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determine the best time of day and frequency of milking for each breed of dairy cattle during different lactation and reproductive cycles.

Future research should focus on improving real-time monitoring of milk quality and assessing how many automatic milking stations will optimally serve certain herd sizes and breeds.

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EFFECTIVENESS OF BIOLOGICAL PREPARATIONS FOR GROWING CORN UNDER ORGANIC PRODUCTION

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Auxiliary products in organic production are one of the main components of a successful organic business. After all, the operators of organic production do not have the opportunity to meet the plant's needs for nutrients with synthetic fertilizers, or to fight pests and diseases with the help of chemical protection agents.

One of the main concepts of organic production is the use of fertilizers for the purpose of improving the fertility of the soil, and not for obtaining a high yield. That is, maintenance of the nutrient regime of the soil, enrichment of it, improvement of the conditions of biological activity, all this falls on the furnace of auxiliary products that are used for conducting organic production. Also, one should not forget about the introduction of crop rotations, which are the key to balancing biological diversity. Often, operators who start organic farming ask "What herbicide can be used for organic production", of course there is no such product and there cannot be!

It should be noted that agrotechnical methods contribute to solving most of the challenges of conducting organic production. Therefore, every farmer must fulfill the mandatory requirements: choose crops and varieties that are resistant to pests and diseases; develop an appropriate crop rotation (crop rotation); apply mechanical methods (techniques, technologies) of growing products; to provide protection against natural enemies (pests). These can be plantations, sowing of nectarines with conveyor flowering plants, summer and winter shelters for entomophages, etc. [1].

Under conditions of fulfillment of the basic requirements of organic production, there is a threat of crop loss, auxiliary products can be used, if they are allowed for use in organic production. These are substances listed in Annex II of Regulation (EU) No. 889/2008) and/or ready-made commercial forms (auxiliary products) approved by the certification body.

Therefore, the main goal of our research was to determine the most effective auxiliary products in organic production for growing corn for grain.

The research was conducted in 2019–2022 on the basis of the Training Production Center (TPC) of the Bila Tserkva National Agrarian University (BNAU).

The soil under the test is typical chernozem. Agrochemical characteristics of the soil: humus (according to the Tyurin and Kononova method) - 3.4%, easily hydrolyzed nitrogen (according to the Kornfield method) - 110, mobile compounds of phosphorus and potassium (according to the Chirikov method) - 120 and 110 mg/kg of soil, respectively. The studied hybrid Ostrech SV. The scheme of the experiment provides: No treatment (control) Spraying during the growing season (starting with 3 leaves three times during the growing season with an interval of 10-12 SE "Avatar organic"); Intensive technology" Intensive technology + "Avatar organic". The product "Avatar Organic" contains micro- and ultra-microelements necessary for plants that are part of the microelement complex in the form of nanoparticles chelated with natural organic acids - citric, succinic, malic, tartaric and their mixtures. This auxiliary product is included in the List of pesticides and agrochemicals allowed for use in Ukraine, as well as in the List of auxiliary products for use in organic production, taking into account the requirements of the standard of international accredited certification bodies for organic production and processing, which is equivalent to EU regulations No. 834/2007 and No. 889/2008.

So, as a result of the research conducted in 2019-2022, the yield of corn per grain in the control variants was at the level of 5.9 t/ha. The use of auxiliary product "Avatar organic" helped to increase the crop yield to 6.20 t/ha. With the use of intensive corn cultivation technology, the yield level was fixed at 8.32 t/ha. With the use of "Avatar Organic" in this technology, the yield level increased to 8.65 t/ha. It should be noted the positive effect of the auxiliary product "Avatar Organic" for conducting organic production, where the average yield level for 2019-2022 increased by 0.30 t/ha, compared to the control variants.

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