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TECHNOLOGY OF PREPARATION, STORAGE AND INITIAL WORKING OF COTTON RAW MATERIALS

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Abstract. *Today, in the cotton industry in Uzbekistan, significant work is being carried out in the field of perfecting the technology of primary processing of cotton and equipping it with new equipment and technology, mechanization and automation of heavy work that requires a lot of work. This article describes in detail the technology of preparation, storage and initial processing of raw cotton.*

Key words: *cotton factories, cotton fiber, modern technologies, special quality labels, Bukhara-6, Bukhara-8, Bukhara-102, S-6527, Namangan-77 varieties.*

In addition to the growth of the raw material base, many new cotton factories and cotton processing centers were rebuilt, and cotton processing mechanisms were equipped with new modern equipment. This makes it possible to further improve the quality of cotton products. Uzbek cotton fiber is somewhat competitive in the world market, and has been occupying prestigious positions in this field. In particular, the fiber quality of cotton of Bukhara-6, Bukhara-8, Bukhara-102, S-6527, Namangan77 varieties of cotton gives a high index, and it is possible to obtain special quality labels. 80-85 percent of the cotton fiber grown in our republic is exported to foreign countries. About 30% of the produced cotton products are processed in our country. It is planned to increase this indicator in the future. In the world market, special attention is paid to the whiteness of the fiber, the degree of pollution, and especially the micronize index. If the micronize index is higher than 4, 8-4, 9, the fiber is considered coarse and cannot compete in the world market. The purchase price of coarse fiber is also low. The main and acceptable indicator for determining the price of cotton fiber is its relative breaking strength of 23.5-26.4 gk/tex.

Fast ripening of cotton, productivity, quality of cotton fiber, resistance to diseases, soil and climate conditions and other unfavorable conditions - all this depends on the selection of the most suitable selection varieties of cotton and their rational placement. Currently, cotton factories are equipped with modern technologies, for the efficient use of these equipment, highly educated, specialized or secondary-educated middle-level employees (plant managers, mechanics, energy workers, workshop and shift supervisors) are required. , foremen, adjusters, trade experts and classifiers) is important. Along with cereal crops, cotton is one of the oldest cultural crops on our planet. Cotton thread was used in the Indus Valley 3 thousand years ago. Cotton was cultivated for economic needs in Central Asia before the 5th century AD. Cotton is a plant of the genus Gossipium in the Malva family, a small tree-like plant that can be annual or perennial. A short annual plant with a height of 0.7-1.5 m branches is a cultivated type of cotton.

There are 594 types of cotton that are useful in the economy: Indo-Chinese (Gossipium arboreum), African-Asian (Gossipium herbaceum), Mexican (Gossipium hirzutum) and Peruvian (Gossipium barbadenze).

The last two types of cotton are found in Central Asian countries, including Gossipium barbadenze, which is grown only in Turkmenistan, Tajikistan and Uzbekistan. Cultivated types of cotton consist of several selective varieties. A breeding variety is a set of plants with a classification unit of a cultured type with morphological and economic characteristics and characteristics of the same generation. Morphological signs of cotton are distinctive features of plant structure (stem structure, branches, leaves, flower, boll, seed, etc.). The characteristics of the economy include indicators that determine the quantity and quality of the harvest, in terms of satisfying human needs. The main indicator for cotton is the quantity and quality of fiber obtained from it.

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Depending on the quality of the fiber, cotton is divided into long and medium fiber varieties. The length of the fiber of the long fiber cotton variety is 36-42 mm. The long fiber varieties are mainly Gossipium barbadenze. Medium fiber cotton is 25-35 mm long and has a relatively coarse fiber, mainly Gossipium hirzutum species or hybrids between species. Cotton is propagated by seeds that can retain their vital properties for several years. In order for the seed to germinate, the necessary conditions for moisture in the soil and temperature in the environment are necessary. The normal growth of cotton begins when the humidity of the seed is 60 percent or higher. For this reason, hairy seed is moistened before planting to speed up its germination. The seed begins to germinate in 5-7 days when the temperature in the soil is 14-16 C and in the air is 15-20 C. After the seedling takes root, the vegetative phase of growth begins, the first true leaf appears seven to ten days after the cotton sprouts, and after another 4-5 days, the second leaf is formed, and so on. in this way, the cotton stalk begins to grow.

After the formation of 5-7 or more leaves, the branches of the crop (sympodial) begin to develop. About a month after the cotton sprouts, the first boll is formed, and after another 25-30 days, the flower opens. Shoots form and flower every three days vertically (from bottom to top along main stem) and seven days horizontally (on crop stems) (Table 1). The harvest, which is called kosak, consists of pallachas, which are limited by 4-5 cobs in medium fiber varieties. In long fiber varieties, the pod has 3-4 lobes. The palla contains 5-9 or more fibrous seeds, each of which is covered with fibers of a certain length (from 25 to 45 mm) and short fluff (less than 20 mm long). In terms of economic and technological parameters of cotton and fiber, weight of one bag of cotton and 1000 seeds, fiber yield, length, fineness, relative breaking strength, ripeness, micronaire index, fiber uniformity and appearance Appearance is important. The physical values of the morphological characters listed in the table are reflected in the technological process of cotton processing.

The temperature necessary for good growth, development and production of cotton is called effective temperature. This temperature is equal to the difference between the average daily air temperature and the biological minimum temperature (10C for cotton). Classification of cotton fiber by quality Cotton is grown only for raw cotton. Due to gross gasification of cotton growing areas, the use of cotton stalks as fuel in rural areas is losing its former importance. The processing of cotton stalks to obtain building materials from it is being partially started. The main product produced from raw cotton is cotton fiber. 595 Therefore, it is classified according to the quality of cotton fiber in the world. In Uzbekistan, the system of classifying cotton according to fiber quality has been adopted. Currently, the method of fiber classification involves dividing into types (vertical classification) and industrial grades (horizontal classification). Accordingly, cotton fibers are divided into certain types and industrial varieties according to their quality. According to the current standards, fiber strands are divided into 9 types according to mass length, relative tensile strength and linear density. Current standards of fiber quality indicators are by type. Own DST 604:2001. "Cotton fiber. Technical conditions". according to the standard, the type of cotton fiber is determined by the lowest indicator of staple mass length or linear density.

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