

INFLUENCE OF "ZEROX" IMMUNOSTIMULANT ON COTTON LEAF SURFACE AND SPECIFIC DENSITY OF LEAF SURFACE

R.O.Atoeva¹, B.F. Aripov²,

¹⁻²Teacher of Bukhara State University

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The main methods of application of contact, universal-acting immunostimulant and other biologically active substances are based on the seeds before planting and suspend them during the vegetation period.

In this article, Bukhara-10 varieties of cotton in the number of 3 seedlings (80-90; 100-110; 120-130 thousand bushes/ha) by applying the immunostimulant "Zerex" in three different norms (1-2-3 l/t) before sowing seeds and during the growing season of plants (2-4 leaves, flowering) were studied the effect on the level of the leaf and the specific density of the leaf surface.

As a result, it is the best among the options being tested "Zerex" was applied at a rate of 2 l / t before sowing and 2 l / t during the cotton growing season + PAV 0.15 l / ha, the number of seedlings is the tenth option with 80-90 thousand bushes / ha, Its leaf surface was 13,256 dm² / plant; specific density was 0.57 g / dm².

Keywords: Bukhara-10 cotton variety, "Zerex» immunostimulant, a number of different seedlings, leaf surface, specific density of leaf surface.

1. Introduction

Nowadays, As a result of the progressive growth of the population is necessary to put into practice the ways of obtaining high yields from agricultural crops. Therefore, using of bio and immunostimulant is being widespread [1,2].

The use of immunostimulants in agricultural crops has been shown to have a positive effect on their fertility [3], growth and development processes [4], dry mass, pure photosynthesis productivity [5,6], productivity [7] and other physiological processes in plants [8].

Leaf - As a photosynthetic organ of a leaf plant, its large or small levels affect a number of physiological (photosynthetic productivity, transpiration) and biochemical (gibberellin, absent acid, cytokine synthesis, metabolism) processes.

2. Literature Review

A large or small plant leaf surface will cause a decrease or increase in yield. Also, the assimilation surface of the leaf surface is directly related to the specific density of leaf surface. The specific density of the leaf surface, large or

small, affects the processes of light absorption, aeration exchange through the leaves, and water evaporation.

In order to determine the rate of positive effect on the leaf surface and specific density of the leaf surface of cotton from different standards of immunostimulants "Zerov" (1.0-2.0-3.0 l/t; l/ha), three seedlings of "Bukhara-10" varieties of cotton (80-90; 100-110; and 120-130 thousand bushes/ha).

The immunostimulant "Fitovak" -200 ml/t was used as a standard. The control variant was watered with potable water and suspended in water during the growing season.

3. Research Methodology

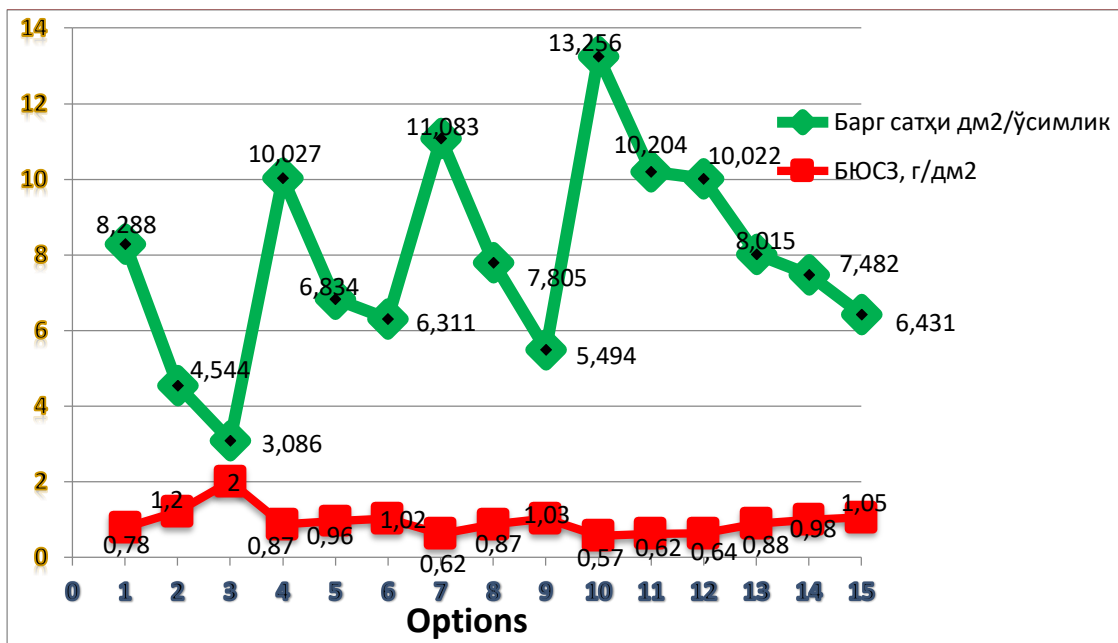
All analysis and phenological observations carried out in the investigation in field and laboratory condition were conducted on the basis of "Methods experiments of field" which written Uzbekistan Cotton Science Research Institute [9] and Plant Insect Protection Center, as well as, methods given in several other literature. Research data was mathematical process in the method of B. Dospexov [10]

4. Analysis and Results

When the ChDNS is 64-73-60%, depending on the number of seedlings and the norms of "Zerov", the specific density of leaf surface and leaf surface in 15 variants, respectively: 3,086-13,256 dm² / plant; and in the range of 0.57-2.0 g/dm².

In the tenth variant (number of standing density 80-90 thousand bushes/ha, the preparation "Zerov" was used at the rate of 2 l/t and 2 l/t; ha + surfactant 0.15 l/ha) amounted to leaf surfaces at a level of 13.256 dm²/ ha, specific density of leaf surface 0.57 g/dm² and respectively compared to the first option: 4,968 dm² / plant leaf surface exceeded, a decrease in the specific density of the leaf surface by 0.21 g/dm² was established. Studies have shown that in the whole test variants, as the number of seedlings increases, the leaf surface in a single plant decreases and the specific density of the leaf surface increases.

1- diagram



Number of seedlings 120-130 thousand bushes/ha and the leaf surface in the third option used Zerox 2 l/t, l/ha was 10,022 dm²/plant; the specific density of the leaf surface was 0.64 g/dm², the leaf surface was found to be 6.936 dm² /plant more than the third variant, and the specific density of the leaf surface was 1.36 g / dm² less. Zerox" preparations 1-2-3-l/t; l/ha norms and the number of seedlings is among the options at 80-90 thousand bushes/ha the most positive result in terms of leaf surface and specific density of leaf surface is 2 l/t; l/ha were observed in the variant.

Conclusion

In short, the large leaf level during the organogenesis of cotton ensures high economic and biological productivity. Also, a decrease in the specific density of the leaf surface ensures the acceleration of physiological processes in the leaves. In our study, the most positive result was observed in the tenth variant. This can be explained by the fact that the drug regulates endogenous hormones in the plant.

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