

AN ELABORATION OF A DEVELOPMENTAL MODEL OF ECOLOGICAL AGRICULTURE

ELABORAREA UNUI MODEL DE DEZVOLTARE A AGRICULTURII ECOLOGICE

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Abstract: *In this paper I will attempt to research "An elaboration of a developmental model of ecological agriculture in Calarasi County" on the territory that found out the farm S.C. AUGER PETRUȘ S.R.L., where are practising ecological agriculture. Also, this work intend to instruct agricultural producers and a better information with help of the advertising in publication of speciality and the participation to the specialty market, deliver of folders, booklets, etc., so that utilize more and more agricultural methods that are favourable for environment, in the process of integration in European Union.*

Rezumat: *Prin prezenta lucrarea voi realiza „Elaborarea unui model de dezvoltare a agriculturii ecologice în județul Călărași”, pe teritoriul căruia se afla ferma S.C. AUGER PETRUȘ S.R.L., unde se practică agricultura ecologică. De asemenea, prin intermediul acestei lucrării se urmărește instruirea producătorilor agricoli și o mai bună informare cu ajutorul reclamelor în publicațiile de specialitate și participarea la târgurile de specialitate, distribuirea de pliante, broșuri etc., astfel încât să utilizeze din ce în ce mai mult practicile agricole care sunt benefice pentru mediu înconjurător, în procesul integrării în Uniunea Europeană.*

Key words: ecological agriculture, soil conservation, protection of the ecosystems, biodiversity, food safety and security, production

Cuvinte cheie: agricultura ecologică, conservarea solului, protecția ecosistemelor, biodiversitate, securitatea și siguranța alimentelor, producția

INTRODUCTION

As alternative to the conventional agriculture, that represents an energetic-intensive system, expensive for society, with harmful potential on environment and the health of population, caused by decay of consumption of polluted products (dioxins, trichinae, and salmonella) appeared ecological activities in agriculture.

In this way, the ecologic agriculture puts a different accent on the natural quality of the products, quantitative appearances and productivity is on an inferior plan.

In the ecologic agriculture in the process of production is forbidden use fertilizer and the fertility of the soil is maintained through the:

- cultivation of leguminous plants and plants with deep roots inside of a fit crop-rotation ;
- put into practice of rother soil;
- use of manure;
- application of the rother soil and unrother soil and by-products from activities of animal's growth, but only that become from farms that practice ecological agriculture.

MATERIAL AND METHOD

Material and method used to accomplish the goal in that work are research (foray works of speciality); evaluation, analysis and interpretation of date from works of speciality and

statistic date. Documentation remains a basic element which there is well relate problems which are arise ecological agriculture and its implications, concerning of conservation of naturals resources and ecosystems for the future generations.

REULTS AND DISCUSSIONS

The soil is the main capital good of the farmer, is an environment created by him by the time that he is administrating. The soil is not an inert support, but a remarkable biologic manufactory. Therefore, to all agricultural what works involves soil, this must envisaged, after a severe analysis of these implications about property of the soil on the whole.

This complex environment is favorable of an intense animal, vegetal and microbial activity: bacteria, fungi, collembolans, acarieni, worms of soil, having multiple roles:

- The breaking up and decomposition of the organic substance;
- Aeration and structuring of the soil;
- Solubilisation of the nourishing elements;
- Fastening of the nitrogen/ azoth;
- Secretion of some growing substance.

In practice, an agricultural exploitation must seem like an ecological unit. By intensity of biological process with a little of external help can be touch objective effective power of the exploitation.

To develop an ecological agriculture means, first, to adjust social and economic cardinal point of the rural., which suppose redefinition of the way to conceive occupation of agriculture worker and the knowledge for manage a farm. In this way, in Romania are establishing:

- institutional and legislative plan, according to the one existent in European Union;
- responsible authority for ecological agriculture;
- general rules and principles of the ecological production;
- the list of the allow producte which can be utilized in ecological agriculture, and the

list of the ingredients and methods of treatment who can be utilized to preparation of the ecological food;

- the time necessary for conversion of conventional agriculture in ecological one;
- putting the label on ecological agro-food producte;
- system of inspection and certification;
- sanction who can be applied in cases of different kind of frauds;

For increase the chance of the ecological products to get into the community market in the same time with the coming into UE of Romania, it has as a target creation of an internal market of ecological agro-food and a production for foreign by:

-continue promotion of the ecological agriculture concept by specialized institutions (National Agency of Agrarian Consulting, associations, research institutes, universities etc), and by Embassies of Romania in foreign countries, identification, in this way, potentials investors and opportunities of collaboration in this area;

-foundation of pilot-farm with minimum surface, specialized in ecological agriculture;

-preparing stages for formatives, operatives and inspectors in ecological agriculture compartment;

-creation of a national structure of searching in ecological agriculture;

-opportunities given to producers who apply this type, ecological one, of agriculture on the conversion period;

- delimitation of the ecological areas.

Transformation of a traditional agricultural exploitation in the one that practice ecological involve some risks, economical and technical the same, because in the conversion period farmers can not compensate lost of productivity because the products really “clean” are obtained in a relatively long time. Also, ecological agriculture involves larger costs of production than the traditional one, due to usage of a numerous people involved in work and low effective power of the crops.

In ecological agriculture must be observing principles that was established into the last time:

A. Methods of the cultivation of lands must follow maintained and increasing of fertilities of soil and biological activities by:

- proper rotations with vegetable plants, manure plants and plants with profound roots;
- utilization of rother soil (microbial, vegetal and animal origin), that comes from own farm or other ecological farms;
- rother soil accepted into the ecological agriculture will be applied just in case when previous measures was not sufficient;
- activation of the rother and unrother soil with especially preparation is permissive only if its are prepared with plants, microorganisms and bio-dynamic prepares;
- is allowed utilization of the microorganism to improve of the qualities of the soil or for decompose nutritive elements.

B. Fighting against diseases, pests and weeds by combination of the next measures:

- utilization of the tolerant and resistant species and varieties ;
- assurance a proper crop-rotation;
- protection of the useful entomofauna through the assurance favorable conditions, such as: hedge, places for nests, launch of marauders, burn with the flame weeds;
- utilization of the permissible substances in ecological agriculture (see annex no.2);
- prepares with copper (max 8kg/ hectare/ year).

CONCLUSIONS

1. Ecological agriculture represents the system wherewith is promoted a cultivation of the soil through which means that maintain an equilibrium between agro systems and environment, favorably preservation all the elements and positive processes who has part of agricultural contemporary and future systems.

2. The basic elements of technological links are sustain by crops rotation, use of vegetable grout, green manures, and just grout domestic garbage for fertilization, inclusion of the vegetables in the lettered structure, biological check of disease, of the pest and weeds.

3. Conclusively, the development of the ecological agriculture has not rush, it requires little and secure steps to touch all objective and avoid some crises produced by ecological accidents like recently produced in European Union (nitro fen crises, hormone crises etc).

4. Ecological agriculture became important because by that it can be reduced national metabolically risks for all population’s consumer because responsibility for health and prosperity of all human being on the Earth is one of the most noble obligation of the man.

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