



THE INFLUENCE OF EARLY DURATION AND CLIMATE ON THE MASS OF 1000 GRAIN

Ishankulova Gavhar Norkulovna,

Associate Professor of Karshi Institute of Engineering and Economics,

ishankulova.gavxar@mail.ru

Article history:	Abstract:
Received: 6 th October 2023 Accepted: 6 th November 2023 Published: 7 th December 2023	For the results of the effect of harvest periods and climate on the mass of 1000 grains according to the thesis "The yield of winter wheat varieties and the dependence of technological quality on the harvest period". 1000 grain mass of organized varieties, soil-climate grain support and the launch of incentives suitable for harvest periods were analyzed.
Keywords: Wheat, weight of 1000 grains, harvesting periods, pests, productivity.	

Ensuring food safety, improving the yield and quality of wheat production, developing suitable agrotechnologies for their cultivation for different soil and climate conditions, and carrying out stable and decades-long researches are of great importance. Its weight is of great importance in relation to the number of seeds in agricultural crops. In grain crops, 1000 grains are obtained from the seed, which determines the quality of the mass.

This study was carried out according to the priority direction of the republican science and technology development V. "Rural development, biotechnology, ecology and environmental protection". R.R.Ismoilov and Rakhasanov (2005) based on his researches, the quality of wheat grain affects the harvest under many influences that can be summarized in 3 groups: genetic genotype (variety), freezing technology, natural resources and non-toxic quality. To obtain high-quality grain, high-quality grains are necessary. A.F.Nikulin et al. (2012) and V.G.Krivobochechek (2014) variety with a special genotype is the basis for producing high-quality grain. R.R.Ismagilov and others (2008) estimate estimate the main natural resource for grain quality monitoring is "heat" in regional conditions. This resource, stressing, describes the supply of energy necessary for the growth and development of plants and the oxidation of grain content with the deviation of solar radiation to a certain extent. In the process of "grain emergence and ripening", there is a strong relationship between the yield of oxyl content of grain and the average daily chlorophyll content. According to many scientists, it is possible to control the quality of wheat grain through technological processes. Natural resources, quality and production process, which change in the region (territory) and periods (years or level of production), like wheat, cannot be the same for all regions.

Its weight is of great importance in relation to the number of seeds in agricultural crops. In grain crops, 1000 grains are obtained from the seed, which determines the quality of the mass. The mass of 1000 grains is an indicator of the size and hardness of seeds and is expressed in grams. Meteorological influence, agrotechnical support and other influences are also there. Drought and lack of moisture in the soil cause the seeds of plants to be weak and light. 1000 grain mass of the plant is affected by diseases and pests. To increase the mass of 1000 grains in the cultivation of seed grain, it is necessary to improve agrotechnical means. Supplying plants with moisture and nutrients is very important [1]. It is different for different plant species, homogeneously for different varieties.

In our investigations, it was determined that 1000 grains of grain mass were harvested in 4 periods, when the soil-climate of the regions and the moisture content of the grain were 20-22%, 14-16%, 10-12% and 8-9%. The weight of 1000 grains in the 1st period of harvest in the desert area was 33.1-36.3 g, the lowest value was observed in the Yaksart variety, and the highest strength was observed in the Selyanka variety. In the 2nd period of harvest, the mass of 1000 grains was analyzed and the lowest measurement was 35.7 g in the Krasnodar-99 variety, and the highest was 37.8 g in the Selenka variety. The 1000-grain mass (33.5-37.4 g) of the cultivars in the 3rd period harvest was higher compared to the 1st period harvest and controlled compared to the 2nd period harvest. Harvesting in the 4th period was analyzed with respect to the harvests in all periods. The weight of 1,000 grains of grain is of great importance in obtaining planting standards, and grains smaller than the standard size are not taken for seeding. The delay in sowing and harvesting causes a decrease in the level of profitability in seed grain. According to the results obtained from the experimental field of Kasbi district, Yaksart variety has 33.1 g in the 1st period (20-22% grain moisture), 35.9 g when the moisture is 14-16%, and 35.9 g in the 2nd period. , 3 - 3 is 35.9 g compared to period 3. , was 33.4 g in the 4th period. In the Krasnodarskaya-99 variety, the highest grain weight of 1000 grains was 35.7 g in the 2nd term harvest, and in the 4th term harvest according to the last kw, it was found that it was 2.5 g less than the previous harvest.

In Turkestan variety on this date, 36.0 g in the 1st harvest, 37 g in the 2nd harvest, 36.4 g in the 3rd harvest, and 36.2 g in the 4th harvest. reached One of the local varieties, Gozgon, has a mass of 1,000 grains classified from 36.9 to 35.8 g. According to the analysis of the yield obtained from the experimental field in the Chul Ody region, the grain mass of

1000 grains in the 1st period of harvest (grain moisture content 20-22%) is 37.9 g, in the 2nd period harvest (grain moisture content 14-16%) 40,2 g. It was determined that 0.7 g of weight had been lost during the harvest in the 4th period (grain moisture content 8-9%). In Karshi district, in the 1st period of harvest, the weight of 1000 grains of winter wheat varieties was 36.3-41.2 g, 3.5-4.9 g higher than in Kasbi district. In the 2nd harvest period, the mass of 1000 grains of the varieties was 38.4-42.3 g, compared to the 1st harvest period, it was determined up to 1.1-2.1 g. The 1000-grain mass (37.7-41.8 g) of the varieties was higher in the 3rd harvest compared to the 1st harvest and control compared to the 2nd harvest. In the harvest of the 4th period, the control was analyzed compared to the harvest of all periods. The mass of 1,000 grains of young autumn wheat varieties in the 1st period of harvest in the mountain area is 38.1-42.5 g, compared to Kasbi district, 5.0-6.2 g, compared to Karshi district, 1.3- 1.8 g.(Table 1).

Table 1

Soil and climate as well grain moisture kura harvesting periods launch of 1000 grains of grain mass of autumn cold wheat varieties under the influence

No.	Grain moisture kura harvesting periods	Varietal name	1000 grain weight, g		
			desert area	Chul took it	then the previous area
1	Harvesting in the 1st period (grain moisture 20-22%)	Yaksart	33.1	37.9	38.5
2		Krasnodarskaya-99	33.4	36.7	38.1
3		Selyanka	36.3	36.3	39.8
4		Gozgon	35.7	36.6	40.2
5		Turkestan	36.0	41.2	42.5
6	Harvesting in the 2nd term (grain moisture 14-16%)	Yaksart	35.9	40.2	40.6
7		Krasnodarskaya-99	35.7	38.4	41.1
8		Selyanka	37.8	39.5	42.7
9		Gozgon	36.9	39.4	40.9
10		Turkestan	37.0	42.3	44.0
11	Harvesting in the 3rd term (grain moisture 10-12%)	Yaksart	33.5	39.7	39.2
12		Krasnodarskaya-99	34.3	37.7	39.7
13		Selyanka	37.4	38.6	41.1
14		Gozgon	35.8	37.9	40.4
15		Turkestan	36.4	41.8	43.2
16	Harvesting in the 4th term (grain moisture 8-9%)	Yaksart	33.4	39.5	39.0
17		Krasnodarskaya-99	34.1	37.6	39.6
18		Selyanka	37.3	38.4	39.9
19		Gozgon	35.8	37.7	40.2
20		Turkestan	36.2	41.7	43.0

The mass of 1000 grains of the varieties in the 2nd period harvest was 40.6-44.0 g, compared to the 1st period harvest, it was re-analyzed to 1.5-2.5 g. The 1000-grain mass (39.2-43.2 g) of the cultivars in the 3rd period harvest was higher than the 1st period harvest and controlled compared to the 2nd period harvest. Harvesting in the 4th period was analyzed with respect to the harvests in all periods.

In conclusion, it can be said that in all three trees of the Kashkadarya region, the moisture content of 1000 grains of grain mass of winter wheat was 14-16% at the optimal moisture level. In the cross-section of the regions, the mass of grain was lower in the desert and semi-desert regions, and in the front region, the mass of grain was higher by 1000 units compared to other regions. When the autumn annual wheat variety is harvested in the wax ripening phase, it was determined that 1000 grain mass of grain mass was reduced due to the influence of grain ripening. Exceeding the optimal period of harvesting caused the formation of cracks in the cytoplasm of the grain under the influence of heat and dry air.

LIST OF USED LITERATURE

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