

## “INVESTIGATION OF THE EFFICIENCY IMPACT OF IRRIGATION REGIMES ON COTTON GROWTH AND DEVELOPMENT”

*Ashurova Gulmira Aminovna  
Teacher Trainee Bukhara State  
Technical University Uzbekistan*

### ANNOTATION

Cotton does not consume the same amount of water at all stages of growth, setting a specific water and nutrient regime for each phase of its development, taking into account the interaction between soil, water and plant need. Violation of the interdependence slows down the growth of the plant, slows its development and delays the passage of the basic phases.

**Keywords:** vegetation, hectare, critical growth, reclamation, pest, weeding.

### IRRIGATION OF COTTON.

The introduction of optimal irrigation norms and procedures in the development of cotton is an important condition for high yields. Cotton was irrigated with 700-800 m<sup>3</sup> of water for 10-14 hours before flowering and 900-2100 m<sup>3</sup> of water for 18-24 hours during the flowering period.

Bukhara-6 cotton variety is more drought tolerant than other varieties and requires less water. On the farm we observed, the water was mostly irrigated at night with juice. Such irrigation acts as a mulch by feeding the manure in the water to the cotton, reducing water evaporation and improving its absorption into the soil. In this way, the plant drinks enough water, and most importantly, the nutrients are not lost.

### COTTON PESTS AND INSECTS.

Thrips and sap are very dangerous for the initial growth period of the plant. To increase the plant's resistance to them, a mixture of nitrogen, phosphorus and potassium fertilizers or a 1.5-2.5% solution of a separate type was applied using OVX-28 tractor sprayers at a rate of 200-300 liters of aqueous suspension per hectare.

Pheromone handles are hung in the field to control the cotton bollworm, and are taken to the field every morning and evening. If butterflies are caught in the morning, 1 g of grain trichogramma is applied 3 times in 5 days. Bracon is carried out in the ratio 1: 5, 1:10, 1:20, depending on the appearance of the worm in the field and its density. From 300 to 200 females per hectare. Trichogramma and bracon are distributed early in the morning (5-1000 hours) in the evening (17 to 21). If more than 20 butterflies fall on a pheromone trap in one night, a chemical fight will take place.

Chemistry is the study of the structure and evolution of matter. Chemistry, like other sciences, came into being as a product of human activity, with the aim of satisfying natural needs, producing the necessary products, synthesizing one another, and finally learning the secrets of various phenomena. One of the chemical drugs used is karate (0.5 l / ha), Nurel-D (1.5 l / ha), tolstar (0.6 l / ha), daltofos (1.5 l / ha). 200–300 m is sprayed at the expense of the working solution.

### CHILPISH.

The pruning is done in a timely manner to preserve the comb, flower buds, and to accelerate the process of bud formation and maturation. When cotton is harvested in a timely and quality manner, the ripening of the pods accelerates by 5-10 days and increases the yield by 3-4 quintals per hectare.

This important event is held by cutting the growth point of the main and side branches of the cotton to stop the vegetative growth of the plant and direct the nutrients to the harvest targets. On the farm where the chilpish is observed, Chilpish is carried out manually when 12-13 crop horns appear. Chilpish was done 3 times. When the chilling was done in time, an additional 3-4 pieces appeared on top of the cotton. This increased productivity by 15-20%. Fiber quality is hidden. Economic efficiency has increased.

One of the main agro-technical measures in preparation for the cotton harvest is defoliation. Chemical de-leaving of the plant before harvest accelerates the opening of the pods, increases the amount of high-quality fiber, eliminates the rot of the pods and ensures timely harvesting.

In cotton, leaf shedding began when 60-70% of the buds were opened, and magnesium chlorate defoliation consumed 8-12 kg per hectare, depending on plant growth. Cotton picking. Timely harvesting of cotton without destroying it is a medium-important agro-technical measure. To harvest the cotton crop, the field was first selected and then prepared. When choosing cotton fields for the cotton harvest, first of all, attention was paid to the timing of sowing. In cotton, 50-60% of the openings were identified and quality defoliation was carried out. 10-12 days after defoliation, the field is ready for cotton picking. Roads have been prepared for access to each field Irrigation ditches were buried, and the field around it and the ditches inside it were leveled.

Cotton drying sites have been prepared. Cotton was harvested in the area around the field, and trailers were made available for walking. Before going to pick cotton, the farmer took 10 plant samples in 5 envelopes from 5 points in the field and counted the total number of cocoons in these plants and the number of openings. Of the 150 plants in the 10 plants in the sample, 120 were opened, which is 80-85%. Such a field is ready for harvest.

The farm we observed finished the first harvest on day 3 and started the second harvest on day 12 and finished it on day 2. The third picker came down to pick after 15

days and in 2 days the picker completed the cotton pick. 100% of the planned cotton was sold to the first grade.

## AGROTECHNICAL MEASURES IN GROWING BUKHARA-6 COTTON.

The following processes are required for agro-technological cultivation of Bukhara-6 cotton variety.

- A) Autumn plow.
- B) Leveling the ground.
- C) Soil washing.
- G) Getting buds for planting and giving backup water.
- D) Preparation of seeds for sowing. (mixing the ash with the seeds).
- E) Apply herbicide along with sowing seeds.
- J) Unification.
- Z) Caring for cotton.
- L) Feeding cotton.
- M) Irrigation of cotton.
- I) Sprinkle cotton.
- T) Cotton pest and disease control
- O) Cotton leaf shedding, Cotton picking.
- Cotton storage and initial processing.

### UNITY OF COTTON.

Cotton was held when 1-2 leaves appeared. Unification was completed in 8 days. On the eighth day after the single, that is, once removed, the weakly diseased seedlings were removed and a full and flat hectare was formed. Due to the strong branching of Bukhara-6 cotton from the measuring sticks, 90-95 thousand seedlings were left on one hectare. YA corresponds to 8-9 seedlings per square meter.

### CONCLUSION

To study and analyze the textbook literature on the technological features of cotton varieties grown and considered promising in the territory of the Republic and the regime of cotton irrigation, the original thickness of the opinion expressed in the literature. The following conclusions can be drawn from the analysis of the results of field experiments on the effect of different irrigation regimes and bush thickness on its growth, development and productivity. The yield of cotton depends on the selection of cotton varieties grown by regions, soil climatic conditions, their method of sowing, bush thickness, irrigation regime, nutrition and other technological features. Irrigation regime and thickness of the bush per hectare have a significant impact on the growth, development and yield quality of cotton: cotton of Bukhara-6 variety Irrigation in relation to Ch DNS 70-

Gives good results in 70-60 percent regimen. Irrigation regime of cotton significantly affects the height of the stem, the formation of the fruiting branch and the accumulation of pods. According to the studied variant, the most sympodial branches are cotton buds Ch D N is found to be 70-70-60% relative to S:

#### REFERENCES.

1. Raximbaev F.M. Hamidov M.H. Bespalov F.A. Peculiarities of irrigation of agricultural crops in the Amudarya sheep section. Tashkent, Fan-1992.
2. Mirzajonov Q.M., Malaboev N.E., Umarov D.D. "The reclamation of the lands along the island is in the book" Modern technology of cotton growing ". Tashkent-1993