



Evaluation of practices for parasite control in organic ruminant systems

PROPara



Aim of the project:

Generate tools and information to facilitate parasite control in organic ruminant systems

Introduction

Parasitism is a major challenge to the health and welfare of organic livestock. In this project we will evaluate available means to monitor and control endoparasites through a series of farm-based parasitological and socio-economical studies under organic conditions. Participating countries are: Denmark, France, Germany, Lithuania, Sweden, Switzerland, The Netherlands, UK.

Background

Over the last 15 years, several projects funded either by EC or National Governments have been commissioned to investigate sustainable ways of controlling parasites in organic and low input livestock production systems. Although these projects have largely delivered the underpinning scientific research, progress to implement effective control strategies has been hindered by: i) little research at a farm systems level, ii) the absence of clear cost-benefit or societal acceptance analysis and iii) difficulties in delivering user-friendly innovation and reaching the appropriate stakeholders.

Main activities

- ▶ assess existing knowledge from research, development and benchmarking studies on parasite control, with on-farm trials
- ▶ associate novel data on disease prevalence with risk factors and control measures
- ▶ develop, refine and evaluate user friendly decision support tools
- ▶ perform cost-benefit analysis on control measures available for organic ruminants
- ▶ develop and deliver technical innovation to facilitate deployment of sustainable parasite control strategies



Expected societal benefits of the project

The consortium will engage with stakeholders beyond the academic community, farmers and advisors at a first stage and standard-setting organisations, EC and national decision-makers at a later stage, to promote awareness and knowledge and to further explore the wider societal implications of the research work.

One of the desired outcomes will be a reduction in the use of allopathic (commercial) drugs for helminthosis controls, which will have a positive impact on the environment and slow down the development of anthelmintic resistance. Project innovations will also improve sustainability of organic ruminant production, which has positive implications in improving farming income, and as a consequence human welfare and cultural development of rural communities. To ensure a significant impact on this, a specific work package dedicated to cost-benefit and farmers' acceptance analysis has been included to identify approaches that will facilitate the wide deployment of integrated strategies by organic ruminant farmers.



Expected results and impacts

The project will develop and deliver innovations for organic ruminants in Europe, through stakeholder participation throughout. For example, for cattle it will deliver: i) an electronic application that will facilitate liver fluke control for organic farmers and ii) a parameterised model where weight gains are used as a proxy for early diagnosis and targeted treatment of GIN.

For small ruminants it will deliver: i) a set of farmer friendly criteria formulated as a tool to help farmers decide drenching requirements of their flock/herd and ii) an economic model, that will generate estimates of the extra costs of implementation of alternative strategies for GIN control. The project will also deliver novel information based on surveys and stakeholder participation studies on current helminth control strategies in organic farms in Europe, fluke prevalence data and associated risk factor analysis, which will improve animal health and welfare through improved monitoring.

Expected long-term impacts

The overall objective of this project is to generate information and tools that can be readily used by organic farmers to improve animal health and welfare. The expectation is that the implementation of alternative approaches to control parasitism will be facilitated following the realisation of the project.

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How to reach target groups

The consortium will focus on informing the main stakeholder groups: i) organic ruminant producers, farmer organisations, veterinarians and agricultural advisors, ii) livestock feed producers and other industry and iii) agricultural standard setting bodies, consumer groups and animal welfare non-government organisations. The three main dissemination mechanisms are the project website, PrOPara Workshop and the national training events.



Further information

This project is funded via the ERA-net CORE Organic Plus, which is a network of 20 countries on initiating transnational research projects in the area of organic food and farming systems. In 2014, CORE Organic Plus selected PrOPara and 10 other projects.

Read more at the CORE Organic website: <http://www.coreorganic.org/> and find publications from the project at: <http://coreorganicplus.org/research-projects/propara/> and at: <http://orgprints.org/view/projects/propara.html>