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摘要: Grain size, determined chiefly by grain length, is one of the main factors affecting the grain yield in rice production. To study the trait of rice grain size, F1 and F2 populations were developed from crosses Shuhui 881/Y34 and Shuhui 527/Y34, and genetic analysis for minute grain was performed. The F1 populations showed minute grains, and grain size segregations in the two F2 populations were both in accordance with the ratio of 3:1, indicating that minute grain in Y34 was controlled by a completely dominant gene. By using the F2 population from Shuhui 881/Y34, this dominant gene, tentatively designated as Mi3(t), was mapped based on SSR markers in the interval between RM282 (genetic distance of 5.1 cM) and RM6283 (genetic distance of 0.9 cM) on the short arm of chromosome 3.

关键词: rice; minute grain; genetic analysis; gene location

Rice Science. 2005, 12(4): 243-248

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