ANALELE UNIVERSITATII DIN ORADEA, Fascicula Ecotoxicologie, Zootehnie si Tehnologii de Industrie Alimentara

BIO AGRICULTURAL PRODUCTS, A NEW GENERATION OF PRODUCTS: STRONG AND WEAK POINTS

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Abstract

The impact of ecological agriculture on consumers grows deeper every day, because a proper diet is similar to maintaining health [1]. Bio products are the most indicated in order to meet new requirements of quality, safety and respect for nature. Consumer is the one making the connection between the bio products and a very good health condition or even a very good shape. Quality of life is getting lower and lower every year and not only from an economical point of view, analyzing the standard of living, but also because the lack of quality of the daily consumed products, that reached a high level of risk. Starting with the clothing products, cosmetics or food products, all the way to medicines, their quality is much diminished, sometimes close to zero, putting consumers' health at a risk.

Key words: ecological agriculture, production, bio products, farm, legislation.

INTRODUCTION

The times we are living in make us become aware consumers, educated in the choices we are making. No matter what the source of the information is, it does nothing else but to inform us how and what to eat in order to keep our health. On this background, the agricultural and bio products came naturally, products with an improved nutritional value, in order to serve consumer's needs.[8]

Ecological agriculture aims at to using as small quantities as possible from outside the farms and prohibits the use of synthesis chemicals used as soil fertilizers and ameliorators, ingredients for fodders preparation, pesticides and additives for food products preparation. [2]

Ecological production means obtaining food products without using synthesis chemical products, according to the ecological production rules that follow standards, guides and national programs and are certified by an inspection body.[10] It aims at achieving sustainable, diversified and balanced agricultural systems that guarantees the protection of natural resources and consumers' health.

The bio product is made from ecological agriculture ingredients, but without using food additives for synthesis.[9] The conventional food product is made from raw material coming from conventional (ordinary) agriculture, the synthesis chemical substances also being used, as well as artificial food additives. [3]

When making bio products, any additives or integrated substances are left aside. Marketing these products is usually made in special shops or even in the producer's "courtyard". Certified bio products are marked and labeled according to existing regulations.[7] Ecological products are only those having been quality certified and having the logo of the certifying body on the label. We can not include in this category any product sold as being "natural" or "rural".

MATERIALS AND METHODS

Since the beginning of 20th century, many countries have already practiced, for some time, ecological agriculture and made new and improved technologies in this field.[6] Romania was practicing only conventional agriculture, on the whole agricultural area, on the pastures from the hill-mountain regions, where natural fertilizers were used and synthesis products left aside, but without any stipulated regulations.

The ecological movement has aroused conscience and the need for a balanced and alternative nutrition. As a result, by 1900 the first ecological stores emerged, selling products as well as ecologists' ideas.

Even today, the products regulations are based on the "natural" principles, especially from ecological crops and raising animals accordingly. However, the market for bio products has been a niche until the `80`s. Only the stores specialized on natural products were selling the products and only to selected buyers, most of them intellectuals, teachers and consumers very much aware of the nutrition importance. [5]

Inside the 2005-2009 National Export Strategy it is stipulated that ecological holdings represent a new sector in Romania, taking into account that our country has proper conditions for promoting ecological agriculture, such as the fertile and productive soil and the lack of a negative impact as that from the developed countries, due to the use of chemical substances and related technologies.

The number of ecological farms increased in our country from 930 in 2000 to 1200 in 2001 and expanded gradually. Crops practiced in ecological farms are: vegetables, cereals, fodder plants, medicinal plants, grey peas, oily plants, fruit trees (cherry trees).

Productive potential in our country's ecological system can reach 15-20% of the total agricultural area, larger areas being on the hill-mountain region, where the technologies of pastures' maintenance and exploiting were based on traditional ecological methods (application of farmyard fertilizers, exploiting by animal feeding and/or mowing, using mixed vegetal-animal system), but the arable areas from this region are not to be neglected.

The areas cultivated following the ecological system have increased more than six times during the last five years, from 17438 ha in 2000 to 110400 ha in 2007, the total area cultivated following the ecological production reaching 170000 ha in 2008. [5]

The bio (ecological) products cultivated in Romania are cereals, vegetables, oily plants, forest fruits, fruits but also, since 2006, Romania has produced bread, medicinal tea, sunflower oil, soy drinks and apple juice.

Recent studies of Romanian Academy estimate that in Romania selling of bio agricultural products can reach the amount of 2 million euro per year, meaning almost 1% of the total agro-alimentary market.[1] Most of the bio products are imported, because the number of local producers of these products is very low. Thus, more than 95% of the Romanian ecological vegetables and cereals are exported, especially in Germany, Switzerland, Holland and Italy. The exports have reached the amount of 20 million euro in 2008, while imports were around 1.5 - 2 million. [2]

According to the Minister of Agriculture data, the year 2009 is more appropriate to capitalize in a greater extent the bio products on the internal market, around 60%, the rest of 40% being in exports.

The only Romanian bio product intended mainly for export is honey, being exported almost 75%. Regarding the imports, Romania brings only small quantities of bio products, mostly those that we can not produce for the time being, like coffee and chocolate. [4]

Imports are doubling every year, showing that bio products have a good market in Romania. A report by the Directorate for Agriculture and Rural Development shows that in 2008 were registered no less than 2176 small producers of ecological milk, 19 beekeepers controlling over 2000 hives, 57 ecological farms, mainly of cattle, as well as 2 exporters of ecological milk products.

RESULTS AND DISCUSSIONS

Ecological production aims at achieving sustainable, diversified and balanced agricultural systems that guarantees the protection of natural resources and consumers' health. The impact of ecological production process over environment is minimal.

If in the past the consumers and the distributing stores picked a product according aspects related to quality, price, and availability in equal measure, nowadays they adopt or not a product according also to aspects related to the associated environment protection issues. The environment related effects gather actually the life-long effects of the product over the environment. Consumers are interested in the timeliness of environmental protection and started to look for them in shops, wanting to buy products labeled as "natural", "ecological", "biodegrading". [3]

After people were terrified of the "mad cow" disease or the dioxin present in food products, there were many concerns related to agroalimentary safety. Consumers became interested also in the aspects regarding the quality of the consumed food products, demanding more and more information related to the way they are produced. The policy regarding the quality of agricultural and food products is part of Romania's agro-alimentary policy, being developed by the Ministry of Agriculture, Forests and Rural Development in the form of regulations - decrees and decisions, methodological norms and standards of products. Thus, a bio product can only be marketed after being checked and quality certified by the inspection and certifying bodies from EU countries. We can distinguish the bio certified products checking the "ea" mark applied on the package labels and this certifying can only be obtained through rigorous procedures, strictly controlled.

Consumers of bio products motivate their choice of consuming them on the possibility of avoiding getting sick risk, on finding again the taste for natural products. On his turn, in order to produce these products, the producer has to respect some principles, as follows: [5]

- 4 reducing non-renewable resources and raw materials from outside the holdings to minimum;
- **4** recycling waste and secondary products of vegetal or animal origin, by using them as raw materials in vegetal or animal production;
- **4** producing bio products of animal origin coming from animals raised from birth in ecological holdings;
- 4 feeding animals with ecological food made of agricultural ingredients ecological produced;
- **4** producing ecological food products from ecological ingredients;
- **4** giving up any polluting technology;
- continuously supporting natural fertility of soil;
- 4 applying technologies for plant crops as well as for stock farming, meant to meet species, varieties and breeds needs;
- **4** absence of genetically modified organisms (GMO) and plants irradiation;
- 4 lack of synthesis chemical additives: preservatives, dyes, flavors, emulsifiers, acidifiants, taste enhancers, thickening agents. The strong points of bio products, on one hand, are:

> existence of a tendency for healthy food products, a perfect fit for bio products;

- a growing interest for sustainable production, being more and more accepted the fact that ecological agriculture is more friendly than non-ecological agriculture;
- > the existence of an international market for the bio products;
- bio products can now be found in more and more supermarkets, stimulating their sales and marketing;
- the chance of practicing extensive production systems or managing ecological holdings.

On the other hand, the weak points are:

- ✓ tendency of trying to sell non-ecological products as well as healthy ones;
- ✓ prices of bio products are higher than those of the products from the conventional system, due to the fact that the large area of poor farms and the lack of modern technologies lead to high costs, which can hardly be covered;
- ✓ only a few farmers dare to change to ecological agriculture, from financial reasons;
- ✓ the low level of people income makes that consumption requirements are aimed at products from the intensive production system, with much lower prices.

CONCLUSIONS

Starting from these facts, we can estimate that, in the future, developing a strong sector of ecological agricultural production aimed at internal market needs time, education, substantial investments in marketing and transport infrastructure as well as in products control and certification.

The internal market of bio products can become operational on the account of lower costs, with efforts made for the consumption education of population and supported by the income increase.

Taking advantage of media campaigns presenting additives as dangerous substances for health, bio products (also called organic or ecological products) have come more and more forward. Bio products are diversified, healthy, free of pests, diseases and harmful residues, with a content balanced in bioactive and mineral substances. They are the result of ecological technologies that do not use chemical fertilizers and pesticides. All these bio-ecological technologies have the role of making available to the consumer and the processing industry natural products free of chemical remnants and to technologies designed to contribute to saving agricultural ecosystem.

Romania is considered to be an area with ecological agriculture potential and consequently the level of granted funds should be substantially

increased. The lack of consistent subsidies and funds for investments, lack of the market interest for "bio products" are only a few causes that make Romania's potential unexploited. Taking into consideration that producing a bio product is not that simple and Romanian farmers do not have the necessary means, authorized agencies have now the opportunity to stimulate ecological agriculture development by granting funds. By stimulating and encouraging the farmers, there is the proposal that the amounts owed to certify a bio product to be supported from European funds, because the Romanian farmers do not have development funds and almost 65% are practicing subsistence farming.

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