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SOWING SYSTEM AND AGRICULTURAL TECHNIQUES FOR GROWING NEWLY CREATED WHEAT VARIETIES

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Annotation
As a result of implementation of comprehensive measures in the field to meet the demand of the population of our republic for bread and bakery products at the expense of grain grown in our country, grain independence was achieved in a short period of time. Biologically, durum wheat differs from soft wheat in its resistance to drought, high temperature, yellow and brown rust and scab diseases, and does not spill when it is harvested. Therefore, in wheat breeding, it is important to pay special attention to the creation of soft and hard wheat varieties that are suitable for the conditions of each region, that is, resistant to the effects of various stress factors, with high yield and high grain quality.

Keywords: Seed breeding system and agrotechnics of soft and hard wheat varieties.

Introduction

Today, in the development of grain farming, which is one of the main branches of agriculture in the world, it is necessary to create varieties of soft and hard wheat that are fertile, with high grain quality, resistant to various adverse external conditions, to properly organize seed production, and to increase its yield. and special attention is being paid to the improvement of agrotechnologies of optimal cultivation. Today in the world 730 mln. more than tons of grain crops are grown. One of the most important tasks in ensuring food security is to obtain high-quality grain crops, including wheat.

In the grain-growing countries of the world, the soft wheat grain obtained from the fields of grain crops is mainly used for the needs of the population for bread and flour products, while the hard wheat grain is widely used in the pasta and confectionery industry. Biologically, durum wheat differs from soft wheat in its resistance to drought, high temperature, yellow and brown rust and scab diseases, and does not spill when it is harvested. In 2012, planting of the families selected from the Bunyodkor and Mingchinor varieties by the method of individual selection was carried out on October 16 in advance, and the row spacing was 30 cm wide, and each family was planted by hand with a length of one meter. Irrigation of the experimental area was carried out on October 21-24. In 8-10 days after watering, the seeds fully germinated and were recorded in a special corded journal. In order to speed up the development of the families planted in the nursery in the first year, grasses were fed with nitrogen

mineral fertilizers in the amount of 100 kg (ammonium nitrate) per hectare. The budding phase of planted families was recorded on December 5-11.

Table 1 Experienced nursery of the first year varieties Creator and A thousand years (2019).

Variety name	Number of families planted, pcs.	Landing time, days	Germinatio n, day	Collect, day	The day before the discovery	Tubing, day	thorn, day
Creator	500	18.10.11	28.10.11	10.12.11	35	24.03.12	21.04.12
A thousand years	500	18.10.11	29.10.11	10.12.11	34	27.03.12	24.04.12

On March 5, the first spring fertilizing of the planted families was carried out and the first spring watering was carried out. The budding phase of both varietal families was noted on March 22-27. From seed germination to the tuberization phase, 144-149 days passed. During the tuberization phase, the second feeding was carried out with 75 kg/ha of pure ammonium nitrate fertilizer per hectare.

N.I. Vavilov identified 44 species of bread wheat (Triticum aestivum) with 42 chromosomes and their geographical distribution in Central Asia according to the origin of cultivated plants [32; p. 559].

A. Nurbekov and R. Siddikov say that the place where ancient agriculture flourished in Uzbekistan is the Chust oasis of the present Fergana Valley. The development of agriculture here dates back to the Bronze Age and is mentioned in the literature [103; p. 16].

According to O. Amanov and others, any good variety reveals its potential only when planted with high-yielding and high-quality seeds [3; p. 20].

According to S. Gaibullaev and others, the southern regions of our country provide a temperate climate for growing early and mid-early varieties of wheat.

In the experiments of M. P. Richards et al., in studies conducted in hot field conditions in Mexico, when studying photosynthesis and chlorophyll of leaves during grain ripening, it was found that they have a positive relationship with yield [121; pp. 529-539].

Research methods. Phenological observation, field and laboratory analyzes were carried out according to the methods of the All-Russian Research Institute of Plant Growing, biometric analyzes - according to the methods of the State Commission for Testing of Agricultural Crops, level of drought resistance. and heating was carried out according to the method of N. Koyushko. Statistical analysis of the data was carried out using the "Field Optical Methodology" method by B. A. Dospehov.

Research results and discussion. Based on the results of research on the selection of soft and durum wheat, seed production and agricultural cultivation technologies.

The ripening period for families selected from the Bunyodkor variety was recorded on May 29. Or the time from full germination to maturity of planted families was 192 days, and the period from sowing seeds to full ripeness was 205 days. The period from the ear stage to full ripening of this variety was 38 days. As with any drought-tolerant variety, the period between heading and maturity was shorter than other varieties.

The period of full ripening of families selected from the Mingchinor variety was 220 days, and from the ear phase to full ripening - 41-42 days.

After harvesting the families, which were fully assessed and rejected for both grades, each family was collected in separate bags and taken to the central warehouse, and the heads of the families in each bag were threshed in a special grain thresher. On November 14-16, autumn irrigation work was carried out to restore the seeds of planted colonies. Full germination was noted 21-23 days after watering the

seeds. It was possible to obtain the useful air temperature necessary for complete seed germination after 21-23 days. Since the air temperature in December 2014 and January 2015 was favorable for the growth and development of autumn grain crops, the budding phase was observed on January 20.

The ripening period for families selected from the Bunyodkor variety was recorded on May 29. Or the time from full germination to maturity of planted families was 192 days, and the period from sowing seeds to full ripeness was 205 days. The period from the ear stage to full ripening of this variety was 38 days. As with any drought-tolerant variety, the period between heading and maturity was shorter than other varieties. In their scientific experiments, they studied methods of irrigating intensive varieties of winter wheat brought from domestic and foreign countries. According to the results of his research, to obtain a grain yield of 70-75 c/ha from winter wheat, the soil moisture before watering for intensive varieties of winter wheat should be 65-70 percent compared to the ChDNS, and 60-65 percent for local varieties suitable for use . He determined that intensive varieties need to be watered once in the fall at the rate of 550-600 m3/ha and 3 times during the growing season. The main factor providing artificial soil moisture is crop irrigation. When irrigation is not enough to obtain a high-quality and high yield of grain crops, it is necessary to carry out irrigation work in places not provided with natural moisture and precipitation.

Conclusion: When using the same agricultural technology in irrigated areas, the yield increases significantly in the conditions of pale and typical gray soils compared to barren and infertile soils, that is, in the average region the yield is 3.6-5 compared to the desert region. .8 c/ha compared to the average region, in the foothills - 2.5-4.9 c/ha, in the foothills - 7.8-8.5 c/ha compared to the desert area. For the “Mingchinor” variety, when applying 75 kg of phosphorus fertilizer per hectare and 2 suspensions, the yield was 28.1 c/ha per hectare or 16.4 c/ha more than the control, a net profit of 737.8 thousand soums was received. For the Langar variety, when applying 75 kg/ha and 2 suspensions, the yield was 26.1 c/ha, which is 15.5 c/ha more than the control.

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