

Management tools in organic egg production, focusing on animal welfare and food security

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Background

During the last couple of years there has been in-creasing public concern about intensive animal productions systems and their consequences for animal welfare, food security and environment. This has among other things led to an increase in organic food production, incl. organic egg production. However, recent figures point to severe problems with increased mortality, feather pecking and cannibalism in organic flocks. Some of these problems could correlate with problems managing large flocks of loose-housed hens. It is therefore necessary to develop advisory tools for organic egg producers, to secure animal health and welfare in the flocks.

The HACCP system is a quality assurance system, which is widely used in the industry, but also recently adapted to animal production. It aims to prevent problems by identifying and monitoring critical control points in the production and suggests proper actions in cases of deficiencies. It is a control system well suited for authorization. Another approach to improve welfare on farms is via welfare assessment reports, which works as an input for discussing welfare with the farms and simultaneously gives farms the opportunity to compare themselves with other farmers and thereby points the attention to problematic areas regarding welfare in their own production.

Objective

The aim of the project is to develop management tools for organic egg producers using the welfare assessment system and HACCP-concept, thereby securing animal health and welfare at the farms and accounting for food security.

Progress – 2006

A paper regarding the HACCP system was submitted

The thesis was submitted

Plans – 2007

The thesis was defended 20th of March 2007 ☺

Publications

Bonde, M.K.; Hegelund, L. and Sørensen, J.T. (2005) [Nye tal på svinesundhed](#). In *Økologisk Jordbrug*, 21. October, No 346, page 8.

Hegelund, L. (2006) [Fjerpilning hos økologiske høns](#). In *Økologisk Jordbrug*, March, No 357, page 6.*

Hegelund, L. (2006) [Medicinforbrug og dødelighed i økologisk og konventionel slagtesvineproduktion](#), in Sørensen, Jan Tind, Eds. *Sundhed og medicinforbrug hos økologiske og konventionelle slagtesvin*. Intern Rapport nr. 1 - Husdyrbrug, page pp. 13-16. Department of Animal health, Welfare and Nutrition, DIAS.

Hegelund, L.; Bonde, M.K. and Sørensen, J.T. (2006) [Ingen forskel på dødelighed mellem økologiske og konventionelle slagtesvinebesætninger, men de konventionelle havde et tre gange så stort medicinforbrug](#). In *Forskningsnytt*, No 1, page pp. 10-11.

Hegelund, L.; Bonde, M.K. and Sørensen, J.T. (2005) [Øko-grise får mindre antibiotika](#). In *Økologisk Jordbrug*, 30. December, No 351, page pp. 6-6.

Hegelund, L.; Hermansen, J.E.; Sørensen, J.T. and Horsted, K. (2006) [Økologisk ægproduktion: Produktion, sundhed, ernæring og næringsstofhusholdning](#). DJF Rapport Husdyrbrug no. 71, Department of Animal Health, Welfare and Nutrition, DIAS.

Hegelund, L.; Sørensen, J.T.; Horsted, K. and Hermansen, J.E. (2004) [Velfærdsvurderingsrapporter, økologisk ægproduktion. Rapport fra afdelingen for Husdyrsundhed og Velfærd](#). Report, DIAS.

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Hegelund, L.; Sørensen, J.T. and Johansen, N.F. (2003) [Developing a welfare assessment system for use in commercial organic egg production](#). *Animal Welfare*(12):pp. 649-653.

Hegelund, L.; Sørensen, J.T.; Kjær, J. and Kristensen, I.S. (2005) [Use of the range area in commercial egg production systems: effect of climatic factors, flock size, age and artificial cover](#). In *British Poultry Science*, February, Volume 46, No 1, page pp. 1-8.

Time schedule details (whole PhD period)

Total period(s) of leave (not working on PhD project): 15,75 months (26.03.03 - 31.12.03 + 14.06.05 - 31.12.05)

Total period of extra employment on PhD project: -

(Planned) date of submission of thesis: 15.12.2006

(Planned) date for defence: 20.03.2007