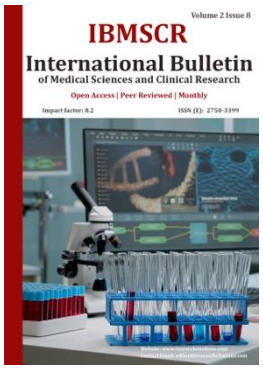

THE EFFECT OF THE FRACTIONAL COMPOSITION OF CEREALS AND SOWING PERIODS ON THE GERMINATION OF AUTUMN WHEAT GRAIN AND THE NUMBER OF COBS

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Abstract: This article provides information on the germination of autumn wheat varieties and sowing dates for the number of productive cobs, as well as the effect of grain fractionation. As an object of research, autumn soft wheat varieties were obtained. The studies were carried out in the conditions of moderately saline hungry salt porridge soil. Special sieves with grain diameter <2mm; 2 - 2.5 mm; 2.5-3mm and 3.0<mm are separated into fractions in aid. In the large fraction, the yield of grain in field wine was 60.91%, the number of spikes was 580.7, in the middle fraction, respectively: 54.51%; 471.96; in the light fraction, 48.99%; 381.23. When planted in September, the yield was 63.72% for productive cobs at 572.76, in October respectively; -53.77%; 494.43; and in November -46.9% at 366.73. Autumn wheat varieties have been found to have a 6.87% yield compared to October when planted in November and a 127.7 spike count , a 16.82% decrease compared to September and a 206.0 decrease in the number of spikes. Medium to large fractional grain was recommended for planting.

Keywords. Fractional composition of grain: large, medium light, flourish, number of cobs, soft wheat.

Introduction Germination is a complex physiological process that begins with the fact that the seed is ground. In doing so, the grain receives the required amount of water for growth and development. This process will depend on the quality of the spent seed, but also on the temperature, sowing time, norm, humidity and other factors. Flat germination of seeds affects not only the yield and its quality. Especially in the conditions of arable soil, the yield directly affects the yield, being from important criteria. As we have already noted, the germination of seeds depends on many factors, including the weight of the seed. This can also be seen from the results of a study to determine the relationship between wheat's a 1,000 grain weight and flourish. The results showed that when the weight of 1,000 grains increased from 9 g to 37.2 G, the Unicity was found to increase from 51.8% to 82.7% [1]. This indicates that when the grain weight increases, the tensile strength also increases. One of the factors affecting the germination of seeds is the sowing norm. While 2.5 mln/ units per hectare had a 92% germination rate , 4.5 mln/ units accounted for -93%, 6.5 mln /units accounted for -94%, and 7.5 mln /units accounted for -92% [2]. The fractional content of autumn wheat grain in the conditions of irrigated soil is as follows: a large fraction is found to be equal to 8-15%, medium - 69-74%, light-12-22% and extremely light-3-6% [3]. Large fractional seed grain was an additional 4 ts/ga from plants such as wheat, barley, millet and flax when planted [4]. It is such a result that was obtained in a medium-salted light-colored Ox soil syrup. When medium and large fractions of autumn wheat were used for planting, an additional 4-6 ts/ha of grain was obtained [5]. At the same time the fractional composition of the grain was

affected by the level of correlation bonds between quantitative indicators of autumn wheat symptoms. The light fraction recorded an increase in the level of correlation bonds between quantitative indicators of autumn wheat symptoms compared to the large fraction [6]. It shows that medium and large fractions should be used as seed grains. From the analysis of literature related to the topic, it can be seen that the germination of the seed depends on many factors. But the data on the effect of fractional composition on uniqueness and the number of productive cobs is incomplete. It follows that in this work, the main goal is to study the impact of the fractional composition of grain and sowing periods on the yield and the number of productive cobs. Methods and place of study. The study was carried out on a field experimental field with a medium salinity in the Sharat of the Syrdarya region. As an object of research, varieties of autumn soft wheat (Triticum aestivum L) (friendship and Chillaki, Kroshka) were obtained. SSPS-17dasturi was used in the performance of phenological observations and computational work. With the help of this program, statistical analysis of primary biometric indicators was carried out. When dividing the grain content into fractions, sieves with a diameter of 2>mm; 2 - 2.5 mm; 2.5 - 3.0 mm; 3.0 mm< were used.

Results obtained The effect of autumn wheat fractions on yield (Table 1) shows that the yield of wheat grains planted in September was -69.98% in a large fraction, -62.39% in a medium fraction, and 58.81% in a light fraction. From this data, it can be seen that the fraction composition has an effect on the unimaginability. The difference of the light fraction from the large fraction was 11.17%, and from the medium fraction -3.58%. This indicates a high degree of tensile strength from a large fraction. Not only the fractional composition of the grain, but also the sowing periods affected the yield. When wheat was planted in October, the yield was 60.83% in the large fraction, 51.84% in the middle fraction, and 48.64% in the enggil fraction. From this data, it can be seen that there is a unimaginable decrease in October and November compared to that planted in September.

Table 1.

The effect of sowing dates and grain fractions on the germination of autumn wheat grain

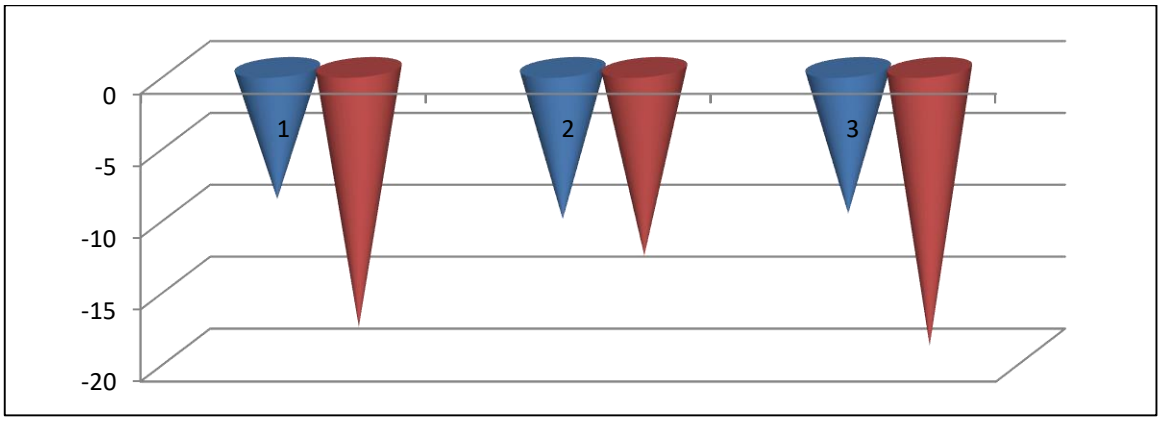
Statistical indicators	Fractions		
	Big	Middle	Light
	Sowing period-September		
Arithmetic mean indicator	69,98 ±2.09	62.39 ±2.37	58.81 ±1.62
Sowing period-October			
Arithmetic mean indicator	60.83 ±5.97	51.84 ±3.44	48.64 ±2.91
Sowing period – November			
Arithmetic mean indicator	51.94 ±2.93	49.31 ±1.91	39.45 ±3.02

The recording of such a condition is natural. Because the high air temperature in September ensured that the tensile strength was also high. The impact Dira of sowing dates and grain fractions on tensile strength can also be clearly seen from the data in Figure 1. While large fractional grain decreased by 9.15% compared to September when planted in October, it

decreased by 18.04% in November. It was this result that was also recorded in the middle fraction. This indicator was 10.55% in October and -13.08% in November compared to 10.17 and 19.36% in the light fraction. This means that the decrease in tensile strength was noted in a light fraction and when planted in November. The number of cobs is a product of germination, being one of the important factors affecting the yield of autumn wheat varieties. The sowing period and the fractional composition of the grain also affected the number of productive cobs (Table 2). When large fractional grain was planted in September, the number of spikes (1m2) was 763.3, in October - 593.9, and in November -385.13. This suggests that the number of productive cobs decreased from 169.4 in September when planted in October to 378.17 in
November.

Table 1.

The duration of sowing and the effect of fractions on the germination of grain

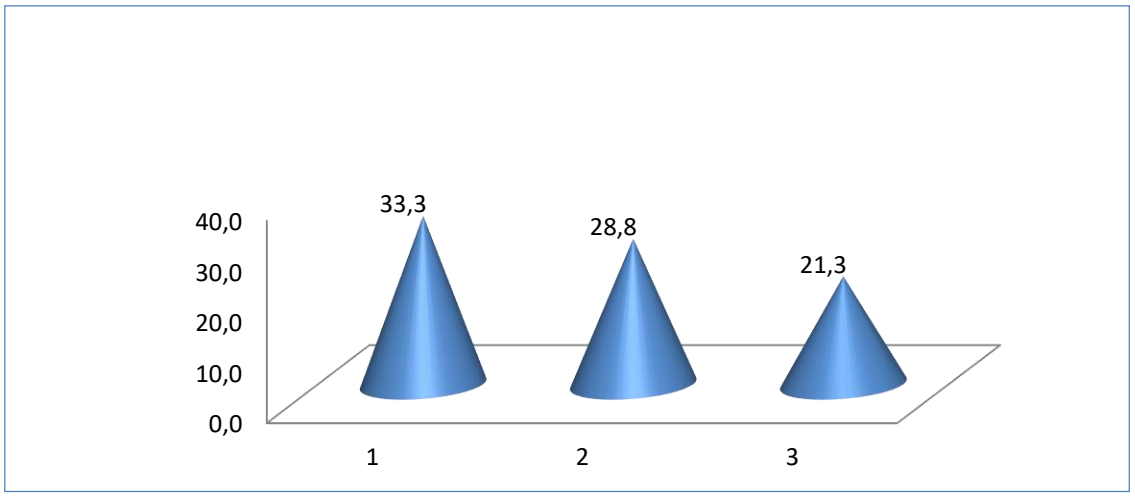


Izox: 1-large fraction; 2-medium fraction; 3-light fraction. When the first column is planted in September , the difference in germination compared to October, column 2-November,%. The average fractional seed grain was 549.4 tans when planted in cetacean, 537.2 in October and 329.30 tans in November. The number of bushels was estimated at 405.6 when the light fractional seed grain was planted in September, 352.2 in October and 385.9 in noyayur. The recording of such a condition is primarily associated with a decrease in tensile strength. Recall that the germination of wheat grain planted in November was reduced by 10.5% in the middle fraction to 13.0% in November

Table 2

Sowing dates and the effect of fractional millet of cereals on the number of spikes

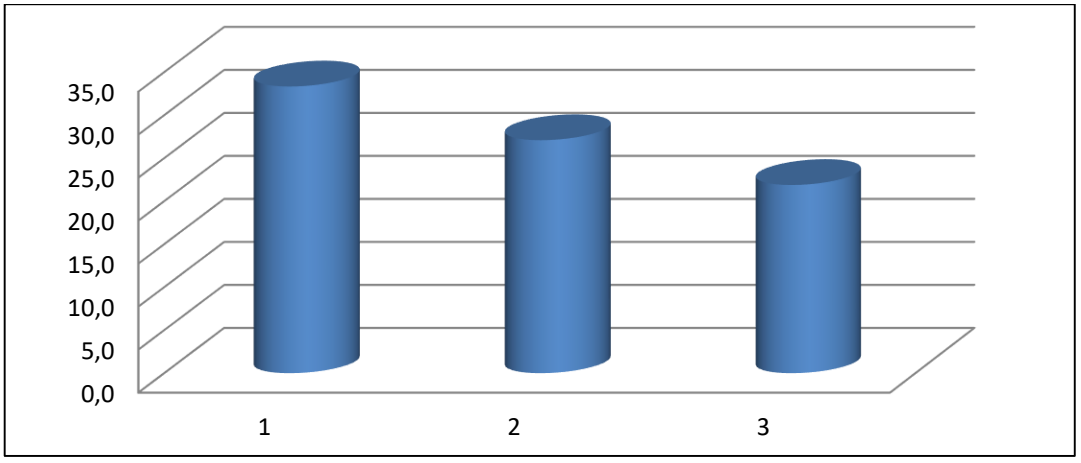
Statistik specification	Sowing dates		
	1.09	1.10	1.11
	Major faction		
Arithmetic mean indicator	763.3 ±9.51	593.9 ±12.48	385.13 ±20.13
Arithmetic mean indicator	Middle fraction		
	549.4 ±13.32	537.2 ±17.14	329.30 ±7.95
Arithmetic mean indicator	**Light fraction**		
	405.6 ±28.5	352.2 ±20.3	385.9 ±13.72



Information on the effect of grain fraction on the number of spikes is shown in Figure 2. From the data in the picture, the most spikes are formed in a large fraction with a share of 33.3%, medium in the fraction -28.8% and in the light fraction -21.3%. This indicates a 4.5% increase in the number of productive spikes in the large fraction compared to the medium fraction and a 12% increase in the light fraction. From this data, it can be seen that the use of large and medium fractions for seed grain is influenced by an increase in the number of productive cobs.

Table 3.

The effect of planting deadlines on the number of spikes, in%



Izox: 1st senyatbr; 2nd October; 3rd November Affected the number of productive cobs of planting periods (Figure 3).

Here, too, the largest number of spikes (33.3%) was recorded when planted in September -27.1% in October and -21.9% in November. From this data, the number of spikes shows a 6.2% increase in October when planted in September, compared to November - 11.4%. In general, the impact of the fractional composition of the grain and the sowing dates on the yield and the number of productive cobs was determined. In the light fraction, it was found that the Unicity for the medium fraction decreased by 5.55%, compared to the large fraction by 11.95%. It was noted that the germination of autumn wheat grain planted in

November decreased by 6.87% compared to October, and by 16.82% compared to September. The number of productive spikes was 33.3% in the large fraction, 28.8% in the middle fraction, and 21.3% in the light fraction.

Conclusion

The germination of the autumn wheat grain was influenced by the sowing period. The germination of autumn wheat varieties planted in September was 9-10% higher than in October and 13-19% higher than in November. 2. The fractional composition of the grain was found to have an effect on tensile strength. In the large fraction of autumn wheat planted in September, the yield was 69.98%, in the middle fraction -62.39% and in the light fraction - 58.81%, in October respectively; 60.83;51.84; 48.64%, in November; 51.94; 49.31; and 39.45%. The uniqueness was higher in September and in large fractions compared to other fractions and terms. 3. The number of spikes (1m2) when a large fractional seed grain was sown in September was 763.3, in October - 593.9, and in November -385.0; in the middle fraction respectively: 549.4; 537.2; 329.3; and in the light fraction; 405.6; 352.2; 385.9. It was noted that the number of spikes in wheat planted in November decreased by 6.2% compared to October and 11.4% compared to September.

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