ECOLOGIC AGRICULTURE IN TELEORMAN DISTRICT

AGRICULTURA ECOLOGICĂ ÎN JUDEȚUL TELEORMAN

SIMION C. O.[1], FARCAŞ N.[2], SIMION MARIANA[1]
[1]Bioterra University Bucureşti
[2] University of Agricultural Sciences and Veterinary Medicine Bucharesti

Abstract. *The ecologic agriculture guarantees the protection of the natural resources and the health of the people, a proper development for humans and environment. Lately both the demand of ecologic products and the number of the agricultural producers in the field has grown. Teleorman district is situated among the most important districts in the country, if we are gather the areas where the ecologic agriculture is practiced, both the certified one and the areas in conversion. From year to year the area planned for ecologic agriculture has grown a lot to 2922 hectares. In order to encourage the agricultural producers to practice an ecologic agriculture, the Consultation Office dealt with informing regarding to new techniques in ecologic agriculture, organized symposiums on this theme, prepared ecologic technologies to all the vegetable cultures which were also distributed to the agricultural producers, demonstrative areas were created together with practical demonstrations regarding the preparation of the seed tree material, herbicide applying methods, disease control in the case of nursery transplant, pest control and so on. The results obtained by the agriculture producers showed the economic efficiency of the ecologic cultures, much superior to the conventional ones.*

Rezumat. *Agricultura ecologică asigură protejarea resurselor naturale şi sănătatea oamenilor, o dezvoltare armonioasă între om şi mediu. În ultima perioadă de timp a crescut atât cererea de produse ecologice cât şi numărul de producători agricoli care activează în acest domeniu. Județul Teleorman se situează între județele fruntaşe din țară, dacă însumăm suprafețele pe care se practică agricultura ecologică, atât certificată cât şi pe suprafețele aflate în conversie. De la an la an suprafața planificată pentru agricultura ecologică s-a mărit foarte mult ajungându-se la 2922 hectare. Pentru încurajarea producătorilor agricoli de a practica o agricultură ecologică, Oficiul de consultanță s-a ocupat de difuzarea informațiilor cu privire la noutăți în agricultura ecologică, a organizat simpozioane cu această temă, a întocmit tehnologii ecologice la toate culturile legumicole pe care le-a şi difuzat producătorilor agricoli, au fost realizate loturi demonstrative şi s-au efectuat demonstrații practice privind pregătirea materialului semincer, metode de erbicidare aplicate, combaterea bolilor la răsad, combaterea bolilor şi dăunătorilor în vegetație etc. Rezultatele obținute de producătorii agricoli au arătat eficiența economică a culturilor ecologice, mult superioară celor convenționale.*

Ecological agriculture is practiced in about 100 countries worldwide and the surface of land under ecological agricultural practices is ever increasing.

According to I.F.O.A.M. statistics the global agricultural surface assigned to ecological cropping systems mounts to 15.8 million ha, the largest tracts of

land being in Australia (7.6 million ha), Argentina (3 million ha), Italy (1 million ha). The distribution of tracts of land on continents is as follows:

The evolution of ecological agriculture in Romania can be pointed out as follows:

1992–Establishment of the first Poligon of Ecological Agriculture at the Station of Research in Growing Vegetables - Bacau;
1997–Establishment of „BIOTERRA" Association;
2000–Release of O.U.G. nr 34/2000 – regarding ecological foodstuff, , approved by Law nr.38/2001;
2001–Establishment of Ecological Agriculture Bureau;
2002–Establishment of National Federation of Ecological Agriculture (F.N.A.E.);
2003–Legislation regarding Ecological Agriculture: Order nr 527/2003, for approving the rules regarding the system of checking and certification; Order 721/2003, for approving the rules regarding the export and import of ecological products.
2004–Accreditation of Romanian Checking Bodies, through Order nr.88/2004
2006–The appearance of „ae" label
2006–Law 513 – approves Emergency Ordonnance nr.62 and modifies O.U.G. 34/2000;
2007–Order 688 – regarding the system of checking and certification;
2007–Order 219 – regarding the registration of operators in ecological agriculture

MATERIAL AND METHODS

The special importance of ecological agriculture sector which provides high quality products for human consumption determined us to carry out an adequate study regarding regulations and legislation, ecological techniques and technologies, market/prices, ways towards sustainable development and environment protection, financial support.

The case study was Teleorman county and the data were gathered and processed with the help of OJCA.

RESULTS AND DISCUSSIONS

Teleorman county is among the top counties countrywide, with respect to the tracts of land on which ecological agriculture is practiced, both certified and under conversion.

Every year the surface planned for ecological agriculture has increased very much, reaching 2922 hectares as follows:

-the first company – S.C.PROD BIO AGRO Limited and the largest tract of land certified for ecological agriculture is sited in Ciolăneşti commune, Teleorman county, with a surface of 1712 ha under ecological practices - field crops;
-KAS AGRICOM Limited - 230 ha, field crops – first year conversion;
-Dida Adrian – 23,5 hectares – fruit shrubs – first year conversion;

-S.C.AGRO – ILY Limited – 122,34 hectares – field crops – first year conversion;
-S.C.AGROVERA Limited – 783,21 hectares – field crops – first year conversion;
-S.C.BENJE COMPANI – 47,88 ha – out of which: 4,00 hectares - vegetables – certified; 2,00 hectares - vegetables – second year conversion; 41,88 hectares field crops – first year conversion;
-BOZEANU GHEORGHE – 120 - bee hives - certified;
-Association of Vegetable growers Cernetu - 1,08 hectares vegetables.
-Perspective 2008 – 20,00 hectares vegetables; 100,00 hectares field crops.

Fig. 1. Achievements in the "bio" field, in Teleorman county

The effects of ecological agricultural imply the elimination of pesticides, the improvement of water and foodstuff quality, plant nutrition, soil protection and improvement, biodiversity and nature protection, animal welfare, quality promotion, production decrease by 20 %, price increase by 25 % – 30 %, expenses for obtaining ecological yields 19,2% higher, income accomplished up to 100%, resulting from the calculation of economic efficiency in tomato crop.

The promising findings aim to encourage the increase in ecologically cultivated tracts of land and to attain two objectives, a qualitative one by positioning ecological agriculture in the core of national agriculture, as a pivot for sustainable rural development; the concern for a healthy nutrition has led to the increase of local production of ecological foodstuff (involving business worth millions of euros, accounting for significant input in farms, supermarkets, special restaurants and factories in Romania); and a quantitative one by extending the area cultivated by ecological means, to 150.000 hectares in 2007, and developing an internal distribution market for ecological products.

Table 1

Comparison between economic effects of two kinds of agricultural practices

Crt. no.	INDICATORS	CROPPING SYSTEM	
		Conventional agriculture	Ecological agriculture
1.	Expenses to 1000 lei income (lei)	904,4	791,2
2.	Income at 1000 lei material expenses (lei)	1524,5	1863,2
3.	Income at 1000 lei, labour-related expenses	5809,7	6794,6
4.	Profit at 1000 lei income (lei)	95,5	209
5.	Profit margin	9,5	20,9

CONCLUSIONS

The following general conclusions can be drawn from the information in this paper:

- economic efficiency in ecological crops is 2-3 times higher;
- income is safe and high;
- consumers' preference for ecological products, in an Agral survey on 220 people, shown the following for different age groups:
  - 47% of the age group 20 to 36 years, wish to consume ecological vegetables;
  - 32% of the age group 36 to 50 years, wish to consume ecological vegetables;
  - 21% of the age group over 50 years, wish to consume ecological vegetables.

REFERENCES

1. **Alecu I.N., Merce E., Pană D., Sambotin L., Bold I., Dobrescu N., 2004** - *Management in agriculture.* Bucharest, Romania. Ceres Publishing House.
2. **Popescu A., Alecu I.** - *Techniques of communication and modern methods of agricultural consultancy.* Bucharest, România.
3. **Roman G.V., Ion V.** - *Modern technologies and EU regulations regarding the cultivation, processing and marketing of grains and technical plants*. Bucharest, Romania.
4. **Simion C.O., Farcas N., Simion M. 2007** - *Management, unitary operations and technological implements.* Bucharest, Romania. Cermaprint Publishing House
5. **Simion C.O., Tanasescu R., Buianu V. 2002** - *General agricultural and agrotouristical management.* Bucharest, Romania. Universitatea Company Publishing House