

研究论文

试用配合力进行粳型水稻杂种优势生态型的划分

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摘要 利用9个生态类型55份粳稻亲本材料, 以生态型进行双列杂交, 研究供试亲本的一般配合力和各生态型组合的特殊配合力以此分析粳稻的优势生态型。结果表明: 各生态型主要性状的一般配合力和特殊配合力方差均达到显著水平, 且一般配合力方差大于特殊配合力方差。配合力分析表明西北粳、台湾粳和非洲ITA粳在多个性状上具有较高的一般配合力, 可初步认为它们是本试验的优势生态型。一般配合力效应与杂种一代表型表现出极显著的正向相关, 而特殊配合力与杂交组合后代相关不显著, 亲本各自的一般配合力和特殊配合力是相互独立的, 二者之间并无必然的联系。亲本性状的与亲本一般配合力的高低也无必然联系。

关键词 [粳稻](#) [生态型](#) [配合力](#)

分类号 [S511](#)

Heterotic Ecotypes Grouping of Japonica Rice by Combining Ability

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Abstract 55 japonica rice varieties from 9 ecotypes were used to make crosses in diallel set. The classification of heterotic groups was based on the GCA and SCA. The results showed that there were notable difference in variance of their combining ability and special ability. The variance of general combining ability (GCA) was higher than that of special combining ability (SCA). The results also indicated those characters were mainly controlled by the effects of additive gene with less action of no-additive gene effect. It was demonstrated that the japonica ecotypes of Northwest, Taiwan and ITA could be considered as heterotic ecotypes in this study. The relationship between GCA and hybrids was significant, and there was no correlation between SCA and hybrids.

Key words [Japonica rice](#) [Heterotic ecotype](#) [and Combining ability](#)

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