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EFFECT OF COATING RATE WITH BENTONITE CLAY AND IRRIGATION SCHEDULE ON 1000 GRAIN MASS OF WINTER WHEAT SEED

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Abstract
The article studied and analyzed the influence of bentonite clay standards and irrigation regime on the weight of 1000 grains of winter wheat varieties in light gray soils of the Kashkadara region. When analyzing, the soil moisture before irrigation was 75-80-70% NH in irrigated options, seeds of winter wheat varieties «Shukrona» and «Turon» 40; 50 kg/t of bentonite clay when used, the weight of 1000 grains is 42 and 52 g, will ensure the cultivation of high-quality grain crops.

Keywords: Bentonite clay, standard, 1000 units, grain mass, shell, irrigation, variety, seeds, resource, agricultural technology.

Introduction

In modern agriculture, the basis of obtaining a high yield from winter wheat, taking into account the soil and climate conditions, as well as the improvement of its cultivation technologies, the correct application of agrotechnical activities in newly created sorts is really important.

Therefore, one of the current tasks of today is to train the population to use resource-economic bentonite clays to grow high-quality and high yield crops for the cultivation of winter wheat sorts created in our country in different regional climatic conditions.

The importance of bentonite is that, depending on the percentage of montmorillonite in its content, when it comes into contact with water, it swells up to 10 times and provides the plant with water for a longer time [1]. When $N_{90}P_{90}K_{90}$ (KCl)+bentonite was used on winter wheat at 300 kg/ha, it was determined that the weight of 1000 grains was 44,8 g [2].

Studying the above information, we carried out our scientific research in the experimental area of the Southern Agricultural Research Institute in S. Rahimov's area of Karshi district, coating the seeds of winter wheat sorts «Shukrona» and «Turon» with bentonite clay 30; 40; 50 kg/t standards were compared to the untreated control and the effect on 1000 grain mass was determined under different irrigation backgrounds.

Table 1 Effects of coating rates and irrigation regimes on winter wheat seeds with bentonite clays on 1000-grain mass.

№	Irrigation regimes %	Coating rates on winter wheat seeds with bentonite clays	Sorts of winter wheat.	Mass of 1000 grain.
1	**Wet Collection (Background)**	Control(untreated)	«Shukrona»	30
2			«Turon»	40
3		Bentonit30 kg/t (coating rates)	«Shukrona»	36
4			«Turon»	42

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5		Bentonit40 kg/t (coating rates)	«Shukrona»	42
6			«Turon»	42
7		Bentonit 50 kg/t (coating rates)	«Shukrona»	38
8			«Turon»	42
9	**LFWC 70-75-60%**	Control(untreated)	«Shukrona»	38
10			«Turon»	44
11		Bentonit30 kg/t (coating rates)	«Shukrona»	40
12			«Turon»	46
13		Bentonit40 kg/t (coating rates)	«Shukrona»	42
14			«Turon»	46
15		Bentonit 50 kg/t (coating rates)	«Shukrona»	42
16			«Turon»	47
17	**LFWC 75-80-70%**	Control(untreated)	«Shukrona»	38
18			«Turon»	46
19		Bentonit30 kg/t (coating rates)	«Shukrona»	40
20			«Turon»	51
21		Bentonit40 kg/t (coating rates)	«Shukrona»	42
22			«Turon»	52
23		Bentonit 50 kg/t (coating rates)	«Shukrona»	42
24			«Turon»	52

In our research, it was determined that the mass of 1000 grains of winter wheat sorts varied from 30 grams to 52 grams depending on the experimental options (table-1).

In our research, the weight of 1000 grains in the water-drinking background varied from 30g to 42 g in the «Shukrona» sort, while in the «Turon» sort, the values were from 40g to 42 g, showing a low result compared to the water-drinking backgrounds.

According to the results of the research, the highest indicator of the weight of 1000 grains, in the background of the irrigation regime of winter wheat with 75-80-70% of LFWC, is from 38 g to 42 g in the «Shukrona» sort, and from 42 g to 52 g in the «Turon» it was noted that there were many.

In our studies; It was found that the use of 30;40;50 kg/t of bentonite clay had a positive effect on the mass of 1000 grains. And the watering regime ensured wheat grains to be full. In the background of drinking only seed water, due to the lack of nutrients in the plants of the same area, it led to the failure of grain formation and the formation of small grains in the weak ones.

In our experiments, the standards for coating seeds with bentonite clay in wet storage (Background) of winter wheat sort «Shukrona» (untreated control) was 30 g .In crusted options with 30;40;50 kg/t bentonite clay , it has changed to 36; 38; 42g, and in the «Turon» sort, the mass of 1000 grains increased until 40; 42; 42; 42 g, it can be seen that it changed due to the influence of bentonite clay and related to the characteristics of the variety.

The soil moisture before irrigation of the experiment was 70-75-60% of LFWC in the variety «Shukrona» , in 1000 pieces it was determined until 38; 40; 42; 42 g . And in the «Turon» variety; It was found that the grain mass changed up to 44; 46; 46; 47 g. It was found that the difference in the «Shukrona» sort, was from 8 to 4 g, while in the «Turon» sort, the mass of 1000 grains was enhanced from 4 until 5 g.

The soil moisture before irrigation of the experiment was 75-80-70% of LFWC in the irrigation regime of the sort «Shukrona» the grain weight increased up to 38; 40; 42; 42 g, When the «Turon»

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sort increased to 46; 51; 52; g. It was found that «Shukrona» and «Turon» varieties had more mass of 1000 grains from 6 to 12 grams compared to the above moisture accumulation background.
According to the data, it was found that the irrigation order and the norm of bentonite clay had a significant effect on winter wheat, and it was found that the mass of 1000 grains increased difference occured between the varieties of winter wheat, 15% dormancy was observed in the «Shukrona» variety, and it was noted that the negative effect of grain on 1000 grain mass increased even more.

1-picture «The process of determining the mass of 1000 grains of the «Turon» variety.

In conclusion. It was found that the irrigation method on the light gray soils of Kashkadarya region before irrigation of soil moisture of LFWC in 75-80-70% and norm of bentonite clay had a significant effect on winter wheat, and it was found that the mass of grains increased by 1000 units. There was a difference between the varieties of winter wheat, 15% dormancy was observed in the «Shukrona» variety, and it was noted that the negative effect of grain on 1000 grain mass increased even more.

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