

一个黄绿色的水稻细胞核突变体

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收稿日期 修回日期 网络版发布日期 接受日期

摘要 用甲基磺酸乙酯(EMS)处理粳稻品种8126离体培养早期的花药,从所产生的一个花粉植株的H2株系中分离到一个黄绿色突变体。突变体植株叶片的叶绿素含量仅为正常叶片的1/3。突变性状稳定,在连续自交4代中,没有出现任何绿色植株;由突变体通过花药培养产生的植株除部分白化苗外均呈黄绿色。突变体与正常植株杂交,无论其为父本或母本,杂种F1植株通过花药培养产生的小苗中绿苗与黄绿苗的比值符合3:1;由杂种F1植株通过花药培养产生的小苗中绿苗与黄绿苗数的比值符合1:1。证明突变性状是由单一的隐性细胞核基因所控制。

关键词

分类号

A Yellow-Green Nucleus Mutant of Rice

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Abstract

Key words [A rice yellow green mutant \(HY 101\) was segregated from an H2 strain of a pollen plant which was produced from the cultured anthers of the variety 8126 treated with mutagen EMS at the early stage of culture. The mutant plants are yellow-green color and the chlorophyll content of its leaves is only about one third of that of normal leaves. The mutant characters are more stable and not a single green plant was observed in the following four generations and in plantlets from mutant by anther culture. The F1 plants of hybrids between the mutant and normal green. The segregation ratio of green plants to yellow-green plants was 3:1 in F2 hybrid plants and 1:1 in pollen plantlets from F1 hybrid plants by anther culture. Thus, the mutant characters are attributed to a single recessive gene located in nucleus.](#)

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