

EFFECT OF IRRIGATION WATER SALINITY , MAGNETIC AND SOAKING BY THE ASCORBIC ACID AND SEAWEED (OLIGO-X) ON GERMINATION AND SEEDLING GROWTH OF HYBREDS CUCUMBER (DALIA) IN PROTECTED ENVIRONMENT.

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ABSTRACT

The experiment was conducted during Autumn season 2012 to study the effects of irrigation water salinity (2.12ds.m^{-1}), magnetic field (1500 GS) and soaking by ascorbic acid or seaweed (OLIGO-X) on velocity and percentage of Seeds germination for Cucumber (*Cucumis sativus*) planted in a glasshouse and some of the vegetable properties . The results showed that magnetizing water caused substantial increase in velocity and percentage of seeds germination and percentage of chlorophyll in the cotyledon leaves . Irrigation by saline water (2.12 ds.m^{-1}) caused a decrease in percentage of germination by 3.73 % compared with fresh water (0.54 ds.m^{-1}) , and magnetizing saline water increased germination by ۴.۲۶ % . soaking by seaweed caused substantial increase in velocity and percentage of germination , stem diameter and percentage of chlorophyll , while soaking by ascorbic acid gave substantial increase in velocity and percentage of germination compared with soaking by water . the maximum of germination was irrigation by magnetizing fresh water (0.54ds.m^{-1}) and soaking by the seaweed , in addition to irrigation by the magnetizing saline water (2.12 ds.m^{-1}) and soaking by ascorbic acid by 95.1 % , and the minimum was irrigation by the saline water and soaking by fresh water by 80.2% .

Key words : Irrigation water salinity , Magnetic , seeds Soaking by the water , Ascorbic acid and seaweed .