THE IMPACT OF ECOLOGICAL ENVIRONMENT ON THE PRODUCTIVITY OF COTTON – PLANT VARIETIES

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ABSTRACT

The article investigated on the basis of a clear analysis of the impact of the ecological environment on the yield of cotton - plant varieties. The development of agriculture, which is one of the main pillars of the Republic's economy for the prosperity of our people after the independence of Uzbekistan and the support of the products grown by ourselves in the industry aside from export, is one of the important issues of the present day. This will make a significant contribution to the rise of the economy of the Republic.

KEYWORDS: Ecology, Varieties Of Cotton - Plant, Ecological Environment, Nature.

INTRODUCTION

The development of agriculture, which is one of the main pillars of the Republic's economy for the prosperity of our people after the independence of Uzbekistan and the support of the products grown by ourselves in the industry aside from export, is one of the important issues of the present day. This will make a significant contribution to the rise of the economy of the Republic.

Therefore, in every region of the Republic today, only this region is to conduct a separate testing of the varieties of porcine in soil-climatic conditions to develop the appropriate care cottonplants on the basis of perfect, thorough methodological applications, to select the fast-growing varieties that yield high quality in these regions, to develop the cotton – plant that are suitable for them, it will help to improve the variety seed production and solve the problems of sarah seed growing.

MAIN PART

Water, nutrients and the number of seedlings are important factors in increasing the yield of the cotton plant. Therefore, it was aimed to study the effect of nutrition on the yield of promising cotton - plant varieties.

The feeding area of the cotton - plant is a normative indicator of a certain form, which can fully meet the biological requirements for a single plant. The less the area, the less the area of breadth

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in the soil and air to feed, and vice versa. When finding (determining) the area of nutrition, it is necessary to determine the root system required for a single plant, and depending on the size of the leaf (surface area).

According to N. Arazmatov's research, in order to obtain a higher crop of cotton - plant varieties in the conditions of meadow soils, it was determined that they should be planted in the system 90x12-1, taking them to seedlings instead of 145-150 thousand/ha in the range of 90 cm, compared to the range of 12 cm. The meadow of Fergana region was observed to be suitable for climatic conditions in relation to the Andijan-36 variety of the Andijan-Sultan variety [1].

I.Boriev, B.Tillaboev the intensity of the opening of the pitcher cotton - plant depends not only on the biological characteristics of the variety, but also on the agrotechnical activities. The duration of planting varies, depending on the planting scheme, the thickness of the seedlings. Planting scheme 90x9-1 when the planting thickness is 120 thousand/ha, the planting scheme will be 60x13-1 (120 thousand/ha) higher than 0,9, 0,1, 1,8 and 3,6% higher than the planting scheme 60x13-1 (120 thousand / ha), if the opening is 2,3, 2,9, 1,4 and 1,0% less than the planting scheme. [2]

D.Ahmedova, G.Makhsudova, U.Umarov, F.Gapporov recommends in order to obtain a higher yield than S-6524, taking into account the fertility of the soil in the hungry soils of the Fergana region, ensuring that at least 120-130 thousand soil grains per hectare **[3]**.

The experiments were conducted on Hungry soils of Fergana region for 2018-2019 years. For this purpose, S-01 was planted on April 21 in different 60x10-1,60x12, 5-1, 60x15-1, 60x20-1 schemes. In the 60x10-1 scheme, 160 000 seedlings were left to the ground to 1. The feeding area of 1 plant in 0,06 m2. In the 60x12, 5-1 scheme, the number of seedlings on the ground to 1 is 130 000, the feeding area of 1 plant is 0.08 m2, when planted in the 60x15-1 scheme , the number of seedlings is 100 000, the feeding area is 0.10 m2, in the 60x20-1 scheme, the number of seedlings per 1 plant is 80 000,

In the experiments in 2018 year, the date of planting was 21.04, and the germination of the seedling to the top was taken into account on 8.05 day. The analysis carried out showed that the period from ripening to ripening of the S-60 pig variety in the variant s-10-1 planted in the scheme 126 days, 60x12, in the variant 5-1 in the scheme 124 days, in the variant 60x15-1 in the scheme 120 days, in the variant 60x20-1 in the scheme 119 days.

In experiments conducted in 2019 year, the date of planting was 24.04, and in all variants, the yield per capita was taken into account on 2.05 day.

According to the results of the experiment, the period from ripening to ripening in the planted Variant S-01 in the scheme 60x10-1 was 118 days, in the variant 60x12, in the scheme 5-1-117 days, in the variants 60x15-1 and 60x20-1-115 days.

The main indicators of the prospective S-01 variety in the field of nutrition were average yield, fiber output, total amount of fiber, weight of cotton in 1 breast, the period from ripening to ripening, the degree of incidence with vilt. When we analyzed the results of the conducted experiment (Table 2), the average yield in the variant 60x10-1 scheme was 35,9 ts/ha, including 30.09 days to 21 ts/ha, fiber output was 35,8%, the total yield of fiber was 12,9 ts/ha, the period from germination of the plant to ripening was 122 days, the incidence The average yield in

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60x12,5-1 variant is 38 ts/ha, including 30.09 to 25,5 ts/ha, fiber output is 36,1 %, the total yield of fiber is 13,7 ts/ha, the period from ripening to ripening is 121 days, the incidence with vilt is 9,5 %, the average yield in 60x15-1 variant is 45,8 ts/ha, the pre-ripening period is 118 days, the incidence with vilt is 11 %, the average yield in the 60x20-1 scheme variant is up to 42,5 ts/ha, including 30.09 days to 36,3 ts/ha, fiber output is 36,8 %, the total yield of fiber is 15,the period from ripening to 6 ts/ha, the ripening period is 117 days, the incidence with vilt was 16%.

Conclusion

The results of the experiment showed that when 100 000 seedlings were left to Earth on 1, the yield was on average 45,8 ts/ha, from the option left by 160 000 seedlings to +9,9 ts/ha, from the option left by 130 000 seedlings to +7,8 ts/ha, from the option left by 80 000 seedlings to +3,3 ts/ha. According to the analysis of the cotton crop harvested until 30 September, when 100 000 seedlings were left, the average yield reached 35,3 ts/ha, from the option of leaving 160 000 seedlings to +14,3 ts/ha, from the option of leaving 130 000 seedlings to +9,8 ts/ha.

According to the results of the experiment conducted in 2018-2019 years, when the S-01 prospective sow herd was left 100 000 seedlings per hectare planted in the 60x15-1 scheme, the feeding area of 1 plant was 0,10 m2 and the biological indicators of nibatan to other options were higher. It is recommended to plant the cotton - plant plant in 60x15-1 scheme in the conditions of a hungry bushy soil of the Fergana region.

Also from experiments it was found that the occurrence of phenotypic changes during the growth and development of the cotton - plant plant was due to the influence of environmental factors. The minimum or maximum impact of environmental factors on the plant of the plant of the larva produces various modifications.

T/r		the	row.			Unit aream2			
	Planting options.	Number of rows in division.	The range of plants in a (cm)	Range of row(cm)	Feed area of 1 plant	Fotal	Perceived	Specified plant number	Number of plant (piece)
1	60x10-1	4	10	60	0,06	60	50	160000	500
2	60x12,5- 1	4	12,5	60	0,08	60	50	130000	650
3	60x15-1	4	15	60	0,1	60	50	100000	500
4	60x20-1	4	20	60	0,125	60	50	80000	400

TABLE 1 UNIT SIZE AND FEED AREA

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TABLE 2 VARIATIONS OF THE MAIN INDICATORS OF THE PLANTING SCHEME BY OPTIONS

T/r	Planting scheme	Years of experience	Average yield	30.09.harvest until the day. ts/ha	Fiber output %	Total yield of fiber %	Weight of cotton wool in 1 breast gm.	Day from sprouting to ripening	Infection with Vilt
1	60x10-1	2018	35,2	21,5	35,0	12,3	4,3	126	9,0
		2019	36,5	20,5	36,6	13,4	4,1	118	6,0
		average	35,9	21	35,8	12,9	4,2	122	7,0
2	60x12,5-1	2018	37,8	28,5	35,4	13,4	4,7	124	11,0
		2019	38,3	22,5	36,8	14,0	4,5	117	8,0
		average	38,0	2,5	36,1	13,7	4,6	121	9,5
3	60x15-1	2018	44,5	37,5	35,7	15,9	5,2	120	12,0
		2019	47,0	33,0	37,6	17,7	5,3	115	10,0
		average	45,8	35,3	36,7	16,8	5,3	118	11,0
4	60x20-1	2018	42,6	37,1	35,8	15,2	5,6	119	15,0
		2019	42,5	35,5	37,8	16,0	5,8	115	17,0
		average	42,5	36,3	36,8	15,6	5,7	117	160

REFERENCES:

- **1.** O'razmatov N. Ekish usullari va tizimlarining g'o'za hosildorligiga ta'siri "Ekologiya xabarnomasi" jurnali. 2018;(1):35-39.
- **2.** Boriev I, Tillaboev B. G'o'zanavlariko'chatqalinliginingpaxtahosildorligigata'siriO'zb. qishloqxo'jaligij. 2012;(4): 25.
- **3.** Ahmedova D, Maxsudova G, Umarov U, G'apporov F. Turli ekologiksharoitnig'o'zao'simliginingmorfo-biologikxususiyatlarigata'siri. Fanvata'lim. "Eksperimentalbiologiyava ekologiya" ilmiylaboratoriyasiningilmiymaqolalarito'plami. Andijoon, 2014. pp.14-17.