

**DEVELOPMENT OF OPTIMAL NORMS FOR FOLIAR FEEDING IN THE
CULTIVATION OF REPEATED CROPS (OIL FLAX AND MILLET)**

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Abstract. In connection with the change in the structure of crops, one of the intensive technologies for growing high and high-quality crops from leguminous crops is to increase the number of repeated crops on the vacated areas after harvesting the cereal crops planted in irrigated areas. Millet is one of the plants that has the property of producing high grain and straw yields in a short growing season. In Uzbekistan, millet is grown as a main and repeated crop. Growing millet as a repeated crop allows you to grow grain crops twice a year.

Keywords: Repeated crop, agrotechnology, cereal, micronutrients, fertilizer, tuberization, fertilizing, yield.

Introduction. In order to fully meet the nutritional needs of the population of food, industry raw materials and livestock, as well as to make more use of irrigated land in conditions of repeated water shortages in the following years, it is widely established to plant drought-resistant cereals and oil crops. The decree of the president of the Republic of Uzbekistan “on the development strategy of New Uzbekistan for 2022-2026” dated January 28, 2022, PF-60, defines important tasks such as increasing the effectiveness of agricultural reforms in the near future and developing the agrarian sector on the development of this front, ensuring cluster-based processing of agricultural products and food security, creating the necessary conditions for Therefore, to develop optimal standards for non-root feeding in the production of oil flax and millet in order to grow a rich and high-quality crop, save the amount of mineral fertilizers applied, improve the environmental environment of the soil and the research carried out to improve the existing elements of Agrotechnology is relevant.

Methods and Materials. The field experiment was carried out in 10 variants, from which the yield of millet grain was 94.0% in the account of 235 units in the control variety. While in all variants the number of plants at 1 m² and the specificity indicators did not differ greatly from each other, the terrain of the experimental field varied, depending on its ecological environment. For example the highest indicator and the highest indicator of Unicity OSA was in Option 8, and the number of seedlings at 1 m² was 98.6% of 247 unities.

It is known that one of the most important processes that indicate the level of activity of plant life is growth. In this process, all physiological and biochemical reactions take place in the plant's body, resulting in an increase in their total dry mass with the formation of new cells and organs. Together with this, many factors of external conditions influence plant growth. Such factors can include temperature, light, humidity, etc. But, agrotechnological measures to plant seeds at optimal deadlines, and ore fertilizers especially also lead to overgrowth of plants.

Phenological observations in the experimental field show that millet has certain phases, such as: mowing-clumping, clumping-clumping, tubing-clumping, roasting-flowering, flowering-ripening. During the growing process, the root mass and ground mass were determined using the example of plants in each variant of millet during the bushing phase, tubing phase, and roasting phases of the plant. In this case, the highest indicator “Master” (NPK 20-20-20 water-soluble complex fertilizer) was observed in the variant applied to 5 kg/, whereas the lowest indicator “Yara kristalon” (NPK 12-12-36 water-soluble complex fertilizer) was observed in the variant applied to 5 kg/. We also received the highest indicator even during the seeding phase of millet, when the “Master” (NPK 20-20-20 water-soluble complex fertilizer) was applied to 8 kg/and fertilizer was applied to 10 kg/in the roasting phase.

Table 1.

Survival up to millet harvest (2025)

№	Types and varieties of crops	Types of fertilizer	Plant number at 1 m ² , PCs		
			At the beginning of the growing season	At the end of the growing season	Number of plants that die, pieces
1	Saratovsky-853 variety of millet	Control	194	193	1
2		Urea	211	211	0
3			218	216	2
4			215	214	1
5			"Master" (NPK-20-20-20 water-soluble complex fertilizer)	186	185
6		204		203	1
7		216		216	0
8		"Yara crystallon" (NPK-12-12-36 water-soluble complex fertilizer)	231	229	2
9			227	226	1
10			219	218	1

During the early development of plants, excessive expansion of the leaf surface increases the accumulation of additional yields (straw), reduces light, disrupts gas exchange, leads to the laying of stems, as a result of which the amount and quality of grain decreases, the inner cavity of the plant, which reaches 50-150 CM in height, is thickly covered with soft hairs. In addition to a millet Bush, that is, the release of 2-5 stems, branching can, in other words, form short side branches with branches that protrude from the above-ground joints of the stem. In the early development phases of the growing season, millet becomes very demanding on nitrogen fertilizers.

In our studies, too, the height of the millet plant has changed depending on its height as well as its dry masses. In our experiments, plant height, growth and development with the use of fertilizers of different norms were observed in different ways.

Table 2

Influence of various fertilizer norms on dry mass by the phases of development of millet on t/ga (2025)

No	Types and varieties of crops	Types of fertilizer	Collection	Tubing	Fasting	Flowering	Maturation
1	Saratovsky-853 variety of millet	Control	0,345	2,463	4,527	5,051	5,698
2		Urea	0,383	2,590	5,191	5,107	6,350
3			0,472	2,753	5,694	5,502	6,723
4			0,366	2,542	4,176	5,366	6,321
5			"Master" (NPK-20-20-20 water-soluble complex fertilizer)	0,244	2,185	3,488	4,557
6		"Yara crystallon" (NPK-12-12-36 water-soluble complex fertilizer)	0,276	2,381	3,581	4,864	5,608
7			0,328	2,587	3,955	5,293	5,948
8			0,231	2,012	3,289	4,927	5,574
9		water-soluble complex fertilizer)	0,186	1,333	2,841	4,462	4,578
10			0,217	1,483	3,042	4,634	4,911

After the millet matured, the crop was harvested by hand mowing, and the amount of harvest and dimensions were clarified under laboratory conditions. According to him, the best result is "Master" (NPK) if the grain mass in one row was 1.51 g in the lowest indicator control option-20-20-20 water-soluble complex fertilizer) per hectare was observed when the growth applied to 5-8-10 kg/h, depending on the darwry. Also according to the results of the observation, the number of grains in the row and the length of the row and the mass of 1000 grains were also in the lowest indicator control variety, but rather "Master" (NPK-20-20-20 water-soluble complex fertilizer) a good result was obtained when applying it to 5-8-10 kg/h, depending on the growth darwry per hectare. The results in the remaining variates can be seen in the table above.

Table 3.

Field germination of flax grain 1 m2 plant number (2025 year)

No	Types and varieties of crops	Types of fertilizer	Growing at 1 m2 number of sprouts,	Field germination of seeds, %
1	Spring grade of	Control	589	84,5

2	oil flax	Urea	574	82
3			602	86,1
4			614	87,7
5		"Master" (NPK-20-20-20 water-soluble complex fertilizer)	596	85,1
6			645	92,1
7			631	90,2
8		"Yara crystallon "(NPK-12-12-36 water-soluble complex fertilizer)	587	83,6
9			666	95,1
10			654	93,4

The field experiment was carried out in 10 variants, of which the uniqueness of the flax grain was 84.5% in the account of 589 units in the control variety. While in all variants the number of plants at 1 m² and the specificity indicators did not differ greatly from each other, the terrain of the experimental field varied, depending on its ecological environment. Maslan's highest indicator and unimaginable OSA highest indicator was in option 9, and the number of seedlings at 1 m² was 666 unimaginable 89.3%.

Conclusion: the highest stem height of re-sown oil flax was observed in high standards of non-root feeding, the highest branching rate in medium standards, even in the uchala fertilizer type. The highest in terms of leaf number, leaf surface, dry mass Content, number of broths in one plant was observed in the uchala fertilizer type also in the middle norms of non-root feeding, and among fertilizers in the variant in which wound fertilizer was applied;

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