ISSN NO: 2771-8840
Date of Publication: 21-11-2023

The influence of foreign and domestic stimulants on the medium-fiber variety of cotton Andijan-35

Fazliddin Shamsitdinov
Namangan Engineering-Technological Institute, Namangan, Uzbekistan
E-mail: fazliddin shamsutdinov@gmail.com

Annotation. Namangan region has a positive effect on the germination of medium-fibrous acorns Andijan-35 in conditions of hungry rich soils, stimulants albite and gummi 20, sprouts in the field, albite 75 ml / t and gummi 20 when applied in the norms of 1.0 l/t 14.8-17.9; 11.3-15.6%, has a positive effect on root rot and gommosis, the height of the acorn is 1.4-10.6 cm, the number of branches of the culture is 0.2-1.2 grains, and the number of acorns is 0.6-1.8 grains, the flowering rate is 7.0-14.2%, the opening of acorns is 11.2-16.0%, the number of leaves due to one plant was equal to 5.4-14.3 grains, 34.1-224.4 when the leaf surface is illuminated, 260.1-670.8 during flowering and 260.6-681.6 cm^2 in height during and that cotton yields increased by 4.9-5.5 c/ha compared to control.

Keywords:

Introduction. Cotton growing is one of the most important sectors in the agriculture of our republic, and the development of the cotton growing network has not only economic, but also political significance, and cotton growing has risen to the level of national pride.

Growth regulators accelerate the physiological processes of the plant in agrocenosis, that is, the metabolism of carbohydrates, proteins and lipids increases, the exchange of substances improves and the redistribution of nutrients is coordinated, the growth and development of the plant accelerates, resistance to diseases increases, the quality and weight of the product increases, and ripening is accelerated.

Research methodology.

Methods of conducting field experiments [1]. when we analyzed the average value for three years, it was found that the soil of the experimental field was very poorly provided with humus, with a low content of mobile phosphorus and exchange potassium, the humus content in the plowed soil layer (0-30 cm) was 0.636; nitrogen in total form - 0.066; phosphorus was 0.118; potassium was 1.424%, the same figures were 0.415; 0,048; 0.091 and 1.299% in the subsoil (30-50 cm) layer, respectively (Table 1).

It is also very low in nutrients: the content of nitrate nitrogen No. 3-14.5 in the underlying layer, No. 3-14.5, mobile phosphorus P2O5-10.5 and volatile potassium K2O-87.1 mg / kg in the underlying layer, respectively.

Table 1. The amount of humus and nutrients in the soil before the experiments
(Hilola yogdusi f/x)

Soil layer.sm	Humus	Common			Mobile form. mg/kg		
		nitrogen	phosphorus	potassium	NO_3	P_2O_5	K_2O
2015-year							
0-30	0.624	0.046	0.112	0.833	18.4	13.5	96.2
30-50	0.483	0.034	0.095	0.712	15.2	10.3	83.4
2016 year							
0-30	0.624	0.041	0.110	0.829	18.2	13.0	95.1
30-50	0.483	0.030	0.089	0.705	14.9	10.1	82.4
2017 year							
0-30	0.66	0.113	0.132	2.61	6.8	5.0	70

ISSN NO: 2771-8840
Date of Publication: 21-11-2023

30-50	0.28	0.081	0.091	2.48	5.2	5.0	70
three-year average							
0-30	0.636	0.066	0.118	1.424	14.5	10.5	87.1
30-50	0.415	0.048	0.091	1.299	11.8	8.5	78.6

Many scientific sources claim that the germination of seeds treated with various physiologically active substances has increased. For example, Sh.In experiment conducted by Abdulimov in the conditions of typical chalk soils of the Tashkent region, when the planting rate of acorns of the den variety is 60, 45 and 30 kg per hectare, and when treated with a stimulant Rostbisol at a rate of 135 ml/t, TJ-85 when using a stimulant of 20 g/t, regardless of the rate of planting seeds, these stimulants have a positive effect on germination due to m, it was found that more sprouts sprouted 42.5-44.7 pieces, 27.6-28.7 pieces with a planting rate of 45 kg, 15.1-21.5 pieces with a planting rate of 30 kg [2].

The amount of humus in the soil of the experimental field was determined by the method of I.V. Tyurin, total nitrogen and phosphorus by I.M. Maltseva and L.I. Gritsenko, mobile phosphorus by B.P. Machigin and exchangeable potassium by P.V. Protasov.

Observations, calculations and analyzes in field experiments were carried out in accordance with the methodological manual of UzPITI “Methodology for conducting field experiments” [2]. During the use of chemicals, the “Brief Guidelines for State Tests of Growth-Regulating Substances” were used, and the data obtained were processed mathematically and statistically according to the method of B. A. Dospekhov

Results of the Study.

An estimated work was carried out to determine the degree of germination of the experimental seed, and the following information was obtained. Data on the three-year average germination and thickness of seed seedlings are presented in Table 2. Alternatively, data on the germination rate of seeds of the Andijan-35 acorn variety in our second test field are also presented in detail in Figure 1.

Considering the data of our experiment, the results of a three-year study revealed that in theoretical nests there was an acceleration of germination of medicinal seeds compared to non-drug variants. In the experimental field, the germination of seeds was calculated based on the fact that germination began on 100 nests, and with an interval of 2-3 days, the sprouts continued until complete germination.

From initial observations, it was found that stimulants have a positive effect. Including, when we analyze the average three-year germination of sprouts, 72.8 percent in the control, 81.9 percent (6.5 kg/t) in Dalbron before sowing seeds, 79.9 percent (0.8 l/t) in Uzgum, albit 83.4 percent (50 ml/t), 87.6 percent (75 ml/t), 80.4% (100 ml/t), unprocessed (7 variants) 69.7%, gummi before planting in seeds 20 is 83.1-85.7% (0.5 l/t), 88.3-90.7% (1.0 l/t) and 76.5% in the raw 12 variants. It was observed that this figure was 9.1 percent higher in Dalbron compared to the control version, 7.1 percent higher in Uzgumi and 3.1-14.8 percent higher in Albit, developed in Russia. Gummi 20 stimulants developed in Uzbekistan were found to accelerate growth to 3.7-15.5 percent compared to other stimulants. The experiment showed that the peak rate of pollen germination was 14.8-17.9 percent higher than in the control, with the introduction of 1.0 l/t of albit stimulant 75 ml / t and gummi 20.

Consequently, "due to the positive effect on germination of sprouts of albite stimulants and gummi 20 in the field, albite 75 ml / t and gummi 20 achieved high results when used in the norms of 1.0 l/t, providing an increase of 14.8-17.9; 11.3-15.6% higher than in the control version.

Sh.Abdualimov, in the conditions of typical chalk soils of the Tashkent region, seeds with and without plumage were treated with the stimulant Vitavaks 200 FF at the rate of 5 l/t. The highest results were obtained when sowing seeds with plumage at the rate of 60 and 30 kg per hectare, seeds without feathers at a rate of 30 and 15 kg, But when seeds were sown without feathers at a rate of 15 kg per hectare, cotton yield decreased by 4.7-5.5 c, this is due to the fact that due to spring rains in these climatic conditions, the formation of yogurt was noted and insufficient seedlings were harvested [3].

In the experimental field, the thickness of the sprout was calculated after Yagana and at the end of the acorn growth period. According to the data obtained, the thickness of seedlings according to the variants after Yagana is 103-107 thousand/ha. Having formed a bush/ha, the thickness of seedlings in experimental variants

ISSN NO: 2771-8840
Date of Publication: 21-11-2023

is slightly thinned into the depth of the action period, and 102-104 thousand/ha. The difference between the options is 1-3 thousand There was a decrease in germination to/s of the bush. This made it possible to compare the results obtained in the experimental versions with each other.

Infection of acorns with diseases of gommosis and root rot by E. Ochilov, N. Kashgarov was investigated on the basis of the methodology "Fundamentals of scientific research in crop production" [4].

The degree of damage to acorn sprouts by diseases of gommosis and root rot was determined by counting tubers infected with gommosis and root rot 10 days after complete germination of the sprouts. According to the data, before sowing the albite stimulator, the seeds were practically not damaged by root rots and homomosis diseases in variants treated with 1.0 l/t of seeds before sowing 0.75 ml/t and gummi stimulants 20.

Table 2. Disease of gommosis and root rot
(Hilola yogdusi f/x)

№	Exprions options	Seed treatment. kg/t. l/t. ml/t	Three-year average (2015-2017)			
			Root Rot. %	Gom mosis %	Seed bark. %	Real sheet. %
1	Control	-	1.7	1.3	3.0	0.3
2	Dalbron	6,5 kg/t	-	0.2	-	-
3	Uzgumi	0,8 l/t	0.1	0.3	0.3	-
4	Albit	50 ml/t	-	0,3	-	-
5	Albit	75 ml/t	-	-	-	-
6	Albit	100 ml/t	0.3	0.1	-	-
7	Albit +insektisids	-	0.2	0.5	1.0	0.7
8	Gummi 20	0,5 l/t	-	0.2	-	-
9	Gummi 20	0,5 l/t	-	-	-	-
10	Gummi 20	1,0 l/t	0.1	0.1	-	-
11	Gummi 20	1,0 l/t	-	-	-	-
12	Gummi 20+ insektisids	-	0.8	0.4	1.5	0.7

When we analyzed the three-year average number of root rot and hommosis diseases by variant, it was found that root rot was 0.2 to 1.7 percent in the seedless variants, while gommosis damage was 0.4 to 1.3 percent in those variants (Table 3). In the experimental field, germ leaf and chin leaf gommosis was found to accelerate by 1.0 to 3.0 percent in control and non-pollinated seed variants.

The degree of damage to acorn sprouts by diseases of gommosis and root rot was determined by counting tubers infected with gommosis and root rot 10 days after complete germination of the sprouts. According to the data, before sowing the albite stimulator, the seeds were practically not damaged by root rots and homomosis diseases in variants treated with 1.0 l/t of seeds before sowing 0.75 ml/t and gummi stimulants 20.

When we conducted a three-year analysis of root rot and hommosis by variant, we found that root rot was 0.2 to 1.7 percent in the seedless variants, while the hommosis damage was 0.4 to 1.3 percent in those variants. In the experimental field, germ leaf and chin leaf gommosis was found to accelerate by 1.0 to 3.0 percent in control and non-pollinated seed variants.

Therefore, in the conditions of dense loose soils of the Namangan region, when treated with stimulants albite and gummi 20 before sowing in seeds, as a result of early and healthy germination of gooseberries, growth is accelerated, resistance to root rot and homomosis diseases increases, and favorable conditions are created for rapid growth and development of gooseberries.

One of the important indicators is to determine the influence of new biologically and physiologically active substances on the growth and development of plants in the ontogenesis of acorns.

J. Sattarov noted that at present various chemical and biological substances are widely used in agricultural crops. In particular, biologically active substances used in acorns and other cultures are mainly synthesized

ISSN NO: 2771-8840
Date of Publication: 21-11-2023

from the plants themselves, various microorganisms or other natural raw materials, as well as chemically. These biologically active substances also have a specific positive effect on the microflora of the soil, and therefore are processed before sowing in seeds and during the growing season of the plant. In this case, the growth and development of the plant are accelerated, the yield and quality of products increase, while they do not harm nature and are considered harmful to the environment [5].

In studies, the effect of stimulants dalbron, Uzgumi, albite and gummi 20 on the processes of growth, development of acorns during the growing season of acorns was observed. But our studies have scientifically proven the positive effect of albite and gummi 20 stimulants on the autonomic and generative organs in gout compared to the control variant. The results of the study were obtained (Table 4). On June 1, according to the options, the height of the ACORN was 11.5-15.8 cm, the number of leaves of the chin - 4.9-6.0 pieces, on July 1, the height was 40.8-48.9 cm, the number of twigs of the crop - 6.8-8.1 pcs., Shona - 6.6-8.7 pcs.

In the variants where stimulants were used, it was found that the height of the plant was 0.4-8.1 cm compared to the control, the yield of the branches increased by 0.1-1.3 pieces, and the number of shona increased by 0.2-2.2 pieces. Observation on August 1 also showed that the height of the plant was 63.5-72.7 cm, the number of collected branches was 10.7-11.7 pieces, the number of cocoons was 6.3-7.3 pieces, the number of nodules was 1.2-1.8 pieces. The importance of fungicides and stimulants has ensured their stability from a scientific and practical point of view when we analyze the above situation. It was noticed that the height of the plant was 1.4-10.6 cm compared to the control version, productive branches were formed by 0.2-1.2 pieces, the number of cocoons was formed by 0.5-1.5 pieces more.

In the observations conducted on September 1, the number of cocoons in which the formed cocoons were 8.6-10.4 units, the opened - 7.1-8.8 units, and the level of disclosure was 80.2-87.5 percent.

P. Anishin determined that the growth and development of crops will occur simultaneously, and the importance of the drug compozision in growing a rich harvest is very high. In particular, the phytohormones contained in it consist of synthetic anologues and play an important role in the orderly management of the physiological processes of crops [6].

With practically preserved positive indicators of stimulants in the studies, it was known that the number of cobs formed in the variants introduced up to 75 ml / t before planting albite seeds, 40 ml / t during the shading period, 1.0 l / t before planting gummi seeds 20, 1.0-1.5 l / during the shading-flowering period was the same 10.4 units, an increase of 1.8 units compared to the control variant.[6] Also, for variants in which other standards and stimulants are used, it was observed that 0.3-1.2 units formed more cocoons. It turned out that growth accelerated to 1.6-1.7 percent compared to the control of discovery.

Thus, in the conditions of light-grained loamy soils of the Namangan region, the growth and development of gout in the period 50-75 ml/t and 40 ml/ha during shading, 0.5-1.0 l/t before planting in gout with a hummingbird stimulant 20, and when shading - during flowering periods at a rate of 1.0-1.5 l/ha, it was found that the growth and development of gout is 1.4-10.6 cm in height, at the same time, the number of horns of the harvest is 0.2-1.2 grains higher, and the number of cocoons is 0.6-1.8 grains higher.

In the experiment, the degree of flowering of the acorn and the opening of the stones were studied. T. Abdurakhmanov, A. Normukhammedov found that the stimulant oxyhumate based on humin has an antivenomous nature, while extreme conditions provide stable positive results even when used at high and low air temperatures, harmsel, saline soil, nitrates and areas with a large number of toxic chemicals [7]. At the same time, it is proved that plant agrocenosis increases the activity of various compounds, amino acids, carbohydrates and nutrients, forming in natural conditions complex organic compounds with various metals and trace elements, facilitating their assimilation by plants. Data on flowering for 2015-2017 and the degree of disclosure are given in (Table 3).

According to the results of the study, the stimulants albite and gummi 20 had a positive effect on the degree of flowering of the cave and the opening of the womb. It should be noted that when we analyze the three-year data on the rate of flowering of acorns, the control variant was 75.3 percent, Dalbron - 76.7 percent, Uzgumi - 81.9 percent, although the highest among the variants for which the stimulant was used was 75 ml/t in seeds before planting, 40 ml/percent. In this case, the growth of acorns, Dalbron 1.4, Uzgumi accelerated by 6.6 percent compared to the control variant, while the effect of albite and gummi 20 stimulants in this regard was higher, accelerating by 13.5-14.2 percent. Positive results were also achieved with the use of other norms of

ISSN NO: 2771-8840
Date of Publication: 21-11-2023

the stimulant albite and gummi 20, and it was noted that the flowering of acorns accelerated by 1.6-8.3 percent compared with the control.

As for the degree of disclosure of the breasts, the above laws have been preserved. In control version 73.9, Dalbron 74.2 with a length of 80.7% albite was 75 ml/t in pre-sowing seed treatment, 40 ml/ha in the shading period, and gummi 20 - 1.0 l/t in pre-sowing seed treatment and 88.9-89.9% in the variants contribute 1.0-1.5 l/ha during shading and flowering. It was noted that the stimulants Dalbron 0.3, Uzgumi 6.8, Albit and Gummi 20 accelerated disclosure by 15.0 to 16.0 per cent compared to the control variant.

It was observed that the opening of the breasts increased by 6.2-11.8 percent compared to the control, with positive results even with other norms of the stimulant Albit and Gummi 20.

Instead of the conclusion, it can be noted once again that in the conditions of light-colored shrub soils of the Namangan region, when growing acorns, the flowering rate is 75-100 ml/t when using the albite stimulant before planting in acorns, 40 ml/ha during the shading period, 0.5-1.0 l/t with the stimulant gummy 20 in acorns, 1.0-1.5 l/ha during flowering - it was found that the growth accelerated by 16.0%, which paved the way for plums and high cotton yields.

In the experiment, plant samples were taken at the end of the period of schonization, flowering and vegetation to determine the leaf surface of the acorn A.A. According to the Nichiporovich method (1961), it was determined by weighing on scales [8]

Table 3.Resource requirements by component Flowering and the degree of opening of the boxes, on average for 2015-2017 (Hilola yogdusi f/x)

т/р №	Experience Options	Flowering rate. %			Difference from control. %	Box opening. %			Difference from control. %
		1-Observation	2-Observation	3-Observation		1-Observation	2-Observation	3-Observation	
1	Kontrol	22.9	49.0	75.3	-	23.0	44.7	73.9	-
2	Dalbron etalon 6.5 l/t	22.4	52.0	76.7	1.4	22.5	44.8	74.2	0.3
3	Uzgumi 0.8 l/t, 0.3-0.4 l/ga	21.9	55.0	81.9	6.6	27.6	53.9	80.7	6.8
4	Albit 50 ml/t+40 ml/t	27.1	56.9	82.1	6.8	25.8	55.2	81.3	7.4
5	Albit 75 ml/t+40 ml/t	25.9	59.4	89.5	1.,2	29.9	56.7	88.9	15.0
6	Albit 100 ml/t+40 ml/t	25.8	56.7	82.3	7.0	29.4	55.3	85.7	11.8
7	Albit +insektisids 40 ml/t	22.3	52.6	76.9	1.6	26.2	48.9	80.1	6.2
8	Gummi 20 0,5 l/t, 0,5+1,0 l/ga	26.8	59.0	81.9	6.6	26.2	56.8	83.6	9.7
9	Gummi 20 0.5 l/t, 1.0+1.5 l/ga	26.2	51.3	83.6	8.3	33.4	54.3	85.1	11.2
10	Gummi 20 1.0 l/t, 0.5+0.5 l/ga	24.8	53.5	82.5	7.2	27.1	53.5	84.5	10.6
11	Gummi 20 1.0 l/t, 1.0+1.5 l/ga	27.8	62.5	88.8	13.5	28.6	57.6	89.9	16.0
12	Gummi 20+ insektisids 0.5+1.0 l/ga	29.0	57.3	78.6	3.3	25.0	52.5	81.0	7.1

ISSN NO: 2771-8840
Date of Publication: 21-11-2023

According to the data obtained, the stimulants albite and gummi 20 had a specific effect on the leaf surface of the acorn. It is known that depending on the weather conditions of the year, the growth and development of the plant will differ, and based on this, the leaf surface is formed. In this experiment, the surface of acorn leaves was also different, depending on the climatic conditions of the year and the sampling period.

Stimulants of Sh. Karimov had a positive effect on the root of the acorn, the mass of the root increased to 3.9-4.8 g, and as a result of the strong development of the root system, favorable conditions were created for optimal growth and harvesting of the plant. At the same time, it was found that the mass of cotton in the acorn of one bush was 2.7-11.7 g, the total dry weight of the plant was 6.1-33.5 g heavier, and the net productivity of photosynthesis increased to 3.39 g / m^2 per day [9].

When growing a high yield of crops, the surface of the leaves and their photosynthetic activity are of great importance. Therefore, in the research work, studies were conducted on the number of acorn leaves and the leaf surface on one bush.

Instead of the conclusion, it can be noted once again that in the conditions of light-colored shrub soils of the Namangan region, when growing acorns, the flowering rate is 75-100 ml/t when using the albite stimulant before planting in acorns, 40 ml/ha during the shading period, 0.5-1.0 l/t with the stimulant gummy 20 in acorns, 1.0-1.5 l/ha during flowering - it was found that the growth accelerated by 16.0%, which paved the way for plums and high cotton yields.

According to the data obtained, the stimulants albite and gummi 20 had a specific effect on the leaf surface of the acorn. It is known that depending on the weather conditions of the year, the growth and development of the plant will differ, and based on this, the leaf surface is formed. In this experiment, the surface of acorn leaves was also different, depending on the climatic conditions of the year and the sampling period.

When growing a high yield of crops, the surface of the leaves and their photosynthetic activity are of great importance. Therefore, in the research work, studies were conducted on the number of acorn leaves and the leaf surface on one bush.

In an experiment conducted under the conditions of typical peat soils of the Tashkent region, with a hummingbird stimulator 20, the dry mass was 10.1-16.4 g compared with the control during processing in the norms of 0.5-1.5 l/ha of ha hawthorn plant during periods of shading-flowering, with an increase in leaf area of 208.8-265.7 cm^2, cotton yield of 3.2-4.8 c/ha.

Table 4. Resource requirements by component Influence of stimulants Albit and Gummi 20 on the growth and development of cotton in the conditions of stony soils of (Namangan region.Hilol yogdusi f/x)

№	Experience Options	Seed treatment. kg/t. l/t. ml/t	Cotton processing during the rowing season		1.06. 2017		1.07.2017		
			Buddin g	Flowe ring	Height. cm	Real sheet. pcs	Heigh t. cm	Fruit bran ches. pcs	Buds . pcs
1	Control	-			11.5	4.9	40.8	6.8	6.6
2	Dalbron	6.5 rg/t	-	-	12.6	5.4	41.4	6.9	6.8
3	Uzgumi	0.8 l/t	0.3 l/ha	0.4 l/ha	14.4	6.0	47.0	7.7	7.6
4	Albit	50 мл/т	40 ml/ha	-	14.9	5.7	48.9	7.9	7.9
5	Albit	75 ml/t	40 ml/ha	-	14.3	5.7	45.6	7.8	8.8
6	Albit	100 ml/t	40 ml/ha	-	14.2	5.3	44.0	7.7	8.1
7	Albit +insektisids	-	40 ml/ha	-	13.9	5.7	44.6	7.6	8.7

ISSN NO: 2771-8840
Date of Publication: 21-11-2023

8	Gummi 20	0.5 l/t	0.5 l/ha	1.0 l/ha	14.8	5.9	48.9	7.8	8.5
9	Gummi 20	0.5 l/t	1.0 l/ha	1.5 l/ha	13.4	5.4	39.0	7.1	6.5
10	Gummi 20	1.0 l/t	0.5 l/ha	1.0 l/ha	13.6	5,7	41.2	7.4	7.1
11	Gummi 20	1.0 l/t	1.0 l/ha	1.5 l/ha	15.8	5.9	41.6	8.1	8.7
12	Gummi 20+ insektisids	-	0.5 l/ha	1.0 l/ha	14.1	5.8	41.6	7.2	7.3

Resource requirements by component Influence of stimulants Albit and Gummi 20 on the growth and development of cotton in the conditions of stony soils of (Namangan region.Hilol yogdusi f/x. 1.08-1.09)

№	Experience Options	Seed treatment, kg/t. l/t. ml/t	Cotton processing during the growing season		1.08. 2017				1.09.2017		Disclosure. %
			Budding	Flowering	Height. cm	Fruit branches.pcs	Buds. pieces	Boxes. pieces	Total boxes. pcs	Open boxes.pc	
1	Control	-			62.1	10.5	1.0	5.8	8.6	7.1	82.5
2	Dalbron	6.5 rg/t	-	-	66.4	10.7	1.3	6.3	8.9	7.5	84,.3
3	Uzgumi	0.8 l/t	0.3 l/ha	0.4 l/ha	66.1	10.8	1.2	6.5	9.1	7.3	80.2
4	Albit	50 мл/т	40 ml/ha	-	65.9	10.9	1.2	6.3	9.2	7.5	81.5
5	Albit	75 ml/t	40 ml/ha	-	67.9	11.7	1.7	7.3	10.4	8.7	83.6
6	Albit	100 ml/t	40 ml/ha	-	66.7	11.1	1.8	7.0	10.0	8.3	83.0
7	Albit +insektisids	-	40 ml/ha	-	69.3	11.3	1.1	6.6	10.1	8.2	81.9
8	Gummi 20	0.5 l/t	0.5 l/ha	1.0 l/ha	72.7	11.5	1.3	7.1	10.2	8.5	83.3
9	Gummi 20	0.5 l/t	1.0 l/ha	1.5 l/ha	63.5	10.7	1.3	6.3	9.5	7.7	81.0
10	Gummi 20	1.0 l/t	0.5 l/ha	1.0 l/ha	65.3	11.1	1.4	6.3	8.8	7.7	87.5
11	Gummi 20	1.0 l/t	1.0 l/ha	1.5 l/ha	66.2	11.2	1.3	6.9	10.4	8.8	84.6
12	Gummi 20+ insektisids	-	0.5 l/ha	1.0 l/ha	65.0	11.3	1.3	6.4	9.6	8.0	83.3

The low-fertility loamy soils of Namangan region, located in arid lands, are considered specific extreme conditions, and the research study examined the number of leaves of the grooved acorn under these conditions and the effect of albite and gummi 20 stimulants on its surface depending on the developmental periods of the plant's life.

ISSN NO: 2771-8840
Date of Publication: 21-11-2023

According to the results obtained, the number of leaves on the plant during the ripening period is 9.9 in the control version, 11.4 in Dalbron, 10.8 in Uzgum, 10.4-12.0 in the variants treated with albite, 10.2-12.2 when using gummi 20, the number of leaves is more than 1.5 in Dalbron, 1.2 in Uzgum, 0.5-2.1 in albite, 0.3-2.3 in gummi 20. This positive differentiation is also determined by the leaf surface of the acorn, with the area of one acorn leaf during acorn maturation of 224.6 cm^2 in the control, 271.5 in Dalbron, 266.8 in Uzgum, 294.3-346.2 in albite, 258.7-348.3 in gummi 20 compared to control and 46.8 in Dalbron, 42.2 in Uzgum, 69.7-7 in albite 121.6, it was found that in Gummi 20 34.1-123.7 cm2 more (Table 4).

Before the expiration date, the weight of cotton in one cocoon was calculated on the experimental fields and amounted to 4.6 in the control, 4.7 in Dalbron, 4.9 in uzgum, 4.8-5.0 in albite, 20 in gum - 4.7-5.3 g. Cotton in one cocoon weighed 0.1. Dalbron, 0.2 in Ozgum, 0.3-0.7 g albite and 0.1-0.7 g of gum (Table 5). It turned out that the cotton crop significantly increased the yield of myrtle in the variants in which the stimulant was used in practice when we analyzed the results obtained over three years. [2] 30.0, Dalbron 30.3, uzgum 32.3, variants treated with albite 31.0-34.9, and gum 20 with the addition of 31.7-35.5 c/ha, with an additional yield in the control variant up to 0.3 c/ha on dalbron, 2.3 c/ha on grapes, 1.0-4.9 c/ha on albite, gum 20 1.7-5.5 t/ha. The highest result is achieved during this period when 75 ml/t of albit preparation is added to seeds before planting, 40 ml / ha during shading and 1.0 l/t to seeds before planting gummi 20 preparation, during shading-flowering, increasing yield by 4.9-5.5 s/ha. In comparison with the reference version, an additional output of 4.6-5.2 hundred weights was achieved.

Table 5. Resource requirements by component Influence of albite and gummi 20 stimulants on cotton yield in conditions of stony soils of Namangan region (Hilola yogdusi f/x)

№	Experience Options	Seed treatment. kg. ml. l/t	Processing during the growing season		Weight of one box. g	Cotton harvest, c/ha			Average cotton yield. c/ha	Control difference.+-
			Budding	Bloom		2015	2016	2017		
1	Control	-			4.6	29.1	29.0	31.8	30.0	-
2	Dalbron	6.5	0.3 l/ga	-	4.7	27.6	29.5	33.7	30.3	0.3
3	Uzgumi	0.8	40 ml/ga	0.4	4.9	30.1	32.0	34.8	32.3	2.3
4	Albit	50	40 ml/ga	-	5.0	29.7	31.9	34.9	32.2	2.2
5	Albit	75	40 ml/ga	-	5.3	33.0	33.4	38.2	34.9	4.9
6	Albit	100	40 ml/ga	-	5.1	30.4	33.0	35.0	32.8	2.8
7	Albit +insektisids	-	0.5 l/ga	1.0 l/ga	4.8	29.4	30.3	33.3	31.0	1.0
8	Gummi 20	0.5	1.0 l/ga	1.5 l/ga	4.7	30.5	32.1	35.0	32.5	2.5
9	Gummi 20	0.5	0.5 l/ga	0.5 l/ga	5.1	31.9	32.8	37.1	33.9	3.9
10	Gummi 20	1.0	1.0 l/ga	1.5 l/ga	4.9	29.5	30.9	34.8	31.7	1.7
11	Gummi 20	1.0	0.5 l/ga	1.0 l/ga	5.3	32.5	34.9	39.1	35.5	5.5
12	Gummi 20+ insektisids	-	0.5 l/ga	1.0 l/ga	5.0	29.8	30.5	35.1	31.8	1.8

NSR_{05}=1,29 ts/ha,
NSR_{05}=3,98%

Stimulants produced in foreign countries and Uzbekistan gave results in which the yield was close to each other when used in the pit, the difference between them was 0.6 quintals.

Other stimulant-based options also yielded an additional yield of 0.3-3.9 quintals compared to the control variant.[7]

The lowest yield was recorded in the Dalbron version of the standard, which was processed into seeds, which gave an additional yield of 0.3 quintals compared to the control version. The low yield in this variant can be explained by the fact that during the period of operation, the working solution is not sprayed over the plant.

ISSN NO: 2771-8840
Date of Publication: 21-11-2023

Conclusions.

1. With a positive effect on the germination of stimulants albite and gummi 20 in the field, albite 75 ml/t and gummi 20 achieved high results when used in the norms of 1.0 l/t, providing 14.8-17.9; 11.3-15.6% more than in the control version.
2. Treatment with stimulants albit and gummi 20 increased resistance to root rot and hommosis diseases as a result of early and healthy germination of acorns, accelerated growth and created favorable conditions for the rapid growth and development of acorns.[5]
3. With the stimulant albit, the growth and development of acorn were accelerated when treated at a rate of 50-75 ml/t before sowing for seeds and 40 ml/ha during the shading period, 0.5-1.0 l/t before sowing on seeds with a gummi stimulant of 20 and 1.0-1.5 l/ha during the shading-flowering periods, the growth and development of acorns increased, the formations turned out to be 0.6-1.8 units more.
4. 75-100 ml/t with albite stimulator, 40 ml/ha during shading, 0.5-1.0 l/t with gummi stimulator 20 for grasshopper, 1.0-1.5 l/ha during shading-acorn flowering periods, the flowering rate was found to accelerate by 7.0-14.2%, cocoon opening by 11.2-16.0%.
5. Stimulators Albit and gummi 20 have a positive effect on the formation of leaves and leaf surface during bud development, increasing the number of leaves due to one plant by 0.3-2.3, during flowering by 4.8-9.5 and during maturation by 5.4-14.3 grains, during which an increase in the illumination of the leaf surface by 34.1-224.4, during flowering for 260.1-670.8 positive effects.
6. It was found that the drug albit was obtained by spraying 75 ml/t into seeds before planting, 40 ml/t during the shading period, as well as 1.0 l/t into seeds before planting the drug gummi 20, shading-flowering, 1.0-1.5 l/during the period, and the yield increased by 4.9-5.5 c/ha. In comparison with the reference version, an additional yield of 4.6-5.2 hundredweight was achieved.

References

1. Misirova, S. A. "Systematic types of fungi of allocated and determined types from decorative flowers in conditions region Tashkent." *Agricultural sciences* 6.11 (2015): 1387.
2. Misirova, S. A. "Determining of the measure disease control ornamental crops during the growing season in the conditions Tashkent region." *Global Journal of Bio-Sciences and Biotechnology* 5.1 (2016): 119-124.
3. Abdumutalovna, Misirova Surayyo, and Sarimsaqova Nilufar Sobirjonovna. "Bioecology of Fungi-Pathogens of Flower Crops and the System to Combat Them." *Agricultural sciences* 7.08 (2016): 539.
4. MISIROVA, SA, and NN ERNAZAROVA. "FIGHTING MEASURES THE DISEASE CAUSES A VERY DANGEROUS FUNGAL SPECIES WIDESPREAD IN TASHKENT REGION." *International Journal of Botany and Research (IJBR)* 6 (2016): 5-12.
5. Misirova, Surayyo. "Technology of growing orchid flowers from seeds." *E3S Web of Conferences*. Vol. 390. EDP Sciences, 2023.
6. MISIROVA, SA. "TECHNOLOGY OF CULTIVATION AND REPRODUCTION OF ORNAMENTAL AND UNIQUE ORCHID FLOWER IN NAMANGAN CONDITIONS." *World Bulletin of Social Sciences* 17 (2022): 156-164.
7. Urmonovich, Numonov Otabek. "MANGOSTEEN NUTRITIONAL PRICE AND FUNCTIONAL PROPERTIES." ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ 14.5 (2023): 3-5.
8. Misirova, S. A. "BIOLOGICAL CHARACTERISTICS OF FUNGAL SPECIES THAT CAUSE DISEASES OF ONION FLOWERS AND MEASURES TO COMBAT THEM." (2022).
9. Misirova, S., and M. Haydarova. "Flowers from Nederland are Considered to Develop in the Climatic Conditions of Uzbekistan and Are Identified the types of Fungus." *Annals of the Romanian Society for Cell Biology* (2021): 5922-5929.
10. Misirova, S. A., et al. "Determination types of fungi-pathogens of ornamental flower crops in conditions region Namangan." *ISJ Theoretical & Applied Science, 10 (66)* (2018): 185-189.
11. Misirova, S. A., M. U. Davlatova, and Sh O. Tuhtaboeva. "Biological Characteristics of Fungal Pathogens of Bulb Flowers and Control Measures." *JournalNX*: 207-214.

ISSN NO: 2771-8840
Date of Publication: 21-11-2023

12. Misirova, S., et al. "Growing Dutch tulips in Namangan region." *Bulletin of Agrarian Science of Uzbekistan* 1 (2021).
13. Sabirov, Ravshan Z., et al. "Volume-sensitive anion channels mediate osmosensitive glutathione release from rat thymocytes." *PLoS One* 8.1 (2013): e55646.
14. Rashidovna, Melanova Nazira, and Numonov Otabek Urmonovich. "Comparative Characteristics of the Leaving of Glutathione From Cells of Different Types." *International Journal on Orange Technologies* 2.10: 79-82.
15. Melanova, N. R., M. U. Davlatova, and O. Numanov. "The Effect of Extracellular Glutathione on the Regulation of Thymocyte Volume in Rats under Conditions of Hypoosmotic Stress." *Annals of the Romanian Society for Cell Biology* (2021): 7032-7038.
16. Sabirov, R.Z., Kurbannazarova, R.S., Melanova, N.R. and Okada, Y., 2010, January. Swelling-induced release of glutathione from rat thymocytes. In *JOURNAL OF PHYSIOLOGICAL SCIENCES* (Vol. 60, pp. S13-S13). 1-11-11 KUDAN-KITA, CHIYODA-KU, TOKYO, 102-0073, JAPAN: SPRINGER TOKYO.
17. Melanova, Nazira Rashidovna, and Sayyora Abduqahharovna Yulchiyeva. "EFFECT OF EXTRACELLUIAR GLUTATHIONE ON COLLOID-OSMOTIC LYSIS OF HUMAN RED BLOOD CELLS." *Scientific and Technical Journal of Namangan Institute of Engineering and Technology* 2.2 (2020): 144-149.
18. Choriyeva, Nargiza Mamarajabovna, and Nazira Rashidovna Melanova. "STUDY OF LYSIS OF HUMAN ERYTHROCYTES UPON ADMINISTRATION OF GOSSYPOL, MEGOSIN AND BATRIDEN." *Scientific and Technical Journal of Namangan Institute of Engineering and Technology* 1.9 (2019): 55-58.
19. Меланова, Назира Рашидовна. "Сравнительная характеристика выхода глутатиона из различных типов клеток." *Universum: химия и биология* 5 (59) (2019): 9-12.
20. Насритдинов, Ахмаджон Абдухамидович, and Хусниддин Тургунбоевич Киргизов. "Агрегат для полосной обработки почвы." *Современные научные исследования и инновации* 12 (2015): 412-416.
21. Байбобоев, Набижон Гуломович, et al. "Энергоресурсосберегающий комбинированный агрегат для обработки почвы." *Вестник Рязанского государственного агротехнологического университета им. ПА Костычева* 3 (23) (2014): 42-44.
22. Насритдинов, А. А., and А. В. Рязанов. "Оптимальные условия установки углоснима." *Техника в сельском хозяйстве* 6 (2003): 34-35.
23. Насритдинов, Ахмаджон Абдухамидович. "Результаты исследования формы лобовой поверхности стойки чизеля-культиватора." *Universum: технические науки* 1 (58) (2019): 18-20.
24. Бойбобоев, Набижон Гуломович, and Ахмаджон Насритдинов. "Теоретические определение перемещение частиц почвы по поверхности углоснима." *Science Time* 6 (18) (2015): 84-89.
25. Misirova, S. A., M. U. Davlatova, and Sh O. Tuhtaboeva. "Biological Characteristics of Fungal Pathogens of Bulb Flowers and Control Measures." *JournalNX*: 207-214.
26. Шамситдинов, Ф. "Результаты опыта." *Защита и карантин растений* 5 (2003): 27-27.
27. Абдуалимов, Ш. Х., and Ф. Р. Шамситдинов. "Влияние применения стимуляторов роста на всхожесть семян, рост, развитие и урожайность хлопчатника в условиях светлых сероземных каменистых почв Наманганской области Республики Узбекистан." *Актуальные проблемы современной науки* 5 (2019): 47-51.
28. Абдуалимов, Шухрат Хамадуллаевич, and Фазлиддин Расулович Шамситдинов. "НАМАНГАН ВИЛОЯТИНИНГ ҚИР АДИРЛИ ТОШЛОҚ ЕРЛАРИДА ЯНГИ СТИМУЛЯТОРЛАРНИНГ ҒЎЗА БАРГ ЮЗАСИ ВА ҲОСИЛДОРЛИГИГА ТАЪСИРИ." *Журнал Биологии и Экологии* 1 (2019).
29. Urmonovich N. O. MANGOSTEEN NUTRITIONAL PRICE AND FUNCTIONAL PROPERTIES //ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ. – 2023. – Т. 14. – №. 5. – С. 3-5.

ISSN NO: 2771-8840
Date of Publication: 21-11-2023

30. Rashidovna, Melanova Nazira, and Numonov Otabek Urmonovich. "Comparative Characteristics of the Leaving of Glutathione From Cells of Different Types." *International Journal on Orange Technologies* 2.10: 79-82.
31. Abdukhamidovich, Nasritdinov Akhmadzhon, and Numonov Otagek Urmonovich. "The Results of Theoretical Studies of the Chisel Cultivator Rack Frontal Surface Shape." *Annals of the Romanian Society for Cell Biology* (2021): 5930-5938.
32. Abdukhamidovich, Nasritdinov Akhmadzhon, Muhabbat Davlatova Urmanovna, and Numonov Otabek Urmonovich. "Strip Till Age of Soil for Deuteric Sowing (Second Crop)." *International Journal on Orange Technologies* 3.4 (2021): 71-74.
33. Abduhamidovich N. A. et al. MANGOSTIN DARAXTI VA MEVASINI TIBBIYOTDA FOYDALANISH //Journal of new century innovations. – 2023. – Т. 28. – №. 2. – С. 12-14.
34. Melanova, N. R., M. U. Davlatova, and O. Numanov. "The Effect of Extracellular Glutathione on the Regulation of Thymocyte Volume in Rats under Conditions of Hypoosmotic Stress." *Annals of the Romanian Society for Cell Biology* (2021): 7032-7038.
35. Рахманов, Дилшод Ортикбаевич, and Муҳаббат Ўрмоновна Давлатова. "ОРГАНОЛЕПТИЧЕСКИХ ОЦЕНКА СВОЙСТВ РЫБ И РЫБНЫХ ПРОДУКТОВ." *O'ZBEKISTONDA FANLARARO INNOVATSIYALAR VA ILMIY TADQIQOTLAR JURNALI* 2.14 (2022): 583-585.
36. Юсупова, Махпуза Нумановна. "БИОЛОГИЧЕСКИЙ МЕТОД ЗАЩИТЫ РАСТЕНИЙ." *Scientific Impulse* 1.9 (2023): 1460-1464.
37. Юсупова, Махпуза Нумановна. "АНОРНИ ЗАРАРКУНАНДАЛАРДАН ҲИМОЯЛАШ." *PEDAGOG* 6.4 (2023): 562-567.
38. Юсупова, Махпуза Нумановна. "САБЗАВОТ ЭКИНЛАРИГА БИОЛОГИК КУРАШ ҲАҚИДА МУЛОХАЗАЛАР." *Scientific Impulse* 1.9 (2023): 1469-1473.
39. Юсупова, Махпуза Нумановна. "ФАРҒОНА ВОДИЙСИ ШАРОИТИДА ИГНА БАРГЛИ ДАРАХТЛАРНИ ЗАРАРКУНАНДАЛАРДАН ҲИМОЯЛАШ." *SO 'NGI ILMIY TADQIQOTLAR NAZARIYASI* 6.4 (2023): 316-320.
40. O'rmonovna, Davlatova Muhabbat. "MANGOSTIN DARAXTI VA UNING KIMYOVIY XUSUSIYATLARI." *INNOVATION IN THE MODERN EDUCATION SYSTEM* 3.25 (2022): 1-4.
41. Юсупова, Махпуза Нумановна. "УФТ: 635 САБЗАВОТ ЭКИНЛАРИГА БИОЛОГИК КУРАШ ҲАҚИДА МУЛОХАЗАЛАР." *Научный импульс*: 355.
42. Qurbonov, I. "Tulip varieties imported from the netherlands technology of cultivation of namangan region. galaxy international interdisciplinary research journal (giirj) issn (E): 2347-6915 Vol. 9." (2021).
43. Kurbanov, I. G. "CARE OF TULIP VARIETIES OF THE NETHERLANDS IN THE CLIMATIC CONDITIONS OF THE NAMANGAN REGION." *American Journal of Interdisciplinary Research and Development* 6 (2022): 117-120.
44. Qurbonov I. E-RECRUITMENT: SOCIAL MEDIA AND RECRUITING //InterConf. – 2021.
45. Qurbonov, Ibragim Sharifjonovich. "CLONELY MICRO-CULTIVATION OF PLANTS AND ITS APPLICATION TO AGRICULTURE." *Scientific and Technical Journal of Namangan Institute of Engineering and Technology* 1.4 (2019): 74-78.
46. Юсупова М. Н., Ахмедова М. М. МЕВАЛИ ДАРАХТЛАРНИ ЗАРАРКУНАНДАЛАРИГА УЙҒУНЛАШГАН КУРАШ ЧОРАЛАРИ //ЖУРНАЛ АГРО ПРОЦЕССИНГ. – 2020. – Т. 2. – №. 8.
47. Ходжаев, Ш. Т., Сагдуллаев, А. У., Исаев, О. Б., & Юсупова, М. Н. (2011). Проблемы защиты растений в Узбекистане. *Защита и карантин растений*, (8), 23-24.Юсупова М. Особенности защиты хлопчатника посеянного под пленки от вредных организмов //Автореф. канд. дисс./М. Юсупова–Ташкент. – 2001.
48. Ходжаев, Ш. Т., Юсупова, М. Н., Курязов, Ш., & Саттаров, Н. (2008). Перспективы биологической защиты хлопчатника от хлопковой совки. *Сб. трудов.-Ташкент: Таллин*, 44-49.

ISSN NO: 2771-8840
Date of Publication: 21-11-2023

49. Yusupova M. N., Nosirov B. Z. Pests of cotton and straw control at collection //EPRA International Journal of Multidisciplinary Research (IJMR)-Peer Reviewed Journal. – 2020. – Т. 6. – №. 12. – С. 57-61.
50. Yusupova M. N., Axmedova M. M. Mevali daraxtlarni zararkunandalariga uygunlashgan kurash choralari //Jurnal JURNAL AGRO PROTSESSING. Data publikatsii. – 2020. – №. 8. – С. 12.
51. Yusupova M. N. Biological method of crop protection in the fergana valley //Agrarian science. – 2018. – №. 6. – С. 68-70.
52. Urmonovich, Numonov Otabek. "MANGOSTEEN NUTRITIONAL PRICE AND FUNCTIONAL PROPERTIES." *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ* 14.5 (2023): 3-5.
53. MN, Yusupova, and B. Z. Nosirov. "Control Of Cotton Pests On Stubble Lands." *International Journal of Applied* 10.2 (2015): 99-108.
54. Юсупова М. Н., Тургунова А. Н., Очилов С. Н. Система интегрированной защиты растений //Российский электронный научный журнал. – 2015. – №. 1. – С. 169-174.
55. Alimzhanova Z. I., Kadyrova D. S., Yusupova M. N. Ceramic pigments based on raw materials from Uzbekistan //Glass and Ceramics. – 2014. – Т. 70. – №. 11-12. – С. 441-443.
56. Yusupova M. N., Gapparov A. M. Biological Method Of Plant Protection In Uzbekistan //The American Journal of Agriculture and Biomedical Engineering. – 2020. – Т. 2. – №. 11. – С. 29-32.
57. Rashidovna M. N., Urmonovich N. O. Comparative Characteristics of the Leaving of Glutathione From Cells of Different Types //International Journal on Orange Technologies. – Т. 2. – №. 10. – С. 79-82.
58. Юсупова М. Н., Носиров Б. З. БИОЛОГИЧЕСКИЙ МЕТОД ЗАЩИТЫ РАСТЕНИЙ В УЗБЕКИСТАНЕ //Научно-практические пути повышения экологической устойчивости и социально-экономическое обеспечение сельскохозяйственного производства. – 2017. – С. 498-501.
59. Urmonovich, N. O. (2023). MANGOSTEEN NUTRITIONAL PRICE AND FUNCTIONAL PROPERTIES. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, *14*(5), 3-5.
60. Yusupova M. et al. Protection of after harvest cultures-as a reservetors of cotton pests //Agriculture and Biology Journal of North America. – 2013. – Т. 4. – №. 5. – С. 576-582.
61. Ходжаев, Ш. Т., Юсупова, М. Н., Юлдашев, Ф., Исаев, О. Б., & Шокирова, Г. (2011). Борьба с вредителями хлопчатника на пожнивных культурах в севообороте. *Вестник защиты растений*, (2), 46-52.
62. Yusupova M. N. et al. Possibilities of the biological method of cotton plant protection //Agriculture and Biology Journal of North America. – 2011. – Т. 2. – №. 5. – С. 742-744.
63. Ходжаев, Ш. Т., Юсупова, М. Н., Юлдашев, Ф., & Жамалов, А. Г. (2010). Хлопковая совка на пожнивных культурах. *Защита и карантин растений*, (12), 22-23.
64. Хайдарова, Х. А., Юсупова, М. Н., Ихтиярова, Г. А., & Хайдаров, А. А. ПОЛУЧЕНИЕ ХИТОЗАНА ИЗ ПОДМОРА ПЧЕЛ APIS MILLIFERA. *Сучасний рух науки: тези доп. XI міжнародної науково-практичної інтернет-конференції, 8-9 жовтня 2020 р.–Дніпро, 2020.–Т. 2.–426 с.*, 352.
65. Yusupova M., Turgunova A., Ochilov S. INTERGRATED PLANT PROTECTION SYSTEMS.