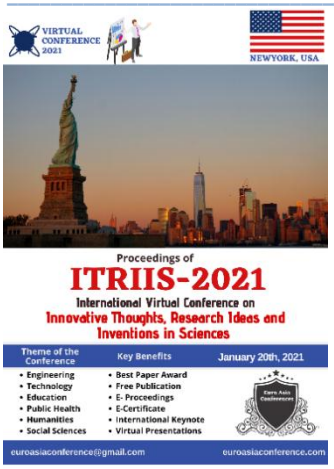


# INFLUENCE OF SEEDLING STORAGE METHODS ON COTTON YIELD

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## Annotation:

Cotton varieties grown in Uzbekistan are fast-ripening, high-yielding, with a high yield and good fiber quality, rich in oil-bearing substances and proteins, resistant to adverse environmental conditions (soil salinity, low temperatures, heat, drought, etc.) and are also resistant to diseases and pests. Effective use of agrotechnical measures, mechanization of row spacings, adaptation to machine harvesting and other valuable economic characteristics and characteristics are required.

## Key words:

Yield, seedlings, seed quality, fiber yield, moisture, machine harvest, pollution.

An increase in cotton yields, an increase in the quantity and quality of cotton products depends on the quality of cotton seeds and seeds. In order to improve the quality of seeds, the "Uzpakhtasanoat" Association attaches great importance to the creation of new technologies and equipment and their implementation at cotton ginning factories.

Based on the above, we conducted a study to explore ways to improve storage methods for hand-picked cotton seeds.

For cotton, the quality of the seeds sown next year is determined by the time they were picked in the field. How well the harvesting is organized depends on how the storage and preparation processes for planting are carried out in accordance with the requirements of the State Standard. Many scientists, with their experience and innovations, contribute greatly to the further improvement of the quality of cotton products in cotton factories. In our state, sufficient opportunities are being created to introduce these innovations into production. As a result, today almost all ginneries in the country are being transferred to a cluster system and re-equipped with modern equipment. This year, the country plans to plant 15 early, 5 medium and 8 promising varieties of cotton. This means that 55.0% of the total planned sown area are fast-ripening, 30.0% mid-ripening, 6.5% promising and 8.5% new varieties. Varieties must

adapt to changes in the environment, including the lack of moisture in the soil, salt-tolerant, and contribute to improving the agricultural background.

This year, due to the high flexibility of the Sultan cotton variety, which is distinguished by high fiber quality and high yield, this variety is grown in the Republic of Karakalpakstan, Andijan, Samarkand, Surkhandarya, Tashkent and 20-50 percent in the Syrdarya region. Cotton growers from Andijan, Namangan and Fergana regions plan to plant such high-yielding varieties as Andijan-35, Andijan-36, Andijan-37, Namangan-77, S-8290, S-6524 on 60-70% of cotton fields.

Prepared cotton and seeds are dehydrated after processing or left with little hair. They are spilled in pots and stored under low pressure and are exposed to various environmental conditions.

Exposure to moisture on cotton and the associated temperature during storage is in some way important for the quality of the seeds and fibers. If the temperature in the pot rises, a state of spontaneous heating occurs, resulting in rapid respiration of the seeds, which leads to a premature depletion of the available energy reserves in the seeds.

With an increase in the machine harvesting of raw cotton, the moisture and pollution of the cotton increases. This situation leads to an increase in the number of drying and cleaning operations in wastewater treatment plants.

In ginneries, the seeds, separated from the fibers, are stored in tanks for 1-4 months. During storage, the temperature is basically the same. The seed is first dehydrated with fire, and then with 96% sulfuric acid. Up to 30% of seeds that do not have the size required by GOST are sent to oil companies. Bales of cotton fiber, fluff and fibrous waste are stacked on top of each other in sheds, if there are no special sheds, a bar is laid under the sheds and covered with tarpaulins. According to the results of the experiment, it turned out that cotton fiber is stored in a closed state by 3.7-4.1% more than in an open state.

## References:

1. Nazirova R.M., Usmonov N.B., Askarov H.H.// Technology of storing grain in a cooled state// Do desenvolvimento mundial como resultado de realizacoes em ciencia e investigacao cientifica: Colecao de trabalhos cientificos «ΛΌΓΟΣ» com materiais da conferencia cientifico-pratica internacional. vol 1, page 93-95 URL: https://ojs.ukrlogos.in.ua/index.php/logos/article/view/4923
2. Nazirova R.M., Usmonov N.B., Bakhtiyorova D// Innovative technologies for grain storage of different crops// Academicia an international multidisciplionary research journal. 2020. vol 10.issue 6, june, pages 222-228. URL: https://saarj.com/academicia-past-issue-2020/
3. Назирова Р.М., Усмонов Н.Б., Тухташев Ф.Э., Тожиев Б// Значение процесса предварительного охлаждения сырья в повышении сохраняемости плодоовощной продукции// Научно-методический журнал “Вестник науки и образования”. Издательство «Проблемы науки». Москва, №20 (74), часть 1, 2019, с 35-38. URL: https://cyberleninka.ru/article/n/znachenie-protsessa-predvaritelnogo-ohlazhdeniya-syrya-v-povyshenii-sohranyaemosti-plodoovoschnoy-produktsii
4. Назирова Р.М., Усмонов Н.Б., Тухташев Ф.Э., Сулаймонов Р.И// Влияние температуры хранения на сохранность и химический состав плодоовощного сырья// “Проблемы современной науки и образования” научно-методический журнал. Издательство «Проблемы науки». Москва,2019. № 11 (144). Часть 2 стр 10-12. URL: https://cyberleninka.ru/article/n/vliyanie-temperatury-hraneniya-na-sohrannost-i-himicheskiy-sostav-plodoovoschnogo-syrya

5. Nazirova R. M., Sulaymonov O. N., Usmonov N. B.//Qishloq xo‘jalik mahsulotlarini saqlash omborlari va texnologiyalari// 0‘quv qo‘llanma. Premier Publishing s.r.o. Vienna - 2020. 128 bet.
6. Назирова Р.М., Усмонов Н.Б., Зокиров А.//“Изучение влияния обработки на сохранность плодоовощного сырья ингибиторами образования этилена”//, научно-теоретический журнал “Вопросы науки и образования” №7 (53), Москва, 2019, стр 13-19. URL: https://cyberleninka.ru/article/n/izuchenie-vliyaniya-obrabotki-na-sohrannost-plodoovoschnogo-syrya-ingibitorami-obrazovaniya-etilena/
7. Назирова Р.М., Усмонов Н.Б., Сулаймонов Р.И.//Изменение химического состава клубней картофеля в процессе хранения// “Проблемы современной науки и образования” научно-методический журнал. Издательство «Проблемы науки». Москва, 2020. № 6 (151). стр 19-22. URL: https://cyberleninka.ru/article/n/izmenenie-himicheskogo-sostava-klubney-kartofelya-v-protsesse-hraneniya
8. Назирова Р.М., Курбанова У.С.,Усмонов Н.Б.//Особенности обработки озоном некоторых видов плодов и овощей для их долгосрочного хранения// Universum: химия и биология: научный журнал. – № 6(72). М., Изд. «МЦНО», 2020. стр 6-9. URL: – https://cyberleninka.ru/article/n/osobennosti-obrabotki-ozonom-nekotoryh-vidov-plodov-i-ovoschey-dlya-ih-dolgosrochnogo-hraneniya
9. Назирова Р.М., Усмонов Н.Б., Мирзаикромов М.А //Влияния процесса охлаждения зерна кукурузы на его сохраняемость, количество потерь и на заражённость насекомыми вредителями// Проблемы современной науки и образования. 2020. № 5 (151) стр 23-27. URL: https://cyberleninka.ru/article/n/vliyanie-protsessa-ohlazhdeniya-zerna-kukuruzy-na-ego-sohranyaemost-kolichestvo-poter-i-na-zarazhyonnost-nasekomymi-vreditelyami
10. Назирова Р.М., Усмонов Н.Б., Хаитов Р., Тўхташев Ф.Э.// Влияние условий возделывания и режимов хранения на химический состав корнеплодов моркови// Проблемы современной науки и образования / 2020. № 5 (150) стр 16-19. URL: https://cyberleninka.ru/article/n/vliyanie-usloviy-vozdelyvaniya-i-rezhimov-hraneniya-na-himicheskiy-sostav-korneplodov-morkovi