

一个新的水稻花器官突变体的鉴定和基因定位

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Characterization and Gene Mapping of a Novel Mutant in Rice Floral Organs

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摘要

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摘要 在水稻(*Oryza sativa*)品种台中65的组培后代中发现一个花器官发育异常突变体*flower organ number 6 (fon6)*, 其主要表型为: 双子房, 多柱头, 7-8枚雄蕊。遗传分析表明, 该突变表型由一对隐性基因控制。以该突变体与籼稻3037杂交的F₂代分离群体作为定位群体, 利用STS标记将与突变性状相关的基因定位于第6染色体短臂上STS标记PL4和PL5之间约480 kb的范围内。该研究结果为进一步的基因克隆及功能研究奠定了基础。

关键词: 双子房 花器官 基因定位 多柱头 水稻

Abstract: We obtained a rice floral mutant, inner *flower organ number 6 (fon6)*, from the progenies of tissue culture of a *japonica* variety Taichung65. The mutant has double ovaries, multi-stigmas, and 7 to 8 stamens. The mutant trait is controlled by a single recessive gene. The F₂ population derived from the cross between Zhongxian 3037 and *fon6* was used for gene mapping. *FON6* was mapped to the ~480-kb region between the sequence-tagged site markers PL4 and PL5 on chromosome 6. These results will be useful for cloning and functional analysis of the gene.

Keywords: double-ovary flower organ gene mapping multi-stigmas rice

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