

ISSN (E): 2938-3757

Marufjonov Abdurakhmon Mosinjon ogli Doctoral Student of Fergana Polytechnic Institute, Department of Technology of Agricultural Products Storage and Preliminary Processing

## **Abstract**

In our republic next years resource efficient agricultural technologies wide scale attraction to do big attention is being directed. In this place Uzbekistan Republic for 2017-2021 intended actions strategy "Village farm work release to the branch intensive methods, first of all, water and resources thrifty modern agricultural technologies application is important from tasks one reached defined. This tasks account received without, soil productivity storage and improve and cotton from the crop high and good quality harvest in cultivation Fergana of the region grassland soils conditions new and promising cotton varieties of maintenance agrotechnics elements work exit according to scientific research take to go current is considered.

**Keywords**: Variety, development, style, option, productivity, water and resource-efficient agrotechnologies.

## Introduction

President Sh.Mirziyoyev, in his address to the Parliament regarding the results of 2022, said that the major changes being implemented in the agricultural system of our country, including agricultural reforms, the transfer of land to private clusters and cooperatives, will increase productivity in cotton production in one year on average. It is possible to increase by 10%, this year 91 thousand hectares of land is put back into use, 133 thousand hectares or 2 compared to last year emphasized that water-saving technologies have been introduced in an equally large area.

The creation of existing opportunities for the growers of Uzbekistan by our President, their implementation in practice imposes the following responsible tasks on each scientific field worker.

- rational use of land and water resources;

- maintaining and increasing the existing productivity of irrigated lands;
- development of agrotechnologies for obtaining high and quality crops from agricultural crops; Based on these tasks, we plan to make full use of existing agro-technologies in the field of cotton cultivation, and to conduct scientific and practical research in their application and to widely apply them to production.

In the conditions of global climate change, developing new approaches in cotton farming to obtain abundant and high-quality cotton harvest, reduce product costs and obtain high profits,

**98** | Page

for example, to harvest the main part of the cotton crop in the period of September introduction of adapted varieties can be a key factor in achieving goal i. Currently, one of the main problems in cotton farming in Fergana region is water shortage and the negative effects of harmful insects. These current problems are having a negative impact on cotton productivity.

Based on the above-mentioned problems, PQ-308 of the President of the Republic of Uzbekistan dated July 7, 2022 "On additional organizational measures to increase cotton productivity, introduce science and innovation in cotton cultivation" and dated March 1, 2022 PQ-144 "On measures to further improve the introduction of water-saving technologies in agriculture" issues of abundant and high-quality harvest of agricultural crops, especially cotton, by applying scientific achievements to production in the tasks defined in the decisions. In this selected topic, the use of cotton varieties suitable for the soil-climate conditions of Fergana region, high-yielding, high-fiber quality, and the use of new water and resource-efficient agrotechnology of their cultivation, laser leveling of land, and coordinated pest control. measures are planned to be implemented in the farm area. At the end of the scientific work process, new fast-ripening, high boll opening rate, intensive, resistant to wilt disease, new varieties of cotton adapted to one harvest and corresponding resource-efficient agrotechnologies, as well as water in laser leveling and drip irrigation technology. automatic smart control system of the harvesters and integrated control measures against plant pests will be introduced.

Also, according to the decision PQ-144 dated March 1, 2022 "On measures to further improve the introduction of water-saving technologies in agriculture", water-saving technologies will be implemented in our republic in 2021 on an area of 433 thousand hectares. and their total figure was 17% of the irrigated areas. By the end of 2022, at least in the republic:

Drip irrigation on 230 thousand hectares, including 160 thousand hectares of raw cotton; Implementation of discrete irrigation systems in 2 thousand hectares of agricultural fields; It is planned to level 218,000 hectares of cultivated land using laser equipment.

Also, the main problems in cotton farming in Fergana region consists of:

- the fact that new cotton varieties superior to the currently cultivated cotton varieties in terms of yield and fiber quality indicators, which do not need to be defoliated, do not reach clusters and farms (such varieties are that he does not have information about);
- increasing water scarcity and global climate change. As a result of this, the demand for water resources increases and the productivity decreases sharply due to the excessive shedding of the crop elements of cotton in high hot temperatures;
- due to the lack of water, the area of economical (drip) irrigation technologies is expanding (478 thousand/ha in 2022. Presidential Decree No. there is. Because of the insolubility of local phosphorus and potassium mineral fertilizers and the high cost of foreign phosphorus and potassium mineral fertilizers the main problem of farmers.
- 30-40% of the crop is lost due to cotton pests (thrips, bollworm). Chemical pest control is expensive and has a negative impact on farm incomes. Manual spreading of bioproducts requires a lot of human labor and there is little chance of uniform distribution over large field areas.



## **REFERENCES:**

 Madaminjon Ubaydullayev, Nodirjon Usmonov, Mirzabobur Mirzaikromov, Farrux To'xtashev, Barchinoy Umarqulova, Nodirbek Ergashev. Scientific analysis of the morphological state of cotton varieties in the experiment before defoliation. E3S Web Conf. Volume 538, 2024. XVI International Scientific-Practical Conference "Actual Problems of Improving Farming Productivity and Agroecology" (IPFA 2024). 04012. page(s) 5. DOI https://doi.org/10.1051/e3sconf/202453804012

ISSN (E): 2938-3757

- 2. SAMIYEVICH, A. A., & BOTIRALIYEVICH, U. N. (2020). Effectiveness of co-planting crops in sandy soils. Plant cell biotechnology and molecular biology, 21(65-66), 1–9. Retrieved from https://ikprress.org/index.php/PCBMB/article/view/5688
- 3. Madaminjon Ubaydullayev, Hasanboy Asqarov, Raxnamoxon Nazirova, Omonjon Sulaymonov, Nodirjon Usmonov, Dinara Abdukarimova. (2024). Research of the scientific basis of leaf surface formation indicators in medium fiber cotton varieties. E3S Web Conf. Volume 538, 2024. XVI International Scientific-Practical Conference "Actual Problems of Improving Farming Productivity and Agroecology" (IPFA 2024). 04010. page 5. DOI https://doi.org/10.1051/e3sconf/202453804010
- 4. Усмонов, Н. (2024). ИСПОЛЬЗОВАНИЕ ОТХОДОВ ВИНОДЕЛИЯ И ПРОИЗВОДСТВО БИОХИМИЧЕСКОГО УКСУСА. Interpretation and Researches, (3). извлечено от https://interpretationandresearches.uz/index.php/iar/article/view/2704
- БИОТЕХНОЛОГИЧЕСКИЕ АСПЕКТЫ 5. Усмонов, Н. (2023).БОРЬБЫ **ВОЗБУДИТЕЛЯМИ** БОЛЕЗНЕЙ РАСТЕНИЙ. Biologiyaning Zamonaviy Yechimlar, 1(4), Tendensiyalari: Muammolar Va 658-660. Retrieved from https://inashr.uz/index.php/bztmy/article/view/431
- 6. Usmonov Nodirjon Botiraliyevich. (2023). Water-Saving Technology in Sandy Soil Conditions. Web of Agriculture: Journal of Agriculture and Biological Sciences, 1(9), 7–12. Retrieved from https://webofjournals.com/index.php/8/article/view/460
- 7. Usmonov Nodirjon Botiraliyevich. (2023). Technology of Intensive Planting of Sunflower and Soybean for Grain in Sandy Soils. Web of Agriculture: Journal of Agriculture and Biological Sciences, 1(8), 21–24. Retrieved from https://webofjournals.com/index.php/8/article/view/313
- 8. Усмонов, . Н. (2023). ЭКИШ ТЕХНОЛОГИЯСИ. Естественные науки в современном мире: теоретические и практические исследования, 2(4), 67–69. извлечено от https://in-academy.uz/index.php/zdtf/article/view/13456
- 9. Usmonov Nodirjon Botiraliyevich. (2022). EFFECT OF SEED GERMINATION OF INTERCROPPING COTTON AND PEANUT. E Conference Zone, 1–2. Retrieved from https://www.econferencezone.org/index.php/ecz/article/view/1423
- 10. Usmonov Nodirjon Botiraliyevich. (2022). BENEFITS OF CO-PLANTING COTTON WITH PEANUTS. Conferencea, 90–92. Retrieved from https://conferencea.org/index.php/conferences/article/view/1040
- 11. Nazirova Rakhnamohon Mukhtarovna, Akhmadjonov Avazbek Akmaljon ugli, & Usmonov Nodirjon Botiraliyevich. (2022). ROOTSTOCK GROWING TECHNOLOGY. INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, IT, ENGINEERING AND SOCIAL SCIENCES ISSN: 2349-7793 Impact Factor:



- 6.876, 16(5), 1–5. Retrieved from https://gejournal.net/index.php/IJRCIESS/article/view/442
- 12. smonov Nodirjon Botiraliyevich. (2022). Effect of Intercropping of Cotton and Peanut on Quantity and Quality of Soil Microorganisms. Eurasian Scientific Herald, 11, 12–15. Retrieved from https://www.geniusjournals.org/index.php/esh/article/view/1990
- 13. Usmonov Nodirjon Botiraliyevich. (2022). EFFICIENCY OF CO-PLANTING OF COTTON AND PEANUTS IN SANDY SOILS OF THE DESERT REGION. Web of Scientist: International Scientific Research Journal, 3(7), 458–461. https://doi.org/10.17605/OSF.IO/GY54Z
- 14. Mukhtarovna, Nazirova R., et al. "Study of the Influence of Processing on the Safety of Fruit and Vegetable Raw Materials." European Journal of Agricultural and Rural Education, vol. 2, no. 6, 2021, pp. 43-45. https://www.neliti.com/publications/378976/study-of-the-influence-of-processing-on-the-safety-of-fruit-and-vegetable-raw-ma#cite
- 15. Назирова Рахнамохон Мухтаровна, Мирзаикромов Мирзабобур Алишер Угли, Усмонов Нодиржон Ботиралиевич Влияние процесса охлаждения зерна кукурузы на его сохраняемость, количество потерь и на заражённость насекомыми-вредителями // Проблемы Науки. 2020. №6-2 (151). URL: https://cyberleninka.ru/article/n/vliyanie-protsessa-ohlazhdeniya-zerna-kukuruzy-na-ego-sohranyaemost-kolichestvo-poter-i-na-zarazhyonnost-nasekomymi-vreditelyami