Abstract
The experience was founded in 2010 in the Didactic Station of the University of Agricultural Sciences and Veterinary Medicine "Ion Ionescu de la Brad" Iasi, Ezăreni farm. The research goal is to introduce a synthetic macromolecular compound in the technology crop. In this study we aimed to evaluate the influence of the hydrophilic polymer (Aquasorb) on some morpho-physiological properties and on corn and soybeans production, in the soil and climatic conditions of Iasi county. Our experience is polifactorial, resembling AxBxC type, being located by the randomized multilevel blocks method in three replications. The experimental factors are: the crop, the polymer dose and the administration time of the polymer. There were administered doses of 15 kg/ha Aquasorb on the variant V_2 and 30 kg/ha on variant V_3, comparing them with the V_1 control variant, on which we did not apply any treatment. The polymer was incorporated in spring 2010 on half of the experimental plot (5/10 m - 50 m_2) using disc harrow before sowing and in autumn 2010 and the other half of the experimental plot (5/10 m - 50 m_2), under the autumn plowing after harvesting the prior plants. We analyzed the influence Aquasorb on plant height, leaf chlorophyll content and the production of corn and soybean crops.

Key words: Hydrogel, hydrophilic polymer, Aquasorb