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-ya 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-ya 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 multilocational 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 aliciulus. The stigmas are 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.

L-204 was approved for certification by the California Crop Improvement Association in 1996. The initial foundation seed field contained some slightly taller and later offtypes (<0.0001%) that were rogued. The rogued offtype plants appeared to be from outcrossing to medium and short-grain varieties. Classes of seed will be breeder, foundation, registered, and certified. Application is being made for L-204 under the U.S. Plant Variety Protection Act, Title V option. Breeder and foundation seed classes of L-204 will be maintained by the California Cooperative Rice Research Foundation, Inc., Biggs, CA.


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 91-Y-631 and released jointly by the CCRRF, the California Agricultural Experiment Station, and the USDA-ARS on 1 Apr. 1996. A-201 originated from the cross R10435 made in 1984. The pedigree is 'L-202'×PI 457920×L-202. An F1 plant was used for backcrossing to L-202. L-202 (2) is an early maturing, semidwarf, long-grain cultivar developed and released by CCRRF in 1984. PI 457920, an introduction from Pakistan, is a semidwarf mutant of 'Basmati 370'.

A-201 was evaluated with commercial cultivars L-202 and 'A-301' (3) in state-wide yield trials conducted by the University of California Cooperative Extension from 1992 to 1995. A-201 is a photoperiod insensitive, early maturing, semidwarf, aromatic long-grain cultivar. It reaches 50% heading in an average of 93 d, which is similar to L-202 and 8 d earlier than A-301, an intermediate maturing aromatic long-grain cultivar. Average plant heights of A-201, L-202, and A-301 were 91, 83, and 85 cm, respectively. A-201 exhibits lodging resistance similar to L-202. A-201 plants have glabrous leaves and spikelets except for a few hairs on the lemma and palea keels. Spikelets are awnless, straw colored, and have red aliciulus. Leaf color is similar to L-202 and lighter green than A-301.

A-201 grains are slightly more slender than L-202 and A-301. Brown rice kernels of A-201 average 23.1 mg in weight, 8.0 mm in length, and 2.2 mm in width (compared with 22.3 mg, 7.9 mm, and 2.3 mm for L-202 and 24.7 mg, 8.0 mm, and 2.3 mm for A-301, respectively). The A-201 kernel has a light brown pericarp and a colorless, nonglutinous, nonaromatic endosperm. A-201 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. The amylose content and alkali spreading values were determined by USDA-ARS Rice Research Unit, Beaumont, TX. L-204 has an amylographic profile distinctly different from L-202 and L-203. Viscosities from a Rapid Visco Analyser characterization were (peak-hot paste-cool paste) 190-91-196, 131-68-155, and 126-59-155 for L-204, L-202, and L-203, respectively. Head rice milling yield of L-204, L-202, and L-203 from samples harvested sequentially at grain moisture contents ranging from 22.0 to 150 g kg⁻¹ (22 to 15%) over 3 yr averaged 577, 520, and 470 g kg⁻¹ (57.7, 52.0, and 47.0%, respectively).

L-204 was approved for certification by the California Crop Improvement Association in 1996.