HEIGHT AND LODGING RESISTANCE OF WINTER WHEAT WHEN USING HERBICIDES AGAINST WEEDS

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Annatation: This article describes the effects of various herbicides on weeds found in winter wheat fields. Additionally, the impact of herbicide application on the growth and lodging resistance of winter wheat is discussed.

Key words: winter wheat, resistance, herbicide, weeds, yield

Introduction: Scientific analyses indicate that there are few studies on the negative impact of weeds on wheat lodging in grain fields where weeds are widespread, and limited work has been done to combat this issue. T.Kh. Khodjakulov emphasizes the necessity of developing lodging-resistant varieties through breeding, considering the significant damage caused by the lodging of cereal crops.

N. Khalilov proposed optimizing sowing norms to increase the resistance of wheat to lodging. The works of Z.A. Ibragimov in the Kashkadarya region and Sh.Kh. Rizaev in the Samarkand region can be attributed to the work done in this area.

Purpose of work: Determining the height and lodging resistance of winter wheat when using herbicides against weeds.

Research object: Winter wheat planted in irrigated fields and different types of herbicides were selected as research objects.

Research methods: Application of herbicides to winter wheat field, monitoring and analysis of changes.

Results: As a result of scientific work, the results of the irrigated lands of Surkhandarya region between 2005 and 2007 were analyzed and presented in the form of a table.

Height and lodging resistance of winter wheat when using herbicides against weeds. (when herbicides were applied on March 20)

№	Experience options	Height, cm	Lying down, score
		The wax is in the ripening phase X±SX	The wax is in the ripening phaseX±SX
2005 yil			
1	Control option without herbicides (st)	90,8 -	4,0 -
2	Puma super 1,0 l/ga	92,3 ± 1,5	4,5 ± 0,5
3	Granstar 15 g/ga	91,8 ± 1,0	4,5 ± 0,5
4	Puma super 1,0 l/ga Granstar 15 g/ga	95,3 ± 4,5	5 ± 1,0
2006 year			
1	Control option without herbicides (st)	91,0 -	4,0 -
2	Puma super 1,0 l/ga	92,8 ± 1,8	4,5 ± 0,5
3	Granstar 15 g/ga	92,0 ± 1,0	4,5 ± 0,5
4	Puma super 1,0 l/ga Granstar 15 g/ga	96,1 ± 5,1	5 ± 1,0
2007 year			
1	Control option without herbicides (st)	90,2 -	4,0 -
2	Puma super 1,0 l/ga	92,5 ± 2,5	4,5 ± 0,5
3	Granstar 15 g/ga	91,5 ± 1,3	4,5 ± 0,5
4	Puma super 1,0 l/ga Granstar 15 g/ga	95,8 ± 5,6	5 ± 1,0
2005-2007 average over the years			
1	Control option without herbicides (st)	90,7 -	4,0 -
2	Puma super 1,0 l/ga	92,5 ± 1,8	4,5 ± 0,5
3	Granstar 15 g/ga	91,8 ± 1,1	4,5 ± 0,5
4	Puma super 1,0 l/ga Granstar 15 g/ga	95,7 ± 5,0	5 ± 1,0

These and other circumstances require the development of new technologies for the elimination of damage caused by weeds in the fields of winter wheat and other grain crops in each region and variety.

From the results of our experiments, it was found that Puma super (1 l/ha) was used to eliminate common spike and dicotyledonous weeds in the fields where the Kroshka variety of winter wheat is grown under the conditions of the irrigated grassy barren soil region of the Surkhandarya region.) and Granstar (15 g/ha) herbicides, when applied separately and together on March 20 and April 10, showed an increase in height and dormancy tolerance, depending on the types of herbicides and methods of application, duration.

The maximum growth and lodging of winter wheat coincides with its wax ripening phase. For this reason, one-time monitoring of growth and lodging was carried out in the experimental options where herbicides were used and in the control option where herbicides were not used, and the results are presented in Tables 4.2.3.14 and 4.2.3.15. During this period, the height and lodging indicators of winter wheat changed in favor of experimental options with herbicides, and the maximum display of height and lodging was observed.

When the height of winter wheat was analyzed according to the tabular data, the height of the Kroshka variety at the wax ripening stage when herbicides were applied on March 20 was 90.8 cm in the control option without herbicides, Puma super (1 l/ha), 1.5 cm when Granstar (15 g/ha) was used, and 4.5 cm when Puma super and Granstar were used together at the specified standards.

The same situation was repeated in 2006-2007 when herbicides were mixed together and applied, compared to the variants where herbicides were applied separately and when herbicides were not applied, the height of the plant was 5.1-5.6 cm higher.

When herbicides were applied on March 20, it was observed that the height of wheat was proportional to that of the untreated control. For this reason, it was observed that when herbicides were applied individually on March 20, 2005, the lodging was 4.5 points, and in the control option without herbicides, it was 4.

When herbicides were used together, it was observed that the incidence of lodging was 5 points without being observed at all. The same parameters were repeated in 2006-2007, when Puma super (1 l/ha) and Granstar (15 g/ha) herbicides were mixed together, and a single application on March 20 ensured the stunted growth of wheat. The staying power is also guaranteed to be significantly improved.

Conclusion: Therefore, when Puma super (1 l/ha) and Granstar (15 g/ha) herbicides are used together against spike and dicotyledonous weeds in the winter wheat field, in return for the removal of such weeds, the wheat is stunted and vigorous. while its growth and development are ensured, its tolerance to lying down is also radically improved.

Even when herbicides were applied on April 10, when weeds were fully germinated, winter wheat height and lodging tolerance were repeated when herbicides were applied on March 20 in all years tested. with a difference of 1-2 cm according to the options, the tolerance to lying down was repeated in the same way.

As a proof of our opinion, if we analyze the averages for the data from 2005-2007, when Puma super (1 l/ha) herbicide was applied against spike weeds in the winter wheat field on March 20, herbicides It was 1.8 cm taller than in the untreated control, 1.1 cm taller in the background of Granstar (15 g/ha) and 5.0 cm taller when both herbicides were applied together. - it was observed to be 2.7-2.9 cm high in experimental options used separately, and 5.7 cm high when used together. However, this elevation was not observed to increase recumbency.

These conditions allow the combined use of Puma super (1 l/ha) and Granstar (15 g/ha) herbicides against spike and dicotyledonous weeds, eliminating such weeds and allowing free growth and development of winter wheat. along with providing, it also indicates the creation of appropriate conditions for increased resistance to lying down.

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