

Evaluation of different farrowing systems regarding productivity and animal welfare

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Background

Farrowing crate

- Restriction of movement
- No nest building
- No separate defaecation area
- High prevalence of skin lesions

Free farrowing pen

- Crushing of piglets ?
- Investment costs and work time requirements ?

EU Report until 2008 regarding loose-housing of lactating sows ([EC 2001](#))

Aim

Consolidated findings regarding:

- Animal health and welfare
- Economic efficiency

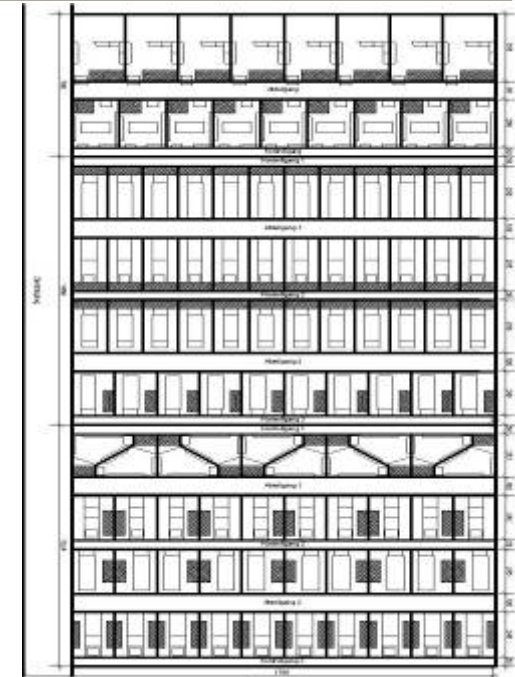
Relevant for:

- Pigs
- Pig industry
- Consumers & legislative bodies

Method

Commercial farm

- 600 sows (LR x LW)
- Group housing during pregnancy
- Batch farrowed in 5 groups, 4 weeks cycle
- Weaning at 3 weeks
- 8 different of farrowing pen types (n=103)





3 free farrowing systems

varying in:

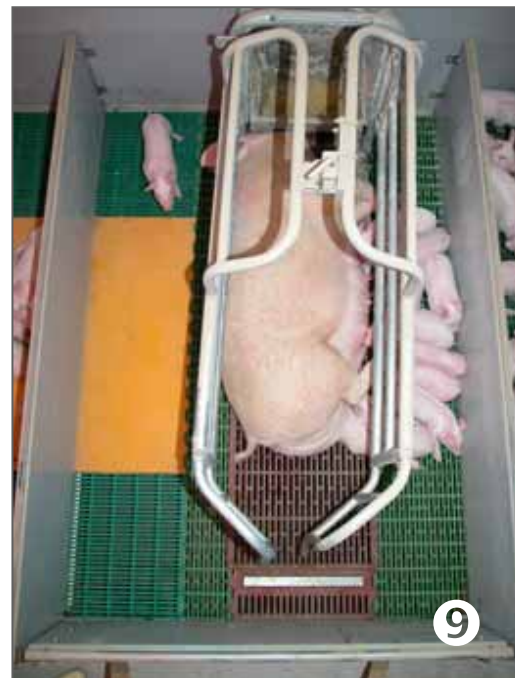
- Space allowance
- Floor type
- Structure
- Creep area





5 crate systems varying in:

- Dimensions
- Floor type
- Crate type
- Creep area



Method - Economy

Productivity data

- 1500 litters (KW-Sauenplaner®)
- Farrowing management: no / minimal / standard
- Linear mixed Model

Work time requirement

- Measuring at level of work elements



Method – Animal Welfare

Clinical examination of the skin

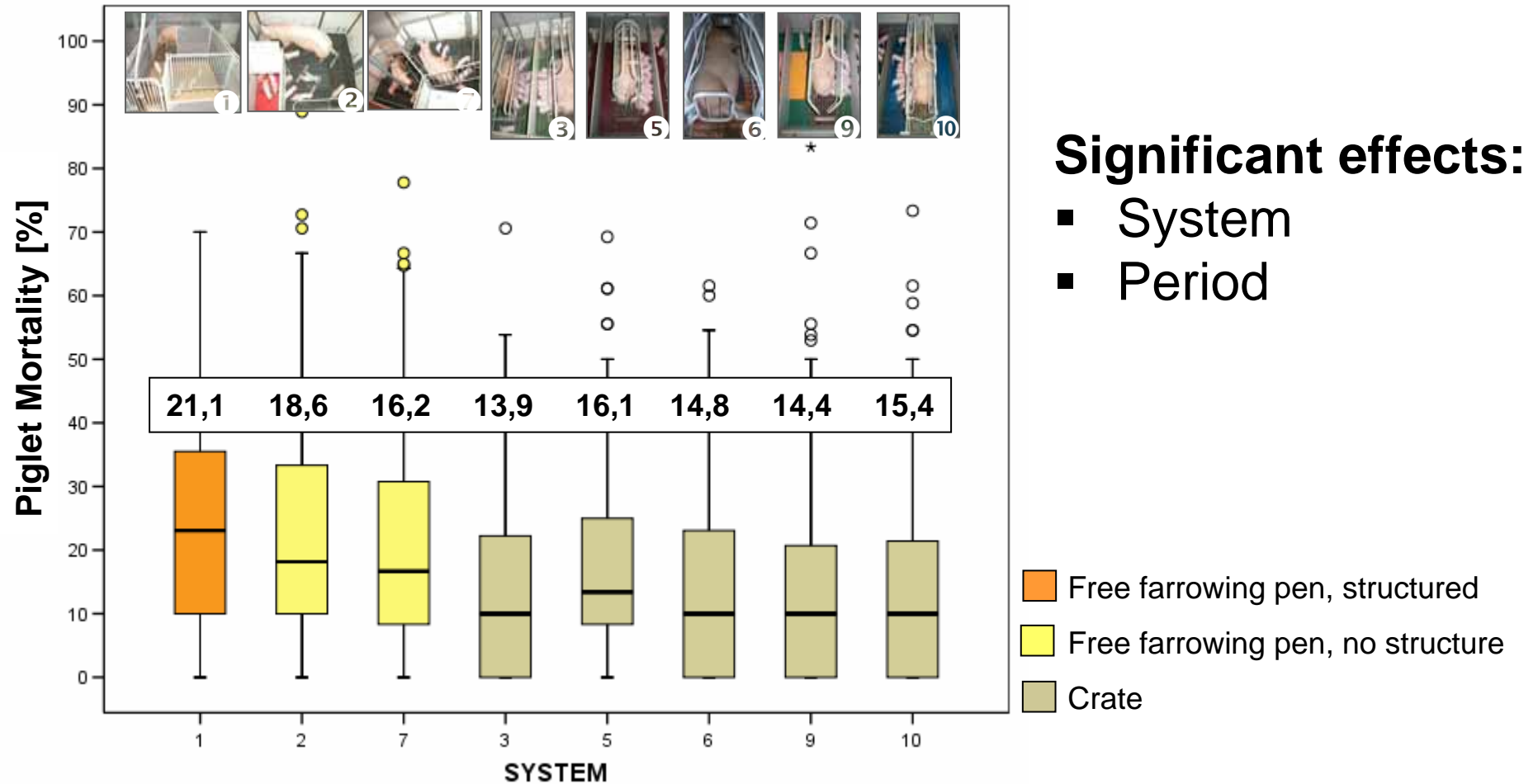
- 455 sows and litters
- 1st and 3rd week of lactation
- Scratches, abrasions, wounds
- Non-parametric tests



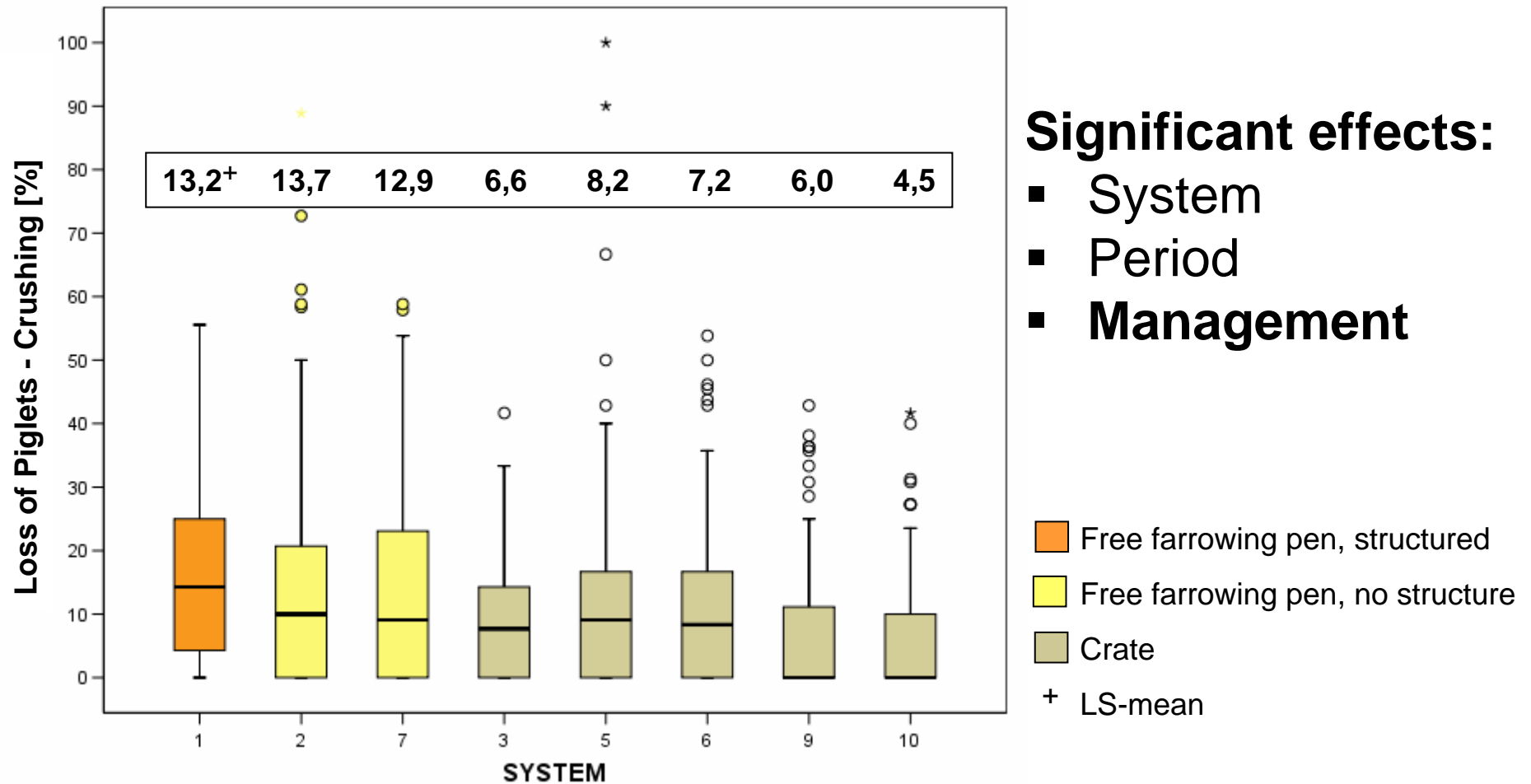
Skin Lesions – Sow & Piglet



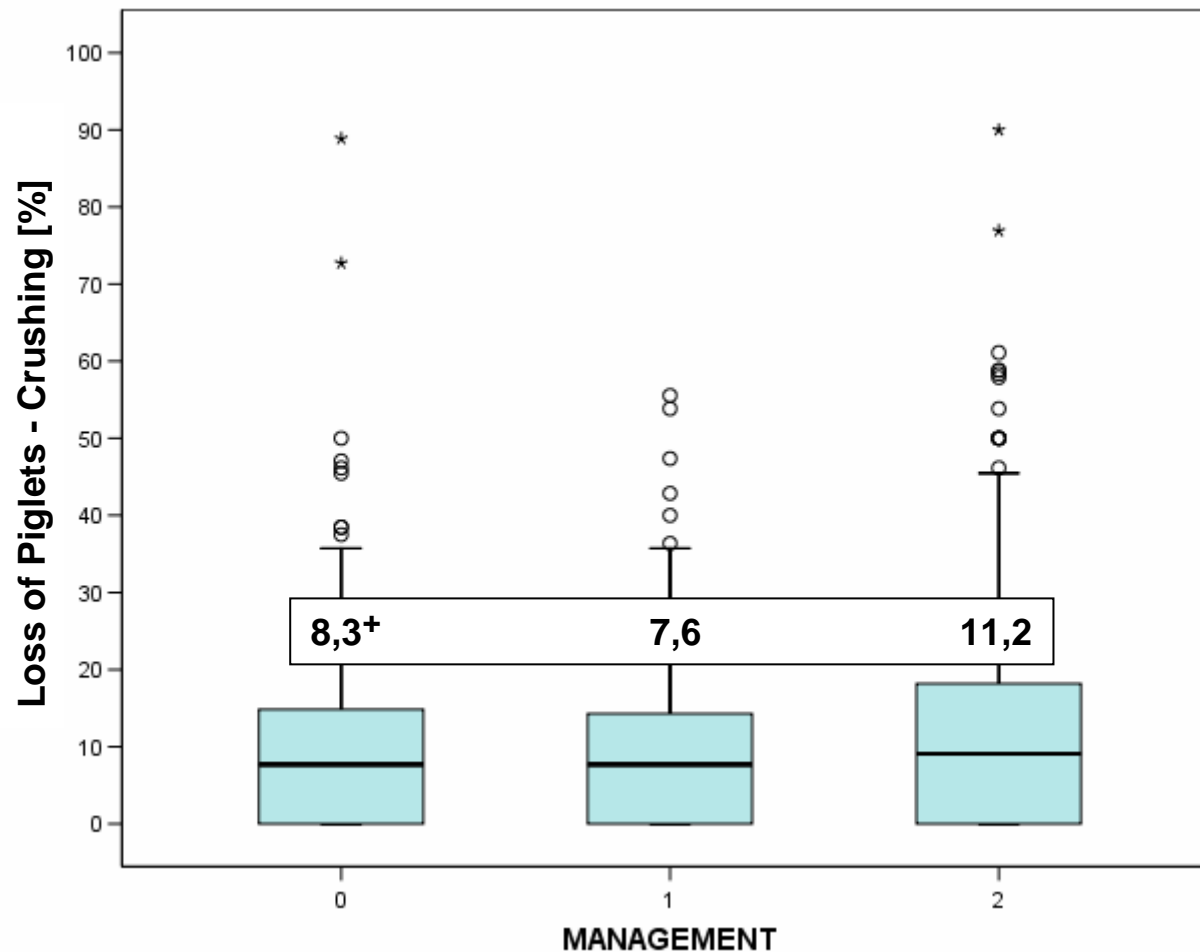
Results - Piglet Mortality



Crushing of Piglets



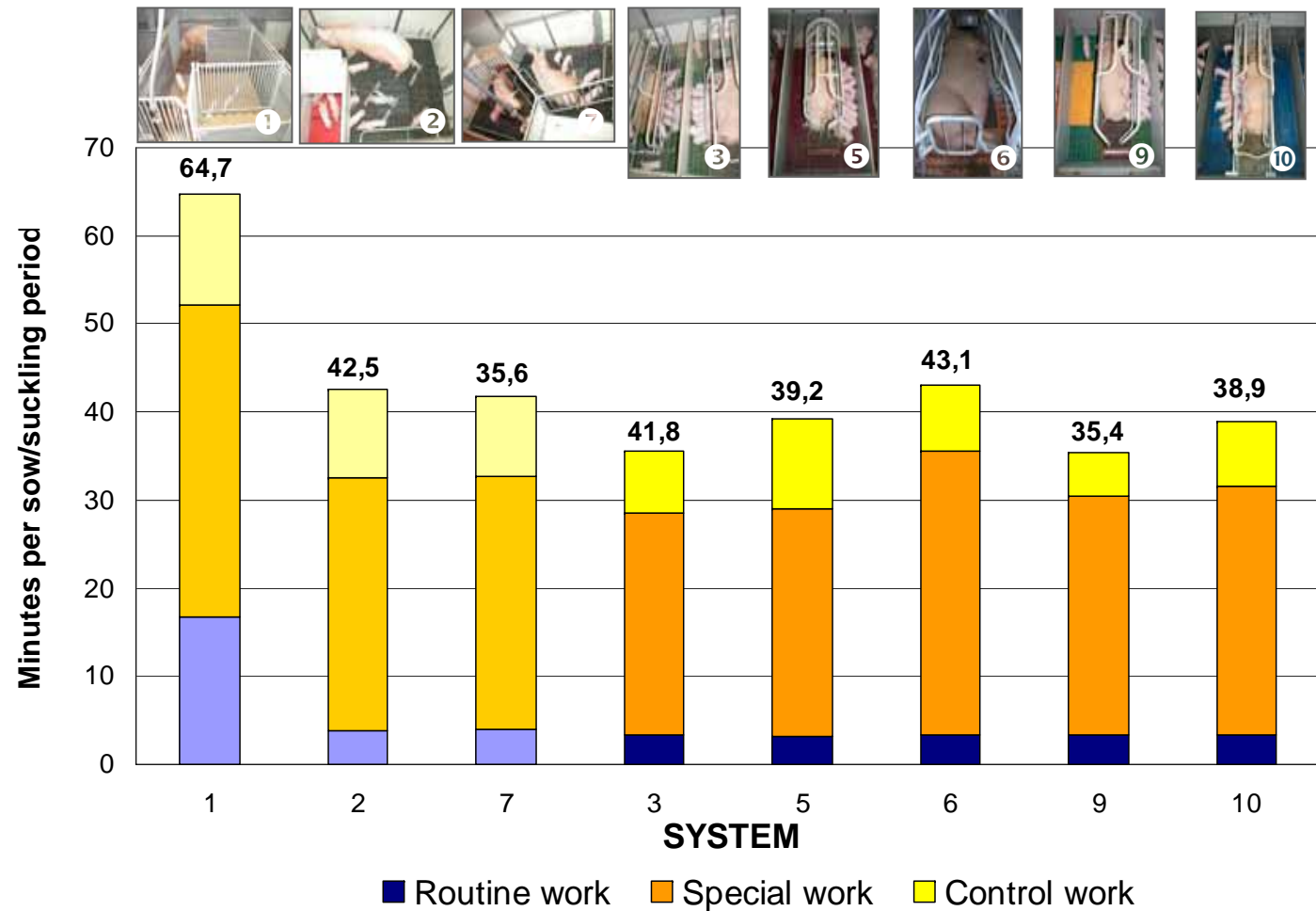
Crushing of Piglets - Management



Most crushing of piglets with highest intensity of care around farrowing !

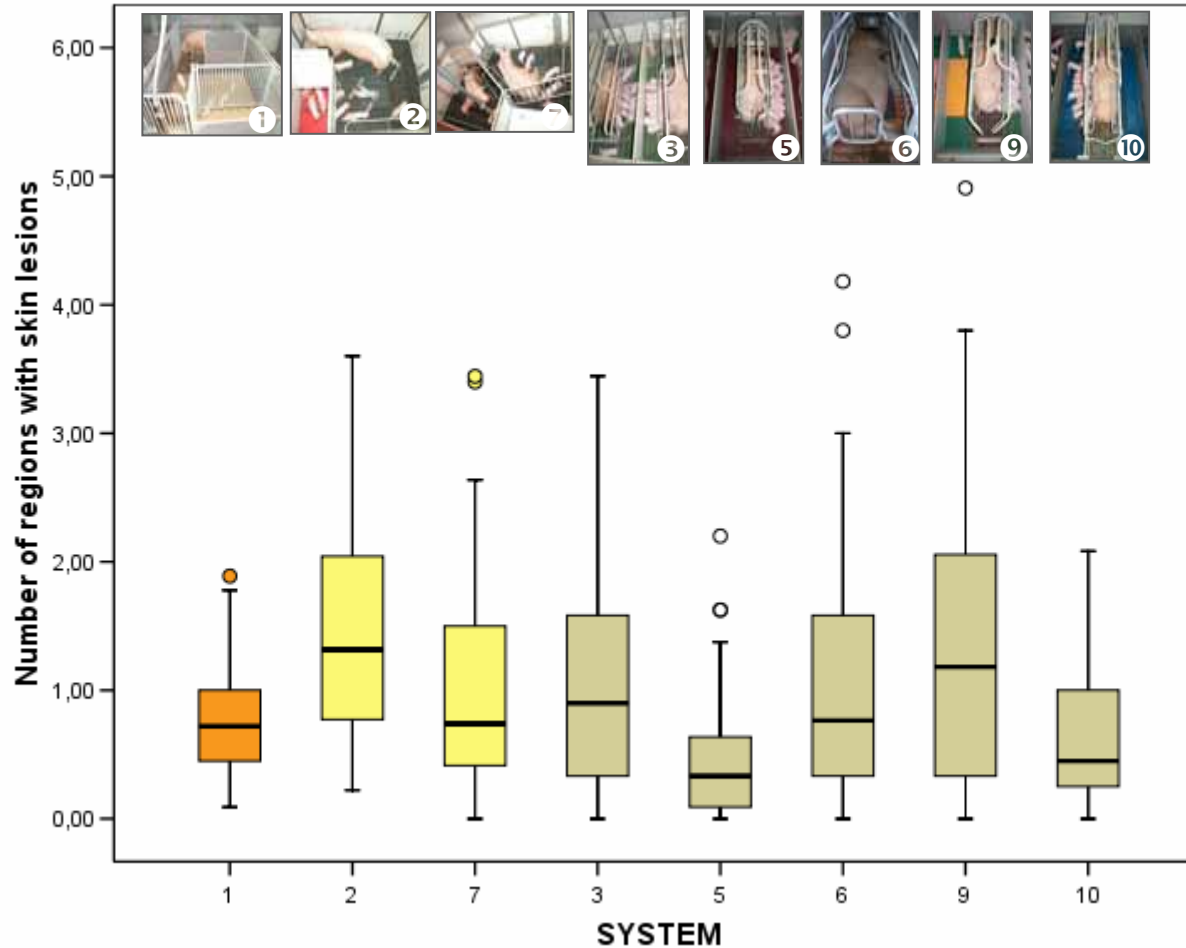
0 no intervention 1 minimal care 2 standard procedere ⁺ LS-mean

Work Time Requirements



Highest in
largest pen
Continuous solid floor!

Skin Lesions of Sows



Significant difference between systems!

Discussion

- Piglet mortality higher in free farrowing pens
Marchant et al 2000 (+); Weber et al 2007 (-)
- Crate systems benefited from routine management ?
- Skin lesions depend on flooring
Putz 2002



Conclusions

- Both farrowing crates and free farrowing pens have positive and negative effects on animal welfare and economy !
- Further development of farrowing pens needed !

A photograph of a pig in a laboratory or clinical setting. The pig is lying on a dark, textured metal grate floor. It has a light pinkish-brown coat and its eyes are closed. There are some yellowish marks on its ear. In the background, other pigs are partially visible. The overall scene suggests a medical or research environment.

Thank you for your attention !

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