Use of plausibility checks at ICAR member organisations

Dairy Cattle Milk Recording WG, Survey 2018

20-2-2018  Juho Kyntäjä, Mtech Digital Solutions, Finland
Juho.kyntaja@mtech.fi
Objectives of this survey

• To see what kind of plausibility checks there are in place at milk recording organisations
• To find differences
• To serve as background for:
  – Further Guideline development
  – Risk assessment
  – CoQ questionnaire
Respondents
Classifying questions

Number of recorded cows

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 100,000</td>
<td>2</td>
</tr>
<tr>
<td>100,000 - 249,000</td>
<td>8</td>
</tr>
<tr>
<td>250,000 - &gt; 500,000</td>
<td>10</td>
</tr>
</tbody>
</table>

Organisation of data processing

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own</td>
<td>10</td>
</tr>
<tr>
<td>Own, service for others</td>
<td>5</td>
</tr>
<tr>
<td>Outsourced with several clients</td>
<td>2</td>
</tr>
</tbody>
</table>

Most important capture method

<table>
<thead>
<tr>
<th>Method</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper sheet</td>
<td>6</td>
</tr>
<tr>
<td>Special device</td>
<td>2</td>
</tr>
<tr>
<td>PC</td>
<td>4</td>
</tr>
<tr>
<td>Webpage</td>
<td>6</td>
</tr>
<tr>
<td>Direct transfer</td>
<td>2</td>
</tr>
</tbody>
</table>

Responsible for capture

<table>
<thead>
<tr>
<th>Role</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer</td>
<td>4</td>
</tr>
<tr>
<td>Technician</td>
<td>12</td>
</tr>
<tr>
<td>Shared</td>
<td>8</td>
</tr>
</tbody>
</table>
Calving

Responsibility for recording calvings

- Farmer in GR > Farmer in GR + MR
- Farmer in GR + Tech in MR
- Tech in GR + MR
- Tech in MR

Plausibility checks for calving

- Cow in herd
- Cow female
- Calving to...
- Cow age
- Days from calving
- Days dry
- Days pregnant
- Sire
- Calf breed
- Synch with GR
Herd recording

- All cows listed
- All cows w/ milk weight
- All cows w/ sample
- All samples w/ milk weight
- All weights w/ sample
- Total milk corresponds to bulk
Cow recording in 2x milking

- Cow in herd: 100%
- Cow not reported: 80%
- Cow not dry: 80%
- Days from calving: 80%
- Days from previous recording: 80%
- Daily milk within limits: 80%
- Daily milk expected: 60%
- Evening vs. morning: 50%
Cow recording in data transfer

- Cow in herd
- Cow not reported
- Cow not dry
- Days from calving
- Days from previous recording
- Daily milk within limits
- Daily milk expected
- Sufficient nr of milkings
- Capture start complete
- Secretion rate
- Milk flow
Milk analysis

Correction of received analyses

<table>
<thead>
<tr>
<th>Fat (time)</th>
<th>Fat (complicated)</th>
<th>Protein</th>
<th>Cells</th>
<th>PAG</th>
</tr>
</thead>
</table>

Plausibility checks for received analyses

<table>
<thead>
<tr>
<th>Vial linked to cow</th>
<th>Cow in herd</th>
<th>Cow has milk</th>
<th>Days from calving</th>
<th>Fat in set limits</th>
<th>Protein in set...</th>
<th>Lactose in set...</th>
<th>Cells in set limits</th>
<th>pH in set limits</th>
<th>Urea in set limits</th>
<th>Freezing point in...</th>
</tr>
</thead>
</table>