Web advisory tools to support dairy production in Slovenian herds

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Cattle in Slovenia

455,000 cattle
162,000 cows

102,000 dairy cows

81,000 dairy cows in recording scheme (81%)
21 cows/herd

60,000 suckling cows

800 cows in beef recording

20.273 km²
Cattle Information System

USER GROUPS
- Central and local cattle breeding services
- Insemination centers
- Test stations
- Breeding organisation
- Breeders
- Extension service
- Veterinarians
- Other services and organisations
- ...

APPLICATIONS
- HTML, Oracle forms applications
- HTML applications
- Authentication

DATABASE
- Herdbook keeping
- Milk and beef recording
- Type classification
- Zootechnical certificates
- Parentage control
- Registry of breeding bulls, bull dams
- Reproduction data
- Data for reports
- EUROP data
- Pedigree and performance data for national BVE
- Data for Slovenian Tracing System and other services
- ...
Aim

• to introduce advisory tools and services on Web Portal Cattle (WPC) for supporting management decisions in Slovenian dairy herds

• access for all herds in recording
The recording results for 28.05.2015 are available.
2561, JANEZ NOVAK, GALICIJA 52, 3310 ŽALEC

Average sample (calc.):
- Fatt: 3.85 %
- Protein: 3.50 %
- SCC: 75,000 SC/ml

Critical cows (in 1000 SCC):
- SI62327752 KLARISA: 491;

Bulk sample:
- Fatt: 3.87 %
- Protein: 3.46 %
- SCC: 66,000 SC/ml
- Urea: 21.

more data on www.cattle.si (WPC)
Somatic cells

• index of somatic cell count (ISC), 1 - 5
  – SCC, lactation, lactation stage, quantity of milk
• contribution of the SCC

<table>
<thead>
<tr>
<th>No.</th>
<th>Cow ID</th>
<th>Name</th>
<th>Lact.</th>
<th>Milk</th>
<th>SCC (x 1000)/ml</th>
<th>BSCC</th>
<th>ISC</th>
<th>PSC</th>
<th>Months after</th>
<th>Days after insem.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>SI 63632107</td>
<td>ANTA</td>
<td>4</td>
<td>29</td>
<td>1642</td>
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<td>3</td>
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<td>JASNA</td>
<td>6</td>
<td>14.5</td>
<td>927</td>
<td>132</td>
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<td>16</td>
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</table>

contribution of the SCC to the bulk tank in SCC and %
Somatic cells (2)

- ISC for the period of the last 12 TD

<table>
<thead>
<tr>
<th>Date</th>
<th>SCI in last 12 months (month/year)</th>
<th>Current TD</th>
<th>Inseminations</th>
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<tbody>
<tr>
<td>No.</td>
<td>Cow ID</td>
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<td>LMD</td>
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</tbody>
</table>

$1^{st} > 200,000$ SCC ~ lactation-f, lact. stage
Somatic cells (3)

- ISC dynamics

 ISC 01.04.2015

 ISC 04.05.2015 (25 cows)

Agricultural Institute of Slovenia
Reproduction

• Reproduction Calendar
  – monitoring and planning of the main reproduction events
  – for desired time period
  – future activities and plans calculated on previously entered events from various data sources
  – simplified entering of data
Feed Ration Planning

• define the feed basis, production price
• choose groups of cows (by lact. stages)
• average data for selected group
Feed Ration Planning (2)

- feedstuffs and forage with daily needs per animal
  - needs
  - costs
- nutritional value of feed ration
- chart - distance to optimal value
- prof. advices
- feed rations can be saved
Conclusion

• WPC - advisory tool to support dairy management
Thank You for your attention!