

EFFECTS OF CALCIUM CHLORIDE AND SODIUM CHLORIDE INDUCED SALINITY ON Na^+ , K^+ , Ca^{++} AND Cl^- CONTENTS OF RADICLE AND PLUMULE OF SUNFLOWER (Helianthus annuus L.) VARIETIES

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ABSTRACT

In an investigation the effects of calcium chloride and sodium chloride induced salinity on Na^+ , K^+ , Ca^{++} and Cl^- contents of radicle and plumule were studied during year 1989. It was observed that Na^+ and Cl^- contents in radicle and plumule increased with salinity levels whereas K^+ was adversely affected and Ca^{++} was non-significantly affected by salinity. Minimum Na^+ contents was recorded in NK277 whereas maximum was recorded in NSH-45. In plumule minimum Na^+ contents was recorded in NK265 and maximum was recorded in NSH-45. The highest Na^+ and Cl^- contents were recorded in T_1 ($18d\text{ sm}^{-1}$), whereas K^+ was the lowest in T_3 ($18d^3\text{ sm}^{-1}$). Variations in Ca^{++} contents were non-significant.

INTRODUCTION

There is a low productivity of all the crops in Pakistan. The reasons of low productivity in Pakistan, besides other factors is,