

Abstract

The present paper is an attempt to approach the problems related to the possibility to plant the *Medicago sativa* species on soils polluted with salty solution, in the context of the intensification and extension of the actual preoccupations concerning the relation between man and his environment. In order to study the influence of the salty solution on the herbaceous species *Medicago sativa*, soil samples have been collected from the Târgoviște Plain – the point Priseaca, from an uncultivated area (a lawn). We need to mention that the collected soil was not polluted with salty solution.

The salty solution concentrations for irrigating were: 1%, 10%, 20%. During the first experiment, the soil used as substrate was treated with salty solution from the moment when the seeds were sown. The seeds germinated, obviously in different proportions depending on the concentration of the salty solution used for irrigation, yet they did not manage to resist in time. During the second experiment, the samples sown were watered with potable water for 21 days, after which we irrigated a salty solution with 10% concentration. All the samples were affected by the pollution produced through the watering with salty solutions. The soil used in the third experiment was leached every three days for two weeks, after which the seeds were sown. Seven days from sowing, 1% of the seeds had germinated.

Key words: germinative energy, *Medicago sativa*, salty soil.