



DEFOLIATION EFFICIENCY OF "TERMIZ-202" COTTON VARIETY WITH INGICHKA FIBER (BARBADENSE.L)

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Article history:	Abstract:
Received: 6 th October 2022	The results of the research on the effect of cotton on shedding of leaves and the opening of buds are presented using different standards of local Suyuq-XMD and UzDEF defoliant in the periods of 30-40% and 40-50% opening of the pods of the thin-fiber cotton (barbadense.L) Termiz-202 variety.
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ENTER. Today, the most important condition for the rapid development of cotton cultivation is the consistent intensification of cotton cultivation, one of the main directions of which is the use of chemical substances. In order to consistently grow abundant and high-quality cotton crops, it is necessary to use chemicals wisely. Therefore, modern cotton farming cannot be imagined without mineral fertilizers, plant growth stimulants, herbicides against weeds, insecticides and fungicides for pest and disease control, and defoliant for shedding cotton leaves. Therefore, it is urgent to continuously continue scientific researches on the scientific basis of development of optimal norms and periods of application of various chemical means in each created thin-fiber (barbadense) cotton varieties.

In order to fulfill the tasks mentioned above and overcome the mentioned natural inconveniences, wide introduction of new modern innovative technologies in agricultural production, improvement of farming culture in clusters and farms, use of short rotation planting system, cultivation of new high-yielding varieties, complex mechanization of field work and elimination of chemicals in agriculture Improving usability is one of the main factors.

It is known that many scientists have conducted research on the theory of cotton leaf shedding. Among them, A.M. Prugalov, T. Zokirov, A. Imamaliev, I.M. Rakhmatov, A.M. Meylikulov and others, based on their research, came to the conclusion that shedding of cotton leaves is a physiological, biochemical process that occurs as a result of changes in metabolism.

In this case, the reduction of moisture and auxin, the increase of salts and ethylene, resulting in the shedding of cotton leaves, are of great practical importance for leaf shedding [2].

One of the practical aspects of cotton plant defoliation is to accelerate the ripening and opening of cotton bolls. Because, as many scientists have stated, it reduces the relative humidity of the air around the plant, sunlight falls well on the pods, as a result, the pods make good use of natural factors, speed up the development and opening of the pods, the weight of the first harvest increases, the high yield of machine and hand harvesting is ensured, and the harvest is harvested in a short period of time. it will be possible to get it [3].

RESEARCH METHODOLOGY. The experiment consisted of 14 options, arranged in 3 replications and one stratum. Each plot consists of 8 rows, the distance between the rows is 60 cm, the total area of one plot is 48 m², of which the total area is 24 m², the total area is 2016 m². When using defoliant, depending on the opening of the cotton buds, their two different durations (30-40% and 40-50%) are defined.

For this reason, our research was carried out to determine the effectiveness of defoliant in the thin fiber (barbadense) cotton variety "Termiz-202" grown in the conditions of growing barren soils of Surkhondaryo region.

RESEARCH RESULTS. According to the results of the research, in order to obtain a high and high-quality cotton crop from the cotton variety "Termiz-202" with a thin fiber, different standards of local Suyuq-XMD and UzDEF defoliant were used in the period of 30-40% and 40-50% opening of the cotton bolls, and their effectiveness was determined. According to the results of the research carried out in Surkhondaryo region, in the first term, 30-40% of the bolls of the cotton variety are opened, in the control variant of the background where defoliation is planned, on the 14th day after defoliation, the natural shedding of leaves is 9.6%, the opening of bolls is 62.3%, and the rate of opening is 24.4%. was found to be 90.2%, the number of fallen leaves was 90.2%, the opening rate of pods was 83.2%, and the rate of

opening was 45.6%, compared to the control. .2% is expected to be higher followed. It was found that the number of fallen leaves was 87.9%, the opening of buds was 79.2%, the rate of opening was 40.8%, and the rate of opening was 16.4% compared to the control in the variant where liquid-XMD defoliant was used at the rate of 9.0 l/ha. . In the case where liquid-XMD defoliant was applied at the rate of 10.0 l/ha, it was noted that the number of fallen leaves increased by 85.8%, the opening of buds increased by 77.3%, the opening rate increased by 39.3%, and the opening rate increased by 14.9% compared to the control. .

It was found that the number of fallen leaves was 90.8%, the opening of pods was 84.1%, and the rate of opening was 47.3% in the case where UzDEF defoliant was applied at a rate of 7.0 l/ha, and the rate of opening was 22.9% higher than the control. .

It is known that the number of fallen leaves was 86.7%, the opening of pods was 78.4%, and the speed of opening was 40.7% in the variant where UzDEF defoliant was applied at the rate of 8.0 l/ha, and the speed of pod opening increased by 16.3% compared to the control. it happened. In the variant where this UzDEF defoliant was used at the rate of 9.0 l/ha, leaf shedding was 83.4%, pod opening was 73.6%, and the rate of pod opening increased by 11.2% compared to the control.

In the second term, defoliation is planned when the cotton buds are 40-50% open.

After the 14th day, it was determined that the natural shedding of leaves was 11.8%, the opening of buds was 72.1%, and the opening rate was 23.1%. 1%, opening of blisters increased by 87.1%, opening rate by 38.3%, opening rate increased by 15.2% compared to the control. It was determined that the number of shed leaves was 89.3%, the opening of buds was 91.2%, the rate of opening was 43.6%, and the rate of opening was 20.5% higher than the control in the variant where liquid-XMD defoliant was used at the rate of 9.0 l/ha. . In the case where liquid-XMD defoliant was applied at the rate of 10.0 l/ha, it was noted that the number of fallen leaves increased by 85.7%, the opening of buds increased by 89.1%, the opening rate increased by 40.5%, and the opening rate increased by 17.4% compared to the control. .

It was found that the number of fallen leaves increased by 85.5%, the opening of pods increased by 85.4%, the rate of opening increased by 36.4%, and the rate of opening increased by 13.3% compared to the control.

It is known that the number of fallen leaves was 90.2%, the opening of pods was 91.8%, and the rate of opening was 44.1% in the case where UzDEF defoliant was applied at the rate of 8.0 l/ha, and the rate of pod opening was 21.0% higher than the control. it happened. In the version where this UzDEF defoliant was used at the rate of 9.0 l/ha, leaf shedding was 87.5%, pod opening was 86.5%, and the rate of pod opening increased by 14.9% compared to the control (Table 1).

In conclusion, it was determined that cotton leaves are artificially dropped, air circulation between cotton rows is improved, air relative humidity decreases around the plant, and sunlight reaches the bolls better, resulting in early boll opening and opening.

Table 1

Effect of defoliants on shedding of cotton leaves and opening of bolls (Surkhondarya region, "Termiz-202" variety)

Indicators	Control	Liquid-XMD-8.0 l/ha	Liquid-XMD-9.0 l/ha	Liquid-XMD- 10.0 l/ha	Own DEF- 7.0 l/ha	Own DEF- 8.0 l/ha	Own DEF - 9.0 l/ha
When 30-40% blisters open							
Green leaves, %	90,4	1,6	1,4	1,2	1,8	1,5	1,2
Dry leaves, %	-	7	8,2	11,5	5,6	7,3	10,7
Semi-dry leaves, %	-	1,2	2,5	1,5	1,8	4,5	4,7
Leaf shedding, %	9,6	90,2	87,9	85,8	90,8	86,7	83,4
Poultry opening, %	62,3	83,2	79,2	77,3	84,1	78,4	73,6
Opening rate, %	24,4	45,6	40,8	39,3	47,3	40,7	35,6
Difference from control, %	-	21,2	16,4	14,9	22,9	16,3	11,2
When 40-50% of the blisters open							
Green leaves, %	88,2	2,2	1,6	1,1	2,0	1,9	1,3
Dry leaves, %	-	4,8	5,6	8,6	4,9	5,1	8,7
Semi-dry leaves, %	-	8,9	4	3,5	7,6	2,8	2,5
Leaf shedding, %	11,8	84,1	89,3	85,7	85,5	90,2	87,5
Poultry opening, %	72,1	87,1	91,2	89,1	85,4	91,8	86,5
Opening rate, %	23,1	38,3	43,6	40,5	36,4	44,1	38
Difference from control, %	-	15,2	20,5	17,4	13,3	21	14,9

To sum up, the results of the research showed that in the thin-fiber "Termiz-202" cotton variety grown in the conditions of barren soils of Surkhondarya region, when different rates of defoliants Liquid-XMD and UzDEF were

applied, (background 1) cotton bolls opened 30-40% during the period of opening of liquid-XMD - at the rate of 8.0 l/ha, high results were obtained when spraying UzDEF defoliant at the rate of 7.0 l/ha, correspondingly, leaf shedding was 90.2-90.8%, pod opening was 83.2-84.1%, opening rate was 45,6-47.3%, the rate of boll opening increased by 21.2-22.9% compared to the control, as well as (in background 2) during the period of 40-50% opening of cotton bolls Liquid-XMD-9.0 l/ha on average, in the options where UzDEF defoliant 8.0 l/ha is used, leaf shedding is 89.3-90.2%, pod opening is 91.2-91.8%, opening rate is 43.6-44.1%, pod opening is it was found that the rate was 20.5-21.0% higher than the control.

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