REGISTRATION OF 'NC 9' PEANUT

'NC9' is a large-seeded, Virginia-type peanut (Arachis hypogaea L. ssp. hypogaea var. hypogaea) (Reg. no. 30) cultivar developed by the North Carolina Agricultural Research Service and released in 1985. It was selected by the pedigree method following the cross of 'NC 2' and 'Florigiant'. The final single plant selection was made in the F4 generation. NC 9 was designated NC 17404 during development and testing.

NC 9 has a runner growth habit similar to that of Florigiant, the predominant cultivar in North Carolina and Virginia. However, it matures up to 10 days earlier than Florigiant. NC 9 is similar to Florigiant in disease and insect susceptibility.

For the first digging date of the Virginia-North Carolina Peanut Variety and Quality Evaluation Program from 1977-1984, NC 9 produced slightly higher yields, more fancy size pods (fruit that ride a 13.5-mm spacing on presizer), extra large kernels (seed that ride a 8.5 x 25.4-mm slotted screen), and greater value per ha than Florigiant. Total mill outturn from straight shelling of farmer's stock peanuts was about 1% higher for NC 9 than Florigiant. Seed counts, pod counts, processing quality, shelf life, and flavor scores were not different for the two cultivars. Blanched test data show NC 9 to be somewhat more difficult to blanch than Florigiant.

Breeder seed are maintained by the North Carolina Agricultural Research Service, Box 7601, Raleigh, NC 27695.

J.C. WYNNE, R.W. MOZINGO, AND D.A. EMERY (1)

References and Notes
1. Professor of crop science, North Carolina State Univ., Raleigh, NC 27695; associate professor of agronomy, Virginia Polytechnic Inst. and State Univ., Blacksburg; and professor of crop science, North Carolina State Univ. Registration by the Crop Sci. Soc. of Am. Accepted 19 July 1985.

REGISTRATION OF 'CALMOCHI-101' RICE

'Calmochi-101' short-grain, waxy-endosperm rice (Oryza sativa L.), (Reg. no. 71) PI494104, designated experimentally as 82-Y-126, was developed by the California Cooperative Rice Research Foundation, Biggs, CA. It is a pure line selection from the cross, R4749, made in the winter of 1977-1978. The pedigree is 'Tatsumi mochi'/'M7'/

Calmochi-101 has pubescence on the hulls and is awnless and has anthocyanin pigmentation.

Panicles of Calmochi-101 normally are completely from leaf sheaths. The new cultivar has seedling vigor and high tolerance to sterility. Night temperatures 10 to 14 days before heading are to M-101. Calmochi-101 and M-101 are similar to stem rot (incited by Sclerotium oryzae C. L. Mordue). Reaction of Calmochi-101 to diseases that are not prevalent in California is unknown.

Brown rice kernels of Calmochi-101 are larger (11.7%) than those of 'Calmochi-202' (2). They averaged 23.9 mg per kernel, 5.4 mm long and 2.95 mm wide compared to 20.4 mg, 5.2 mm and 2.9 mm for Calmochi-202. Grains of Calmochi-101 have pericarps, and white waxy or glutinous endosperm. Results from the Cooperative Rice Laboratory at Beaumont, TX, showed that up less than 1% of the endosperm starch, with a gelatinization temperature as indicated by an amylographic viscosity of 6.0. These characteristics and its amylographic viscosity were typical for U.S. glutinous or waxy rice. Commercial waxy rice users prefer the larger cooking properties of Calmochi-101 to those of Calmochi-202. Whole kernel (head) milling yield of Calmochi-101 was 58.8% compared to 54.2% for M-101.

Calmochi-101 has performed very well in replicated tests conducted in cooperation with the California Cooperative Extension. These tests included very early cultivars and experimental varieties at sites representative of the California growing areas. Calmochi-101 averaged 10,097 kg ha−1 (8148 lb./acre) of paddy (rough rice) at 12% moisture compared to 9134 kg ha−1 (8148 lb./acre) for M-101 for an average yield advantage of 11%. Since Calmochi-101 is earlier than Calmochi-202, is more cold-tolerant, and has preferred quality, it is expected to replace Calmochi-202.

Foundation seed of Calmochi-101 is being developed by the California Agricultural Experiment Station, ARS. It was approved for certification by the Crop Improvement Association in 1985. Application is being made for plant variety protection of Calmochi-101 by the California Agricultural Experiment Station and USDA-ARS. Foundation seed will be maintained by the Cooperative Rice Research Foundation, P.O. Box 306, Biggs, CA 95917.

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Published January, 1986