

FEEDING WHEAT PLANTS WITH MINERAL FERTILIZERS

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Abstract: *The article is about the method of nutrition of the Polovchanka variety of wheat, and it is studied whether it is fed with mineral fertilizers.*

Key words: *Nitrogen, nutrition, wheat, fertility, barley, macro element, micro element.*

Nitrogen feeding. Nitrogen fertilizers play an important role in the production of abundant crops from wheat. Because nitrogen is the main component of plant proteins and is part of almost all compounds. Nitrogen is mainly absorbed by the plant in the form of nitrate and ammonia. The more humus the soil contains, the higher the effectiveness of nitrogen fertilizers. Because plants absorb almost two-thirds of nitrogen from humus in the soil, and the rest from nitrogen fertilizers.

One of the important factors of increasing the effectiveness of nitrogen fertilizers is the correct consideration of the amount of nitrogen in fertilizers. For example, ammonium nitrate contains 34% pure nitrogen in the form of nitrate and ammonia. Urea contains 46% pure nitrogen in amide form. Nitrofos contains 23-24%, ammofos contains 9-12% pure nitrogen.

One of the important tasks in grain farming is the correct use of nitrogen fertilizers, the organization of proper nutrition during the growing season, depending on the soil fertility and plant growth.

Mineral elements are divided into macro and micro elements according to their extraction by plants. Macro elements are elements that are required by the plant in large quantities and can be assimilated. These elements include nitrogen, phosphorus and potassium. Microelements are elements that are absorbed or required by the plant in small quantities. The plant's need for nutrients is satisfied through mineral nutrition. Mineral fertilizers are mainly used for feeding. Nitrogen fertilizers are the most widely used mineral fertilizers in the cultivation of winter wheat.

The plant's dependence on nitrogen fertilizers starts from the initial stages of plant development and continues until the ripening stage. It participates in all physiological processes in the plant. Because of this, the productivity of winter wheat depends on the level of nitrogen supply of the plant.

Nitrogenous fertilizers differ from other types of macro-fertilizers in their mobility. These fertilizers quickly affect the plant and are absorbed by the plant. In the case of nitrates and ammonia, the unabsorbed forms of plant matter can be washed into the water or blown into the air.

The positive effect of nitrogen fertilizers on the yield of winter wheat grain was studied in the scientific works of scientists such as N. G. Malyuga (1992), O. Mirzaev, B. Azizov (2003), Kh. Atabaeva, P. Toreshev (2005).

In the experiments conducted by Professor N. G. Malyuga in the black soil lands of Russia, under the conditions of application of N 200 per hectare for winter wheat, the amount of nitrate in the 0-100 cm layer of the soil decreased by three times, and in the layer up to 200 cm, it increased by 1.7 times. . Also, leaching of nitrates into the lower layers of the soil was observed.

Early spring nitrogen feeding had a positive effect on the nutrient regime of the soil. This situation is explained by the good assimilation of nitrogen by the vegetative organs of the plant. Based on the results of the experiment, we recommend feeding winter wheat with nitrogen fertilizers twice: before planting and in early spring.

Based on the results of the research conducted by B. Azizov, it is recommended to feed winter wheat with nitrogen fertilizers three times, i.e. 40% of the total rate during the period of budding, 40% during the period of rolling the tube, 20% during flowering - harvest. It is recommended to apply during the collection period.

In scientific studies conducted by professors H. Atabaeva and P. Toreshevlar, the distribution of nitrogen fertilizers before planting had a positive effect on the recovery of full seedlings. The authors say that applying nitrogen fertilizers on the background of organic fertilizers significantly increases the effectiveness of nitrogen fertilizers.

A.S. Shatilov, M.K. Kayumov, N. Atakhanov, O. Mirzaev and others carried out scientific work on the use of mineral fertilizers, in particular, nitrogen fertilizers, for growing a planned grain crop from winter wheat.

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