

## RESEARCH ARTICLE

# Heterosis studies for yield and yield components in rice (*Oryza sativa* L.)

■ M. SALA, P. SHANTHI, B. SELVI AND V. RAVI

### SUMMARY

Heterosis in rice was studied for yield and its component traits in 25  $F_1$ s involving 10 parents comprised of 5 lines and 5 testers. The high magnitude of heterosis for grain yield per plant is evident by significant superiority of crosses over mid parent and better parents in several crosses. The crosses viz., ADT37/ Nona bokra, ADT 37 /Pokkali, ADT 37 / FL478, ADT 42 /Pokkali , ADT47/CSR36 showed high relative heterosis and heterobeltiosis for grain yield per plant. The crosses exhibiting good heterotic expression in  $F_1$  may be further studied to isolate superior transgressive segregants in later generations. The development of pure lines from segregating population is very important for evolving high yielding varieties.

**Key Words :** Rice, Relative heterosis, Heterobeltiosis

**How to cite this article :** Sala, M., Shanthi, P., Selvi, B. and Ravi, V. (2016). Heterosis studies for yield and yield components in rice (*Oryza sativa* L.). *Internat. J. Plant Sci.*, **11** (1): 98-102.

**Article chronicle :** Received : 22.11.2015; Revised : 02.12.2015; Accepted : 13.12.2015

### MEMBERS OF THE RESEARCH FORUM

#### Author to be contacted :

**M. SALA**, Tamil Nadu Rice Research Institute (T.N.A.U.) ADUTHURAI (T.N.) INDIA

#### Address of the Co-authors:

**P. SHANTHI AND V. RAVI**, Tamil Nadu Rice Research Institute (T.N.A.U.) ADUTHURAI (T.N.) INDIA

**B. SELVI**, Department of Millets, Tamil Nadu Agricultural University, COIMBATORE (T.N.) INDIA