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INFLUENCE OF FEEDING AND NUTRITIONAL REGIMES AND BATCH THICKNESS ON TECHNOLOGICAL PARAMETERS OF COTTON FIBER

Abstract: *In the experiment, three different soil thicknesses (80; 100 and 120 thousand hectares per hectare, as well as 7.2; 9.0 and 10.8 plants per hectare), two different irrigation regimes with limited soil moisture content (ChDNS) (70). -70-60 and 75-75-60%, as well as irrigation rates 2-3-0 and 2-4-0) and two-fertilizer (NPK) ratio (1: 0.7: 0.5 and 1, respectively) Two criteria: 1: 0.5) were studied. Annual fertilizer values were N200 P140 and K100 and N200 R200 and K100 kg / ha.*

Irrigation mode was considered to be higher in the years of experiments on yields of irrigation variants of 75-75-60% than those of 70-70-60% of soil compared to ChDNS.

At 70-70-60% irrigation mode, the yield was 35.4-40.5 centners / ha, depending on the thickness of the bush and the fertilizer ratio, and on the irrigation options of 75-75-60%, the average yield was 33.5-36.5. t / ha.

Micronaire value of fiber in the cotton crop harvested from the experimental variants was 4.3-4.5% and slightly higher than the microneedle of cotton fiber harvested from 70-70-60% irrigation versus 75-75-60% irrigation.

Key words: *Watering regime, bush thickness, fertility ratio, fertility, the quality, limited field moisture capacity, wet capacity, gross, general, mobile, nitrogen, phosphorus, potassium, humus, economic efficiency, profitability.*

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Introduction

The technology of cotton cultivation should be appropriate to the climatic conditions of each crop region. It is necessary to develop and implement technologies of cotton adaptation to specific soil and climatic conditions, and to constantly improve it. One of these activities is the management of cotton thickness, irrigation and nutritional regimes, and the importance of studying cotton based on its varietal characteristics.

Taking this into consideration, the study of irrigation and nutritional regimes of Zarafshan

varieties of cotton planted in a number of regions of the country, including in Samarkand region, results in wide use of this potential. To this end, field experiments were conducted in the wetlands of the psueaiti Samarkand dog to study different irrigation modes in relation to the norms of fertilizer [9. Page 4].

The water-physical and agrochemical properties of the soil of the experimental field are as follows: before the spring sowing, the soil mass was 1.27 g / cm3 in 0-70 cm layer and 0-100 cm in layer. It was found that the limited field moisture content of the soil (ChDNS) was 21.0% in the 0-70 cm layer and 22.0% in the 0-100 cm layer. The agrochemical condition of the tested soil was preceded by the average amount of pre-spring experiment: humus 1.30% in the 0-30 cm layer, 0.80% at 30-50 cm, with total nitrogen 0.125, 0.078%, gross. phosphorus-0.220, 0.155%, nitrogen-21.4, 9.2, nitrate-32.2, 14.3 mg / kg [1; 18 b].In the experiment, three different soil thicknesses (80; 100 and 120 thousand hectares per hectare, as well as 7.2; 9.0 and 10.8 plants per hectare), two different irrigation regimes with limited soil moisture content (ChDNS) (70). -70-60 and 75-75-60%, as well as irrigation rates 2-3-0 and 2-4-0) and two-fertilizer (NPK) ratio (1: 0.7: 0.5 and 1, respectively) Two criteria: 1: 0.5) were studied. Annual fertilizer values were N200 P140 and K100 and N200 R200 and K100 kg / ha (Table 1).

Along with improving the crop capacity in the complex of applied agricultural technologies, one of the main tasks is to ensure the competitiveness of the fiber quality in accordance with international standards. By the end of the cotton life cycle, regimes irrigation was distributed as per the phases of plant development. In the 70-70-60% irrigation mode of the experiment, the cotton was irrigated 5 times during the season, 2-3 times in the order of flowering, 2 times before the flowering phase, 3 times during the flowering and harvesting period (no irrigation during the ripening, ie no soil moisture The average annual water consumption per hectare was 5110 m3 [2; 2 b].

In the 75-75-60% irrigation mode, the cotton was irrigated 2-4-0 times 6 times during the operation period, and the seasonal water consumption was 5330 m3 / ha.

Analysis of the results of phenological observations in the field during the growing period of cotton showed that the irrigation regime, the thickness of the beds, as well as the different rates and proportions of fertilizers, had a major impact on the growth and development of plants. Observations on September 1 also revealed that with the increase in the number of seedlings in all studied variants, the number of shoots per plant decreased to 2.1 and their opening to 1.2. An analysis of the cotton harvest of September 1 revealed that the openings of cotton grown on variants of 75-75-60% regime were slightly lagging 1.5 to 70-70-60% compared to cotton irrigation options. However, in the experiment, we found that weeds in the variants fed with fertilizers at a ratio of 1: 1: 0.5 are faster than 0.6 in the case of cotton in the variants of 1: 0.7: 0.5 [4. Page 21].

The results of field experiments show that cotton yields are influenced by environmental factors. The irrigation regime was taken into account that the yield of cotton grown in the range of 70-70-60% compared to the ChDNS was higher in the years of experimentation on the variants of irrigation variants of 75-75-60% (Table 1).

At 70-70-60% irrigation mode, the average yield was 37.2-42.3 c / ha, depending on the thickness of the bush and the fertilizer ratio, and on the irrigation options of 75-75-60%, the average yield was 36.3-39.3. t / ha [9. P. 87] (Table 1).

Table 1. Different bush thickness, cotton yield in irrigation and nutritional regimes, t / ha

Experience options	Irrigation mode against ChDNS,%	Thickness of bush before harvest, thous. / Ha	The ratio of NPK	Medium	
				Total harvest	In the form of brass
1 (control)	70-70-60	80,4	1:0,7:0,5	38,3	4,0
2		99,1		40,6	5,3
3		118,9		37,2	4,9
4		79,2	1:1:0,5	39,6	3,6
5		98,1		42,3	4,2
6		118,2		38,4	5,2
7	75-75-60	78,9	1:0,7:0,5	38,0	3,8
8		99,6		36,9	4,9
9		118,5		36,3	4,7
10		81,2	1:1:0,5	39,3	3,4
11		99,1		37,2	3,7
12		118,9		36,5	4,8

	A (water). EKF0.5 = 1.59 ts / ha, V (NPK). EKF0.5 = 1.59 ts / ha, S (batch number). EKF0.5 = 1.3 ts / ha

Fertilization At a ratio of 1: 0.7: 0.5, irrigation was carried out in the 75-75-60% mode, with the option of leaving the bush at an average of 80,000 / ha with the average cotton yield of 38.0 centners / ha, with the thickness of the bush to 100,000 , taking into account the increase in productivity by 36.9 c / ha and the number of bush increased to 120,000 / ha. A similar pattern was observed when fertilizers were applied at a ratio of 1: 1: 0.5 (Table 1).

During the years of experiment, the highest yield (42.3 centner / ha) was irrigated in the 70-70-60% regime of CDNS during the growing season, with a fertilizer ratio of 1: 1: 0.5 and a thickness of 100,000 ha. were obtained under conditions [8; 11 b] (Table 1).

When fertilizer was applied at a rate of 1: 1: 0.5, the cotton was irrigated in 70-70-60% mode, with 80-100 thousand variants per bush thickness, positive changes in fiber length, fiber length and mass of 1000 seeds were found, but the seedling thickness was 120,000 bps. This increase was due to the decrease of these indicators. With irrigation 75-75-60%, bush thickness from 80,000 to 100,000, the length of the fiber is 33.5-33.6 mm, the average mass of 1000 seeds is 120-121.1 g, but the density of the bush is 120,000. a significant decrease in the percentage of fiber output, fiber length, fiber maturity as well as mass of 1000 seeds compared to other studied options (Table 2).

Micronaire value of fiber in the cotton crop harvested from the experimental variants was 4.3-4.5% and slightly higher than the microneedle of cotton fiber harvested from 70-70-60% irrigation options compared to 75-75-60% irrigation mode [5 ; 35 b]. When cotton was irrigated at 75-75-60%, there was also a decline in the cotton grade of cotton compared to 70-70-60%.

Thus, based on the results of the experiment, we can conclude that the inter-alignment of the agro-technological elements is one of the key factors in increasing productivity and crop quality.

Depending on fertilizer ratio and irrigation regimes, thickness of the bush was reduced by 1.6%, length of fiber up to 0.6 mm, and grain mass by 3.4 g due to increase of bush thickness from 80 thousand to 120 thousand ha.

Cotton is maintained in 70-70-60% irrigation mode, leaving an average of 100,000 shoots per hectare, with the highest yield of fertilizer applied at a ratio of 1: 1: 0.5 - 42.3 c / ha, yield - 34.0%. The most cost-effective option. Also, the yield versus the control option was 4.3% higher [3. Page 26].

In summary, we can say that cotton is 70-70-60% irrigation, leaving an average of 100,000 shoots per hectare and fertilizers applied at 1: 1: 0.5 (N200 P140 and K100 and N200 R200 and K100 kg / ha). It was determined that the variant was the most economical and the most effective option in terms of all technological parameters of cotton fiber. Micronaire value of fiber in the cotton crop harvested from the experimental variants was 4.3-4.5% and slightly higher than the microneedle of cotton fiber harvested from 70-70-60% irrigation versus 75-75-60% irrigation.

When cotton was irrigated at 75-75-60%, there was also a decline in the cotton grade of cotton compared to 70-70-60%.

Table 2. Cotton for irrigation, nutritional regimes and bush thicknesses of fiber impact on technological indicators

Variants of experience	Fiber excretion,%	Fiber length, mm	Break power, gk	Micronaire indicator	Coefficient of maturity	Industrial grade	1000 seeds mass, d
1(control)	36,8	33,5	4,6	4,4	2,0	I	121,4
2	36,5	33,4	4,4	4,4	2,0	I	120,0
3	35,2	33,0	4,4	4,3	2,0	I	118,0
4	36,8	33,6	4,6	4,5	2,0	I	121,9
5	36,8	33,6	4,5	4,4	2,0	I	121,2
6	35,4	33,1	4,5	4,4	2,0	I	119,0
7	36,4	33,6	4,4	4,3	2,0	I	120,9
8	36,0	33,5	4,3	4,4	1,9	II	120,0
9	35,0	33,0	4,3	4,3	1,9	II	118,0
10	36,5	33,6	4,5	4,4	2,0	I	121,1

11	36,2	33,6	4,5	4,4	1,9	II	120,3
12	35,0	33,1	4,3	4,4	1,9	II	118,2

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