CORE organic

Prevention of selected diseases and parasites in organic pig herds – by means of a HACCP based management and surveillance programme (COREPIG)



COREPIG

A tool to prevent diseases and parasites in organic pig herds

The health of pigs varies a lot between different organic pig herds. This is likely to be caused by the different management routines implemented in the herd. Since the use of antibiotics and antiparasitic drugs is undesirable in organic pig production, the main focus is on prevention of diseases and parasites. It is therefore important to acquire knowledge of the correlation between management routines and disease incidence in organic pig production and convert this knowledge into a management tool that the individual farmer can use to improve livestock health on the farm.





The overall objective of the project "Prevention of selected diseases and parasites in organic pig herds – by means of a HACCP¹ based management and surveillance programme" is to promote animal health and welfare in organic pig herds in Europe. This will be achieved by carrying out the following three components:

- To conduct an international knowledge synthesis to establish future needs for research into disease and parasite prevention in organic pig production
- To estimate risk factors for selected diseases and parasites in European organic pig herds
- To develop and evaluate a management and surveillance system for organic pig herds based on a HACCP concept.
- 1. HACCP (Hazard Analysis and Critical Control Points) is a systematic preventative approach to food safety that addresses physical, chemical and biological hazards as a means of prevention rather than finished product inspection. HACCP is used in the food industry to identify potential food safety hazards, so that key actions, known as Critical Control Points (CCPs) can be taken to reduce or eliminate the risk of the hazards being realised. The system is used at all stages of food production and preparation processes. Today HACCP is being applied also to industries other than food

Knowledge synthesis

Three international workshops will be held with participation of leading experts in diseases and parasites in organic pig production in Europe. The aim of the workshops is to synthesise current knowledge in the subject area, define appropriate measures of health status and identify further research needs.

Epidemiological study

An epidemiological study will be performed in 100 sow herds in six European countries (Denmark, Germany, Austria, Sweden, Italy and France) over a period of 12 months. The *disease level* in these sow herds will be estimated via interviews with the herd owner and interpretation of farm recordings of livestock data including medicine usage, pre- and post weaning mortality, culling reasons and vaccination protocols.

The parasite level in pigs post-weaning will be estimated from parasitological analysis of faecal samples collected from a sample of 2x20 pigs per farm in fixed seasons in all participating herds. These data will be supplemented by on-farm investigations and slaughterhouse data. Also, the researchers will interview the herd owner about the management and potential risk factors.





Development of a surveillance and management system

Based on the knowledge synthesis and the epidemiological study, animal health and welfare hazards will be identified and a list of critical control points and corrective actions will be suggested. Researchers and organic farmers in four of the partner countries (Denmark, Germany, France and Austria) will work together in teams to identify critical levels for the control points and develop on-farm monitoring systems for groups of eight organic sow herds in each country.

Project coordinator:

Marianne Bonde, Department of Health, Welfare and Nutrition, Faculty of Agricultural Sciences, University of Aarhus,

e-mail: Marianne.Bonde@agrsci.dk

Project partners:

Albert Sundrum, Department of Animal Nutrition and Animal Health, University of Kassel, Germany Christoph Winckler, Department of Sustainable Agricultural Systems, University of Natural Resources and Applied Life sciences, Austria Gerald Cartaud, Inter Bio Bretagne, France Bo Algers, Department of Animal Environment and Health, Swedish University of Agricultural Sciences SLU, Sweden

Giacinto Della Casa, Consiglio per la Ricerca e la Sperimentazione in Agricoltura (C.R.A.), Instituto Sperimentae per la Zootechnia Sezione Operativa di Modena, Italy

Barbara Früh, Research Institute of Organic Agriculture (FiBL), Switzerland

Sandra Edwards, School of Agriculture, Food & Rural Development, University of Newcastle, UK Allan Roepstorrf, Danish Centre for Experimental Parasitology, University of Copenhagen, Denmark

Work packages

In the project the following work packages will be conducted:

WP1 Coordination of the project, dissemination and knowledge synthesis

WP2 Epidemiological study in organic pig herds

WP3 Development and evaluation of a HACCP based surveillance and management system

Further information

You will find further information at the project website http://www.corepig.coreportal.org

The project is initiated as a result of the cooperation in CORE Organic. In this EU supported ERA Network, 11 European partners have launched a joint programme, which intends to step up cooperation between national research activities in organic food and farming. Further information on CORE Organic can be obtained at www.coreorganic.org.

By subscribing to the CORE Organic news your can follow the progress in the project. Subscription is possible via www.coreorganic.org.

