



CORE organic II



Improved health, welfare and nutrition of organic pigs

– Reducing environmental impact across husbandry-systems

ProPIG



Title of the project:

Farm specific strategies to reduce environmental impact by improving health, welfare and nutrition of organic pigs.

Introduction

The aim of the ProPIG is to investigate the interaction of animal health and welfare with nutrition and environmental impact. Improved health can lead to decreased medicine use and higher feed conversion efficiency, therefore environmental impact across three husbandry systems can possibly be reduced.

Farm specific improvement strategies will be developed and disseminated to enhance pig health, welfare, nutrition and environmental impact. 8 European countries will participate including outdoor (e.g. UK, F, I), partly outdoor (e.g. DK, CZ) and indoor farms with concrete outside run (e.g. AT: CH, DE).

Background

Pig husbandry systems across the EU are very diverse offering real potential for improvement and exchange across countries. Enhancement of animal welfare and environmental impact are included in the organic principles, with a particular emphasis on naturalness. In general, organic production is perceived by consumers as being superior in welfare terms and low environmental impacts. This needs to be demonstrable in objective terms through animal welfare assessment protocols, Life Cycle Assessments and calculations of nutrient balances.

Benefits of the project

The approach taken in this project will help to promote sustainable development of organic pig farms by providing benchmarks for health & welfare and environmental impact for different production systems, and associated strategies for improvement. Very practical improvement tools (farm specific planning) including automatic recording and benchmarking for the use on farm or during advisory activities will be developed and implemented.

The outcomes will not only provide specific knowledge to support individual farmers' decisions and encourage change, but valuable sources of improvement strategies will be gained. The tools can be essential tools for organic pig farmers, organic advisors and veterinarians to enhance production systems with regard to animal welfare and protection of the environment.



Expected results

ProPIG applies a holistic, trans- and interdisciplinary research approach which will advance organic research methods in general. The scientific knowledge gained will be suited to develop new and improve existing pig farming systems, from which animals, humans and the environment will benefit. Furthermore important primary data will be collected at farm level that can be a significant source for additional Life Cycle Assessments and Sustainability Assessments.

Expected long-term impacts

Improvement of animal health and welfare and reduction of environmental impact of organic pig farms. The tools such as the automatic recording and benchmarking can be implemented in practice on organic and potentially conventional pig farms and expanded to other species.

Target groups

Organic pig breeding and pig fattening farmers, organic and conventional advisors and veterinarians in all participating countries. All participating institutions will expand their networks across disciplines, being involved in animal welfare, nutrition and environmental impact. Also the transdisciplinary approach connects advisory structures and researchers.

The knowledge gained and the tools developed will benefit similarly farmers, advisors and veterinarians in other countries. The outcomes can benefit (national) stakeholders such as organic associations, agricultural chambers and ministries across Europe. Also the scientific community is targeted by aiming to publish the results in scientific journals.



Main activities

At the beginning of the project three husbandry systems will be defined (outdoor, partly outdoor, indoor with concrete outside run). After development of on-farm assessment protocols (animal health) the study will be carried out on 25 farms of each system across 8 European countries. Environmental impacts will be assessed using Life Cycle Assessment and calculations of nutrient balances at farm and outdoor area level. Together with the farmers farm specific goals and improvement strategies will be defined, evaluated and finally disseminated.



Related projects

CORE Organic I:

COREPIG

ANIPLAN

CORE Organic II: Healthy Hens, ICOPP

Welfare Quality: www.welfarequality.net/everyone

Q-Pork Chain: www.q-porkchains.org/

Acassya www.rennes.inra.fr/umrsas_eng

Project dissemination

- All participating farmers, their advisors and veterinarians
- National (organic) farmer journals (e.g. Bio Austria Zeitung, Bio-land, Soil Associations Organic Farming..)
- National farmer meetings and international (organic) conferences (e.g. IFSA, Minding Animals, Wissenschaftstagung, ..)
- Advisory organisations (e.g. FiBL, Bio-I)
- Current and future related projects
- Website and Organic eprints
- Scientific journals (e.g. Livestock Science)

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How to reach the endusers

- Individual farm reports
- Booklets and codes of practice for improvement strategies
- Decision support tool for reducing environmental impacts
- Automatic recording and feedback tool (handheld benchmarking system)
- The outcomes will be tailored to the end users using various ways of communication, such as articles in professional and peer reviewed journals, workshops for farmers, advisors and stakeholders/funding bodies; Furthermore where appropriate the outcomes and tools will be translated into the national languages.

Further information

This project is funded via the ERA-net CORE Organic II by national funds to each partner. CORE Organic II is a collaboration between 21 countries on initiating transnational research projects in the area of organic food and farming. In 2011, CORE Organic II selected this project and 10 more for funding.

Read more at the CORE Organic II website: www.coreorganic2.org/ProPIG and in Organic Eprints: <http://orgprints.org/view/projects/ProPIG.html>