

ASSOCIATION ANALYSIS OF DROUGHT AND YIELD RELATED TRAITS IN F₂ POPULATION OF MOROBEREKAN/IR64 RICE CROSS UNDER AEROBIC CONDITION

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ABSTRACT

Present study was performed to determine the association between drought and yield related traits in F₂ population of Moroberekan/IR64 rice cross. Results showed that harvest index ($r = 0.30$), biomass yield ($r = 0.78$), panicle weight ($r = 0.58$), panicle length ($r = 0.34$) and number of productive tillers plant⁻¹ ($r = 0.62$) correlated significantly with grain yield, while grain yield was negatively associated with leaf rolling ($r = -0.19$). Path coefficient analysis revealed that harvest index and biomass had direct effect on grain yield (0.320 and 0.566 respectively). The results obtained during present investigation revealed that harvest index, biomass yield, number of productive tillers plant⁻¹ and leaf rolling could be used as selection criteria for high grain yield and drought resistance in segregating populations of rice.

KEYWORDS: Moroberekan/IR64 Rice Cross, Harvest Index, Biomass Yield