ISSN NO: 2771-8840
October 2024

Effect Of Albit And Gummi 20 Stimulators On Cotton Yield In Conditions Of Pale Gray Stony Soils.

Fazliddin Shamsitdinov, Senior teacher of Namangan institute of engineering and technology
FazliddinShamsitdinov@gmail.com
Mobile number 99894-271-40-72

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

№	Experience is an option lari	Seed processing standard	Treatment of cotton during the period of application		In a bag gi cotton weight, g	Harvest by harvest, ts/ha		Total yield, ts/ha	N azorate , ts/ha
			polishing	bloom		26.09	12.10		
1	Control (d albron)	6.5 kg/t	will not be processed		5,2	24,8	4,6	29,4	
2	Albit	75 ml/t	40 ml/ha	-	5,4	28,3	4,4	32,7	3,3
3	Gummi 20	1.0 l/t	1.0 l/ha	1.5 l/ha	5,5	29,9	4,7	34,6	5,2

In the experiment, cotton harvesting was carried out in two periods on September 26 and October 12. When we analyzed the average of the terms, it was found that it was 29.4 in the Control variant, 32.7 in the Albit treated variants and 34.6 ts/ha when Gummi 20 was applied.

Sh. Abdualimov (2007) hairy and hairy seeds were treated with Vitavaks 200 FF stimulator at the rate of 5 l/t in the conditions of typical gray soils of Tashkent region, hairy seeds were planted at the rate of 60 and 30 kg per hectare, hairless seeds at the rate of 30 and 15 kg per hectare, the highest results were hairy seeds 30 kg/ha was obtained at sowing and 50% saving in seed consumption was possible. However, when hairless seeds were sown at the rate of 15 kg per hectare, the cotton yield decreased by 4.7-5.5 t/h, the reason for this was the spring rains in this climate, and it was noted that insufficient seedlings were collected [9].

ISSN NO: 2771-8840
October 2024

Fig. . A photo of the unfolded state of cotton before picking in the experiment.

In the experiment, cotton harvesting was carried out in two periods on September 26 and October 12. When we analyzed the average of the terms, it was found that it was 29.4 in the Control variant, 32.7 in the Albit treated variants and 34.6 ts/ha when Gummi 20 was applied. The highest results are Albit stimulator 75 ml/t per seed before planting and 40 ml/ha during heading period, Gummi 20 stimulator 1.0 l/t per seed before planting and 1.0 l/ha during heading period of cotton, 1.5 l at the beginning of flowering period It was determined that the productivity increased by 3.3-5.2 t/ha when treated in the norms.

Gummi 20 stimulator produced in Uzbekistan, compared to Albit stimulator developed in Russia, an additional yield of 1.9 centners was achieved.

Summary. Field fertility of seed when treated with 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 7 5-9.0% faster, sprouts sprouted 1-2 days earlier and plant height 7.6-11.7 cm, harvested branches 1.3-1.8 pieces, total formed pods 1.4-1.8 per grain, opening of bolls increased by 3.3-5.0%, additional cotton yield increased by 3.3-5.2 t/ha.

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, Surayyo, and Ibrohim Qurbanov. "Biological Characteristics of Fungal Pathogens of Bulb Flowers and Control Measures." *Texas Journal of Agriculture and Biological Sciences* 22 (2023): 49-56.
3. Abdumutalovna, Misirova Surayyo, and Sarimsaqova Nilufar Sobirjonovna. "Bioecology of Fungi-Pathogens of Flower Crops and the System to Combat Them." *Agricultural sciences* 7.8 (2016): 539-547.
4. Misirova, S., et al. "Growing Dutch tulips in Namangan region." *Bulletin of Agrarian Science of Uzbekistan* 1 (2021).
5. Misirova, Surayyo, and Ibrohim Qurbanov. "Biological Characteristics of Fungal Pathogens of Bulb Flowers and Control Measures." *Texas Journal of Agriculture and Biological Sciences* 22 (2023): 49-56.
6. Misirova, Surayyo. "Technology of growing orchid flowers from seeds." *E3S Web of Conferences*. Vol. 390. EDP Sciences, 2023.

ISSN NO: 2771-8840
October 2024

7. 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.
8. 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.
9. Misirova, S. A. "BIOLOGICAL CHARACTERISTICS OF FUNGAL SPECIES THAT CAUSE DISEASES OF ONION FLOWERS AND MEASURES TO COMBAT THEM." (2022).
10. 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* 25.4 (2021): 5922-5929.
11. 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.
12. Abdumutalovna, Misirova Surayyo, and Muhabbat Davlatova Urmanovna. "Technology of in vitro propagation of mangosteen in the climatic conditions of Uzbekistan." *NVEO-NATURAL VOLATILES & ESSENTIAL OILS Journal| NVEO* (2021): 5610-5617.
13. Мисирова, Сурайё Абдумуталовна. "БИОЛОГИЧЕСКАЯ ЭФФЕКТИВНОСТЬ ФУНГИЦИДОВ В БОРЬБЕ С МУЧНИСТОЙ РОСОЙ И РЖАВЧИНОЙ РОЗ." *Научный поиск в современном мире*. 2016.
14. Misirova, Surayyo. "Reproduction technology of a unique orchid flower in the conditions of Namangan." *Texas Journal of Agriculture and Biological Sciences* 22 (2023): 37-48.
15. Мисирова, Сурайё Абдумуталовна, Иброхим Шарифбаевич Курбонов, and Назокат Кобилжоновна Сайфуллаева. "ОПРЕДЕЛЕНИЕ ГРИБКОВЫЕ БОЛЕЗНИ ЦВЕТОЧНЫХ КУЛЬТУР В УСЛОВИЯХ ОБЛАСТИ НАМАНГАНА." *Theoretical & Applied Science* 10 (2018): 185-189.
16. Мисирова, Сурайо Абдумуталовна. "Биоэкология грибов-возбудителей болезней цветочных культур и создание ситемы борьбы с ними." *Материалы 54-й Международной научной студенческой конференции МНСК-2016: Сельское хозяйство*. 2016.
17. Насритдинов, А., А. Нормирзаев, and А. Нуриддинов. "Разработка агрегатов для основной и предпосевной обработки почвы к севы промежуточных." *ФУНДАМЕНТАЛ ФАНЛАР* (2015): 44.
18. Насритдинов, Ахмаджон Абдухамидович, and Хусниддин Тургунбоевич Киргизов. "Агрегат для полосной обработки почвы." *Современные научные исследования и инновации* 12 (2015): 412-416.
19. Байбобоев, Н. Г., Насриддинов, А. А., Нормирзаев, А. Р., & Нуриддинов, А. Д. (2014). Энергоресурсосберегающий комбинированный агрегат для обработки почвы. *Вестник Рязанского государственного агротехнологического университета им. ПА Костычева*, *3*(23), 42-44.
20. Насритдинов, Ахмаджон Абдухамидович. "Результаты исследования формы лобовой поверхности стойки чизеля-культиватора." *Universum: технические науки* 1 (58) (2019): 18-20.
21. Бойбобоев, Набижон Гуломович, and Ахмаджон Насритдинов. "Теоретические определение перемещение частиц почвы по поверхности углоснима." *Science Time* 6 (18) (2015): 84-89.
22. Бойбобоев, Набижон Гуломович, and Ахмаджон Насритдинов. "Теоретические определение перемещение частиц почвы по поверхности углоснима." *Science Time* 6 (18) (2015): 84-89.
23. 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.
24. Yusupova, M. N., and A. M. Gapparov. "Biological Method Of Plant Protection In Uzbekistan." *The American Journal of Agriculture and Biomedical Engineering* 2.11 (2020): 29-32.
25. Ходжаев, Ш. Т., Юсупова, М. Н., Курязов, Ш., & Саттаров, Н. (2008). Перспективы биологической защиты хлопчатника от хлопковой совки. *Сб. трудов.-Ташкент: Таллин*, 44-49.
26. Yusupova, M. N. "Biological method of crop protection in the fergana valley." *Agrarian science* 6 (2018): 68-70.

ISSN NO: 2771-8840
October 2024

27. Юсупова, Махпуза Нумановна, Азиза Нуьмановна Тургунова, and Сайдулло Нуриддинович Очилов. "Система интегрированной защиты растений." *Российский электронный научный журнал.–2015* 1 (2015): 169-174.
28. MN, Yusupova, and B. Z. Nosirov. "Control Of Cotton Pests On Stubble Lands." *International Journal of Applied* 10.2 (2015): 99-108.
29. Yusupova, M. N., S. T. Hodzhaev, and K. S. Mamatov. "Possibilities of the biological method of cotton plant protection." *Agriculture and Biology Journal of North America* 2.5 (2011): 742-744.
30. Yusupova, Maxpuza. "Protection of after harvest cultures-as a reservetors of cotton pests." *Agriculture and Biology Journal of North America* 4.5 (2013): 576-582.
31. 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.
32. Ходжаев, Ш. Т., Юсупова, М. Н., Юлдашев, Ф., & Жамалов, А. Г. (2010). Хлопковая совка на пожнивных культурах. *Защита и карантин растений*, (12), 22-23.
33. Юсупова, М. "Особенности защиты хлопчатника посеянного под пленки от вредных организмов." *Автореф. канд. дисс./М. Юсупова–Ташкент* (2001).
34. Yusupova, Makhpuza, Shakhnoza Irisova, and Otabek Numonov. "Biology of Pomegranate Pests, Control Measures and First Aid in Case of Pesticide Poisoning." *BIO Web of Conferences*. Vol. 82. EDP Sciences, 2024.
35. Yusupova, M., Turgunova, A., & Ochilov, S. INTERGRATED PLANT PROTECTION SYSTEMS.
36. Yusupova, M. N., and B. Z. Nosirov. "Cotton Pest Control on Stubble Crops at Crop Rotation." *International Journal of Biotechnology and Allied Fields* 1.11 (2013): 472-482.
37. Khodzhaev, S. T., Sagdullaev, A. U., Isaev, O. B., & Yusupova, M. N. (2011). Plant protection problems in Uzbekistan.
38. Khodzhaev, S. T., Yusupova, M. N., Yuldashev, F., & Zhamalov, A. G. (2010). Cotton bollworm in the post harvest crops.
39. Khodzhaev, Sh T., and M. N. Yusupova. "Defoliation times and bollworm." (2001): 35.
40. Sabirov, R. Z., Kurbannazarova, R. S., Melanova, N. R., & Okada, Y. (2013). Volume-sensitive anion channels mediate osmosensitive glutathione release from rat thymocytes. *PLoS One*, *8*(1), e55646.
41. 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.
42. Sabirov, R. Z., Kurbannazarova, R. S., Melanova, N. R., & 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.
43. 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.
44. Меланова, Назира Рашидовна. "Сравнительная характеристика выхода глутатиона из различных типов клеток." *Universum: химия и биология* 5 (59) (2019): 9-12.
45. Melanova, N. R., & Yulchiyeva, S. A. (2021). EFFECT OF EXTRACELLUIAR GLUTATHIONE ON COLLOID-OSMOTIC LYSIS OF HUMAN RED BLOOD CELLS. *Scientific Bulletin of Namangan State University*, *2*(2), 144-149.
46. Choriyeva, N. M., & Melanova, N. R. (2019). STUDY OF LYSIS OF HUMAN ERYTHROCYTES UPON ADMINISTRATION OF GOSSYPOL, MEGOSIN AND BATRIDEN. *Bulletin of Namangan State University: Vol*, *1*(9), 11.
47. Melanova, N. R., Yulchieva, S., Rahimova, G. L., & Mamadjanova, M. A. (2020). The role of intracellular camp in the production of glutathione from rat thymocyte cells under hypoosmotic stress. *International journal of Advanced Science and Technology*, *29*(8 Special Issue), 821-825.

ISSN NO: 2771-8840
October 2024

48. Melanova, N. R. (2023). REPRODUCTION OF THE MAGNOLIA (MAGNOLIACEAE) PLANT IN NAMANGAN CONDITIONS. *British Journal of Global Ecology and Sustainable Development*, *22*, 81-87.
49. Melanova, Nazira R. "The importance of the soap tree plant (Kelreiteria Paniculata) in environmental protection and landscaping in the climatic conditions of the Namangan region." *E3S Web of Conferences*. Vol. 390. EDP Sciences, 2023.
50. Шамситдинов, Ф. "Результаты опыта." *Защита и карантин растений* 5 (2003): 27-27.
51. 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.
52. 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).
53. 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.
54. Qurbonov, Ibragim Sharifjonovich. "CLONELY MICRO-CULTIVATION OF PLANTS AND ITS APPLICATION TO AGRICULTURE." *Scientific Bulletin of Namangan State University* 1.4 (2019): 74-78.
55. Qurbonov, I. "E-RECRUITMENT: SOCIAL MEDIA AND RECRUITING." *InterConf.–2021*.
56. 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).
57. Yusupova, M., Irisova, S., & Numonov, O. (2024). Biology of Pomegranate Pests, Control Measures and First Aid in Case of Pesticide Poisoning. In *BIO Web of Conferences* (Vol. 82, p. 01014). EDP Sciences.
58. Irisova, Sh. "Protection Of Plants Sown After Cereals In The Fergana Valley." *Science and innovation* 2.D11 (2023): 158-166.
59. Irisova, Sh. "GROWTH AND REPRODUCTION CHARACTERISTICS OF BLACK FISH (SCHIZOTHORAX INTERMEDIUS) IN A PASTORAL POOL." *Science and innovation* 3.D10 (2024): 132-136.
60. IRISOVA, Shakhnoza. "BIO-ECOLOGICAL FEATURES OF BLACKFISH (SCHIZOTHORAX INTERMEDIUS) IN CHERVOK RESERVOIR." *Journal of Experimental Studies* 1.12 (2023): 18-24.
61. Yusupova, Makhpuza, and Shakhnoza Irisova. "Agrotechnological protection of cotton from sucking pests in various ways of planting." *E3S Web of Conferences*. Vol. 390. EDP Sciences, 2023.
62. Faxriddinovna, Irisova Shaxnoza. "Ekish oldidan chigitga elektrofaollashgan suv bilan ishlov berishning g'o'zaning o'sish davriga ta'siri." *Science and innovation* 2.Special Issue 11 (2023): 421-425.
63. Urmonovich, Numonov Otabek. "MANGOSTEEN NUTRITIONAL PRICE AND FUNCTIONAL PROPERTIES." *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ* 14.5 (2023): 3-5.
64. Abduhamidovich, Nasritdinov Ahmadjon. "MANGOSTIN DARAXTI VA MEVASINI TIBBIYOTDA FOYDALANISH." *Journal of new century innovations* 28.2 (2023): 12-14.
65. Юсупова, Махпуза Нумановна. "ФАРҒОНА ВОДИЙСИ ШАРОИТИДА ИГНА БАРГЛИ ДАРАХТЛАРНИ ЗАРАРКУНАНДАЛАРДАН ҲИМОЯЛАШ." *SO 'NGI ILMIY TADQIQOTLAR NAZARIYASI* 6.4 (2023): 316-320.
66. Юсупова, Махпуза Нумановна. "АНОРНИ ЗАРАРКУНАНДАЛАРДАН ҲИМОЯЛАШ." *PEDAGOG* 6.4 (2023): 562-567.

ISSN NO: 2771-8840
October 2024

67. Юсупова, Махпуза Нумановна. "БИОЛОГИЧЕСКИЙ МЕТОД ЗАЩИТЫ РАСТЕНИЙ." *Scientific Impulse* 1.9 (2023): 1460-1464.
68. O'rmonovna, Davlatova Muhabbat. "MANGOSTIN DARAXTI VA UNING KIMYOVIY XUSUSIYATLARI." *INNOVATION IN THE MODERN EDUCATION SYSTEM* 3 (2022): 1-4.
69. Юсупова, Махпуза Нумановна. "УФТ: 635 САБЗАВОТ ЭКИНЛАРИГА БИОЛОГИК КУРАШ ҲАҚИДА МУЛОХАЗАЛАР." *Научный импульс* 355.
70. Юсупова, М. Н., and О. У. Нумонов. "ЗАЩИТА ТУТОВОГО ДЕРЕВА ОТ ВРЕДИТЕЛЕЙ." *Экономика и социум* 6-1 (121) (2024): 1500-1503.
71. Shamsitdinov, Fazliddin, and Numonov Otabek Urmonvich. "FIBERS OF THE PREPARATION BIOBARS-M IMPACT ON QUALITY INDICATORS I." *American Journal of Interdisciplinary Research and Development* 23 (2023): 173-175.
72. Юсупова, Махпуза Нумановна. "ТУТ ПАРВОНАСИ ВА УНИНГ ЗАРАРИ." *O'ZBEKISTONDA FANLARARO INNOVATSIYALAR VA ILMIY TADQIQOTLAR JURNALI* 3.32 (2024): 35-38.
73. Khusanova, Onarkhon, and Muhammadali Kamoliddinov. "The ecological features of the soil seaweeds." *AIP Conference Proceedings*. Vol. 2789. No. 1. AIP Publishing, 2023.
74. Khusanova, O. G., M. I. Kamoliddinov, and D. B. Muhammadjanova. "The taxonomic structure of soil waterweed in altitudinal belt of the north fergana." *Asian Journal of Multidimensional Research (AJMR)* 8.2 (2019): 332-336.
75. Xusanova, Onarxon. "FARG 'ONA VODIYSI TEKISLIK MINTAQALARIDA TARQALGAN AL'GOSENOZLARNING EKOLOGIYASI." *Namangan davlat universiteti Ilmiy axborotnomasi* 8 (2023): 190-195.
76. Khusanova, Onarkhon, and Zulfiya Rakhimova. "ФАРҒОНА ВОДИЙСИ ТУПРОҚЛАРИДА ЎЧРАЙДИГАН (CHLOROPHYTA) ЯШИЛ СУВ ЎТЛАРИ." *Formation and Development of Pedagogical Creativity: International Scientific-Practical Conference (Belgium)*. Vol. 1. 2023.
77. Khusanova, Onarkhon. "GREEN SOIL ALGAE DISTRIBUTED IN THE SOILS OF FERGANA VALLEY." *Conferencea* (2023): 63-66.
78. Khusanova, Onarkhon. "SOIL ALGAE INDICATORS." *E Conference Zone*. 2023.
79. Onarkhon, G., Khusanova Kh, and X. A. Alimjanova. "Structure and taxonomic analysis of soil algae steep areas of northern Ferghana in winter." *European science review* 7-8 (2018): 26-29.
80. Khusanova, Onarkhon Gaybullaevna. "TAXONOMIC ANALYSIS OF THE SUANOPHYTA DEPARTMENT ON THE SOILS OF THE NORTHERN FERGANA." *Scientific Bulletin of Namangan State University* 2.2 (2021): 136-140.