 has a positive peroxidase reaction where Wells and Wells II have a negative.

3. AP 2190 has the same reaction to Phytophthora root rot as Wells, but differs from Wells II. Wells II is resistant to races 3, 6, 7, 8 and 9 where AP 2190 is susceptible.

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN & SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Soybean)

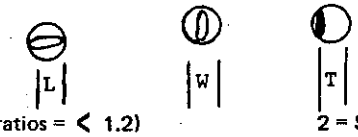
OBJECTIVE DESCRIPTION OF VARIETY
SOYBEAN (Glycine max L.)

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
Nickerson American Plant Breeders		AP 2190
ADDRESS *(Street and No., or R.F.D. No., City, State, and Zip Code)* 5201 Johnson Drive, Mission, KS 66201		FOR OFFICIAL USE ONLY PVPO NUMBER 8600056

Choose the appropriate response which characterizes the variety in the features described below. When the number of significant digits in your answer is fewer than the number of boxes provided, place a zero in the first box when number is 9 or less (e.g., [0][9]).

1. SEED SHAPE:

[2]



1 = Spherical (L/W, L/T, and T/W ratios = < 1.2)
2 = Spherical Flattened (L/W ratio > 1.2; L/T ratio = < 1.2)
3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)
4 = Elongate Flattened (L/T ratio > 1.2; T/W > 1.2)

2. SEED COAT COLOR: (Mature Seed)

[1] 1 = Yellow 2 = Green 3 = Brown 4 = Black 5 = Other *(Specify)* _____

3. SEED COAT LUSTER: (Mature Hand Shelled Seed)

[~~1~~ 2 R/S] 1 = Dull ('Corsoy 79'; 'Braxton') 2 = Shiny ('Nebsoy'; 'Gasoy 17')

4. SEED SIZE: (Mature Seed)

[1][9] Grams per 100 seeds

5. HILUM COLOR: (Mature Seed)

[5] 1 = Buff 2 = Yellow 3 = Brown 4 = Gray 5 = Imperfect Black 6 = Black 7 = Other *(Specify)* _____

6. COTYLEDON COLOR: (Mature Seed)

[1] 1 = Yellow 2 = Green

7. SEED PROTEIN PEROXIDASE ACTIVITY:

[2] 1 = Low 2 = High

8. SEED PROTEIN ELECTROPHORETIC BAND:

[2] 1 = Type A ($SP1^a$) 2 = Type B ($SP1^b$)

9. HYPOCOTYL COLOR:

[4] 1 = Green only ('Evans'; 'Davis') 2 = Green with bronze band below cotyledons ('Woodworth'; 'Tracy')
3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71')
4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Coker Hampton 266A')

10. LEAFLET SHAPE:

[3] 1 = Lanceolate 2 = Oval 3 = Ovate 4 = Other *(Specify)* _____

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11. LEAFLET SIZE:

[2] 1 = Small ('Amsoy 71'; 'A5312') 2 = Medium ('Corsoy 79'; 'Gasoy 17')
3 = Large ('Crawford'; 'Tracy')

12. LEAF COLOR:

[2] 1 = Light Green ('Weber'; 'York') 2 = Medium Green ('Corsoy 79'; 'Braxton')
3 = Dark Green ('Gnome'; 'Tracy')

13. FLOWER COLOR:

[2] 1 = White 2 = Purple 3 = White with purple throat

14. POD COLOR:

[2] 1 = Tan 2 = Brown 3 = Black

15. PLANT PUBESCENCE COLOR:

[1] 1 = Gray 2 = Brown (Tawny)

16. PLANT TYPES:

[2] 1 = Slender ('Essex'; 'Amsoy 71') 2 = Intermediate ('Amcor'; 'Braxton')
3 = Bushy ('Gnome'; 'Govan')

17. PLANT HABIT:

[3] 1 = Determinate ('Gnome'; 'Braxton') 2 = Semi-Determinate ('Will')
3 = Indeterminate ('Nebsoy'; 'Improved Pelican')

18. MATURITY GROUP:

[5] 1 = 000 2 = 00 3 = 0 4 = I 5 = II 6 = III 7 = IV 8 = V
9 = VI 10 = VII 11 = VIII 12 = IX 13 = X

19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

BACTERIAL DISEASES:

[0] Bacterial Pustule *(Xanthomonas phaseoli* var. *sojensis)*

[0] Bacterial Blight *(Pseudomonas glycinea)*

[0] Wildfire *(Pseudomonas tabaci)*

FUNGAL DISEASES:

[0] Brown Spot *(Septoria glycines)*

Frogeye Leaf Spot *(Cercospora sojina)*

[0] Race 1 [0] Race 2 [0] Race 3 [0] Race 4 [0] Race 5 [ ] Other *(Specify)* _____

[0] Target Spot *(Corynespora cassiicola)*

[0] Downy Mildew *(Peronospora trifoliorum* var. *manshurica)*

[0] Powdery Mildew *(Microsphaera diffusa)*

[1] Brown Stem Rot *(Cephalosporium gregatum)*

[0] Stem Canker *(Diaporthe phaseolorum* var. *caulivora)*

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19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant) (Continued)

FUNGAL DISEASES: (Continued)

[1] Pod and Stem Blight *(Diaporthe phaseolorum* var; *sojae)*

[0] Purple Seed Stain *(Cercospora kikuchii)*

[0] Rhizoctonia Root Rot *(Rhizoctonia solani)*

Phytophthora Rot *(Phytophthora megasperma* var. *sojae)*

[2] Race 1 [2] Race 2 [1] Race 3 [1] Race 4 [1] Race 5 [1] Race 6 [1] Race 7

[1] Race 8 [1] Race 9 [ ] Other *(Specify)* _____

VIRAL DISEASES:

[0] Bud Blight (Tobacco Ringspot Virus)

[0] Yellow Mosaic (Bean Yellow Mosaic Virus)

[0] Cowpea Mosaic (Cowpea Chlorotic Virus)

[0] Pod Mottle (Bean Pod Mottle Virus)

[0] Seed Mottle (Soybean Mosaic Virus)

NEMATODE DISEASES:

Soybean Cyst Nematode *(Heterodera glycines)*

[1] Race 1 [1] Race 2 [1] Race 3 [1] Race 4 [ ] Other *(Specify)* _____

[0] Lance Nematode *(Hoplolaimus Colombus)*

[0] Southern Root Knot Nematode *(Meloidogyne incognita)*

[0] Northern Root Knot Nematode *(Meloidogyne Hapla)*

[0] Peanut Root Knot Nematode *(Meloidogyne arenaria)*

[0] Reniform Nematode *(Rotylenchulus reniformis)*

[ ] OTHER DISEASE NOT ON FORM *(Specify)*: _____

20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

[1] Iron Chlorosis on Calcareous Soil

[ ] Other *(Specify)* _____

21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

[0] Mexican Bean Beetle *(Epilachna varivestis)*

[0] Potato Leaf Hopper *(Empoasca fabae)*

[ ] Other *(Specify)* _____

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Shape	S1884	Seed Coat Luster	Wells II
Leaf Shape	Wells II	Seed Size	Cumberland
Leaf Color	Corsoy 79	Seed Shape	Vickery
Leaf Size	Beeson	Seedling Pigmentation	Wells II

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23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100 SEEDS	NO. SEEDS/ POD
				CM Width	CM Length	% Protein	% Oil		
Submitted	108	1.8	83.31	7.5	9.8	37.3	20.5	19	NA
Wells II Name of Similar Variety	108	1.5	97	8.0	11.3	NA	NA	16	NA

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
2. Buttery, B.R. and R.I. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A_2 in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

NORTH AMERICAN PLANT BREEDERS INC.
SOYBEAN TRIAL SUMMARY REPORT 1983

OVER-LOCATION MEANS TRIAL #CV-1201 LOCS: AI, AM, SB, SF, SI, SP

ENTRY NO.	VARIETY OR LINE	MAT.	HT. (in)	LODGE (1-5)	AI YIELD	AM YIELD	SB YIELD	SF YIELD	SI YIELD	SP YIELD	MEAN YIELD	YIELD RANK	WORTH	SEED QUAL
24	LAKOTA	9.0	40.8	2.8	39.3	30.3	49.6	35.5	49.7	46.4	41.8	26	2.5	2.8
16	S1346	9.2	30.0	1.1	40.6	34.1	55.3	36.0	47.8	38.3	42.0	25	1.7	3.2
17	P1677	10.3	35.6	1.9	42.4	36.3	52.7	43.1	43.1	37.3	42.5	24	2.1	2.3
05	75212- 80-31101BR	10.9	33.7	1.2	44.7	42.1	52.1	39.3	45.6	46.0	45.0	11	1.6	2.5
04	74061- 80-27015	11.5	34.7	1.2	43.5	35.5	59.4	42.7	45.2	38.5	44.1	18	1.8	2.5
23	HARDIN	12.6	37.7	2.5	44.6	37.4	59.6	40.4	48.9	32.9	44.0	20	2.7	2.2
18	HP20-20	12.8	36.6	1.9	42.7	41.8	57.9	49.7	44.5	44.1	46.8	5	2.2	2.2
27	HS180	13.1	32.3	2.0	38.2	38.5	55.8	44.4	47.6	42.4	44.5	15	2.1	2.8
02	74061- 79- 125	13.4	39.9	1.7	38.6	38.4	52.3	42.9	48.3	42.5	43.8	21	2.4	2.3
09	74022- 80- Y008Y	13.6	36.9	1.6	39.1	38.2	55.3	44.7	47.1	25.6	41.7	27	1.8	2.0
06	72546- 75- 3016	14.4	38.8	1.8	42.7	46.0	57.6	36.1	46.0	37.8	44.4	16	2.0	2.7
22	WEBER	14.7	35.7	2.0	42.8	43.0	60.8	37.1	42.6	44.1	45.1	10	1.9	2.2
✓10	74022- 80- Y034	14.8	35.9	1.9	43.6	44.1	55.5	39.3	52.1	47.6	47.0	3	2.1	2.7
19	AP200	14.8	38.1	2.4	44.2	35.8	57.3	40.4	46.9	- 43.1	44.6	13	2.5	2.5
21	S1884	14.8	35.9	2.0	42.1	44.8	58.5	42.8	53.1	48.6	48.3	1	2.3	2.2
13	PRIDE B203	15.0	35.9	1.9	44.8	43.4	52.7	46.9	56.9	36.5	46.9	4	2.0	2.0
01	74022- 79- 27	15.1	40.7	1.9	43.8	35.5	52.2	38.3	43.0	34.5	41.2	28	2.5	2.5
03	74061- 79- 11	15.4	39.8	1.8	43.7	44.9	56.4	39.6	46.8	39.9	45.2	9	2.4	2.5
14	STINE 714	15.4	36.5	1.9	41.7	36.3	55.7	48.0	46.2	38.9	44.5	14	2.2	2.5
07	72556- 75- 3100	16.0	35.2	1.8	40.2	49.1	58.2	44.6	47.7	39.0	46.5	6	1.9	3.2
11	75212- 80-32089	16.1	36.2	1.8	45.9	40.4	53.8	42.7	44.7	36.9	44.1	19	2.3	2.0
25	PVI 8093	16.3	35.1	1.8	44.0	44.5	54.9	44.8	49.2	37.9	45.9	8	1.9	2.5
20	EX330	16.4	39.0	2.3	43.6	39.9	50.8	41.4	48.4	41.0	44.2	17	2.5	2.5
08	75220- 80- Y001	16.8	40.7	2.1	44.7	46.6	54.6	44.5	53.4	40.6	47.4	2	2.7	2.5
12	PVI 78122	17.3	38.3	2.0	41.4	46.2	50.7	37.8	46.1	36.3	43.1	23	2.2	2.3
15	CORSOY 79	17.3	39.8	2.6	45.6	42.5	49.3	40.6	49.5	40.7	44.7	12	2.5	2.0
26	J103	20.8	36.9	2.3	43.2	45.5	59.3	46.4	50.1	31.4	46.0	7	2.3	2.8
28	72558- 79- 102	21.6	36.3	1.8	43.2	48.1	52.4	42.7	51.4	23.4	43.5	22	2.1	2.3
	MEAN	14.6	36.9	1.9	42.7	41.0	55.0	41.9	47.9	39.0	44.6		2.2	2.5
	C.V.	15.5	7.9	22.1	11.3	10.5	10.3	13.7	8.1	8.7	11.6		23.7	.0
	LSD(.05)	2.8	2.0	.4	7.9NS	7.0	9.2NS	9.4NS	6.3	5.5	4.5NS		.4	.0NS
	NO. OF REPS	12.0	18.0	18.0	3.0	3.0	3.0	3.0	3.0	3.0	18.0		15.0	3.0

EXHIBIT D R/S

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APPENDIX II | APPENDIX III | APPENDIX IV | APPENDIX V | APPENDIX VI

NORTH AMERICAN PLANT BREEDERS INC.
SOYBEAN TRIAL SUMMARY REPORT 1983

OVER-LOCATION MEANS TRIAL #Y3-1201 LOCS: AI, AM, SB, SF, SI, SP

ENTRY NO.	VARIETY OR LINE	MAT.	HT. (in)	LODGE (1-5)	AI YIELD	AM YIELD	SB YIELD	SF YIELD	SI YIELD	SP YIELD	MEAN YIELD	YIELD RANK	WORTH	SEED QUAL
28	S1346	10.5	28.7	1.1	42.5	37.5	50.5	38.4	36.0	38.3	40.5	28	1.7	3.0
26	P1677	10.8	33.6	1.8	53.1	35.7	51.5	38.7	31.8	42.8	42.3	24	2.0	1.8
10	74011- 80-11024	11.5	32.2	1.4	47.1	34.6	51.6	40.9	36.9	48.7	43.3	20	1.8	2.5
14	74022- 80- Y034	12.3	34.1	1.7	43.5	40.8	51.3	45.8	47.3	49.9	46.4	4	2.1	2.2
24	EX4124TW	12.8	36.6	1.9	43.3	43.7	48.8	42.2	42.3	41.8	43.7	16	2.0	2.5
05	77031-A80-17105	12.9	36.9	1.4	46.2	40.0	50.7	35.5	40.7	44.5	43.0	22	2.0	2.2
23	EX4124G	13.2	34.7	1.7	49.9	42.0	51.2	38.2	43.7	45.7	45.1	11	2.1	2.5
20	74061- 79- 125	14.1	37.2	1.6	50.2	34.9	44.1	38.8	NSY	41.3	42.0	26	2.4	2.5
21	74061- 79- 11	14.1	38.3	1.8	49.0	36.9	51.6	45.0	34.4	40.7	42.9	23	2.3	2.5
25	AP200	14.2	36.8	2.3	46.3	37.1	50.9	44.7	34.1	45.2	43.1	21	2.3	2.7
11	74074- 80- Y047	14.6	31.6	1.6	50.3	44.1	62.5	45.4	43.1	35.9	46.9	2	2.1	2.2
12	74022- 80- Y008Y	15.5	34.9	1.7	46.3	38.5	50.0	42.9	43.5	30.9	42.0	25	1.9	2.0
01	77045-A80-15156	15.8	35.3	1.6	52.4	39.1	47.1	42.7	42.2	37.9	43.6	17	1.8	2.0
18	72556- 75- 3100	15.8	32.9	1.6	48.5	44.4	55.0	40.3	40.7	41.7	45.1	10	1.7	3.0
13	74022- 80- Y008G	16.0	35.8	1.8	48.8	45.7	57.1	39.0	44.9	27.4	43.8	15	2.0	2.2
22	EX330	16.2	38.0	2.4	51.3	38.6	55.3	43.4	39.7	44.6	45.5	8	2.4	2.7
17	72546- 75- 3016	16.4	37.7	1.8	53.1	43.4	51.4	39.6	40.3	39.1	44.5	13	2.0	2.7
19	74022- 79- 27	16.4	39.2	1.8	53.2	34.6	51.8	43.8	48.8	40.6	45.5	7	2.5	2.5
04	77022-A80- 8031	16.8	34.8	1.9	53.8	44.5	52.7	39.0	41.4	34.5	44.3	14	2.1	2.3
03	77013-A80- 4112	17.1	37.1	2.4	54.0	36.9	51.0	34.0	31.2	42.9	41.7	27	2.6	2.5
06	77054-B80-40207	17.5	34.1	1.7	50.5	53.1	52.4	51.5	45.2	43.7	49.4	1	1.8	2.3
02	76118-B80- 5078	17.9	32.8	1.4	49.1	44.9	52.2	44.6	47.8	39.5	46.4	3	1.8	2.5
16	75212- 80-32089	18.1	36.9	1.8	51.9	39.6	56.6	46.5	40.6	41.1	46.1	5	2.1	2.0
07	76029-B80-19034	18.3	34.0	1.9	48.1	46.6	42.6	48.3	44.5	31.2	43.5	19	2.3	2.3
15	75220- 80- Y001	18.6	38.2	1.8	49.8	44.8	56.2	41.4	43.2	37.4	45.5	6	2.3	2.3
09	77087-A80-26195	18.8	33.9	1.9	47.4	43.7	53.8	46.6	39.1	38.7	44.9	12	2.2	2.2
27	AP240	19.3	32.3	1.6	45.0	46.6	49.7	48.0	47.2	36.3	45.5	9	1.4	1.8
08	76157-A80-32008	21.2	35.7	2.1	48.7	38.8	55.4	41.9	42.7	34.1	43.6	18	2.4	2.7
	MEAN	15.6	35.2	1.8	49.0	41.1	52.0	42.4	41.2	39.9	44.3		2.1	2.4
	C.V.	14.6	7.5	19.8	9.1	8.2	8.9	9.4	6.6	7.9	9.3		21.8	.0
	LSD(.05)	3.1	2.1	.4	7.2	5.5	7.5	6.5	4.4	5.1	4.8NS		.5	.0NS
	NO. OF REPS	12.0	18.0	18.0	3.0	3.0	3.0	3.0	3.0	3.0	18.0		15.0	3.0

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8600056

NICKERSON AMERICAN PLANT BREEDERS INC.
SOYBEAN TRIAL SUMMARY REPORT 1984

OVER-LOCATION MEANS TRIAL #Y3-1001 LOCS: GT, HM, HO, WD

ENTRY NO.	VARIETY OR LINE	MAT.	HT. (in)	LODGE (1-5)	GT YIELD	HM YIELD	HO YIELD	WD YIELD	MEAN YIELD	YIELD RANK	WORTH
14	OZZIE	5.3	26.6	1.3	24.1	38.2	33.6	32.7	32.2	28	2.2
15	EVANS	7.3	26.9	1.5	22.8	40.5	36.1	31.6	32.8	27	2.3
09	SIMPSON	10.7	26.9	1.3	24.0	45.6	37.3	29.7	34.2	26	1.9
10	AP120	10.9	30.1	1.5	29.7	45.8	39.1	37.2	37.9	24	1.3
05	75212- 80-31101BR	15.3	31.7	1.2	31.4	49.1	42.9	39.2	40.7	15	1.3
16	HODGSON 78	15.7	33.1	2.1	23.5	45.0	40.7	38.1	36.8	25	2.3
01	76136-A80-20037	16.0	29.7	1.9	38.0	46.7	44.3	40.6	42.4	10	2.1
17	74002- 80-1035	16.1	34.2	1.4	30.2	43.0	39.7	42.4	38.8	23	1.6
03	78101-B81-03101	16.6	35.5	2.7	37.3	47.0	40.1	42.7	41.8	12	2.3
06	75212- 80-31101TN	16.9	32.8	1.3	35.6	49.2	42.2	42.8	42.5	9	1.4
02	78008-A81-19002	17.1	33.8	2.1	36.5	48.9	43.1	44.4	43.2	5	2.3
27	S1346	17.6	29.0	1.4	30.0	50.9	38.9	38.6	39.6	19	1.8
18	AP10	17.7	32.5	2.2	30.0	48.8	40.4	41.6	40.2	17	1.9
26	P1677	17.7	31.3	1.9	27.7	51.2	38.1	40.5	39.4	21	2.5
07	74061- 80-27033W	17.8	35.3	1.7	37.4	43.8	44.4	45.8	42.9	7	2.2
23	4-1206	18.2	34.3	2.0	31.0	43.3	39.8	42.7	39.2	22	2.2
28	LAKOTA	18.2	38.5	3.4	38.7	44.6	43.7	41.3	42.1	11	2.7
13	STINE 1350	18.4	30.8	1.5	32.5	50.0	40.1	49.9	43.1	6	1.8
25	P1981	18.4	36.0	2.5	41.0	45.1	39.4	45.2	42.7	8	2.5
04	78101-A81-32175	18.7	32.5	2.0	35.1	44.8	40.3	39.4	39.9	18	2.0
22	HP20-20	18.8	35.0	2.4	35.9	47.6	40.1	43.5	41.8	13	2.4
11	A1937	18.9	35.1	2.1	43.4	53.2	39.7	45.2	45.4	1	2.1
20	WEBER	19.4	34.4	2.7	32.8	45.0	41.6	38.1	39.4	20	2.3
24	STINE 1480	19.7	31.5	1.7	36.8	53.7	39.9	45.7	44.0	3	1.9
21	S18-84	20.0	35.3	2.8	37.9	48.4	44.1	44.5	43.7	4	2.6
19	AP200	20.2	35.4	2.0	38.9	44.8	41.3	40.0	41.2	14	2.5
12	S14-60	20.4	31.8	2.1	26.1	52.5	41.7	42.0	40.6	16	2.3
✓08	74022- 80- Y034	21.0	37.5	3.0	40.7	47.6	42.0	49.2	44.9	2	2.8
	MEAN	16.8	32.8	2.0	33.2	46.9	40.5	41.2	40.5		2.1
	C.V.	10.1	8.5	20.1	12.3	6.9	9.0	6.6	9.9		24.8
	LSD(.05)	2.3	2.2	.4	6.6	5.3	5.9NS	4.4	4.5		.5
	NO. OF REPS	9.0	12.0	12.0	3.0	3.0	3.0	3.0	12.0		12.0

8600056

NICKERSON AMERICAN PLANT BREEDERS
SOYBEAN TRIAL SUMMARY REPORT 1984

OVER-LOCATION MEANS TRIAL #CV -1201 LOCS: AI, BO, FI, SB, SF, SP

ENTRY NO.	VARIETY OR LINE	MAT.	HT. (in)	LODGE (1-5)	AI YIELD	BO YIELD	FI YIELD	SB YIELD	SF YIELD	SP YIELD	MEAN YIELD	YIELD RANK	WORTH	SEED QUAL
07	75212- 80-31101BR	13.0	29.1	1.2	51.2	36.7	30.9	20.6	34.1	44.2	36.3	23	1.7	2.8
25	LAKOTA	13.6	36.8	2.3	51.8	32.3	29.4	25.7	33.4	50.6	37.2	19	2.4	2.7
09	HODGSON 78	13.7	29.9	1.6	45.4	33.4	32.0	22.2	28.9	42.9	34.1	27	2.4	2.8
15	EX330	14.8	33.7	1.8	52.9	34.2	34.2	29.0	35.3	50.4	39.3	6	2.3	3.4
08	74061- 80-27033W	15.0	30.2	1.3	52.6	34.1	33.1	23.4	35.8	49.5	38.1	14	1.8	3.1
22	P1677	15.0	30.0	1.6	53.6	37.6	33.7	21.0	37.2	44.2	37.9	15	2.0	2.8
21	S1346	15.1	25.7	1.1	44.6	34.3	32.8	20.1	34.0	48.0	35.6	25	1.4	2.6
10	AP10	15.2	30.7	1.6	48.2	32.8	33.4	22.8	31.3	40.4	34.8	26	1.8	2.4
06	75212- 80-31101TN	15.4	29.9	1.2	50.9	38.7	33.5	26.0	38.2	47.6	39.2	7	1.4	2.9
23	HP20-20	16.0	32.9	1.8	54.4	37.4	31.9	25.3	36.0	49.1	39.0	9	2.0	2.7
13	S14-60	16.3	28.9	1.5	52.2	37.0	34.4	23.4	38.0	46.6	38.6	13	1.6	2.5
24	AP200	16.3	32.8	1.7	50.8	33.8	31.0	21.3	33.1	45.8	36.0	24	2.1	3.3
27	WEBER	16.5	32.8	2.0	52.6	35.5	29.6	21.8	34.5	46.3	36.7	22	2.3	2.8
26	HARDIN	16.6	31.2	1.9	51.6	37.1	32.4	26.6	31.6	47.7	37.8	16	2.5	2.9
16	CX155	17.8	35.2	2.0	56.6	37.5	34.5	28.9	30.0	45.1	38.8	11	2.8	2.6
19	CORSOY 79	19.2	36.1	1.9	54.9	35.5	31.2	28.3	35.9	51.8	39.6	5	2.6	2.4
20	S18-84	19.4	31.2	1.8	51.8	35.7	32.2	17.1	33.3	49.8	36.7	21	2.0	2.3
12	WELLS II	19.9	36.4	1.6	52.0	40.9	34.0	23.9	37.8	43.8	38.7	12	1.9	3.0
01	74074- 80- Y047	20.2	30.6	1.8	52.8	37.8	33.9	21.8	38.9	48.5	38.9	10	2.5	2.8
✓05	74022- 80- Y034	20.2	32.8	1.8	54.7	36.2	34.9	24.9	35.7	52.9	39.9	4	2.2	2.6
02	77054-B80-40207	20.3	31.2	1.8	56.2	39.3	35.1	24.6	35.0	49.1	39.9	3	2.1	2.9
17	S2303	20.6	34.1	2.0	54.2	43.7	33.1	26.2	38.0	51.9	41.2	1	2.2	2.5
03	76118-B80- 5078	20.8	30.7	1.4	47.7	37.9	32.4	22.3	33.9	45.9	36.7	20	1.8	2.8
18	PRIDE B203	20.8	31.8	1.9	53.4	41.7	32.3	16.6	36.0	46.0	37.7	17	1.8	2.6
28	J103	20.9	29.9	1.9	55.6	29.9	33.4	22.2	33.8	49.2	37.3	18	2.2	2.8
04	75220- 80- Y001	21.4	36.2	1.8	56.5	39.7	34.3	22.4	38.7	53.4	40.8	2	2.5	2.8
14	S1492	21.4	32.7	2.0	51.3	42.4	34.2	25.2	38.9	44.4	39.1	8	2.1	2.8
11	AP230	24.1	28.6	1.7	47.6	NS	19.6	NS	28.8	38.5	33.6	28	2.4	2.4
	MEAN	17.8	31.9	1.7	52.1	36.8	32.4	23.5	34.8	47.3	37.8		2.1	2.7
	C.V.	9.2	7.3	16.9	6.9	11.2	6.4	14.1	6.8	6.7	9.2		25.4	15.5
	LSD(.05)	2.3	2.0	.3	5.8	6.7	3.4	5.4	3.9	5.2	3.2		.5	.7NS
	NO. OF REPS	12.0	18.0	18.0	3.0	3.0	3.0	3.0	3.0	3.0	18.0		12.0	6.0

8600056

NICKERSON AMERICAN PLANT BREEDERS
SOYBEAN TRIAL SUMMARY REPORT 1984

OVER-LOCATION MEANS TRIAL #Y3-1201 LOCS: AI, BO, FI, SB, SF, SP

ENTRY NO.	VARIETY OR LINE	MAT.	HT. (in)	LODGE (1-5)	AI YIELD	BO YIELD	FI YIELD	SB YIELD	SF YIELD	SP YIELD	MEAN YIELD	YIELD RANK	WORTH	SEED QUAL
18	75212- 80-31101BR	12.8	30.3	1.3	50.1	37.8	33.4	29.8	32.7	47.4	38.5	17	1.3	2.8
19	75212- 80-31101TN	13.2	31.7	1.3	50.6	37.0	35.3	26.3	36.3	51.2	39.5	7	1.3	2.5
03	76008-B80-02031	14.0	30.9	1.8	46.0	35.9	32.2	32.4	27.5	43.5	36.3	27	2.0	2.1
27	S1346	14.3	26.9	1.1	44.8	35.6	31.9	28.6	32.9	46.1	36.7	26	1.2	2.4
06	78038-B81-38006	14.5	30.3	1.2	45.7	41.5	35.7	27.1	33.5	47.8	38.6	14	1.6	2.2
25	P1677	14.5	31.8	1.5	49.4	37.8	36.5	33.0	31.5	44.1	38.7	13	1.8	2.2
22	S14-60	15.0	29.7	1.6	49.9	37.7	38.0	32.0	40.3	44.8	40.5	3	1.5	2.2
24	EX330	15.1	32.8	1.8	50.9	33.8	35.6	25.9	31.5	47.2	37.5	24	2.4	2.8
23	WEBER	15.4	33.4	2.1	45.8	36.0	33.2	28.5	33.4	43.3	36.7	25	2.3	2.2
01	76038-B80-34035	15.8	31.9	1.7	50.3	36.9	36.1	35.2	31.0	46.5	39.4	8	2.3	2.4
02	76137-B80-20076	15.8	32.4	1.5	47.8	36.9	32.3	27.4	34.6	49.8	38.1	19	1.9	2.4
05	78001-B81-01028	16.7	32.9	1.8	49.0	35.5	31.7	38.2	32.7	48.0	39.2	11	2.3	2.6
26	AP200	16.8	33.1	1.7	48.6	35.9	35.5	25.3	24.9	46.0	36.1	28	2.3	2.9
10	78110-A81-11158	17.4	32.1	1.8	49.9	34.0	40.0	32.8	30.2	48.9	39.3	9	2.5	2.4
04	78004-A81-08007	17.5	33.9	1.6	47.0	35.5	33.4	35.2	38.4	45.6	39.2	10	2.0	2.7
11	79109-B81-26174	17.6	32.3	1.6	48.5	41.8	37.6	31.1	34.4	47.8	40.2	4	1.8	2.6
07	78097-A81-17115	17.7	32.8	1.6	46.7	37.0	35.8	31.6	35.9	44.0	38.5	15	2.0	2.3
09	78102-A81-38109	18.0	35.3	2.2	48.3	42.4	37.1	27.5	32.5	45.9	39.0	12	2.6	2.5
21	S18-84	18.0	31.3	1.8	46.8	37.8	33.8	25.7	34.2	49.1	37.9	21	2.3	2.3
08	78006-B81-07011	18.4	31.0	1.4	48.9	36.7	32.6	31.7	30.5	50.0	38.4	18	1.9	2.9
✓17	74022- 80- Y034	19.3	34.3	1.8	49.3	38.0	35.0	31.4	33.0	51.1	39.6	6	2.2	2.0
28	CORSOY 79	19.3	37.1	2.1	48.0	41.3	35.2	33.3	31.9	49.9	39.9	5	2.6	2.3
12	78110-B81-11087	19.5	34.9	1.7	47.4	40.6	32.3	31.2	33.2	46.2	38.5	16	2.2	2.8
14	77054-B80-40207	19.5	32.3	1.6	53.3	37.6	36.7	32.4	36.9	49.2	41.0	1	1.9	2.7
13	74074- 80- Y047	19.8	31.6	1.7	46.5	34.8	35.3	28.0	31.5	49.0	37.5	23	2.5	2.9
20	PRIDE B203	19.8	33.5	1.9	45.7	37.9	34.7	30.7	35.1	44.7	38.1	20	2.2	2.3
15	76118-B80- 5078	20.5	30.3	1.4	46.0	35.9	35.6	29.7	30.6	49.1	37.8	22	1.7	2.6
16	75220- 80- Y001	20.6	36.8	1.7	49.6	40.1	36.3	30.0	36.8	50.8	40.6	2	2.3	2.7
	MEAN	17.0	32.4	1.7	48.3	37.5	35.0	30.4	33.1	47.4	38.6		2.0	2.5
	C.V.	8.4	7.1	20.1	7.0	9.1	6.1	13.3	7.3	6.5	8.9		24.9	17.3
	LSD(.05)	2.1	1.6	.3	5.5NS	5.6NS	3.4	6.6	4.0	5.0	2.7		.5	.4
	NO. OF REPS	12.0	18.0	18.0	3.0	3.0	3.0	3.0	3.0	3.0	18.0		12.0	6.0

860056

1981 V2-03 TRIAL 81(LAVERNE,IA-LOC1 ** SHEFFIELD,IA-LOC2 **)
(JANESVILLE,WIS-LOC3 **)

ENT	PEDIGREE	MATURITY	HEIGHT	LODGING	LOC1 YIELD	LOC2 YIELD	LOC3 YIELD	MEAN YIELD	RANK
1	74020-NNSOY018-80	25	49	2.9	45.1	53.8	51.9	50.3	28
2	74020-NNSOY022-80	28	44	2.4	45.8	60.1	61.2	55.7	10
3	74022-NNSOY001-80	26	43	2.3	46.5	63.7	52.1	54.1	19
4	74022-NNSOY008-80	26	45	2.0	51.2	65.5	59.8	58.9	2
5	74022-NNSOY013-80	27	49	2.3	48.2	53.0	52.6	51.3	27
✓6	74022-NNSOY034-80	27	45	2.2	51.1	61.8	57.2	56.7	7
7	74022-NNSOY036-80	27	45	2.1	53.3	64.1	56.6	58.0	3
8	74022-NNSOY049-80	25	43	2.7	50.0	64.8	64.9	59.9	1
9	74022-NNSOY052-80	28	46	1.9	47.6	59.2	51.1	52.6	26
10	74068-NNSOY001-80	28	46	2.1	51.9	58.6	53.9	54.8	15
11	74068-NNSOY002-80	18	45	3.0	48.3	57.9	52.0	52.7	25
12	74068-NNSOY004-80	28	47	2.2	47.8	58.8	53.5	53.4	23
13	74068-NNSOY006-80	21	44	2.6	50.1	61.1	56.6	55.9	9
14	74068-NNSOY010-80	28	47	2.8	51.3	63.8	55.8	57.0	5
15	74068-NNSOY012-80	26	46	2.1	53.7	61.3	55.8	56.9	6
16	74068-NNSOY014-80	27	47	2.0	49.2	62.3	61.3	57.6	4
17	74068-NNSOY016-80	28	48	2.0	44.8	59.9	57.1	53.9	20
18	74068-NNSOY027-80	28	46	2.1	49.3	59.3	55.1	54.6	16
19	74068-NNSOY036-80	28	48	1.9	50.5	55.7	56.1	54.1	18
20	74068-NNSOY037-80	26	47	2.2	51.1	59.6	58.4	56.4	8
21	74068-NNSOY041-80	27	47	2.0	46.5	57.6	57.0	53.7	21
22	74074-NNSOY001-80	22	41	2.1	48.2	58.4	54.5	53.7	22
23	74074-NNSOY025-80	22	46	2.1	44.5	59.0	62.1	55.2	13
24	74074-NNSOY029-80	21	44	2.3	50.5	58.6	57.9	55.7	11
25	AP10	15	43	3.3	47.0	57.4	55.6	53.3	24
26	HP20-20	21	44	2.7	47.6	60.4	58.4	55.4	12
27	VICKERY	26	46	3.2	46.2	59.3	57.2	54.2	17
28	HARCOR	29	49	3.2	45.9	61.8	57.1	54.9	14
	MEAN	25	45	2	49	60	56	55	
	C.V.	5.5	4.6	13	6.5	5.7	6.5	7.0	
	LSD(.05)	1.4	1.7	0.3	3.6	4.0	5.6	3.2	

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1982 Y3-02 TRIALS (LOC1-SHEFFIELD, IA * LOC2-ALGONA, IA * LOC3-MASON CITY, IA * LOC4-ITHACA, MI * LOC5-SOUTH BEND, IN)

ENTRY	PEDIGREE	MATURITY	HEIGHT	LODGING	LOC 1 YIELD	LOC 2 YIELD	LOC 3 YIELD	LOC 4 YIELD	LOC 5 YIELD	MEAN YIELD	RANK
1	74011-NNS11024-80	27	37	1.8	61.7	63.2	56.1	54.6	47.0	56.5	8
2	74069-NNS30031-80	26	36	1.9	58.3	60.3	56.9	49.9	46.7	54.4	22
3	74074-NNS Y047-80	28	36	2.0	56.7	58.5	60.8	54.2	55.8	57.2	4
4	75135-NNS Y004-80	27	35	1.6	58.7	61.8	57.3	49.8	45.6	54.6	19
5	74022-NNS Y049-80	29	35	2.3	60.3	59.4	58.4	53.2	50.2	56.3	9
6	75103-NNS Y004-80	29	41	1.9	57.0	60.9	54.8	52.0	44.4	53.8	24
7	74022-NNS Y008-80	28	38	2.1	61.3	63.5	55.5	56.1	48.5	57.0	5
8	74068-NNS Y012-80	29	40	1.8	59.5	64.3	55.9	49.3	47.5	55.3	12
9	74068-NNS Y037-80	29	38	1.9	55.7	60.2	56.4	52.2	41.9	53.3	26
✓10	74022-NNS Y034-80	28	37	2.1	63.1	63.5	58.7	49.8	51.3	57.3	3
11	74022-NNS Y036-80	28	37	2.0	57.2	60.5	55.1	51.6	51.9	55.3	13
12	74068-NNS Y014-80	29	40	2.1	57.9	61.6	55.6	50.4	49.9	55.1	15
13	75220-NNS Y001-80	29	43	2.1	60.8	64.9	54.4	51.7	56.6	57.7	2
14	75220-NNS Y004-80	30	41	2.1	59.6	63.7	53.3	52.5	45.7	55.0	17
15	75212-NNS32089-80	29	39	2.1	59.1	68.2	57.4	53.3	56.1	58.8	1
16	72546-NNS 3016-75	26	40	2.1	53.9	62.5	54.7	54.8	49.2	55.0	16
17	74022-NNS 27-79	29	43	2.2	60.7	62.6	55.6	51.6	49.5	56.0	11
18	74020-NNS 9-79TN	28	36	1.7	50.6	60.7	52.1	49.3	43.5	51.2	28
19	74020-NNS 9-79BR	29	38	2.0	57.5	60.3	58.4	49.9	47.0	54.6	20
20	72556-NNS 3100-75	29	35	1.7	54.0	64.2	58.5	50.7	38.9	53.3	25
21	74061-NNS 11-79	27	42	2.0	57.2	63.8	54.5	52.6	52.4	56.1	10
22	74061-NNS 3-79	29	42	1.9	55.2	61.2	53.4	55.2	47.6	54.5	21
23	74061-NNS 125-79	28	41	2.1	56.1	64.3	56.5	52.7	55.1	56.9	6
24	72541-NNS 1090-75	29	38	2.3	55.3	56.4	52.0	48.5	49.3	52.3	27
25	HP20-20	26	37	2.1	59.5	58.2	56.6	50.1	49.1	54.7	18
26	WEDER	27	38	2.7	56.8	58.4	56.7	49.3	49.0	54.0	23
27	AP200	28	41	2.4	57.6	62.2	58.0	51.1	54.0	56.6	7
28	VICKERY	29	40	2.9	58.6	55.3	57.6	49.7	54.2	55.1	14
	Mean	27.7	38.3	2.0	57.8	61.5	56.1	51.6	49.5	55.3	
	LSD (.05)	0.9	3.8	0.5	5.4	5.9	ns	ns	8.4	2.7	
	CV (%)	4.2	6.1	13.7	5.8	5.9	5.4	6.0	10.5	6.7	

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APPENDIX II

APPENDIX III

APPENDIX IV

APPENDIX V

"EXHIBIT E"
(No. 8600056, 'AP 2190')

Nickerson American Plant Breeders, through various changes in corporate structure and purchases, are sole owners of the assets of the previous companies North American Plant Breeders and AgriPro, Inc. The ownership comprises all the soybean genetic material, including the variety AP 2190.

Wayne Ellingson
Signature

Wayne R. Ellingson

Director of Soybean Research