

EFFECTS OF CALCIUM CHLORIDE AND SODIUM CHLORIDE INDUCED SALINITY
ON GERMINATION, WET AND DRY WEIGHT OF RADICLE
AND PLUMULE OF SUNFLOWER (HELIANTHUS ANNUUS L.) VARIETIES.

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Received: 21-05-91
Accepted: 06-10-91

ABSTRACT

In an investigation the effects of calcium chloride and sodium chloride induced salinity on germination, wet and dry weight of radicle and plumule were studied during year 1989. It was observed that germination, wet and dry weight of radicle and plumule improved with T_1 (6 dSm^{-1}) but adversely affected by higher salinity levels of T_2 (12 dSm^{-1}) and T_3 (18 dSm^{-1}). Significant variations were recorded in wet and dry weight of radicle and plumule of different sunflower varieties. Variety NK-265 gave the highest dry matter and good percentage of seed germination, it may be considered more resistant than the other varieties under trial.

INTRODUCTION

There is a low productivity of all the crops in Pakistan. The reasons of low productivity in Pakistan, besides other factors is, soil salinity. To combat the salinity hazards, two alternatives are there: One is to reclaim these soil through management practices such as addition of amendments and leaching of the excessive salts from root zone, whereas, the other is growing of salt tolerant species which can withstand and give the growers subsistence return.

Salt affected soils are normally dominated by NaCl and may contain other salt such as Na_2SO_4 , Na_2CO_3 , CaSO_4 , CaCl_2 , MgCl_2 ,