The Louisiana State University AgCenter’s Rice Research Station, Crowley, LA, released a doubled haploid (DH) mapping population Cocodrie/MCR01–0277 with 325 DH lines (Reg. no. MP 2, NSL 439502 MAP). The parent lines have been assigned PI numbers, as Genetic Stocks-Orzya (GSOR) 200326 (PI 641931 MAP) and MCR01–0277 as GSOR 200327 (PI 641932 MAP). The progeny lines are listed as GSOR 200001 to 200325. The mapping population was developed at the Rice Research Station from a cross between the sheath blight (caused by Rhizoctonia solani Kühn) susceptible cultivar Cocodrie (PI 606331) (Linscombe et al., 2000) and the line MCR01–0277 which was developed by M.C. Rush with a high level of partial resistance to sheath blight in the rice pathology program. Using the first letter of each parent line, these materials are designated as the C/M mapping population. A set of 325 DH plants was regenerated through anther culture from randomly sampled F1 plants. Seeds of the 325 DH lines were increased in a winter nursery in Puerto Rico in 2004. The entire population was continued through two DH generations to provide materials.

The cross between Cocodrie and MCR01–0277 was made in 2003, and 14 F1 plants were space planted in the greenhouse during the winter of 2003–2004. At the booting stage, boots were randomly collected for anther culture. A total of 235800 anthers were plated onto callus induction medium and 725 green plantlets were regenerated in 2004 from calli transferred to regeneration medium as described by Chu et al. (1998). These plants were transplanted in the greenhouse. After discarding the haploid, tetraploid, and a few aneuploid plants, which did not set seeds or exhibited very low spikelet fertility, the 325 normal seed setting plants (DH) were harvested. A single panicle of each DH plant was harvested for a panicle-to-row increase in the DH generation in 2004. All lines survived and produced 50 or more grams of seed in 2004.

The establishment of a DH mapping population was initially requested during the Multistate Rice Breeders Conference held in 2002 in Louisiana. The objective was to further understand the molecular basis of sheath blight resistance (S. Linscombe, personal communication, 2003). This population is to be used by USDA funded Rice Coordinated Agricultural Project (RiceCAP), a multiple institution effort, for studies in southern U.S. crosses. Rice Biotechnol. Q. 35:15–16. Linscombe, S.D., F. Jodari, P.K. Bollich, D.E. Groth, L.M. White, Q.R. Chu, R.T. Dunand, and D.E. Sanders. 2000. Registration of ‘Cocodrie’ rice. Crop Sci. 40:294.

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