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THE INFLUENCE OF THE WEIGHT OF SOWING SEED ON THE GERMINATION AND GERMINATION LEVEL OF SEEDLINGS

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Abstract: The influence of 1000 seed weight on seedling germination energy, seedling thickness and the level of tillering was studied in the conditions of meadow soils of Andijan region, when early winter wheat “Asr Chilgisi” and ultra early “Ultra” varieties were planted at different times. According to the obtained results, it was found that the high germination rate was observed in the varieties planted with 1000 seed weight of 45-46 g in the period of September 15, and it was 2.73 seeds/plant.

Key words: Winter wheat, varieties, early “Asr chilgisi”, ultra early “Ultra”, seed sowing dates, 1000 seed weight.

Enter: Today, in 100 countries of the world, the wheat plant is cultivated annually on an area of more than 220.1 million hectares, and as a result, about 749.5 million tons of grain are grown. However, in the conditions of global climate change, in many countries, 8-10 million hectares (2%) per year are excluded from production as a result of the degradation of irrigated farming areas for various reasons.

In recent years, the problem of water shortage in irrigation of irrigated areas is also occurring in our country, and the water problem is becoming an urgent issue day by day. In such conditions, it is important to create early and very early varieties that do not require a lot of water and to introduce them widely into production conditions.

Based on the above-mentioned problems, the scientific staff of the Laboratory "Agrochemistry and Soil Science" of the Scientific Research Institute of Cereals and Legumes conducted scientific research on the development of agrotechnology for the cultivation of early spring wheat, which does not require a lot of water during the growth period of winter wheat, and its variety.

The main part: Scientific researches were carried out in the conditions of meadow soils of Andijan region, in the fields of the central experimental farm of the Scientific-Research Institute of Cereals and Legumes.

The experimental system consisted of 9 options, arranged in 4 repetitions, in one tier. In the options, the width of the egate is 60 cm, the length is 20 m. The occupied area of one option is 48 m², the area to be considered is 24 m². The total area of the experiment is 0.18 m².

Table 1.

Experience system

№	Sowing dates	Weight of 1000 grains of planted krkg, gr.
1	15.09	45-46
2		40-41
3		35-36

4	1.10	45-46
5		40-41
6		35-36
7	15.10	45-46
8		40-41
9		35-36

During the phenological observation and pollination work in autumn rye «Методика Государственного сортоиспытания сельскохозяйственных культур» (М, Колос, 1964) and the manual "Failure to conduct a field trial" was used. The obtained results show that the energy of seed germination and seedling thickness were not influenced by the size and weight of seeds.

In particular, when the options planted on September 15 were analyzed, the germination rate of the sown seeds was observed in option 3 with a weight of 1000 seeds of 35-36 g, and it was determined that they germinated in 7 days, compared to option 2 with a weight of 1000 seeds of 40-41 g. per day, and 1000 seeds with a weight of 45-46 g were observed to germinate 2 days earlier compared to option 1. When the options planted on October 1 and 15 were studied and the above laws were repeated, rapid seed germination was observed in the options with 1000 seed weight of 35-36 g, compared to the options with seed weight of 40-41 g, up to 2 days, 1000 seed weight of 45- Compared to the 46 g variants, it was noted that the germination was faster up to 3-4 days.

When the number of sprouted seedlings was studied in the sections of the options, high indicators were found in the options with 1000 seed weight of 45-46 g, compared to the options with 1000 seed weight of 40-41 and 35-36 g, when the seeds were sown on September 15, 8.8-16, up to 4 units/m², field fertility of seeds up to 2.2-4.1%, when seeds are planted on October 1 up to 4.8-17.2 units/m², field fertility of seeds up to 1.2-4.3%, seeds 15 It was found that when it was planted in the period of October, it was 6.8-17.6 units/m², and the field fertility of the seeds was 1.7-4.4% higher.

In early spring (1.03) when the number of seedlings that emerged from the winter was analyzed by options in the section of seeding periods, the highest seedling thickness was observed in the option with 1000 seed weight of 45-46 g in all seeding periods, and 1000 seed weight of 40-41 and 35-36 g. compared to options with 12.6-28.8 units/m² when seeds were planted on September 15, 10.2-28.6 units/m² when seeds were planted on October 1, and 10.3-28.6 units/m² when seeds were planted on October 15 As high as 28.8 units/m², seedling mortality in winter was 1.3-4.0% when seeds were sown on September 15th, and 1.6-3.7% when seeds were sown on October 1st. It was noted that it decreased to 1.2-3.8 percent.

When the degree of germination of seedlings was studied in the section of options on March 1, high results were recorded in options with a weight of 1000 seeds of 45-46 g, compared to options with a weight of 40-41 and 35-36 g of 1000 seeds, when seeds were sown on September 15. ,2-0.9 units/bush, when the seeds were sown on October 1, it was up to 0.2-0.8 units/bush, when the seeds were sown on September 15, it was found to be up to 0.2-0.3 units/bush.

Table 2.

Effect of seed size and planting time on seed germination and seedling thickness

№	Sowing dates	Weight of 1000 grains of sown seed, gr.	Germination rate, day	Field germination of seeds, %	The number of sprouted seedlings, pieces/m ²	The number of seedlings that died in winter, %	The number of seedlings that have emerged from the winter, units/m ²	Clumping level, pc
1	15.сех	45-46	9	92,8	371,2	11,3	329,3	2,73
2		40-41	8	90,6	362,4	12,6	316,7	2,56
3		35-36	7	88,7	354,8	15,3	300,5	1,87
4	01.окт	45-46	11	92,5	370,0	9,7	334,1	2,65
5		40-41	10	91,3	365,2	11,3	323,9	2,49
6		35-36	8	88,2	352,8	13,4	305,5	1,82
7	15.окт	45-46	14	91,1	364,4	10,8	325,0	1,49
8		40-41	12	89,4	357,6	12	314,7	1,24
9		35-36	10	86,7	346,8	14,6	296,2	1,71

In conclusion, we can emphasize that the size of the sown seed and the weight of 1000 grains have an effect on the life span of the germinated seedling. At the same time, it does not affect the productivity of crops.

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