BIOINSTITUT o.p.s.



INSTITUTE FOR ECOLOGICAL AGRICULTURE AND SUSTAINABLE LANDSCAPE MANAGEMENT



Introduction

In 2008, Bioinstitut, o.p.s. continued to grow from both the side of professional involvement in resolving research projects as well as in the resulting consolidation of essential members of our working team.

We joined into further collaboration with research institutes in the CR that are interested in the subject of organic farming. Likewise, we value our cooperation with the main players in the ecological sector – both domestic as well as internationally. Also important is Bioinstitut's interconnection with the PRO-BIO Association of Organic Farmers, thanks to whom the results of our work make it directly to their users; simultaneously, the PRO-BIO Association provides us with a response to the outputs we offer. We are thus able to react appropriately to the needs of practice through the choice of project themes, seminars, and commissions.

Despite the attempts of many research institutes to tie into the new modern trends with which the OF sector is currently and distinctly connected, many subjects remain that have not been comprehensively resolved in the CR. Therefore, even in the future, we will continue to utilize collaboration with the FiBL Research Institute and to offer valuable information acquired from long-term experience abroad which has been adapted to Czech conditions for use in practice.

At the same time, we try to assist effective farming that contributes to protecting the natural environment and supporting the development of biodiversity on farms.

In addition to professional support, we strive to popularize organic farming and to give it a more visible profile. We offer the public and especially consumers of organic products "open gate" days on farms which practice agriculture in harmony with the preservation of nature and the landscape. In this way, we promote an additional level of the benefits of OF, which is currently understood among consumers rather only on the level of organic products' quality and the protection of the consumers' own health.

We have also enhanced our organization's website presentation. In regularly updating our website, we put together a varied offering of educational events, professional literature, work and social gatherings which best illustrate the scope of our work.

We trust that our results and outputs support the development and competitiveness of Czech organic farming on both the domestic and European markets.

> Mgr. Pavlína Samsonová Director of Bioinstitut



Bioinstitut's Activities

- acting as an umbrella for research activities and education in organic agriculture
- transferring the findings of science and research in the area of organic agriculture into practice
- publication and informational activities in the Czech Republic and in the countries of Central and Eastern Europe.

Bioinstitut is engaged in projects supporting the development of organic agriculture in the form of education, providing information, and further educational activities.

Bioinstitut works closely with a range of professional and research organizations in the CR and is the co-ordinator of a number of research projects.

Research Projects

The main theme of our current projects is conservation agriculture in relationship with preserving nature and the landscape in addition to the creation of a procedure for farm plans and proposals for modifying the system of disbursing financial support in agriculture. At the same time, there are projects which are being resolved directly via agricultural practice.



Optimizing Agricultural and River Landscapes in the CR with Emphasis on the Development of Biodiversity

Bioinstitut workers prepare a farm plan

- Registration no.: 2B06101
- **Realization period**: 07/2006 06/2011
- Financing: Part of the research project 2B06101 The National Research Program II. (The Ministry of Education, Youth and Sports)
- Primary project organizer: Palacký University Olomouc
- Co-participants: the Czech Hydrometeorological Institute, the Czech Agricultural University in Prague, Mendel University of Agriculture and Forestry, the Research Institute for Fodder Crops, the Potato Research Institute, OSEVA – Research Station



One of our organization's objectives within this research project is to create and verify a procedure for environmental conservation management plans for agricultural enterprises in the landscape. The project is thematically connected to the Organic Farmers for Nature project where we transfer the results of research directly into practice on the agricultural enterprise.

The main goal for the year 2008 was to verify in practice the working version of the "Procedure for Mapping an Agricultural Enterprise, " which serves as the basis for creating conservation management plans. During the course of the vegetation period for 2008, more enterprises – covering various production areas, of various sizes and management structures (plant production only, livestock production, or mixed farms) – were mapped.

Within the project, a collective of authors produced a methodical handbook: Non-forest Woody Vegetation – Design, Planting, and Maintenance. When designing farm plans, the planting of non-forest woody vegetation is one of the most frequently proposed measures.

Optimizing Organic Agriculture and Selected Agri-environmental Measures with Emphasis on Nature and Landscape Conservation

- Registration no.: SP/2d3/155/08
- Realization period: VII. 2008 XII. 2010
- Financing: Research and Development, the Ministry of the Environment
- Primary project participant: Bioinstitut, o.p.s.
- Co-participants: Palacký University Olomouc; the Research Institute for Soil and Water Conservation Praha Zbraslav, the Institute of Agricultural Economics and Information – Brno establishment

During work on this project, individual organizations focus on methods of organic agricultural land management and the conducting of selected agri-environmental measures and then monitor their influences and impact on ecosystems.



A range of international literature illustrates the positive effects of organic agriculture on the environment. The situation in the Czech Republic, which underwent socialist change in the post-war period with the consolidation of individual plots of land and the elimination of a large percentage of stabilizing elements from the landscape, often does not indicate this despite implemented agri-environmental measures. The goal of the project is proposals for optimizing the organic method of farming and selected agri-environmental measures beneficial to conserving nature and the landscape. At the same time, there is the assumption that even organic farmers will profit from these measures, because only demonstrable effects on the environment will be supported in the future within the Common Agricultural Policy. The results of the analysis will be applicable even within conventional agriculture; they will be especially appropriate for protected land areas.



At the beginning of December of last year, workers from Bioinstitut Olomouc and the Ministry of Agriculture set out on a work-oriented trip to Northern Ireland. The goal of the trip was to become acquainted with the Rural Development Program's configuration of agri-environmental measures with respect to the diversity of plants growing naturally and animals in living naturally the wild but also to preserving or improving the landscape char-



The Utilization of Legume-Cereal Intercropping for Increased Self-sufficiency with Animal Fodder and Maintenance of Soil Quality on Organic Farms in the Czech Republic

- **Realization period**: Dec 1, 2008 May 31, 2010
- Registration no.: A/CZ0046/1/0024
- **Financing**: The project is supported by the EHP and Norway Financial Mechanisms and by the Czech State budget via the Research Support Fund
- **Co-participants**: Agritec, s.r.o, Mendel University of Agriculture and Forestry Brno, Bioforsk Organic (Norway)

Legume-cereal intercropping (LCI) has existed in traditional agriculture (even before the entrance of intensive, large-scale agriculture) and has been used as a part of crop rotation on arable land. Its effects on soil improvement and high-quality grain production (legume and



cereal) are historically well-known. On the other hand, this technique is currently not widely used. It is evident that findings for improving the OF animal fodder base in the CR that are usable in practice and verified by experiments are lacking. It is necessary to offer the CR's organic farming practice a substitute for insufficient cereal produce as well as high-risk and expensive imports (GMO soy). The solution could be LCI, which does not suffer from disease and pests, easily maintains a weedless state, and, thanks to the presence of legumes, additionally enriches the crop rotation with nitrogen (fixing air-borne nitrogen into the soil).

It is necessary to newly establish possible LCI components with respect to the conditions of organic farming and with respect to new varieties, potential weed levels, the mechanical treatments used in organic farming, cultivation economics, and, primarily, nutritional feed value.

Educational and Informational Activities

Bioinstitut supports the creation of information points on farms that are open to visitors. In this way, it is gradually creating a network of model farms, often of those fulfilling above-standard requirements for nature and landscape conservation or having organic product processing with sales directly on the farms.

The goal is to transmit information about the relationship between conservation management in the landscape and both species diversity and the landscape's character – and, moreover, to inform about the options for processing organic products on the farm with linkage to direct sales "from the courtyard" or sales in local stores, e.g., health food stores.

We organize trips to selected farms connected to seminars intended for both the public as well as for parties newly interested in an organic method of farming and also for workers from state agencies who often enter into dealings with farmers – additionally for high school and university students as well as consumers with a relationship to nature and to the method of producing food products.

These activities are realized thanks to two educational and information oriented projects.



Organic Agriculture and Processing Organic Food (EZZB)

- Realization period: IX. 2008 XII. 2010
- Financing: a public commission of the Ministry of Agriculture
- The organizer of the public commission is the PRO-BIO Association of Organic Farmers with its branches and regional centers in cooperation with Bioinstitut, o.p.s. and the Association of Organic Farming Consultants in the CR – EPOS.

Organic Farmers for Nature. Model Organic Farms as an Example for Preserving Nature and the Landscape on the Level of the Agricultural Enterprise

- Realization period: VII. 2008 V. 2010
- Financing: Supported by a grant from Iceland, Liechtenstein, and Norway within the EEA and Norway Financial Mechanisms through the Civil Society Development Foundation, the Ministry of Agriculture for the CR, and Liechtenstein's Sonnenwiese Foundation via FiBL.







We are gradually equipping farms with exterior informational placards, brochures, and other informational materials.

Thanks to the informational support that we provide for the farms, visitors can learn how to recognize the fundamentals of farming in accordance with nature or how organic products originate.

Work with members of the Organic Farmers for Nature network involves visits to the farms, individual advisory services, contact via telephone or e-mail, and consultation. On-site advisory services are aimed at deepening the influence of management on farms with species diversity. Next, advice concerning the options for utilizing agricultural grants as well as the Ministry of the Environment's financial resources is tied into this. In this regard, data is gathered towards designing farm plans, and measures are proposed (e.g., planning plantings in the open landscape).

The basic significance of these activities lies in initiating and supporting the interest of organic farmers to attend to both agricultural and non-agricultural land; through this, the organic farm is perceived as an interconnected whole in which measures can be used to support nature as well as for agriculture alone – planting windbreaks, hedgerows, etc. serves as protection against water and wind erosion; planting groups of trees and bushes as well as solitary trees ensures the welfare of animals (providing shade); sowing and planting specific types of plants supports functional biodiversity – the beginning of beneficial relationships between organisms of agricultural and non-agricultural areas (pest – predator) is a utilized form of biological plant protection.

In November, there was the "Organic Cultivation of Field Crops and Vegetables on the Country Life Organic Farm" excursion and seminar. Moreover, this was in relationship to the environment in



which the farm is located – the Povodí Kačáku natural park. Here, they farm with respect to renewing the landscape's original balance – with the attempt to minimize water and wind erosion and attend to and support species diversity in cultivated crops as well as the surrounding nature. The excursion was aimed at processing grains, which also took place directly on the farm grounds – cleaning, threshing, and milling grain and baking various types of bread products connected in to sales in their own stores in Prague as well as to other stores selling health food products – even outside of Prague. It is a rarity here that they work with kamut, an old variety of grain – i.e., its milling and the baking of kamut bread products.

To support education, transferring information from research into practice, and the mutual exchange of experience, we organize seminars and excursions for farmers, advisors, state agency workers, schools, and the public.





Another form of ensuring informational and professional support to the OF sector is the creation of methodical handbooks aimed either directly at primary production or at processing organic products. At the end of the year, we published a procedure for slaughtering and processing meat at the farm level. Next year, the themes of processing milk, organic seed, and cultivating herbs at the farm level in OF will be addressed.

The goal of creating methodical handbooks is to support developing production for processing products at the farm level, i.e., developing the domestic production of organic products and a regional market with organic products. Visits and seminars on organic farms

On December 2008 the OrganicXseeds seminar took place where the database of organic seeds was discussed and prepared for trial version in the CR.



Bioacademy



Bioacademy www.pro-bio.cz/bioak

B-8, the European Summer Academy on Organic Farming, traditionally held by the PRO-BIO Association of Organic Farmers with the yearly participation of representatives from more than 20 European countries.

Within its framework, Bioinstitut organized the First Scientific Conference on the theme: "New Findings in Science and Research in Organic Farming." During the course of the conference, workers of various specializations exchanged current findings from OF research with overlap into the sphere of the landscape and individual environmental elements. All contributions presented within the Scientific Conference were published in the Bioacademy 2008 Proceedings.

Collaborating organizations: Palacký University Olomouc; Forschungsinstitut für Biologischen Landbau FiBL Schweiz, Austria; Bioforsk (the Norwegian Institute for Agricultural and Environmental Research); ISOFAR (the International Society of Organic Agriculture Research); Bio Forschung Austria; BIO AUSTRIA.



The First Organic Ball

Bioinstitut and the PRO-BIO Association organized the First Organic Ball, an informal social event for all the friends of organic farming and lovers of organic wine. The event became an opportunity for friendly gathering and a celebration of the past year in the organic sector. The First Organic Ball took place on Feb. 15, 2008 in the Hunters' Cabin in Litovelské Pomoraví.





Publication Activities in the Year 2008

Bioinstitut's Practical Handbooks and Procedures

Substances for Plant Protection Registered in the CR Which Are Permitted for Use in Organic Farming (2nd Updated Edition)

This list of substances is approved by the following monitoring organizations: ABCERT AG, Biokont CZ, KEZ o.p.s., and the PRO-BIO Association of Organic Farmers. This is a practical aid which nominally lists the trade name of the substance including active materials, registration number, the name and address of the registrant, and the range and subject of use.

Non-Forest Woody Vegetation – Design, Planting, and Maintenance

With a range of graphically illustrative photographs, this publication contains a detailed overview of the functions which non-forest woody biotopes fulfill in the landscape, a detailed procedure for planning plantings, and the actual planting of trees and bushes including their subsequent maintenance. Part of the handbook is a basic overview of costs that must be allowed for basic vegetative elements. The publication's attachments, which contain a list of woody species appropriate for planning under the specific conditions of the Czech Republic, are valuable.

Slaughter and Processing of Meat and Meat Products in Organic Farming – Instructions and Recommendations for Slaughter and Processing on the Organic Farm

This handbook is meant to make it easy for farmers to familiarize themselves with the area of processing meat and its products; there is a continually increasing interest in this among consumers. It contains an overview of the necessary laws, regulations, and ordinances; common requirements for equipping the operation for slaughter and processing; subsequently, the processing itself and the manufacture of farm products; a list of documents with samples; necessary information for "courtyard" sales; the options for financial support in the area of processing meat; and, lastly, useful references and publications. This handbook provides instructions and recommendations of how to simply organize slaughter and to construct and start operating a building for processing meat and meat products directly at the level of the agricultural enterprise. It is intended for current and future processors carrying out slaughter and meat processing on the farm.













Organic Farming and GMOs/Questions of Coexistence/Your Questions – Our Answers

This brochure is aimed at the coexistence of the system of organic farming with the system that uses cultivating genetically modified crops and at the possible theoretical and practical risks to which farmers using an organic method can be exposed in this context. Particular emphasis is placed on the significance of preventive measures, or steps, by which it is possible to minimize this risk as well as on other measures resulting from valid legislation concerning the problematic of coexistence – on both the national and European levels. The brochure is intended for both farmers and the professional public and is lucidly presented in the form of questions and answers.

Translations of the Merkblatt FiBL Advisory Papers:

Group Nursing Piglets in Organic Pig Breeding

Pig breeding under the conditions of organic farming is a very promising field. For its successful realization, it is important to emphasize – more than elsewhere – the animals' welfare and natural immunity. Alternative technologies for breeding are more likely to make this possible, such as, for example, the system of group nursing piglets tested on organic farms in Germany, Austria, and in Switzerland or family breeding that mates nursing sows as described in examples from Czech practice.

FiBL Dossier: The Quality of Organic Produce

This publication, which originated in cooperation with the PRO-BIO League, is a translation of the original published by the FiBL Research Institute of Organic Agriculture in Switzerland. The handbook brings those interested in organic farming the current results of research in the area of quality organic produce and its health benefits, mainly in comparison with products from conventional production.

Materials for Training, Education, and Informational Activities

- The Bioacademy Proceedings Šarapatka, B.; Samsonová, P. (eds.): Bioacademy 2008 Proceedings, New Findings from Science and Research in Organic Farming. Olomouc: Bioinstitut, 2008.
- CD with training presentations: Organic Farming A Presentation for Training and Practice





The 2008 Organic Farming Yearbook

In cooperation with the PRO-BIO League, Bioinstitut has produced the new Organic Farming Yearbook for the Ministry of Agriculture, which guides you through the world of organic farming and organic produce. Here, readers will discover a current outline of the structures and the size of areas under organic agriculture, the number of enterprises and manufacturers, information about the production of commodities, statistical data about the processors of organic products including offers of organic products to the end customer and their price comparisons (e.g. the differences in prices when buying on the farm and in commercial chains or in organic stores), and much more information.

Thanks to the financial support of the Avalon Foundation and SVWO, Bioinstitut is preparing a **translation of the textbook Organic Farming in Practice into the Russian language**.

Bioinstitut regularly contributes current matters of interest to the **Bioměsíčník bulletin**, which is distributed to prepaid customers and to health food stores around the CR.



Financial report

Costs		
Cost structure	Kč	EUR
Materials – usual consumption	239 059	8 877
Travel	475 238	17 647
Other services	1 127 151	41 774
Wage	1 708 504	63 443
Statutory social insurance	508 012	18 864
Statutory social costs	8 073	300
Other taxes and fees	180	7
Gifts	5 070	188
Exchange rate losses	34 429	1 278
Other costs	14 508	539
TOTAL	4 120 224	152 917

Revenues				
Revenue structure	Kč	EUR		
Earnings from own products	82 748	3 073		
Earnings from the sale of services	872 134	32 385		
Interest	6 619	246		
Exchange rate profits	320 257	11 892		
Accepted contributions (gifts)	434 040	16 117		
Other revenues	19 413	721		
Operational grants	3 064 525	113 796		
TOTAL	4 799 736	178 230		
Overall costs	4 120 224	152 017		

Overall costs	4 120 224	152 917
Overall revenues	4 799 736	178 230
Economic result	679 512	25 313

EUR = 26,93 (According to the Czech National Bank's exchange rate for Dec. 31, 2008)

Company Structure

Management Board

- Chairman / Ing. Petr Trávníček
- Vice Chairman / Dr. Ing. Urs Niggli
- Prof. RNDr. Otakar Štěrba, CSc.
- Dipl.-Ing. Agr. ETH Martin Lichtenhahn
- Ing. Zdeněk Perlinger
- Prof. RNDr.Lubomír Dvořák, CSc.

Supervisory Board

- Chairman / Ing. Jiří Jirka (up to April 9. 2008), Ing. Henrieta Kotlebová (from April 9, 2008)
- Dr. Elisabeth Stöger
- Ing. František Chlad



Company Director

- Ing. Jiří Urban (up to June 30, 2008)
- Mgr. Pavlína Samsonová (from July 1, 2008)

Employees

- Ing. Jiří Urban
- Mgr. Pavlína Samsonová
- Mgr. Karolína Dytrtová
- Ing. Alena Malíková
- Mgr. Stanislava Čížková
- Ing. Markéta Sáblíková
- Ing. Ladislav Čáp
- Mgr. Filip Vávra
- Prof. Dr. Ing. Bořivoj Šarapatka, Csc.
- Ing. Vladimír Lačňák

External Collaborators

- Ing. Radomil Hradil
- Ing. Vilma Hladíková
- Ing. Bohuslava Pajurková
- Ing. Marek Bednář
- accredited OF advisors
- et al.



Management and Supervisory Board Meetings

In 2008, two meetings took place of the Management Board – on Sept. 5, 2008 in Lednice na Moravě and on Dec. 18, 2008 in Olomouc.

Collaboration with Organizations

- The FiBL Research Institute of Organic Agriculture Switzerland, Germany, Austria
- PRO-BIO Association of Organic Farmers, Šumperk and its regional branches
- The Faculty of Science at Palacký University in Olomouc
- The Ministry of Agriculture for the CR
- The Ministry of the Environment for the CR
- The Avalon Foundation, the Netherlands
- SVWO The Swiss Association for East-West Cooperation in Ecological Farming, Switzerland
- The Sonnenwiese Stiftung Foundation, Liechtenstein
- IFOAM EU GROUP, Brussels
- Bioforsk the Norwegian Institute for Agricultural and Environmental Research, Norway
- The Mendel University of Forestry and Agriculture, Brno
- The State Phytosanitary Administration, Brno establishment
- The State Veterinary Administration



- KEZ, o.p.s.
- Agritec, s.r.o.
- ÚZEI The Institute of Agricultural Economics and Information
- VÚMOP The Research Institute for Soil and Water Conservation
- The PRO-BIO League
- Organic farms participating in the Organic Farmers for Nature network

Special Thanks to

- The collective of external collaborators for their help in the creation of handbooks and procedures
- The lecturers speaking at educational seminars
- The editorial staff at BIO Měsíčník



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The company is written into the register of the Regional Court in Ostrava on April 9, 2005, Division 0, Entry 198.

