Character Association and Path Analysis of Yield and Yield Component Traits in Rice (*Oryza sativa* L.)

M Srinivasa Rao, M Subba Rao, M Lal Ahamed, P Ramesh Babu, G Rama Rao and V Srinivasa Rao

Department of Genetics and plant Breeding, Agricultural College, Bapatla, A. P.

ABSTRACT

An investigation was carried out in forty three rice cultivars to understand the association among yield and quality components and their direct and indirect influence on the grain yield. The correlation analysis indicated that grain yield was significantly associated with days to 50% flowering, days to maturity, plant height, productive tillers plant⁻¹, panicle length, filled grains ⁻¹, total grains panicle⁻¹, hulling %, milling % and head rice recovery. Path coefficient analysis revealed that days to maturity, plant height, productive tillers plant⁻¹, total grains panicle⁻¹ and head rice recovery had positive direct effect on grain yield. Hence, selection based on these traits could help to bring simultaneous improvement of yield and yield attributes.

Key words: Character association, Path Analysis and Rice.