

CHARACTER CORRELATION IN DIFFERENT ENVIRONMENTAL CONDITIONS FOR YIELD AND YIELD COMPONENTS IN RICE (*ORYZA SATIVA L.*)

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Received-24.10.2015, Revised-02.11.2015

Abstract: Association analysis gives an idea about relationship among the various characters and determines the component characters, on which selection can be based for genetic improvement in the grain yield. Three hundred seventy nine (379) lines of F₃ progenies of cross between Swarna x IR86931-B-6 and MTU1010 x IR86931-B-6 were conducted in field of research cum instructional farm, College of Agriculture, IGKV, Raipur (C.G.). Rice crop was grown in irrigated and water stress condition rainout shelter I (ROS I) and rainout shelter II (ROS II). In irrigated condition, grain yield showed highly significant and positive correlation with plant height (0.724), total tillers (0.919) and effective tillers (0.925). Under water stress condition, effective tillers possessed significant and positive association with plant height (0.695=ROS I; 0.453=ROS II) and with total tillers (0.969=ROS I; 0.967=ROS II). Similarly, total tillers exhibited significant and positive association with plant height (0.708=ROS I; 0.518=ROS II).

Keywords: Correlation, Rice (*Oryza sativa L.*), Yield

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