Whose milk is in the vial?
Workshop, ICAR Prague 2019
Nils-Erik Larsson
Växa Sverige
Facts about...

Växa Sverige

- Official breeding organisation - Sweden
- Members, farms 6400
- Cows in Milk recording 200 000 (2200 farms)
- Cows in AI - 280 000
- Employees, 300 full-time
- Offices – working areas 27

Skånesemin, Rådgivarna Sjuhärad organises Milkrecording, AI locally.
- Milkrecording
  - 33 000 cows, 300 farms
Milk recording 2017/2018

• 2427 herds, full year, 77 % of all herds
  – In total 2713 herds incl. herds with part of year

• 233 000 cows, 79 % of all cows (Sweden)

• Average production 10146 kg ECM
  – 9827 kg milk

• Average herd size, milkrecording 91,6 cows
Distribution of herds according to size – Large variation!
Milk recording - Sweden

• B4, 100 %

• Variety of methods for recording and sampling
  – Stand-alone milkmeters, TrueTest models, DeLaval
  – Fixed installed meters
  – AMS-samplers

• All milkrecording equipment owned by farmers...
  – ... with few exceptions as AMS-samplers (DeLaval, Lely)
    and a few TT Ezi-scanners.
Sweden
– Large country
– Large distances
• Växa Sverige has 2200 herds in milkrecording in area shown!
• Cost for A4 milkrecording would be too high!
Milkrecording Support - Supervision

Support by Phone, E-mail, Skype, Teamviewer - remote support tool

1. Supervision by Dairy factory comparison
   - Produced milk – Delivered milk
   - Milk-yield, kg
   - Fat, protein content

2. If necessary or wanted – visits on farm!
Milk recording – Sampling!
Farmers can choose to sample at all milkings or either evening or morning, ex. March 2019

- 32% of farmers sample all milkings
- 27% sample morning milkings
- 22% sample evening milkings
- 14% sample morning and evening milkings
- 5% sample no milkings

Legend:
- AMS
- All milkings
- Evening
- Morning
- No sampling
Securing Cow-Id - Vial

• Starts with preparation of testmilking!
• Since last testmilking....
  – All calvings reported
  – All cullings reported
  – All purchased cows reported
  – All dried off cows reported

Testmilking can be stressful! If everything is well prepared at start the lower the risk for errors on testday!
Testmilking with Cow Id.
– Order of vial

Cow Id - Vial
Using order of vials for connecting to Id of cow:

• Cassetes supplied by Eurofins
• Red side of cassette with vials – Always to the left!
• Numbering – Top left always vial nr 1 ....
• Second row nr 11 ....
• Template for numbering available

• Vials secured with lid and elastic rubber band!
Testmilking with cowid – order of vial

Mostly farmers has a paper during testmilking as base for reporting: Paper for skanning, printout from webb/MinGård (MyFarm).

<table>
<thead>
<tr>
<th>Produktionsuppföljning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Läpnummer</td>
</tr>
<tr>
<td>469</td>
</tr>
<tr>
<td>492</td>
</tr>
<tr>
<td>494</td>
</tr>
<tr>
<td>499</td>
</tr>
<tr>
<td>500</td>
</tr>
<tr>
<td>502</td>
</tr>
<tr>
<td>505</td>
</tr>
<tr>
<td>506</td>
</tr>
<tr>
<td>516</td>
</tr>
<tr>
<td>517</td>
</tr>
<tr>
<td>519</td>
</tr>
<tr>
<td>520</td>
</tr>
</tbody>
</table>
Cow Id - Vial
Order of vials
By cow id, serial nr
Cow Id - Vial

Order of vials: Set as order of milked cows at sampling!
Barcode reader: Cow id - vial

Used by herds with fixed meters and management systems.

- TT Ezi-Scanner.
- Can be combined with reporting of milk yield or only for linking Cow-id with vial.
AMS-Link: Cow Id - Vial

By AMS-Link - barcode reader

• Data from AMS-sampler with position for vial and associated cow-id.
• Barcode is scanned and connected to test records
• Screenview of vials in cassette – possible to follow reading barcodes
AMS-Link: Cow Id - Vial

• Vials connected to cows without milk or not used is shown
• Registering of dry cows possible
• Possible to add cows milked outside AMS
AMS – Milkrecording.
Handling of vials

VMS-sampler, cassettes from Eurofins can be used!

Lely Shuttle, vials has to move to shuttle and back to cassette
Cow Id. – Vial
Methods used in Swedish milkrecording

Herds
- Vial order nr: 65%
- AMS-Link Barcodes: 32%
- EziScanner Barcodes: 3%

Cows
- Vial order nr: 53%
- AMS-Link Barcodes: 41%
- EziScanner Barcodes: 6%
Conclusions, cow-vial link

**PAG**, pregnancy analyses introduced 2015, done on milksamples from milkrecording!

- Approx 1000 herds subscribe for PAG
- Approx 9000 – 10000 analyses each month

**No complaints** about suspicion on results for pregnancy tests nowadays!

-> Evidence that methods works!
Future plans for improvement?

• Registering through MinGård/MyFarm webpage introduced 2018/19
  – Further development planned
• Develop new system for using barcodes connected to MinGård/MyFarm
  – Use of Smartphones/Tablets or other handheld devices!?
• Searching for suitable barcode-readers
Thank You for your attention!