and yellow when mature. The panicle is medium in size and equilateral in shape with spreading branches. There is some unevenness in height, however, only a few panicles, if any, are completely above the panicle canopy. The overall appearance of Moore resembles Lodl, one of its parents, except for plant color.

Seed of Moore was released to certified growers in Minnesota, North Dakota, South Dakota, and Wisconsin in 1979. The cultivar is best adapted to the northern portion of that area.

Breeder seed will be maintained by the Minnesota Crop Improvement Association, 1900 H Bender Ave., St. Paul, MN 55108.

Application for plant protection will be made.

REGISTRATION OF M-301 RICE1
(Beg. No. 55)

C. W. Johnson, H. L. Carnahan, S. T. Tseng, and D. M. Brandon

'M-301' (Oryza sativa L.), C.I. 9973, (experimental designation 78-Y-65) is a composite of 15 homogeneous F1 lines. It was derived from a cross, R2733, made at the California Co-operative Rice Res. Foundation’s Rice Exp. Stn. in the winter of 1974 to 1975. This cross was ‘Calrose 76’/CS-M3/’75S’. The Calrose 76/CS-M3 parent was a short-stature, late-maturing, medium-grain F1 line that was later increased and released as ‘MT’. M5 is a tall, medium-grain cultivar of intermediate maturity which originated as an earlier maturing natural mutant from CS-M3.4

M-301 was compared with cultivars and experimental varieties from California in replicated tests conducted cooperatively with the California Agric. Exp. Stn. and the California Coop. Ext. Service.

The designation, M-301, indicates that the new cultivar has medium-grain shape (M), is of intermediate maturity (300 series) and is the first cultivar in this series (01) to be released since adoption of this naming system in 1979. It has glabrous lemma, palea and leaf blades except that some hairs are found on the lemma keel and on leaf blade margins. No plant parts of M-301 show anthocyanin pigmentation. M-301 is sparsely awned.

M-301 has short stature, averaging around 97 cm as compared to 125 cm for M5. Panicles of M-301 normally are exerted completely from the leaf sheaths. The new cultivar has good seedling vigor and intermediate maturity similar to the M5 parent. It is not photoperiod sensitive. M-301 is much more resistant to lodging than M5, averaging 48 vs. 85% lodging for the latter. It lodges more than M7 which averaged 10% in the same tests.

Brown rice kernels of M-301 are slightly smaller than M5, averaging 22.9 mg as compared to 23.8 for M5. Brown rice kernels range from 5.9 to 6.0 mm long and 2.7 to 2.8 mm wide. Milled kernels of M-301 are similar to those of M5 in translucency. Grains of M-301 have light brown bran (pericarp) and white non-glutinous and non-aleurone endosperm. Results from the Cooperative Regional Rice Quality Laboratory at Beaumont, Tex. showed that the amylose makes up 17 to 19% of the starch. M-301 kernels have a low gelatinization temperature as evidenced by alkali spreading scores of 6.9 to 7.0 in 1.7% KOH. These values are typical of those for U.S. medium-grain rice cultivars.

M-301 is sparsely awned.

M-301 has good tolerance to sterility (comparable to M7) caused by low temperatures 10 to 14 days before heading. Reaction of M-301 to diseases that are prevalent in humid areas is unknown. M-301 is moderately tolerant to stem rot (infected by Sclerotium oryzae Catt.), being similar in reaction to its parents.

M-301 appears to be adapted to the major rice growing areas of California and should replace M5.

Foundation seed of M-301 will be made available to seed growers in 1979 on a “certification pending basis”. M-301 was released jointly by the California Co-operative Rice Res. Foundation, Inc., the California Agric. Exp. Stn. and AR-SEA-USDA. It was approved for certification by the California Crop Improvement Association in 1980. Application is not being made for plant variety protection of M-301. Classes of seed will be breeder, foundation, registered and certified. Both the 1979 foundation and registered seed lots of M-301 contain up to 0.3% of off-types also having medium-grain shape and being short in stature but with pubescent hulls and leaves. Some of the off-types were slightly earlier than M-301. Off types have been removed from the seed for breeder seed production in 1980. Breeder and foundation seed of M-301 will be maintained by the California Co-operative Rice Res. Foundation, Inc., P.O. Box 306, Biggs, CA 95917.

REGISTRATION OF S-201 RICE1
(Beg. No. 56)

H. L. Carnahan, C. W. Johnson, S. T. Tseng, and D. M. Brandon

'S-201' rice (Oryza sativa L.), C.I. 9974. (experimental designation 78-Y-38 + 78-Y-41) is a composite of two homogeneous lines from the cross ‘Calrose 76’/CS-M3/’56 made at the California Co-operative Rice Research Foundation’s Rice Exp. Stn. near Biggs, Calif. This cross, designated R2742, was made in the winter of 1974 to 1975. The greenhouse and a winter nursery in Hawaii were used to advance the early generations and/or for preliminary seed multiplication. The maternal parent of the final cross was a short-stature, F1, late-maturing, medium-grain line that was later increased and released as ‘MT’. The S6 parent has been described and is a popular tall, early-maturing, short-grain cultivar that is being grown on more than 90% of the California short-grain acreage. M7 is the source of S-201’s short stature while S6 is the source of its grain shape and early maturity.

S-201 was compared with cultivars and experimental varieties from California in replicated tests conducted cooperatively with the California Agric. Exp. Stn. and the California Coop. Ext. Service.

The designation, S-201, indicates that the new cultivar has short grains (S), is of early maturity (200 series) and is the first (01) cultivar of this grain type and maturity to be released since adoption of this naming system in 1979. S-201 has glabrous lemma, palea and leaf blades except that some hairs are found on the lemma keel and on leaf blade margins. No plant parts of S-201 show anthocyanin pigmentation. S-201 is awned except for occasional tip awns.

S-201 has short stature, averaging 86 cm. Panicles of S-201 normally are exerted completely from the leaf sheath. The new cultivar has good seedling vigor comparable to its S6 parent. S-201 heads and matures

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