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# RESPONSE OF SOME SELECTED WHEAT (*Triticum aestivum L.*) GENOTYPES TO SALINITY: GROWTH AND IONIC RELATIONS

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## ABSTRACT

*A pot experiment was conducted to study the salt tolerance of selected wheat genotypes previously screened under solution culture. Soil was collected from a normal field and used for control (non-saline) and for saline soil, NaCl salt was added as required to attain a salinity level of 15 dS $m^{-1}$. Seeds of selected wheat genotypes were imbibed before sowing in the soil. Canal water was used for irrigation and recommended doses of NPK fertilizers were used. Maturity was recorded as days to heading and data regarding total biomass, grain and straw yields were recorded. Leaf samples were collected at booting stage for $Na^+$, $K^+$ and $Cl^-$ concentration in the expressed leaf sap. Salinity, on an overall average basis reduced the grain and straw yields. In case of grain yield, all the genotypes varied significantly and BWN-148 gave highest yield on absolute and relative basis. The maturity was enhanced under saline conditions in all the genotypes but variably which also reduced the yield and vice versa. The concentration of $Na^+$ and $Cl^-$ increased in expressed leaf sap of all the genotypes and BWN-143 showed lowest $Na^+$ conc. and highest $K^+$:$Na^+$ ratio compared to other genotypes.*