No. 7200086

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 CIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

SRF 150

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:

L. Roller

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Earl L. Butz

Secretary of Agriculture

FORM GR-470
(2-12-71)

UNITED STATES DEPARTMENT OF AGRICULTURE
CONSUMER AND MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION SRF 150	2. KIND NAME Soybeans	FOR OFFICIAL USE ONLY PVPO NUMBER	
3. GENUS AND SPECIES NAME Glycine max (L.) Merr.	4. FAMILY NAME *(Botanical)* Leguminosae	FILING DATE 1/21/72	TIME 1:30 ~~A.M.~~ P.M.
	5. DATE OF DETERMINATION October, 1969	FEE RECEIVED $50.00	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. Name and mailing address of applicant representative(s), 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

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 12A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52, P.L. 91-577)*
- [X] 12B. Exhibit B, Botanical Description of the Variety
- [ ] 12C. Exhibit C, Objective Description of the Variety
- [X] 12D. Exhibit D, Data Indicative of Novelty
- [X] 12E. Exhibit E, Statement of the Basis of Applicant's Ownership

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

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), P.L. 91-577) (If "Yes," answer 14B and 14C below.)* [X] YES [ ] NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? [X] YES [ ] NO	14C. If "Yes," to 14B, how many generations of production beyond breeder seed? 3

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 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 (P.L. 91-577).

January 21, 1972
(DATE)

Arnold L. Matson
(SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

RECEIVED JAN 24 1972 U.S. DEPARTMENT OF AGRICULTURE C&MS GRAIN DIVISION

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and $50.00 fee to U.S. Dept. of Agriculture, Consumer and Marketing Service, Grain Division, Hyattsville, Maryland 20782. Retain one copy for your files. All items on the face of the form are self-explanatory unles noted below.

ITEM

5 Insert the date the applicant determined that he had a new variety.

12a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.

12b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.

12c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.

12d Provide complete data indicative of novelty. Seed and plant specimens may be submitted and seeds submitted may be sterile. Where possible, include photographs of plant comparisons, chemical tests, etc.

12e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

RECEIVED JAN 24 1972 U.S. DEPARTMENT OF AGRICULTURE C&MS GRAIN DIVISION

FORM GR-470
(2-12-71)

UNITED STATES DEPARTMENT OF AGRICULTURE
CONSUMER AND MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION SRF 150	2. KIND NAME Soybeans	FOR OFFICIAL USE ONLY PVPO NUMBER 7[illegible]76
3. GENUS AND SPECIES NAME Glycine max (L.) Merr.	4. FAMILY NAME *(Botanical)* Leguminosae 5. DATE OF DETERMINATION October, 1969	FILING DATE 1/20/72 · TIME 1:30 ~~A.M.~~ P.M. FEE RECEIVED $50 · 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. Name and mailing address of applicant representative(s), 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

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 12A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52, P.L. 91-577)*
- [X] 12B. Exhibit B, Botanical Description of the Variety
- [ ] 12C. Exhibit C, Objective Description of the Variety
- [X] 12D. Exhibit D, Data Indicative of Novelty
- [X] 12E. Exhibit E, Statement of the Basis of Applicant's Ownership

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

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), P.L. 91-577) (If "Yes," answer 14B and 14C below.)* [X] YES [ ] NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? [X] YES [ ] NO	14C. If "Yes," to 14B, how many generations of production beyond breeder seed? 3

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 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 (P.L. 91-577).

January 21, 1972
(DATE)

Arnold L. Matson
(SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

Soybean

'SRF 150'

13A. Exhibit A:

'SRF 150' originated as a composite of the seed of 330 F_2 plant progenies from the backcross 'Hark' (7) x ['Wayne' (3) x D 61-5141]. The parentage of D 61-5141 is 'Dorman' (5) x PI 181537. Seven BC_5 plants were used in the last backcross to produce BC_6 progenies which were bulked to produce 'SRF 150.'

13B. Exhibit B:

'SRF 150' is a "thin line" variety in maturity group I. Compared to the variety 'Hark,' it is 1-3 days earlier and very similar in plant type, seed coat color, pod color, and flower color. It differs from 'Hark' in leaf shape, seed size, and number of seeds per pod. Leaf shape of 'SRF 150' is lanceolate - 'Hark' ovate; seed size 15.1 grams per 100 seeds compared to 16.2 for 'Hark;' 'SRF 150' produces a high proportion of 4-seeded pods.

13C. Exhibit C:

Seed shape	:	Spherical
Seed color	:	Medium shade yellow
Seed luster	:	Dull
Seed size	:	15 g/100 seeds
Hilum color	:	Yellow
Cotyledon color	:	Yellow
Protein content	:	39.8%
Oil content	:	20.2%
Leaflet shape	:	Lanceolate
Leaflet color	:	Medium green
Leaf width	:	51 mm.
Leaf length	:	145 mm.
Flower color	:	Purple
Pod color	:	Brown
Plant pubescence color	:	Gray
Plant habit	:	Slender, indeterminate
Hypocotyl color	:	Purple

13C. Exhibit C (continued):

Maturity group	:	I - 116 days
Lodging score	:	2.4
Height	:	104 cm.
Disease	:	Susceptible to Soybean Cyst and Phytophthora Root Rot

13D. Exhibit D:

'SRF 150' is the only variety of its maturity which has a lanceolate shaped leaf. It is most similar to 'Hark' but differs from 'Hark' in leaf shape, seed size, and number of seeds per pod.

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 150' variety of soybean.

Exhibit A -

"SRF 150" soybeans (Glycine max (L.) Merr.) originated as a composite of the seed of 330 F_2 plant progenies from the back-cross Hark(7) x [Wayne(3) x D61-5141]. The parentage of D61-5141 is Dorman(5) x PI 181537. 7 BC_5 plants were used in the last back-cross to produce BC_6 progenies which were bulked to produce SRF 150. The 330 progenies were selected for homozygousity for the narrow leaf characteristic (na) and for uniformity in appearance. All breeding and selection was carried out at the Soybean Research Foundation under the supervision of Dr. Arnold L. Matson.

Exhibit B -

Seed of SRF 150 is slightly elongate, seed coat dull and yellow and has a yellow hilum. The trifoliate leaves are lanceolate in shape, flowers are purple, pod color brown, pubescence grey, and growth habit indeterminate. It is a "thin line" variety. It is Group I in maturity being about 1-3 days earlier than Hark. It is very similar to Hark in plant type, seed coat color, pod color, and flower color. It differs from Hark mainly in leaf shape, seed size, and number of seeds per pod. Leaf shape of SRF 150 is lanceolate - Hark ovate, seed size 15.1 grams per 100 seeds compared to 16.2 grams per 100 seeds for Hark. SRF 150 produces a high proportion of 4 seeded pods, this % will vary with rate of planting, soil type, and weather but in all cases will be higher than Hark grown under the same conditions.

Exhibit D -

Particulars of Trial Performance

Average performance in 1971 Central Iowa Yield Test

	Yield (bu/a)	Maturity (Mo-day)	Height (in.)	Lodg. score	Emerg. score	Chlor-osis score	Seeds /lb.	Protein* %	Oil* %
Hark	55.9	9-15	42	2.4	2	5	2600	40.1	20.1
SRF 150	51.8	9-12	41	2.4	1	5	2800	39.8	20.2

* Not Iowa Central tests but from tests grown in Central Illinois.

Exhibit E -

The Soybean Research Foundation is employer of the breeder, Dr. Arnold L. Matson, and is therefore the sole owner of the SRF 150 variety of soybean.

Signed Arnold L. Matson

Arnold L. Matson

Application No. 72086 Soybean SRF 150

Exhibit D - Data Indicative of Novelty

SRF 150 is the only variety of its maturity which has a lanceolate shaped leaf. It is most similar to Hark. The data below indicates that it is different from Hark.

Average performance in 1971 Central Iowa Yield Test

	Yield (bu/a)	Maturity (Mo-day)	Height (in)	Lodg. score	Leaf Size Width	Leaf Size Length	Chlorosis score	Seeds /lb.	Protein %	Oil %
Hark	55.9	9-15	42	2.4	79mm.	120mm.	5	2600	40.1	20.1
SRF 150	51.8	9-12	41	2.4	51mm.	145mm.	5	2800	39.8	20.2

*Not Iowa Central tests but from tests grown in Central Illinois

FORM GR-470-2
(6-15-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C
(Soybean)

OBJECTIVE DESCRIPTION OF VARIETY
SOYBEAN *(GLYCINE MAX)*

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(S)
Soybean Research Founation, Inc.

ADDRESS *(Street and No., or R.F.D. No.; City, State, and ZIP Code)*
P.O. Box #72
Mason City, Illinois 62664

FOR OFFICIAL USE ONLY
PVPO NUMBER
72086
VARIETY NAME OR TEMPORARY DESIGNATION
SRF 150

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

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

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

3. SEED COAT LUSTER:
[1] 1 = DULL 2 = SHINY

4. SEED SIZE
[1 5] GRAMS PER 100 SEEDS

5. HILUM COLOR:
[2] 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] 1 = YELLOW 2 = GREEN

7. LEAFLET SIZE *(See Reverse)*:
[1] 1 = SMALL 2 = MEDIUM 3 = LARGE

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

9. LEAF COLOR *(See reverse)*:
[2] 1 = LIGHT GREEN 2 = MEDIUM GREEN 3 = DARK GREEN

10. FLOWER COLOR:
[2] 1 = WHITE 2 = PURPLE 3 = OTHER *(Specify)*

11. POD COLOR:
[2] 1 = TAN 2 = BROWN 3 = BLACK

12: POD SET:
[ ] 1 = SCATTERED 2 = CONCENTRATED

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

14. PLANT TYPES *(See Reverse)*:
[1] 1 = SLENDER 2 = BUSHY 3 = INTERMEDIATE

15. PLANT HABIT:
[2] 1 = DETERMINATE 2 = INDETERMINATE 3 = OTHER *(Specify)*

16. HYPOCOTYL COLOR:
[2] 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. [0 9]) when days are 9 or less.)*
[ ]

19. MATURITY GROUP:
[3] 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. [0 2]) 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)*

[0] BACTERIAL PUSTULE	[1] SOYBEAN CYST	[0] DOWNY MILDEW	[0] PURPLE STAIN	[0] POD AND STEM BLIGHT	[0] ROOT KNOT
[0] FROGEYE	[0] STEM CANKER	[1] PHYTO-PHTHORA	[0] BROWN STEM ROT	[0] TARGET SPOT	[0] BROWN SPOT
[0] BUD BLIGHT	[0] WILDFIRE	[0] RHIZOCTONIA ROT	[ ] OTHER *(Specify)*		

FORM GR-470-2 (REVERSE)

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

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

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 MM	Length MM	Protein	Oil		
Submitted	116	2.4	104 41	51mm	145mm	39.8	20.2%		
Name of similar variety Hark	119	2.4	107 42	79mm	120mm	40.1	20.1		

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. 72086 Soybean SRF 150

EXHIBIT D

Data Indicative of Novelty

SRF 150 is very similar to its recurrent parent, Hark, except that (1) the trifoliate leaves are lanceolate in shape, (2) a larger percentage of its pods bear 4 seeds, (3) seed size is slightly smaller, and (4) it matures 1-3 days earlier.

SOYBEAN RESEARCH FOUNDATION, INC.
PLANT INSTITUTE BLDG.
MASON CITY, ILLINOIS 62664

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, Commisioner
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 transfered the following samples to conventional storage and marked all records and GRIN, showing the samples expired.

PV #	VARIETY NAME	ACTION TAKEN
SOYBEAN		
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

TONI PISANO
Computer Assistant