

INFLUENȚA MULCIRII CU FOLIE DE PLASTIC ASUPRA STĂRII DE COMPACTITATE A SOLURILOR DIN SOLARII

THE INFLUENCE OF THE BLACK PLASTIC FOIL ON THE COMPACTNESS STATE OF THE SOILS FROM POLYTUNNELS

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Growing vegetable in greenhouses presents some advantages such as obtaining the earlier harvest, extending the vegetation period of the plants, ensuring the protection of the plants against some natural risk (hail, mist, early autumn frost etc). Soil mulching with plastic film associated with drip irrigation is frequently used in greenhouses. The pipes are installed on the rows of cultivated plants. It is known that mulching the soil with plastic film or other materials presents some advantages such as increasing the soil temperature and decreasing the diurnal temperature amplitudes, avoiding or reducing water loss through evaporation, increasing the accessibility of nutrients with low solubility, decreasing the loss of easily soluble nutrients, weed control, etc. The present case study was carried out in different locations in the Eastern part of Romania and the results reported some negative effects of mulching the soil with plastic film regarding soil properties and on the state of soil compactness. Among the conclusions drawn from the studies carried out, we mention: (i) covering the soil with plastic film favored the increase in the degree of settlement in the area between the rows; (ii) reduction of aeration porosity; (iii) decrease in vigor and production of cultivated plants.