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THE INFLUENCE OF SMOKING PROCEDURE, FERTILIZER RATE AND THICKNESS OF GAZA NEWLARIN ON THE WEIGHT OF A PIECE OF COTTON SHORTS

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Abstract: In the article, in the conditions of medium salinity, grazing light gray soils of the Syrdarya region, if we calculate the amount of water used in the 70-70-65% irrigation system compared to the 75-75-65% irrigation system in comparison with ChDNS, then in the 70-70-65% irrigation system Compared to the 75-75-65% irrigation method, it was found that the amount of seasonal water consumption was 329.0-349.8 m3/ha. It should be noted that due to the fact that the groundwater level is located on the surface, the soil moisture is well preserved, taking into account that the seasonal irrigation rate was not too high, on average, 336.7 m3/ha of water was saved in three years.

Soil moisture before irrigation is in the order of 70-70-65% compared to ChDNS, the rate of fertilizers is N220, P154, K110 kg/ha, seedling thickness is 100-110 thousand bushels/ha in Sultan cotton variety 33.1 ts/ha in S-6524 cotton variety 32.2 ts/ha, soil moisture before irrigation is in the order of 75-75-65% according to ChDNS, the rate of mineral fertilizers is N220P154K110 kg/ha and when we increase the thickness of seedlings to 100-110 thousand bush/ha, it is 35.4 ts/ha in Sultan cotton variety, S -Increased to 34.4 ts/ha in cotton variety 6524.

Key words: In the article, the medium salinity of the Syrdarya region, light colored gray soils of the Syrdarya region, and the new, regionalized and promising Sultan, S-6524 cotton varieties were taken.

Introduction: Today, cotton is grown in more than 90 countries of the continents of Asia, America, Africa, Australia and Europe, with a total of 32.0 million. covers an area of one hectare. "In terms of the amount of cotton fiber cultivation, 5987.0 thousand tons were harvested in China, of which 5978.2 thousand, 6205.0 thousand tons in India, 6201.4 thousand, 1785.0 thousand tons in Pakistan, 1782.8 thousand tons of medium fiber cotton were harvested. constitutes". It is one of the important tasks to obtain a high yield from cotton due to the improvement of the elements of new modern innovative resource-saving agrotechnologies in cotton care in the countries of the world.

In the cotton-growing countries of the world, special attention is paid to the development of advanced methods of growing technologies of high and quality crops from cotton varieties under the conditions of global climate change. From this point of view, it is urgent to carry out research in the cultivation of fast-growing and fruitful new varieties of cotton in different soil and climatic conditions, taking into account the special biological characteristics of the crops in the application of one-time irrigation, seasonal irrigation and annual mineral fertilizers.

Special attention is being paid to the development of new technologies that can ensure the production of abundant and high-quality cotton that meets the requirements of world standards due to the rational and efficient use of land, water and natural resources in the cotton industry of our republic. Clause 3.3 of the Action Strategy for the Development of the Republic of Uzbekistan for 2017-2021 states that special attention should be paid to "introduction of modern agro-technologies of new cotton varieties in the field of agricultural production". Therefore, based on the biological characteristics of the cotton varieties grown in the cotton fields of our republic, it is determined to conduct scientific research on the development of optimal seedling thickness, fertilizer (NPK) norms and irrigation procedures, and to pay special attention to the implementation of the developed innovative developments.

According to S.G. Zaitsev, the excess of water in the soil in the period before flowering allows the upper part of the cotton root system located in the fertile layer of the soil to develop strongly, and as a result, it causes a lack of water in the next important period of flowering and fruiting. He stated that during the period from planting to flowering, until the harvest, it is necessary to fertilize the cultivated field of cotton with no more than one irrigation (at the beginning of hoeing or a little later) (S. G. Zaitsev, 1929).

According to Sh.Botirov's observations of the soils of the Surkhan-Sherabad oasis during 2001-2003, the thin-fiber cotton Termiz-31 belongs to type III in irrigated barren soils with medium-heavy sand, sizot water level is 1.2-2.5 meters. 5-6 times in the 1-3-1, 1-3-2 system when the soil moisture before irrigation is 75-75-65% compared to ChDNS, the interval of irrigation periods is 15-17 days, when the effective water is 720-1105 m3/ha, the weight of one boll of cotton is 2.73 g, the yield is 37.7 tons/ha, 131.4 m3 of water was used for 1 centner of cotton crop (Sh.Botirov, 2005).

In the observations conducted by A.Shamsiev in the conditions of typical gray soils of the Tashkent region, it was found that interrow irrigation of cotton at 65-70-60% soil moisture compared to ChDNS had a good effect (A.Shamsiev, 2003).

According to the information of O.Sh. Boynazarov, in the conditions of light gray soils of Surkhondarya region, the optimal growth and development of the Porloq-1 cotton variety is the 70-75-65% irrigation method and seasonal mineral fertilizers N200, P140, A high and high-quality harvest is achieved when K is used at the rate of 100 kg/ha (O.Sh. Boynazarov, 2019).

M.A. Avliyakulov and others [28; 395-399-p.] according to scientific research, the soil moisture before irrigation is 70-75-65% compared to ChDNS, it is irrigated 6 times in the 1-4-1 system, and the duration of irrigation is 18.0 hours until flowering, 18 hours during the flowering-harvest period. 0-20.0 hours, 17.5 hours during the ripening period, 12-17 days between irrigations, and the seasonal irrigation rate was 5022.3 m3/ha (M.A. Avliyakulov et al., 2018).

According to the results of the research conducted by S.M. Boltaev, O.Sh. Boynazarov, the Porloq-1 cotton variety in the conditions of low salinity light gray soils with a water level of 0.5-2.0 meters of Surkhondarya region, soil moisture before irrigation ChDNS 70- At 75-65% seedling thickness and 80-90 thousand bushes per hectare, the highest yield was obtained, this figure was 38.7 centners (S.M. Boltaev, O.Sh. Boynazarov, 2018).

According to the conclusions of T.T. Rajabov, T.Ya. Rajabov, the results of the research on the influence of irrigation water on the change in the level of seepage water and its level of mineralization are presented. In order to obtain a high and quality harvest from agricultural crops in the irrigated areas of the Karshi steppe, it was determined that the level of seepage water should be 2-2.5 meters above the surface of the ground during the working period, and 2.5-3.0 meters in the autumn-winter months (T.T. Rajabov, T. .Ya. Rajabov, 2018).

According to the researches of A. Haydarov and others, the stem structure and branching of the UzPITI-202 cotton variety is 1.5-2.0 type, and it has a wider shape compared to the UzPITI-201

cotton variety. In particular, in the varieties (10 and 14) treated with 70-75-60% irrigation in the 90x12-1 planting system compared to ChDNS, the average branching of plants was 72.5 and 68.5 cm, compared to UzPITI-201 cotton variety 10 -14 cm has a wider branching pattern. For this reason, it was observed that the harvesting process was higher in these options (A. Haydarov et al., 2018).

According to the above information, it can be concluded that the standards of feeding cotton varieties and irrigation procedures have been studied, but no scientific researches have been conducted in the meadow gray soils of the Syrdarya region.

MATERIALS AND METHODS

Conducting field and production experiments, planting, crop care, harvest, calculation and analysis are universally accepted by the Ministry of Agriculture and Water Management (2016), the All-Russian Institute of Plant Science (1984, 1986), the All-Russian Research Institute of Potato Farming (1967, 1989), the Research Institute of Vegetables, Rice Crops and Potatoes (1978), the State Commission for Testing New Varieties of Agricultural Crops of the Republic of Uzbekistan (1974) was conducted based on the method and recommendations. The statistical analysis of the results obtained in the field experiments was calculated by the method of B.A. Dospekhov using Microsoft Excel.

RESULTS AND DISCUSSION

In the conditions of moderately saline grazing light gray soils, the location depth of seepage water and the amount of harmful salts in the active layer of the soil where the roots spread and the standard ratio of mineral fertilizers are integrally dependent on the weight of cotton in one bag and productivity indicators. In turn, optimal planting thickness, mineral fertilizer rates and irrigation procedures are also very important.

In the experimental field, cotton samples were collected from all pre-harvested, i.e. labeled plants, from optimally opened bolls from each option and return, and the average weight of one boll of cotton per option was determined.

Before harvesting, it became known that in 2015-2017, the soil moisture before irrigation in Sultan cotton variety was in the order of 70-70-65% compared to ChDNS, the annual rate of fertilizers was N180, R126, K90 kg/ha, and the seedling thickness was 80-90 thousand bushels/ha according to the results, the average weight of cotton in one bush is equal to 5.2 grams, and when the thickness of seedlings is increased to 100-110 thousand bush/ha, it is 5.0 grams. When the annual rate of fertilizers is increased from N180, R126, K90 kg/ha to N220, R154, K110 kg/ha, when the seedling thickness is 80-90 thousand bushels/ha, according to returns, the average weight of cotton in one bush is equal to 5.5 grams, and the seedling thickness is 100- It was 5.3 grams when it was increased to 110,000 bushels/ha. The analysis of the data obtained above showed that when the rate of fertilizer increased, the weight of cotton in the boll increased by 0.2 grams.

In the S-6524 cotton variety, soil moisture before irrigation is in the order of 70-70-65% compared to ChDNS, the annual rate of fertilizers is N180, R126, K90 kg/ha, the average weight of cotton in one boll is 5, It was equal to 1 gram, and when the seedling thickness was increased to 100-110 thousand bush/ha, it was 4.9 grams. It was observed that the weight of cotton in one bush decreased by 0.2 grams in exchange for the seedling thickness. When the rate of annual fertilizers is increased from N180, R126, K90 kg/ha to N220, R154, K110 kg/ha, when the seedling thickness is 80-90 thousand bushels/ha, according to returns, the average weight of cotton in one bush is equal to 5.4 grams, and the seedling thickness is 100- It was 5.2 grams when it was increased to 110,000 bushels/ha. The analysis of the data obtained above showed that when the rate of fertilizer increased up to 0.2 grams, the weight of cotton in the boll was higher.

According to the varieties of cotton, Sultan cotton variety S-6524 compared to cotton variety, the pre-irrigation soil moisture is in the order of 70-70-65% according to ChDNS, the annual rate of fertilizers is N180, R126, K90 kg/ha, according to returns when the seedling thickness is 80-90 thousand bushels/ha on average, the weight of cotton in one bush is 0.1 grams higher, and it can be seen that it is also 0.1 grams higher when the seedling thickness is increased to 100-110 thousand bush/ha. When the rate of annual fertilizers is increased to N220, R154, K110 kg/ha, the average weight of cotton in one bush is 0.1 grams according to returns when the seedling thickness is 80-90 thousand bush/ha, and 0.1 gram when the seedling thickness is increased to 100-110 thousand bush/ha we can emphasize that it was high.

The soil moisture before irrigation in Sultan cotton variety is 75-75-65% according to ChDNS, the annual rate of fertilizers is N180, R126, K90 kg/ha, the thickness of seedlings is 80-90 thousand bushels/ha, according to returns, the average weight of cotton in one bush is 5.5 grams was equal, when the seedling thickness was increased to 100-110,000 bushels/ha, it was 5.3 grams, it was observed that the weight of cotton in one bush decreased by 0.2 grams in exchange for the seedling thickness. When the rate of annual fertilizers is increased from N180, R126, K90 kg/ha to N220, R154, K110 kg/ha, when the seedling thickness is 80-90 thousand bushels/ha, according to returns, the average weight of cotton in one bush is equal to 5.7 grams, and the seedling thickness is 100- When increased to 110,000 bushels/ha, it was 5.5 grams. The analysis of the data obtained above showed that when the rate of fertilizer increased, the weight of cotton in the boll increased by 0.2 grams.

In the S-6524 cotton variety, soil moisture before irrigation is in the order of 75-75-65% compared to ChDNS, the annual rate of fertilizers is N180, R126, K90 kg/ha, the average weight of cotton in one boll is 5, It was equal to 3 grams, and when the seedling thickness was increased to 100-110 thousand bush/ha, it was 5.1 grams. It was observed that the weight of cotton in one bush decreased by 0.2 grams in exchange for the seedling thickness. When the annual rate of fertilizers is increased from N180, R126, K90 kg/ha to N220, R154, K110 kg/ha, when the seedling thickness is 80-90 thousand bushels/ha, according to returns, the average weight of cotton in one bush is equal to 5.5 grams, and the seedling thickness is 100- It was 5.3 grams when it was increased to 110,000 bushels/ha.

The analysis of the data obtained above showed that when the rate of fertilizer increased up to 0.2 grams, the weight of cotton in the boll was higher. Sultan cotton variety compared to S-6524 cotton variety, pre-irrigation soil moisture is in the order of 75-75-65% according to ChDNS, the annual rate of fertilizers is N180, R126, K90 kg/ha, when the thickness of the seedling is 80-90 thousand bushels/ha, the average yield in one pot cotton weight

CONCLUSIONS

Compared to ChDNS, cotton weight per boll was significantly heavier in 75-75-65% arrangements than in 70-70-65% arrangements. In particular: in the Sultan cotton variety, compared to the 2-3-4-5 options, it was 0.2-0.3 grams higher in the 10-11-12-13 options. The above situation was also reflected in the S-6524 cotton variety, that is, it was 0.1-0.2 grams higher in the 14-15-16-17 variants than in the 6-7-8-9 variants. Soil moisture before irrigation was 75-75-65% in Sultan and S-6524 cotton varieties compared to ChDNS, and averaged 5.7-5.5 grams.

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