# Piglet mortality in organic herds

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## Introduction

Productive performance of organic pig farms is lower compared to conventional farms, but only very few data exist. Better knowledge of the productivity of organic herds regarding litter size at birth, piglet losses around birth and during lactation, as well as housing and management conditions should help to identify critical points and hence to improve the situation.

## Objectives

- Describe productive data, housing and management characteristics in 100 organic farms from 6 EU countries (Austria, Denmark, France, Italy, Germany, Sweden).
- Identify critical points for piglet mortality.

## Methods

### Interview of the farm manager

Background, performances, management…

### Observations on the farm

Housing and animals

### Farmers' records

Live born, still born, fostered (+ & -) and weaned piglets/litter

During 3-11 months, starting between January and July 2008

## Analyses

No epidemiological analyses possible

### *Descriptive analyses*

Threshold of ≥ 10 litters/farm, records of stillborn

➔ 38 farms in 4 countries (France: 14, Germany: 12, Austria: 7, Sweden: 5) with a mean of 69 (10 to 713) litters/farm.

***Classification of the farms*** according to their housing and management, using multiple correspondence analysis (MCA) and subsequent hierarchical classification, variables transformed in binary variables

➔ 49 "indoor" and 33 "outdoor" farms

Comparison of the performances between farm types

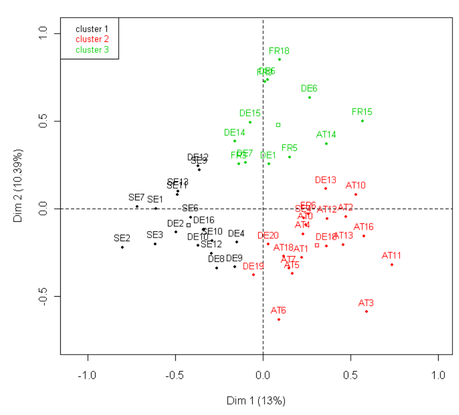
## Results

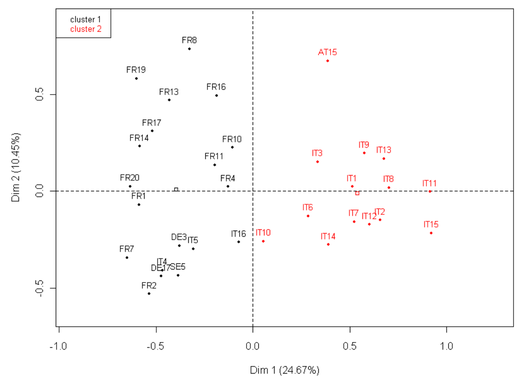
### Table 1. Performances (38 farms)

| | | |
|---|---|---|
| Total littersize at birth, mLSB | 12.9 | 1.6 |
| Mean littersize at weaning, mLSW | 9.2 | 12 |
| Percentage of losses, pLOSS | 26.7 | 7.1 |
| Duration of lactation, days | 45.3 | 5.9 |

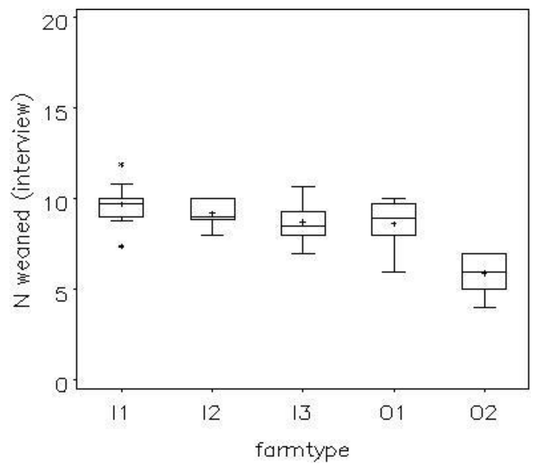
Losses increased with mLSB (2.1 ± 0.7% additional loss per piglet, $P < 0.01$) and with sdLSB (3.9 ± 1.6% additional loss per unit of SDLS. mLSB was correlated with sdLSB ($r = 0.44$, $P < 0.01$).

### Fig 1. MCA for indoor (left) and indoor (right) farms




### Fig 2. Littersize at weaning (from interviews) according to farm type




**I1:** bigger farms, batch farrowing, cross fostering, vaccination program, no outdoor run, large lying area, no group suckling, lameness rare

**I2:** cleaning and disinfection rare, small lying area, group suckling

**I3:** no batch farrowing , no cross fostering, fat sows, group suckling, no vaccination program

**O1 vs O2:** more batch farrowing & crossbred sows, larger herds, specific feed ratio during lactation

## Conclusions

- Detrimental influence of litter size at birth on piglet mortality (more competition & higher proportion of piglets with low birth weight), high standard deviation in litter size may exacerbate these problems.
- No clear difference between all indoor and O1 farms. O2 farms more "traditional", lower performances.

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