



## CONTROL MEASURES FOR ANNUAL AND PERENNIAL GRASS WEEDS IN SOYBEAN CROPS

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### ABSTRACT

*Weeds reduce the yield of agricultural crops, worsen the quality of products. With an average weediness of crops, the yield decreases by 20-25%, and with a strong weediness, you can not get a crop at all.*

There are 841 species of weeds in our republic, they belong to 72 families. The most common are annual weeds 519 and perennial weeds 322. They are classified according to biological characteristics, nutrition, living conditions.

**Parasitic weeds.** They are divided into fully parasitic and semi-parasitic weeds. Weeds that feed on cultivated plants and feed solely on them are called fully parasitic weeds. Weeds that grow together with cultivated plants and feed on them from the soil are called semi-parasitic or thick-stemmed weeds (ivy, giant ivy). In addition, there are root parasites, which include various types of wormwood.

**Non-parasitic weeds.** Perennials: ephemera, early and late spring, winter, autumn, dicotyledons. Perennial weeds include taproots and taproots, rhizomes, rhizomes, tubers, bulbs and creepers. This group includes free-living grasses that have green leaves and root systems and absorb nutrients directly from the soil. Annual and biennial weeds reproduce only by seeds, laying seeds once in a lifetime. Most of them are heterocarpous, that is, they produce seeds of different sizes. On the other hand, perennial weeds produce seeds several times a year.

In the fight against weeds, it is also necessary to know the viability and dormancy of their seeds. Small-seeded spring weeds germinate at a depth of 1-2 cm and cannot germinate at 5 or more cm at all. Seeds of some weeds can germinate at a depth of 10-20 cm (desinets, wild oats). Therefore, special treatment against this type of cereal weeds is required.

### Table 1

**Efficacy of Miura herbicide against annual and perennial grass weeds in soybean fields**



№	Weeds name	Control (no herbicide )	Zellek super, 104 g/l a.e. – 0.5 l/ha (reference)		Miura, - 0.4 l/ha		Miura, - 0.5 l/ha	
			units/m 2	%	units/ m2	%	units/m2	%
	After 15 days							
1	<i>Avena fatua L.</i>	4,2	0,6	85	0,5	87	0,4	89
2	<i>Setaria glauca L.</i>	5,6	0,6	89	0,7	87	0,6	89
3	<i>Setaria Viridis</i>	5,1	0,7	86	0,7	86	0,6	88
4	<i>Cynodon dactylon</i>	5,3	1.1	79	1.0	81	0,7	87
5	<i>Sorghum halepense</i>	5,6	1.2	77	0,9	83	0,6	89
	Средний	5.1	0,8	83	0,7	84	0,5	88
	After 30 days							
1	<i>Avena fatua L.</i>	5,3	0,7	87	0,7	87	0,6	89
2	<i>Setaria glauca L.</i>	5,7	0,6	89	0,7	85	0,6	87
3	<i>Setaria Viridis</i>	5,6	0,8	87	0,8	87	0,7	89
4	<i>Cynodon dactylon</i>	5,8	1.7	70	1.0	84	0,7	90
5	<i>Sorghum halepense</i>	4,9	1,0	79	0,7	85	0,5	89
	Average	5,4	0,9	82	0,7	85	0,6	89
	After 60 days							
1	<i>Avena fatua L.</i>	5,6	0,7	88	0,5	90	0,5	90
2	<i>Setaria glauca L.</i>	5,4	0,8	85	0,5	91	0,4	93
3	<i>Setaria Viridis</i>	5,6	0,8	86	0,5	92	0,5	92
4	<i>Cynodon dactylon</i>	5,1	1.5	68	1.4	70	0,7	89
5	<i>Sorghum halepense</i>	5,4	1.7	68	1.4	74	0,6	89
	Average	5,4	1,1	84	0,8	83	0,7	90
	Average 3 accounts	5,3	0,9	79	0,7	84	0,6	89

During the growing season of soybeans, annual and perennial weeds amounted to 5.1 units in the study in the control variant. This type of herbicide is Zellek super, 104 g/l a.e. – herbicide 0.5 l/ha (standard) after 15 days: *Avena fatua L.* - 89%, *Setaria glauca L.* - 98%, *Setaria Viridis* - 88%, *Cynodon dactylon* - 87%, *Sorghum halepense* - 89% on average 0.5 pieces/ha. m<sup>2</sup>, i.e. 88%, after 30 days *Avena fatua L.* - 89%, *Setaria glauca L.* - 87%, *Setaria Viridis* - 89%, *Cynodon dactylon* - 90%, *Sorghum halepense* - 89% on average 0.6 pcs/m<sup>2</sup>, i.e. e. 89%, after 60 days *Avena fatua L.* - 90%, *Setaria glauca L.* - 93%, *Setaria Viridis* - 92%, *Cynodon dactylon* - 89%, *Sorghum halepense* - 89% on average 0.7 pieces/m<sup>2</sup>, t. e. , 90%, and the average calculation result showed 89%. Based on these results, Zellek super, 104 g/l c.u. –



compared with 0.5 l/ha (standard) Miura herbicide - efficiency when applying 0.5 l/ha (Russia) Miura - showed that it was 5% higher than 0.4 l/ and 10% higher than the standard.

In conclusion, we can say that Miura, a.e., whose effective substance is Khizalofop-P-methyl against annual and perennial thorny weeds, was found among soybean fields in gray soils of the Tashkent region. - The use of the drug 0.5 l/ha (Russia) gave good results and when applied, the yield was 26 t/ha, i.e. 17 t/ha additional yield compared to control.

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