Lamb mortality – Massif Central
first year results

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Aims

• Acquire regional references on the rates and causes of lamb mortality in suckler ewe breeders, taking into account livestock rearing systems

• Describe the main risk factors present in livestock.
Material and methods

- 54 suckler ewe breeders:
  - Massif Central area
  - 3 rearing systems: two lambing periods, system type 3 lambing in two years, pastoral system
  - Major criterion for inclusion: motivated breeders! To have good lambing recording

- Records
  - Lambing data (date, dam id, litter size...)
  - Lamb mortality (date, lamb id, observed causes from a standardized list)

- 2 lots (lambing periods) per farm with more investigations:
  - Body Condition Score,
  - Survey on rearing practices
  - Barn temperature
  - Plasma selenium concentration of the dam
The study is based on

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>2 lambing periods</th>
<th>Accelerated system (3 lambing / 2years)</th>
<th>Pastoral system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nb of farms</td>
<td>54</td>
<td>29</td>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>Nb lots (lambing period)</td>
<td>156</td>
<td>96</td>
<td>33</td>
<td>27</td>
</tr>
<tr>
<td>Nb of lambs born</td>
<td>36 907</td>
<td>17 738</td>
<td>12 434</td>
<td>6 735</td>
</tr>
</tbody>
</table>
Distribution of mortality rates

Mortality rate at 60 days

2 lambing periods: median = 12.7%
Accelerated system: median = 18.4%
Patorial system: median = 14.6%
Distribution of lamb mortality by age

Mortality before 10 days = 65% of the overall mortality

Aborted/stillborn

- 0 - 2 days: 17.2%
- 3 - 10 days: 14.3%
- 11 - 60 days: 29.0%
Farmers’ perception regarding different mortality categories

- Aborted and stillborn more associated with the system: “fatality”
- Mortality between tagging and weaning is seen as a big problem
Main causes of mortality

- Too small
- Sudden death/enterotoxaemia
- Others causes
- Suckling problem
- Crushed / accident
- Unknown
- Respiratory disorders
- Diarrhea
- “Drowned”
- Ewe without milk
- Misplaced
- Watery mouth disease
- Malformation
- Too big
- Not accepted
- Arthritis
- Digestive colibacillosis

% of mortality causes

- Lamb and ewe
- Infectious causes
- Lambling
- Others
## Main risk factors

<table>
<thead>
<tr>
<th>Ewe</th>
<th>Lamb</th>
<th>Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Culling strategy (45%)</td>
<td>• Colostrum intake (85%)</td>
<td>• Improper design, management and atmosphere of sheep pens</td>
</tr>
<tr>
<td>• Low body condition score (44%)</td>
<td></td>
<td>• No sanitary break or less than 1 month (62%)</td>
</tr>
<tr>
<td>• Low selenium status (30%)</td>
<td></td>
<td>• Age difference between lambs within the same sub-lot around birth (22%)</td>
</tr>
</tbody>
</table>

- Improper design, management and atmosphere of sheep pens
- No sanitary break or less than 1 month (62%)
- Age difference between lambs within the same sub-lot around birth (22%)
Conclusions

• High variability of mortality rate within rearing systems
• Early lamb mortality
• Main cause: lamb vigour
• Some major risk factors still exist

• Need to follow research and exchanges on lamb and dam “quality”
Thank you for your attention

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