# EFFECT OF TILLAGE METHODS AND HERBICIDES APPLICATION ON WEEDS IN COTTON FIELDS

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**Abstract.** Annual weeds were reduced by 85.4% and perennial weeds were reduced by 82.7% as a result of the combined application of herbicides with two-layer plow tillage against weeds. has a positive effect on the growth and productivity of the stem.

**Key words:** Cotton, soil, main treatment, weed, annual weeds, perennial weeds, option, return, agronomy, control, efficiency, yield, control of crop rotation with herbicides.

33 million people from more than 80 countries of the world. Cotton is grown on about 100,000 hectares, and winter wheat is grown on more than 200 million hectares in more than 100 countries, and 10-15% of the harvested crop is lost due to weed infestation. In a number of other countries of the world, such as China, Germany, USA, Brazil, Argentina, India, Pakistan, Australia, South Korea, Russia, Ukraine, Kazakhstan, more than 3000 types of weeds are spread, of which more than 200 types damaging the main agricultural crops. These problems are eliminated as a result of the combined agrotechnical and chemical control measures against weeds.

The research conducted in Ghoza (2012-2015) was carried out by placing 6 options, 4 repetitions and 1 layer. The area of each option was 720 m2, the area of consideration was 360 m2. The total area of the experiment is 1,728 hectares. Weed control Dafosat pre-plough, Stomp 33% e.c. herbicides are sprayed along with planting. Andijan-35 variety of cotton was cultivated in the experiment.

The obtained data show that when the number of weeds in the field is taken into account before plowing the soil with a simple plow at a depth of 28-30

cm, the number of annuals was 28 units/m2, this indicator, It was found that it was 23 pieces/m2 in p years. In the spring, it was noted that the number of annual weeds was 21 weeds/m2, and the number of perennial weeds was 13 weeds/m2.

When the number of weeds in the field was taken into account before plowing at a depth of 28-30 cm on a two-layer plow, it was found that the number of annuals was 29 pieces/m2, and this indicator was 22 pieces/m2 in perennials. . In the spring, it was observed that the number of annual weeds was equal to 14 pieces/m2, and the number of perennials was equal to 8 pieces/m2.

It can be seen from the obtained data that when plowing with a two-layer plow at a depth of 28-30 cm, compared to plowing the soil with a regular plow at a depth of 28-30 cm, annual weed germination is 7 units/m2, perennial weeds It was observed that it was less than 5 units/m2.

Based on the above data, it can be concluded that when the soil is plowed to a depth of 28-30 cm with a simple plow, compared to plowing with a two-layer plow at a depth of 28-30 cm, weed residues and seeds are buried in deep layers and buried before plowing. As a result of applying Dafosat herbicide against annual weeds at the rate of 6.0 l/ha, their seeds and root stems can be explained by the fact that it has low fertility.

In our first observation, the number of annual weeds was 16.93 units/m2, and the number of perennial weeds was 11. 95 units/m2, in the variant where Dafosat herbicide was applied at the rate of 6.0 l/ha before autumn plowing, the number of annual weeds was 16.40 units/m2, and perennial weeds were 11.70 units/m2 that, in the option where Stomp herbicide was used at the rate of 2.0 l/ha along with seeding, the number of annual weeds was 16.85 units/m2, and the number of perennial weeds was 12.20 units/m2 was recorded.

In the experiment, in order to determine the effectiveness of the methods of soil treatment against weeds and the combined use of herbicides, when observation was carried out after 20 days, the soil was cultivated with a simple plow to a depth of 28-30 cm, and herbicides were applied against weeds. The number of annual weeds increased by 28.20 units/m2 (32.5%), and the number of

perennial weeds increased by 16.80 units/m2 (18.6%) in the non-planted control option. In the variant where Dafosat herbicide was applied at the rate of 6.0 l/ha before autumn plowing, the number of annual weeds increased to 6.65 units/m2 (67.2%), and perennial weeds to 3.75 units/m2 (73.2%), in the case of application of Stomp herbicide at the rate of 2.0 l/ha along with seeding, the number of annual weeds decreased by 4.60 units/m2 (77.7%), and perennial weeds were found to have increased by 15.30 units/m2 (5.1%).

The number of annual weeds increased by 20.80 units/m2 (23.8%) in the control option, plowed at a depth of 28-30 cm with a two-layer plow, and no herbicide was applied. and the number of

Although it increased by 13.67 units/m2 (16.3%), the number of annual weeds was 4.70 units/m2 ( by 73.9%), and perennials by 2.30 pieces/m2 (82.0%), annual weeds in the option where Stomp herbicide was applied at the rate of 2.0 l/ha along with seeding while the number of weeds decreased by 2.60 units/m2 (84.1%), it was observed that perennial weeds increased by 12.63 units/m2 (3.6%).

In order to account for weeds in the experiment, after 40 days, the soil was tilled with a simple plow at a depth of 28-30 cm, and in the control option, where no herbicide was applied, the number of weeds in one year was 28.95 units/m2 ( by 35.0%), and the number of perennial weeds increased by 17.20 units/m2 (21.8%), in the variant where Dafosat herbicide was applied at the rate of 6.0 l/ha before autumn plowing annual weed count by 6.25 pcs/m2 (69.3%) and perennials by 3.62 pcs/m2 (73.9%) with Stomp herbicide 2.0 l /ha, the number of annual weeds decreased by 4.27 units/m2 (79.5%), and perennial weeds by 15.65 units/m2 (7.6 %) was found to have increased.

The number of annual weeds increased by 21.35 units/m2 (26.1%) in the control option, plowed to a depth of 28-30 cm with a two-layer plow, and no herbicide was applied. and the number of grasses increased by 13.91 units/m2 (18.5%), these indicators Dafosat herbicide before autumn plowing In the variant applied at the rate of 6.0 l/ha, the number of annual weeds increased to 3.75

units/m2 (75.9%), and perennial weeds increased to 2.14 units/m2 (82.7% ) ha, in the case of application of Stomp herbicide at the rate of 2.0 l/ha along with seeding, the number of annual weeds increased by 2.40 pcs/m2 (85.4%) decreased, but perennial weeds increased by 12.86 units/m2 (5.1%).

In the study, when we consider the weeds after 60 days, the number of weeds in one year was 29.57 weeds/m2 ( by 38.4%), and the number of perennial weeds increased by 17.62 pieces/m2 (24.4%), but in autumn In the variant where Dafosat herbicide was applied at the rate of 6.0 l/ha before plowing, the number of annual weeds increased to 6.43 units/m2 (68.3%), and perennial weeds increased to 5.83 units/m2 ( by 59.5%), the number of weeds in one year was 4.43 in the option where Stomp herbicide was applied at the rate of 2.0 l/ha along with seeding units/m2 (78.7%) decreased, and perennial weeds increased by 19.15 units/m2 (40.8%).

The number of annual weeds increased by 21.92 pieces/m2 (30.4%) in the control variant, which was treated with a two-layer plow at a depth of 28-30 cm, and no herbicide was applied. and the number of weeds increased by 14.29 units/m2 (21.5%), Dafosat herbicide 6.0 l/ha before autumn plowing the number of annual weeds increased to 3.89 units/m2 (75.5%) and perennial weeds to 4.20 units/m2 (64.7%) in the moderately applied option with seeding together with Stomp herbicide at a rate of 2.0 l/ha, the number of annual weeds decreased by 2.28 units/m2 (85.7%), perennial weeds it was found that grass increased by 15.75 pieces/m2 (17.0%).

In the experiment, when we took into account the amount of increase of weeds in the control options compared to the main soil tillage methods, after 20 days when the soil was plowed with a two-layer plow at a depth of 28-30 cm compared to the option in which the soil was plowed with a simple plow at a depth of 28-30 cm annual weeds by 8.7%, perennial weeds by 2.3%, 40 days after 8.9% to 3.3%, and after 60 days from 8.0% to 2.9% less germination was observed.

Compared to the main tillage methods, after 20 days the effect on annual weeds is up to 6.4%, the effect on perennial weeds is up to 8.8%, after 40 days a effect on annual weeds up to 5.9%, effect on perennial weeds up to 8.8%, after 60 days effect on annual weeds Up to 6.3%, it was noted that the effect on perennial weeds was up to 5.2%.

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