Mitigation of salinity by different plant nutrients in *Sesamum indicum* (L.)

Shashi Lata Singh, Swati Shahi and Malvika Srivastava

Received October 15, 2016 and Accepted January 7, 2017

ABSTRACT : In the present work experiments were conducted to study the effects of salinity and its mitigation by application of plants nutrients viz. organic manure (Farmyard manure and vermicompost) and inorganic fertilizer (NPK fertilizer) in *Sesamum indicum* (L.). The plants were treated with 200 mM NaCl, 200 mM NaCl + NPK fertilizer, 200 mM NaCl + FYM and 200 mM NaCl + VC. Untreated plants were kept as control. Response of different plant nutrients on Sesame plant under salt stress condition was studied in terms of plant height, plant biomass, electrolyte leakage, chlorophyll content and yield parameters. These parameters were analyzed from 30 DAS up to 70 DAS at ten-day interval. Plant biomass, plant height, chlorophyll content and yield parameters decreased under saline condition as compared to control plant, whereas electrolyte leakage increased under salinity as compared to control plant. However, application of organic and inorganic manure ameliorated the effect of salinity on all the parameters investigated.

Key Words: Salinity, farmyard manure, vermicompost, NPK fertilizer, chlorophyll content.