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研究论文

普通野生稻Oryza rufipogon Griff. 生态分化的初探

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摘要 为探讨普通野生稻Oryza rufipogon Griff. 的生态分化式样， 对中国的31个天然居群及其生境进行了考察。 通过对其生活史特性、 生长习性、 抽穗光周期、 百粒重和繁育系统的初步观察后得到如下结果： 1) 在中国没有发现一年生的天然居群； 2) 随着纬度的升高， 普通野生稻的繁育系统有从无性生殖向有性生殖偏移的趋势； 3) 适应日照长度变化的结果使其始穗期有随着纬度的升高而提早的趋势； 4) 茎的生长习性的多型性与周围栽培稻的基因流有关， 在小生境中水分条件的差异亦可导致生长习性从匍匐到直立的渐变。 但是， 等位酶分析的结果表明同一居群内具有不同生长习性的类型之间没有明显的遗传分化。

关键词 普通野生稻 生态分化

分类号

A Preliminary Study on Ecological Differentiation within the Common Wild Rice Oryza rufipogon Griff

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Abstract In order to reveal the pattern of ecological differentiation in Oryza rufipogon Griff., 31 natural populations as well as their habitats were investigated in southern China, and the variation of life-history, culm growing habits, photoperiod sensitivity, and reproduction systems was observed: (1) annual populations are not recognized in China; (2) as the latitudes increase, the proportion of asexual reproduction tends to increase and that of sexual reproduction decrease; (3) the change of daylight length leads to the initial heading stage from late to early as the latitudes increase; (4) the variation of culm growing habits from creep to vertical is not only influenced by gene flow of cultivated rice nearby, but also can be affected by the differences of water condition in their microhabitats. A llozyme diversity was analyzed for all types of growing habits within an introgressed population, and little genetic differentiation was found among them.

Key words Oryza rufip og on Griff. Ecological differentiation

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