No. 7200040

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Mr. Steve Landry

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

RICE

'Golden Steve'

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* 17 th *day of* October *in the year of our Lord one thousand nine hundred and* seventy-five

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

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 Golden Steve	2. KIND NAME Rice	FOR OFFICIAL USE ONLY PVPO NUMBER 72040
3. GENUS AND SPECIES NAME Oryza sativa	4. FAMILY NAME *(Botanical)* Gramineae 5. DATE OF DETERMINATION September, 1965	FILING DATE 10/14/71 TIME 11:30 A.M. P.M. FEE RECEIVED $750.00 CHARGES —
6. NAME OF APPLICANT(S) Mr. Steve Landry	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)* RFD 120 Morse, Louisiana 70559	8. TELEPHONE AREA CODE AND NUMBER 318 783-0238
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*	10. STATE OF INCORPORATION	11. DATE OF INCORPORATION

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

Mr. Steve Landry
RFD 120
Morse, Louisiana 70559

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

[X] 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? [ ] YES [X] NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed?

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).

10/14/71
(DATE)

(SIGNATURE OF APPLICANT)
Steve Landry

(DATE)

(SIGNATURE OF APPLICANT)

RECEIVED
OCT 1971
U.S. DEPARTMENT OF AGRICULTURE
CGMS 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.

7200040

ORIGIN AND BREEDING HISTORY OF "GOLDEN STEVE"

In 1960 a cross between Zenith and Rexoro was made. Zenith matures in approximately 125 days while Rexoro is a late maturing variety requiring approximately 170 days from seeding to maturity. The grain type of Zenith is medium while Rexoro is a long grain variety.

Several seeds from the cross were planted to obtain F_1 plants in 1961 with the F_1 plants then being crossed with red rice in the same year. The seeds obtained from this cross were planted in 1962 in small rows where segregation occurred and this resulted in varibility being present among individual plants. Several plants were selected that year and seeds from each selected panicle were seeded in separate, small progeny rows in 1963 and natural self-fertilization was allowed to occur. The progeny row of one of the selected panicles appeared uniform and several selections were made within this row. In 1964 the seeds of each selected panicle were planted in separate rows. There was essentially no noticeable variation that occurred in one row so the seeds of this row were harvested and bulked together and approximately six pounds of rough rice was obtained. From 1965 to 1971 seeds from this selection have been grown under larger plot sizes and the selection is true breeding in that maturity, grain type, color of hulls, height and lodging resistance has been uniform.

BOTANICAL DESCRIPTION OF THE VARIETY

The mature plant of Golden Steve is a smooth-hulled, golden-hulled, awnless, non-pubescence hull, and a medium-grain rice variety.

In 1971 a two-factorial experiment consisting of variety X N rates was conducted. The varieties included in the experiment were Saturn, Starbonnet, Nato, Bluebelle, and Golden Steve. The three N rates used were 0, 100, and 150 pounds/A.

The height of Golden Steve as an average of all N rates was 48.2 inches while it was 50.9, 50.1, 46.5, and 49.2 inches for Saturn, Nato, Bluebelle, and Starbonnet, respectively.

Bluebelle matured in 116 days while Golden Steve, Saturn, and Nato matured at approximately the same time, that being 120 days. Starbonnet required 132 days to reach maturity. The early maturity of Golden Steve confirmed the results obtained from previous years. Additionally, Golden Steve matured very uniformly.

At the rate of 150 pounds/A of N there was an appreciable amount of lodging that occurred, especially in Saturn. However, none of the replications of Golden Steve were lodged.

The yield of Golden Steve was significantly below that of Starbonnet, Saturn and Nato, but was significantly higher than Bluebelle. The average milling yield of "Golden Steve" was 109 pounds of total milled rice and 100 pounds of head rice. The average milling yields of the four other varieties were 98-81, 111-106, 110-97, and 111-108 for Starbonnet, Saturn, Bluebelle, and Nato, respectively.

The milling yield results obtained in this experiment substantiates previous year findings of Golden Steve. From 1966 to 1971, milling yield tests of Golden Steve have been conducted and it has averaged 108 pounds of total milled rice with 97 pounds being head rice.

Exhibit D
Rice - Golden Steve

'Golden Steve' most closely resembles 'Nato' except that 'Golden Steve' has gold vs. straw-colored hulls, a more open panicle and greater lodging resistance than 'Nato'.

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-17
(1-2-73)

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

EXHIBIT C
(Rice)

OBJECTIVE DESCRIPTION OF VARIETY

RICE (*ORYZA SATIVA*)

REFERENCES: *See Reverse.*

NAME OF APPLICANT(S): Steve Landry

ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*): RFD 1, Box 93, Morse, La. 70559

FOR OFFICIAL USE ONLY

PVPO NUMBER: 7200040

VARIETY NAME OR TEMPORARY DESIGNATION: Golden Steve

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. 0 8 9 or 0 9) when number is either 99 or less or 9 or less.

1. MATURITY (Seeding to 50% Heading):

LOCATION: LaFayette, La. AVERAGE DATE SEEDED: April 25

2 Season: 1 = VERY EARLY (85 days or less) 2 = EARLY (86 - 100) 3 = MIDSEASON (101 - 115) 4 = LATE (115 - or more)

9 0 NUMBER OF DAYS

1 0 NO. OF DAYS EARLIER THAN . . . 4

3 NO. OF DAYS LATER THAN 2

1 = BELLE PATNA 2 = BLUEBELLE 3 = NATO 4 = STARBONNET 5 = CALROSE 6 = REXORO

2. PLANT HABIT (Tiller Angle from Perpendicular at the Early Jointing Stage):

3 1 = SPREADING (more than 60°) 2 = INTERMEDIATE 3 = ERECT (less than 30°)

3. STEMS (Full Heading):

1 2 7 CM. TALL (Soil level to tip of extended panicle on main culm)

0 3 CM. SHORTER THAN 3

0 6 CM. TALLER THAN. 2

1 = BELLE PATNA 2 = BLUEBELLE 3 = NATO 4 = STARBONNET 5 = CALROSE 6 = REXORO

0 3 NUMBER OF NODES

1 INTERNODE COLOR (Outside)

1 SEPTUM COLOR (Inside Node)

1 = LIGHT YELLOW 2 = CREAM 3 = GOLD 4 = GREEN 5 = REDDISH 6 = LIGHT PURPLE 7 = PURPLE 8 = DARK PURPLE 9 = OTHER (Specify) _____

2 Tillering Ability (number of culms): 1 = 10 OR LESS (Belle Patna) 2 = 11 - 20 (Bluebonnet) 3 = ABOVE 20 (Century Patna)

1 Strength: 1 = STURDY (Starbonnet) 2 = INTERMEDIATE (Belle Patna) 3 = WEAK

4. LEAF BLADE (First Leaf Below Flag Leaf):

6 1 CM. LENGTH

1 0 MM. WIDTH

2 Color: 1 = PALE GREEN (Starbonnet) 2 = MEDIUM GREEN (Bluebelle) 3 = DARK GREEN (Calrose) 4 = PURPLE 5 = RED 6 = OTHER (Specify) _____

1 Pubescence: 1 = GLABROUS 2 = INTERMEDIATE 3 = PUBESCENT

2 Flag Leaf Angle: 1 = HORIZONAL 2 = ASCENDING 3 = ERECT

6 3 CM. LENGTH OF FLAG LEAF (Booting Stage)

1 2 MM. WIDTH (widest point) OF FLAG LEAF (Booting Stage)

5. LEAF SHEATH (First Leaf Below Flag Leaf):

2 Ligule Length: 1 = NONE 2 = 20 MM. OR LESS 3 = 21 - 34 MM. 4 = MORE THAN 34 MM.

Color:

2 SHEATH (Outside)

1 SHEATH (Inside)

1 SHEATH (Seedling)

5 COLLAR (Light yellow)

1 LIGULE (white)

2 AURICLE

1 = COLORLESS (white) 2 = GREEN 3 = RED 4 = PURPLE 5 = OTHER (Specify) _____

PVP # 72040 GOLDEN STEVE

6. PANICLE:

[2] Type: 1 = OPEN 2 = INTERMEDIATE 3 = COMPACT

[2] Habit: 1 = DROOPING 2 = INTERMEDIATE 3 = ERECT

[17] CM. LENGTH

[2] Exsertion: 1 = LESS THAN 90% 2 = 90 - 99% 3 = 100% EXSERTION

7. SPIKELET:

[1] Stigma Color: 1 = COLORLESS (White) 2 = YELLOW 3 = PURPLE 4 = RED

8. LEMMA AND PALEA:

[06] Color at Maturity

[ ] Apiculus color at maturity

[ ] Apiculus color at anthesis

01 = COLORLESS (White) 02 = GREEN 03 = YELLOW
04 = TAWNY 05 = STRAW 06 = GOLD
07 = BROWN FURROWS 08 = RED 09 = PURPLE
10 = PIEBALD 11 = BLACK 12 = OTHER (Specify) _____

[1] Pubescence: 1 = GLABROUS 2 = PUBESCENT ONLY ON LEMMA KEEL 3 = PUBESCENT

1 DJH letter 4/22/75

[1] Awn: 1 = AWNLESS 2 = TERMINAL SPIKELETS AWNED 3 = AWNED AND AWNLESS 4 = ALL SPIKELETS AWNED

[ ] MM. AWN MAXIMUM LENGTH

9. SEED:

[2] Non-pigmented coat (Pericarp) ("Brown Rice" color): 1 = LIGHT 2 = MEDIUM 3 = DARKER

[4] Pigmented coat (Pericarp): 1 = GOLD 2 = PURPLE 3 = RED 4 = BROWN 5 = SPECKLED BROWN

[1] Scent: 1 = NONSCENTED (Common) 2 = LIGHTLY SCENTED (Sadri) 3 = SCENTED (Popcorn aroma - Della)

[1] Endosperm: 1 = NON-WAXY (common) 2 = WAXY (glutinous)

[1] Endosperm: 1 = TRANSLUCENT, FEW CHALKY SPOTS 2 = CHALKY GERMTIP 3 = WHITE BELLY 4 = LARGE CHALKY CORE 5 = OPAQUE

1 DJH letter 4/22/75

[2] Shattering (Threshability): 1 = DIFFICULT THRESHING (Conway) 2 = THRESHES READILY 3 = SHATTERS

[1] Dormancy: 1 = LOW (0 days) 2 = MEDIUM (30 days) 3 = HIGH (90 days or more)

10. GRAIN:

[2] Paddy shape (length/width Ratio): 1 = SHORT (less than 2.2:1) 2 = MEDIUM (2.2:1 to 3.4:1) 3 = LONG (greater than 3.4:1)

DJH 3/12/75 DJH 3/12/75

MEASUREMENTS:

Grain Form	Length (mm.)	Width (mm.) 3.4	Thickness (mm.)	L/W Ratio 2.04	1000 Grains (Grams)
Paddy	07.0	~~4.0~~	2.0	~~1.75~~	27.0
Brown	06.0	3.0	2.0	2.00	23.2
Milled	05.4	2.8	1.9	[illegible]	05.5

MILLING QUALITY

[ ] % HULLS

[67] % TOTAL MILLED RICE

DJH 4/2/75

11. RESISTANCE TO LOW TEMPERATURE:

[2] Germination & Seedling vigor: 1 = LOW (Bluebelle) 2 = MEDIUM (Nato) 3 = HIGH (Caloro)

[2] Flowering (Spikelet fertility): 1 = LOW (Bluebelle) 2 = MEDIUM (Caloro) 3 = HIGH (Calrose)

12. RESISTANCE TO:

[ ] Salinity: 1 = LOW (Bluebonnet) 2 = MEDIUM (Blue Rose) 3 = HIGH

[ ] Alkalinity: 1 = LOW (Bluebelle) 2 = MEDIUM (Dawn) 3 = HIGH (Arkrose)

13. RESPONSE TO PHOTOPERIOD:

[1] 1 = NON-SENSITIVE (Belle Patna) 2 = WEAKLY SENSITIVE (Blue Rose) 3 = STRONGLY SENSITIVE (Caloro)

PV # 72040 GOLDEN STEVE

14. PYRICULARIA ORYZAE RESISTANCE (International races found under References, items 2 and 4 below.) (0 = Not Tested; 1 = Susceptible; 2 = Resistant):

GROUP	IA	IB				IC			ID				IE		IG		IH				
NUMBER	109	1	33	49	54	1	17	19	1	8	13	14	1	3	1	2	1				
RESISTANCE																					

15. DISEASE RESISTANCE (0 = Not Tested; 1 = Susceptible; 2 = Resistant):

0	CERCOSPORA ORYZAE	0	ENTYLOMA ORYZAE	0	FUSARIUM PANICLE BLIGHT
0	HELMINTHOSPORIUM ORYZAE	0	HOJA BLANCA VIRUS	0	LEPTOSPHAERIA SALVINII
0	PYTHIUM SEEDLING BLIGHT	0	RHIZOCTONIA ORYZAE	0	STRAIGHTENED
0	TILLETIA BARCLAYANA	0	WHITE TIP NEMATODE		OTHER (Specify)

16. INSECT RESISTANCE (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

0	GRASS HOPPER	0	LEAF HOPPER	0	RICE HISPA
0	RICE MIDGE	0	STEM BORER	0	STINK BUG
0	SWARM CATERPILLAR	0	WATER WEEVIL		OTHER (Specify)

17. INDICATE A VARIETY WHICH MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Tillering		Seed Shape	[illegible]
Lodging	[illegible]	Endosperm Transp.	
Leaf Angle	[illegible]	Milling Quality	[illegible]
Leaf Color	[illegible]	Cook & Proc. Quality	[illegible]

18. GIVE THE FOLLOWING AVERAGE DATA FOR SUBMITTED AND A SIMILAR VARIETY

VARIETY	PARBOIL CANNING STABILITY (% Loss)	PROTEIN * (%)	AMYLOSE ** (%)	ALKALI REACTION *** 1.7	ALKALI REACTION *** 2.0	GELATINIZATION TEMPERATURE (°C)
SUBMITTED						
SIMILAR						
NAME OF SIMILAR VARIETY						

*Hulled Rice - Dry Wt. **Milled Rice 11 - 12% Moisture ***Average spreading value in 1.7% and 2.0% KOH Solution.

REFERENCES

1. C. R. Adair et al, 1972. Rice in the United States: Varieties and Production. USDA Handbook No. 289 (Rev.), 124 pp.
2. J. G. Atkins, et al, 1967. An International Set of Rice Varieties for Differentiating Race of Pyricularia Oryzae. Phytopath. 57:297-301.
3. Te-Tzu Chang, 1965. The Morphology and Varietal Characteristics of the Rice Plant. IRRI Los Banos, Philippines Tech. Bulletin 4.
4. K. C. Ling and S. H. Ou, 1969. Standardization of the International Race Numbers of Pyricularia Oryzae. Phytopath. 59:339-342.
5. B. D. Webb et al, 1968. Characteristics of Rice Varieties in the USDA Collection. Crop Sci. 8:361-365.
6. Nickerson's or any recognized color fan may be used to determine plant colors of the described variety.

COMMENTS:

This variety we have developed is very good in our area. It's lodging resistance, cooking quality, and milling quality are also very high.