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Influence of Methods and Norms for Applying Fertilizers on the Growth, Development and Yield of Shade

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Abstract: currently, due to the changes that occur in the plant world as a result of the sharp change in climate, the seed causes a qualitative indicator of the grain. This is due to the fact that the generative organ of the plant does not receive moisture in the soil as a result of warming the air during dressing, the process of building up from the root in the plant is observed, and the putsch causes the grain to become a whirlpool. In this article, the influence of methods and norms for applying fertilizers on the growth, development and yield of soybeans on the germination of seeds in field conditions is determined.
Keywords: control, urea, soy, varietal, flower, dukak, stem growth, stem height, phytovak, Nurafshan, ENTO MICRO.

In our republic, it was widely established to plant exportable crops as the main crop on low-yield land to replenish the population's food needs and increase soil fertility. In the decree of the president of the Republic of Uzbekistan on the strategy of agricultural development of the Republic of Uzbekistan for 2020-2030, PF-5853, effective use of land and Water Resources, modernization and rapid development of Agriculture, continuous development of agricultural production, further strengthening the country's food security, expansion of production of environmentally friendly products, production of high-income and competitive products, priority areas such as enriching the structure of crops with food and legumes have been identified in increasing soil fertility in areas where cotton and Bush grain are planted [1]. In addition, the role of shade in increasing soil fertility is considered great, which, at the expense of the presence of legume bacteria (Rhizobium Japonica) in its root, enriches the soil with nitrogen and leads to the accumulation of biological nitrogen in the amount of an average of 70-100 kg/ga in 1 year. That is why the remains of roots and prunes that remain from this crop are considered important in maintaining and increasing soil fertility.

Research results. The main products of the shade are soy flour and soy oil. Soy flour is used in the production of food, confectionery, fillers, meat substitutes, in the preparation of milk, cheese and diabetes products. Soy oil is also used in food, and is also used in the preparation of mayonnaise, margarine, oil for salad dressing. From the waste of unrefined soy oil, paints, soap, varnish, rubber products are produced.

In addition, it is also important in increasing soil fertility. After harvesting, soy accumulates up to 70-80 kg of biological nitrogen in an area of 1 hectare. It can be planted as a siderat crop on land with low soil fertility, increasing soil fertility [2].

In the experiment, the medium-sized "Nurafshon" variety of soybeans was planted in 400 thousand units of germinated seeds per hectare, 3-4 cm deep. After the completion of the planting work, seeds were given for the purpose of obtaining a full seedling.

The seedling thickness of the shade was 329.2 units/ga in the control (fertilizer-free) control variant, 328.8 PCs/ga In the control (fertilizer-free) Phytovac variant, 331.6 PCs /ga in the control (fertilizer-free) urea variant, 332.4 PCs /ga In the control (fertilizer-free) ENTO MICRO variant, 334.8

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PCs /ga In the control (fertilizer-free) Phytovac+ urea variant Qadi, control (no fertilizer) fitovak+ ento Micro was 335.6 PCs/ga in the variant, P90 K60 control was 342.4 PCs/GA in the variant, The P90 K60 Phytovac variant had 340.8 units/ga, the P90 K60 urea variant had 343.6 units/ga, the P90 K60 ENTO MICRO variant had 344.8 PCs /ga, the P90 K60 Phytovac+ urea variant had 344.4 PCs /ga, the P90 K60 Phytovac+ ENTO MICRO variant had 344.0 units/ga, the P90 the K60 N30 control variant had 343.2 PCs /GA, the P90 K60 N30 phytovak variant had 341.2 PCs /ga, the P90 K60 N30 urea variant had 343.2 units/ga, the P90 K60 N30 ento micro variant had 342.0 PCs /ga, The P90 K60 N30 Phytovac+ urea was found to be 342.4 units/ga in the variant, while the P90 K60 N30 Phytovac+ ENTO MICRO was found to be 343.6 PCs /ga in the variant.

The seedling thickness of the shade was found to be an average of 328.8-344.8 PCs/ga at the beginning of the practice period.

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Information about the seedling thickness of the shade is presented in Table 1.

Table 1.

Germination of soy crop seeds in field conditions, 2023

№ var	Mineral fertilizer norm, kg/ga	Name of fertilizers and preparations used when feeding the shade through the Leaf	Shonalashda	When blooming and forming legumes	Duration of observation, %				Seedling thickness, thousand PCs /ga
					20.04	22.04	24.04	26.04	at the beginning of the period
1	Control (without fertilizer)	Control	Treated with water		26,7	44,5	66,7	82,3	329,2
2		Fitovak	300 ml/ga	400 ml/ga	25,1	42,8	66,3	82,2	328,8
3		Karbamid	3,0 kg/ga	5,0 kg/ga	26,0	43,2	66,4	82,9	331,6
4		IFO MACROMIX	1,0 l/ga	1,0 l/ga	25,8	43,9	66,5	83,1	332,4
5		Fitovak+ karbamid	300 ml/ga+3,0 kg/ga	400 ml/ga+5,0 kg/ga	26,1	44,0	66,7	83,7	334,8
6		Fitovak+ IFO MACROMIX	300 ml/ga+1,0 l/ga	400 ml/ga+1,0 l/ga	25,5	43,6	66,0	83,9	335,6
7	P_{90} K_{60}	Control	Suv bilan ishlov beriladi		27,1	44,8	68,4	85,6	342,4

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8		Fitovak	300 ml/ga	400 ml/ga	27,6	45,0	68,0	85,2	340,8
9		Karbamid	3,0 kg/ga	5,0 kg/ga	27,0	44,4	68,9	85,9	343,6
10		IFO MACROMIX	1,0 l/ga	1,0 l/ga	27,3	45,2	68,3	86,2	344,8
11		Fitovak+ karbamid	300 ml/ga+3,0 kg/ga	400 ml/ga+5,0 kg/ga	26,9	44,6	68,5	86,1	344,4
12		Fitovak+ IFO MACROMIX	300 ml/ga+1,0 l/ga	400 ml/ga+1,0 l/ga	27,2	44,2	68,2	86,0	344,0
13	N_{30} P_{90} K_{60}	Control t	Treated with wate		27,4	44,9	68,9	85,8	343,2
14		Fitovak	300 ml/ga	400 ml/ga	27,6	44,7	67,8	85,3	341,2
15		Karbamid	3,0 kg/ga	5,0 kg/ga	27,1	45,1	69,1	85,8	343,2
16		IFO MACROMIX	1,0 l/ga	1,0 l/ga	27,8	44,6	68,6	85,5	342,0
17		Fitovak+ karbamid	300 ml/ga+3,0 kg/ga	400 ml/ga+5,0 kg/ga	27,0	44,3	67,4	85,6	342,4
18		Fitovak+ IFO MACROMIX	300 ml/ga+1,0 l/ga	400 ml/ga+1,0 l/ga	27,5	44,9	68,5	85,9	343,6

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