THE ACTION OF GROWTH REGULATORS ON THE PROCESS OF PHOTOSYNTHESIS IN TOMATO PLANTS

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Abstract

This research was conducted to determine the effects of two biostimulants on photosynthesis processes of two tomato cultivars, in greenhouse conditions. This study was carried in 2021 at the ICAM Iasi under greenhouse condition. The biological material was represented by two tomato cultivars (*Drops and Chiquita*). The bifactorial experience was conducted in a pots experiment in randomized blocks with three repetitions. The application of biostimulants (*Bactamil and Agromax-Cap*) was done every seven days by foliar spraying throughout the vegetation period. Research was focused on the influence of biostimulants on the photosynthesis process. It has been shown that the chlorophyll content of the leaves is closely related to the mineral nutrition of the plant. The value of chlorophyll content increases with the amount of nitrogen in the leaves, which is why the high values indicated by SPAD show a healthy growth from a nutritional point of view. Plants treated with biostimulants had higher values of the total chlorophyll content compared to the control group, which demonstrates an intensification of the photosynthesis process. The yield of the *Agomax – Cap* stimulator gives better results in terms of the increase in chlorophyll content in the varieties studied and as a result, will also increase the production efficiency.,

Key words: tomato, growth regulators, photosynthesis, SPAD