

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 culture. This compound is also found under the trade name Lignohumat. Lignohumatul is a foliar fertilizer containing up to 90 % humic acid particles. Most of Lignohumat weight, about 20 % is represented by sodium and potassium, elements that rely on hydroxide cations used in the technologic process of humat production. The experience is bifactorial, type A x B and is placed after the block method on one line, in three repetitions. A factor is the plant (maize and soybeans), and factor B is the Lignohumat dose applied (V₁ untreated, considered control, V₂ seeds and vegetation treatments depending on the culture). In maize two treatments were applied (100 g Lignohumat/10 l water / t seeds + 60 g / ha in the 3-4 leaf stage, in the same time with herbicides), and in the soybean crop were four treatments applied (100 g Lignohumat/10 l water / t seeds + 60 g / ha / 300 liters water in two-three leaves stage, before flowering phase and after flowering). We analyzed the influence Lignohumat on plant height, leaf chlorophyll content and the production of maize and soybean crops.

Key words: Humic substances, Lignohumat, chlorophyll content, maize, soybean