



Yield potential and correlation analysis of some rice hybrids for yield and its component traits

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1 ABSTRACT

Eleven hybrid combinations developed by three line systems with two standard check varieties were evaluated in two rice growing seasons in 2014 and 2015 at the experimental farm of the Rice Research and Training Center (RRTC), Kafr El-Sheikh, Egypt to find out best heterotic hybrids and interrelationships of yield and yield components of rice. Analysis of variance revealed significant differences for all traits studied, indicating the presence of high genetic variability among the genotypes. Two hybrids yielded significantly better than the higher-yielding check variety Giza 179 over the two seasons. The results revealed that the degree of standard heterosis varied from trait to trait. All of the hybrids showed superiority over standard check Sahel 108 for grain yield also showed significant heterosis for majority of other traits. While, two out of 11 hybrids significantly exceeded the respective check Giza 179. The interrelationships study showed positive and significant correlations in most of the cases. The highest value was found between flag leaf area and panicle length (0.788). Grain yield showed significant correlation and positive with number of panicles plant⁻¹ (0.565).
