Studies on the Genetic Variation of Rice Hybrid Populations by Natural Selection in First Crop Season and at Different Locations

III. Genetic Variability of Agronomic Characters in F₃ Populations

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Summary

In 1983, the F₂ populations of two hybrid crosses, J682020 x Chianong 242 (A cross) and IR747B₂ x Chianong Shen Yu 30 (B cross) were planted in first crop season at four locations in Taiwan (Pingtung, Chiayi, Taichung and Lanyoung). In first crop season of 1984, half of the seeds obtained from each location were once again planted at their original sites. The remaining seeds were brought to Taichung and planted together with their parental strains for evaluation the genetic variation on various characters in F₃ populations.

By comparing certain genetic parameters among locations, it was found that the distribution patterns, mean values, variation, heritability and correlation of agronomic characters of F₃ populations varied in different locations. The F₃ populations from each of the four location (Pingtung, Chiayi, Taichung and Lanyoung) were space-planted in the field at Taichung and the genetic parameters were estimated. Similar results were found.

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