



# 'ProPIG'

## Organic pig health, welfare and environmental impact across Europe



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### Background

Organic pig production is characterised through a holistic approach based on the EU Regulation (EC) No 834/2007 and the IFOAM principles: 'health, ecology, fairness and care'.

'Health' is defined as 'the wholeness and integrity of living systems. It is not simply the absence of illness, but the maintenance of physical, mental, social and ecological well-being' (IFOAM; 2006).

Applying those concepts to organic pig production can cause conflicts between animal welfare and environmental impact: Outdoor systems allow natural behaviour, such as rooting, however, this can cause damage to the grass cover

Across the EU a variety of **husbandry and management systems** have been developed (CorePIG, Rousing et al. 2011):

Indoor with concrete outside run

Partly outdoor

Outdoor



=?



=?



Animal welfare & Environmental impact ?

### Hypothesis

- ❖ When well managed, **all three housing systems are similar**
- ❖ Good animal health, welfare and proper nutrition is **correlated** with decreased environmental impacts at farm level

### Aim of ProPIG

1. To identify **animal - environment interactions** in the three different housing systems for organic pigs (outdoor / partly outdoor / indoor with concrete outside run) across the European climate zones
2. To develop and implement **farm specific strategies** to reduce environmental impacts by improving health, welfare, nutrition and management of organic pigs
3. To **disseminate knowledge** to national advisory bodies and farmers

### Methods

On-farm assessment protocols will be carried out on **75 farms in three pig husbandry systems** in eight European countries.

- 🐷 Evaluation of animal health and welfare **from animal based parameters** including clinical and selected behavioural parameters
- 🐷 **Life Cycle Assessment and calculations of nutrient balances** at farm and outdoor area level
- 🐷 Feedback of results to farmers to be used to decide **farm specific goals and strategies to achieve these goals.**
- 🐷 All farms will create their **individual health, welfare and environmental plan**, which will be reviewed after one year to allow continuous development

### References:

- Fraser, D. (2003): Assessing animal welfare at the farm and group level: the interplay of science and values. *Animal Welfare* 12: 443-443.  
 IFOAM (2006): The IFOAM norms of organic production and processing, Version 2005.  
 Rousing, T. (2011): Final report of CorePIG; [http://www.coreorganic.org/research/projects/corepig/2011\\_CorePig\\_%20Final\\_report.pdf](http://www.coreorganic.org/research/projects/corepig/2011_CorePig_%20Final_report.pdf)  
 Watson, C.A., Atkins, T., Bento, S., Edwards A.C., Edwards, S.A. (2003): Appropriateness of nutrient budgets for environmental risk assessment: a case study of outdoor pig production. *European Journal of Agronomy*, 20, 117-126.

Weaners						
	A	B	C	D	E	Week 1 score
% weaners occur	10.5-70	>70-82.5	>82.5-90	>90-98.3	>98.3-100	07.5
% weaners with respiratory problems	0-10	>10-23	>23-30	>30-75	>75-100	0.0
% weaners with severe respiratory problems	0-0	>0-10	>10-10	>10-10	>10-100	0.0

goal: improve respiratory problems  
 Preventative measures  
 find reason - take blood samples; adapt vaccination if necessary  
 improve ventilation  
 Therapy  
 mild cases without fever: herbal cough tea; otherwise Antibiotic



### Perspectives

ProPIG will provide the opportunity not only to investigate, but also improve the influence of organic pig farming systems on animal welfare and environmental impact.

This fulfils the **fourth IFOAM principle of care**: 'Organic Agriculture should be managed in a precautionary and responsible manner to protect the health and well-being of current and future generations and the environment' (IFOAM, 2006).

This project runs from 2011-2014, therefore no results are available yet.

[www.coreorganic2.org/propig](http://www.coreorganic2.org/propig)

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