

Working Technology and Equipment for Organic Culture of Medicinal and Aromatic Plants

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Abstract

The environmental-friendly agriculture represents an integral management system of production process, that ensures the conservation of the agrosystem resistance, including biodiversity, natural cycles and soil biological activity.

The European concept of sustainable agriculture is based on the working tools specific to environmental-friendly agriculture.

Ecological agriculture application is based on the use of some agronomic technologies adapted to the specific of each crop, technologies that are applied to complying to certain strict production rules, established by European and national norms and laws. The regulations refer both to the used agronomical methods and to the biological and mechanical ones, for all works performed within the respective technology.

Authors present the researches on environmental-friendly crops technology for medicinal and aromatic plants, suitable to Romania's conditions in compliance with the national and European regulations, that is supported by a working equipment and machine system specific to these crops, based on the following fundamental rules:

- maintenance and promotion of the natural biodiversity within the farm and around it, application of the sustainable crop production systems and the protection of the habitats of the natural flora and fauna;
- maintenance and preservation of genetic diversity by the local genetic resources management;
- promotion of the national use of the water and the water preservation in the soil;
- establishing of a balance between the vegetal crop field and natural local resources;
- protection of the organisms that naturally control the plant pests, especially during the crop maintaining works and the favourable condition setting for their development.

The achievement of these requirements is possible by the following ways:

- utilization of the mechanical means for weed eradication;
- limitation of the synthetic products used for crop protection against diseases and pests;
- soil fertility conservation by composted and uncomposted manure and green fertilizer application, and by chemical substances elimination;
- harvesting of plant flowers with mechanical means that would not interfere with the environment and the life of natural flora.

The technology will be structured on species of medicinal and aromatic crops plants entering the componency of food substituents used in human nutrition.

Key words: environmental-friendly crops, technology, machine system, medicinal and aromatic plants

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