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Effects Of Planting Norm And Feeding Conditions On Growth, Development And Yield Of Soybean Varieties On Typical Burrow Soils Exposed To Irrigation Erosion

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ABSTRACT

In order to produce a uniformly high and high-quality crop from soybeans grown in the conditions of typical burlap soils exposed to irrigation erosion of Samarkand region: in the unwashed part of the soil of the area, the sowing is carried out in the norms of 80 kg/ha seedva N90P63K45 kg/ha, as a result of stratification on the basis of resurstejamkor agrotechnologies in the norms of seedva N90P42K30 kg/ha to n120p84k60 kg/ha when the soil is washed and seedva n70p42k30 kg/ha in the washed soil collected part of the field, the yield of soybeans "Selekta 201" in the areas where the soil is not washed 29,8-31,6-28,3 ts, Variety 26,4-28,5-24,7; sort of "Nena" 24,6-26,2-23,2 ts/ha, these indicators are in accordance with the above-mentioned norms of planting and fertilization in the "Selekta 201" variety in the areas where the soil is washed 28,2-27,5-29,4; on "Uzbekskaya-2" 25,3-24,6-26,2; In "Nena" 22,5-21,7-24,8 ts/ha, the yield of the "Selecta 201" variety of soybeans in the above planting and fertilization norms in the collected (accumulated) part of the washed soil of the experimental field 31,5-30,2-29,3 TS / ha "Uzbekskaya-2" Variety 27,8-26,2-24,6; in "Nena" 25,6-23,4-22,5 it was determined that ts/ha increased the fertility of these soils and ensured the cultivation of clean products without harming the ecological environment, while keeping the crop and the soil from washing with irrigation water.

KEYWORDS

Typical burlap soil, irrigation erosion, soybean varieties, planting and mineral fertilizer norm, growth, development, productivity.

INTRODUCTION

In order to fully meet the demand of the population of Uzbekistan for protein food products, it is necessary, first of all, to expand and grow the assortment of agricultural crops with a high protein content. Those so valuable legumes-one of the cereals, is soybeans. Soy is important in the preparation of food, fodder and in increasing soil fertility. Soybeans contain 35-55 % protein, 12-27 % fat and a variety of vitamins (A, V, S, D, E), a number of ferments, while the stem contains 4-5% protein and up to 5% fat. Products made from soybean seeds (oil, margarine, glaze, soybean milk and flour, canned food and condiment products) are much cheaper than real ones, they do not remain from them in terms of satiety and digestion. Currently, 40% of the oil consumed by the world's population is soy oil (Atabaeva, 2000; Bordichev, Litov, 2005; Norman, 2005; Administrakov, 2008; Mannopova, Mirzaakhmedov, 2009; Yormatova, Kushmetov, 2018; Tangirova, 2018; Utambetov, Bekbanov, 2020; Abitov, Teshaev, 2020; Nurmatov, Rakhimov, Amonov, 2020).

According to data, at present, soybeans are grown in more than 80 countries of the world. Over the next 30 years, soybeans have grown on a global scale in 3.2 times, while the yield has grown by 31 million. from 254 million. increased in tons. Soybeans are on the 4 place after salting, corn and shale are on the 2 place in terms of protein content. The main countries that grow soybeans are: the USA, Brazil, China, Argentina, India, Italy, Indonesia, Paraguay, Canada, etc. that are sown in large areas (Atabaeva, 2019; Abidov, Holmurodova, 2018; Shamsiev, Khusanov, 2020; Makhmudov, Khalikov, 2020).

Today, the demand for soybeans as a harmless crop for Environmental Protection is

increasing. Because this crop absorbed pure nitrogen in the atmosphere, enriched the soil with biological nitrogen, reducing pollution of the environment and the water basin with nitrogen compounds contained in the applied mineral fertilizers. The yield of grain crops with a spike planted after shading increases, and the possibility of a sharp reduction in the standard of nitrogen fertilizers applied to them is created. Also, the use of pesticides in the cultivation of soybeans will not be required at all.

Therefore, one of the most important issues in increasing the productivity of typical burlap soils exposed to irrigation erosion and the yield of agricultural crops grown in these conditions, ensuring food insecurity of the population of the Republic is considered. The period of demand in our republic is the period of expansion of the fields of leguminous-grain, oil and protein-rich crops, development of agrotechnics for the cultivation of new promising varieties, study of the population from the conditions of typical clay soils exposed to irrigation erosion and making scientifically-based recommendations for the production of soybeans in meeting the need for food.

MATERIALS AND METHODS

For the development of Agrotechnology for the application of optimal planting and fertilization standards, which ensure the growth, development, yield and quality grain cultivation of soybean varieties in the conditions of typical burrowing soils exposed to irrigation erosion, protect the soil from washing and increase its productivity, and for 2016-2019 years, the irrigation of the farmer's farm "Nurboev Alikul Nurboevich we conducted field experiments in conditions of typical burlap soils with erosion.

Field experiments were conducted on 4-repetitions, the options were systematically placed on one hemisphere. (1-table)

1.table.

Experimental structure

Experience options				Terms of application of NPK standards			
species	NPK norm, kg/ha	planting times	planting seeds norm, kg/ha	in kg/ha under the plow		when feeding the plant	
				P ₂ O ₅	K ₂ O	4-барг N	ғунчалашда N
Uzbek-2	Control (without fertilizer)	10-April	70	-	-	-	-
			80	-	-	-	-
			90	-	-	-	-
		20- April	70	-	-	-	-
			80	-	-	-	-
			90	-	-	-	-
		30- April	70	-	-	-	-
			80	-	-	-	-
			90	-	-	-	-
	N ₁₂₀ P ₈₄ K ₆₀	10- April	70	84	60	60	60
			80	84	60	60	60
			90	84	60	60	60
		20- April	70	84	60	60	60
			80	84	60	60	60
			90	84	60	60	60
		30- April	70	84	60	60	60
			80	84	60	60	60
			90	84	60	60	60
	N ₉₀ P ₆₃ K ₄₅	10- April	70	63	45	45	45
			80	63	45	45	45
			90	63	45	45	45
		20- April	70	63	45	45	45
			80	63	45	45	45
			90	63	45	45	45
		30- April	70	63	45	45	45
			80	63	45	45	45
			90	63	45	45	45
	N ₆₀ P ₄₂ K ₃₀	10- April	70	42	30	30	30
			80	42	30	30	30
			90	42	30	30	30
		20- April	70	42	30	30	30
			80	42	30	30	30
			90	42	30	30	30

		30- April	70	42	30	30	30
			80	42	30	30	30
			90	42	30	30	30
Experience options				Terms of application of NPK standards			
species	NPK norm, kg/ha	planting times	the norm of sowing seeds, in kg / ha	in kg/ha under the plow		when feeding the plant	
				P ₂ O ₅	K ₂ O	4-barg N	budding N
SELECTRUM 201	Control (without fertilizer)	10-April	70	-	-	-	-
			80	-	-	-	-
			90	-	-	-	-
		20- April	70	-	-	-	-
			80	-	-	-	-
			90	-	-	-	-
		30- April	70	-	-	-	-
			80	-	-	-	-
			90	-	-	-	-
	N ₁₂₀ P ₈₄ K ₆₀	10- April	70	84	60	60	60
			80	84	60	60	60
			90	84	60	60	60
		20- April	70	84	60	60	60
			80	84	60	60	60
			90	84	60	60	60
		30- April	70	84	60	60	60
			80	84	60	60	60
			90	84	60	60	60
	N ₉₀ P ₆₃ K ₄₅	10- April	70	63	45	45	45
			80	63	45	45	45
			90	63	45	45	45
		20- April	70	63	45	45	45
			80	63	45	45	45
			90	63	45	45	45
		30- April	70	63	45	45	45
			80	63	45	45	45
			90	63	45	45	45
	N ₆₀ P ₄₂ K ₃₀	10- April	70	42	30	30	30
			80	42	30	30	30
			90	42	30	30	30
		20- April	70	42	30	30	30
			80	42	30	30	30
			90	42	30	30	30
		30- April	70	42	30	30	30
			80	42	30	30	30
			90	42	30	30	30

			90	42	30	30	30
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Experience options				Terms of application of NPK standards			
species	NPK norm, kg/ha	planting times	the norm of sowing seeds, in kg / ha	in kg/ha under the plow		when feeding the plant	
				P ₂ O ₅	K ₂ O	4-barg N	
Nena	Control (without fertilizer)	10- April	70	-	-	-	-
			80	-	-	-	-
			90	-	-	-	-
		20- April	70	-	-	-	-
			80	-	-	-	-
			90	-	-	-	-
		30- April	70	-	-	-	-
			80	-	-	-	-
			90	-	-	-	-
	N ₁₂₀ P ₈₄ K ₆₀	10- April	70	84	60	60	60
			80	84	60	60	60
			90	84	60	60	60
		20- April	70	84	60	60	60
			80	84	60	60	60
			90	84	60	60	60
		30- April	70	84	60	60	60
			80	84	60	60	60
			90	84	60	60	60
	N ₉₀ P ₆₃ K ₄₅	10- April	70	63	45	45	45
			80	63	45	45	45
			90	63	45	45	45
		20- April	70	63	45	45	45
			80	63	45	45	45
			90	63	45	45	45
		30- April	70	63	45	45	45
			80	63	45	45	45
			90	63	45	45	45
	N ₆₀ P ₄₂ K ₃₀	10- April	70	42	30	30	30
			80	42	30	30	30
			90	42	30	30	30
		20- April	70	42	30	30	30
			80	42	30	30	30
			90	42	30	30	30
		30- April	70	42	30	30	30
			80	42	30	30	30
			90	42	30	30	30

The soils of the experimental area are typical burlap soil, the slope of the field is -0,005 meters, the sizot waters are located at a depth of 16-20 m, the average sand by mechanical composition. The amount of humus in the stratum of the experimental field soils (0-30 CM) is 0,93 %, total nitrogen-0,091, phosphorus-0,185, potassium-2,29%, respectively, their active forms are nitratli nitrogen-12,6, active phosphorus-14,2 and replaceable potassium-286 mg/kg.

In the field of experiment, the seeds of local varieties "Uzbekskaya-2", and foreign varieties "Selekta 201", "Nena" were sown in the first ten days of April against the background of a depth of 70 cm to 4-5 cm, nitrogen to 60-120 kg/ha, phosphorus to 42-84 kg/ha and potassium to 78080 and 90 kg/ha. All phenological observations and biometric measurements in the field of experiment (height of the plant, number of branches, legumes and leaves, leaf levels, yield intensity, dynamics of the formation of endings) – were carried out on the basis of the methodological manual "methods of conducting field experiments". Statistical analysis of data obtained using Microsoft Excel program B.A. On the basis of dospekhov's manual "methodology polevogo opita" dispersion analysis was performed.

RESULTS AND DISCUSSION

It was observed that in the conditions of typical burlap soils exposed to irrigation erosion, the sowing and fertilization standards of the middle-ripening varieties "Uzbekskaya-2", "Selekta 201", "Nena" were different, the soil of the field of experiment was not washed, washed and washed soil had a different effect on the germination of the seeds in the collected parts. For example, the soil of the control (without fertilizer) variant of the experiment was not washed, washed and washed, when the planting norms in the collected parts of the soil were 70, 80, 90

kg/ha, the germination of seeds was observed after 6-8 days when the germination took place, and in the washed part of the field the soil was observed after 7-9 Of the options used in the norms of Mineral fertilizers (N120P84K60; N90P63K45; N60P42K30 kg/ha), the yield of the seeds of the "Uzbekskaya-2" Variety in the unwashed part of the soil was 95,8%, when the soil was washed was 93,5% and the collected part of the washed soil was 96,4%, these indicators corresponded to 94,7; It was observed that 92,3 and 95,5%, in the "Nena" variety were equal to 96,2-96,8; 95,3-96,1%.

It was noted in our research that the norms of planting and fertilization also had a different effect on the number of Bush of plants preserved during the harvesting of soybean varieties. The soil of the experimental field is not washed in accordance with the norms of planting (70, 80, 90 kg/ha), the number of soils of the "Uzbekskaya-2" Variety 86,5-89,3-91,6 %, in the part where the soil is washed 84,8-87,5-89,6 and while the washed soil is in the collected areas 87,4-90,2-92,5 if%, then these indicators correspond to the variety " Selecta 201 84,8-86,5-88,2; 83,6-86,2-87,7 and 85,7-88,4-90,3 %, and at the end of the period of validity in the "Nena" varieties preserved plants Bush number in accordance with the above 87,5-90,6-92,4; 88,3-91,4-93,5 and 90,4-92,2-94,5 it was taken into account that % is equal. This condition can be explained by the fact that in the washed part of the soil of the field, under the influence of irrigation water, nutrients are washed out and the amount of moisture is reduced.

In our experiments, it was observed that the norms of planting and use of mineral fertilizer stratification had a significant impact on the growth and development of soybean varieties in the areas where the soil was not washed, washed and washed soil was collected. For example, it was found that the soil of the experimental field was washed, in variants

where the fertilizer was not used, in all planting norms, soybean varieties germinated 2-3 days earlier. If the budding phase of soybean varieties began 2-4-6 days before the planting, depending on the norms of mineral fertilizers in the washed part of the soil of the options, where the norms of planting were increased from 70 to 90 kg/ha, it was taken into account that the budding period in the areas where the soil was not washed. Such results were also recorded in the flowering and ripening phases of soy varieties.

In our experiments, if the height of the height of the soybean varieties at the end of the vegetation period was 125,4-127,6 CM, in the "Uzbekskaya-2" Variety in the "unwashed control (fertilizer-free) variant" 125,4-127,6 CM, in the "Selekta 201" 126,8-129,3, in the "Nena" 92,5-94,2 CM, these indicators were calculated in accordance with the in the collected part of the washed soil, it was taken into account that it is equal to 126,5-128,3; 128,6-131,4; and 94,3-96,7 CM.

In our experiments, it was observed that the height of soybean varieties was high in the variants with increased planting and mineral fertilizer standards. In the unwashed part of the soil of the experimental field, mineral fertilizers (up to N90P63K45 kg/ha) were applied, and in the variants with planting norms 70, 80, 90 kg/ha, the height of the "Nena" variety is 132,5-144,3 CM, in accordance with the planting standards, in the washed part of the soil of the field in the norm of n60p42k30 kg/ha), respectively 135,2-147,5 CM, these indicators are 136,3-146,8; 133,5-144,3 in accordance with the above in the "uzbekskaya-2" variety; 138,6-149,4 "selection 201" type 138,4-147,6; 135,2-146,4; 139,5-148,8 it is noted that it is equal to CM, these indicators are relevant in relation to the variant in which the soil of the plot is washed, the soil is not washed 1,7-2,1; 2,8-2,5; 3,1-1,9; in the collected part of the washed soil, less than in CM, on the contrary, 2,3-2,6 CM, 1,5-2,6; and 1,8-2,9 CM

were observed to be higher. It should be noted that the soil of the experimental field was not washed, and in the collected parts of the washed soil, it was found that with an increase in the norm of planting of soy varieties, the number of leaves, side branches and legumes in plants decreased by a certain amount. This can be explained by the fact that due to the high number of bushings of soybean varieties in these areas, the area of plant nutrition is reduced, as well as unfavorable conditions for the accumulation of vegetative and generative organs of densified plants.

According to the results of biometric observations carried out on soy varieties grown in the experimental field, it was observed that the effect of the norms of planting and application of mineral fertilizer stratification in the formation of leaves in plants was significant during the growth period. The norm of planting in the "Selekta 201" variety of shade grown in the control (without fertilizer) variant of the unwashed part of the soil of the experimental field is 70, 80, 90 kg/ha, when the number of leaves is in accordance with the norms of planting at the end of the pollination period 26,5-25,2 – 25,6 grain, in the washed part of the soil 24,2-23,8 – 23,7 and while in the collected part of the washed soil 27,8-26,5 – 27,3 the number of leaves in plants of the variant in which fertilizers (up to N90P63K45 kg/ha) are applied in the unwashed part of the soil of the field, respectively 5,7-4,8 in relation to the fertilizer-free option, if the soil of the specified planting standards – 5,2 PCs., in the variant where fertilizers (up to N120P84K60 kg/ha) are applied in the washed part of the soil 5,3-4,5 – 5,0 and against the background of fertilizers (N60P42K30 kg/ha) in the collected part of the washed soil 6,3-5,8 – 5,4 it was taken into account that the pieces formed more leaves. The yield of leaves in soybean varieties grown under the conditions of typical burlap soils subjected to irrigation erosion is inextricably dependent on the application of planting and

stratification of mineral fertilizer standards, and results obtained as above. When comparing the varieties by the number of leaves, it was observed that in the variety "Selekta 201", more leaves were formed than in other varieties ("Uzbekskaya-2", "Nena"). But it was noted that if the increase in the norm of planting of soy varieties did not have a significant effect on the number of leaves, the effect of mineral fertilizer norms was high.

Planting norms of soy varieties studied in our studies, it was observed that when the soil of the experimental field is increased from 70 to 90 kg/ha in Unbroken, washed and washed soil parts, the number of side branches in the plants decreases, as well as exceeding the range of joints. For example, at the end of the period of validity in the "Uzbekskaya-2" variety of shade grown in the control (without fertilizer) variants of un-washed, washed and washed soil collected parts of the experimental field soil, according to the norms of planting (70, 80, 90 kg/ha) 3,1-3,3; 2,6-2,9 and 2,4-2,6 pieces of soil washed; 2,4-2,6 and 2,1-2,3 and 3,2-3,5 in the collected part of washed soil; 2,8-3,0 and 2,6-2,8 grains, these indicators were observed to decrease the number of side branches in the varieties "Selekta 201" to 0,2-0,3; 0,1-0,2 and 0,3-0,4 pieces, in the varieties "Nena" to 0,4-0,5; 0,3-

In the unwashed part of the soil of the experimental field, soybean varieties are grown against the background of mineral ogitlarni (N70P80K90K45 kg/ha) in the planting norms of 201, 0,5-0,4 – 0,3 PCs, "Uzbek-2" at 0,3-0,2 - 0,2 PCs., in "Nena" 0,4-0,6-0,9 PCs., in the planting norms specified in the soil washed areas, the number of side branches of "Selekta 201" variety in the options used in the norm of mineral fertilizers (N120P84K60 kg/ha), in comparison with the control (without fertilizer) option 0,3-0,2-0,1 dona, at "Uzbek-2" 0,2-0,1-0,1, at "Nena" 0,3-0,4-0,5 in the variants where the norm of planting (up to 70, 80, 90 kg/ha) and mineral fertilizers

(up to N60P42K30 kg/ha) are applied in the collected part of the soil washed units, experimental field, these indicators correspond to varieties 0,6-0,5-0,4; 0,5-0,3-0,3; 0,6-0,8-1,1 it was taken into account that a high amount of side branches were formed before the grain. This was observed to increase the planting norm in the cultivation of soybeans in conditions of typical burlap soils exposed to irrigation erosion, decrease in the number of side branches in plants and change in plant gabitus, especially in the morning varieties gabitusin is small. Therefore, in these conditions, effective influence on the development of vegetative organs of plants on the account of planting soy varieties and stratification of mineral fertilizer norms, favorable conditions for the formation of a large number of harvest elements are created in them.

The effect of sowing and stratification of mineral fertilizer norms on the formation of yield structure elements of soybean varieties grown in conditions of typical burlap soils exposed to irrigation erosion is shown that when the norm of planting in the control (without fertilizer) variant of the unwashed part of the soil of the experimental field is 80 kg/ha, the number of legumes it was taken into account that the number of legumes in plants is higher in variants with the planting norm corresponding to 90-70 kg/ha.

In our research, the number of legumes of the "Selekta 201" variety of the variant shade grown against the background of the mineral fertilizeritlarni respectively (N80P63K45; N120P84K60 and N60P42K30 kg/ha), the soybean varieties are sown to the norms of 80, 90 and 70 kg/ha in the parts where the soil is not washed, washed and washed 72,3-69,8-73,5 number of seeds in a grain, a bush plant 126,5-124,2-128,3 seedling, seedless in a bush plant 13,4-12,1-14,5 g. Seedmass, 1000 pieces 165,5-163,1-166,2 g. these indicators are in the form of "Uzbekskaya-2" 71,4-70,5-72,7 PCs,

125,3-122,8-126,5 PCs, 12,8-12,3-13,6 g and 162,7-160,5-164,5 g., "Nena" sort 64,5-62,6-65,7 PCs, 114,3-112,5-116,2 PCs, 11,8-11,2-12,5 g and 168,4-165,7-169,3 it was taken into account that it was equal to G. It should be noted that, taking into account the characteristics of each variety in the formation of generative organs in soybean varieties, the correct selection of acceptable planting and fertilization norms, it was determined that they have an effective effect on the yield of soybean varieties grown on typical coarse soils subjected to irrigation erosion.

It was observed that the elements of the yield structure of soybean varieties grown in the field of experiment (legumes, seedling and Mass in one bush plant, 1000 seeds) had a different effect on the yield of varieties depending on the norms of planting and fertilization. For example, in the control (without fertilizer) variant of the unwashed part of the soil of the experimental area, the yield of the shade "Selecta 201" variety is corresponding to the norm of planting to 70, 80, 90 kg/ha 17,5-15,3-14,6 ts / ga ni, these indicators are in the variants where the soil is washed and the washed soil is collected, respectively 15,8-14,2-13,6 and 18,7-16,5-15,4 in the case of ts/ga, the productivity of the shade in the variety "Uzbekskaya-2" in accordance with the above 16,3-14,6-13,8 as well as 14,7-13,5-12,6 and 17,2-15,1-14,5 ts/ga, In "Nena" 16,3-15,6-15,2 as well as 14,6-14,2-13,4 and 16,7-14,8-14,2 was equal to ts/. These indicators are proof that once again, as a result of washing away many nutrients and moisture from the slope on the lands subjected to irrigation erosion, soils with different fertility are formed in one dive itself. Therefore, in the cultivation of high and high-quality yields from soybeans grown in these conditions, it is important to stratify and apply optimal planting and fertilizing standards, taking into account, first of all, the characteristics of the varieties, the degree of soil washing and fertility.

In our experiments, when mineral fertilizers are applied to N90P63K45 kg/ha in the norms of sowing up to 70, 80, 90 kg/ha of soybeans in the unwashed part of the field, the grain crop is 29,8 in the standard of planting "Selekta 201"; 31,6; 28,3 ts/ ha, 26,4 in the "Uzbekskaya-2" varieties; 28,5; 24,7;; These indicators are in the "Selecta 23,2" variety when applied to mineral fertilizers N120P84K60 kg/ha in the above planting standards in the areas where the soil is washed, if it is up to 201 ts/ha 28,2-27,5-29,4 ts/ ga, at "Uzbekskaya-2 25,3-24,6-26,2 in "Nena", 22,5-21,7-24,8 TS/Ha, when mineral fertilizers are applied to N60P42K30 kg/ha in the above planting standards in the part of the washed soil accumulation (accumulation) of the experimental area, the yield of the variety "Selekta 201" 31,5-30,2-29,3 ts/ ga, uzbekskaya-2 Variety 27,8-26,2-24,6, "Nena" sort 25,6-23,4-22,5 was equal to ts/. So it was found that it is desirable to apply stratification in accordance with the norms N90P63K45; N120P84K60 and N60P42K30 kg/ha in the case of increasing the yield of soybean varieties in the conditions of typical burlap soils subjected to irrigation erosion, in the untreated part of the soil of the field up to 80 kg/ha.

CONCLUSIONS

Budding of soybeans varieties grown in the conditions of typical burlap soils exposed to irrigation erosion of Samarkand region in the norms of sowing up to 70, 80, 90 kg/ha, mineral fertilizer (N120P84K60; N90P63K45; At the end of the period of application, the height of the shade "Nena" variety is 132,5-144,3 CM, at the end of the period of application, in the untreated part of the soil of the options applied mineral fertilizers (N90P63K45 kg/ha), when the soil of the experimental field at the effect of N60P42K30 kg/ha begins early 2-4-6 days, when applied against the background of OGITLARNI (N120P84K60 kg/ha) 130,8-142,6 cm and the collected part of washed soil (n60p42k30 kg/ha) 135,2-147,5 CM, these

indicators are in the sort of "Selecta 201", in accordance with the above 138,4-147,6; 135,2-146,4; 139,5-148,8 CM, "Uzbekskaya-2" Variety 136,3-146,8; 133,5-144,3; 138,6-149,4 the fact that it is CM, these indicators are relevant in relation to the above in the washed part of the soil of the plot 1,7-2,1; 2,8-2,5; 3,1-1,9; CM less, while in the collected part of the washed soil, on the contrary 2,3-2,6; 1,5-2,6; 1,2-1,7 it was found that the number of leaves, side branches and legumes in plants decreased by certain indicators with an increase in the norm of planting of soybean varieties in parts where the soil was not washed and washed were collected.

In order to produce a uniformly high and high-quality crop from soybeans varieties in all parts of the field (unwashed, washed, washed soil collected) under the conditions of typical burlap soils exposed to irrigation erosion: in the unwashed part of the soil of the plot, when the soil is washed in the norms of sowing up to 80 kg/ha seeds oghitlarni N90P63K45 kg/ha seeds up to 90 kg/ha seeds up to N120P84K60 kg/ha and in the washed part of the field seed up to 70 kg/ha seeds up to N60P42K30 kg/ha in accordance with the above 29,8-31,6-28,3 ts/ga, uzbekskaya-2 Variety 26,4-28,5-24,7; Sort of "Nena" 24,6-26,2-23,2 ts/ha, these indicators are in accordance with the above-mentioned norms of planting and fertilization in the "Selekta 201" variety in the areas where the soil is washed 28,2-27,5-29,4; on "Uzbekskaya-2" 25,3-24,6-26,2; in "Nena" 22,5-21,7-24,8 ts/ha, the yield of the "Selecta 201" variety of soybeans in the above planting and fertilization norms in the collected (accumulated) part of the washed soil of the experimental field 31,5-30,2-29,3 TS / ha "Uzbekskaya-2" Variety 27,8-26,2-24,6; In "Nena" 25,6-23,4-22,5 it was determined that ts/ha increased the fertility of these soils and ensured the cultivation of clean products without harming the ecological environment, while keeping the crop and the soil from washing with irrigation water.

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