Registration of ‘L-204’ Rice

‘L-204’ is a long-grain rice (Oryza sativa L.) (Reg. no. CV-105, PI 592739) developed by the California Cooperative Rice Research Foundation, Inc. (CCRRF) at the Rice Experiment Station, Biggs, CA. It was designated experimentally as 92-Y-93 and released jointly by the CCRRF, the California Agricultural Experiment Station, and the USDA-ARS on 1 Apr. 1996. L-204 is a pure line selection from the cross R12664 made in 1986. The pedigree is ‘Lemont’/Tainung-sen-yu 2414/L-201’. Lemont (1) is an early maturing, semidwarf long-grain cultivar developed by the USDA-ARS at the Rice Research Station, Beaumont, TX.

Tainung-sen-yu 2414 (3) is a semidwarf long-grain line selected by the Taiwan Agricultural Research Institute from IR-5470, which was introduced from the International Rice Research Institute. L-201 (4) is an intermediate height long-grain cultivar developed and released by CCRRF in 1979.

L-204 was compared with commercial cultivars L-202 (5) and L-203 (6) in multilocation yield trials conducted by the University of California Cooperative Extension from 1992 to 1995. L-204 is a photoperiod insensitive, early maturing, semidwarf long-grain cultivar. It has glabrous leaves and spikelets. Some hairs are present on the lemma and palea keels. The spikelet is awnless, and straw-colored with red apiculus. The stigma is purple. Leaves are darker green than L-202 and L-203.

L-204 is about 2 and 5 d earlier than L-203 and L-202, respectively, reaching 50% heading in about 88 d. It averages 85 cm in height and is about 4 cm taller than L-202 and L-203. The seedling vigor of L-204 is similar to L-203 but slightly better than L-202. Seedling vigor visual scores for L-204, L-203, and L-202 were 4.2, 4.2, and 3.8, respectively (where 1 = poor and 5 = excellent). L-204 is tolerant of thiobencarb and molinate herbicides in the seedling stage. L-204 showed no significant difference from L-202 and L-203 in reaction to stem rot (caused by Sclerotium oryzae Catt.) and aggregate sheath spot (caused by Rhizoctonia oryzae-sativae [Saw.] Mordue) diseases. The stem rot disease ratings (scale of 0 to 10, where 0 = no symptoms and 10 = stem completely penetrated) (2) were 6.6, 6.7, and 6.3 for L-204, L-202, and L-203, respectively, and aggregate sheath spot ratings (number of dead leaves on the uppermost four nodes) were 2.4, 2.5, and 2.6. L-204 appears to be slightly more susceptible to cool temperature-induced sterility than L-202 and L-203.

L-204 has shown significantly higher yield potential than L-202 and a yield potential equal to L-203. Average yield at 120 kg ha⁻¹ (12%) grain moisture in the 20 tests conducted from 1992 to 1995 were 10332 kg ha⁻¹ for L-204, compared with 9559 and 10 070 kg ha⁻¹ for L-202 and L-203, respectively. L-204 grain weight is similar to L-203 and about 10% heavier than L-202. Brown rice kernels of L-204 in 1995 were 25.6 mg in weight, 8.1 mm in length, and 2.4 mm in width, compared with 22.3 mg, 7.9 mm and 2.2 mm for L-202 and 25.0 mg, 8.0 mm, and 2.4 mm for L-203, respectively. The L-204 kernel has a light brown pericarp, colorless, nonglutinous, nonaromatic endosperm. L-204 has an apparent amylose content of 233 g kg⁻¹ (23.3%) and an intermediate gelatinization temperature (70-75°C), as indicated by spreading values of 3 to 5 in 17 g kg⁻¹ KOH solution. Amylose content and alkali spreading values were determined by

References and Notes

3. Teng, Y.T. 1995. Personal communication. Key: USDA-ARS Rice Research Unit, Beaumont, TX. L-204 has an intermediate gelatinization temperature, as indicated by spreading values of 3 to 5 in 17 g kg⁻¹ KOH solution. Amylose content and alkali spreading values were determined by

Registration of ‘A-201’ Rice

‘A-201’ is an aromatic long-grain rice (Oryza sativa L.) (Reg. no. CV-106, PI 592740), developed by the California Cooperative Rice Research Foundation, Inc. (CCRRF) at the Rice Experiment Station, Biggs, CA. It was designated experimentally as 92-Y-93 and released jointly by the CCRRF, the California Agricultural Experiment Station, and the USDA-ARS on 1 Apr. 1996. An F₁ plant was used for backcrossing to L-202 and L-203 (84%) grain moisture in the 20 tests conducted from 1992 to 1995. The A-201 kernel has a light brown pericarp and a colorless, nonglutinous, nonaromatic endosperm. L-204 has an apparent amylose content of 233 g kg⁻¹ (23.3%) and an intermediate gelatinization temperature, as indicated by spreading values of 3 to 5 in 17 g kg⁻¹ KOH solution. Amylose content and alkali spreading values were determined by

References and Notes

3. Teng, Y.T. 1995. Personal communication. Key: USDA-ARS Rice Research Unit, Beaumont, TX. L-204 has an intermediate gelatinization temperature, as indicated by spreading values of 3 to 5 in 17 g kg⁻¹ KOH solution. Amylose content and alkali spreading values were determined by

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