PIGLET MORTALITY IN DANISH ORGANIC HERDS

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THE PROJECT

Why? An estimated preweaning mortality between 25 and 40%

What? Identifying piglet mortality risk factors in Danish organic herds

How? 1. Registrations on the piglet mortality during one year

2. Necropsies on a sample of dead piglets
ON-FARM MORTALITY REGISTRATIONS

- A pocket sized booklet.
- Sows: Parity, body condition, lameness etc.
- Counting and registration of piglets;
  - 1st inspection after birth
  - Castration (or 3-5 days after birth)
  - Vaccination (or 14-21 days after birth)
  - Weaning (7 weeks after birth)
- June 2014 until May 2015.

Registrations on approximately 6000 farrowings
PREWEANING MORTALITY - SUMMER 2014

- 1st inspection
- Castration (age 3-5 days)
- Vaccination (age 14-21 days)
- Weaning (age 7 weeks)
- Total

Mortality (%)
STILLBORN PIGLETS – SUMMER 2014

Herds

- 7%
- 11%
- 12%
- 8%
- 6%
- 7%
- 10%

- 10%
## LITTER SIZE - SUMMER 2014

<table>
<thead>
<tr>
<th>Herds</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total litter size</td>
<td>15.90</td>
<td><strong>17.62</strong></td>
<td>17.58</td>
<td><strong>14.73</strong></td>
<td>15.71</td>
<td>14.90</td>
<td>15.07</td>
</tr>
<tr>
<td>Live born</td>
<td>14.72</td>
<td><strong>15.66</strong></td>
<td>15.53</td>
<td>13.55</td>
<td>14.77</td>
<td>13.83</td>
<td><strong>13.54</strong></td>
</tr>
<tr>
<td>Stillborn</td>
<td>1.18</td>
<td>1.96</td>
<td><strong>2.05</strong></td>
<td>1.18</td>
<td><strong>0.94</strong></td>
<td>1.07</td>
<td>1.53</td>
</tr>
</tbody>
</table>
Necropsies

- Dead piglets from approximately 25 sows on each farm.
- 4 seasonal collection periods.
- Necropsies performed at the farms.
- Cause of death, body condition, stomach content etc.

Necropsies on approximately 4000 piglets
NECROPSIES - SUMMER 2014

- Crushed: 37%
- Stillborn: 24%
- Discarded: 13%
- Euthanized: 8%
- Weak: 5%
- Hunger: 7%
- Infection: 2%
- GI: 1%
- Trauma: 1%
- Unknown: 2%
- Other causes: 2%
- Trauma: 1%
- Infection: 2%
- GI: 1%
- Crushed: 37%
NECROPSIES - SUMMER 2014

Stomach content
- Empty: 22%
- Half full of milk: 41%
- Full of milk: 31%
- Empty: 22%
- Other: 6%

Time of death - Stillborn piglets
- Before farrowing: 13%
- During farrowing: 62%
- Unknown: 25%
SUMMARY PRELIMINARY RESULTS

- On farm mortality registrations – high mortality
  - Hot summer in 2014!

- Necropsies
  - Crushed piglets represent the largest group of diagnoses
  - The majority of the crushed piglets had suckled before dying
  - The majority of stillborn piglets die during the farrowing
Influence of sows parity, body condition and lameness?

Enhanced survival if born in a small rather than in large litter?

Higher mortality in piglets with many stillborn litter mates?

Are small piglets more prone to crushing?

Different patterns in mortality depending on season?

Influence of management factors such as the use of nursing sows?
THANK YOU FOR YOUR ATTENTION!