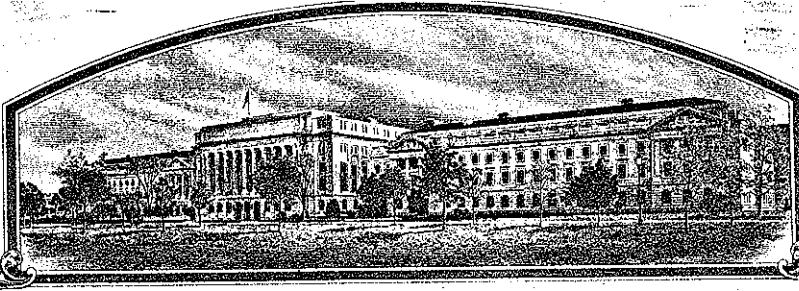


No.

7800101



# THE UNITED STATES OF AMERICA

**TO ALL TO WHOM THESE PRESENTS SHALL COME:**

## Northrup King Company

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. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'S4055'



*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 21st day of December in the year of our Lord one thousand nine hundred and seventy-eight*

Attest:

*[Signature]*  
Commissioner  
Plant Variety Protection Office  
Grain Division  
Agricultural Marketing Service

*[Signature]*  
Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE  
 AGRICULTURAL MARKETING SERVICE  
 LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

FORM APPROVED  
 OMB NO. 40-R3822

**APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE**

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

INSTRUCTIONS: See Reverse.

1a. TEMPORARY DESIGNATION OF VARIETY		1b. VARIETY NAME		FOR OFFICIAL USE ONLY	
		S4055		PV NUMBER 7800101	
2. KIND NAME		3. GENUS AND SPECIES NAME		FILING DATE	
Soybeans		Glycine max		8-03-78	
				TIME	
				10:00 <input checked="" type="checkbox"/> A.M. P.M.	
4. FAMILY NAME (BOTANICAL)		5. DATE OF DETERMINATION		FEE RECEIVED	
Leguminosae		October 1976		\$ 500.00	
				\$ 250.00	
6. NAME OF APPLICANT(S)		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)		8. TELEPHONE AREA CODE AND NUMBER	
Northrup King Co.		P.O. Box 959 Minneapolis, MN 55440		612-781-8011	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.)			10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION		11. DATE OF INCORPORATION
Corporation			Delaware		1896
12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: Allenby L. White Northrup King Co. P.O. Box 959 Minneapolis, Minn. 55440					

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

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES?  YES  NO (If "Yes," give name of countries and dates.)

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES?  YES  NO (If "Yes," give name of countries and dates.)

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL?  YES  NO

17. The applicant(s) declare(s) that a viable sample of basic seed 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 Act.

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

July 28, 1978  
 (DATE)

Allenby L. White  
 (SIGNATURE OF APPLICANT)

1

(DATE)

(SIGNATURE OF APPLICANT)

## INSTRUCTIONS

**GENERAL:** Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, 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 uniformity and 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, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- 15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

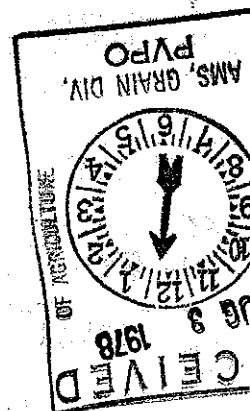


EXHIBIT A  
ORIGIN AND BREEDING HISTORY OF S4055 SOYBEANS

- 1971 100 F<sub>4</sub> progeny rows from the cross "Beeson x Cutler" were grown. One of these, numbered 3247, was selected on the basis of agronomic appearance to be tested in a preliminary yield trial.
- 1971-72 A sample of 3247 was grown, along with other experimental lines, in an F<sub>5</sub> increase block. Ten plants were harvested and threshed individually for planting in an F<sub>6</sub> observation row.
- 1972 3247 was tested at Washington, Iowa, and Waverly, Illinois. The ten progeny rows from the plants selected the previous winter were grown. One of these, designated 103247, was selected on the basis of agronomic appearance, uniformity, and performance of the parent strain, 3247, for further testing.
- 1973 103247 was tested at Washington, Iowa, Carrollton, Missouri, and Waverly, Illinois.
- 1974 103247 was tested at 8 midwestern locations.
- 1975 103247 was tested at 8 midwestern locations. 100 representative single plants were harvested and threshed individually.
- 1976 103247 was tested at 8 midwestern locations. The 100 plants selected in 1975 were grown as 100 progeny rows. These were checked carefully for uniformity and conformity to type. Any rows containing off-types were eliminated, the remaining rows were bulk harvested to produce pedigree seed.
- 1977 103247 was tested at 8 midwestern locations. Breeder seed was grown from the pedigree seed produced in 1976.
- 1978 103247 was named S4055 and released to foundation seed growers.

S4055 is stable and uniform for all normal descriptive characteristics. A very low frequency of variants would be expected through mutation, outcrossing, or mechanical mixture. These will be prevented from increasing in frequency by use of the pedigree purification system referred to above.

2

9/14/78  
Date

*Allen H. White*  
Signature

7800101

EXHIBIT B  
NOVELTY STATEMENT FOR S4055 SOYBEAN

S4055 is most similar to Bonus in maturity, seed coloration, plant habit, and appearance. It can be differentiated from Bonus on the basis of reaction to Race 1 of Phytophthora root rot. S4055 is susceptible, Bonus is resistant.

Data contrasting S4055 soybeans from other Group III and IV varieties.

	Color of		Hilum	Race 1 Phytoph.
	Pubescence	Flower		
S4055	G <i>afs</i>	P	Imp Bl	S
Wayne	Br	W	Bl	S
Calland	Br	P	Bl	R
Woodworth	Br	W	Bl	S
Williams	Br	W	Bl	S
Bonus	G	P	Imp Bl	R
Cutler 71	Br	P	Bl	R
Kent	Br	P	Bl	S
SRF 307 B	Br	W	Br	S
SRF 307 P	Br	W	Br	R
SRF 350	Br	W	Bl	S
SRF 400	Br	P	Bl	R
SRF 425	Br	P	Bl	S
SRF 450	Br	P	Bl	
A3585	Br	P	Br	S
Agripro 27	Br	P	Bl	S
Mitchell	Br	P	Br	S

Key G=Grey  
Br=Brown  
P=Purple  
W=White  
Bl=Black  
Imp Bl=Imperfect Black  
S=Susceptible  
R=Resistant

**OBJECTIVE DESCRIPTION OF VARIETY**  
**SOYBEAN (GLYCINE MAX)**

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S) Northrup King Co.  ADDRESS (Street and No., or R.F.D. No.; City, State, and ZIP Code) P.O. Box 959 Minneapolis, MN 55440	<b>FOR OFFICIAL USE ONLY</b> PVPO NUMBER <b>7800101</b> VARIETY NAME OR TEMPORARY DESIGNATION S4055
--	---

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

1. SEED SHAPE:      1 = SPHERICAL      2 = SPHERICAL FLATTENED      3 = ELONGATE      4 = OTHER (Specify)

2. SEED COAT COLOR:      1 = YELLOW      2 = GREEN      3 = BROWN      4 = BLACK      5 = OTHER (Specify)      SHADE:      1 = LIGHT      2 = MEDIUM      3 = DARK

3. SEED COAT LUSTER:      1 = DULL      2 = SHINY      4. SEED SIZE      1 8 GRAMS PER 100 SEEDS

      8

5. HILUM COLOR:      1 = BUFF      2 = YELLOW      3 = BROWN      4 = GRAY      5 = IMPERFECT BLACK      6 = BLACK      7 = OTHER (Specify)      SHADE:      1 = LIGHT      2 = MEDIUM      3 = DARK

6. COTYLEDON COLOR:      1 = YELLOW      2 = GREEN      7. LEAFLET SIZE (See Reverse):      1 = SMALL      2 = MEDIUM      3 = LARGE

8. LEAFLET SHAPE:      1 = OVATE      2 = OBLONG      3 = LANCEOLATE      4 = ELLIPTICAL      5 = OTHER (Specify)

9. LEAF COLOR (See reverse):      1 = LIGHT GREEN      2 = MEDIUM GREEN      3 = DARK GREEN      10. FLOWER COLOR:      1 = WHITE      2 = PURPLE      3 = OTHER (Specify)

11. POD COLOR:      1 = TAN      2 = BROWN      3 = BLACK      12. POD SET:      1 = SCATTERED      2 = CONCENTRATED

13. PLANT PUBESCENCE COLOR:      1 = GRAY      2 = BROWN      3 = OTHER (Specify)      SHADE:      1 = LIGHT      2 = MEDIUM      3 = DARK

14. PLANT TYPES (See Reverse):      1 = SLENDER      2 = BUSHY      3 = INTERMEDIATE      15. PLANT HABIT:      1 = DETERMINATE      2 = INDETERMINATE      3 = OTHER (Specify)

16. HYPOCOTYL COLOR:      1 = GREEN      2 = PURPLE      17. SEED PROTEIN:      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:      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.)

MM. LENGTH OF SEEDLING         MM. LENGTH OF COTYLEDON         MM. WIDTH OF COTYLEDON

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

<input type="text" value="0"/> BACTERIAL PUSTULE	<input type="text" value="0"/> SOYBEAN CYST	<input type="text" value="0"/> DOWNY MILDEW	<input type="text" value="1"/> PURPLE STAIN	<input type="text" value="0"/> POD AND STEM BLIGHT	<input type="text" value="0"/> ROOT KNOT
<input type="text" value="0"/> FROGEYE	<input type="text" value="0"/> STEM CANKER	<input type="text" value="1"/> PHYTO-PHTHORA	<input type="text" value="0"/> BROWN STEM ROT	<input type="text" value="0"/> TARGET SPOT	<input type="text" value="1"/> BROWN SPOT
<input type="text" value="0"/> BUD BLIGHT	<input type="text" value="0"/> WILDFIRE	<input type="text" value="1"/> RHIZOCTONIA ROT	<input type="text" value="0"/> OTHER (Specify)	<b>4</b>	

## 22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant shape	Williams	Petiole angle	Williams
Leaf shape	Williams	Seed size	Beeson
Leaf color	Bonus	Seed shape	Beeson
Leaf surface	Bonus	Seedling pigmentation	Bonus

## 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	183	2.1	110 cm			41.6	21.7 %	18	
Name of similar variety Bonus	182	2.2	125 cm			44.6	20.4	18	

## 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"

7800101

APPLICATION FOR REVIEW OF SOYBEAN VARIETIES FOR CERTIFICATION  
National Certified Soybean Variety Review Board

APPLICANT'S NAME Northrup King & Co. Date April 10, 1978

ADDRESS P. O. Box 49, Washington, Iowa 52353 Attn: John Thorne

SPONSORING INSTITUTION (If other than applicant) \_\_\_\_\_

BREEDER'S NAME (If other than applicant) \_\_\_\_\_

Variety Name S4055 Experimental Designation 103247

The breeder, the sponsoring institution, or the organization must describe and DOCUMENT in this application those characteristics of the variety which give it distinctiveness by supplying the information requested below. Action will be deferred unless application is sufficiently documented.

- I. Indicate parentage (known variety or strain designation requested), breeding procedure (bulk, pedigree, etc.) and time sequence (generation) used in developing the variety. S4055 originated from an F<sub>5</sub> plant chosen from an

F<sub>3</sub>-derived line from the cross Beeson x Cutler.

II. VARIETY DESCRIPTION

- a. Maturity: \_\_\_\_\_ days earlier, or 3 days later than \* Williams
- b. Flower Color: Purple X, or White \_\_\_\_\_.
- c. Pubescence Color: Brown \_\_\_\_\_, or Gray X.
- d. Pod Color : Black \_\_\_\_\_, Brown \_\_\_\_\_ or Tan X.
- e. Seedcoat Color: Yellow X, Black \_\_\_\_\_, Brown \_\_\_\_\_, Green \_\_\_\_\_ or other (describe) \_\_\_\_\_.
- f. Seed coat luster: Dull \*\* or Shiny \_\_\_\_\_.
- g. Hilum Color: Gray \_\_\_\_\_, Yellow \_\_\_\_\_, Black \_\_\_\_\_, Brown \_\_\_\_\_, Imperfect Black X, Buff \_\_\_\_\_, or other (describe) \_\_\_\_\_.
- h. Seed Shape: Round X, Elongate \_\_\_\_\_, or other (describe) \_\_\_\_\_.
- i. Seed Size: Seed per lb. 2480, and compared to \* Williams - 2680
- j. Plant height, inches: 43.5 compared to \* Williams at 41 inches.
- k. Lodging score: 1 \_\_\_\_\_, 2 2.2, 3 \_\_\_\_\_, 4 \_\_\_\_\_, 5 \_\_\_\_\_ compared to \* Williams which was: 1 \_\_\_\_\_, 2 2.2, 3 \_\_\_\_\_, 4 \_\_\_\_\_, or 5 \_\_\_\_\_. (Based on a score of 1 = erect to 5 = lodged flat).
- l. Leaf size or shape: Large X Medium \_\_\_\_\_, Small \_\_\_\_\_, Ovate X, Oval \_\_\_\_\_, Lanceolate \_\_\_\_\_, or other (describe) \_\_\_\_\_.
- m. Plant Type: Slender \_\_\_\_\_, Bushy \_\_\_\_\_ or Intermediate X.
- n. Plant Habit: Determinate \_\_\_\_\_ or Indeterminate X.

\* Compared with another widely grown variety of somewhat similar maturity grown in the area of usage and registered with the Crop Science Society of America.

\*\* Classified as dull, but somewhat less so than some other varieties classed as dull.



o. Other plant or seed characteristics that might help identify this variety (describe) \_\_\_\_\_

p. Protein content, if known: 41.6% compared to \*Williams with 42.2%

q. Oil content: 21.7% compared to \*Williams with 21.5%

III. DISEASE REACTION (List diseases for which rated and mark the reaction)

Diseases

- a. Phytophthora Rot
- b. Rhizoctonia Rot
- c. Purple Stain
- d. Brown Spot
- e. \_\_\_\_\_
- f. \_\_\_\_\_
- g. \_\_\_\_\_
- h. \_\_\_\_\_

	Moderately			Susceptible
	Resistant	Res.	Susc.	
_____	_____	_____	X	_____
_____	_____	_____	X	_____
_____	_____	_____	X	_____
_____	_____	_____	X	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

IV. INSECT REACTION (List insects for which rated and mark the reaction)

Insects

Resistant

Moderately Resistant

No Resistance

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

V. (a) State any advantage (s) over varieties of similar maturity.

S4055 has high yield and excellent standability.

(b) State any distinguishing characteristics which demonstrate eligibility for certification. The combination of grey pubescence, purple flower,

imperfect black hilum, and susceptibility to Phytophthora Race 1 is distinguishing  
 (Note: at least one variety used for comparison shall be similar maturity and registered with the CSSA).

VI. Performance Data (This is not mandatory, but would be of considerable value to the committee in deciding whether a variety is new and different or worthy of certification). Yield and chemical data are required when either of these two traits is claimed as a distinctive characteristic. Note: Attach data when appropriate.

- a. Performance data are X, are not included with this application.
- b. The data submitted are \_\_\_\_\_, are not X confidential to the committee.

- VII. Tabular data concerning height, maturity, lodging, and seed size taken at or after maturity, is required. Yield and chemical composition is required only when either of these two traits is claimed as a distinctive characteristic. Data shall include appropriate check varieties registered with the CSSA. Data may be from tests conducted by private firms or Agricultural Experiment Stations, or both. Location(s) data collected \_\_\_\_\_

Variety	No. of Tests*	Height (2)	PERFORMANCE DATA		Seed Size Wt./100 seeds (1)	Oil con- tent(1)	% Pro tein(1)	Yield (29)
			Data Mature (8)	Lodging Index (28)				
S4055		43.5	10-3	2.2	18.3	21.7	41.6	48.4
Williams		41.0	9-30	2.2	16.9	21.5	42.2	48.7

- VIII. List the geographic area or areas of adaptation of this variety Southern

Nebraska and Iowa; Northern Kansas and Missouri; Central and South-central

Illinois, Indiana, and Ohio; Northern Kentucky.

- IX. State procedure for maintaining Foundation Seed, seed classes to be used, a statement as to limitations of generations that may be Certified, and any requirements or limitations necessary to maintain varietal characteristics.

Breeder seed will be maintained by Northrup King using Pedigree purification.

Foundation, Registered, and Certified Classes will be used.

- X. If this variety is accepted by Official certifying agencies, when will certified seed be offered for sale? Foundation, registered, and certified seed

will be produced in 1978 for sale in 1979.

- XI. The Variety Review Board assumes all information on the application to be the responsibility of the originator or owner. If inaccuracies are later identified it will be the responsibility of the originator or owner to notify the Variety Review Board and to make corrections. When experimental designations are approved by the Variety Review Board and are later changed to a permanent name or number the originator or owner will notify the Variety Review Board and give them the new name or number.

- XII. Has application been made for Plant Variety Protection? Yes X No

At the time a variety is accepted for certification, a two pound sample seed lot of the generation, or generations, requested by the certifying agency shall be submitted to the agency by the sponsor. This lot(s) is to be retained as a control sample against which all future seed released for Certified Seed Production may be compared to establish continued trueness to variety.

\* Given for each character.

7800101

Submit twelve copies of this application and a one pound sample of the seed to:

Lowell A. Burchett  
Secretary-Treasurer  
Kansas Crop Improvement Association  
Call Hall 205  
Kansas State University  
Manhattan, Kansas 66506

If printed or mimeographed material is enclosed with this application, please send twelve copies of such matter.

Please submit a short and precise description of this variety in the space provided below, as you wish it published by AOSCA.

---

S4055 is a new, high yielding, early Maturity Group IV soybean variety. It is between Williams and Cutler 71 in maturity. Its average yield is about 3 bushels per acre higher than Cutler 71.

Seeds of S4055 are yellow with imperfect black hila. Plants have grey pubescence, purple flowers, and tan pods.

S4055 is best adapted to Southern Nebraska and Iowa; Northern Kansas and Missouri; Central and South-central Illinois, Indiana, and Ohio; and Northern Kentucky.

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OFFICIAL COMMITTEE ACTION:

Approved \_\_\_\_\_

Deferred \_\_\_\_\_

Disapproved \_\_\_\_\_

Signed \_\_\_\_\_

Chairman, National Certified Soybean  
Variety Review Board

Date \_\_\_\_\_

7800101

EXHIBIT D  
ADDITIONAL DESCRIPTION OF S4055 SOYBEANS

S4055 is an early Maturity Group IV variety maturing between Williams and Cutler 71. It has very good lodging resistance. S4055 has fairly large leaves which are somewhat more slender than those of Cutler 71. Level of branching is similar to most varieties of similar maturity. Plant height is taller than Williams, but shorter than Bonus.

Seeds of S4055 are fairly large compared to Williams or Bonus. Seed coats are dull, but are somewhat more shiny than other varieties which are classified as dull. Hilum color is imperfect black. S4055 is lower in seed protein than Bonus, but higher in oil content. In 1977 trials, S4055 averaged 41.6 percent protein compared to 44.6 for Bonus, 42.2 for Williams, and 42.5 for Cutler 71. Oil percent was 21.7 for S4055, 20.4 for Bonus, 21.5 for Williams and 20.6 for Cutler 71.