

***Salicornia europaea L.*, Acknowledgments**

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SUMMARY

The vast majority of plant species and much of the wild are quite sensitive to abiotic stress conditions. If cultivated, selection characteristics such as growth rate, biomass accumulation, production of fruits and seeds, not in terms of potency and excessive tolerance, but on the contrary, it decreased compared with that of predecessors, thus inhibiting growth and reproduction is the most common response to stress, which uses all its resources to survive. This is a specialized feature to survive and complete their biological cycle, although it is subjected to adverse conditions in their habitats. The study of the plants response to abiotic stress is an important investigation line, due to the fact that drought and the soil salinity cause significant loss of cultivated areas in the world. The quantification of the proline level is used in order to determine whether it has a role in the response mechanism to abiotic stress (Tipirdamaz *et al.*, 2006). Recognition of the biochemical and physiological mechanisms involved in osmoregulation, and response to osmotic stress, outdated implement new strategies that will improve the conditions which led to stress and the saline fluid. Water transport, synthesis of osmolites, transport sodium and potassium ions, are mechanisms that plants use them to tolerate ADAT and potential changes in the fluid. Anorganic solutions of interest regarding the plants response to environmental stress are the metabolites, sugars (sucrose and fructose), amino acids (proline and betaine), glycerol, mannitol and other metabolites. These substances involved in plant metabolism, accumulates in the cytoplasm of plants without producing toxicity. More. To maintain osmotic balance under stress, these substances act as osmoprotector osmolits maintaining a balance in protein against oxidative stress. (Khan and Weber, 2008).

Keyword: plants, salinic stress, tolerance

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