

THE DEVELOPMENT OF THE SELECTION PROCESS IN OUR REPUBLIC AND ITS PRACTICAL IMPORTANCE

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Annotation

This article contains information about the scientific work carried out in recent years in the field of selection of the cotton growing industry of our republic. The achievements of the conducted scientific research are analyzed.

Keywords: selection, genotype, genetic composition, plant varieties, productivity.

In our republic, in the field of breeding and seed production, various methods such as hybridization, changing plant species under the influence of drugs, and exposure to various rays are used. The composition of most of the created varieties is not improved to the level of a mature variety population, the variety is submitted to the test and propagated without being enriched with genotypes with high potential, and such varieties are improved [1-4], without the possibility of variation. cannot live long in more areas and will be excluded from zoning. On the contrary, with the help of improved methods of genetics and selection, all the characteristics of the biological and valuable economic value of the (stable) varieties whose genetic composition has been enriched and become a balance have been developed from generation to generation.

Cotton farming is an important branch of production in our country, and promising cotton varieties being created play an important role in its development. In the development of this industry, not only economic characteristics of varieties (speed, fibre yield, fibre length, meeting industrial demand), but also resistance to various diseases and pests, adaptation to extreme conditions or tolerance are important [5,6,7,8,9]. It is important to study the wild and semi-wild forms of cotton from different countries, which retain many useful characteristics, in order to collect such characteristics in varieties. Samples of cotton with valuable

characteristics can be found in the collection that has been studied and preserved for many years [3,4,5,6].

Relinquishing the monopoly of cotton made it possible to further improve its cultivation, create new productive varieties, and improve the quality of fibre due to the fact that they pay great attention to the development of the cotton and textile industry in our country.

World breeders have been working on the creation of a medium fibre cotton variety for several decades [10,11,12,13]. Because every additional millimetre of fibre of this grade increases its value. However, in the process of improving the quality of the fibre, its early ripening characteristics and productivity may be damaged. At the same time, it is not easy to improve the quality of medium fibre cotton, accelerate the flowering and opening, and also increase the yield. Solving this task requires a lot of time and money.

The solution to this problem ensures the stability of production in agriculture, achieving high results in small cultivated areas during the short growing season [14,15,16,17,18,19,20]. It also reduces the negative impact of economic activities on the environment.

Today, selection, seed breeding, renewal of varieties, implementation of new fast-growing varieties of cotton with high fibre quality and their rational placement in different soil and climate conditions of our country have been determined to be a priority state task.

Based on the soil and climate conditions, 5 regions for the placement of varieties are defined in our republic [21,22,23,24,25,26,27]:

1. Regions where very fast varieties are planted. This region is located at an altitude of 900–1300 meters above sea level, with an effective temperature range of 1900–2000 °C. includes Kosonsoy and other districts.
2. Regions where Tezpushar varieties are planted. This includes the plain regions of the northern regions, the north of the Republic of Karakalpakstan, and the mountainous districts of Tashkent and Samarkand regions, where the effective temperature is 2000-2150 °C.
3. The region of the Central Provinces includes the plains and pre-mountainous regions at an altitude of 100-850 meters above sea level, with an effective temperature range of 2150-2500 °C.
4. The regions of Tashkent, Andijan, Khorezm and Surkhandarya regions with good water supply are included.
5. Regions where thin fibre varieties are planted.

These cotton field regions determine to a certain extent the yield and fibre quality of the technical crop, taking into account the weather conditions, that is, and insufficient heat. Prior to frost, early-harvested cotton is known to have more first-grade fibre than late-harvested cotton. The fibre yield of cotton belonging to the first industrial grade is 32-34%, while the fibre yield of cotton belonging to the third-fourth industrial grade is 24-28%.

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