Registration of 'Lafitte' Rice

'Lafitte' rice (Oryza sativa L.) (Reg. no. CV-102, PI 593690) is an early maturing, high yielding, blast resistant, medium-grain cultivar developed at the Rice Research Station at Crowley, LA, by the USDA-ARS, the Arkansas Agricultural Experiment Station, the Mississippi Agricultural and Forestry Experiment Station, and the Texas Agricultural Experiment Station. Lafitte was officially released 6 Dec. 1995.

Lafitte originated from the cross 'Mercury'/Mercury'/Koshihikari' made at the Rice Research Station in 1988. Mercury (1) is an early-maturing, semidwarf, medium-grain cultivar released by the Rice Research Station in 1987. Koshihikari is a premium quality, short-grain cultivar from Japan. The selection number of Lafitte was 9120071. It was entered into the Louisiana advanced yield test and the Uniform Regional Rice Nurseries (URRN) in 1993 with the designation RU9302008.

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Lafitte has a short-statured plant type, but is moderately susceptible to lodging. In the URRN grown in Louisiana, Arkansas, Mississippi, and Texas from 1993 to 1995, the average height of Lafitte was 99 cm and that of 'Bengal', 'Mars', and 'Rico 1' was 94, 117, and 114 cm, respectively. The average number of days from emergence to 50% heading was 86, 90, 91, and 92 for Lafitte, Bengal, Mars, and Rico 1, respectively.

The leaves of Lafitte are dark green and glabrous. Kernels are glabrous and have straw-colored hulls and apiculi at maturity.

The average grain yield of Lafitte in the URRN in the four major rice-producing states of the southern USA from 1993 to 1995 was 7993 kg ha⁻¹, compared with 8581 kg ha⁻¹ for Bengal, 7226 kg ha⁻¹ for Mars, and 8410 kg ha⁻¹ for Rico 1. Average milling yields (i.e., the ratio of whole kernel to total milled rice, mg g⁻¹:mg g⁻¹) at 120 mg g⁻¹ moisture from the URRN (1993-1995) were 642:703 (64:70%) for Lafitte, 612:701 (61:70%) for Bengal, 624:704 (62:70%) for Mars, and 573:702 (57:70%) for Rico 1. Individual kernel dimensions for Lafitte, Bengal, Mars, and Rico 1 are shown in Table 1.

Results from the USDA-ARS Rice Quality Laboratory at Beaumont, TX, indicate that Lafitte has typical U.S. medium-grain rice cooking characteristics as described by Webb et al. (2). Lafitte has an average apparent starch amylose content of 138 g kg⁻¹ and a low gelatinization temperature (65-68°C), as indicated by an average alkali spreading reaction of 6 in 1.7% KOH. The endosperm of Lafitte is nonglutinous and nonaromatic, with a light brown pericarp.

Lafitte is highly resistant to the blast fungus [Pyricularia grisea (Cooke) Sacc.] races IB-1, IC-17, IG-1, IH-1, IE-1, and moderately susceptible to race IB-49. Lafitte is moderately resistant to sheath blight (caused by Rhizoctonia solani Kühn), resistant to narrow brown leaf spot (caused by Cercospora oryzae Miyake), moderately resistant to leaf smut (caused by Entyloma oryzae Syd. & P. Syd.), resistant to brown spot [caused by Bipolaris de Haan] Shoemaker], and susceptible to the physiological disorder straighthead.

Variants observed and removed from increase fields of Lafitte included any combination of the following: taller, shorter, earlier, later, gold hull, and intermediate grain type. The total number of variants numbered fewer than 1 per 5000 plants.

The Louisiana Agricultural Experiment Station will apply for plant variety protection for Lafitte under Title V of the U.S. Plant Variety Protection Act. Breeder and foundation seed of Lafitte will be maintained by the Louisiana State University Agricultural Center, Louisiana Agricultural Experiment Station, Rice Research Station, P.O. Box 1429, Crowley, LA 70527-1429.


References and Notes


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