EFFICACY OF CHEMICAL SUBSTANCES AGAINST WHITE ROT DISEASE OF SUNFLOWER VARIETY “MADINA”

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Annatation. Due to the use of modern technologies in the cultivation of sunflower in the conditions of naturally damaged meadow gray soil, the full germination of seeds differed by 2-3 days compared to the control option.

At the same time, when treated with 0.7-0.9 kg/t of Bordeaux drug concentrate, sunflower white rot disease was affected 2 times less than the control. Productivity is more than 9s/ha due to healthy plants, and 6.4s/ha more than the standard option.

Keywords Soil, variety, seedling thickness, growth and development, white rot, yield conclusions. Fungicide, productivity, conclusions.

The sunflower crop is considered to be one of the most important oil crops. The valuable part of this crop is that valuable oil is extracted from it for our people. Currently, due to the expansion of the sunflower cultivation area, the yield is increasing year by year. However, the obtained yield and the amount of oil produced from it are not at the required level, because part of the crop is destroyed due to the spread of pests and diseases. As a result of research carried out by a number of our scientists in recent years, it can be seen in the example of sunflower experiment [2] that it is not necessary to plant sunflowers in the same field with successive harvests against infection, therefore, it was concluded that it is necessary to recommend short-rotational planting.

He came to the conclusion that sunflower seeds should not be sown on the same field for two years.

Table 1

t/r	Experience options	**Annual norm l/ga**	**Duration of use of chemicals**	**Reserved area ga**

1	Control			2. 0.ga
2	Copper cup (standard)	4 kg/t	When the first appearance of the disease occurs	2.0 ga
3	Maksim 3.5% s.p	5 l/ ga	Seed treatment before planting	2.0 ga
4	Bordo 0.7-0,9kg/t	2 l/ga	When the disease first occurs	2.0 ga

The experiment was conducted in the area of the educational experimental farm of the Andijan Institute of Agriculture and Agrotechnologies. The experiment consists of 4 returns and 4 options, all options are placed in one layer, each option consists of 8 rows.

On the 6th day after sowing the seeds, the number of young sprouts germinated in the 3rd variant was 76.2%, while in the control variant this figure was 67.4%. In the remaining 2 and 4 variants, this appearance was in 70.3-72.9%. In fact, the thickness of seedlings is considered to be an important factor in increasing productivity, because if the thickness of seedlings in the plan is maintained in each hectare, the life period of sunflower will not only be extended by 7-10 days, but also the indicator of grains in the basket will be higher. will bring.

Table 2

Experience options	Germinate the seeds Output indicator	Dates taken into account				Leaves
		15 VIII	1 IX	15 IX	1 X	
Control	83.2	17.3	29.1	73.9	78.4	9
Copper cup (standard)	88.4	25.3	37.8	79.3	88.1	12.3
Maksim -3.5% s.p	90.5	28.6	43.4	85.1	96.0	13.7
Bordo 0.7-0,9kg/t	96.8	32.4	52.2	93.8	109.3	14.6

Determining the date of sunflower planting is considered to be an event of great importance, because clear days of the weather allow timely sowing of seeds, along with the formation of full hectares in this area, early growth of seedlings and development will be made possible.

It is known from the given table-2 that the height of the stem of the plants in the field planted with sunflowers was close to the height of the stem of the plants in all options. But the data received on the next September 15 was completely different from the previous data, the best option turned out to be the 4th. The height of the sunflower stem in these options is 92.8 cm. if there was, on this date, the growth branch of the plants in the control warrant is 72.9 cm. the difference between them is that the height of the stem of the plants of the 4th option grew 19.9 cm high.

When the number of leaves was obtained according to the options, the emergence of leaves in the seedlings of the control option was behind compared to the plants of the other option. From the data presented in the table, it can be seen that in the control variant, 8.9 pieces were formed in each seedling, and the maximum number of leaves collected was 5.9 pieces more than in the control variant, which occurred in the seedlings of the 4th variant. there were leaves. It can be seen from this that the use of high agrotechnical measures for plants is the basis for the emergence of new morphological signs in sunflower.

Table 3

Effect of various chemical substances on disease and productivity of sunflower parts.

Experience options	The thickness of the seedling is 1,000	Counted number of plants	Disease development			A lifelong illness %	General productivity s/ga	The weight of a thousand seeds is gr
			Stem	Leaf	Shopping cart			

Control	42.7	100	17.0	26.0	33.0	36.2	14.7	47.8
Copper cup (standard)	41.6	100	9.0	21.0	27.0	31.5	17.2	51.3
Maksim-4.0-4.5l/ ga	42.3	100	7.0	19.0	24.0	28.6	18.3	53.4
Bordo 0.7-0.9 kg/t	41.9	100	3.0	12.0	6.0	17.3	23.6	56.7

In order to find out the aggressiveness of the pathogen that causes white rot disease of sunflower, from the 1st and 3rd returns of the experiment, i.e. 100 seedlings from each option were counted and calculations were made on the distribution in separate parts of the sunflower stems table -3 from the conducted data, it is known that the most infection with the pathogen S chroet f helianthi Novot was observed in the stems of the control variant, i.e. it was 17%, while in the stems of the plant in the 4th variant, this appearance was 3 made up %. In other words, when we pay attention to the disease on the leaves, a strong disease was observed in the control variant, the number of diseases on the leaves of the plants in this variant was 3 times more infected than in the 4th variant. An incidence of more than 5% was observed compared to the reference variant. In fact, high yield of high-oil sunflower varieties is an important indicator.

Due to the use of modern technologies in increasing the productivity of the sunflower crop in the following years, it is possible to extend their life period by 8-10 days by cultivating varieties with a high oil content and resistant to diseases.

It is known from the given table-4 that the highest yield was obtained from sunflower seedlings of the 4th option, 23.6s/ha was obtained from this option, and this indicator was 18.3s/ha from the control option. in other words, 5.3s/ha less yield was obtained. The weight of 1000 grains in the control option was 47.8 grams, while the weight of the grains in the 4th option was 56.4 grams, the difference between them was 0.8 grams.

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