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DETERMINATION OF COTTON SELECTION VARIETIES SUITABLE FOR SOIL CONDITIONS AND REGIONAL LOCATION OF FERGANA REGION

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Annotation

Depending on the location of Fergana region and climatic conditions, cotton with medium fiber seed is planted in this area. Based on this, more emphasis should be placed on the selection of cotton varieties grown in order to obtain a large yield from the cultivated fields. Also, increasing crop productivity and productivity in the case of using a good selection variety.

Keywords: Cotton, S-6524, S-8290, Sultan, nitrogen, potassium, phosphorus, diesel fuel, temperate, continental.

Introduction

There are 37 types of cotton in nature, many forms and varieties. All of them belong to the Malveceae family, a botanical genus called "Gossypium". Plants belonging to this family include hemp, okra, rough hemp, sedum, Chinese rose, and button-flower.

F. According to the classification of M. Mauer and A. Abdullaev, only 4 of all known wild types of cotton are cultivated. These are two diploid Old World cotton species: Gossipium-herbaseum (African-Asian cotton) and Gossipium-arbereum (Indo-Chinese cotton) and two tetraploid New World cotton species. : Gossipium-hirzutum (Mexican cotton) and Gossipium-barbadenze (Peruvian cotton).



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The main goal of growing cotton is to get as much and good quality fiber from it as possible.

The main requirements for the varieties: fruitful, early, almost 80-90% of the harvest should be transferred to the first industrial variety, resistance to diseases and insects, convenient to work with machines and harvest by machine.

The quality of fiber for the textile industry must meet a number of requirements. In this case, the main technological parameters of the fiber are as follows (Table 1.2): appearance with length, hardness, thinness and relative breaking strength. The finer, thicker and longer the fiber, the better quality product is produced. Currently, more than 30 varieties are regionalized in scientific research institutes and seed farms. Cotton selection. Breeding is the science of breeding new varieties and hybrids of plants and new breeds of animals. The theoretical bases of biology, genetics and related sciences are used in carrying out selection work on cotton. The starting material includes various cultivated, wild and semi-wild types of cotton in nature [1].

shu jumladan, gʻoʻza navlari boʻylicha								
yangi navlar	istiqbolii naylar	O'rtapishar navtar	jami ertapishar	ertapishar navlar		Jami ekin maydoni	Tumanlar nomi	T/e
	5-8290	5-6524	navlar	Namangan-77	Sutton			
0,7	2,9	1,6				5,2	Yazyavan	1.
0,6	3.6		2,1	27		5,3	Ottieriq	2
0,6		3,0	3.6	3,6		7.2	Qoshtepa	1
-0,1	3,5		2,2	22		5,8	Farg'ona	4
0.7	2,8		4,5	4.5		8,0	Beshirig.	5.
0,5	1,2		4,5		4,5	6,2	Dang'ara	E
0,3	24		2,0	2,0		4,7	O'zbekiston	7
0,4	15		3.5	1	3.5	5,4	Furget	8
0,5	1,8		2.9	2,9		5,2	Bagdod	01
0,8	1,6		2,7	2,7		52	Buveyde	10.
0,4	-10		2,6	2,6		60	Pishton	11
0,5	2.7	2.5				5,7	Uchkarprik	12.
0,6	(2,6)		3.0	2,8		6,2	Qua	15.
0.3	1,9		2.9	2,9		53	Tothlog	14
7,0	31,5	7,1	36,5	28,5	8,0	82,1	Jamit .	

Figure 1

Fergana Valley is surrounded by mountains, which prevents the direct passage of cold air masses blowing from the north and northeast and moist air masses blowing from the west. Therefore, its climate is characterized by hot, dry, long summers and mild winters. In winter, the cold air blowing from the mountains surrounding the valley accumulates in the central part of the Fergana basin.



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The winter-summer air temperature in the valley decreases from the west to the east and from the central part to the hills: the average temperature in January in Kok is -2.2 °C, in July it is +27.5 °C, in Kampirravot - 4, 8 °C, July is +24.9 °C. In some years, cold air masses blow from the north and northeast and pass over the mountains, causing the temperature of the valley to drop. At that time, the coldest temperature drops to -26-30 °C.

The least rainy month is August or September in most of the valley. 2-3% of the annual rainfall is observed in these months. Only in the high mountain parts of Turkestan and Aloy mountain ranges, the least rainfall is recorded in the winter months - December, January or February, which is 3-4% of the annual rainfall.

Precipitation falls mainly in the form of snow in high mountain regions. Above 2500, the ratio of snow to rain is about the same, and below that, it rains more. The accumulation of snow in the mountains and its melting in the spring and summer to saturate the rivers is very important for irrigated agriculture.[3]

Fargʻona viloyatida 2019-yil paxta hosilini yetishtirish uchun talab etiladigan moddiy resurslar	
HISOB-KITOBI	
	ming tonna

T/r	paxta ekin Tumanlar nomi maydoni, ming gektar		talab etiladigan moddiy resurslar				
			mineral oʻgʻitlar (sof holda)				
			dizel yoqilgʻisi	jami	shundan		
			Jann	azotli	fosforli	kaliyli	
1,	Yozyovon	5,2	1,3	1,9	1,3	0,4	0,2
2.	Oltiariq	6,3	1,5	2,4	1,6	0,6	0,2
3.	Qo'shtepa	7,2	1,8	2,7	1,8	0,6	0,3
4.	Farg'ona	5,8	1,3	2,1	1,4	0,5	0,2
5.	Beshariq	8,0	2,0	3,1	2,1	0,7	0,3
6.	Dang'ara	6,2	1,5	2,3	1,6	0,5	0,2
7.	O'zbekiston	4,7	1,1	1,8	1,2	0,4	0,2
8.	Furgat	5,4	1,3	2,2	1,5	0,5	0,2
9.	Bag'dod	5,2	1,3	1,9	1,3	0,4	0,2
10.	Buvayda	5,1	1,2	2,1	1,4	0,5	0,2
11.	Rishton	6,0	1,5	2,1	1,4	0,5	0,2
12.	Uchkoʻprik	5,7	1,4	2,3	1,6	0,5	0,2
13.	Quva	6,2	1,5	2,6	1,7	0,6	0,3
14.	Toshloq	5,1	1,3	2,0	1,3	0,5	0,2
Jami:		82,1	20,0	31,5	21,2	7,2	3,1

Figure 2



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Summary

In the conditions of the Fergana Valley, it is advisable to plant seeded cotton with selection varieties such as S-6524, S-8290 and Sultan according to the above requirements. The above tables show the selection varieties planted in Fergana region and the consumption of mineral fertilizers for them. It can be seen that the consumption of mineral fertilizers for a well-chosen selection variety is not much required, in addition to the valley climate, conditions also have a great impact on the productivity of planted crops. Therefore, it is recommended to plant cotton varieties that are suitable for the climate of the region, and this can be beneficial for both the farm and the consumer. In conclusion, it should be said that alternative selection varieties for Fergana region are S-6524 and S-8290.

References:

- 1. Allanazarov, S., Ubaydullaev, M., & Komilov, J. (2023). Effect of Weeding on Cotton Weight Per Boll and Cotton Yield Depending on Seedling Thickness of Medium Fiber Cotton Varieties. In *BIO Web of Conferences* (Vol. 78, p. 03012). EDP Sciences.
- 2. Ubaydullayev, M., & Kurbanova, U. (2023). The influence of defoliants on the technological quality indicators and chemical composition of seed. *Science and innovation*, 2(D4), 26-30.
- 3. Убайдуллаев, М. М., & Саетбековна, Қ. У. (2023). Дефолиация ўтказиш учун далаларни танлаш ва тайёрлаш. *Journal of Science-Innovative Research in Uzbekistan*, 1(9), 322-328.
- 4. Mo'minjonovich, U. M., & Saetbekovna, Q. U. (2023). Effect of defoliants on cotton weight. Journal of Science-Innovative Research in Uzbekistan, 1(9), 316-321.
- 5. Ubaydullayev, M. M. (2022). Yangi defoliantlar hosildorlik garovi. Архив научных исследований, 2(1).
- 6. Mo'minjonovich, U. M. (2022). Effectiveness Of Defoliants. Eurasian Research Bulletin, 8, 9-12.
- 7. Mominjonovich, U. M., & Ogli, M. I. V. (2022). Study and analysis of technological processes of cotton drying in a cluster system. International Journal of Advance Scientific Research, 2(11), 6-10.
- 8. Ubaydullaev, M. M., & UT, T. (2022). Determination of appropriate norms and terms of defoliants. American Journal Of Applied Science And Technology, 2(05), 18-22.



VOLUME 2, ISSUE 5, 2024. MAY

ResearchBib Impact Factor: 8.654/2023 ISSN 2992-8869



- 9. Ubaydullaev, M. M., & Makhmudova, G. O. (2022). Medium fiber s-8290 and s-6775 cotton agrotechnics of sowing varieties. European International Journal of Multidisciplinary Research and Management Studies, 2(05), 49-54.
- 10. Ubaydullaev, M. M., & Komilov, J. N. (2022). Effect of defoliants for medium fiber cotton. International Journal of Advance Scientific Research, 2(05), 1-5.
- 11. Ubaydullaev, M. M., & Mahmutaliyev, I. V. (2022). Effectiveness of foreign and local defoliants on the opening of cups. International Journal of Advance Scientific Research, 2(05), 6-12.
- 12. Ubaydullaev, M. M., & Sultonov, S. T. (2022). Defoliation is an important measure. European International Journal of Multidisciplinary Research and Management Studies, 2(05), 44-48.
- 13. Ubaydullaev, M. M., & Nishonov, I. A. (2022). The Benefits of Defoliation. Eurasian Journal of Engineering and Technology, 6, 102-105.
- 14. Ubaydullayev Madaminjon Mo'minjon o'g'li, & Ma'rufjonov Abdurahmon Mo'sinjon o'g'li. (2022). Biological efficiency of foreign and local defoliants. "Science And Innovation" international scientific journal, 1(2). https://doi.org/10.5281/zenodo.6569808
- 15. Ubaydullayev, M. M. (2021). G 'o 'zada defoliatsiya o 'tkazishning maqbul me'yor va muddatlari. Monografiya.-Corresponding standards and terms of defliation of cotton. Monograph.-. Соответствующие нормы и сроки дефолиации хлопка. Монография. Zenodo.
- 16. Ubaydullaev, M. M. (2020). The importance of sowing and handling of c-8290 and c-6775 seeds in the conditions of the meadow soils of the Fergana area. In International conference on multidisciplinary research (p. 11).
- 17. Ubaydullayev, M. M., & Ne'matova, F. J. (2021). The importance of planting and processing of medium-field cotton varieties between cotton rows in Fergana region. The American jurnal of agriculture and biomedical engineering. USA, 3(09).
- 18. Тешаев, Ф. Ж., & Убайдуллаев, М. М. (2020). Определение эффективных норм новых дефолиантов в условиях лугово-солончаковых почв Ферганской области при раскрытии коробочек 50-60% сортов хлопчатника с8290 и с6775. Актуальные проблемы современной науки, (5), 62-64.



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ResearchBib Impact Factor: 8.654/2023 ISSN 2992-8869



- 19. Mo'minovich, U. M. (2021). The Importance Of Planting And Processing Of Medium-Field Cotton Varieties Between Cotton Rows In Fergana Region. The American Journal of Agriculture and Biomedical Engineering, 3(09), 26-29.
- 20. Ubaydullayev, M. M., Ne'matova, F. J., & Marufjonov, A. (2021). Determination of efficiency of defoliation in medium-fiber cotton varieties. Galaxy International Interdisciplinary Research Journal, 9(11), 95-98.
- 21. Ubaydullaev, M. M. U., Askarov, K. K., & Mirzaikromov, M. A. U. (2021). Effectiveness of new defoliants. Theoretical & applied science Учредители: Теоретическая и прикладная наука, (12), 789-792.



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