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ANALYSIS OF THE ORIGIN AND HARVESTING OF COTTON

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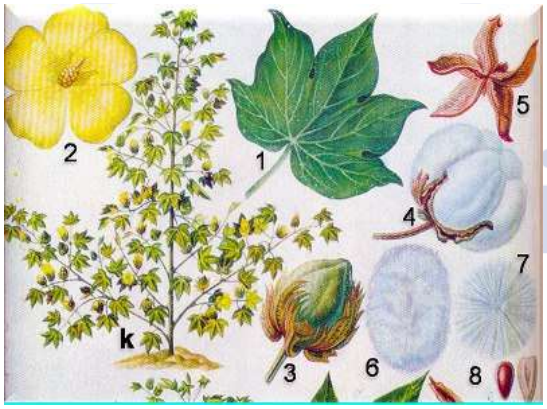
Abstract: In this article, the history of the origin of cotton and the recommendations for increasing its yield are given through its analysis.
Key words: Cotton, fiber, yield, irrigation, mineral fertilizer, temperature

Enter. Cotton is a perennial plant that belongs to the family of flowering plants (genus GASSIPIUM). It originated in the Cretaceous period and has been living for several tens of millions of years. Cotton first began to grow in tropical countries, and later, with changes in the earth's climate, it also began to grow in arid regions.

Cotton spread in north-western India, Pakistan, Samoli semi-deserts, and after the opening of the American continent, it was found that it spread to Mexico, Peru, and Brazil. The third place of cotton is Australia, where you can still find wild species. So, the cotton plant is a semi-shrub and tree-like perennial, and its wild species were the reason for the emergence of species with one-year short-day neutral and sympodial branching.



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In more than 80 countries of the world, 20 million tons of cotton fibers are grown annually on an area of approximately 30-32 million hectares (annual change is about 2 million hectares). China, the USA, India, Pakistan and Uzbekistan are the leading countries in the supply of cotton fiber. They account for 65% of the cotton fiber grown in the world, the remaining 35% are cotton fiber, 75 It belongs to the countries that grow za. More than 200 million pickers will be busy with harvesting cotton. 60 million working farmers are constantly working in various organizations and enterprises in cotton raw materials, processing, seed, oil, and protein processes. Of the countries that grow cotton, China annually has approximately 3.7 million hectares, Uzbekistan has 1 million 441 thousand hectares, with a yield of 24.5 s/ha and a gross yield of 3.5 million tons, India 9 million, Pakistan 2.9 million hectares, Brazil 2.2 million hectares, as well as Egypt, Mexico and Turkey is one of the main cotton producing countries.

Gossipium hirzitum - medium fiber
(Mexican) cotton
1-leaf, 2-flower, 3-pod, 4-open pod, 5-pod, 6-lobe, 7- fibrous waste, 8-seed

Cotton is one of the valuable technical crops from which various raw materials and products are obtained. But the main purpose of planting it is to get fiber. 63 kg of seed and 37 kg of fiber are obtained from 100 kg of raw cotton. The following main products are obtained from the seed. Kunjara-23 kg, barley-18 kg, oil-12 kg, spinning fiber-33 kg, fluffy cotton-3 kg, short fluff (delint)-3.5 kg, fluffy lint-3.5 kg, large cotton-2 kg. About 300 products are obtained from cotton fiber, seed, stalk and leaf. One kilogram of fiber produces 8-12 meters of chit or 15-20 meters of batiste, 40-150 spools of yarn, and dozens of other products are obtained from the seed. During cotton processing and ginning, dead (immature short-fibered bolls, tangled fibers) and short lint (less than 5.0 mm in length) are produced. Cotton contains 30-35% fiber and 50-55% seed (24-29% oil in seed), 2-3% dead fiber, 3-5% short lint. Cotton is divided into cotton, medium-fiber and long-fiber types depending on the type of selection and the thickness of the fiber.

It is known that the potential of the cotton plant is very large, and it has been proven that it can produce 250-300 centners of cotton per hectare or more in hydroponics, vegetation containers and some stationary experimental fields. For example, Xinjiang-Uyg of China In 2011, a world record high cotton yield was recorded in Ur Autonomous Region. In the experimental field, 126.7 quintals of

cotton were grown from one hectare. Also, in 2016, 60 quintals of cotton per hectare were grown in Israel. In our country, 30 to 45 centners of cotton per hectare is grown in advanced farms and scientific research institutes. However, this cannot be an abstract limit of cotton productivity.

Indicator names	Standard					
	to hairy seeds			to hairless seeds		
	I category	II category	III category	I category	II category	III category
Moisture (mass percentage of moisture), max	9,0	10,0	10,0	9,0	10,0	10,0
Impurity (mass fraction of mineral and organic impurities), max	5,0	6,0	0,7	0,2	0,3	0,3
Hairy, mostly	—	—	_	0,3	0,4	0,5
Mechanical damage, at most	5,0	6,0	7,0	6,0	7.0	8,0
residual fiber, at most: for hairy seeds	0,8	0,8	0,8	—	—	—
For naturally depilated seeds	0,4	0,4	0,4	—	—	—

It is an important task to create the optimal conditions necessary for the cotton plant at each phase and stage of its growth and development. In a word, the possibility of harvesting cotton is very large. Cultivated varieties that are planted as annual plants, while keeping their genetics, are sometimes 50-60, even 120-130 in some cotton bushes, on the edges of the fields, on the roadsides. we meet plants with more pods.

Unfortunately, this situation cannot be reproduced in field conditions. During the growing season, cotton forms a total of 50-60 bolls, flowers, bolls and crop elements. At least 80-85 percent of them are shed in a natural state due to lack of one or another external and internal factors. Only 7 to 10 bolls per bush in Paykal

are preserved until the end of the growing season and become cotton. will be opened. It takes 70-75 days for mass production of cotton buds. This period includes the stage of combing the cotton, until the opening of the bolls into cotton wool. The shedding of crop elements in cotton coincides with the same period, it is scientifically based that 43% of the crop nodes are shed in June, 47% in July, and 8-10% in August. Therefore, the external factors necessary for the formation of generative and vegetative organs in the cotton bush, as you know, change. air and nutrients are provided at the level of the plant's needs, and if we save an average of 1.5 bolls per bush, we will increase the yield by 4-5 centners per hectare.

As a result of a sharp increase in temperature, the process of photosynthesis in cotton is disturbed, that is, the air nutrition of cotton deteriorates. Under the influence of hot temperature, there is a competition for water between leaves, stems, branches and crop nodes. Most of the water is absorbed by the leaves and evaporates. Therefore, the moisture content of the soil during this period should not be less than 70-75%. The importance of sufficient moisture is that water keeps the temperature of the tissues in the plant in check. If there is too much moisture, the vital activity of the root system of cotton will deteriorate, the roots will breathe poorly due to lack of oxygen, as a result, the cotton will begin to absorb nutrients and water slowly. . Nutrients do not sufficiently reach the upper varus of the cotton and the bolls and combs located in the 2.3 position of the side branches. As a result, it leads to their premature shedding. Adding water to some cotton plants in July has a negative effect on the viability of male pollinators in the cotton flower due to the increase in the relative humidity of the air between the cotton rows. it causes it to spill. Under the influence of high temperature, it is observed that the cold fruit that enters the body of the cotton that is hot is dropped. Therefore, as much as possible it is useful in every way to organize cotton watering at night. Because it reduces the negative impact of high temperature on the cotton crop.

At the time of harvesting, in the months of flowering and fruiting, it is necessary not to stop applying local fertilizers to cotton and watering with manure. Because it has been proven that local fertilizers contain many nutritious microelements and other substances for cotton, and cotton takes full advantage of this. They provide the synthesis of various compounds and biostimulants in cotton, such as carbohydrates, proteins, enzymes, nucleic acids. In addition, it increases the resistance of cotton to wind, heat, lack of water, and similar unfavorable factors.

Analyzing the above, maintaining the crop nodes formed in cotton is important in the collection of crops in the cotton plant only when external factors are provided,

primarily nutrients, moisture, light, temperature, and air are controlled by human perception. opportunities will be created.

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