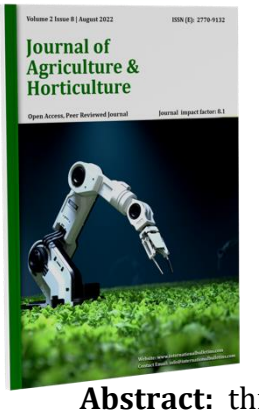

DEPENDENCE OF WINTER WHEAT GROWTH AND DEVELOPMENT ON THE LEVEL OF WEED CONTROL

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Abstract: this article presents ideas for eliminating some representatives of annual weeds and dicotyledonous weeds in the winter wheat field.

Key words: weeds, photosynthesis, herbicide, winter wheat, growth, development.

Spike and dicotyledonous weeds have a significant negative effect on the growth and development of winter wheat by overshadowing them.

The fields selected for the experiment were wheat fields where spike and dicotyledonous weeds were common in previous years, and since they consisted of fields where winter wheat was planned to be planted next year, the Kroshka variety of winter wheat was planted in the fall, and observation work was carried out on the duration of growth and development of this variety. According to the data in the tables, the duration of winter wheat from planting to uniform germination of Kroshka variety is 7 days on average, and the beginning of the budding phase from full germination begins after 18 days when 3-4 leaves are released, forming up to 4-5 stalks in autumn. it was observed that it continues in the spring and produces up to 20 stalks.

The full flowering of the Kroshka variety of winter wheat fell on March 15-20, and rapid development of weeds was observed during these times. That is, since spike and dicotyledonous weeds also developed evenly with winter wheat and began to use all the factors equally, on March 20, when their level of negative impact on winter wheat began to increase, on March 20, Puma super (1 l/ha) and Granstar (15 g/ ga) when used separately and together, it first stops the photosynthesis process in such weeds, accelerates the respiration process, disrupts their physiological and biochemical processes, increases the process of self-decomposition, and within 15-20 days, all the organs of weeds belonging to both species , including the roots, are completely destroyed, and full conditions are created for the steady growth and development of winter wheat. In other words, winter wheat is saved from the negative effects of weeds and the necessary conditions for its free growth and development are created.

In the control option where herbicides are not applied, winter wheat grows and develops together with dicotyledonous and spike weeds, and due to their negative effects, the length of the growing season increases. Because, as a result of growing winter wheat in the shadow of dicotyledonous and spiky weeds, the vegetation period is extended, the need for nutrients and water increases, various diseases and insects develop, and the negative impact on wheat lawns increases, forcing it to grow stunted. For this reason, it was observed that the duration of the vegetation period of winter wheat was 218-220 days in the control variant where herbicides were not applied, and the duration of the vegetation period of wheat fields that were weeded by herbicides varied depending on the types of herbicides and the method of application.

The herbicide Puma super (1 l/ha) against spike weeds and Granstar (15 g/ha) against dicotyledonous weeds, when applied individually and together, significantly increased the duration of the phases from the tillering phase to the wax ripening phase without almost any changes. it was observed that there were changes in the level, and there were no changes in the experimental options from the milk ripening phase to full ripening.

Even when herbicides were applied on March 20, when applied on April 10, it was observed that periodic changes in tuber-head, ear-flowering and flowering-milk ripening phases were proportional to each other.

In all years of the experiment, the duration of the tuber and spike phases was 31-33 days in the control option without herbicides, 29-31 days when Puma super (1 l/ha) was used, and 29-31 days when Granstar (15 g/ha) was used, which was very little difference was observed. However, when the specified rates of Puma super and Granstar herbicides were used, the duration of the tuber and spike phases was observed to decrease sharply, compared to the control variant without herbicide application, it was reduced to 7 days in 2005, 5 days in 2006, and 6 days in 2007. A similar pattern was observed when herbicides were applied together on April 10, with an acceleration of 5 days in 2005, 3 days in 2006, and 2 days in 2007 compared to the no-herbicide control option in 2005.

Therefore, when herbicides are used together, there is a significant shortening of the tuber-ear phases of winter wheat due to the death of weeds.

Due to the rapid development of winter wheat in the spike-flowering and flowering-milk ripening phases, the vegetation period is shortened due to weed control in these phases.

When Puma super (1 l/ha), Granstar (15 g/ha) herbicides are used individually and together, the duration of the control option without herbicides was 12 days, while this indicator was 10-11 days when herbicides were used separately, 2. A reduction of 3 days was observed.

For this reason, the Kroshka variety of winter wheat in the irrigated lands of the barren soil region of Surkhandarya region was 220 days without spraying herbicides against weeds, and 213-216 days when herbicides were applied separately, Puma super (1 l/ha) with spike, Granstar (15 g/ha) it was observed that the duration of growth and development phases was 209-212 days and reduced to 8-11 days when used in combination against dicotyledonous weeds.

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