IN VITRO SALT INDUCED STRESS RESPONSES IN *CAPSICUM ANNUUM* CV. PUSA JWALA

Shalini[1], Neeru[2] and Uttam Kumar[3]

Department of Botany, C.C.S. University, Campus, Meerut (UP)
Department of Botany C.C.R.D. College, Muzaffarnagar (UP)
National Dairy Research Institute, Karnal, Haryana
Email: shalinisingh333@gmail.com

Abstract: The research work was carried out to study the effect of salt stress on biochemical aspects of different type of explants of cultivar Pusa Jwala of *Capsicum annuum*. Leaf, hypocotyls, cotyledonary leaf and stem explants were cultured on MS medium containing 2,2,4-D and various concentrations of NaCl (50, 100, 150 and 200mM) Data on fresh and dry weights of callus tissue were recorded monthly. Different biochemical parameters such as moisture percentage, proline accumulation, ascorbate, protein and phenolics were tested in order to put forward the relative tolerance to salinity. Present finding suggest that, the response of *capsicum* calli to salt stress may be accomplished by increasing the capacity of antioxidative system and the synthesis of new protein which could be in turn contribute to select a salt resistant in *Capsicum*.

Keywords: *Capsicum*, Ascorbate, Proline, Protein, Phenolics

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