

Determination of the Leaf Surface of Cotton Variety Termiz-202 With Thin Fiber

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In the conditions of swampy soils of Surkhondarya region, the data on the development periods of the leaf surface of fine-fiber Termiz -202 cotton, including combing, flowering-harvesting, ripening and before defoliation , are presented .

Tekoma (Naychagul) – Campsis Radicans (Seem), China Wisteria - Wisteria Sinensis (Sums), Japanese Beauty – Lonicera Japonica (Thumb). Horizontal landscaping. Action strategy. development period, thin fiber Termiz-202 new boll , combing, flowering-harvest, ripening, defoliation, vegetative, leaf surface, cm 2 /plant , m 2 /ha.

Global climate change in the world is causing various natural disasters. In turn, it has an effect on the growth of agricultural crops, and a decrease in the weight of the harvested crop is observed. Especially in the conditions of Surkhondarya region, which is the southern region of our country, the cultivation of cotton varieties is becoming difficult, and as a result of the strong hot summer wind and the increase of pests in the summer season, the desired harvest is becoming limited.

It is known that fine fiber cotton varieties are more resistant to natural extreme conditions and insects than medium fiber cotton varieties according to their biological properties. Taking this into account, in the following years, attention was paid to the cultivation of fine fiber cotton at the government level, and a number of decisions and decrees were adopted. For example, the Cabinet of Ministers of the Republic of Uzbekistan dated January 30 , 2020 No. 47 "On effective organization of fine-fiber cotton cultivation, breeding of new varieties and introduction of incentive mechanism", dated January 14, 2020 "Measures to increase the level of mechanization of cotton harvest in the territory of the Republic on" decisions No. 21 were

adopted. Also, in accordance with the decision No. 121 dated March 4, 2021 "On effective use of existing land areas and rational placement of agricultural crops for the harvest of 2021", it is planned to plant cotton crops on 72,370 hectares of cultivated land in Surkhandarya region. The effectiveness of defoliants used in cotton depends primarily on the thickness of the cotton leaves and their size. The surface of the leaf surface depends on watering, feeding methods and several other factors, and can be of different sizes or different thicknesses according to the development level of each cotton variety.

Therefore, according to the researches of Kh. D. Chorieva and others, it was determined that the consumption of defoliants is 15-20% lower than other types of cotton because of the lower leaf surface and thin leaves of Termiz-202 cotton variety [5; 23-p.].

In his studies, F.J. Teshayev found that the defoliation efficiency depends on the level of cotton leaves, and the level of leaves is directly related to the feeding procedures of the cotton, and when the fertilizer rates are increased from 150 kg/ha to 250 kg/ha, the leaf area of the new cotton Bukhara-102 is 65558.0 per hectare. m^2 / ha found out that it has increased [6; pp. 10-11].

Also, according to U. Abdurakhmanov, if a leaf is considered one of the organs that control the transition of life processes in a plant, then the process of photosynthesis directly forms the basis of the accumulation of resources necessary for plant growth and development. In the complete passage of this process, external environmental factors such as light, temperature, amount of CO_2 in the air, humidity in the soil, depending on the assimilation activity of plants, the number of leaves, the thickness of the leaf plate, and the surface of the leaf show their influence [7; 49 p.].

Based on that, it can be said that depending on the surface of the leaf surface, the criteria for using defoliants may be different. From this point of view, in the studies, the surface of the leaf surface of goza species was also studied, and the obtained data are presented in Table 1 and Figure 1.

According to the results of the conducted research, the surface of the leaf surface of cotton was close to each other in both periods, but it was observed that the surface of the cotton variety was different due to the increase in the number of leaves of the cotton variety due to the change of weather.

It should be noted that excessive growth of leaves overshadows the plant and has a negative effect on its growth, and when it is reduced, the productivity of photosynthesis decreases. Therefore, the surface of the leaf should be at an acceptable level, only then will the ground be created for the process of assimilation and dissimilation [2; 637 p.].

According to the data obtained from the field experiments in 2018-2020, when the research was carried out, the surface of the leaf surface of the fine fiber Termiz-202 cotton variety reached 438.3-456.7-466.4 cm^2 on average in one plant by the time of the planing period. per hectare was 5630.0-5968.1-6156.5 m^2 , during the flowering-harvest period this indicator is 2120.4-2090.3-2030.2 cm^2 per hectare, 27236.5 per hectare It was found to be -27315.6-26798.6 m^2 / ha .

It was found that during the ripening period of cotton, the leaf surface was on average 2536.2-2576.8-2422.5 cm^2 per plant, 32577.5-33673.1-31977.0 m^2 per hectare.

1 – table Changes in the surface of the leaf surface

Goza new	Seedling thickness	Leaf surface, cm ² /plant				Leaf surface, m ² /ha			
		His comb	Flowering - harvesting	Cooking	Def. before	Shonalah	Flowering-harvest collection	Ripe	Def. before
2018 year									
Termiz-202	128450	438.3	2120.4	2536.2	2564.7	5630.0	27236.5	32577.5	32943.6
2019 year									
Termiz-202	130678	456.7	2090.3	2576.8	2652.3	5968.1	27315.6	33673.1	34659.7
2020 year									
Termiz-202	132000	466.4	2030.2	2422.5	2530.6	6156.5	26798.6	31977.0	33403.9

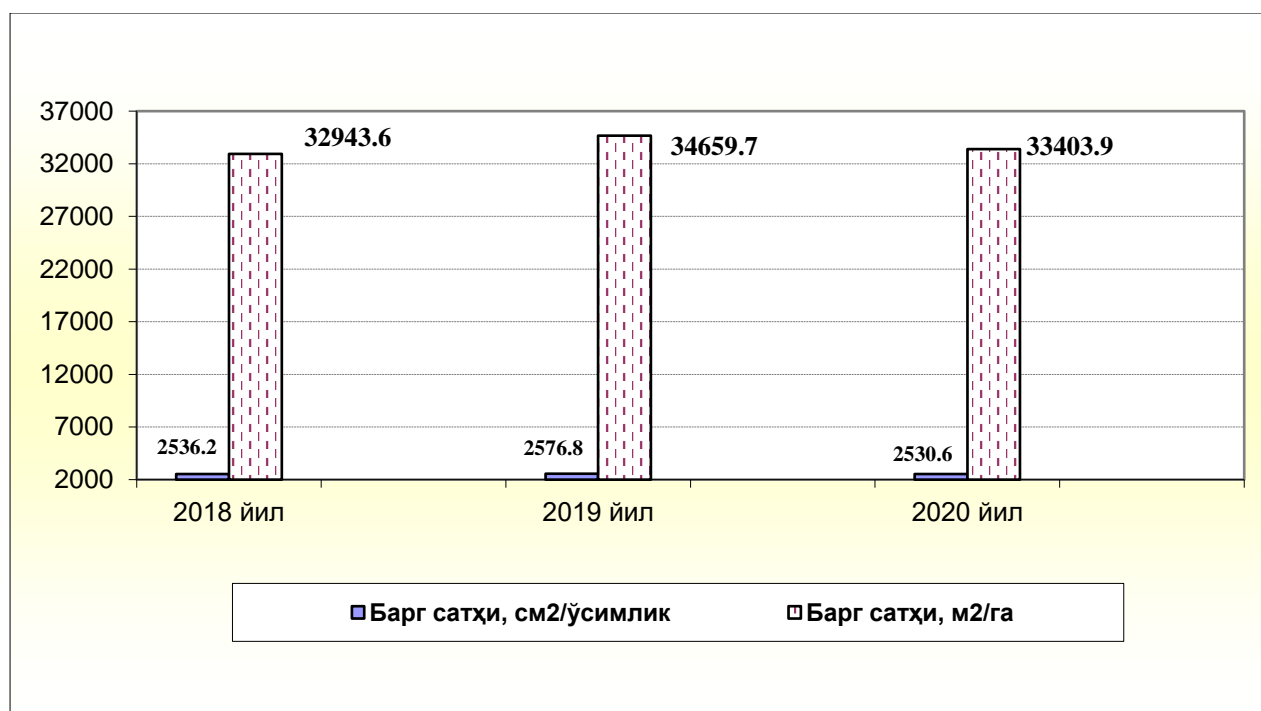


Figure 1. Cotton leaf surface before defoliation

Also, since the defoliation activities were carried out mainly in the third ten days of August in our research, the surface of the cotton leaf was determined even before defoliation.

Because, scientists such as R. Nazarov, F. Teshayev, U. Abdurakhmanov have emphasized that the leaf surface, like other factors, directly affects the efficiency of defoliation.

Before defoliation, the leaf surface had a high width, and the leaf surface of one plant was 2564.7-2652.3-2530.6 cm² according to the research years, and 32943.6-34659.7-33403.9 m² / (Table 1 and Figure 1).

It should also be noted that, in order to fully understand the efficiency of defoliation based on the guidelines, we did not conduct chilpish agro-operation in the experiments we conducted. Therefore, the leaf surface area before defoliation was slightly higher than during the ripening period due to the formation of additional leaves. Also, higher leaf surface area by year was observed in 2019 experiments and can be explained by different climatic conditions by year. Because weather conditions are one of the factors that directly affect the growth and development of cotton.

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