REGISTRATION OF ‘LACASSINE’ RICE

‘LACASSINE’ (Oryza sativa L.), (Reg. no. CV-88, PI 548772) is a high-yielding, early-maturing, long-grain cultivar developed at the Rice Research Station at Crowley, LA, by the Louisiana Agricultural Experiment Station in cooperation with the USDA-ARS, the Arkansas Agricultural Experiment Station, the Florida Agricultural Experiment Station, the Mississippi Agricultural and Forestry Experiment Station, and the Texas Agricultural Experiment Station. It was officially released in February 1991.

Lacassine originated from the cross ‘Newbonnet’/‘Lemont’ made at the Rice Research and Extension Center at Stuttgart, AR, in 1981. The F1 plant was grown in Crowley and a F2 population was included in the breeding nursery in 1982. Lacassine is an F4 bulk of a single progeny row in the breeding nursery at Crowley in 1983, selection 8320476. It was evaluated in the preliminary yield nursery (experimental designation 8402561) in 1984 and entered in the Cooperative Uniform Regional Rice Nurseries (URRN) in 1985 with the designation RU 8502045.

Lacassine has a semidwarf plant type and is highly resistant to lodging. It is similar in height to Lemont and ‘Gulfmont.’ In the URRN grown in Louisiana, Arkansas, Texas, and Mississippi in 1985 to 1990, the average height of Lacassine was 91 cm and that of Lemont, Gulfmont, and ‘Tebonnet’ were 92, 92, and 129 cm, respectively. The flag leaf of Lacassine is shorter than those of Lemont and Gulfmont and tends to remain less upright at maturity. Days to heading averages 88 for Lacassine, 90 for Lemont, 88 for Gulfmont, and 83 for Tebonnet.

The leaves, lemma, and palea of Lacassine are glabrous. The spikelet is straw-colored and awnless. The apiculus is purple at heading, but the color fades as the grain approaches maturity. The grain is nonaromatic.

Lacassine has excellent grain yield potential. The overall average yield of Lacassine in the URRN in the four major rice producing states in the South in 1985 to 1990 was 7598 kg ha⁻¹, compared with 7105 for Lemont, 7255 for Gulfmont, and 6736 for Tebonnet. Lacassine has good ratooning ability, comparable with Lemont and Gulfmont.

Milling yields (mg g⁻¹ whole kernel/mg g⁻¹ total milled rice) at 120 mg g⁻¹ moisture (1985-1990 URRN average) were 580:702 (58:70%) for Lacassine, 589:707 (59:71%) for Lemont, 602:704 (60:70%) for Gulfmont (58:70%) for Tebonnet. Individual kernel dimensions for Lacassine, Lemont, Gulfmont, and Tebonnet are shown in Table 1.

Results from the Cooperative Regional Laboratory at Beaumont, TX, indicate that Lacassine is intermediate in U.S. long-grain rice cooking quality as described by Webb et al. (1). Lacassine has an apparent starch amylose content of 22 g kg⁻¹ indicated by an average alkali spreading reaction of 3.1.

Lacassine is moderately susceptible to rice blast (Pyricularia oryzae Cavara) races IB-49 and IC-17 and highly resistant to the other major blast races. It is resistant to sheath blight (Rhizoctonia solani Kühn), moderately susceptible to narrow brown leaf spot (Cercospora oryzae Kühn), and moderately susceptible to the disorder straighthead.

Variants observed and removed from increase fields of Lacassine were taller and included any combination of the following: pubescent, glabrous, earlier, later, intermediate grain type, and purple leaf color. The variants numbered less than 1 per 5000 plants.

Breeder and foundation seed of Lacassine were obtained from the Rice Research and Extension Center at Beaumont, TX, and the Cooperative Uniform Regional Rice Nurseries, P.O. Box 1429, Crowley, LA 70527.

Application for plant variety protection of Lacassine is not expected.


References and Notes


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Table 1. Paddy, brown, and milled grain dimension and weight of Lacassine, Lemont, Gulfmont, and Tebonnet rice grown at Crowley, LA, in 1990.

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Class</th>
<th>Length (L)</th>
<th>Width (W)</th>
<th>Thickness</th>
<th>L/W Ratio</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lacassine</td>
<td>Paddy</td>
<td>9.70</td>
<td>2.64</td>
<td>2.02</td>
<td>3.67</td>
<td>28.4</td>
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<tr>
<td>Lemont</td>
<td>Paddy</td>
<td>9.61</td>
<td>2.72</td>
<td>2.05</td>
<td>3.53</td>
<td>28.5</td>
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<tr>
<td>Gulfmont</td>
<td>Paddy</td>
<td>9.70</td>
<td>2.70</td>
<td>2.08</td>
<td>3.65</td>
<td>28.8</td>
</tr>
<tr>
<td>Tebonnet</td>
<td>Paddy</td>
<td>9.70</td>
<td>2.72</td>
<td>2.06</td>
<td>3.58</td>
<td>28.6</td>
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