Winter Wheat Absorption Of Nutrients (Npk) From 1 Hectare Of Land And Consumption For 1 Ton Of Grain Yield And Phosphorus Utilization Coefficient

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ABSTRACT

In our republic, scientific research aimed at the effective use of mineral fertilizers in increasing the yield of agricultural crops, including wheat, is carried out and certain results are achieved. It is of great practical importance to develop an optimal system of application of mineral fertilizers, ensuring the production of high and high-quality grain crops from autumn wheat varieties in the irrigated typical Boz soils of the Tashkent region, to determine the food environment formed in the soil for specific periods of the autumn wheat development phases and the amount and ratio of Fertilizer is an effective and fast influencing factor that allows you to raise the quality of the crop. The development of an optimal norm for the use of a suspension made of fertilizers in leaf feeding, the study of the influence of these norms on the development of autumn wheat growth, seedling thickness, grain texture and quality in Ham has a special purpose.

Keywords: Nitrogen, phosphorus, potassium, Suspension, leaf feeding, autumn wheat, seedling thickness, grain quality.

It is known that mineral food, which is used during the periods of plant growth and development, has a role in each of the elements. It is also important to apply phosphorus fertilizers in autumn wheat at optimal norms and deadlines.

Increasing the yield and improving the quality of wheat grain depends primarily on the quality of the seed and the application of advanced technologies in the grain industry.

According to the results of a scientific study, today autumn wheat absorbs 50-55% of fermented nitrogen fertilizers, 20-22% of phosphorus fertilizers, 55-60% of potash fertilizers. While some of the nitrogen fertilizers not absorbed by the plant are raised into the air in the amiac state, some are washed into the water of sizot in the nitrite and nitrate States. This condition has a negative impact on ecology.

Research B.A.Dospehov's (1985) "Metodika polevogo opita", a DUK affiliated to Tashkent State Agrarian University in the experimental plots "Methods of conducting field experiments" (Tashkent 2007), "Metodika agrofizicheskix issledovani" (Tashkent 1973), "Metodika agroximicheskix issledovani" (Tashkent 1973), "Metodicheskie ukazanie po opredeleniyu kachestva rastitelnoy produksii" (Moscow 1980).

Over the next three or four years, grain crops are being harvested from the irrigated areas of our Republic, increasing by 40 s/in the middle of the winter. But the low content of protein, gluten in cereals, the lack of the required level of physicochemical properties limit the possibilities of making quality bread and bakery products.

Leaf feeding is of great importance especially in grafting, particularly in autumn wheat production, especially in the use of this method in nitrogen feeding of autumn wheat under irrigated conditions ensures high efficiency.

The need for nitrogen in autumn wheat is high throughout the growing season. When the yield is high (65-70 c/ha), the amount of nitrogen accumulated in the leaf and stem of the plant cannot ensure that there is a sufficient amount of protein in the grain. As a result, the content of protein in the grain decreases, leading to a decrease in the technological quality indicator of the grain.

In the production of autumn wheat, even in conditions of high grain yields, feeding from the Leaf is effectively obtained.

Listed in Table 1.

To absorb nutrients from an area of 1 hectare of plants, spend on a yield of 1 ton and the coefficient of use of phosphorus

Table 1

Option order	Absorption from 1 hectare (kg)			Consumption per 1 ton grain crop, (kg)			Phosphorus utilization factor, %
	N	R	K	N	R	K	
1	160,0	40,5	116,2	38,5	9,7	28,0	-
2	169,6	62,0	160,3	34,4	12,5	32,5	21,5
3	161,0	42,2	118,3	37,9	9,9	27,9	1,7
4	165,2	58,9	148,1	35,3	12,6	31,6	18,4
5	180,0	43,5	120,2	39,2	9,4	26,1	-
6	189,6	65,9	170,2	34,9	12,1	31,4	22,9
7	181,0	45,5	120,3	38,4	9,6	25,5	2,0
8	183,1	62,3	168,1	35,9	12,0	32,6	18,8
9	185,8	45,3	122,1	38,7	9,3	25,3	-
10	195,1	67,4	178,1	34,4	11,9	31,4	22,1

11	192,1	46,8	125,1	39,5	9,6	25,7	1,5
12	194,1	63,2	170,1	36,3	11,8	31,8	17,9

The optimal indicator in the experiment was 189.6; 65.9; 170.2 kg from an area of 1 hectare, obtained in a variant (6) applied at a depth of 13-15 CM before planting phosphorus fertilizer between the rows of acorns in the background applied in moderation to N_{180}, K_{90} kg/ha, and N 34.9 kg, P 12.1 kg, K 31.4 kg for 1 ton. The phosphorus utilization factor was equal to 22.9%. With an increase in the norm of Mineral fertilizers by $N_{230}P_{160}K_{115}$ kg/, the above indicators are the absorption of NPK from 1 hectare area of 5,5; 1,5; 7,9 kg, as well as the consumption of 1 ton per crop of 0,5; 0.2; 0.0 kg, while the phosphorus utilization factor was differentiated by 0.8% only.

One of the most urgent tasks is to improve the technological quality indicators of grain in the grain industry. Because the quality of the product depends primarily on the quality of the grain. Technological quality indicators of cereals include grain transparency, flour strength, protein and gluten content in cereals.

It is known that an increase in grain yield under irrigated conditions in most cases leads to a decrease in the technological quality indicators of grain. Because in conditions of increased yield,the rich soils in our republic have a low content of humus, Mineral fertilizers in the soil were taken equal to their control,regardless of the phosphorus fertilizer standards used during the autumn wheat clumping period of the backgrounds in the norms N_{130}, K_{65} kg, N_{180}, K_{90} kg/hec and N_{230}, K_{115} kg/hec. This once again found evidence that phosphorus fertilizers have a very low effect on the application of autumn wheat during germination, clumping periods.

So,a relatively high use coefficient of phosphorus fertilizer N_{180}, K_{90} kg/hec was determined when phosphorus fertilizer was applied between the rows of acorns at a depth of 13-15 CM (22.9 %) before planting at a depth of 125 kg.

In the control option in the experiment, the grain transparency was 80%, the flour strength was 210, the protein content of the grain was 11.6%, and the gluten content was 26.8%.

In the experiment, the technological quality indicators of grain in all the studied options were higher than in the control option. Non-root fed variants were observed to have a grain transparency of 86-91%, a grain protein content of 12.6-13.6%, and a gluten content of 27.6-31.7%. Relatively high increases in grain quality were observed in the autumn wheat flowering phase with a 15% suspension solution of carbomide in an externally Fed variant from the root. In this variant, the protein content of the cereal was 13.6% and the gluten content was 31.7%. The quality of the grain fully meets the requirements of the strong wheat template.

One of the most basic indicators in grafting is grain yield. Wheat crops, including fall wheat, are cultivated for grain. Therefore, increasing grain yield is one of the most urgent tasks.

In order to increase the grain yield, it is necessary to apply new innovative technologies in grafting. One such innovative technology is the feeding of autumn wheat through the Leaf, in addition to the root.

Data on the positive effect of non-root feeding on Autumn wheat grain yield in the experiment

In the experiment, the mineral background was da, that is, the grain yield in conditions when feeding was carried out through the Root was 65 s/hec, while the grain yield in non-root feeding condensed variants was 65-71 s/hec. At the expense of non-root feeding, an increase in grain yield by 1-6 s/hec was observed. We observed that the highest grain yield increased by 71 s/hec in conditions of non-root feeding with a 10% suspension solution of carbomide in the autumn wheat tubing phase.

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