Registration of 'Jasmine 85' Rice

'Jasmine 85' rice (Oryza sativa L.) (Reg. no. CV-107, PI 595927), a midseason aromatic (scented) long-grain cultivar with medium grain cooking quality, was developed at the International Rice Research Institute (IRRI), Los Baños, Philippines. It was officially released in 1989 by the USDA-ARS and the Texas Agricultural Experiment Station in cooperation with the Agricultural Experiment Stations of the Univ. of Arkansas, Louisiana State Univ., and Mississippi State Univ., and IRRI (1).

Jasmine 85 (IR841-85) was derived from the cross IR262/Khao Dawk Mali-105', which was made in 1966. Khao Dawk Mali 105, the leading aromatic cultivar produced in Thailand (2), is tall (about 150 cm), photoperiod-sensitive, and not adapted for production in the USA. IR262 was derived from the cross 'Peta' *3/'Tai-chung Native 1'. Jasmine 85 possesses the semidwarf gene found in IR262, but it is intermediate in height (110 cm) between typical U.S. semidwarfs such as 'Gulfmont' (96 cm) and standard height cultivars such as Katy (117 cm). It is similar to 'Cypress' in its moderate susceptibility to lodging, according to experimental plot data from Texas trials. At maturity, the spikelet is straw-colored, awnless, and the apiculus is colorless. Plants have erect tillers and upright flag leaves. The leaves, lemma, and palea are pubescent. There is no anthocyanin pigment in any Jasmine 85 plant parts. The number of days to 50% flowering (102) averaged 11 d later than Katy, which is among the latest of the commercial southern rice cultivars. Seedling vigor is similar to that of ‘Lemont’ and not as vigorous as Katy and Cypress.

In regional tests conducted during 1988 to 1994, average grain yield (120 g kg⁻¹ moisture) of Jasmine 85 (entry RU8803197) was 6450 kg ha⁻¹, compared with 4488, 6643, 6700, and 5972 kg ha⁻¹ for 'Della', Gulfmont, Cypress, and Katy, respectively. In these trials, the milling yield (mg g⁻¹ whole milled kernels : mg g⁻¹ total milled rice) of Jasmine 85 (503:680) averaged less than those of Delia (568:697), Gulfmont (612:708), Cypress (617:702), and Katy (591:685). Brown rice kernels of Jasmine 85 in 1994 averaged 7.07 mm in length, 2.29 mm in width, 1.77 mm in thickness, and 23.2 g kg⁻¹ moisture. Jasmine 85, like those of the fragrant rices of Thailand, are soft in texture and cohesive, with cooked kernels tending to cling together. The number of days to 50% flowering (102) averaged 11 d later than Katy and Cypress. The leaves, lemma, and palea are pubescent. There is no anthocyanin pigment in any Jasmine 85 plant parts. The number of days to 50% flowering (102) averaged 11 d later than Katy, which is among the latest of the commercial southern rice cultivars. Seedling vigor is similar to that of ‘Lemont’ and not as vigorous as Katy and Cypress.

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Jasmine 85 is highly resistant, with disease ratings of 4 or less, compared with 7 or greater for Gulfmont (on a scale of 0 to 9 for symptomless to killed plants) for brown leaf spot [caused by Cercospora oryzae (Syd. & P. Syd.)] and leaf smut (caused by Ustilago maydis (Berk. & Curt.) Shoemaker], similar to Delia but less resistant than Gulfmont, Cypress, and Katy.

Breeder seed of Jasmine 85 will be maintained by the Texas A&M University System Agricultural Research and Extension Center at Beaumont. Foundation seed will be distributed by the Texas Rice Improvement Association, 1509 Imes Rd., Beaumont, TX 77713-8530. Limited quantities of seed are asked to make appropriate recognition of source of germplasm, parental line, or genetic stock.

M. A. MARCHETTI, C. N. BOLLICH, B. R. JACKSON, A. M. MOORE

References and Notes

3. M.A. Marchetti, C.N. Bollich (retired), B.M. McChung, USDA-ARS, 1509 Imes Rd., Beaumont, TX 77713-8530. Limited quantities of seed are requested for research. Limited quantities of seed are requested for research. Limited quantities of seed are requested for research.