

EFFECT OF SALINITY LEVELS ON Na^+ , K^+ , Ca^{++} AND Cl^- CONTENTS
OF SHOOT FIRST AND SECOND HARVEST 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 shoots of four sunflower varieties grown for one month (first harvest) and two months (2nd harvest) respectively were studied during year 1989. Na^+ and Cl^- contents in plants of both the harvests increased with salinity levels while K^+ was adversely affected and Ca^{++} was non-significantly affected by salinity. Significant variations were recorded in Na^+ and Cl^- in plants of first harvest of different sunflower varieties. K^+ was only significantly differed in second harvest, whereas Ca^{++} did not vary significantly in varieties.

The highest Na^+ and Cl^- were recorded in T₁ (12 dsm⁻¹), whereas K^+ was the lowest in T₃ (12 dsm⁻¹). Variations in Ca^{++} were non-significant. Variety NK212 contained the lowest Cl^- content and Variety NSH-45 contained the highest K^+ content.