

Under the Influence of External Factors Scientific Basics of Cotton Production Control

Shokirova Gavkharkhan Nazirgulomovna (PhD)

*Masodigova is the daughter of Mokhidabonu Abdvohijon assistant
Fergana State University*

Abstract: *The introduction of innovations into practice begins with theory. This situation is reflected in the annual growth of cotton grain threshing in our country. After all, the creation of new varieties, the use of advanced methods of cotton processing, and the regular improvement of maintenance tools are due to the achievements of science.*

Key words: *cotton, knot, boll, hydroponics, calcium, boll phase, heredity.*

The demand and demand for our locally grown cotton has steadily increased and now stands at 28 tons. Yes. It is clear that this is not the end.

It is known that cotton is a subshrub plant that lives in the wild for several years. Each cotton boll contains hundreds of fruiting nodes, but for various reasons most of them, 80%, fall off. Today's cotton varieties, which are grown as annuals, naturally lose at least 60% to 80% of their yield elements, given their heritability.

The results of scientific studies conducted in laboratories, indoor hydroponic methods and in special experimental fields show that from medium-fiber varieties, 250-300 g of cotton are obtained from one cotton plant. So, if 100 thousand cotton seedlings are planted per hectare, then 200-300 tons of cotton can be grown per hectare. Therefore, the existing potential of cotton is very great; it is only necessary to bring it to the field and fully utilize it.

Unfortunately, in June and August, cotton bushes, which begin to ripen with 45 to 60 seeds, gradually drop buds, honeycombs, flower buds and, finally, only 7-10 seeds remain in the body of the plant. The reasons for such a large loss are varied, so many recommendations have been developed to prevent it. For example, pruning the growing point of the main stem, from which the lateral branches of the cotton plant grow, simultaneously reduces excess shoots located far from the main stem, and with the surgical method, the interweaving of cotton elements is reduced. . But it is impossible to use this method in the field. Because the costs, manpower, time are not enough.

Some scientists associate the loss of fruit nodes on a cotton bush with a lack of water, nitrogen and other minerals. Another group of scientists believes that the lack of full sunlight for the production of knots and bolls is due to the fact that cotton seedlings are planted too densely than normal, garimsal and other external factors, as well as a lack of useful microelements such as iron, zinc, copper, Potassium, molybdenum, calcium are present in cotton. All views of scientists are not without their own foundations.



The formation of fruit elements in a cotton bush includes a long period from the carding phase to cold snap, with nodules appearing continuously. Moreover, the reproduction process is very complicated and takes 75-90 days. During this period, cotton's need for nutrients, moisture and light is highest. If at this time, from June 15 to August 25, there is a lack of nutrients, water, air and light from external factors - or it is not moderate, then this will lead to the fact that many 85% percent of the elements of the harvest will be intertwined.

Having analyzed the above, it is possible to grow a high yield of 45-50 t/ha by scientifically controlling cotton yield by external factors.

- There should be no weeds in the fields sown with cotton; only then can the ineffective consumption of mineral fertilizers and moisture be prevented.

- By timely removal of the growing points of the main stem and lateral branches of the cotton plant, leaf level is reduced, the amount of light and air temperature for the cotton plant is improved, moisture and nutrients are more directed to the elements of the crop, and scattering is prevented. decreases by 20%. The opening of cotton is accelerated by 4-5 days. Productivity increases to 5 tf.

- It is necessary not to loosen the cotton and not to increase the vegetative mass. To do this, it is necessary to fertilize and water in moderate quantities.

- One of the solutions to this problem is the creation and introduction of cotton varieties that meet all fiber quality requirements, do not shed crop elements, and are resistant to diseases and pests. A yield of 40-50 quintals was ensured by dissolving macro- and microelements in sufficient quantities in water using reservoirs and organizing drip irrigation.

By introducing 80-100 tons of rotted local manure per hectare and using modern agricultural technologies, a harvest of 45-50 tons per hectare was obtained at the Sahibjon farm in the Tashlok region in 2019-2021.

Examples and suggestions are given above.

It was recommended that enterprising, innovative farmers be provided with the opportunity to introduce innovations based on the results of scientific work, based on internal capabilities.

At the end of our speech, it should be noted that today we use only 15-20% of the internal potential of the cotton plant. Further development of the remaining 80-85% of cotton's potential requires joint research by scientists and specialists in many fields to find solutions to the problems of growing a high-quality cotton crop of more than 100-120 tons per hectare.

References:

1. Нурматов Ш.Н., Мирзажонов Қ., Авлиёқулов А. ва б. Дала тажрибаларини ўтказиш услублари. – Тошкент, 2007. – 147 б.
2. Успенский Ф.М. Паутиный клещ и система приёмов борьбы с вредителями хлопчатника. – Ташкент: Фан, 1970. – 304 с.
3. Хўжаев Ш.Т. Ўсимликларнинг зараркундалардан уйғунлашган ҳимоя қилишнинг замонавий усул ва воситалари. – Тошкент: “Навруз”, 2015. – 552 б.
4. Хўжаев Ш.Т., Маматов К., Курязов Ш., Дурдиев К. Айрим агротехник чора-тадбирларнинг ёўза тунлами ривожланишига таъсири //Мақолалар тўплами. – Тошкент: Талқин, 2008. – Б. 35-40.
5. Хўжаев Ш.Т., Курязов Ш., Юсупова М. Ёўзани чилпиш ва кўсак курти //Мақолалар тўплами. – Тошкент: Талқин, 2008. – Б. 40-44.
6. Яхонтов В.В. Экология насекомых. – Москва: Высшая школа, 1969–487 с.
7. Шакирова Г.Н. Хужаев Ш.Т. Важность агротехнический методов против вредителей растений //Универсум: технические науки: научный журнал. – Москва, 2020. - №7. – С.-25.



8. Ш.И.Маматожиев, М.А.Мирзаева, Г.Н.Шокирова Влияние технологии допосевной обработки на содержание влаги в почве //Универсум:технические науки: научный журнал. – Москва, 2021. - №6(87). – С.46-49.

