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INFLUENCE OF SUGAR BEET PLANT THICKNESS ON ITS DISEASES

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ABSTRACT

Sweetness of the leaf and root of sugar beet leads to severe damage by various insects. The reduction of damage to the plant is primarily directly related to the number of its seedlings. The distribution of sugar beet diseases is also directly related to the number of seedlings. therefore, the number of seedlings for sugar beet is important. In the conditions of Andijan region, it is advisable to plant in the 60X25-1 system so that the number of seedlings is normal.

Keywords: sugar beet, root fruit, leaf, disease, seedling thickness, number of irrigations, disease, pest.

Today, in the practice of world agriculture, it is possible to reduce the cost of production due to soil protection, wide introduction of resource-efficient new technologies that preserve productivity, improvement of agrobiological properties of land, production of high-quality crops, saving fuel and lubricants and other factors. In order to regularly provide the population with food products, technologies that protect soil fertility are used for 80 million people worldwide. 19.3 million in the USA, 17.4 million in Brazil, 14.8 million in India, 12.3 million in China, 10 million in Mexico, 3.5 million in Australia, 3.7 million in Pakistan . is being introduced per hectare. In world practice, all irrigated lands are almost completely re-cropped after winter cereal crops.

Special attention is paid to the development of agrotechnics for the cultivation of field crops, taking into account the biological characteristics, soil and climatic conditions, and its regular improvement in order to satisfy the demand of the population for food products, industry for raw materials, and animal husbandry for feed.

In our studies, we verified that mineral fertilizers, mainly nitrogen fertilizers, are of great importance for the growth and high yield of sugar beet. For sugar beets in the form of sodium nitrate ($NaNO_3$), $N_{200}R_{150}K_{200}$ kg/ha normal is effective [4; 12-б., 5; 122-126-б.].

After the winter wheat repeated sowing of beet crops will have a positive effect on the size of the soil and serve to increase its productivity. Although this crop, which has been studied in practice, yields relatively good results, it is important to select the optimal sowing standards for all repeated crops [6; 140-144-б.].

In the conditions of gray-meadow soils of the Andijan region, planting sugar beet seeds as a re-crop, moistening the seeds up to 80-100%, encapsulating the seeds using a mixture of 75% vermicompost+ 25% soil and applying mineral fertilizers $N_{200}P_{150}K_{200}$ allows you to get the maximum yield of 370.2 centner/ha of root crops [7; 98-103-б.].

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The experiment was conducted in the fields of the current "Mirzasayib Mirzasoliev" farm (former B.Rajapov company farm) in the Buloqboshi district of the Andijan region. The soil of the field is considered to be light-colored gray soil irrigated by skeet, and seepage water is located at a depth of 20-30 m. The soil is low in phosphorus and potassium.

The experiment consists of 8 options, 4 returns are placed in one tier. In the experiment, sugar beet was planted in different thicknesses with a width of 60 cm between the rows, in one version there were 8 rows, the length of the row was 100 m, the total area of one plot was 480 m2, and the area of consideration was 200 m^2. There are 32 plots in the experiment, and the total area of the experiment is 15520 m^2. Sugar beet variety "Saharnaya-R-32" was used in the experiment.

Our experiment consisted of 4 returns from option 8, the total area of which was 1248 m^2, and the area of consideration was 1050 m^2 (Table 1). In the first version of the experiment, wheat was grown in its pure form (without alfalfa), and in the remaining versions, alfalfa seeds were planted in wheat at different times. Field and production experiments and laboratory analyzes were carried out based on the following methodological guidelines. "Metodika polevyx opytov s khlopchatnikom" [2] and "Metodika polevyx opytov po izucheniyu agrotekhnicheskih priemov po vozdelyvaniyu kukuruzy" [3; p. 278] was carried out in accordance with the manuals. Clarification of the data obtained from the experiment on productivity, correlation between the results and the factors used was carried out based on the manual of B. Dospehov "Metodika polevogo opyta" [1].

Different seedling thicknesses and watering rates have been studied to affect sugar beet roots with various diseases, and we have studied the effect of these diseases on root growth. According to him, we studied the effect on the shape of the rhizome. We can see these data from Table 1. According to these data, in the 60x15-1 system of planting systems, the infection of sugar beet root was higher than in other variants. Because of this, there was no seedling thickness necessary for the normal growth and development of the rhizome. An excess number of seedlings leads to an increase in diseases in root-fruit plants (Gamuev V.V., 2004), in our experiment, if the same 15% of plants were infected with root rot and cercosporosis disease of root-fruit in the 65-65-60 irrigation system, the same seedling thickness of 70 In the -70-65 irrigation system, this increased to the same 20%. The least affected variants were observed in variants 7 and 8, which had an average of 6 and 7% rot, respectively, in the 65-65-60 irrigation system, and slightly more root rot disease in the 70-70-65 irrigation system in the same planting system. with 7%, and 8% with cercosporosis disease, we expected that root and fruit were damaged.

Table 1 Correlation between seedling thickness and root diseases.

Bap.	Planting scheme	Watering mode	Incidence rate		The shape of the root	
			Rotting disease	Church sporosis	length	diameter
1	60X15-1	65-65-60	15	15	18	12
2	60X15-1	70-70-65	20	20	16	10
3	60X20-1	65-65-60	9	8	22	14
4	60X20-1	70-70-65	10	11	20	13
5	60X25-1	65-65-60	7	8	26	16
6	60X25-1	70-70-65	9	9	23	14
7	60X30-1	65-65-60	6	7	28	18
8	60X30-1	70-70-65	7	8	20	16

When we studied the effect of these diseases on the growth and development of root crops, we saw that there is a proportionality between them. In this case, the more the rhizome is affected by the disease, the more it affects the growth of the rhizome, especially the shape of the rhizome. The length of the rhizome of variant 1, which is the most affected by the disease, is 18 cm, and the diameter is 12 cm. They produced the smallest rhizome, and at the same time, we can see drastic changes in their shape. In the other studied options, the above law was preserved, that is, the more damaged the rhizome, the more changes in its shape will occur. In variant 7, which is the least damaged, the shape of the rhizome was 28 and 18 cm, respectively.

In conclusion, it can be said that when the sugar beet is planted in the 60x30-1 system and irrigated in the 65-65-60 system, the infection of the root is the lowest, and the shape of the root is large. Irrigation rates also cause a certain amount of diseases to increase in root crops. We can observe that this is a 1% increase compared to the planting system in option 8.

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