ORGANIC AGRICULTURE (OPFAHIЧHE ЗЕМЛЕРОБСТВО)

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У статті розглядаються питання впровадження органічного землеробства у технологію вирощування сільськогосподарських культур. Проведення порівняльної діаностики класичного і органічного землеробства. Аналіз перспектив органічного землеробста.

Ключові слова: органічне землеробство, чиста продукція, добрива, пестициди, сівозміна.

The article deals with the introduction of organic farming into the technology of growing crops. The comparative dianostics of classical and organic farming is carried out. Analysis of the prospects of organic farming.

Key words: organic farming, clean products, fertilizers, pesticides, crop rotation.

The global community's awareness of the growing environmental threat posed by intensive farming has stimulated the development of alternative management models that better meet the vital interests of society. Organic farming has become such a model, which has recently been providing the growing global market with certified, healthy, safe food.

Every year, Ukraine is getting closer to developed countries in terms of production and consumption of organic products. The presence of 19% of agricultural land suitable for organic farming, fertile black soil and strong agricultural production traditions create favorable conditions for the development of the organic sector in the country. Significant foreign and domestic experience in organic production, the presence of centers of scientific and practical activity, and institutional support from other countries simplify the conversion of traditional enterprises to ecological or environmentally oriented ones. In addition, the favorable geographical location and low land lease prices are favorable for both investment and export of organic products to consumer countries, and the price premium increases the income of rural residents.

Organic agriculture is a system of agricultural production that prohibits or significantly limits the use of synthetic combined fertilizers, pesticides, growth regulators, and food additives in animal feed. This system is based on crop rotation, the use of crop residues, manure and compost, legumes and plant fertilizers, organic waste, minerals, and mechanical tillage and biological pest control to increase fertility and improve soil structure, provide adequate plant nutrition, and control weeds and various pests.[1]

The global organic market is developing rapidly. The introduction of organic agriculture, which is based on maintaining and improving the health of soil, plants, animals and humans as a single and indivisible whole, based on the principles of natural ecological systems and is preventive in nature to protect the health and well-being of current and future generations and the environment, is becoming increasingly important. This is evidenced by the growth of the global organic agricultural market (almost 106 billion euros in 2019), the increase in the area under organic production, and the interest and growing demand among the population.

Organic production is a holistic system of farming and food production that combines the best practices in terms of environmental protection, biodiversity, conservation of natural resources, high standards of animal welfare, and a production method that meets certain requirements for products made with substances and processes of natural origin. Thus, the organic production method plays a dual social role: on the one hand, it provides a specific market that meets the needs of consumers for organic products, and on the other hand, it provides for the common good by contributing to environmental protection, proper animal welfare, and rural development.[2]

An equally important issue in stimulating the spread of organic agricultural practices in our country and increasing their productivity is the involvement of more public and private educational and consulting institutions in the domestic organic sector. Ukraine's organic sector is in dire need of highly qualified young organic specialists who can bring organic agriculture to a qualitatively high international level. The peculiarities of organic production require much better theoretical and practical training, which often lies in the interdisciplinary and transdisciplinary plane.

Thus, it can be concluded that organic farming is a priority for modern agricultural production. It balances the socio-economic needs of society and business and the natural resource potential of land use, providing the population with high-quality and environmentally friendly food in an ecologically safe environment.

The shortage of organic products on the global and European markets opens up great opportunities for Ukrainian organic producers. Innovative technologies for growing organic products reduce the cost of production, and high prices and demand ensure high income even with lower crop productivity as opposed to conventional farming, which creates higher financial and economic performance of certified organic farms and provides additional profit.

Stimulation of organic production should be provided through financial and preferential support from the state, which is interested in the health of the nation and an environmentally friendly environment. Further research is needed to develop a certification program at the expense of the state, popularize organic products among the population on the basis of better taste, train qualified personnel in the production of organic products, provide subsidies, apply innovative technologies for growing organic products, and develop producers' own production of organic products.

The main conditions for the effective cultivation of organic crops are: cooperation with a certification body, market orientation, strict adherence to the technology and principles of organic production. [3]

Having analyzed the process of transformation of farms' environmental friendliness, we can state that a good choice of the way to transition from conventional to organic farming is one of the key factors that will determine the efficiency of its operation in the future. Other key factors include local conditions and traditions, crop response to organic production methods, type of production processes, selected agricultural technologies to comply with the requirements of the organic principles, the possibility of introducing a stabilization period to eliminate the negative effects of previous land use, the soil and climate zone in which the agricultural enterprise is located, and its size. Despite all the obstacles and risks, reorientation of agricultural production of most traditional farms in an environmentally friendly direction is possible, and changing the mindset of agricultural producers is essential for future generations.

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