

696. Khybri, M.L., Nambiar, K.K.M., Shri Niwas, Puri, D.N. and Saxena, H.G. 1987. Mortality of bamboo (*Dendrocalamus strictus*) in relation to waterlogging and salinity build up in Chambal ravine. Abst. No. 38, National Symp. on "Land and Water Management in Ravines", CSWCRTI, Research Centre, Agra, March 19-22, 1987: 34.

The causes of bamboo mortality in Chambal Ravines around Kota were investigated. The hydrological studies revealed that the water table in ravine system I was rising and there was an average rise of 71 cm in water table within a short period of two years, 1970-72. Soil investigation revealed that the salinity was fast building up in ravine system I as a result of the ravine bed level being in close proximity of the water-table and due to the capillary fringes, a lot of water evaporated from the soil profiles, thus accumulating large quantities of salts in varying proportions in different horizons. EC values were more than 20 mmhos/cm where complete mortality of bamboo plantations was observed. From the varying growth performance of bamboo plantation at different sites of ravine system I with varying E_c values it was observed that bamboos (*Dendrocalamus strictus*) appear to tolerate salinity upto 10 mmhos/cm when the average salinity level of the soil profile does not go beyond this limit.