No. 8700108

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 3132'

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* 30th *day of* October *in the year of our Lord one thousand nine hundred and* eighty-seven.

Attest:

Kenneth R. Evans
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Richard E. Lyng
Secretary of Agriculture

APPROVAL EXPIRES 4-30-89

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

FORM APPROVED: OMB NO. 0581-0065

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)	2. TEMPORARY DESIGNATION	3. VARIETY NAME
Nickerson American Plant Breeders		AP 3132

4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code)	5. PHONE (Include area code)	FOR OFFICIAL USE ONLY
5201 Johnson Drive P.O. Box 2955 Mission, KS 66205	(913) 384-4940	PVPO NUMBER 8700108

6. GENUS AND SPECIES NAME	7. FAMILY NAME (Botanical)	FILING	
Glycine Max	Leguminosae	DATE	April 1, 1987
		TIME	2:00 ☐ A.M. ☑ P.M.

8. KIND NAME	9. DATE OF DETERMINATION	FEES RECEIVED	
Soybean	January 1983	AMOUNT FOR FILING	$ 1800.00
		DATE	March 30, 1987
		AMOUNT FOR CERTIFICATE	$ 200.00
		DATE	September 25, 1987

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	12. DATE OF INCORPORATION
Delaware	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
R.R. #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 Variety *(Request form from Plant Variety Protection Office.)*
d. ☐ Exhibit D. Additional Description of Variety.
e. ☒ Exhibit E. Statement of the Basis of Applicant's Ownership.

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

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

A small quantity of seed was sold in the spring of 1986

☒ Yes *(If "Yes," give names of countries and dates)* U.S.A.
☐ 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	DATE
Wayne Ellingson	12/29/86
SIGNATURE OF APPLICANT	**DATE**
R E Heiner	1/5/87

FORM WA-470 (7-84) (Edition of 3-84 is obsolete.)

"EXHIBIT A"
ORIGIN AND HISTORY OF 'AP 3132'

1. AP 3132 originated in Iowa from a hand pollinated cross of 'AP 350' and 'Woodworth'. The cross was made during the summer of 1977. The F1, F2 and F3 generations were grown in Brazil during 1977-79. F2 and F3 generations were advanced using a modified single seed decent technique. The F4 generation was grown in Iowa during the summer of 1979. Single plants of the cross were selected and seed was planted as a progeny row in 1980.

2. In 1982, single plants of the variety were reselected and grown as progeny rows in 1983. Only rows conforming to a standard were harvested and bulked.

   The genetic make-up of 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 3132 has been in yield tests since 1981. See the attached for 1982-86 data. AP 3132 has been tested under the experimental designation 77054-A80-21268 or AP 3132.

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

"EXHIBIT B"

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

AP 3132 is most similar to the variety 'Pella'. However, AP 3132 differs from Pella in flower color, hypocotyl color, pubescence color, seed coat luster and hilum color.

1. AP 3132 has white flowers where Pella has purple. The associated hypocotyl color trait is green for AP 3132 where Pella is purple.

2. The pubescence color of AP 3132 is gray where Pella is tawny.

3. AP 3132 has shiny seed coat luster where Pella is dull.

4. AP 3132 has yellow hilum color where Pella has black.

FORM APPROVED: OMB NO. 0581-0055

EXHIBIT C
(Soybean)

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

OBJECTIVE DESCRIPTION OF VARIETY
SOYBEAN (Glycine max L.*)*

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
Nickerson American Plant Breeders		AP 3132

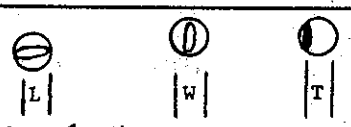
ADDRESS *(Street and No., or R.F.D. No., City, State, and Zip Code)*
5201 Johnson Drive
Mission, KS 66205

FOR OFFICIAL USE ONLY
PVPO NUMBER
8700108

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]). Starred characters ★ are considered fundamental to an adequate soybean variety description. Other characters should be described when information is available.

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)

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

★ 4. SEED SIZE: (Mature Seed)

[1][8] Grams per 100 seeds

★ 5. HILUM COLOR: (Mature Seed)

[2] 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:

[1] 1 = Low 2 = High

★ 8. SEED PROTEIN ELECTROPHORETIC BAND:

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

★ 9. HYPOCOTYL COLOR:

[1] 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:

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

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:**

[1] 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:**

[ ][6] 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)*

★ [0] 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)

★ [0] 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)*

★ [1] Race 1 [1] 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)*

★ [0] Race 1 [0] Race 2 [1] Race 3 [0] 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	Stine 2050	Seed Coat Luster	Corsoy
Leaf Shape	Century	Seed Size	HP 3033S
Leaf Color	Stine 2050	Seed Shape	Century
Leaf Size	Century	Seedling Pigmentation	Williams

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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	124	1.8	94	7.4	11.8	37.9	20.3	18	N/D
Pella Name of Similar Variety	126	1.8	98	7.2	11.8	N/D	N/D	17	N/D

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.

RECEIVED
MAS
MAR 30 1987
Plant Variety
Protection Ofc.

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1982 Y2-02 TRIALS (LOC1-SHEFFIELD, IA * LOC2-ALGONA, IA * LOC3-MASON CITY, IA * LOC4-ITHACA, MI)

ENTRY	PEDIGREE	MATURITY	HEIGHT	LODGING	LOC 1 YIELD	LOC 2 YIELD	LOC 3 YIELD	LOC 4 YIELD	MEAN YIELD	RANK
1	77032-NNSA19250-80-L	33	37	2.0	60.9	63.6	59.1	55.0	59.6	1
2	77048-NNSB35197-80	27	40	2.2	54.8	59.9	53.6	50.9	54.8	16
✓3	77054-NNSA21268-80	35	39	2.6	60.8	64.1	51.2	54.9	57.8	4
4	77038-NNSA32263-80NR	26	38	1.6	54.5	56.2	53.4	50.4	53.6	21
5	77087-NNSA15167-80	28	41	2.6	59.6	62.6	53.8	56.0	58.0	3
6	77096-NNSA20213-80	28	41	2.4	57.1	59.4	55.8	52.1	56.1	10
7	77096-NNSB30252-80	29	41	2.7	52.7	59.0	53.0	54.0	54.7	17
8	77100-NNSA27247-80	29	42	2.6	57.6	63.2	53.6	51.9	56.6	8
9	76023-NNSA02258-80NR	28	40	2.7	59.4	58.7	53.4	53.0	56.1	9
10	76038-NNSB35010-80	25	35	2.0	57.2	57.6	49.6	50.3	53.7	20
11	76042-NNSB01053-80	29	40	2.3	51.9	53.9	50.3	47.7	51.0	26
12	76042-NNSB02044-80	26	38	2.0	55.4	61.3	52.3	52.0	55.3	14
13	76113-NNSA10019-80	28	40	2.3	52.2	53.2	51.9	50.4	51.9	25
14	76117-NNSA14025-80	27	39	2.4	56.2	58.8	50.0	46.6	52.9	24
15	76118-NNSB05078-80	27	35	1.5	57.9	62.0	52.4	55.6	57.0	7
16	76140-NNSA24007-80	27	42	2.3	58.4	58.6	52.4	52.5	55.5	13
17	76149-NNSA28035-80	29	37	2.1	54.4	56.2	52.1	54.0	54.2	18
18	76157-NNSA32008-80	29	38	2.8	59.3	64.3	56.8	53.8	58.6	2
19	76189-NNSB05118-80	27	38	2.6	48.1	56.8	46.3	47.1	49.6	28
20	76195-NNSB12137-80	28	40	2.6	54.6	52.6	47.0	46.8	50.3	27
21	76195-NNSB13115-80	28	38	2.2	59.2	60.3	49.3	47.8	54.1	19
22	76196-NNSB16116-80	28	40	2.3	62.2	57.5	51.2	52.6	55.9	11
23	76196-NNSB17111-80	28	39	2.6	58.9	58.6	52.5	53.4	55.9	12
24	76211-NNSA40040-80	28	39	2.1	55.3	55.5	48.5	52.8	53.0	23
25	76211-NNSA02052-80	27	37	2.1	54.5	57.5	50.8	51.9	53.6	22
26	WEBER	27	40	2.9	58.0	57.2	53.9	50.1	54.8	15
27	HP20-20	26	39	2.2	56.8	62.6	55.8	55.0	57.5	6
28	AP200	27	41	2.6	58.5	63.1	58.1	51.1	57.7	5
	MEAN	28	39	2	57	59	52	52	55	
	C.V.	3.6	5.4	16	6.4	4.7	5.6	6.3	5.8	
	LSD(.05)	0.9	1.3	0.2	4.2	3.2	3.4	3.8	2.0	

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NORTH AMERICAN PLANT BREEDERS INC.
SOYBEAN TRIAL SUMMARY REPORT 1983

OVER-LOCATION MEANS TRIAL #Y3-2301 LOCS: AM, BK, CR, JF, SB, VW

ENTRY NO.	VARIETY OR LINE	MAT.	HT. (in)	LODGE (1-5)	AM YIELD	BK YIELD	CR YIELD	JF YIELD	SB YIELD	VW YIELD	MEAN YIELD	YIELD RANK	WORTH	SEED QUAL
23	AP200	10.4	37.4	2.8	40.0	52.0	35.0	53.3	39.6	41.3	43.6	27	2.9	2.6
03	76045-B80-5063	11.7	36.2	1.9	50.2	61.0	43.0	61.1	39.0	42.0	49.4	20	1.8	1.9
04	76195-B80-12120	12.0	37.5	2.4	45.8	53.2	39.6	47.1	31.0	35.7	42.1	28	2.7	2.1
24	CORSOY 79	12.8	39.2	2.9	46.4	57.4	44.7	54.5	38.6	40.1	46.9	25	2.8	2.1
26	AP240	13.1	33.8	1.7	52.8	59.4	46.0	58.9	40.0	42.3	49.9	19	1.1	2.0
05	76035-B80-25012	14.6	35.8	2.0	54.2	60.2	40.3	61.7	49.2	42.0	51.3	12	1.9	2.2
21	73046-78-9BR	15.6	38.0	2.2	53.3	61.2	43.4	68.2	44.0	41.6	51.9	7	2.6	1.9
07	76194-B80-9123	15.7	37.4	1.9	49.0	58.2	43.8	59.8	39.4	44.4	49.1	22	1.4	1.9
20	73046-78-9TN	16.0	37.7	1.9	52.6	64.3	47.4	65.1	38.8	35.6	50.6	17	1.9	2.0
19	72558-79-102	16.2	35.2	1.7	50.0	56.5	42.4	55.6	41.1	40.0	47.6	24	1.7	2.1
22	73053-78-13	16.8	35.6	1.7	58.3	67.0	39.3	66.4	47.2	38.6	52.8	4	1.7	1.9
25	CENTURY	17.0	36.7	1.6	51.7	59.1	45.5	59.7	49.0	38.0	50.5	18	1.4	2.1
12	76260-A80-33047	17.8	35.8	1.9	57.9	63.4	45.7	64.0	38.8	40.5	51.7	10	1.4	2.0
06	76191-B80-6112	18.6	38.8	2.2	56.6	58.2	46.2	60.8	42.7	40.2	50.8	14	1.7	2.2
✓02	77054-A80-21268	19.2	36.9	1.7	58.1	59.6	50.0	64.0	43.2	39.1	52.3	5	1.4	2.2
01	77032-A80-19250	19.6	34.1	1.6	53.8	78.3	45.5	64.4	35.0	43.2	53.4	1	1.6	2.2
13	76262-A80-39075	19.7	39.9	2.1	54.7	59.1	43.2	66.0	52.3	37.9	52.2	6	2.2	2.0
11	77027-A80-16262	20.8	41.3	2.4	53.8	57.6	44.5	70.5	35.3	33.1	49.1	23	2.6	2.1
14	76013-A80-33218	20.9	43.2	2.9	48.8	61.1	40.9	60.6	42.5	42.8	49.4	21	2.9	2.3
10	76201-B80-28140	21.1	38.6	2.2	51.2	68.6	42.0	65.0	50.1	42.5	53.2	2	2.1	2.0
18	77038-B80-10184	21.7	37.3	2.0	50.4	53.4	44.6	59.1	33.6	35.2	46.1	26	2.0	2.2
27	HS265	21.8	35.1	1.7	59.1	64.1	44.6	62.0	45.6	42.0	52.9	3	1.7	2.1
15	76025-A80-7213	22.7	38.4	1.8	56.4	67.2	43.2	63.5	34.3	40.3	50.8	15	2.1	2.3
09	77058-A80-23153	23.3	43.3	2.6	54.9	57.6	42.9	63.1	44.7	41.0	50.7	16	2.9	2.0
16	77032-A80-18109	23.3	37.6	2.0	56.4	60.8	49.2	65.2	42.2	36.9	51.8	8	2.3	2.2
17	77031-A80-24265	23.3	42.3	2.4	53.9	65.2	43.2	60.2	47.3	40.8	51.8	9	2.7	2.1
28	PELLA	23.7	38.8	1.8	56.0	68.7	45.9	59.7	42.7	35.3	51.4	11	2.2	2.0
08	77058-A80-17151	25.1	37.2	2.5	56.6	60.2	53.6	62.1	35.7	39.2	51.2	13	2.4	2.2
	MEAN	18.4	37.8	2.1	53.0	61.2	44.1	61.5	41.5	39.7	50.2		2.1	2.1
	C.V.	12.8	7.6	17.8	7.9	9.6	7.0	5.7	12.7	11.0	9.8		25.2	10.2
	LSD(.05)	3.1	1.8	.3	6.8	9.5	5.1	5.7	8.6	7.1NS	4.4		.7	.3
	NO. OF REPS	9.0	18.0	18.0	3.0	3.0	3.0	3.0	3.0	3.0	18.0		9.0	9.0

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NICKERSON AMERICAN PLANT BREEDERS
SOYBEAN TRIAL SUMMARY REPORT 1984

OVER-LOCATION MEANS TRIAL #CV-2301 LOCS:AM,BK,HA,K1,SB,VW AM,BK,

ENTRY NO.	VARIETY OR LINE	MAT.	HT. (in)	LODGE (1-5)	AM YIELD	BK YIELD	HA YIELD	K1 YIELD	SB YIELD	VW YIELD	MEAN YIELD	YIELD RANK	WORTH	SEED QUAL
16	A2575	12.5	31.6	1.5	28.8	44.5	57.2	21.2	21.2	40.4	35.6	20	2.3	2.3
10	77054-B80-40207	12.7	27.9	1.9	32.1	46.9	45.6	21.7	22.4	37.5	34.4	24	1.7	2.6
11	76118-B80-05078	13.2	28.3	1.4	30.7	45.2	38.1	21.7	24.6	37.5	33.0	28	1.7	2.5
09	75220-80-Y001	13.3	33.2	1.7	29.8	51.7	46.1	22.5	24.9	44.4	36.6	16	1.7	2.6
28	A2680	13.5	28.2	2.0	31.2	43.6	33.6	22.8	25.5	43.6	33.4	27	2.0	2.4
17	S1492	13.8	30.2	2.1	32.5	41.8	43.2	21.6	25.9	43.0	34.7	23	1.7	2.3
25	KELLER	14.8	32.1	1.8	30.0	45.0	50.2	22.2	18.4	43.4	34.9	22	2.0	2.3
02	76035-B80-25012	14.9	29.9	1.9	27.5	42.5	45.2	20.8	22.6	41.6	33.4	25	1.0	2.5
22	P2480	15.2	30.7	1.6	30.9	48.7	44.8	25.9	23.7	42.8	36.1	18	1.7	2.2
20	BSR 201	15.5	29.9	1.9	34.4	49.9	50.7	25.2	21.9	49.3	38.6	6	1.3	2.3
14	AP 240	16.0	29.3	1.5	32.0	50.0	51.2	24.8	17.4	48.6	37.4	12	1.0	2.3
19	CENTURY	16.7	32.9	1.7	30.3	48.1	51.5	23.3	19.7	46.9	36.7	15	1.3	2.3
13	HP 2530	16.8	33.3	1.9	32.8	37.7	44.5	25.8	23.3	48.9	35.5	21	1.7	2.5
18	S2596	17.2	31.9	1.9	30.9	43.2	51.5	25.6	25.1	48.7	37.5	10	2.7	2.3
06	76201-B80-28140	17.5	30.4	2.0	37.5	51.4	42.3	21.9	25.2	42.1	36.7	14	2.0	2.3
05	76262-A80-39075	17.6	33.1	1.7	31.0	49.0	52.1	24.1	22.1	48.4	37.8	8	2.7	2.4
01	74019-80-Y028E	17.7	33.0	2.2	31.7	51.3	56.5	28.1	26.3	53.0	41.1	1	2.7	2.1
04	77032-A80-19250	17.9	26.6	1.5	27.2	48.8	39.4	18.4	21.3	45.4	33.4	26	1.7	2.6
26	STINE 2050	18.0	30.9	1.8	32.9	54.7	46.9	26.6	27.3	47.1	39.2	4	1.3	2.2
27	HP 3033S	18.3	31.8	2.1	28.1	47.9	49.7	25.1	25.3	44.5	36.8	13	2.7	2.2
08	77031-A80-24265	18.8	35.6	1.8	28.9	44.8	57.0	22.6	26.9	44.3	37.4	11	2.7	2.4
21	HS 265	18.8	30.6	1.5	33.7	54.1	51.4	24.3	23.0	48.0	39.1	5	1.3	2.5
✓03	77054-A80-21268	19.3	31.4	1.6	35.2	55.5	55.3	25.6	27.5	47.5	41.1	2	2.3	2.4
07	77032-A80-18109	20.0	30.7	1.8	29.6	52.2	57.7	23.5	17.2	46.7	37.8	9	2.3	2.5
15	PELLA	20.0	34.8	1.7	34.5	46.5	55.0	24.3	17.1	49.9	37.9	7	2.0	2.2
23	AP 330	21.1	33.4	1.8	27.6	47.3	52.4	21.2	16.4	51.6	36.1	19	2.3	2.4
24	HP 3440	21.1	33.6	1.8	29.9	46.3	51.1	25.4	17.2	47.3	36.2	17	2.0	2.5
12	77063-B80-22216	21.2	36.7	2.4	30.5	52.6	51.0	38.7	23.5	48.3	40.8	3	2.7	2.2
	MEAN	16.9	31.5	1.8	31.1	47.9	49.0	24.1	22.6	45.7	36.7		1.9	2.4
	C.V.	11.7	9.5	20.9	9.0	9.6	12.4	15.3	13.6	9.8	12.7		.0	13.7
	LSD(.05)	2.2	1.8	.3	4.6	7.5	9.9	6.0	5.0	7.3	4.2		.0NS	.3
	NO. OF REPS	12.0	18.0	18.0	3.0	3.0	3.0	3.0	3.0	3.0	18.0		3.0	15.0

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NICKERSON AMERICAN PLANT BREEDERS
SOYBEAN TRIAL SUMMARY REPORT 1985

ALL-LOCATION MEANS TRIAL #CV-3001 LOCS. LI, HA, AD, BK, CI, UI, BL

VARIETY NO.	VARIETY OR LINE	MAT.	HT. (in)	LODGE (1-5)	LI YIELD	HA YIELD	AD YIELD	BK YIELD	CI YIELD	UI YIELD	BL YIELD	MEAN YIELD	YIELD RANK	SEED QUAL
	78015-B81-18024	20.9	33.5	1.4	41.6	45.2	55.6	64.2	53.5	59.1	53.4	53.3	15	1.9
	HS 265	22.1	32.1	1.3	30.3	32.9	52.8	55.1	51.3	57.7	52.2	47.5	28	2.2
	79101-B81-36081	22.3	36.2	1.7	39.3	51.9	53.3	62.2	54.0	52.0	54.8	52.5	22	2.1
	76262-A80-39075	22.3	39.6	2.0	49.7	43.5	53.5	59.2	59.3	56.9	54.5	53.8	13	2.2
	77054-A80-21268	22.4	35.8	1.8	40.9	41.1	58.2	63.4	51.8	53.3	52.3	51.6	26	2.3
	STINE 2050	22.6	34.8	1.9	41.6	41.9	56.7	63.8	52.0	53.9	56.4	52.3	24	2.3
	PELLA	23.3	39.7	1.7	41.8	46.9	56.8	67.2	52.6	53.0	51.6	52.9	18	2.2
	AP 3023	23.9	37.8	2.3	44.2	46.9	54.0	66.9	54.4	56.9	51.4	53.5	14	2.2
	HP 3033S	24.4	36.4	1.8	42.6	41.2	59.4	70.0	58.1	56.6	55.9	54.8	7	2.2
	78038-B81-38024	26.4	38.4	1.9	42.9	50.4	50.6	65.8	52.0	53.1	53.2	52.6	20	2.2
	78036-B81-33032	26.8	36.7	2.6	39.7	46.4	54.6	61.3	58.9	53.3	51.5	52.3	23	2.4
	HP 3440	27.0	39.4	2.0	41.2	48.8	59.7	68.5	55.9	48.2	54.7	53.9	12	2.7
	77063-B80-22216	27.1	40.5	2.9	43.2	44.0	54.9	64.2	49.7	56.6	53.0	52.2	25	2.2
	HARPER	27.2	35.3	1.6	45.9	46.7	53.6	66.5	59.7	62.1	57.8	55.9	4	2.0
	S30-31	27.5	39.2	2.6	44.0	47.4	55.9	59.0	53.6	53.7	56.7	52.9	19	2.1
	A3127	27.9	36.3	1.6	44.3	47.9	59.4	73.1	62.0	57.1	51.7	56.5	1	1.9
	HP 3700	30.4	39.9	2.2	43.9	40.1	52.1	61.6	55.2	53.8	50.4	51.0	27	2.0
	78088-B81-31052	30.6	38.1	2.3	45.3	40.4	59.1	74.5	56.9	52.5	53.9	54.7	8	1.9
	79101-B81-05142	30.7	39.4	2.8	43.5	50.1	54.6	63.4	57.9	50.3	51.0	53.0	17	2.0
	78098-B81-37061	30.9	39.7	3.1	42.4	48.2	51.4	68.3	52.2	53.3	52.2	52.6	21	2.0
	IN 0433	31.8	40.2	2.3	43.0	56.3	57.3	68.5	57.6	53.9	53.4	55.7	5	2.5
	WILLIAMS 82	32.0	41.4	2.2	46.8	56.1	56.4	65.1	57.4	50.1	50.4	54.6	9	2.0
	A3420	32.1	41.2	2.5	47.3	47.6	58.9	68.5	58.4	52.8	51.3	55.0	6	1.8
	79101-B81-01121	32.3	37.1	1.5	44.8	51.2	53.8	63.8	60.6	61.1	56.5	56.0	3	2.0
	P3981	33.1	40.0	2.1	46.3	43.5	57.7	70.4	53.5	51.2	48.8	53.1	16	2.0
	79101-B81-22117	33.3	38.1	1.6	46.0	41.9	60.2	70.7	59.0	59.0	55.0	56.0	2	2.0
	79101-B81-38124	33.6	40.7	1.8	46.7	51.2	55.4	65.5	55.6	52.2	53.0	54.2	10	2.4
	A3966	35.1	43.4	2.5	43.4	47.0	54.9	69.2	60.8	53.5	49.1	54.0	11	1.9
	MEAN	27.9	38.2	2.1	43.3	46.3	55.7	65.7	55.8	54.5	53.1	53.5		2.1
	C.V.	6.3	6.9	17.1	9.6	11.3	5.3	7.5	4.2	6.2	8.0	8.1		9.8
	LSD(.05)	2.0	2.1	.4	6.7	8.5	4.8	8.0	3.8	5.5	6.3NS	3.5		.2
	NO. OF REPS	15.0	21.0	21.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	21.0		15.0

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ENTRY NO.	VARIETY	MAT	HT	LODGE	YIELD BL	BK	CR	HA	OI	MT	UI	WI	MEAN	RANK	% CHECK
14	79025-A82-26102	16.4	33.0	2.6	63.0	50.8	54.4	12.2	54.3	44.3	50.9	56.4	48.3	28	84
17	AP 3023	16.9	36.8	2.8	61.1	50.8	47.1	36.7	46.7	56.4	44.6	63.3	50.8	22	89
10	AP 3132	17.3	36.3	2.4	51.5	50.2	56.1	36.4	56.1	56.1	36.2	58.3	50.1	23	87
18	HP 3033S	17.6	35.1	2.7	54.5	49.4	58.2	32.2	49.5	51.0	43.7	59.5	49.8	24	87
25	STINE2050	19.2	34.5	2.6	58.2	53.4	49.2	16.8	49.9	52.7	48.0	68.0	49.5	26	86
23	A2943	19.6	35.9	1.9	64.6	55.2	64.5	41.8	50.6	59.1	46.5	66.4	56.1	4	98
9	78015-B82-34268	19.7	33.4	1.8	60.0	53.4	58.1	32.6	46.9	55.1	47.7	56.9	51.3	19	90
22	PELLA	19.9	40.5	2.3	51.0	55.1	61.6	43.7	50.2	48.9	45.8	65.0	52.7	12	92
19	HP 3440	20.1	38.8	2.5	56.7	52.0	63.0	19.5	48.7	51.2	38.3	66.3	49.5	25	86
27	S30-31	21.2	38.2	2.7	54.6	52.3	55.6	36.7	56.1	57.2	42.9	60.9	52.0	17	91
7	79120-B82-12174	21.7	38.7	2.4	54.2	53.6	63.2	37.1	47.8	47.1	43.1	60.0	50.8	21	89
8	79116-A82-23151	22.8	40.4	2.2	54.5	56.7	62.1	45.4	52.0	52.4	36.8	61.9	52.7	11	92
5	79156-B82-29268	23.2	33.0	1.9	60.2	53.2	52.0	37.9	52.8	52.6	42.8	58.0	51.2	20	89
21	HARPER	23.8	35.4	2.0	57.8	58.0	56.1	42.6	52.3	51.2	44.7	56.3	52.4	15	91
11	AP 3773	24.8	38.4	2.4	62.9	55.9	59.7	55.5	50.9	55.2	38.1	62.0	55.0	6	96
4	79176-M82-849	25.7	40.8	2.2	52.4	53.4	57.8	51.3	52.1	53.3	40.0	58.7	52.4	13	91
2	79176-B82-23265	26.2	41.1	2.4	58.2	55.4	65.6	58.6	53.0	51.8	45.3	63.8	56.5	3	99
20	HP 3700	26.3	39.5	2.7	47.3	58.6	62.3	49.4	51.4	46.6	31.8	66.8	51.8	18	90
24	A3127	26.3	36.0	2.3	60.1	56.9	54.0	55.6	59.5	59.9	44.2	65.9	57.0	2	100
6	79052-A82-16251	26.4	35.4	2.2	62.2	55.2	56.1	35.1	52.8	58.8	47.6	58.8	53.3	9	93
1	79027-B82-29058	26.9	41.7	2.6	58.6	60.1	66.3	62.3	51.6	51.3	44.6	63.3	57.3	1	100
3	79116-B82-38141	27.7	35.9	1.9	53.3	51.5	50.9	50.0	46.0	52.4	33.4	50.7	48.5	27	85
12	EX 3977	27.7	38.0	2.3	58.9	60.3	62.5	55.1	51.7	53.6	39.8	63.7	55.7	5	97
28	P3981	27.9	39.6	2.4	54.8	57.5	68.6	49.6	53.2	49.7	45.3	61.2	55.0	7	96
13	EX 3988	28.9	37.3	2.2	58.7	58.4	58.5	34.8	52.0	50.3	40.4	66.4	52.4	14	91
15	WMS 82	29.3	42.2	2.6	57.4	52.9	58.8	59.3	47.5	51.2	37.8	59.9	53.1	10	93
26	S3999	30.4	37.4	2.4	54.9	53.3	57.6	43.1	48.5	54.8	42.2	61.4	52.0	16	91
16	A3427	31.3	40.9	2.6	57.7	57.3	57.3	52.3	49.8	50.1	42.1	63.3	53.7	8	94
	MEAN	23.8	37.6	2.3	57.1	54.7	58.5	42.3	51.2	52.6	42.3	61.5	52.5		92
	C.V.	8.0	8.0	34.5	7.8	4.4	7.6	24.4	6.1	7.9	10.9	7.9	9.6		
	NO. OF REPS	18.0	24.0	24.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	24.0		

LOCATIONS: BL - BLOOMINGTON, IL; BK - BROOKSTON, IN; CR - CRAWFORDSVILLE, IN; HA - HAVILAND, OH; OI - OSKALOOSA, IA; MT - MONTICELLO, IL; UI - URBANA, IL; WI - WASHINGTON, IA

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"EXHIBIT E"

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 3132.

Wayne R. Ellingson
Signature

Wayne R. Ellingson

Director of Soybean Research