THE EFFECT OF THE SOWING PERIOD, NORM AND NUMBER OF TUBERS OF THE GRAIN CORN VARIETY "MASSINO" ON GRAIN QUALITY INDICATORS

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Annotation: in the article, a new local grain Jack (Sorghum detachment l.) Scientific data on the duration of planting, norm, scheme and influence of the number of seedlings on the grain quality indicators of the" Massino " variety are presented.

Having reached the optimal sowing period for growing seeds and commodity grains, the second decade of April, the seed size is set at 5.0 kg/ha, the number of seedlings is set at 90-100 thousand bushes per hectare.

Keywords: global climate change, drought, oats, planting time, norm, number of seedlings, yield, grain and quality indicators.

Drastic global climate change on Earth, drought, constant population growth and intensive industrial development, in turn, are leading to an increase in demand for agricultural products. Over the past 50 years, the area where oats are planted has increased by 60 percent worldwide, and grain production – by 244 percent.

In World Agriculture, the oat crop is the 5th most common cereal crop, and 70-75 million of the 85 countries of the world.hectares are grown on Land [1; S. 368]. Among the main countries that grow corn grain are India (17.6 mln.ga), China (10.0 mln.ga), in African states (13.8 mln.ga), USA (7.0 mln.ga), Argentina (1.5 mln.ga), Australia (1.0 mln.ga), Mexico (1.4 mln.ga) states include. In the rest of the states, oats are worth 14-18 million rubles.it is grown on an area of hectares (32.6-41.9%).

Currently, the main cultivated areas of Johor in Uzbekistan are the Republic of Karakalpakstan, Khorezm, Bukhara, Navoi vilo

located in Yachats, 20 thousand.grown on an area of more than a hectare [2; B. 27-26]. The grain that has been studied is the oat crop, although it is considered "Southern", but in recent decades, due to the labor of breeders, it has also moved to areas with a heavier climate and colder and more temperate ones. The fact that the chick is grown on large areas is that it does not choose a place, is poor, has high environmental elasticity, high temperature, drought and salinity resistance.

Oat grain stores phosphorus, potassium, magnesium and a variety of vitamins, carbohydrates, protein and amino acids [3; S.16-18]. It is estimated that in Asia and Africa, more than 200 million people use the corn grain, which is obtained annually, as food throughout the year.

Oats are an effective type of crop that is not very demanding on soil fertility, it is possible to grow cereals, green mass, hay by planting two to three times a year [4; S. 60].

Oat grains store an average of 70 to 73 starches, 12 to 15 proteins, 3.5 to 4.5% oil. The nutritional index of the green mass is high, nutritious and tender. It contains 70 - 80% water, 2.5 - 5.0% protein, fat -0.8 - 1.0, sugar content -15-18, and very small amounts of klechatka Store 6-8%. With such indicators, it is especially well suited to the conditions of the island-side region in the construction of the island-side sea [5; S. 35-40].

The purpose of the study. The central region of the Republic consists in the development of an optimal planting period, norm and number of seedlings, which, in the conditions of typical peat soils, ensure the cultivation of abundant and high-quality cereals from the corn variety "Massino".

As an object of the study, a new variety of "Massino" of typical oxen soils and local grain Linden of the Tashkent region was obtained.

The subject of the study was the study of the growth of the plant under the influence of all agrotechnical measures studied, the impact of grain on quality indicators in its development.

Styles of research. Finological observations and biometric measurements carried out in laboratory and field experiments in research work "methods of conducting field experiments", "testing of agricultural varieties of the Republic at the central chemical and technological laboratory revealed grain quality indicators", as well as the results obtained B.A.Mathematical statistical analysis was carried out using dospehov's multifactorial style.

In the experimental scheme, the period of planting the template-St variety Uzbekistan-5 and the "Massino" variety is 10.04, 20.04 and 30.04, and the number of seedlings is studied in 90, 100, 110 thousand units per hectare. Agrotechnical activities were carried out in accordance with the recommendations of the scientific Experimental Station of the Republican food crops. The experiment was conducted in 2020-2022.

As a result of the analysis carried out with the cooperation of the central chemical and Technology Laboratory for the testing of agricultural varieties of the Republic, the best indicators of the grain corn variety "Massino" were observed during the first planting period (10.04) and during the second planting period (20.04).

During these periods, the good germination of seeds, the growth of plants, the degree of formation of biometric indicators of crop elements, as well as the high yield of cereals were determined in the variants in which 90 thousand and 100 thousand Bush seedlings were bred.

Focusing on the data of the table, it was observed that the quality indicators of the seeds of the" Massino " variety are directly related to the duration of sowing and the number of seedlings. In particular, the highest quality indicators for the years of the experiment, namely dry matter in cereals 47.4%, sugar content 15.7%, klechatka

6.2%, oil 4.5%, starch 77.5% 90 thousand seedlings, were found when planted on April 20. Also, the Highness of these indicators led to an increase in the quality of cereals, reducing the amount of starch in cereals by 0.5%.

Again, from the most basic indicators, it was found that protein content is 0.4 percent higher than 100 and 110 thousand Bush seedlings, and vitamin content is 0.6-0.04 percent higher. But, it was noted that 100,000 Bushes had a low grain yield of 3.7 ts/per seedling and 2.2 ts/per 110,000 seedlings.

However, it was found that the weight of 1000 grains is 1.7-3.2 grams higher than the thickness of 100 and 110 thousand seedlings.

Table

Chemical and technological indicators of the varieties Don oat "Massino" and Uzbekistan-5 (2022)

N	Number of seedlings per thousand Bush / ha	Dry matter, %	Sugar content, %	Klechatka, %	Ër, %	Starch, %	Protein substance, %	Vitamin C, mg	Nitrate, mg
Massino navi II-term (20.04)									
1	90000	47,4	15,7	6,2	4,5	77,5	8,3	12,3	12,3
2	100000	46,8	14,8	6,0	4,3	78,2	7,9	11,9	12,3
3	110000	46,7	14,6	6,0	4,2	82,7	7,9	11,7	12,2
Uzbekistan-5 navi II-term (20.04)									
1	90000	46,9	15,1	6,0	4,1	78,2	8,0	11,9	12,1
2	100000	45,8	14,7	5,8	3,9	79,0	7,7	11,2	12,0
3	110000	45,2	14,1	5,7	3,7	82,3	7,1	11,1	11,9

So, it is noted that all the above-mentioned indicators in the table correspond to the law of seed cultivation. It is known that in the cultivation of high-quality seed offspring from all agricultural crops, the number of seedlings is required to be optimal, the area of nutrition is sufficient, the seeds are planted earlier for Biological full ripeness, and harvested and harvested without leaving them to oil.

The grain obtained and found its proof on the basis of complex chemical and technological analyzes, it was recommended that the corn Massino Variety be grown in the second term (20.04) to a thickness of 90 thousand bushes, for seed grain.

According to the research data, the most optimal growth, development, accelerated formation of yield elements, as well as the highest grain yield (76.0 ts/ha),

100 thousand bushes of the second planting period (20.04) were determined when the seedling was cared for. Also, the data of the chemical and Technology Laboratory also proved that the grain quality indicators in this period and seedling thickness are fully consistent with the requirements of commodity grain cultivation.

As a result, it was recommended to plant a second sowing period (20.04) and 100 thousand tubers for growing high-yield and high-quality commodity cereals from the corn Massino variety.

As you know, in the conditions of Uzbekistan, the climate is extremely sharply changing. Some years of spring come early or too late, oily or dry. Accordingly, there is also an unwritten law of nature on whether the weather comes warm or warm. Also, when spring comes early, autumn also comes early. As a result of this, the sowing dates of the grain Linden can also change.

According to the results of the three-year research conducted, when the Massino variety is grown in the conditions of the Tashkent region, that is, the central region of the Republic, in relation to the standard Uzbekistan-5 Variety, it was found that due to moderate conditions (soil, water is not salted, there is no drought, too high temperature), the duration of the vegetational period in relation This was demonstrated by the fact that higher grain yields were obtained compared to those regions.

It has been found that this may have caused the Massino variety not to be harvested in late-term planting (30.04) guaranteed grain.

According to the indicators of the grain chemical and technological table of the Massino variety, hattoki found that planting in an acceptable period (20.04), but the number of seedlings is 100 thousand bushes, a tendency to decrease all the analysis indicators in care. Also, the least indicator of grain yield (70.1 ts/ga) was found in this variant.

Even lower rates compared to this were also noted in the third sowing period (30.04). As a result, in guaranteed cultivation for cereals, it is recommended to plant the Massino variety 100 thousand bushes thick by April 20, plant 110 thousand bushes, and in cases with a late planting period (30.04) not to grow more than 90-100 thousand plants, in years when the weather is favorable, it is recommended to grow it for cereals in

According to the results of studies, when planting the "Massino" variety around April 20 and caring for 90-100 thousand bushes of seedlings, a sharp change in the grain quality indicators of the "Massino" variety compared to the default variety Uzbekistan-5, there was no sharp difference in the amount of dry matter, sugar, clechat, starch, vitamin C and nitrate.

But, in the grain of the "Massino" variety, there was a tendency to increase the amount of fat, protein, sugar. In conclusion, it was determined that the template is superior in terms of high yield of the Massino variety and grain quality indicators in comparison with the Uzbekistan-5 variety.

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