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EFFECT OF DEFOLIANT APPLICATION ON COTTON WEIGHT PER BAG AT DIFFERENT CROP THICKNESSES

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Abstract
In cotton farming high to productivity in reaching agrotechnician of events place is incomparable. In particular, the street thickness right designation and applying defoliant technology of cotton quality indicators and harvest to the elements noticeable impact shows. Move Optimal thickness to be of plants growth and development processes balancing, defoliation and cotton of the breasts faster and one in rhythm to the opening help These factors one in the chest cotton weight important in the formation of importance profession will come. So Okay, move. thickness and defoliant application one in the womb cotton to the weight the impact study current scientific and practical importance has is considered.

Keywords: Cotton fruit, fruit weight, electronic scales, seedlings thickness, 1-2 terms, option, default, template, baystar, background.

Introduction

Defoliation cotton of the breasts fast and one in rhythm opening provide , yield elements to the formation and fiber quality to improve directly impact shows . Therefore defoliants various in the standards application and seedling at the optimum thickness to be determined scientific and practical in terms of important is considered .

This S -7303 cotton in research in the genre various seedling in thicknesses Baystar low, medium defoliant and high standards used . Comparison template as and Entodefol defoliant used . studied of factors one in the womb cotton to the mass impact identified , defoliation efficiency to evaluate aimed at scientific conclusions was released .

Literature Analysis

The effect of two types of seedlings, i.e. 70-80 and 110-120 thousand bushes per hectare, on the cotton yield of medium-fiber cotton varieties S-9070 and Aqdaryo-6 in the conditions of grassy - gray soils of the Samarkand region was studied by A. Toshtemirov, Kh. Tursunmurodov In this case, it was observed that in the variants where the seedling density was 110-120 thousand plants,

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there were 1.5-2.9 fewer bolls compared to 70-80 thousand plants/ha. It was also found that higher seedling density reduced cotton yield from 2.2 to 2.6 centners in both cotton varieties [1; 144-146-b].

U. Abdurakhmanov, L. Fozilovs determined the effectiveness of applying different rates of FanDEF-M and UzDEF-K defoliants at 30-40 and 50-60% cotton boll opening to obtain high and quality cotton yields from Andijan-37 and Sultan cotton varieties bred in the Tashkent region, and found that rates of 6.0-7.0 l/ha of these defoliants were the most effective [2; 18-20-b].

U. Abdurakhmanov, in his research, studied the effect of defoliants on bolls of different ages of cotton varieties S-6541 and Andijan-37 and found that bolls up to 30 days old are physiologically and biologically immature, the level of cellulose accumulation and chaining of the fiber is low, and defoliants cause some damage to bolls of this age. According to the author's conclusion, when cotton bolls are more than 30 days old and 40-50 days old, the level of cellulose formation and chaining in the fiber is high, and defoliants do not negatively affect bolls of this age [3; 120-b].

N.Boboyeva by take visited in research one in the womb cotton to the weight other factors row seedling thickness impact determined , middle "Bukhara-102" cotton fiber variety when 90-100 thousand bushes are placed per hectare one in the womb cotton weight 5.0-5.9 g in the 1st harvest was if , seedling thickness 10-20 thousand bushes/ ha when increased to 4.5-5.5 g , up to 0.4-0.5 g decrease observed . [4; 120-b]

Research methodology:

Experience test The work consists of 3 layers , 3 loops. and 15 options, seedlings thickness 70-80; 100-110; 130-140 thousand bushes/ ha marked every one seedling thicknesses for control , Entodefol 0.150 l/ha (standard), Baystar Defoliant rates 0.500-0.600-0.700 l/ha was used . In one go cotton weight determination for As a sample, 50 opened bolls of cotton were picked from the I and III iterations of the defoliant-applied variants and measured on an electronic scale .

Research results:

It is known from the results of scientific experimental work that each agrotechnical measure carried out, starting from autumn plowing, has its own effect on the cotton yield. Including seedling thickness and defoliation measures, they also have a positive or negative effect on the weight of cotton per boll, and therefore on the cotton yield. Considering the closeness of the results obtained in the research years (2022-2024), we found it appropriate to analyze the average of the three-year results in this article.

When the seedling density was set at 70-80 thousand bushes/ha, the weight of cotton per bush in the control variant was 5.36 g, and in the Entodefol 0.150 l/ha variant it was 5.56 g, which was 0.20 g more than the control variant. When Baystar defoliant was used at rates of 0.500; 0.600; 0.700 l/ha, this indicator was 5.64-5.76-5.51 g, respectively, and the difference from the control was 0.28-0.40-0.15 g higher. Here too, the high weight of cotton per bush in the variants where defoliation was used shows that defoliants have a significant effect on yield indicators. However, a high rate of defoliant has a negative effect.

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Effect of defoliant on cotton weight per bushel 2022-2024 Table 1

Variant order	Experience options	Years			3-year average	Difference from control
		2022	2023	2024		
70-80 thousand bushes/ha						
1	Control	5.45	5.24	5.38	5.36	
2	Entodefol-0.150	5.68	5.46	5.53	5.56	0.20
3	Baystar-0.500	5.73	5.59	5.61	5.64	0.2 8
4	Baystar-0.600	5.86	5.67	5.76	5.76	0.4 0
5	Baystar-0.700	5.62	5.42	5.50	5.51	0.1 5

Street chat reach a thickness of 100-110 thousand bushels/ha when scheduled control in the option noticeable change observed result 4.90 gr taken this and 70-80 thousand bushes/ha arrived designated background control from the option one in the womb cotton weighs 0.46 grams less It happened . This is it. means that number of bushes per hectare increasing progress cotton weight to decrease take comes . Template as chosen Entodefol when applied at 0.150 l/ha this The indicator is 5.01 grams . organization what did without 70-80 thousand bushes/ha background 0.55 grams less than It was . Baystar defoliant low , medium , high standards when used suitable without 5.02-5.15-5.08 gr organization what did without70-80 thousand bushes/ha arrived designated to the background relatively one in the womb cotton weight 0.62-0.61-0.43 gr less that was determined . As this street chat in thickness control to the option relatively differences in the rates of Entodefol-0.150 and Baystar-0.500; 0.600; 0.700 l/ha suitable without 0.11-0.12-0.25-0.18 gr organization did.

Defoliant one in the chest cotton to the weight impact 2022-2024 Table 2

Variant order	Experience options	Years			3-year average	Difference from control
		2022	2023	2024		
100-110 thousand bushes/ha						
1	Control	4.94	4.72	5.03	4.90	
2	Entodefol-0.150	5.05	4.83	5.14	5.01	0.11
3	Baystar-0.500	5.12	4.86	5.09	5.02	0.12
4	Baystar-0.600	5.26	4.98	5.22	5.15	0.25
5	Baystar-0.700	5.15	4.91	5.17	5.08	0.18

Highest street chat thickness arrived Against the background of the established 130-140 thousand bushels/ha control and template in options in the womb cotton weight suitable 4.08-4.19 grams without organization as remaining two to the background relative to 1.28-0.82; Less than 1.17-0.82 g results record was done . Baysatra defoliant 0.500; 0.600; 0.700 l/ha standards suitable without in the chest cotton The weight is 4.18-4.28-4.37 grams . three annual research as a result It was determined . In this background control from the option differences suitable in the amount of 0.11-0.10-0.20-0.29 gr This was to see in any case maybe defoliants amount increasing progress with one in the chest cotton weight increase status observed .

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Defoliant one in the chest cotton to the weight impact 2022-2024 Table 3

Variant order	Experience options	Years			3-year average	Difference from control
		2022	2023	2024		
130-140 thousand bushes/ha						
1	Control	4.11	3.95	4.17	4.08	
2	Entodefol-0.150	4.18	4.10	4.29	4.19	0.11
3	Baystar-0.500	4.14	4.06	4.33	4.18	0.10
4	Baystar-0.600	4.27	4.19	4.39	4.28	0.20
5	Baystar-0.700	4.36	4.27	4.47	4.37	0.29

Conclusion

In the womb cotton weight increasing progress defoliation the event own on time good quality to transfer related . Migration thickness the most acceptable standard designation with defoliants efficiency indicators further increasing goes . In this place to emphasize Okay, the number of bushes. increasing progress and given defoliants amount increase question Research The number of bushes in the work is 100-110 thousand bushes/ha . Baystar defoliant up to 0.600 l/ha designation as a result the most high results per hectare productivity amounts to Ninabat received without analysis And the most high results record was achieved . 70-80 thousand bushels/ ha designated in the background in the chest cotton Weight 5.76 grams organization did even though the number of bushes per hectare shortage on account of general productivity to be relatively low was determined. But this amount of defoliant in the background with dependency there is that in experiments determined.

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