

ANALYSIS OF MOISTURE AT DIFFERENT POINTS OF COTTON IN THE GARMENT DURING THE STORAGE PROCESS OF HIGH- HUMIDITY COTTON

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Abstract

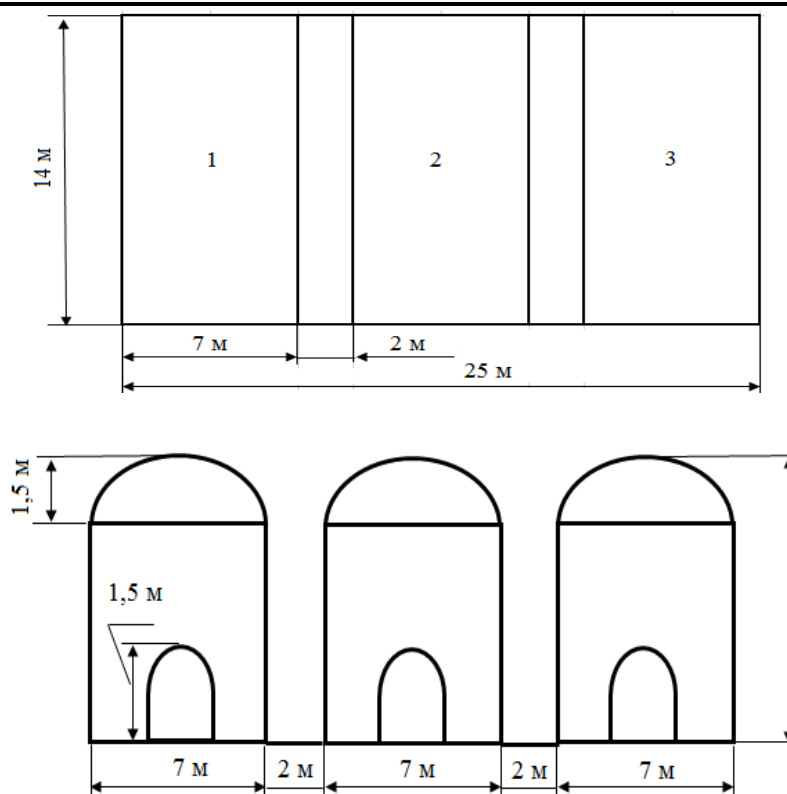
In this article, the unevenness of moisture content in the storage of high-moisture cottons in cotton ginning enterprises is studied, and the effect of this unevenness on the production process is considered.

Key words: Cotton, fiber, quality, storage, humidity, dirt, temperature.

Currently, clusters are focused on obtaining high-quality fiber with extensive use of resource-saving technologies. In order to obtain quality fibers from cotton received by the cotton ginning enterprises belonging to the clusters, it is necessary to pay attention to the process of keeping them in good quality.

Mainly, there are many changes in the process of storing cotton with high humidity, these changes lead to self-heating of cotton, yellowing of its color, and as a result, low-quality fiber is obtained from this cotton. Currently, cotton with high moisture content is stored in 3 7x14 meter storage areas with a distance of 2 meters from the existing 14x25 meter storage areas in cotton ginning enterprises and cotton preparation facilities. Fig. 1.





Due to the fact that high-moisture cotton collected in the gin area is brought from different farms with different moisture and dirtiness, the moisture and dirtiness are not distributed uniformly throughout the gin, which in itself leads to the process of internal heating during the storage of high-moisture cotton.

Experiments were conducted at the Uzbek cotton ginning enterprise belonging to the "REAL AGRO COTTON" cluster in order to study the distribution of moisture along the grain during the storage of high-moisture cottons.

Initially, the high-moisture S-6524 selection grade, industrial grade 5/3 cotton was placed in 7x14 meter plots.

During the storage process, the daily temperatures of the barn were determined and recorded using a thermoscope, and ventilation was carried out based on this temperature change.

In order to study the distribution of moisture in the area of the tunnel, samples of 0.5x1x1 meters were taken from 3 points of the site where the tunnel was divided into 3 equal parts.(0.5 meters above), humidity from the 3rd point below (0.5 meters above the ground)



VXS-M1 was determined on the laboratory instrument for moisture determination Fig. 2

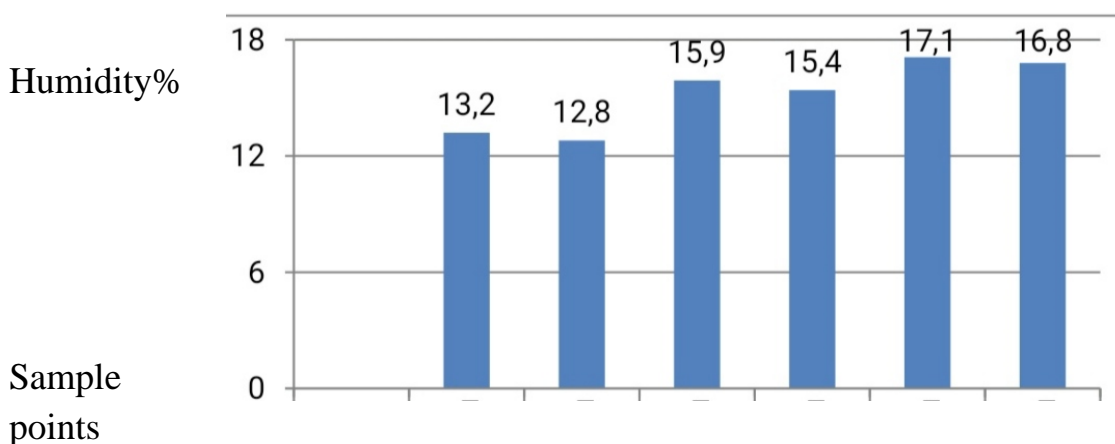


Figure 2.

Histogram of moisture unevenness at different points of the slope As can be seen from the histogram, the humidity at different points of the gharam is different. Unevenness of moisture affects both the production process and causes unevenness in the drying, cleaning and curing process.

As a result, fiber quality deteriorates.

Analyzing the obtained results, it can be concluded that in the process of storing high-moisture cotton, it is necessary to control the uniform distribution of moisture and dirt, and to take the difference between moisture and dirt as close as possible. As a result, high-quality cotton with high moisture content is preserved, and high-quality fiber is obtained from it.

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