Effect Of Foliar Feeding on Growth of Winter Wheat

Aminova. Dildor Kholmurodovna

Southern Agricultural Research Institute
q.x.f.f.d.

ABSTRACT

This article will discuss how to improve product quality and improve product quality.

Keywords: biostimulator, action, option, collection, through leaves, growth, development, top dressing.

According to the law of minimum, plant productivity is determined by the minimum amount of substance in its composition. In addition, microelements - boron, manganese, sulfur, iron, copper, zinc, molybdenum, etc. are of great importance for plant development. Application of microelements in small doses in the form of liquid fertilizer outside the root satisfies their deficiency in the plant. The use of micronutrient fertilizers for winter wheat helps to increase the agrotechnical and economic efficiency of grain cultivation. Treatment with micronutrient fertilizers before planting seeds increased productivity by 6.1%, the amount of gluten in grain increased by 24.9-28.4%, and the average economic profit was 1818 soums/ha. Additional foliar feeding of plants helped to increase the average profit by 2.1 times [1].

According to the results of the field experiment conducted by I. Ernazarov and R. Khasanova in the conditions of Kasbi district of Kashkadarya region, root feeding of autumn soft wheat with urea was found to be an economically effective agrotechnical measure. When using urea solution, the optimal rate was determined in the variant of 40 kg/ha, the net income was 278703-389512 soums/ha and the yield was 11.8-14.6% [2].

According to the results of a three-year experiment on studying the effectiveness of foliar feeding of spring wheat with chelated micronutrient fertilizers in the soil-climatic conditions of the Kurgan region of Russia, the increase in the yield of winter wheat due to the application of foliar feeding was 6.9-13.9% for three years. . It was observed that the amount of gluten in wheat grain increased by 1.03-2.17%. According to the results of the three-year research, the maximum yield was recorded in the variant using Tenso-cocktailem (1.64 t/ha) and the high quality gluten content in the variant using JUSS-3 (28.9%) [3].

K.E.Denisov and A.A.Geraskina studied the effectiveness of extra-root feeding with various micronutrient fertilizers on winter wheat productivity indicators, plant height, 1000 grain weight, grain weight per ear were positive compared to the standard for all options studied. it was determined that there was a change [4].

Scientists of the Saratov State Agrarian University named after N.I.Vavilov K.E.Denisov and A.A.Geraskina conducted research to determine the effect of extra-root feeding with various micronutrients on the quality of winter wheat grain, and according to the results of the

research, it was used in the experiment preparations

It was found that the use of Ekstrasol, Biostim and potassium humate significantly increased the quality of winter wheat grain compared to the control option [5].

According to the research conducted by A.S. Mukhomedyarova in the conditions of productive moisture deficit in the highly arid steppe region of Western Kazakhstan, crop rotation system and growth control tools in N30 agrophone conditions for growing high-quality grain and abundant 1.8 t/ha of winter soft wheat. and agrotechnical activities such as extra-root feeding have been determined [6].

According to the results of the research conducted by A.G. Subbotin and A.A. Kobylinskyi in 2017-2018 in order to study the effect of extra root feeding on winter wheat varieties in the soil-climatic conditions of the Saratov left bank region of the Russian Federation, foliar feeding of plants increases grain yield and it was determined that it ensured the improvement of technological quality indicators. The highest effective result was recorded in Novoershovskaya variety 4.70 t/ha and Levoberezhnaya-3 5.26 t/ha when Raykat was used [7].

1-жадвал.

Effect of foliar feeding on chlorophyll content of Shams cultivar plants of winter soft wheat

No	Options	Consumption rate	Var	Chlorophyll content (using the SPAD 502 instrument)		
				Indications before foliar feeding	Indicators after 1st feeding (after 10 days)	Indicators after 2nd feeding (after 10 days)
1	Control	-	Shams	38.9	45.0	46.0
2	Gumi Nurdil	400 ml/ha		50.0	47.0	67.0
3	Gumi Nurdil	450 ml/ha		49.0	55.0	59.0
4	Gumi Nurdil ml/ha	500ml/ha		48.0	49.0	58.0
5	Nanosil plus	400 ml/ha		46.0	49.0	66.0
6	Nanosil plus	450 ml/ha		48.0	54.0	58.0
7	Nanosil plus	500ml/ha		46.0	62.0	71.0

The purpose of the study. It is to determine the duration and norms of foliar feeding in the conditions of irrigated ice soils of Kashkadarya region in obtaining abundant and high-quality harvest of winter wheat. Research methodology. Conducting field experiments, planting, phenological observations, biometric measurements, crop maintenance, yield determination based on sources, recommendations, instructions, methods, such as "Metodika polevogo opyta" (1985) of the Ministry of Agriculture and Water Management of the Republic of Uzbekistan (1991), B.A. Dospehov was carried out. According to the

results of the conducted scientific research, it was found that foliar feeding in the form of suspension significantly differed in the sprayed variants compared to the control variant, that is, the variant without fertilizer.

In the experimental area allocated to the "Plant Protection" laboratory in the Karshi agro-plot of the Southern Agricultural Scientific Research Institute, in seven options, namely one control, the second option Gumi Nurdil 400 ml/ha, the third option Gumi Nurdil 450 ml/ha, the fourth optionGumi Nurdil 500 ml/ha, the fifth option Nanosil plus 400 ml/ha, the sixth option Nanosil plus 450 ml/ha, the seventh option Nanosil plus 500 ml/ha were used twice at an air temperature of 80-120. In the experiments, the results showed that the seventh option Nanosil plus 500 ml/ha, applied at 120, had a higher rate of plant growth and development compared to all options.

Based on the above information, it should be noted that foliar feeding is one of the effective agrotechnical measures used to increase the quality indicators of winter wheat. Foliar feeding is an effective method for growing winter wheat.

References Used:

1. Gureev I.I., Zherdev M.N., Brezhnev A.L. Sovershenstvovanie agrotechnologii vyrashchivaniya ozimoy pshenitsy s ispolzovaniem udobreniy, soderjashchikh mikroelementy. Zemledelie, #8 2016. S. 25-28.
2. Ernazarov I., Khasanova R. Ekonomicheskaya effektivnost podkormok carbamidom sortov ozimoy pshenitsy v usloviyax oroshaemogo zemledeliya Uzbekistana Vladimirskiy zemledelets №1 (91) 2020. S. 26-29.
3. Sozinov A.V. Urozaynost i kachestvo zerna yarovoy pshenitsy sorta tertsiya pri listovoy podkormke chelatnymi mikroudobreniyami. Injenernoe obespechenie v realizatsii sotsialno-ekonomicheskix i ekologicheskix programm APK. Played 26 times in 2020. S 316-319.
4. Denisov K.E., Geraskina A.A. Vliyanie microudobreniy pri listovoy podkormke na elementi productivity ozimoy pshenitsy // Agrarnye konferentsii № 4 (16) 2019 g. S 1-5.
5. Denisov. K.E., Geraskina A.A. Vliyanie razlichnyx mikrudobreniy na kachestvo zerna ozimoy pshenitsy v zasushlivom Povolje //Osnovy i perspektivy organicheskikh biotechnologiiy № 3 2019 g S 13-15.
6. Mukhomediarova A.S. Sovershenstvovanie tekhnologii vozdelyvaniya ozimoy pshenitsy v suhostepnoy zone Zapadnogo Kazakhstan Sovremennye problemy i perspektivy razvitiya agropromyshlennogo kompleksa Sbornik statey po itogam Mejdunarodnoy nauchnoprakticheskoy konferentsii. Saratov, July 16-22, 2019. pp. 670-674.
7. Subbotin A.G., Kobylinsky A.A. Osobennosti formirovania urojaya ozimoy pshenitsy v zavisimosti ot primeneniya podkormok v usloviyax Saratovskogo Pravoberejya //Agrarnye konferentsii Saratov № 291402019 g p 24-27.