Farm specific strategies to reduce environmental impact by improving health, welfare and nutrition of organic pigs

C. Leeb & ProPIG Consortium
Stockholm, 1st October 2014
Research Seminar
Three Pig Husbandry Systems in Europe

75 farms in 8 countries

To identify

- animal - environment interactions in three systems

Hypothesis

- all systems are able to ensure good welfare and low environmental impact
- when well managed

Indoor with concrete outside run

Outdoor

Partly outdoor

ProPIG Amsterdam, 15.5.2013 Coreorganic2 Research Seminar
Environment - Greenhouse gas emissions: CO$_2$-eq in 3 Systems

No statistical difference

Partly outdoor:
- Better than outdoor: Eutrophication potential (PO$_4$-eq.)
- Better than indoor: Acidification (SO$_2$-eq.)
Farm specific strategies for improvement

To develop and implement

• **Farm specific strategies** to:
  – reduce environmental impacts
  – by improving health, welfare, nutrition and management of organic pigs

• To **disseminate knowledge** to national advisory bodies and farmers

<table>
<thead>
<tr>
<th>Visit</th>
<th>Assessment</th>
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<tbody>
<tr>
<td>Farm plan</td>
<td>1. Visit Assessment Farm plan</td>
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<tr>
<td>Assessment</td>
<td>2. Visit Farm plan</td>
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<tr>
<td>Implementation of measures</td>
<td>3. Visit Assessment Farm plan</td>
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- Preventative measures
  - find reason
  - take blood samples; adapt vaccination if necessary
  - improve ventilation

- Therapy:
  - mild cases without fever: herbal cough tea; otherwise
  - Antibiotic
Training & On Farm Improvement

Training and Inter-Observer Agreement

3 Farm visits:
1. On farm data collection
2. Feedback to farmer as „Farm plan“ incl. Goals and Measures
3. Repeat visit to measure effectiveness

PigSurfer
### Analysis & Dissemination

„Booklet for Improvement“

<table>
<thead>
<tr>
<th>Check</th>
<th>Measures</th>
<th>Effectiveness</th>
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<tbody>
<tr>
<td>Is supply with minerals and vitamins ensured?</td>
<td>- Supply especially young sows with sufficient Ca, P, biotin, Manganese, Copper, Zinc and Vitamin D. An optimal Ca:P ratio is 1.3 to 1.5</td>
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<td></td>
<td>- Regularly control length and shape of claws. Trim if necessary, also the dew claw.</td>
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<td>- Ensure sufficient (but not too much) abrasion by choosing slightly abrasive floors in the pregnant sow area</td>
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<td>Is claw length of sows adequate?</td>
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<td>Are there a lot of lame sows after regrouping?</td>
<td>- Carry out regrouping after weaning and/or mating on pasture (or at least an outdoor run with good grip).</td>
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<td>- Keep stable groups throughout the production cycle</td>
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**Lameness**

- Those claws make walking very difficult and should be trimmed.
- Too abrasive floor or standing in dung can harm claw substance.
- Too small or too wide gaps in slatted floors hold the risk of claw injuries.