SCREENING OF RICE (*ORYZA SATIVA* L.) GERMPLASM FOR NaCL TOLERANCE

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ABSTRACT

A total of 213 rice accessions were tested for salt tolerance. Nona Bokra (Tolerant) and IR2035 (Susceptible) were used as control. Present studies were conducted in the growth chamber at 29/21°C day /night temperature with relative humidity 70%. Accessions were tested at 8 dS m^{-1} and 12 dS m^{-1} concentration of NaCl. Out of 213 accessions, 60 were evaluated for seedling height and biomass. After evaluation of these 60 accessions, 20 accessions were finally selected to study the NaCl stress at 12 dS m^{-1} concentration. The parameters such as height, fresh dry biomass, Na^+ and K^+ contents of the seedling were recorded after fifteen days and were analyzed statistically. The effect of NaCl stress was more pronounced at 12 dS m^{-1}. Nona Bokra has shown more tolerance than IR2035. It was also observed that K^+ contents were higher than the Na^+ contents in Nona Bokra which confirmed our current observations.