



## THE INFLUENCE OF PLANTING PERIODS OF NEW MEDIUM AND THIN FIBER COTTON VARIETIES ON SEED GERMINATION DYNAMICS

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<b>Article history:</b>		<b>Abstract:</b>
<b>Received:</b>	24 <sup>th</sup> October 2022	In the scientific article, the influence of planting dates of new medium and fine fiber cotton varieties on various extreme and stress conditions during the season, the tolerance of cotton varieties, seed germination, and the influence of them are described.
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V nauchnoy state describes the effect of new crop seeds and tonkovoloknistykh sortov klopchatnika na ustoychivost sortov klopchatnika k lichnym stressovym usloviyam v techenie sezona na dynamics vskhojest semyan.

Nowadays, economic, rational and effective use of existing land, water and natural resources is of great importance in the further development of agriculture and deepening of economic reforms in our country. Also, the cotton industry plays a special role in achieving the production of high-quality, competitive agricultural products that fully meet the requirements of world standards.

Uzbekistan is the sixth largest producer of cotton in the world after China, USA, India, Pakistan and Brazil.

As part of the strategy for the development of agriculture of the Republic of Uzbekistan for 2020-2030, according to the decree of the President of the Republic of Uzbekistan No. PF-5853 of October 23, 2019, in the direction of the development and implementation of the state policy on food insecurity in 2021, farming skills, soil-climate conditions, water Based on the supply, all regions of the republic will gradually transition to the cultivation of certain types of products. In the placement of agricultural crops, the main attention will be paid to its productivity, exportability, cultivation in integrated areas. Based on the cooperation and cluster system, a system of product cultivation, processing, storage and sale to domestic and foreign markets will be established. In the strategy, agricultural scientists and specialists have great tasks in the direction of rational placement of fast-ripening and fruitful new varieties of cotton that meet the world standards and state requirements for the quality of cotton fiber, based on the soil and climate conditions of the regions, and the improvement of agrotechnics for its maintenance.

Taking into account the soil, climate and conditions of the Surkhandarya region, the maintenance of the system of agro-measures and the development of planting periods and norms of mineral fertilizers are considered urgent today.

Each emerging cotton variety, especially the newly created medium and fine fiber cottons, requires specific agrotechnology, so it is necessary to develop their agrotechnics taking into account the different soil and climate conditions of the Republic when planting cotton varieties. In this, one of the main measures of agrotechnology is the irrigation procedures for the effective use of mineral fertilizers, and the growth of the cotton planted in different periods, taking into account the impact of abiotic factors, taking into account the impact of abiotic factors, the occurrence of different stress situations in the development phases of the planting periods, depending on the thickness of the seedlings, and the soil climatic conditions, it is more relevant to study the impact on development and productivity.

Abiotic factors are inorganic factors of the environment that affect living organisms, namely climate, humidity, radiation, salinity and space effects, light and heat, air flow, water exchange. Depending on the number and distribution of abiotic factors in their range, cotton varieties depend on limited or maximum factors for the survival of living organisms. The excess or deficiency of these factors has different effects on the growth and development of living organisms. Scientific studies were carried out in order to study the dependence of different cotton varieties on the abiotic effects during the seasonal growth period and to determine the importance of feeding standards for development and yield.

In this regard, the influence of different planting periods of thin and medium-fiber cotton varieties Sherabad-ShN and SP-1607 on the yield and its quality was studied in the conditions of barren soils that are being grazed in the

extreme climatic conditions of Surkhandarya region. In this case, SP-1607 and medium fiber Sherabod-ShN varieties of cotton with thin fiber were planted and studied in different periods.

Medium and thin fiber cotton varieties are planted in three terms this year on March 25, April 5 and April 20.

The dynamics of seed germination on 25.03.2022, 5.04.2022, 20.04.2022 were determined. It should be noted separately that the drop in air temperature in the first and second ten days of April this year, the drop in the temperature in the 10 cm layer of the soil, the fast and sharp germination of the planted seeds. s had difficulties in germination.

In our research, new medium and thin fiber cotton varieties were planted at different periods, and the effect of mineral feeding norms on germination dynamics of cotton seedlings was determined.

The effect of seasonal mineral feeding on seed germination and dynamics was determined according to the planting dates of thin and medium fiber cotton varieties in the conditions of barren soils that are being grazed.

The effect of planting dates on the dynamics of sprout germination was unique to the planting dates of cotton varieties planted in 2022.

It was observed that the dynamics of seed germination of cotton varieties planted in three periods differed according to the characteristics of the soil and climate between certain periods and the biological characteristics of the varieties. It can be noted that the germination and dynamics of thin-fiber cotton varieties differed slightly from the medium-fiber cotton varieties due to the special biological characteristics of the varieties. This situation was observed in all three planting periods. In the experiment, it was found that the dynamics of germination initiation and monitoring periods were the highest in variants planted on 5.04, and the full germination period was 2-3 days and 5-10% higher than cotton varieties planted on other dates.

It was found that sowing of medium and thin fiber cotton varieties in different periods in the conditions of barren soils of Surkhandarya region affects the speed and quantity of seeds germination according to the specific spring conditions of the soil and climate. In the study, the full germination of the Bukhara-102 variety planted on April 5 in the spring was 92%, the Sherabad-ShN variety was 93%, and the thin fiber Termiz-202 variety was 94%, and the SP-1607 variety was 94%. The first planting date was 25.03.2022 4-6% higher than the third planting date, and 2-3% higher compared to 20.04.2022 Table 1.

The dynamics of sprouting, %.  
(first planting time, 25.03.2022) Table 1

Goza varieties	Sowing periods	Start of germination	Observation periods, days			Complete germination, %
			3.04	5.04	7.04	
Bukhara-102	25.03.2022	1.04	13	25	50	86
Bukhara-102	25.03.2022	2.04	13	24	50	85
Sherabad-Sh	25.03.2022	2.04	15	26	53	88
Sherabad-Sh	25.03.2022	1.04	14	28	55	90
Termiz-202	25.03.2022	1.04	14	25	55	90
Termiz-202	25.03.2022	1.04	15	26	58	89
SP-1607	25.03.2022	1.04	14	26	60	89
SP-1607	25.03.2022	1.04	13	28	61	90

(second semester, 04/05/2022)

Goza varieties	Sowing periods	Start of germination	Observation periods, days			Complete germination, %
			11.04	13.04	15.04	
Bukhara-102	5.04.2022	10.04	15	27	50	92
Bukhara-102	5.04.2022	10.04	15	25	50	92
Sherabad-Sh	5.04.2022	10.04	17	28	53	92
Sherabad-Sh	5.04.2022	10.04	15	30	55	93
Termiz-202	5.04.2022	10.04	16	32	55	95
Termiz-202	5.04.2022	10.04	15	30	58	94
SP-1607	5.04.2022	10.04	17	33	60	95
SP-1607	5.04.2022	10.04	16	35	61	95

(third semester, 20.04.2022)

Goza varieties	Two periods.	The beginning of germination	Observation periods, days			Complete germination, %
			28.04	30.04	2.05	
Bukhara-102	20.04.2022	24.04	15	27	50	91
Bukhara-102	20.04.2022	24.04	15	25	50	92
Sherabad-Sh	20.04.2022	24.04	17	28	53	91
Sherabad-Sh	20.04.2022	24.04	15	30	55	92
Termiz-202	20.04.2022	24.04	16	32	55	92
Termiz-202	20.04.2022	24.04	15	30	58	92

SP-1607	20.04.2022	24.04	17	33	60	92
SP-1607	20.04.2022	24.04	16	35	61	92

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Required	Senior teacher, doctoral student
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