METHODS, NORMS AND EFFECTS OF REPLANTING ON THE GROWTH AND DEVELOPMENT OF TRITICALE

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Annotation. *In the pasture soils of Fergana region, triticale and beans are planted after winter wheat as a secondary crop. detected.*

During the years of independence, the country has taken comprehensive measures to meet the demand of the population for grain and grain products. As a result, grain independence was achieved in a short period of time. In this regard, it is necessary to pay special attention to the expansion of arable land and the cultivation of secondary crops on vacant lands. Along with the efficient use of land through the cultivation of such crops, scientific research is being conducted on the preservation and increase of soil fertility, the development of technology for growing grain twice a year and the selection of appropriate crops.

In experiments conducted under typical gray soil conditions, the application of mineral fertilizers in repeated crops in the amount of N_{60}, P_{30}, K_{30} kg / ha created conditions for the optimal growth and development of moss, beans and soybeans, and the yield was 2.0; Found an increase of 3.2 and 2.9 ts / ha. (B.M.Khalikov [42; 102-104-p]).

In our research, too, the corner was planted with triticale for efficient land use, and the effects and productivity of triticale planting norms and fertilizers on its growth and development were determined.

In our research, we also found that corn and triticale were planted together in order to increase productivity, efficient use of land, and the effect of triticale planting norms, methods, and fertilizer norms on its growth and development.

In 2008 (Table 1) the number of plants per 1 m^2 in 4 and 13 variants was 246-250, respectively, planted along with the corner with a seed consumption of 200 kg / ha of triticale plant in accordance with the norms of mineral fertilizers $N_{100}R_{70}K_{50}$ kg / ha and $N_{130}R_{90}K_{65}$ kg / ha. , total number of stems 580.2-600.1; the number of spike stems was 299.6-300.0, the spike length was 11.2-11.3 and the stem height was 72.2-73.0 sm.

Phenological observations before harvesting the green mass of repeated crops revealed that the effect of mineral fertilizer norms on the growth and development of triticale was almost uniform. In this case, the number of plants at the rate of $N_{130}R_{90}K_{65}$ kg / ha compared to $N_{100}R_{70}K_{50}$ kg / ha is 4.0; total number of stems 19.9; the number of spike stems was 0.5, the spike length was 0.1 sm, and the stem height was 0.8 sm higher.

In variant (5), where triticale was planted at a rate of 150 kg of seeds per hectare, the above figures were 214-220 respectively; 702.4-688.4; 300.4-304.1 pieces and 12.9-12.0 sm and 73.2-73.8 sm. As a result of the reduction of applied seed norms from 200 kg / ha to 150 kg / ha, it was found that the number of plants per 1 m^2 area (seedling thickness) decreased by 32.0-30.0. But the total number of stems is 42.2-88.1; the number of grains in the ear is 6.8-4.0; spike length was observed to increase by 0.7–0.7 sm and stem height by 1.0–0.8 sm.

Hence, triticale has also been found to have certain seedling thicknesses for optimal germination and development. In this case, when sowing at a seed rate of 150 kg / ha per hectare, all indicators were observed to be relatively high.

When sown with triticale at a rate of 100 kg of seeds per hectare, the above figures are proportional to 198.0-200.0; 665.6-685.1; The number of plants per 1 m^2 was 275.0-295.5, 11.6-11.7 and 72.2-73.5 sm, compared to the variant sown with seeds at the rate of 150 kg / ha, 16.0-20, 0; total stems 36.8–3.1; spike stems were found to be 25.4–8.6 sm long, spike length 1.3–0.3 sm, and stem height 1.0–0.3 sm less. These changes are of course related to the seedling thickness along with the triticale and the angle. However, the number of stalks was 19.6-4.6 less than when the seed consumption was 100 kg / ha compared to the 200 kg / ha variant, but the total number of stalks was slightly higher.

When the triticale plant was planted at an angle of 15 sm between rows, in the variant (7) where 200 kg / ha of seeds were consumed, the above parameters of the

Table 1

Influence of sowing methods, norms and fertilizers on the growth and development of triticale, (in m^2), 2008

Option mode	Types of crops	Planting methods	Planting norms, kg / ha	Number of plants, pcs		Total number of stems, pcs		Spike stems number, pcs		Spike length, sm		Stem height, sm	
				1	2	1	2	1	2	1	2	1	2
1; 10	Control	No crops	-	-	-	-	-	-	-	-	-	-	-
2; 11	Burchok	Row spacing 15 sm	250	-	-	-	-	-	-	-		-	
3; 12	Burchok	Row spacing 60 sm	250	-	-	-	-	-	-	-		-	
4; 13	Planted with the addition of burchok and triticale	Planted in rows of 60 sm between rows	250/200	246,0	250,0	580,2	600,1	299,6	300,1	11,2	11,3	72,2	73,0
5; 14			250/150	214,0	220,0	702,4	688,4	300,4	304,1	12,9	12,0	73,2	73,8
6; 15			250/100	198,0	200,0	665,6	685,1	275,0	295,5	11,6	11,7	72,2	73,5
7; 16		Planted in rows of 15 sm between rows	250/200	235,0	240,0	628,0	655,1	278,3	284,1	11,7	11,8	72,1	72,1
8; 17			250/150	205,0	220,0	632,8	645,2	287,6	300,1	12,9	11,9	73,3	73,6
9; 18			250/100	199,1	200,0	616,4	632,1	268,1	278,1	11,4	11,6	71,0	72,0

Note: 1-$N_{100}P_{70}K_{50}$ kg / ha, 2-$N_{130}P_{90}K_{65}$ kg / ha

plant were 235.0-240.0 in proportion to the fertilizer norms; 628-655,1; 278.3-284.1 grains and 11.7-11.8; 72.1-72.1 sm.

These data show that the same seed rate is 11.0-10.0 (number of plants) less than the variant planted together in the row spacing of 60 sm, the total number of stems is 39.8-55.0 more, the number of corn stalks is 18.3-16.0 grains, the spike length was 0.5-0.5 sm, and the stem height was 0.1-0.9 sm less.

In this method of sowing (row spacing, row spacing), higher data on the main parameters were obtained when the seed consumption was 150 kg / ha. At the same time, the length of the spike (200 kg / ha above the norm) was 1.2-0.1 sm, and the height of the stem was 1.2-1.5 sm higher.

In 2009 and 2010, almost the same data were obtained. Only in subsequent years the figures are 10-15, 15-20, 8-9 and 0.2-0.3 sm and 1-2 sm less than in 2008, which is due to the arrival of climatic conditions each year.

In the experiment, since the triticale plant itself was not a separate planted variant, the results obtained by the methods of planting together with the triticale angle (60 sm) or in rows (15 sm) were compared and analyzed.

Thus, in the pasture soils of Fergana region, if triticale and pepper are planted after winter wheat as a secondary crop, the conditions for optimal growth and development of the plant are 60 sm. was determined to be.

References.

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