



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Soybean Research Foundation, 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, OR 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. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CLASS OF 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

SRF 400

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 fifth day of July in the year of our Lord one thousand nine hundred and seventy three.

Attest:

J. J. Rollin

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Carl L. Betz
Secretary of Agriculture

Soybean

'SRF 400'

13A. Exhibit A:

'SRF 400' originated as a composite of 72 F2 plant progenies from the backcross 'Clark 63' (7) x D 61-5141. The parentage of D 61-5141 is 'Dorman' (5) x PI 181537. The 72 F2 progenies were selected for homozygosity of the narrow leaf character (na) and for uniform appearance.

13B. Exhibit B:

'SRF 400' is very similar to 'Clark 63' in plant type, seed coat color, hilum color, flower color, disease resistance and maturity. It differs from 'Clark 63' in leaf shape, seed size, and number of seeds per pod. Leaf shape of 'SRF 400' is lanceolate - 'Clark 63' is ovate; seed size 14.3 g/100 seeds - 'Clark 63' 16.1 g/100 seeds. 'SRF 400' has a higher percentage of 4-seeded pods. Like 'Clark 63', 'SRF 400' is resistant to Phytophthora Root Rot.

13c Exhibit C:

Seed shape	:	Spherical
Seed color	:	Medium shade yellow
Seed luster	:	Dull
Seed size	:	14 g/100 seeds
Hilum color	:	Black
Cotyledon color	:	Yellow
Protein content	:	40.8%
Oil content	:	22.2%
Leaflet shape	:	Lanceolate
Leaflet color	:	Medium green
Leaf width	:	60 mm.
Leaf length	:	162 mm.
Flower color	:	Purple
Pod color	:	Brown
Plant pubescence color:	:	Medium brown
Plant habit	:	Bushy and indeterminate
Hypocotyl color	:	Purple

PVPA 7119

Rec'd 2/27/71

Ham

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1. VARIETY NAME OR TEMPORARY DESIGNATION SRF 400	2. KIND NAME Soybeans	FOR OFFICIAL USE ONLY	
		PVPO NUMBER 7119	
3. GENUS AND SPECIES NAME Glycine max (L.) Merr.	4. FAMILY NAME Leguminosae	FILING DATE 2/2/71	TIME 9:30 A.M.
	5. DATE OF DETERMINATION April, 1968	FEE RECEIVED 50.00 - 3.00	CHARGES
6. NAME OF APPLICANT(S) Soybean Research Foundation, Inc.	7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) P.O. Box #72 Mason City, Illinois 62664	8. TELEPHONE AREA CODE AND NUMBER 217-482-3219	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation		10. STATE OF INCORPORATION Illinois	11. DATE OF INCORPORATION April 28, 1965

12. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- 12A. Exhibit A, Origin and Breeding History of the Variety (See Section 52, P.L. 91-577)
- 12B. Exhibit B, Botanical Description of the Variety
- 12C. Exhibit C, Objective Description of the Variety
- 12D. Exhibit D, Particulars of Trial Performance
- 12E. Exhibit E, Statement of the Basis of Applicant's Ownership

The applicant declares that a viable sample of basic seed that is planted to produce the variety commercially will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable. (See Section 52, P.L. 91-577).

13A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? (See Section 142, P.L. 91-577) (If "Yes," answer 13B and 13C below.) YES NO

13B. Does the applicant(s) specify that this variety be limited as to number of generations? YES NO

13C. If "Yes" to 13B, how many generations of production beyond breeder seed? 3

14. Name and mailing address of applicant representative(e), if any, to serve in this application and receive all papers:
 Arnold L. Matson,
 Director of Soybean Breeding
 Soybean Research Foundation, Inc.
 Mason City, Illinois 62664

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is entitled to protection under the provisions of Section 42 and is distinct, uniform, and stable as required in Section 41 of the Plant Variety Protection Act (P.L. 91-577).

January 28, 1971

 (DATE)

 (DATE)



 (SIGNATURE OF APPLICANT)

 (SIGNATURE OF APPLICANT)

'SRF 400'
Soybean

PV # 7100019
2

13C. Exhibit C (continued):

Maturity group: IV - 124 days
Lodging score : 2.3
Height : 119 cm.
Disease : Resistant to Phytophthora Root Rot;
Susceptible to Soybean Cyst

13D. Exhibit D:

'SRF 400' is the only variety of its maturity which has a lanceolate shaped leaf. It is most similar to 'Clark 63' but differs in seed size and number of seeds per pod in addition to leaf shape (see Exhibit B).

13E. Exhibit E:

The Soybean Research Foundation is employer of the breeder, Dr. Arnold L. Matson, and is therefore the sole owner of the 'SRF 400' variety of soybean.

Exhibit A -

"SRF 400" soybeans (Glycine max (L.) Merr.) originated as a composite of 72 F₂ plant progenies from the back-cross Clark 63 (7) x D61-5141. The parentage of D61-5141 is Dorman (5) x PI 181537. The 72 progenies were selected for homozygosity for the narrow leaf characteristic (na) and for being uniform in appearance. All breeding and selection carried out at Soybean Research Foundation under supervision of Dr. Arnold L. Matson.

Exhibit B -

Seed is round, seed coat is dull yellow, hilum is black, trifoliolate leaves are lanceolate in shape, flowers are purple, pubescence, tawny. Growth habit indeterminate. SRF 400 is very similar to Clark 63 in plant type, seed coat color, hilum color, flower color, disease resistance, and maturity. It differs from Clark 63 mainly in leaf shape, seed size, and number of seeds per pod. Leaf shape of SRF 400 is lanceolate - Clark 63 ovate, seed size 14.3 grams/100 seeds - Clark 63 16.1 grams/100 seeds. SRF 400 will have a considerable number of 4 seeded pods the % of which will vary with rate of planting, soil type, and season but in all cases it will be higher than Clark 63. An occasional 5 seeded pod may be found in SRF 400. 5 seeded pods are very rare in Clark 63 if they occur at all. Like Clark 63 SRF 400 is resistant to Phytophthora root rot (Phytophthora megasperma var. sojae).

Exhibit D - Particulars of Trial Performance

Average performance in 1970 Southern Iowa Yield Test

	Yield (bu/a)	Maturity (Mo-day)	Height (in.)	Lodging score	Emergence score	Seeds per lb.	Protein* %	Oil* %
Clark 63	42.8	9-24	46	2.5	5	2900	41.3	22.2
SRF 400	43.3	9-24	47	2.3	5	3000	40.8	22.2

*Composite samples from 18 locations throughout corn belt

Exhibit E -

The Soybean Research Foundation is employer of the breeder, Dr. Arnold L. Matson, and is therefore the sole owner of the SRF 400 variety of soybean.

Signed



Arnold L. Matson

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant shape	Clark 63	Petiole angle	Clark 63
Leaf shape	SRF 300	Seed size	Clark 63
Leaf color	Clark 63	Seed shape	Clark 63
Leaf surface	Clark 63	Seedling pigmentation	Clark 63

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY:

VARIETY	NO. OF DAYS TO MATURITY	LODGING SCORE	PLANT HEIGHT cm	LEAF SIZE		CONTENT		AVERAGE NO. OF PODS PER PLANT	IODINE NO.
				Width	Length	Protein	Oil		
Submitted	124	2.3	119 47"	60 MM	162MM	40.8	22.2%		
Name of similar variety Clark 63	124	2.5	117 46"	94MM	147MM	41.3	22.2		

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"

Application No. 7119 Soybean SRF 400

EXHIBIT D

Data Indicative of Novelty

SRF 400 is very similar to its nearest parent, Clark 63, except that (1) the trifoliate leaves are lanceolate in shape, (2) a larger percentage of its pods bear 4 seeds, and (3) seed size is slightly smaller.

SOYBEAN RESEARCH FOUNDATION, INC.
PLANT INSTITUTE BLDG.
MASON CITY, ILLINOIS 62564



United States
Department of
Agriculture

Agricultural
Research
Service

Northern Plains Area
National Seed
Storage Laboratory

Ft. Collins, Colorado
80523
Telephone: 303 484-0402
Fax: 303 221-1427

August 30, 1990

Dr. K. H. Evans, Commissioner
Plant Variety Protection Office
Nal Building, Rm. 500
10301 Baltimore Blvd.
Beltsville, MD 20705-2351

Dear Dr. Evans:

Subject: Expiration of Protection and Transfer of Seed Samples

As you requested, the National Seed Storage Laboratory has transferred the following samples to conventional storage and marked all records and GRIN, showing the samples expired.

<u>PV #</u>	<u>VARIETY NAME</u>	<u>ACTION TAKEN</u>
<u>SOYBEAN</u>		
7100016	SRF 100	Expired, transfer to NSSL 8-30-90
7100019	SRF 400	Expired, transfer to NSSL 8-30-90
7200077	SRF 450	Expired, transfer to NSSL 8-30-90
7200082	Cutler 71	Expired, transfer to NSSL 8-30-90
7200083	Amsoy 71	Expired, transfer to NSSL 8-30-90
7200086	SRF 150	Expired, transfer to NSSL 8-30-90
7200126	Bonus	Expired, transfer to NSSL 8-30-90
7300010	Buccaneer	Expired, transfer to NSSL 8-30-90

Sincerely,

TONI PISANO
Computer Assistant

#7119

Application No. 7119 Soybean SRF 400

Exhibit D - Data Indicative of Novelty

SRF 400 is the only variety of its maturity which has a lanceolate shaped leaf. It is most similar to Clark 63. The data below indicates that it is different from Clark 63.

Average performance in 1970 Southern Iowa Yield Test

	Yield (bu/a)	Maturity (Mo-day)	Height (in.)	Lodg. score	Leaf Size		Seeds per lb.	Protein* %	Oil* %
					Width	Length			
Clark 63	42.8	9-24	46	2.5	94mm.	147mm.	2900	41.3	22.2
SRF 400	43.3	9-24	47	2.3	60mm.	162mm.	3000	40.8	22.2

*Composite samples from 18 locations throughout Corn Belt