

MODERN TRENDS OF ORGANIC PRODUCTION

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Organic production forbids using of chemical fertilizers, pesticides and genetically modified organisms. Methods, principles and rules aimed at getting natural and ecological production with saving and recovering of natural resources should be used.

Production of environmentally friendly goods can be held on the multidisciplinary balanced agricultural enterprise only. Needed enterprise has both plant growing and animal husbandry components. Production of environmentally friendly goods is not reduction fungicides, mineral fertilizers and herbicides use, but complete refusal of the chemical components and their replacement with biological ones [1].

Organic production has higher cost than traditional one. Using of own energy resources [3, 4], and decreasing in the use of energy resources are significant factors which allow cost reducing [5].

We recommend creation of platforms for the straw based compost production in agricultural enterprises [3]. Production of compost based on livestock wastes and straw by spontaneous fermentation method in stacks or on open areas is the most expedient nowadays [6].

According to peculiarities of organic agricultural production with natural and climatic conditions in Ukraine and Lithuania biomass can be used as the main source of energy resources in agroecosystems. Innovative technologies which allow transformation of biomass of agricultural origin into modern and energy-friendly types of energy sources (electricity, liquid and gaseous biofuels) and effective using of solid biofuels are needed during the process.

Growing of biomass and its further transformation into liquid or solid biofuels, improvement of biogas complexes and receiving of thermal, electric energy and organic fertilizers are ways to increase energy autonomy of production.

High quality and environmentally friendly agricultural products can

be received without synthetic substances but with the soil fertility saving. However, in this case reserves of production increase are limited. This contradicts demand for agricultural products during growth of the population. That is why there is a problem concerning production of high quality and environmentally friendly food products in sufficient quantity with simultaneous reproduction of soil fertility in developed agrarian countries.

Processes, machines and equipment which allows getting energy from agricultural raw materials in the cycle of organic production should be based on waste free production cycles which use natural resources in complex.

CONCLUSION

Functioning of organic agricultural production in modern conditions solves current problems: providing population with quality food products; providing own enterprise, other technological processes and household needs with energy resources; maintenance of the biological diversity of life forms and the preservation of the environment.

Problem of improvement of corresponding technical means of organic production should be solved with maintaining of quality food production level, improving energy efficiency and preserving soil fertility at the same time.

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