'Jackson' is a very early-maturing, long-grain rice (Oryza sativa L.) (Reg. no. CV-101, PI 572412) developed at the Texas A&M University Agricultural Research and Extension Center at Beaumont, TX, by the USDA-ARS and the Texas Agricultural Experiment Station in cooperation with the Texas Rice Improvement Association, the Texas Rice Research Foundation, and the Mississippi Agricultural and Forestry Experiment Station. It was officially released April 1993.

Jackson was developed from a cross of RU7603015/'L-201' (Davis cross No. 622) made by J.N. Rutger, USDA-ARS, Davis, CA, in 1978. Seed from the F1 plant was included in the breeding nursery in 1980. In 1985, RU7603015 was released as 'Skybonnet 1 in Texas (1).

'L-201' was released in California in 1979 (2). Jackson was developed from the same cross as 'Maybelle' (3), and the two cultivars have identical pedigrees and the same identification, RU8403113, through the F7 generation. Panicle rows of RU8403113 were grown in Mississippi in 1987, and the subsequent breeder seed increase exhibited differences from the original RU8403113 in plant height, maturity, and flag leaf length. Therefore, the Mississippi-grown RU8403113 was assigned a new identification, RU9004003, and the differences were verified in widespread tests in the following years. The differences between RU8403113 (Maybelle) and RU9004003 were sufficiently great to merit the release of RU9004003 as a new cultivar, Jackson.

Jackson does not possess a gene for semidwarfism, but it is relatively short and has excellent resistance to lodging. In the Uniform Regional Rice Nurseries (URRN) in Texas, Louisiana, Arkansas, and Mississippi in 1990 and 1991, the overall average height of Jackson was 104 cm, compared with 99 cm for Maybelle. The average time from seeding to heading was 79 d for Jackson and 73 d for Maybelle. In 1990–1991 yield trials across Arkansas, Louisiana, Mississippi, and Texas, Jackson averaged 7329 kg ha−1, compared with 6474 for Maybelle (4). In those same trials, average whole-grain milling yields (mg g−1 whole kernels/mg g−1 total milled rice) at 120 mg g−1 moisture were 595/710 (60/71%) for Jackson and 560/695 (56/70%) for Maybelle.

Table 1. Average milled rice dimensions and weight of Jackson and Maybelle grown in Arkansas, Louisiana, Mississippi, and Texas in 1991–1992.

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Length (L)</th>
<th>Width (W)</th>
<th>Thickness</th>
<th>L/W ratio</th>
<th>Weight mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jackson</td>
<td>6.91</td>
<td>2.10</td>
<td>1.72</td>
<td>3.30</td>
<td>19.2</td>
</tr>
<tr>
<td>Maybelle</td>
<td>6.84</td>
<td>2.08</td>
<td>1.69</td>
<td>3.29</td>
<td>18.6</td>
</tr>
</tbody>
</table>

The outer surface of the leaf sheath of Jackson, like Maybelle, is green and the inside is colorless, with a purple tinge near the base. The leaves are glabrous. The spikelet is straw-colored, glabrous, and awnless. The apiculus is purple at heading, but at maturity the color is very faint. The grain is nonaromatic.

Grain dimensions and weight of Jackson, like Maybelle, are comparable to those of high-quality long-grain cultivars in the southern United States (5). The cooking and processing qualities of Jackson, like Maybelle, are comparable to those of current conventional long-grain cultivars in the southern United States (5). Jackson, like other high-quality long-grain cultivars, is characterized as a relatively high amylose-intermediate gelatinization temperature type. Milled rice grain characteristics of Jackson and Maybelle are similar (Table 1).

Like Maybelle, Jackson is susceptible to Pyricularia grisea Sacc. (the causal agent of rice blast) and has lower levels of field resistance to the disease than Skybonnet, but it is much more resistant than L-201. Jackson is also resistant to the physiological disorder straighthead. Like Maybelle, Jackson is very susceptible to panicle blight, a physiological disorder of unknown cause.

Breeder seed of Jackson will be produced and maintained by the Delta Branch Experiment Station of the Mississippi Agricultural and Forestry Experiment Station. Foundation seed will be produced by the Mississippi Foundation Seed Stocks and will be available through the Mississippi Agricultural and Forestry Experiment Station, P.O. Box 197, Stoneville, MS 38776.

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References and Notes

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