**ABSTRACT**

Agricultural crop production around the world is adversely affected by excess salt accumulation in the soil. Plants initiate broad range of signal transduction pathways to respond any stress. Salicylic acid (SA) is an endogenous plant growth regulator that acts as a signal molecule to modulate plant response by reducing the effects of abiotic stress on plants. The main objective of this study is to examine whether exogenous salicylic acid pre-treatment may reduce the adverse effects of salt stress and enhance salt tolerance in Solanum lycopersicum. For this experiment, two weeks old seedlings were subjected to salt stress by adding salt water (100 mM NaCl) for three days with or without salicylic acid pre-treatment. After salt stress exposure plant leaves were harvested and the various measures were recorded. Results of this study exhibited that salicylic acid pre-treatment mitigates various advers effects of salt stress on plant growth by stimulating plant biomass, water relations, protein content, chlorophyll pigment, and inorganic osmolytes accumulation. Simultaneously, an increase in activity of antioxidant enzymes of SOD, CAT and POX were also triggered.  This current study suggested that pre-treating of Solanum lycopersicum with salicylic acid attenuates the depressive effect of salinity by accelerating the osmolyte accumulation and triggering activity of free radical scavenging enzymes.