### Annual report 2010

### BIOINSTITUT o.p.s.

Institute for organic agriculture and sustainable landscape management







### Introduction

In 2010 Bioinstitut entered its sixth year of activity. It was a year under the constellation of completing longterm Bioinstitut research and educational projects. As the projects were from various providers (e.g. Ministry of Agriculture, Ministry of the Environment, Ministry of Finance, National Training Fund, NROS – Civic Society Development Foundation), there was greater demand on both completion of all planned outputs and on precise completion of project administration. In successfully carrying out these projects Bioinstitut has proven that it has sufficient experience and the necessary team of experts to carry out research, application and educational projects. This was also confirmed in a whole range of inspections carried out during 2010 on Bioinstitut worksites (e.g. FÚ Olomouc, Ministry of Finance via the Ernst and Young company, Civic Society Development Foundation, National Training Fund) as well as a financial audit of the business accounts of the whole company. None of these inspections found any doubt about the execution or administration of Bioinstitut projects.

The main theme of most Bioinstitut activities and projects in 2010 was nature and landscape conservation and support of biodiversity. Thanks to research projects lasting several years focusing on optimisation of management and the concept of individual consultancy approach, we have also actively engaged in the preparation of a new scheme of agro-environmental measures for the new program period from 2014.

During 2010 Bioinstitut developed a new strategic plan for the company which arose primarily from the need to ensure the long-term staffing, financial and professional stability of the organisation. After six years of the company's existence it was necessary to evaluate activities and results achieved so far, and on the basis of this to define future aims, set priorities for carrying out themes, revise the users

of services provided and define the essential and viable structure of the organisation and its financing.

It is evident from the development of our organisation that the company has gone through a dynamic phase of development over the past six years. Bioinstitut has successfully engaged in work to support the development of organic farming in the Czech Republic and has established cooperation with numerous experts, organisations, government bodies and foreign partners. We are striving towards the gradual professionalization of our activities and the strategic plan is an attempt to make another step in the right direction.

Continual implementation of themes also requires continual financing which cannot be fully ensured through project activity alone. Despite this reality we strive to fulfil the objectives we are aiming for. We appreciate the support of the founders, who cooperate with us and develop our partnership with other institutions, especially at an international level. We appreciate the cooperation with state administration, which regards us as a partner in dealing with issues relating to organic farming, picks up and further develops the initiatives we have begun and which would not be able to achieve their intended aims without further continuous funding. We appreciate the trust of the members of the Czech Technology Platform, who nominated us as their coordinator. We also appreciate the interest shown by organic farmers in the activities and outputs we offer. Communication and personal contact provide us with the necessary stimulus for solutions, feedback on our proposals and initiatives. Mutual trust in cooperation enables research and verification of outputs directly "in the field", without which their implementation in practice would not be possible.

Thanks to their interest our work has a purpose.

Mgr. Pavlína Samsonová, Director of Bioinstitut



### **About Bioinstitut**

Bioinstitut, o. p. s. was founded in 2004 as a partner organisation to the Research Institute for Organic Agriculture FiBL Frick in Switzerland. The other cofounders were PRO-BIO Association of Organic Farmers, Šumperk and the Palacky University in Olomouc.

**Bioinstitut's mission** is to support the development of organic farming in the Czech Republic by means of research, education, provision of information, training and transfer of scientific findings into practical use. We see organic farming as the only supervised and legally defined method of sustainable agriculture in CZ which not only fulfils a productive function, but also a whole range of non-productive functions, supporting sustainable rural development, biodiversity of landscape and sustainable production of food.

#### Visions and Objectives

#### The aim of our activities is to make Bioinstitut:

- a recognised specialist centre of competence for organic farming focusing on the relationship between farming and conservation of nature and landscape.
- an intermediary and guarantor in ensuring effective transfer of findings from research and development into practice and vice versa in the field of organic farming and in terms of the relationship between farming and the environment.
- the representative for the interests of the organic farming sector and the interests of the rural community in communication with state administration in CZ and for the non-profit sector at EU level.



### People in Bioinstitut

#### Managerial Board

- CHAIRPERSON - - Ing. Ludmila Mužikovská
- VICE CHAIRPERSON - Dr. Urs Niggli (to IX. 2010)
  Ing. Petr Trávníček (from X. 2010)



#### Supervisory Board

- CHAIRPERSON - - Ing. Henrieta Kotlebová (to VIII. 2010)
  JUDr. Michal Malacka Mag. i., Ph.D., MBA (from IX. 2010)
- MEMBERS- - - - Ing. Miloslav Knížek
   Ing. Ivan Pur
- BI EMPLOYEES - - Mgr. Pavlína Samsonová Director

Mgr. Tomáš Berka – botanist, project team member

Alice Bohačíková – secretary

Ing. Ladislav Čáp – OXS database, project team member

Mgr. Stanislava Čížková – botanist, project team member

Dr. Josef Dlouhý – project coordinator

**Mgr. Karolína Dytrtová** – project coordinator, Member of Board and IFOAM EU Group steering committee

Mgr. Jana Laciná – project coordinator

Ing. Vladimír Lačňák – accredited adviser on organic farming

**Ing. Alena Malíková** – accredited adviser on organic farming, nature conservation and landscape protection

Ing. Markéta Sáblíková – PR

Prof. Dr. Ing. Bořivoj Šarapatka, CSc. – agroecology

Ing. Jiří Urban – CTPOA coordinator

#### External colleagues

- - - - - - - - - - - Ing. Stanislav Hejduk, Ph.D.

Ing. Radomil Hradil

Ing. Radim Jarošek

Ing. Tomáš Mitáček

Mgr. Jan Mládek

Mgr. Stanislav Mudra

Ing. Jarmila Neugebauerová

Prof. RNDr. Milena Rychnovská, DrSc

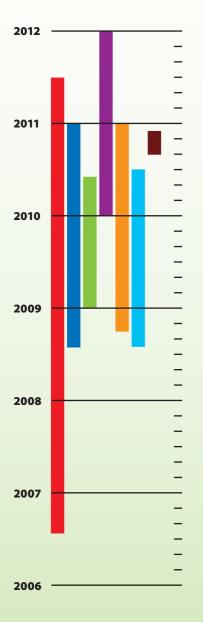
Mgr. Tomáš Vynikal

Accredited OA advisers and others

#### Research projects

### Educational projects and commissions

### **Projects**



7/2006 – 6/2011

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

**(** 7/2008 – 12/2010

Optimizing Organic Agriculture and Chosen Agroenvironmental Measures with Emphasis on Nature and Landscape Conservation

**(** 12/2008 – 5/2010

The use of Legume-Cereal Intercropping (LCI) for Increased Self-Sufficiency in Fodder and Maintenance of Soil Quality on Organic Farms in the Czech Republic

**(** 1/2010 – 12/2011

Agroenvironmental advice and information centres – Czech network

9/2008 - 12/2010

Organic Agriculture and Processing Organic Food

**<** 7/2008 – 6/2010

Organic Farmers for Nature: Model Organic Farms as an Example for Preservation of Nature and Landscape at the Level of Agricultural Enterprise

**4** 9/2010 – 11/2010

Transfer of Swiss findings on supporting and enhancing biodiversity on agricultural land to Czech conditions

#### Research projects

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

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- Registration No: 2B06101
- Implementation period: 7/2006 6/2011
- **Funding**: Ministry of Education, Youth and Sports, National Research Program II.
- **Primary project organizer**: Palacky University Olomouc
- **Co-participants**: Bioinstitut, o.p.s., the Czech Hydrometeorological Institute, the Czech University of Life Sciences in Prague, Mendel University of Agriculture and Forestry, the Research Institute for Fodder Crops, the Potato Research Institute, OSEVA Research Station

Within this project, Bioinstitut's aim is to create and verify a procedure for planning environmentally considerate management in the landscape (farm management plans). 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. One of the partial tasks is to prepare a points system for assessing farms which will enable the evaluation and quantification of the existing type of management and its effect on biodiversity of the agricultural landscape. Another advisory instrument developed under this project is the procedure for mapping agricultural enterprises and a system of overall monitoring and classification of permanent grassland, also used when drawing up a farm management plan.

With regard to the initial assessment and results of mapping, plans are proposed to offer more effective utilization of existing agro-environmental measures and supplement them with measures supported by the Care of |Landscape Program or recommendations in terms of suitable management of landscape features etc. We verified the points system and procedure for drawing up plans in 2010 in the form of pilot projects on several farms included in the "Organic Farmers for Nature" network.





#### Optimizing Organic Agriculture and Chosen Agroenvironmental Measures with Emphasis on Nature and Landscape Conservation

Registration No: SP/2d3/155/08

■ Implementation period: 7/ 2008 – 12/ 2010

■ **Funding**: Research and Development, the Ministry of the Environment

**Primary project organizer**: Bioinstitut, o.p.s.

■ **Co-participants**: Palacky University Olomouc; the Research Institute for Soil and Water Conservation, Prague; the Institute of Agricultural Economics and Information, Prague – Brno division

The project, focusing on improving the system and enhancing the benefit of agroenvironmental measures for nature and landscape, has brought four types of proposals formulated by experts in the fields of soil science, botany, entomology and ornithology. The settings and effectiveness of selected existing measures were revised and modified accordingly, or brand new measures were defined and their costs underwent economic evaluation. The project mainly dealt with sub-measures on grassland management and measures entitled Bird-sites on grassland – Corncrake nesting sites. Besides AEM, proposals for GAEC adjustment were also formulated.



### The use of Legume-Cereal Intercropping (LCI) for Increased Self-Sufficiency in Fodder and Maintenance of Soil Quality on Organic Farms in the Czech Republic

Registration No: A/CZ0046/1/0024

■ Implementation period: 12/2008 – 5/2010

 Funding: The project was supported by the EHP and Norwegian Financial Mechanisms and by the Czech State Budget via the Research Support Fund

Primary project organizer: Bioinstitut, o. p. s.

Co-participants: Bioforsk Organic (Norway), Agritec – Research, Breeding & Services, Ltd.;
 Mendel University of Agriculture and Forestry in Brno

The project aimed to verify possible LCI components with regard to organic farming conditions and with regard to new varieties, potential weed levels, mechanical methods used in organic farming, cultivation economics and, primarily, the nutritional value of feedstuffs. The project outputs included several specialist articles, seminars and a handbook "Cultivation of legume-cereal mixes in organic farming – Results of experiments on selected Czech organic farms". Another brochure "Earthworms and their significance in improving soil quality" was created in cooperation with Norwegian partners.

#### Educational projects and commissions

### Agroenvironmental advice and information centres – Czech network

- **Abbreviated title**: Agro-Envi Network
- Implementation period: 1/2010 12/2011
- Funding: SEF State Environmental Fund of the Czech Republic; Czech Ministry of the Environment
- **Primary project organizer**: PRO-BIO Association of Organic Farmers
- Co-participants: Bioinstitut, o.p.s., EPOS the Association of Organic Farming Consultants, PRO-BIO Regional Centre in Litomyšl, Information Centre for the Development of Moravské Kopanice region (public benefit company)

Thanks to funding from SEF the project partners are running information centres to spread specialist knowledge on ecologically considerate farming methods and procedures and within workshops and seminars they motivate farmers' interest in further options and approaches to nature and landscape conservation. The project includes expert working groups which operate according to three main topics: Soil, Permanent Crops and Nature and Landscape Conservation. The latter of these groups is coordinated by Bioinstitut, its objective lies in the afore-mentioned agroenvironmental measures and possibilities of implementing these within the new program period in the form of farm management plans.

The method of farming has a significant influence on all elements of the environment; it is fundamental in forming the landscape and distinctly affects diversity of species. Therefore the project attempts to disseminate information on these relationships among both farmers and the general public. In terms of promoting the benefits of organic agriculture, in 2010 Bioinstitut created 2 posters entitled "Organic Farming" and "Water within the Landscape" and 4 leaflets for farms involved in the "Organic Farmers for Nature" network. Bioinstitut also published the 2nd updated edition of the "Place for Nature" handbook with additional information on new grant programs and the new amendment to the Act on Agriculture. 2 seminars (on utilization of permanent grassland in OA and landscape features) were also held in 2010.

#### **Organic Agriculture and Processing Organic Food**

- Implementation period: 9/2008 12/2010
- **Assigned by**: Ministry of Agriculture a public commission
- **Project organizer**: PRO-BIO Association of Organic Farmers with its branches and regional centres
- **Sub-organizers**: Bioinstitut, o.p.s. and EPOS the Association of Organic Farming Consultants o. s.

Thanks to the implementation of this project several hundred farmers have had the opportunity to attend educational seminars and practical demonstrations of processing organic food. A whole series of informational and educational materials was created on organic farms and on manufacturing organic produce. Numerous organic farms were equipped with information points and boards for the public. Last but not least, methodology

to improve livestock welfare was drawn up and verified in practice. The aim of the project was to increase public awareness of organic farming and thus contribute to its general development in the Czech Republic.

The project promoted the developing network of model organic farms with above-standard activities in the protection of the environment or farm-processing of organic produce. The network involves 11 organic farmers for whom Bioinstitut produced information boards and leaflets promoting and explaining the principles of organic farming interacting with the surrounding environment and landscape.

Seven farms were equipped with information points which also serve for educational events. Through these information points, boards, leaflets and especially personal contact with consumers, the public and people newly interested in organic farming, the model farms can pass on their experience of considerate management of the countryside and farm-processing. Thus, by their own example, they demonstrate the multifunctional character of organic farming.

Bioinstitut supported the development of farm-processing of organic produce by publishing 4 practical handbooks on the production and processing of selected organic products. The handbooks were compiled thanks to contributions from numerous experts from various fields and they provide a practical guide for all organic farmers who want to finalize their produce. In the last year of the project a team of specialists participated in compiling and publishing a guide "Organic cultivation of medicinal herbs and spices". Organic farms held seminars on processing organic produce, soil maintenance and protection and cultivation of medicinal herbs. Complete information on activities and outputs of this project is available at www.pro-bioprojekt.cz.



#### Organic Farmers for Nature: Model Organic Farms as an Example for Preservation of Nature and Landscape at the Level of Agricultural Enterprise

- Implementation period: 07/2008 06/2010
- **Funding**: Supported by a grant from Iceland, Liechtenstein, and Norway within the EEA and Norwegian Financial Mechanism through the Social Development Fund, the Ministry of Agriculture of the Czech Republic, and Liechtenstein's Sonnenwiese Foundation via FiBL.
- Organizer: Bioinstitut, o.p.s.

he aim of the project was to support organic farming as an important prerequisite for maintaining species diversity and rural landscape diversity.

The project Organic Farmers for Nature II was successfully concluded in 2010. In the course of the project we organized a series of seminars both for farmers participating in the "Organic Farmers for Nature" network and the public, including secondary-school students specializing in agriculture and nature conservation. Seminars held regularly in the "Sluňákov" Centre for Ecological Activities, near Olomouc, became very popular.

We also organized numerous advisory visits to organic farms, assisted in drawing up applications for grants (e.g. for planting solitary trees, baulks and hedgerows in the agricultural landscape). Events held within the project (4 seminars, 4 workshops, 2 voluntary work events) were attended by 355 participants in total, including lecturers from CZ, Austria, Switzerland and UK.

Many specialist articles were published, as well as the monthly "Organic Farmers for Nature Bulletin" ("Zpravodaj Ekozemědělci přírodě") issued as an amendment to the "Bio-monthly" ("Bioměsíčník") magazine. During the project's implementation our representatives often took part in negotiations of expert groups at the Ministry of Agriculture and the Ministry of the Environment and actively participated in the creation of new legislation and strategic documents.

### Transfer of Swiss findings on supporting and enhancing biodiversity on agricultural land to Czech conditions

- Registration No: 015
- Implementation period: 9/2010 11/2010
- **Funding**: Ministry of Finance of the Czech Republic, Swiss-Czech Co-operation Program

Within the Swiss-Czech Co-operation Program supporting exchange of experts and co-operation between Czech and foreign institutions, Bioinstitut employees made a one week study visit to Switzerland. The aim was to improve specialist co-operation with the founder FiBL Frick, exchange of work experience and, for Bioinstitut, especially the integration of information gained in the ongoing projects and commissions. Another aim was to compare the approach to systems of supporting and protecting biodiversity in the agricultural landscape, as well as the principle of ecological compensation areas (ECA), their maintenance and conditions for support in the form of subsidies. The Swiss ECA system is a unique method of protecting sites providing refuge for wildlife and, at the same time, contributing to protection of soil and water resources. The visit by Bioinstitut staff to FiBL also enabled discussion on possible common project aims.



### **Events**

### Legume-cereal mixes in organic farming – new findings for practitioners

- **DATE**: 9. 3. 2010
- **VENUE**: Vysočina Regional Office, Jihlava

Dioinstitut worked in cooperation with partners in the LCI Organic project to organise training for farmers on the theme of growing legume – cereal mixes (LCM). Themes covered knowledge of agrotechnical parameters of cultivation, the influence of the proportion of peas on the occurrence of weeds, disease and pests in LCM and possibilities for their use in ruminant nutrition, the influence on soil quality, economics of cultivation and practical experience from model farms.

### Landscape features – their significance, registration, establishment and maintenance

- **DATE**: 25. 6. 2010
- **VENUE**: HUCUL farm, Janova Hora, Vítkovice v Krkonoších

Workshop on the theme of care for landscape elements (LE), experience of registration of LE in the Land Parcel Identification System (LPIS) at the Agency for Agriculture and Countryside and information on subsequent inspection on behalf of the State Agricultural Intervention Fund, intended for farmers and state administration staff. The meetings included lectures on the importance of landscape elements in terms of nature conservation, financial support for the establishment of new LE and methods of establishing and subsequently caring for LE. In conclusion there was a tour of the Hucul farm with a practical demonstration of LE typical of the Krkonoše region, e.g. stone walls, heaps of stone and solitary trees in the landscape.



### Organic dairy cattle nutrition based on permanent grassland fodder

**DATE**: 13. 5. 2010

■ **VENUE**: Ing. Dalibor Vacek's farm, Opatovice u Hranic

Another seminar organised by Bioinstitut on model farms was divided into two thematic blocks. The first part dealt with nature conservation and the importance of landscape greenery. It included a presentation on a farm plan proposal for organic farming drawn up by Bioinstitut for Mr. Vacek. Other speakers focused on tree-planting on farm land from the perspective of species diversity, gathering solar energy and retaining water in the landscape as well as their practical use and aesthetic value. In the second part of the seminar the nutritional requirements of dairy cattle were presented. This was in answer to the question of whether grazing, hay and haylage can provide sufficient feed and nutrition for cattle.



#### Soil quality in organic farming



- **DATE**: 23 11 2010
- **VENUE**: Sasov organic farm, Jihlava, Vysočina region

The quality and fertility of soil is a basic precondition for good yield, but also a result of the care given to it. For organic farming this mutual relationship is a basic precondition, but not a rule. Understanding the mutual bonds and the ability to evaluate them can significantly help the farmer towards rational farming, nutrition of plants and minimization of negative influence on the environment.

Within the seminar there were presentations on the basic soil characteristics and indicators which are the subject of monitoring and sampling, the importance of biomass and nutrient balance in the system, the function of organic matter in soil, sources of nutrients from the rock underbed, from the atmosphere and also from crop residue. The farmers were certainly interested in the information about the quantity of material that various crops leave behind in the form of crop residue on arable land. This is a source of organic matter which is important for the formation and content of humus and the quality of soil. Participants were also introduced to the system of agrochemical testing of soil, the results of which are accessible within the LPIS register and are therefore at the disposal of farmers.

Visiting representatives of Sasov organic farm presented the start of its Biogas station project and all the difficulties encountered in project preparation, future expectations and as yet unanswered questions about the Biogas plant and its use in OF.

#### Growing, collecting and processing organic medicinal herbs

SEMINAR 1DATE: 31, 8, 2010

■ **VENUE**: Bozetice farm, Borohrádek

on the model farm in Borohrádek – Bozetice a new guide-book was presented entitled "Growing Medicinal and Root Plants in Organic Farming". The author's presentation was supplemented by practical experience from organic growers of medicinal plants, the perspective of Ayurvedic medicine on medicinal plants and inspiration for further potential to widen the range of cultivated medicinal plants, their processing and use. There was also tour of drying facilities for medicinal plants on Mr. Podstavek's farm and an excursion to the premises of the Apotheke company in Libchavy, Ústí nad Orlicí, where the product range includes teas of organic quality.



■ SEMINAR 2

**DATE**: 17. 6. 2010

VENUE: Sonnentor company, Čejkovice

A further introduction to medicinal plants and a new practical guidebook took place at the processing company Sonnentor, which gave participants the opportunity to tour the production facilities.

#### Soil: its importance, protection and care and Natural Gardens

**DATE**: 16.–17. 2. 2010

**VENUE**: Sluňákov Ecological Centre, Horka n. M.

Bioinstitut organised the third annual two-day seminar at Sluňákov ecology centre near Olomouc. This year the invited experts gave talks on current problems relating to farm land. Apart from widespread loss of farm land to various "essential" construction projects, farm land also suffers from degradation – acidification, desertification or loss of soil fertility relating primarily to loss of organic matter. Wind and, especially,



water erosion deprive us of huge amounts of one of the most valuable elements of nature. In their talks the experts focused on ways of identifying these problems and also presented possible practical solutions – considerate methods of soil management including possible legal measures. The second part of the seminar was devoted to the theme of natural gardens, their establishment and importance and also focused on old varieties.

### Visit to organic farms in Switzerland and introduction to Swiss agricultural legislation

■ **DATE**: September 2010

Within a study visit to Switzerland Bioinstitut staff also visited Swiss agricultural enterprises. The first destination was the GutRheinau biodynamic enterprise in the meanders of the Rhine, where functional biodiversity is exploited in agricultural production. In the next part of the visit we were introduced to a project to revitalise marshland biotope on arable land. The eco-farm trip then continued with a visit to an enterprise in the Seeland region. There we had the opportunity for an on-site consultation on the experience of the enterprise, advisers and state administration staff on the implementation of the enterprise, financing and last, but not least, the motivation for the enterprise to enter the revitalisation projects and funding programmes.





### **CTPOA**



The Czech Technology Platform for Organic Agriculture (CTPOA) began its first year of activity. The main aim of the platform is to connect bases of direct production and processing with consultancy, research and education. This vertical structure also includes consumers and communication with state administration. The platform unites representatives of primary farm production, processing and sales and transfers their comments to the field of research and development.

In its first year of activity the platform has been represented by Bioinstitut in the role of coordinator. In order to fulfil the purpose of founding CTPOA, the priorities of the Strategic Research Agenda and the aims of the CTPOA Implementation Action Plan, the platform coordinator and members – primarily representatives of the sectors of research and education – drew up a project application to the Operational Programme – Education for Competitiveness, the field of Support 2.4 Partnership and Network: "Building specialist capacity and support for cooperation within CTPOA."

An internet domain www.ctpez.cz was registered to create a progressive collection of key arguments in favour of organic farming, production and consumption of organic produce, which are freely available for down-loading. Members of the platform were actively involved in the preparation and revision of a new research programme by the Ministry of Agriculture entitled Complex sustainable systems (CSS) and in its presentation to the Government Council for Research, Development and Innovation. They also participated in the creation of an investment programme for research organisations. The CSS programme was approved by the government.

An important achievement was the creation of priorities for the Czech Republic for the international research programme Core Organic II, where priorities were defined for CZ in intensification of organic plant production focusing on the production of feed for monogastric livestock, in pig farming and also the supplementary theme of quality of organic produce.

In December 2010 the platform organised seminars in Rančířov and Sasov, near Jihlava. These were attended by practitioners, processors, state administration staff and personnel from the fields of research and education, with the aim of drawing up a formulation of needs from practice for further research tasks. Subsequently a workshop was organised with an excursion with the management of Sasov Model Organic Farm where several research experiments are under way as well education in OF and scientific research projects (NAZV) in organic pig-breeding.

There was also significant support for seminars, conferences and workshops. At the Czech University of Life Sciences a series of seminars was held entitled "Burning issues in establishing an organic approach in conservation of nature and landscape within commercial activity in the context of CZ and EU", "Sustainable Reality" and "Livestock Breeding in Organic Farming".

Through its members the platform participated in preparation of the international scientific conference "Organic Food Quality and Health Research" (FQH) in Prague and began preparation of the 3rd scientific conference on OF to be held in Prague in the autumn of 2011.

In 2010 the CTPOA became a member of the European platforms TP Organic and IFOAM EU Group. Further information at www.ctpez.cz.

# Cooperation with the Ministry of Agriculture



#### Training for Inspection Organisations in OA

Training was organised within the MoA's Annual Education Plan. In 2010, for the first time after the introduction of official inspection in organic farming, the MoA opted for a unified concept of education for all OF inspection staff, which ensures cooperation and uniform interpretation guaranteed by the MoA (Department for the Environment and Organic Farming). Such an approach is not only favourable in terms of better adoption of new findings but mainly in the uniform interpretation of these. The training included conclusions and open questions to become the subject for education in the following year. Bioinstitut invited both Czech and foreign lecturers, the main themes being soil and plant production, plant protection agents, risk analysis, direction on residue limits, interpretations of methodical sheets published by the MoA, administrative procedures, risk-assessment of operations etc.

#### Organic Agriculture Yearbook 2009

Bioinstitut has been issuing the Czech Organic Agriculture Yearbook since 2006. Thanks to increasing quality of data-gathering and closer cooperation with all players within the sector we have succeeded in documenting the development of OF on many levels of the whole production vertical. Furthermore, the Yearbook is always translated into English, thus providing information on OF development in CZ on an international level. A summary of the most important data is presented on the website "Organic-Europe" – in the section "Country Reports" (http://www.organic-europe.net).



or farms involved in our projects we create information boards introducing the public to the aspects of management and interesting natural features on a given farm. Each board is original in its content, giving some history of the specific location, the production focus of the farm and explaining how organic farming can benefit the landscape, nature and animals.

#### In 2010 we produced information boards for these enterprises:

- Orlice River Farm Considerate management in a river landscape
- The Šrůtek Organic Farm Organic management in the village of Benešov na Vysočině
- Water in the landscape The return of water to the landscape (revitalization of river Včelnička water-course)
- Bemagro Malonty Organic farming, harmony between nature and farming

The information boards, with frames made of solid wood. complete with a colourful plastic poster, are located on sites frequented by walkers (hiking trails, farm entrances). The purpose is to inform visitors to the farm, and local people, of the character of organic farming.

#### Leaflets

or farms involved in the project we also produce information leaflets. This option was utilised by Sasov Organic Farm (Living organically in the Czech-Moravian Highlands), Stateček u Lněníčků Farm (Diverse organic farming in the Doupovské hory Special Protection Area), Ondřej Podstavek (Organic farming, nature and landscape in Bozetice in the Orlice Nature Park) and Kozodoj Farm.





### For the public

#### **Bulletins**

n 2010 we also continued to issue Zpravodaj Ekozemědělci přírodě (Organic Farmers for Nature Newsletter), published in the monthly magazine "Bioměsíčník". With the help of the publishing company VH Press the newsletter is distributed in printed form to all members of PRO-BIO Association, businesses involved in the Organic Farmers for Nature network and other subscribers. It is issued to a volume of around 6000 copies every month.

#### **Newsletter themes in 2010**

- The story of corn from Rheinau
- Protection of biodiversity in the farm landscape in Switzerland
- Global change: Testimony of the Soil (3 parts)
- Agro-environmental measures in organic farming in England and Scotland
- Landscape elements new legislation, their protection and access to grants
- Biogas plants the situation in the Czech Republic
- Flood and erosion prevention measures
- Nature conservation on model farms in Great Britain (2 parts)

An electronic archive of all issues is accessible on the website www.bioinstitut.cz.

#### Website

p to date information on events in the field of research, projects, cooperation, invitations to events and seminars, our publication range and printed information are constantly available on the Bioinstitut website www.bioinstitut.cz



### **Publications**

#### **Agroecology**

A textbook on agroecology – a scientific discipline which utilises ecological theory for the study, design, management and evaluation of productive agricultural systems which also protect natural resources. A long-term solution to the problems of modern farming can only be achieved through restructuring and via such a farming system that adapts its form and function on the basis of agroecology. The textbook is intended for modern farming activity and for the academic field.

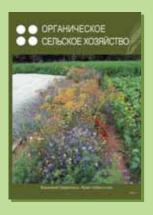


#### Organic farming and biodiversity

The information bulletin summarizes conclusions of numerous research projects focusing on the influence of OF on the quality of the environment and thus also the abundance of various animal and plant species. It can be proven that, in comparison to conventional agriculture, organic farming increases biodiversity. Its less intensive production and higher proportion of natural sites result in the occurrence of site-specific plant and animal species and organic farmers can thus profit from untouched and therefore sustainable ecosystems.

The material has been translated into Czech from the Swiss original published by FiBL.





### Organic Agriculture / Organiceskoje selskoje chozjajstvo

original entitled "Ekologické zemědělství v praxi" offer a comprehensive compendium of information and knowledge intended to assist all people interested in organic farming – not only teachers and students but also practitioners.





#### **Organic Agriculture Yearbook 2009**

The Yearbook follows the development and present state of organic farming in the Czech Republic, information on organic farms and their production structure, organic food production, sale and distribution, legislation, OF grants, OF inspection, education, science and research, OF promotion etc.

Created by Bioinstitut and co-authors for the Ministry of Agriculture of the Czech Republic.

#### Cultivation of legume-cereal mixes in organic farming Results of trials conducted on selected Czech organic farms



Considerable amount of experience and knowledge exists on the cultivation of legume-cereal mixes (LCM) in conventional farming. However, the number of findings that are experimentally verified and usable in organic farming is quite insufficient. This situation gave rise to two research projects which, through experiments on selected Czech organic farms, verify the use of LCMs under organic conditions. The publication summarizes the results achieved so far. These cover a number of areas from the selection of species and varieties and their respective proportion in cultivation, through experimental verification of the influence on the occurrence of disease, pests and weeds, to the quality and nutritional value of LCM production and its economics.

### **Growing organic medicinal herbs** and spices

Another of the Practical Guides published by Bioinstitut in cooperation with other experts. This handbook provides information on medicinal herbs and general principles for their cultivation, processing technology, the HACCP system, storage, packaging, seed production and the main principles of organic production, complete with colour photographs of pests and disease and an extensive list of other useful literature.

### Places for nature on your farm (2<sup>nd</sup> updated edition)

Bioinstitut, in cooperation with specialists in nature and landscape conservation, published an updated version of the "Places for Nature on your farm" practical handbook supplemented by the theme of landscape elements – their significance, protection, registration, financial support etc. It provides information on various natural biotopes within a farm, potential danger to these biotopes and possibilities for protection of these ecologically valuable areas. The handbook also includes a list of available financial support, which has been consulted with the staff of the Agency for Nature Conservation and Landscape Protection and the Ministry of Agriculture of the Czech Republic.

The handbook is mainly intended for farmers who want to save or improve biotope diversity on their farms as well as supporting endangered animal and plant species and may wish to gain some financial subsidy for the measures implemented.

### Earthworms and their significance in improving soil quality

This handbook offers information on the benefit of earthworms to soil and agriculture, and on the biology, species and life of earthworms. Earthworms are helpers valued by all farmers. They work for nothing, live on soil and plant residue, carefully process the soil, improve the availability of nutrients for plants and support the growth of plants.

Translation of this publication is the result of cooperation between Bioinstitut and Bioforsk Organic within the Norwegian-Czech research project "The use of Legume-Cereal Intercropping (LCI) for Increased Self-Sufficiency in Fodder and Maintenance of Soil Quality on Organic Farms in the Czech Republic."







### Financial review

COSTS

| CO313   |           |         |
|---|-----------|---------|
| Breakdown of costs                              | CZK       | EUR     |
| Material - general needs                        | 88 072    | 3 514   |
| Travel  | 450 070   | 17 960  |
| Other services                                  | 3 000 496 | 119 732 |
| Salaries  | 3 086 380 | 123 160 |
| Compulsory social insurance                     | 930 641   | 37 137  |
| Exchange rate losses                            | 357 889   | 14 281  |
| Other additional costs                          | 21 713    | 866     |
| Creation of corrected entries                   | -124 386  | -4 964  |
| Additional income tax payments                  | 17 800    | 710     |
| TOTAL   | 7 828 676 | 312 397 |
| INCOME  |           |         |
| Breakdown of income                             | CZK       | EUR     |
| Income from own produce                         | 64 622    | 2 579   |
| Income from sale of services                    | 1 046 051 | 41 742  |
| Income from goods sold                          | 12 148    | 485     |
| Interest  | 6 088     | 243     |
| Exchange rate gains                             | 103 977   | 4 149   |
| Accepted contributions (gifts)                  | 204 124   | 8 145   |
| Other additional income                         | 10 460    | 417     |
| Contributions from participants in organisation | 60 000    | 2 394   |
| Operational grant                               | 6 360 348 | 253 805 |
| TOTAL   | 7 867 817 | 313 959 |
| BUSINESS RESULT                                 |           |         |
| Total Income                                    | 7 867 817 | 313 959 |
| Total Expenditure                               | 7 828 676 | 312 397 |
| Business result                                 | 39 142    | 1 562   |
|   |           |         |

EUR = 25,060

Czech National Bank exchange rate 31. 12. 2010

### Auditor's report

OL AUDITING, s. r. o.

tř. Svobody 956/31, 772 00 Olomouc, Česká republika

Entered in Business Register held by Regional Court

In Ostrava, Div. C, file 17744

tel./fax: 587420338

e-mail: ol auditing@mybox.cz

#### Independent Auditor's Report

#### On verification of Annual Report for 2010

for the company

#### Bioinstitut, o. p. s

Křížovského 8, 771 47 Olomouc, company ID No.: 26856948

We have verified the accordance of the annual report with the final accounts of the company Bioinstitut, o.p.s., Křížovského 8, 771 47 Olomouc, ID No.: 26856948 for the year 2010. The statutory body of the company is responsible for the compilation and accuracy of the annual report. Our task, on the basis of the executed examination, is to issue a statement on the accordance of the annual report with the final accounts.

We have conducted the examination in accordance with International Auditing Standards and related application clauses of the Chamber of Auditors of the Czech Republic. These standards require that auditors plan and conduct the examination in such a way as to achieve reasonable certainty that the information given in the annual report, which describes facts which are also the itemised in the final accounts, is in all significant respect in accordance with the relevant final accounts. We are convinced that the examination provides reasonable foundation for the issue of an auditor's statement.

#### Auditor's Statement

In our opinion the information given in the annual report of the company Bioinstitut, o.p.s., Křížovského 8, 771 47 Olomouc, ID No.: 26856948 for the year 2010 is in all significant respect in accordance with the afore-stated final report.

Olomouc 20.06.2011

OL AUDITING, s.r.o.

tř. Svobody 956/31, 772 00 Olomouc

authorised by the Chamber of Auditors of the Czech Republic No.286 responsible auditor: Josef Špaček, examination No. KA ČR 1153

Appendix: Annual report of the company Bioinstitut, o.p.s., Křížovského 8, 771 47 Olomouc, IČ: 26856948, for the year 2010

## Bioinstitut is a member of...

- Czech Technology Platform for Organic Agriculture
- PRO-BIO Association of Organic Farmers
- Green Circle Platform
- International association IFOAM EU Group









#### The foundation of FiBL International



Bioinstitut has become a member of FiBL International – International Association of Organic Agriculture Research Institutes, which was founded on February 19, 2010 at BioFach Trade Fair in Nuremberg, Germany. The purpose of the association is the advancement of science and research in the field of organic agriculture, taking into account ecological and socio-economic aspects as well as considerations for human and animal health.



### Cooperation

- FiBL Research Institute of Organic Farming Switzerland, Germany, Austria
- PRO-BIO Association of Organic Farmers, Šumperk and regional branches, CZ
- Faculty of Science at Palacky University in Olomouc,CZ
- Ministry of Agriculture of the Czech Republic
- Ministry of the Environment of the Czech Republic
- Agency for Nature Conservation and Landscape Protection, CZ
- Sonnenwiese Stiftung Foundation, Lichtenstein
- IFOAM EU Group, Brussels
- Bioforsk Norwegian Institute for Agricultural and Environmental Research, Norway
- Mendel University, Brno, CZ
- State Phytosanitary Administration, Brno Division, CZ
- ÚKZÚZ Central Institute for Supervising and Testing in Agriculture
- State Veterinary Administration, CZ
- KEZ, o. p. s., CZ
- Daphne Institute, CZ
- Agritec, s.r.o., CZ
- ÚZEI the Institute of Agricultural Economics and Information, CZ
- VÚMOP the Research Institute for Soil and Water Conservation, CZ
- PRO-BIO League, CZ
- Organic farms participating in the "Organic Farmers for Nature" network

#### Our special thanks to

- A collective of external colleagues for their cooperation in the creation of handbooks and methodical manuals
- Lecturers speaking at educational seminars
- Editorial staff at BIO Monthly
- All sponsors supporting our projects financially
- All people and organizations supporting us and helping us in our work

#### www.bioinstitut.cz

### **Contacts**

#### Bioinstitut, o. p. s.

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Office address: Tř. 17. listopadu 50 771 46 Olomouc

IČ: 268 569 48, DIČ: CZ 268 569 48 tel: +420 585 631 182 e-mail: info@bioinstitut.cz

Company recorded in the Business Register of the Regional Court in Ostrava on 9th April 2005, Section 0, File 198



### **Donations**

f you are interested in the activities of Bioinstitut for the sector of organic farming and you would like to give us your financial support, you can make a donation by credit transfer to:

Account No. 196 757 397 / 0300 held in Československá obchodní banka.

We welcome financial support of any kind for our activities. If you would like us to send you confirmation of receipt of your donation (e.g. for the purpose of a tax statement), please email us the necessary information (name and permanent address). We thank you in advance for whatever financial contribution you are able to make.