Effectiveness Of Using Albit And Gummi 20 Stimulators On Medium Fiber Andijon-35 Cotton Varieties

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ABSTRACT

Light gray stony soils of Namangan region Albit stimulator 75 ml/t per seed before planting and 40 ml/ha during weeding and Gummi 20 stimulator 1.0 l/t per seed before planting and 1.0-1.5 l/ha during weeding-flowering periods when processed according to standards, the field germination rate of the seed is accelerated by 7.5-9.0%, sprouts germinated 1-2 days earlier and plant height is 7.6-11.7 cm, harvested branches are 1.3-1.8 pieces, total formed pods 1.4-1.8 grains, opening of bolls increased by 3.3-5.0%, additional cotton yield increased by 3.3-5.2 tons/ha.

Keywords: cotton variety, Andijon-35, Albit and Gummi 20 preparations, seed germination, growth, development, cotton yield and quality

Introduction. In the agriculture of our country, a lot of work is being done on the development and implementation of modern technologies for obtaining abundant and high-quality crops.

"Development of agriculture of the Republic of Uzbekistan" of the President of the Republic of Uzbekistan PF-60 of January 28, 2022-decisions for 2022-2026 and In the action strategy on the five priority directions of the development of the Republic of Uzbekistan, among the priorities of the modernization and rapid development of agriculture, the main attention is focused on the tasks of expanding scientific research works on the creation and introduction of new advanced agrotechnologies suitable for the climatic conditions of agricultural crop care. .

Growth regulators have been found to have a positive effect on optimal plant growth and development and increased productivity. In this regard, you can find a lot of information in the literature. For example, stimulants accelerate the activity of physiological processes in plant agrocenosis, that is, carbohydrate, protein and lipid metabolism increases, metabolism improves, and the redistribution of nutrients is coordinated, and plant growth and development accelerate. Also, resistance to diseases increases, resulting in an increase in product quality and weight.

The biological effectiveness of the new biologically physiologically active substances Albit and Gummi 20 stimulants in the medium-fiber Andijon-35, cotton variety, was studied in the conditions of light gray stony soils of the "Ma'murbek, Mukhtorbek" farm located in the area of hilly fields of Torakorgan district of Namangan region. In the experiment, the plants were treated with stimulators before planting the seeds and during the period of cotton growth, and Albit and Gummi 20 stimulators were tested as a comparison with the control option.

Experience system

N	Experience options	Seed processing standard.	Processing rate during the cotton growing season	
			polishing	bloom
1	control	6.5 kg/t	will not be processed	
2	Albit	75 ml/t	40 ml/ha	-
3	Gummi 20	1.0 l/t	1.0 l/ha	1.5 l/ha

Albit drug was applied at the rate of 75 ml/t before seeding, and 40 ml/t was applied during the tillering period.

Gummi 20 stimulator was treated at the rate of 1.0 l/t of the seed before planting and 1.0-1.5 l/ha during the flowering period. It should be noted that Albit and Gummi 20 stimulants have been compared to the control option and scientific work has been carried out.

In the experiment, before planting, soil samples were taken from the 0-30-30-50 cm layers using the envelope method. The obtained analyses, humus content by I.V. Tyurin, total nitrogen and phosphorus by the method of I.M. Maltseva and L.I. Gritsenko, mobile phosphorus by B. P. Machigin and exchangeable potassium were determined by the method of P.V. Protasov . When we analyzed the soil samples, it was found that the soil of the experimental field was low in humus, very low in mobile phosphorus and exchangeable potassium, and 30 смthe amount of humus in the tillage (0-) layer of the soil was 0.82; total nitrogen 0.144; phosphorus 0.148; potassium was 2.38%. These indicators are 0.40 in the under-driving (30- 50 см) layer, respectively; 0.093; was 0.102 and 2.15%.

The amount of humus and nutrients in the soil before the experiment ("Ma'murbek, Mukhtarbek" f/x)

Soil layer, cm	Humm us, %	In general form, %			Mobile form, mg/kg soil		
		nitrog en	phosph orus	potassi um	NO_3	P_2O_5	K_2O
0-30	0.82	0.144	0.148	2.38	17.9	5.0	60.0
30-50	0.40	0.093	0.102	2.15	8.3	5.0	60.0

Also, the amount of nitrate nitrogen in the driving layer was NO_3 -17.9, mobile phosphorus P_2O_5 -5.0 and exchangeable potassium K_2O -60 mg/kg, while in the driving layer it was 8.3; 5.0; At 60.0 mg/kg, it was found to be very low in nutrients.

In many scientific sources, it is noted that the fertility of seeds treated with various physiologically active substances has increased.

The seed of the Andijan-35 cotton variety was planted using a seeder in the order of 90 x 20 x 2. Monitoring work 25.04; 27.04; Held on April 29 and May 2.

F.A. Abdullaev (2014) Gumin stimulators, i.e. Gumimax stimulator applied to 0.8-1.0 l/t of seed increased control by 11.1% compared to theoretical hives. found that the seeds were 13-17 more than the control variety [4].

Germination of seedlings and after yagana and seedling thickness at the end of the period of operation (Ma'murbek Mukhtorbek f/x)

№	Experience options	Seed processing standard	Germination of seeds, %				from control, %	Seedling thickness, thousand bush/ha	
			25.04	27.04	29.04	2.05		after yagana	at the end of the validity period
1	control	6.5 kg/t	6.5	22.0	41.5	62.5	-	111.1	109.5
2	albit	75 ml/t	8.0	23.0	43.5	69.0	7.5	111.1	109.5
3	gummi 20	1.0 l/t	13.5	27.0	49.0	71.5	9.0	111.1	108.7

In the final analyzes of our studies described above, it was found that Albit stimulator 75 ml/t per seed before planting and 40 ml/ha at tillering and Gummi 20 at 1.0 l/t per seed before planting and 1.0-1 during tillering-flowering periods. High results were achieved in the variants processed at the rate of 5 l/ha. That is, compared to the control, initially, the height of the plant increased by 1.5-3.1 cm, the number of true leaves increased by 0.6-1.1 pieces, and in July, the plant height increased by 3.4-6.3 cm, compared to the control ,5-0.8 pieces, the number of combs increased by 1.3-1.7 pieces. By August 1, it became clear that the above options were superior to the control option, in which the plant height was 57.7-65.8 cm, the number of harvested branches was 9.8-1.5, the number of pods was 1.6-2.0, and the number of nodes was 4. , equal to 8-7.5 pieces, the optimal standards of Albit and Gummi 20 stimulants compared to the control are the length of the cotton 4.8-8.1 cm, the harvest branches 0.8-1.7 pieces, the number of bolls 0.4 pieces, the number of nodes 0.8-2.7 pieces, it was observed that more were formed.

In the observations conducted on September 1, the height of the plant was 63.8-75.5 cm, the yield branches were 10.9-12.7 pcs., the total number of pods formed was 8.1-9.9 pcs., including those that opened by 49.4-51.6% was equal. When we compared the results obtained in the study with the control option, we saw the following patterns.

That is, it was observed that Albit and Gummi 20 stimulants are higher than the control option, plant height increased by 7.6-11.7 cm, harvested branches increased by 1.3-1.8 units, total formed pods increased by 1.4-1.8 units.

The dynamics of flowering and opening of bolls during the period of cotton were studied, and if we focus on the analytical results of the data obtained on the level of flowering of cotton, the flowering level of cotton was 2.07, 5.07 and 8.07, and the level of opening of bolls was 14.08. Held on 17.08 and 20.08.

Albit and Gummi 20 stimulators had a positive effect on the flowering rate of cotton, 77.5% in the control option on July 8, Albit stimulator 75 ml/t per seed before planting, 40 ml/ha during the tillering period, and Gummi 20 stimulator 1.0 l per seed before planting. /t and 1.0-1.5 l/ha during the flowering-flowering period, and 80.3-82.4% when processed in the norms. It was noted that the used stimulants had a positive effect on the flowering of cotton and accelerated it by 2.8-4.9% compared to the control option.

Although it was emphasized in our research that cotton flowering is observed until 100% flowering according to the methodological guidelines, due to the sudden warming of the day, the observation calculation work was done in the interval of 3 days, due to the high influence on the dynamics of flower opening, combined with stimulators and external factors, premature flowering occurred. is explained by the fact that the level has accelerated.

Sh. Abdualimov, Y. Soriev et al. (2013) Bukhara-102 variety hairy seed of cotton was treated with Tj-85 stimulator at the rate of 20 g/t and Rostbisol at the rate of 135 ml/t before sowing, when 60, 45 and 30 kg per hectare were

planted. under these conditions, the seed germination was 7.7-13.8% higher than the control, the growth and development of the cotton was accelerated, the height was 4.3-10.7 cm, the number of bolls increased by 1-2 grains, the opening of the bolls was accelerated, and the yield of high-quality cotton cultivated. In this case, the highest results were achieved when the rate of sowing seeds was 45 kg per hectare, and the consumption of seeds was saved by 20-25% [7].

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