

The seedling thickness of autumn soft wheat varieties, the degree of wintering and the number of bushes, different planting dates, planting standards and the effect of fertilizing.

Azimova Muhayyo Egamberdievna, (PhD

Counter-Engineering Economics Institute.

Annotation. The article provides information on the timing of planting, planting norms and the effect of fertilizing on the seedling thickness, wintering rate and number of bushes of autumn soft wheat varieties, taking into account the biology of each created wheat variety in growing a high and stable harvest.

Keywords: variety, norm, duration, number of tubers, period, fertilizer, grain, temperature, acceptable, option, biotic, abiotic.

Taking advantage of the domestic capabilities of promising autumn soft wheat varieties, which are currently grown in Uzbekistan, a high grain yield is obtained. There are opportunities to further increase these indicators by improving the currently existing agrotechnological measures at Ana and developing new methods.

The timing of planting autumn soft wheat in our republic will depend on the biological characteristics of the variety, weather conditions, soil type and other factors. The currently recommended autumn periods of sowing soft wheat, not all times are suitable for the soil-climatic conditions of the regions. Depending on the sowing dates, autumn wheat may be at the end of the pre-wintering period, when germination from the germinating seed begins. As a result of changing the planting period, it is possible to control the periods of development of autumn soft wheat, as well as to introduce the plant in the period when it is necessary to overwinter [1; 39-b.].

The main reasons for the death of autumn soft wheat varieties grass are their weak chininess when entering wintering, and plants planted mainly in early periods grow strongly under the influence of heat, spending a lot of sugar to breathe, while when planted late, they begin to overwinter without the formation of sufficient sugar in plants. Cold War of plants leads to a thinning of the number of tubers in cultivated areas and a significant decrease in grain yield. In particular, low temperatures during the germination period of wheat seeds when planted late will delay their germination, while those that sprout are also nymphs and are affected by Frost. In order for wheat grass to overwinter well, it is important to carry out planting in the optimal period [4; 156-b., 3; p.2.].

Q.Jo ' raqulov, A.In the experiments of Nurniyozov, wheat Istiqlol and Makuz-3 varieties were planted in the early (1.10) term with 3.0 and 4.0 mln of flourable seeds per hectare, plants that died during the wintering period accounted for 15-16%, while in the areas where seeds were planted in the norms of 5.0 and 6.0 mln/ha, these indicators averaged 11-12%. A high indicator of winter hardiness of wheat varieties is observed in areas where seeds are planted at 20.10. One of the



https://scopusacademia.org/

reasons for the loss of a certain part of plants when planted in the early term, this can be explained by the fact that they develop strongly in autumn under the influence of hot temperatures, increasing the mass of the Earth's top by the norm, occurring at low temperatures as a result of the expenditure of a large amount of sugar].

According to the results of our studies, the effect of low temperatures on Autumn soft wheat varieties in the conditions of irrigated light-colored oxen soils has varied and will depend on the germination time of the plant, the germination conditions of the seed, the weather and the state of the plant at the time of entry into wintering. Therefore, they believe that it is very important to know that autumn wheat is best resistant to adverse conditions in the winter season.

Judging by the results of our studies, on average, during 2014-2016, the autumn soft wheat varieties Krasnodarskaya-99, Yaksart, Bunyodkor and gooseberry varieties were not applied to fertilizer in the early (1.10) term (control) options when planted in seeds of 4.0 mln, the loss of plants according to the varieties 17.4; 16.4; 15.8 and 13.8%, the norm during this sowing period is 5.0-6.0 mln in the planted options, these indicators are respectively 16,5-19,6; 14,8-18,5; 13,3-17,2 and it was 11.7-15.5%.

Autumn soft wheat varieties in the early (1.10) term; 4.0; 5.0;6.0 mln flourable seeds in the growing, $N_{180}P_{108}K_{54}$ when planted against the background of kg / ha, during the pre-wintering period 1 M² ha, 351-511 in the Krasnodarskaya-99 variety, 362-515 in the Yaksart variety, 366-522 in the Bunyodkor variety and 376-539 in the goose variety, while the number of bushes perished after wintering is determined in accordance with the varieties and norms 10,6-12,2; 8,8-10,2; 7,7-9,0 and 6.6-8.5%. Mineral fertilizers in the term and norms of this planting are in high moderation (N₂₁₀P₁₄₇K₁₀₅ kg/ha) the options used include wintering of autumn wheat varieties, control (without fertilizer) and N₁₈₀P₁₀₈K₅₄ kg/ha slightly less than the options used, the perished plants averaged around 8.7-5.5%. Autumn wheat varieties, when planted in early (1.10) periods in the conditions of irrigated light-colored peat soils of the kashkadarya region, can be explained by the fact that during the wintering period, plants die a lot, they grow well in favorable weather in the fall, develop and decrease in resistance to various fungal diseases.

In our experiments carried out in conditions of irrigated light-colored loamy soils, the best results were observed in areas where autumn soft wheat varieties were planted in the optimal term, in moderation and in the norm of fertilizers. Sowing in the medium (20.10) term, 4,0; 5,0 and 6,0, million. in the seed of the grains flourish and Fertilizers $N_{180}P_{108}K_{54}$ in the period up to wintering when planted against the background of kg / ha $1M^2$ the number of sprouts in the Krasnodarskaya-99 variety according to the norms 365; 440; 522 , in the Yaksart variety - 378, 455, 541, in the Bunyodkor variety - 382, 464, 550 and in the goose - variety 386, 471, 558 pieces, in accordance with the varieties after wintering the plant 336, 410,473; 350, 428, 492; 356, 438, 506 and 366, 450, 520 pieces,



preserved 92,1; 93,2; 90,6; 92,6; 94,1; 91,0; 93,2; 94,4; 92,0 and that 94.8; 95.5; 93.2% died while 7,9-9,4; 7,4-9,0; 6,8-8,0 and it was around 5.2-6.8%.

At the time of medium planting (20.10), the planting rate is 5.0 mln flourable seed and fertilizer norm $N_{210}P_{147}K_{105}$ in the pre-wintering period in peakkalchas applied to kg/ha, the number of bushes is 442 in the Krasnodarskaya-99 Variety at 1m2, 452 in the Yaksart variety , 460 in the Bunyodkor variety and 475 in the goose variety, 475 in the 427, 440 and 460, respectively, after wintering, or 93.9; 94.5; 95.6 and 96.8% preserved, the level of thinning is 6.1; 5.5; 4.4 and 3.2%. The norm of planting in these conditions is 6.0 million.plants that overwintered when germinated in fertile seeds were 90.2; 91.1; 92.6 and 93.6%, while the number of sprouts that died was 9.8; 8.9; 7.4 and 6.4%. It was found that with an increase in the norm for planting autumn soft wheat varieties in all sowing periods, the winter hardiness of plants decreases.

When growing autumn soft wheat varieties, planting deadlines, norms and feeding also have a direct effect on the preservation of plants until the harvest of cereals. Autumn soft wheat varieties are important in determining the germination of seeds in field conditions, the number of overwintering plants, the amount of plants stored until the harvest of cereals.

Table 1.1Overwintering of autumn soft wheat varieties and the duration of planting on
the number of bushes, the norm and the effect of fertilizers (sowing period
October 20, on average 2014 - 2016vy.)

Various			Winter lash cha	O	vortuintoring t	At the end of the Amal period 1m ² plants in						
			seedlin	0								
			g									
			number									
			1m²/	1 m ² /	%	sparse pry %	per	%				
Krasnodar Region -99	Control)	4,0 млн	334	287	85,7	14,3	273	81,5				
		5,0 млн	413	368	86,4	13,6	353	82,8				
		6,0 млн	490	418	83,1	16,9	392	77,9				
	$N_{180}P_{108}K_{54}$	4,0 млн	341	336	92,1	7,9	307	84,1				
		5,0 млн	420	410	93,2	6,8	375	85,2				
		6,0 млн	500	473	90,6	9,4	438	83,9				
	$N_{210}P_{147}K_{105}$	4,0 млн	343	343	93,0	7,0	314	85,1				
		5,0 млн	423	415	93,9	6,1	381	86,2				
		6,0 млн	501	485	90,2	9,8	449	83,5				
Яксарт	Control (no fertilizer	4,0 млн	338	296	86,3	13,7	282	82,3				
		5,0 млн	415	380	87,6	12,4	364	83,9				
		6,0 млн	490	428	84,3	15,7	409	80,5				
	$N_{180}P_{108}K_{54}$	4,0 млн	346	350	92,6	7,4	321	84,9				
		5,0 млн	427	428	94,1	5,9	390	85,7				
		6,0 млн	505	492	91,0	9,0	455	84,1				
	$N_{210}P_{147}K_{105}$	4,0 млн	349	351	93,4	6,6	322	85,6				



https://scopusacademia.org/

		5,0 млн	433	427	94,5	5,5	394	87,2
		6,0 млн	511	498	91,1	8,9	462	84,4
Бунёдкор	Control (no fertilizer	4,0 млн	336	309	88,0	12,0	294	83,7
		5,0 млн	413	398	89,2	10,8	380	85,2
		6,0 млн	492	449	85,4	14,6	431	82,1
	$N_{180}P_{108}K_{54}$	4,0 млн	351	356	93,2	6,8	326	85,3
		5,0 млн	432	438	94,4	5,6	403	86,8
		6,0 млн	505	506	92,0	8,0	465	84,5
	$N_{210}P_{147}K_{105}$	4,0 млн	353	362	94,3	5,7	334	87,0
		5,0 млн	437	440	95,6	4,4	407	88,5
		6,0 млн	510	512	92,6	7,4	473	85,6
Гозғон	Control (no fertilizer	4,0 млн	332	328	89,1	10,9	311	84,5
		5,0 млн	409	409	90,0	10,0	391	86,1
		6,0 млн	487	467	86,2	13,8	452	83,4
	$N_{180}P_{108}K_{54}$	4,0 млн	343	366	94,8	5,2	332	86,1
		5,0 млн	420	450	95,5	4,5	411	87,3
		6,0 млн	498	520	93,2	6,8	478	85,7
	$N_{210}P_{147}K_{105}$	4,0 млн	345	371	95,6	4,4	341	87,9
		5,0 млн	423	460	96,8	3,2	435	91,6
		6,0 млн	505	526	93,6	6,4	484	86,1

In our experiments, the varieties of autumn soft wheat were planted in early (1.10) terms, 4.0; 5.0 per hectare; 6.0 million in 1 Krasnodarskaya-99 varieties in the option of control (without fertilizer) planted in a flour Seeder $1M^2$ the number of plants preserved at 249, 331, 374 pieces or 77.4; 79.2; 75.5% respectively, in the Yaksart variety 256(78,2%), 337(79,3%), Bunyadkar variety 272 (79,5%), 353 (82,3%), 396 (78,2%), the goose Variety has, 290 (81,4%), 365 (83,5%), 429 (80,3%) in the term and norms of this planting, mineral fertilizers, if they have formed N₁₈₀P₁₀₈K₅₄ when applied to kg/ 1 M² the number of plants preserved in the varieties correspond to 287 (81,8%) - 414 (81,0%), 297 (82,0%) - 423 (82,3%), 308 (84,2%)- 436,5%), 323(85,9%) - 452 (83,8%) was equivalent to. Among the wheat varieties planted in the early term (1.10), the plant was most preserved at the end of the period of action, 5.0 million per hectare was fertilized , and in the variants where fertilizers were applied to n210p147k105 kg/, the number of plants preserved in 1 m2 in the Bunyodkor variety was 398 pieces or 86.3%, and in the goose variety 418 pieces or 90.5%.

In our studies, it was observed that plants from autumn soft wheat varieties are kept in the smallest number, up to grain harvest, in Krasnodarskaya-99 and partially Yaksart varieties. When planting was conducted in early (1.10) periods, plant retention to grain harvest varied from 77.4-75.5% to 81.5-77.9% and 73.6-72.3% depending on planting dates. In the evening period (10.11) planted Krasnodarskaya-99, the norm of planting in Yaksart varieties is 4.0 million per hectare. from 6.0 million.while increasing the yield of cereals did not significantly reduce the number of plants stored until harvest, in the optimal deadlines (20.10), the preserved plants at the end of the period of action were the highest in the varieties of the plant and Goose, in accordance with the varieties amounted to 407-



435 pieces or 88.5-91.6%. This means that the optimal planting period, the norm and the number of plants that ensure the cultivation of a high grain crop in the fertilizing norm are maintained.

Thus, in the middle (20.10) period of the creative and gooseberry varieties of autumn soft wheat under conditions of irrigated light-colored loamy soils, the planting norm is 5.0 million units of unsweetened seeds and mineral fertilizers planted against a background of N210P147K105 kg/ha, the wintering of autumn wheat grass by 95.6 and 96.8%, respectively, the minimum plant loss (4.4 and 3.2%), as well as the maximum number of bushes at the end of 88.5 and 91.6%) while providing preservation and effectively affecting the growth and development of autumn wheat varieties during subsequent development periods, planting is less than the optimal norm(4.0 million.seed) or more(6.0 million. seed) were found to have reduced plant winter hardiness, and the number of surviving plants Bush at the end of vegetation was 77.2-80.3%.

REFERENCES

- Siddikov R., Egamov I., Mansurov A. March is the month of harvest on the harvest of autumn bushy grain crops / / Agro science. - Tashkent. 2015. – N4 (48). – p. 49.
- Egamov I., Adashev I. The effect of sowing deadlines on grain yields // Agro science. - Organizational. 2017. N6 (50). – p. 23-24.
- Babomirzaev P.X. The impact of planting deadlines in the south of our republic on the growth and development of wheat // Agro science.-Tashkent. 2017. - №2 (46).- p. 38
- Gubanov Ya. V., Ivanov N.N. Azimaya pshenisa. Moscow. Kolos. 1998. S-303.
- 5. M.E.Azimova. G.N.The influence of sowing period, planting norm and fertilizer norms on field germination of varieties of soft wheat in autumn. // Agro-science-Tashkent 2021. No. 3 p-15-16
- Axmatovich J. R. In vitro rearing of trichogramma (Hymenoptera: Trichogrammatidae) //European science review. – 2016. – №. 9-10. – С. 11-13.
- 7. Jumaev R. A. et al. The technology of rearing Braconidae in vitro in biolaboratory //European Science Review. 2017. №. 3-4. C. 3-5.
- Axmatovich J. R. In Vitro Rearing of Parasitoids (Hymenoptera: Trichogrammatidae and Braconidae) //Texas Journal of Agriculture and Biological Sciences. – 2022. – T. 4. – C. 33-37.
- Suleymanov B. A., Jumaev R. A., Abduvosiqova L. A. Lepidoptera Found In Cabbage Agrobiocenosis The Dominant Types Of Representatives Of The Category Are Bioecology //The American Journal of Agriculture and Biomedical Engineering. – 2021. – T. 3. – №. 06. – C. 125-134.