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Influence of Foliar Treatment on Maize Yield

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Abstract: According to modern agricultural technologies, one of the important elements in growing agricultural crops is foliar fertilization. Due to the fast, balanced supply of plants with the nutrients they need, productivity increases significantly and the quality of the products obtained improves. Research was conducted according to the following plan: 1) control sample, 2) mineral fertilizer pre-sowing application, 3) foliar treatment of vegetative plants in the phase of 7-9 true leaves, 4) pre-sowing mineral fertilizer with foliar treatment of vegetative plants in the phase of 7-9 true leaves. According to the conditions of the study, the pre-harvest density of corn sowing was 75 thousand plants per hectare. The effectiveness of using Avangard K microfertilizer at the rate of 2 l/ha in the 7-9 of the leaves phase of corn plants was established. The average yield of corn for years of research in the control plots was 5.4 t/ha. The use of mineral fertilizers increases plant productivity, with the average yield being 6.9 t/ha. As for foliar feeding Avangard K, the average yield was 7.0 t/ha. The highest yield values of 7.3 t/ha were recorded in areas with complex application of microfertilizers with foliar feeding Avangard K of plants. Therefore, it can be concluded that the maximum values of corn yield can be obtained with the complex use of mineral fertilizers and foliar fertilizing with microfertilizer Avangard K in the phase of 7-9 leaves of the crop.

Keywords: foliar fertilizing; microfertilizer; Avangard K; Zea mays; yield