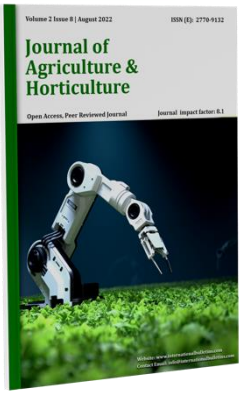

WINTER WHEAT YIELD STRUCTURE WHEN HERBICIDES ARE USED AGAINST WEEDS

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Abstract: In this article, opinions are expressed on the fact that when weeds are grown in the winter wheat field without elimination, weed shading, absorbing part of water and nutrients, and negatively affecting the structure of the crop can be significant. As a result of applying Puma super (1 l/ha) against spike weeds and Granstar (15 g/ha) against dicotyledonous weeds, the winter wheat variety Kroshka has a long spike, spikes in the spikes, and the number of grains in the spike and spike from one spike. increase in grain yield, this condition is more effective when the herbicides Puma super (1 l/ha) against weeds with spikes and Granstar (15 g/ha) against dicotyledonous weeds are mixed together and sprayed with a solution, the grain structure is significantly improved.

Key words: winter wheat, weeds, monocots, herbicide, wheat field, productivity.

Wheat yield is related to the structure of the crop and changes depending on the changes in all agrotechnological processes during growth and development.

The results of our experiments revealed that when the weeds in the winter wheat field were grown without elimination (control option), weed shading, absorbing part of water and nutrients, and negatively affecting the crop structure were observed to a significant extent.

When the results of the three-year experiments were summarized and the average of the results of the effectiveness of the use of herbicides against spiky and dicotyledonous weeds was observed, it was found that the same conditions were observed in terms of indicators. That is, the effect of weed control with the combined application of Puma super (1 l/ha) and Granstar (15 g/ha) herbicides separately (especially at the beginning of April) significantly improved grain structure and grain it was determined to increase productivity.

It was observed that the effect of herbicides used for weed control resulted in longer spike length to a certain extent. When the herbicide Puma super (1 l/ha) was applied on March 20, it was observed that it was 0.1 cm longer than the control option without this herbicide, this indicator was 0.2 cm against the background of the herbicide Granstar (15 g/ha), when both herbicides were applied together.

When the specified herbicides were applied on April 10, the spike length of wheat was found to be longer.

In the same way, an increase in the number of spikes, spikes and spikes of winter wheat was observed with the help of herbicides. However, in the experiment, it was found that when the selected herbicides were applied on April 10, the number of grains was greater than when applied on March 20.

On March 20, when we analyzed the data on the individual and combined use of Puma super (1 l/ha) against spiky and dicotyledonous weeds, and Granstar (15 g/ha) against dicotyledonous weeds, we witnessed the following cases.

When Puma super (1 l/ha) herbicide was applied and spiked weeds were eliminated on March 20, the number of spikes in spikes was 1 compared to the control option without this herbicide, and when Granstar (15 g/ha) herbicide was applied and dicotyledonous weeds were eliminated, the number of spikes was 1 compared to the control option. It was observed that the number of spikes in the ear increased by 2.6 when both herbicides were used together.

However, the effectiveness of the experimental herbicides when they were applied individually and together on April 10 was characterized by the fact that the number of spikes in the ear of the Kroshka variety of winter wheat was more than when the herbicides were applied on March 20.

Spike and dicotyledonous weeds of winter wheat Kroshka showed a significant increase in the number of grains in spikes when eliminated by means of Puma super (1 l/ha) and Granstar (15 g/ha) herbicides. However, this situation was manifested in the increase in the number of grains in the spikes. That is, when the herbicides were applied on March 20, the number of grains in the spike in the control variant was 30.7, compared to 2 grains in the background of Puma super (1 l/ha) herbicide, 3 grains in the background of Granstar (15 g/ha) herbicide, and both herbicides together at the prescribed rates. it was observed that the number of grains in the spikes increased by 5.3 grains when used. It was found that the effectiveness of herbicides when applied on April 10 was more effective in increasing the number of grains.

It was observed that the increase in grain mass from one ear of winter wheat variety Kroshka was greater when the spike and dicotyledonous weeds in the experimental field were eliminated by means of herbicides. Especially when both herbicides are used together, the increase in grain yield from one ear up to 0.04 grams is one of the main indicators for ensuring the increase in grain yield.

Therefore, the use of Puma super (1 l/ha) herbicide against spiky weeds and Granstar (15 g/ha) herbicide against dicotyledonous weeds in the conditions of long-cultivated lands of Surkhandarya region is the main means of improving crop structure and increasing grain yield. . Especially, the effectiveness of the combined use of these herbicides against spiky and dicotyledonous weeds is more evident in the structure of the crop.

It is known from scientific sources of 1980-1990 that herbicides were mixed with each other, with mineral fertilizers and other chemical agents, and when they were used once, the efficiency was high. Repeated use of tractor-mounted herbicide sprayers for winter wheat field weed control, especially when herbicides are mixed and applied together, increases exposure as well as costs.

The selectivity of herbicides when used to control weeds in winter wheat fields requires the use of several herbicides together to control weeds of different species.

According to the results of our experiments (Table 1), Puma super (1 l/ha) herbicide with spikes and Granstar (15 g/ha) herbicide against dicotyledonous weeds were used individually and together to significantly increase grain yield compared to the control option without herbicides. was found to increase.

Table 1

Dependence of the yield of the Kroshka variety of winter wheat on the level of weed control by herbicides

№	Options of experiment	Yield, ts/ha				Difference compared to control, +,-	
		2009 y	2010 y	2011y	average	ts/ha	%
When the herbicide was applied on March 20							
1	I control	31,3	34,4	32,8	32,8	-	100,0
2	II option	45,3	50,1	48,5	47,9	+15,1	146,0
3	III option	46,9	49,5	47,3	47,9	+15,1	146,0
4	IV option	56,7	57,3	56,1	56,7	+23,9	172,8
When the herbicide was applied on April 10							
1	I control	30,1	31,5	29,8	30,4	-	100,0
2	II option	47,3	48,1	47,1	47,4	+17,0	155,9
3	III option	47,8	49,7	48,1	48,5	+18,1	159,5
4	IV option	59,5	61,2	60,5	60,4	+30,0	198,7

However, it was observed that grain yield varies depending on the period, type and method of herbicide application.

First of all, when the grain yield of the control option without herbicides was analyzed according to the duration of herbicide application, the following cases were observed. It was observed that the grain yield of the control option was different in the years of the experiment, in the places where herbicides were applied and where herbicides were not applied. However, the fact that the difference in grain yield in the control options does not exceed 2.0-2.5 ts/ha can be considered as the error between the experimental options. Because the smallest difference between experimental options (ECF) is 1.10-3.11, this indicator is a natural difference that occurs between experimental options and repetitions, and it is recognized that the experiments were conducted correctly according to such differences that occur in field experiments.

On March 20, according to the first experiment on eliminating spike and dicotyledonous weeds in the winter wheat field by applying herbicides, the grain yield in the control option without herbicides was 31.3-34.4 ts/ha, Puma super (1 l/ ga) the grain yield when spiky weeds were eliminated by means of herbicide was 45.3-50.1 ts/ha in the years of the experiment, and the three-year average additional grain was 15.1 ts/ha compared to the control variant without the use of herbicides. When Granstar (15 g/ha) herbicide was used against dicotyledonous weeds, the grain yield differed dramatically from year to year (46.5-49.5 ts/ha) and the average was 47.9 ts/ha. However, when both herbicides were used together at prescribed rates, the additional grain yield increased up to 72.8%. That is, according to the three-year experiments, the average grain yield when herbicides were used together was 56.7 ts/ha, and the additional grain yield was 23.9 ts/ha compared to the control option without herbicides. These conditions can be attributed to the negative effect of dicotyledonous weeds. It is natural that the decrease in grain yield when Granstar (15 g/ha) herbicide is applied alone, compared to when both herbicides are used together, is caused by the negative effect of spiky weeds. Because spike and dicotyledonous weeds develop in winter wheat fields at the same time and have a negative effect on productivity. When Puma super (1

l/ha) and Granstar (15 g/ha) herbicides are used together, the grain yield increases dramatically due to the simultaneous elimination of both spike and dicotyledonous weeds and the creation of full conditions for the free growth and development of winter wheat.

According to the second experiment, when Puma super (1 l/ha) herbicide was used against spikes and Granstar (15 g/ha) herbicide against dicotyledonous weeds on April 10, the additional grain yield increased to 6.1 ts/ha compared to when herbicides were applied on March 20. This situation can be explained by herbicides being applied on March 20, and despite the elimination of weeds, new ones appear and have a negative effect on the growth and development of winter wheat, reducing the yield. Because on April 10, all types of weeds that have been treated with herbicides will fully germinate and be eliminated by herbicides (early and dicotyledonous). Therefore, it was found that additional grain yield when Puma super (1 l/ha) was applied on March 20 was 15.1 ts/ha, and this indicator increased by 2.0 ts/ha when applied on April 10. Also, when Granstar (15 g/ha) herbicide was applied on April 10 compared to March 20, an increase of 3.0 ts/ha was observed. The additional grain yield when herbicides are applied on April 10, when weeds have fully germinated, is on average up to 30 ts/ha, increasing the total average grain yield to 60.4 ts/ha.

So, when spike and dicotyledonous weeds are widespread in winter wheat fields, Puma super (1 l/ha) and Granstar (15 g/ha) herbicides are mixed against them and grain yield is improved due to the cleaning of wheat fields from such weeds. it is possible to achieve an increase of up to two contributions.

We selected the fields where winter wheat was grown a year before the experiment and where winter wheat is planned to be grown next year, and we marked the fields with a lot of spike and dicotyledonous weeds. Before conducting the experiments, we calculated such weeds and then applied herbicides according to the experimental scheme. Therefore, it was observed that there was a significant difference in yield between the experimental variants without herbicides and those with herbicides. Herbicides are usually applied to crops with a lot of weeds.

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