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THE EFFECT OF SOWING SCHEME AND PRIMING PERIODS ON PRODUCTIVITY OF COTTON VARIETIES

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Abstract: This article presents the results of comparative studies of the new promising cotton varieties "Sultan" and "S-8294" grown in the soil and climatic conditions of the Khorezm region with the old Khorezm-127 variety and the effect of planting system (scheme) and weeding periods to cotton yield.

Keywords: Khorezm region, variety, Khorezm-127, S-8294, Sultan, option, seedling thickness, planting scheme, chipping, fertility, approximate number of seedlings,.

Cotton plantation is one of the important branches of agriculture in our country. A great skill, experience and a unique school have been created in the field of cotton growing in our republic.

In recent years, in order to ensure food security, solve employment in rural areas, and increase multi-sectoral farms, the area under cotton cultivation has been slightly reduced, that is, a part of the cultivated area has been allocated for grain, fruit and vegetable crops. As a result, during the last 2-3 years, cotton cultivation areas have decreased by about 15-16%.

However, this did not reduce the attention to the cotton harvest, on the contrary, the task was set not to reduce the gross cotton yield due to the use of science and new technologies, improvement of the crop rotation system, increase of labor efficiency and cotton yield.

It is envisaged not to reduce the volume of total gross product cultivation due to the increase of cotton productivity in the strategic directions of agricultural development in our republic. So, in order to obtain the specified amount of harvest from the available areas, it is necessary to increase the yield of cotton by at least 15-16%.

In the following years, cotton varieties "S-8294" "Sultan" that meet the above requirements were created. In order to grow high-quality raw cotton from these varieties, it is necessary to develop agrotechnologies for their optimal growth and development.

The high or low productivity of cotton varieties depends on the timely and high-quality implementation of all applied agrotechnical measures, and it has been proven by many scientific experiments that it is related to soil fertility, the rate of fertilizers, soil moisture, seedling thickness, and the duration of weeding.

In particular, according to R.Isaev, D.Rashidova, N.Mamedov, when the thickness of the cotton plant is about 60 thousand in per hectare, by the end of August, the height of the main stem is 105 cm, the number of side branches is 17, and the number of bolls in one bush of cotton is 13.3. In this case, as the number of seedlings increased, the height of cotton, the number of branches and bolls decreased. Also, despite the fact that the plants in the options with 120-140 thousand seedlings per hectare are short and have few bolls, in these options, the highest cotton yield was grown due to the number of seedlings [1; 9-10 pp.].

N.M. Abdurakhimov and A.M. Kochkharov studied the effect of priming on the lodging of cotton, when priming was carried out early and when chemical priming was carried out, it was found that the resistance of cotton to lodging increased compared to other methods. He stated that the main reason for this is the uniform distribution of the elements along the branches when pruning is done chemically [2; pp. 25-28].

According to the data by S. Allanazarov, O. Sindarov and others, in the conditions of the soil of Tashkent region, to obtain a high yield of the S-6560 cotton variety, 80-90 and 100-110 thousand bushels/ha should be planted and weeding should be carried out on 13-14 harvest branches according to the thickness of the seedling. it was determined that it is necessary and 3.7-2.6 ts/ha more yield can be obtained compared to the option without pruning. Also, when the UzPITI-202 cotton variety is maintained at different seedling thicknesses, and when pruning is carried out, the highest indicators show that it is necessary to maintain cotton at a thickness of 100-110 thousand seedlings and carry out pruning at 13-14 harvest branches, and in this case, to get an additional yield of 2.7 t/ha of cotton. it was observed that it can be achieved [3; 6-8 p].

In general, the difference between cotton rows and seedling thicknesses is an important factor that has a direct impact on productivity.

Taking into account the above points, we compared our experiments in 2022 in Khorezm region PSU and EAITI Khorezm ITS, comparing the new promising cotton varieties "Sultan" and "S-8294" with the already planted Khorezm-127 cotton variety, and studied the effect of planting systems and weeding periods on productivity. .

Table 1

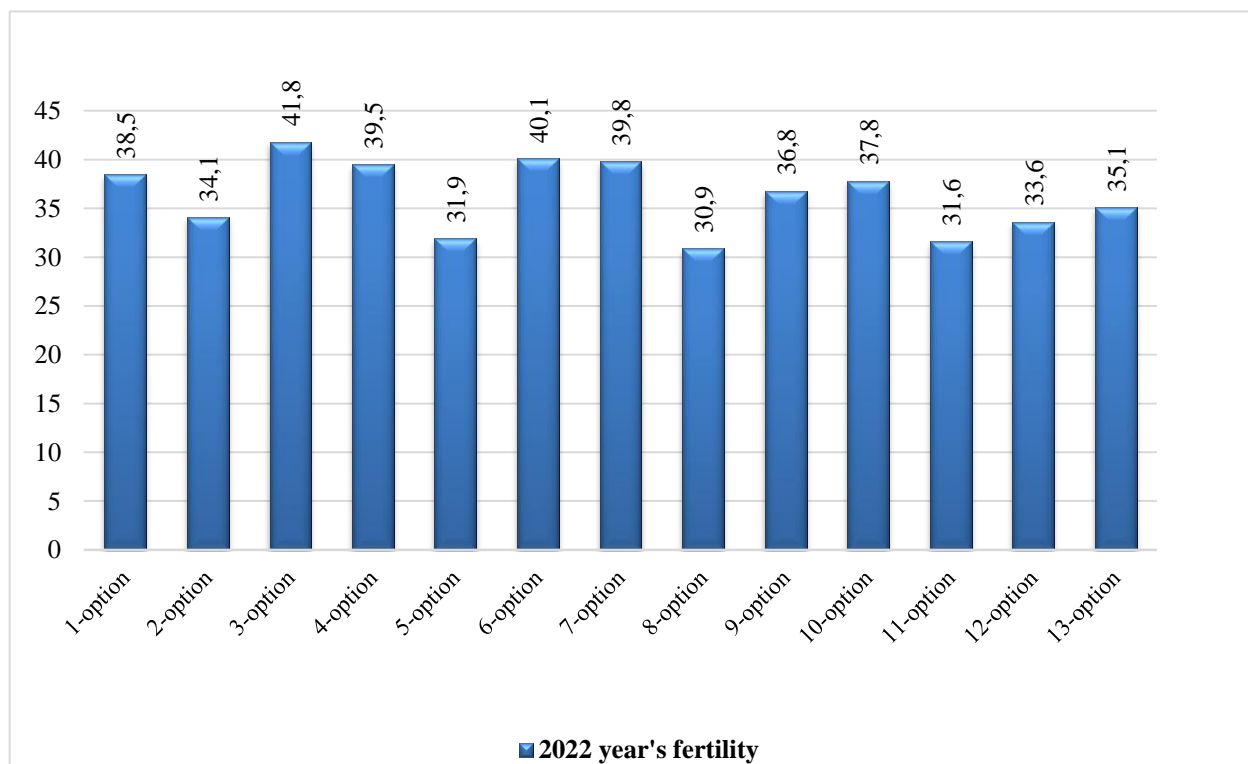
Experience system

No	Varieties	Planting scheme	Theoretical number of seedlings, thousand bush/ha	Chipping deadlines
1	Khorezm-127 (control)	60x15-1	100-110	12-14
2	Sultan	60x12-1	130-138	10-11
3				12-14
4				15-16
5		60x15-1	100-110	10-11
6		12-14		
7		15-16		
8		S-8294	60x12-1	130-138
9	12-14			
10	15-16			
11	60x15-1		100-110	10-11
12	12-14			
13	15-16			

The conducted field experiment consisted of 13 variants, placed in 1 tier in 4 repetitions. The experimental options consisted of 8 rows, the width between the rows was 60 cm, and the length of each option was 50 meters, so that if the area of one plot was 240 m², the calculated area was 120 m². The total area of the experiment was 12500 m². (Table #1)

Before the experiment, when soil samples were taken from the experimental area using an envelope method and agrochemical analyzes were carried out in the laboratory (2022), the amount of humus in the 0-30 cm layer of the soil was 0.912%, the amount of total nitrogen was 0.093%, the amount of total phosphorus was 0.108%, and the amount of potassium was 1.370%. . It was found that the amount of nitrate in the soil was 8.02 mg/kg, mobile phosphorus was 21.95 mg/kg, exchangeable potassium was 171 mg/kg. 0.768, respectively, when these indicators are studied in the 30-50 cm layer of the soil under driving; 0.065; 0.094; 1,300 percent, and the characteristic forms are 6.65; It was observed that it was 18.05 139 mg/kg.

According to the obtained data, the cotton variety Khorezm-127 was planted in the 60x15-1 planting scheme and the 1st option, where weeding was carried out on the 12-14 harvest branch, yielded an average of 38.5 tons/ha of cotton, while the Sultan variety was planted in the 60x12-1 scheme and the 10- 34.1 t/ha was observed in the 2nd option, where 11 harvest branches were pruned. However, when the Sultan variety was planted in the same 60x12-1 scheme and priming was carried out on 12-



14 harvest branches (Option 3), this indicator was 41.8 t/ha, compared to the 1st

option, an additional cotton yield of 3.3 t/ha was achieved. This Sultan variety was planted in the 60x15-1 planting scheme, and 40.1 centners of cotton was harvested per hectare when weeding was carried out on 12-14 harvest branches.

We can see that the cotton variety S-8294, which has been experimented, was cultivated in the 60x12-1 planting scheme, and 30.9 t/ha of cotton was harvested when weeding was carried out on 10-11 harvest branches. When the variety S-8294 was planted and cared for in this 60x12-1 scheme, the highest rate was observed in the 10th option, where weeding was carried out on 15-16 harvest branches, and it was 37.8 ts/ha, compared to the undercontrol (Khorazm-127) option, 0.7 ts. It was found that less cotton was harvested. When we planted the S-8294 variety in the scheme 60x15-1, the highest yield was observed at 35.1 t/ha when priming on the 15-16 harvest branches.

In conclusion, it is important to note that it has been scientifically proven that the biology of the variety, seedling thickness and ripening period have a significant effect on cotton yield.

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