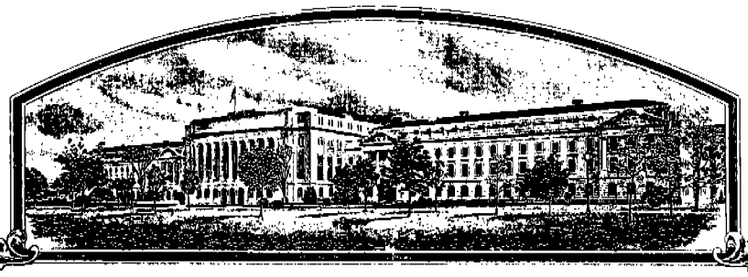

No. 7400076

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Rice Researchers, 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, 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 (7 U.S.C. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

RICE

'Ampec'

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* 30th *day of* June *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 Ampec	2. KIND NAME Rice	FOR OFFICIAL USE ONLY PVPO NUMBER 7400076
3. GENUS AND SPECIES NAME Oryza Sativa	4. FAMILY NAME *(Botanical)* Graminae	FILING DATE 3·13·74 / TIME 10:00 A.M.
	5. DATE OF DETERMINATION December 1, 1972	FEE RECEIVED $ 750 / CHARGES —
6. NAME OF APPLICANT(S) Rice Researchers, Inc. Arthur H. Williams	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)* ☒ P.O. Box 652 Woodland, California 95695	8. TELEPHONE AREA CODE AND NUMBER

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)* Corpoation	10. STATE OF INCORPORATION California	11. DATE OF INCORPORATION 1968

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

Arthur H. Williams
Rt. 2, Box 320
Chico, California 95926

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.)* [ ] YES [X] 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?

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).

2-10-74
(DATE)

Rice Researchers Inc
Arthur H Williams
(SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

7400076

Ampec

Exhibit A

Origin and Breeding History

Ampec originated in California from a hand pollinated cross between Colusa × Asahi Mochi. F1 plants were then back-crossed to Caloro three times.

Homogenic glutinous lines were then selected and tested for amylopectin quality. From several of these satisfactory lines, pure line selections were then made based on straw strength, maturity, and plant type.

Because of its similarity to Caloro, special care must be taken to avoid physical contamination with this variety.

From letter March 24, 1975:

JGH 3/28/75

Ampec is a pure line selection except for awns. Awns will vary from tip to 1 inch. Other than that, no variants are expected.

7400076

Ampec

Exhibit B

Botanical Description

Ampec is a glutinous (waxy endosperm) variety. In California it would be classified as a mid season variety maturing in fifty days. The plant closely resembles Caloro. It has strong seedling vigor and responds well to water seeding and tillers well.

The grain shape is short (pearl type).

The culm is stiff and erect with pubescence on culm, leaves, and grain. The grain is also awned.

The second foliar leaf is short with a small angle and is dark green.

The flag leaf is narrow and short with medium angle.

The panicle is compact, short and tips soon after heading. Generally at least 100 seeds will mature per panicle.

The lemma and palea are straw colored at maturity.

Ampec

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

FORM APPROVED. OMB NO. 40-R3712

EXHIBIT C
(Rice)

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

OBJECTIVE DESCRIPTION OF VARIETY

REFERENCES: *See Reverse.*

RICE *(ORYZA SATIVA)*

NAME OF APPLICANT(S)
Rice Researchers, Inc.

ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*
P.O. Box 652
Woodland, California 95695

FOR OFFICIAL USE ONLY

PVPO NUMBER
7400076

VARIETY NAME OR TEMPORARY DESIGNATION
AMPEC

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 Sacramento Valley AVERAGE DATE SEEDED April 25 -- May 5

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

[1][0][7] NUMBER OF DAYS

[ ][ ] NO. OF DAYS EARLIER THAN . . . [ ]

[0][0] NO. OF DAYS LATER THAN . . . . . [5]

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

[0][0] CM. SHORTER THAN . . . . . [5]

[ ][ ] CM. TALLER THAN. . . . . [ ]

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

[0][4] NUMBER OF NODES

[4] INTERNODE COLOR (Outside)

[ ] 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) _____

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

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

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

[3][6] CM. LENGTH [0][8] MM. WIDTH

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

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

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

[3][0] 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):

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

Color:

[2] SHEATH (Outside) [2] COLLAR

[2] SHEATH (Inside) [2] LIGULE

[2] SHEATH (Seedling) [2] AURICLE

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

'Ampec'

PV # 7400076

Exhibit D

'Ampec' most closely resembles 'Caloro' in plant type including head and panicle type, but 'Ampec' has a glutinous vs. non-waxy endosperm and grain is slightly smaller [15 % *] and under adverse weather conditions at heading time exhibits less sterility than 'Caloro.'

* 1000 grain wts. gs.	Rough	Brown	Milled
Caloro	30.2	25.0	23.4
Ampec	25.6	21.0	20.4

Arthur H. Williams

7400076

Ampec

Exhibit E

Statement of the Basis of Applicant's Ownership

Variety is co-owned by breeder and applicant.

Rice Researchers Inc. is THE OWNER 7/23/78

 74 00076 AMPEC

6. PANICLE:

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

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

[2 5] CM. LENGTH

[3] 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:

[0 5] Color at Maturity

[0 5] Apiculus color at maturity

[0 5] 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) _____

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

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

[1 5] MM. AWN MAXIMUM LENGTH

9. SEED:

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

[ ] 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)

[2] Endosperm: 1 = NON-WAXY (common) 2 = WAXY (glutinous) [5] Endosperm: 1 = TRANSLUCENT, FEW CHALKY SPOTS 2 = CHALKY GERMTIP 3 = WHITE BELLY 4 = LARGE CHALKY CORE 5 = OPAQUE

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

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

10. GRAIN:

[1] 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)

MEASUREMENTS:

Grain Form	Length (mm.)	Width (mm.)	Thickness (mm.)	L/W Ratio	1000 Grains (Grams)
Paddy	7.0	3.6	3.0	1.9	256
Brown	5.2	3.2	2.5	1.6	210
Milled					204

Ex D 2/25/75

MILLING QUALITY

[2 0] % HULLS [7 1] % TOTAL MILLED RICE

11. RESISTANCE TO LOW TEMPERATURE:

[3] 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:

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

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

13. RESPONSE TO PHOTOPERIOD:

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

 740076 AMPEC

14. PYRICULARIA ORYZAE RESISTANCE (International races found under References, items 2 and 4 below.)
(0 = Not Tested; 1 = Susceptible; 2 = Resistant): not tested 5/3/74

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	1 [~~0~~] 3/28/75 letter LEPTOSPHAERIA SALVINII
[0] PYTHIUM SEEDLING BLIGHT	[0] RHIZOCTONIA ORYZAE	[0] STRAIGHTENED
[0] TILLETIA BARCLAYANA	[0] WHITE TIP NEMATODE	[0] 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	[1] WATER WEEVIL	[0] OTHER (Specify)

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

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Tillering	Caloro	Seed Shape	Caloro
Lodging	Calrose	Endosperm Transp.	Glutinous
Leaf Angle	Caloro	Milling Quality	Caloro
Leaf Color	Caloro	Cook & Proc. Quality	None

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			0 3/28/75 letter			
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: