### U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

### Objective Description of Variety
Rice (Oryza sativa)

<table>
<thead>
<tr>
<th>NAME OF APPLICANT (S)</th>
<th>TEMPORARY OR EXPERIMENTAL DESIGNATION</th>
<th>VARIETY NAME</th>
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<tbody>
<tr>
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<table>
<thead>
<tr>
<th>ADDRESS (Street and No. or RD No., City, State, and Zip Code, Country)</th>
<th>FOR OFFICIAL USE ONLY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PVPO NUMBER</td>
</tr>
</tbody>
</table>

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**PLEASE READ ALL INSTRUCTIONS CAREFULLY:**

Place the appropriate number that describes the character of this variety in the spaces provided below. These numbers are also code numbers corresponding to descriptors developed by IBGR-IRRI Rice Advisory Committee and the US Rice Crop Advisory Committee. Breeders will demonstrate distinctness more readily by describing as many characters as is possible.

1. **MATURITY:** Days to Heading (Seedling to 50% Heading)

   A. South: (Location: ____________________________) at ___________________ kg/ha (Nitrogen Rate)

      ___ Number of Days
      ___ Days Earlier Than Check Variety: ________________________________
      ___ Days Same As Check Variety: ________________________________
      ___ Days Later Than Check Variety: ________________________________

      ___ Maturity Class
      1 = Very Early (85 Days or Less)  2 = Early (86 – 100)
      3 = Intermediate (101 - 115)  4 = Late (More Than 115)

   B. California: (Location: ____________________________) at ___________________ kg/ha (Nitrogen Rate)

      ___ Number of Days
      ___ Days Earlier Than Check Variety: ________________________________
      ___ Days Same As Check Variety: ________________________________
      ___ Days Later Than Check Variety: ________________________________

      ___ Maturity Class
      1 = Very Early (90 Days or Less)  2 = Early (91 – 97)
      3 = Intermediate (98 - 104)  4 = Late (More Than 104)

2. **CULM:**

   ___ Angle (Degrees from Perpendicular after Flowering):
   1 = Erect (Less than 30°)  3 = Intermediate (About 45°)
   7 = Spreading (More than 60° but the culms do not rest on the ground)
   9 = Procumbent (The culm or its lower part rests on the ground surface)
### 2. CULM: (continued)

LENGTH

- ____ cm (Soil level to top of extended panicle on main stem)
- ____ cm Shorter Than Check Variety: ______________
  - Length Same as Check Variety: ______________
- ____ cm Longer than Check Variety: ______________

- ____ Height Class: 1 = Short (≤ 95 cm) 2 = Medium (96-114 cm) 3 = Tall (>115 cm)

- ____ Internode Color: (After Flowering): 1 = Green 2 = Light Gold 3 = Purple Lines 4 = Purple

- ____ Strength (Lodging Resistance): 1 = Strong (no Lodging) 2 = Intermediate (Most Plants Lodged) 3 = Moderately Strong (Most Plants Leaning) 4 = Intermediate (Most Plants Leaning) 5 = Intermediate (Most Plants Leaning) 6 = Intermediate (Most Plants Leaning) 7 = Weak (Most Plants Flat)

### 3. FLAG LEAF: (At Maturity)

- ____ cm Length  ____ mm Width

- ____ Pubescence: 1 = Glabrous 2 = Intermediate 3 = Pubescent

- ____ Leaf Angle (After Heading): 1 = Erect 2 = Intermediate 3 = Horizontal 4 = Descending

- ____ Blade Color (At Heading): 1 = Pale Green 2 = Green 3 = Dark Green 4 = Purple Tips
  5 = Purple Margins 6 = Purple Blotch 7 = Purple

- ____ Basal Leaf Sheath Color (At Heading): 1 = Green 2 = Purple Lines 3 = Light Purple 4 = Purple

### 4. LIGULE:

- ____ mm Length (From base of collar to the tip, at late vegetative stage)

- ____ Color: (Late Vegetative Stage): 1 = White 2 = Purple Lines 3 = Purple

- ____ Shape: 1 = Acute to Acuminate 2 = 2-Cleft 3 = Truncate

- ____ Collar Color (Late Vegetative Stage): 1 = Pale Green 2 = Green 3 = Purple

- ____ Auricle Color (Late Vegetative Stage): 1 = Pale Green 2 = Purple

### 5. PANICLE:

- ____ cm Length

- ____ Type: 1 = Compact 2 = Light 3 = Medium 4 = Clustering

- ____ Secondary Branching: 1 = Absent 2 = Light 3 = Heavy 4 = Clustering

- ____ Exsertion (Near Maturity): 1 = Less than 90% 2 = 90 – 99% 3 = 100% Exserted

- ____ Shattering (At Maturity): 1 = Low (≤ 5%) 2 = Moderate (6 – 25%) 3 = High (More than 25%)

- ____ Threshability: 1 = Difficult 2 = Intermediate 3 = Easy

### 6. GRAIN: (Spikelet)

- ____ Awns (After Full Heading): 0 = Absent 1 = Short and Partly Awned 2 = Short and Fully Awned 3 = Long and Partly Awned 4 = Long and Fully Awned

- ____ Apiculus Color (At Maturity): 1 = White 2 = Straw 3 = Brown (Tawny) 4 = Red
  5 = Red Apex 6 = Purple 7 = Purple Apex

- ____ Apiculus Color (After Full Heading): 1 = White 2 = Straw 3 = Brown (Tawny) 4 = Red
  5 = Red Apex 6 = Purple 7 = Purple Apex

- ____ Stigma Color: 1 = White 2 = Light Green 3 = Yellow 4 = Light Purple 5 = Purple
6. GRAIN: (Spikelet)

____ Lemma and Palea Color (At Maturity):

0 = Straw  
1 = Gold and/or Gold Furrows on Straw Background  
2 = Brown Spots on Straw (Piebald)
3 = Brown Furrows on Straw  
4 = Brown (Tawny)  
5 = Reddish to Light Purple
6 = Purple Furrows on Straw  
7 = Purple  
8 = Purple
9 = Black  
10 = White

____ Lemma and Palea Pubescence:  
1 = Glabrous  
2 = Hairs on Lemma Keel  
3 = Hairs on Upper Portion
4 = Short Hairs  
5 = Long Hairs (Velvety)

____ Spikelet Sterility (At Maturity):
1 = Highly Fertile (> 90%)  
3 = Fertile (75 – 90%)  
5 = Partly Sterile (50 – 74%)
7 = Highly Sterile (< 50% to Trace)  
9 = Completely Sterile (0%)

7. GRAIN: (Seed)

____ Seed Coat (Bran) Color:
1 = White  
2 = Light Brown  
3 = Speckled Brown  
4 = Brown
5 = Red  
6 = Variable Purple  
7 = Purple

____ Endosperm Type:  
1 = Nonglutinous (Nonwaxy)  
2 = Glutinous (Waxy)  
3 = Indeterminate

____ Endosperm Translucency:  
1 = Clear  
5 = Intermediate  
9 = Opaque

____ Endosperm Chalkiness:  
0 = None  
5 = Medium (10 – 20% of Sample)  
9 = Large (More than 20% of Sample)

____ Scent (Aroma):  
0 = Nonscented  
1 = Lightly Scented  
2 = Scented

Shape Class (Length/Width Ratio):

____ Paddy
1 = Short (2.2:1 and Less)  
2 = Medium (2.3:1 to 3.3:1)  
3 = Long (3.4:1 and More)

____ Brown
1 = Short (2.0:1 and Less)  
2 = Medium (2.1:1 to 3.0:1)  
3 = Long (3.1:1 and More)

____ Milled
1 = Short (1.9:1 and Less)  
2 = Medium (2.0:1 to 2.9:1)  
3 = Long (3.0:1 and More)

Measurements:

Grain Form | Length (mm) | Width (mm) | Thickness (mm) | L/W Ratio | 1000 Grains (grams)
--- | --- | --- | --- | --- | ---
Paddy |  |  |  |  |  
Brown |  |  |  |  |  
Milled |  |  |  |  |  

____ Milling Quality (% Hulls)  
____ Milling Yield (% White Kernel (head) Rice to Rough Rice)

____ % Protein  
____ % Amylose

Alkali Spreading Value:  
1.5% KOH Solution  
1.7% KOH Solution

____ Gelatinization Temperature Type:  
1 = High  
5 = Intermediate  
7 = Low

Amylographic Paste Viscosity

Peak | Hot Paste | Cooled Paste | “Breakdown” “Setback”
--- | --- | --- | ---

8. RESISTANCE TO LOW TEMPERATURE:

____ Germination and Seedling Vigor:  
1 = Low  
2 = Medium  
3 = High

____ Flowering (Spikelet Fertility):  
1 = Low  
2 = Medium  
3 = High

9. SEEDLING VIGOR NOT RELATED TO LOW TEMPERATURE:

____ Vigor:  
1 = Low  
2 = Medium  
3 = High
10. _BLAST RESISTANCE_: *(Pyricularia oryzae).* (International races found under References)

<table>
<thead>
<tr>
<th>Group</th>
<th>IB</th>
<th>IC</th>
<th>ID</th>
<th>IE</th>
<th>IG</th>
<th>IH</th>
<th>Others:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>1</td>
<td>5</td>
<td>45</td>
<td>49</td>
<td>54</td>
<td>1</td>
<td>17</td>
</tr>
</tbody>
</table>

Resistance: ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

11. RESISTANCE TO OTHER DISEASES:

<table>
<thead>
<tr>
<th>0 = Immune</th>
<th>1 = Resistant</th>
<th>3 = Moderately Resistant</th>
<th>5 = Intermediate</th>
<th>7 = Moderately Susceptible</th>
<th>9 = Susceptible</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ Narrow Brown Leaf Spot (<em>Cerospora oryzae</em>)</td>
<td>___ Aggregate Sheath Spot (<em>Rhizoctonia oryzae-sativae</em>)</td>
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<tr>
<td>___ Leaf Smut (<em>Entyloma oryzae</em>)</td>
<td>___ Straight Head</td>
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<tr>
<td>___ Brown Leaf Spot (<em>Helminthosporium oryzae</em>) (=<em>Bipolaris oryzae</em>) (=<em>Drechslera oryzae</em>)</td>
<td>___ Kernel Smut (<em>Neovossia horrida</em>) (=<em>Tilletia barclayana</em>)</td>
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<tr>
<td>___ Leaf Scald (<em>Gerlachia oryzae</em>)</td>
<td>___ White Tip Nematode (<em>Aphelenchoidea besseyi</em>)</td>
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<tr>
<td>___ Hoja Blanca Virus</td>
<td>___ Stem Rot (<em>Sclerotium oryzae</em>)</td>
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<tr>
<td>___ Sheath Rot (<em>Sarocladium oryzae</em>)</td>
<td>___ Bacterial Blight (<em>Xanthomonas campestris pv. oryzae</em>)</td>
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<tr>
<td>___ Pythium Seedling Blight (<em>Pythium sp.</em>)</td>
<td>___ Sheath Blight (<em>Rhizoctonia solani</em>)</td>
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<tr>
<td>___ Sheath Spot (<em>Rhizoctonia oryzae</em>)</td>
<td>___ Other: ________________________________</td>
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12. INSECT RESISTANCE:

<table>
<thead>
<tr>
<th>0 = Immune</th>
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<th>5 = Intermediate</th>
<th>7 = Moderately Susceptible</th>
<th>9 = Susceptible</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ Grasshopper</td>
<td>___ Rice Stink Bug (<em>Oegalus pugnax</em>)</td>
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<tr>
<td>___ Rice Leafhopper</td>
<td>___ Swarm Caterpillar</td>
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<tr>
<td>___ Rice Hispa</td>
<td>___ Rice Water Weevil (<em>Lissorhoptrus oryzae</em>)</td>
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<tr>
<td>___ Rice Midge</td>
<td>___ Rice Stalk Borer (<em>Chilo plejadellus</em>)</td>
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<tr>
<td>___ Least Skipper</td>
<td>___ Sugarcane Borer (<em>Diatraea saccharalis</em>)</td>
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13. OTHER DESCRIPTORS: If there are other characters that describe this variety, please indicate below:

REFERENCES


