Activity of the Reference Laboratory for trichinellosis in Poland
National Veterinary Research Institute in Pulawy, Poland
Department of Parasitology
Trichinellosis Reference Laboratory

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Meat examinations
• All slaughtered pigs, horses and hunted or farmed wild boars are tested for trichinela.

Methods:
• Magnetic stirrer method for pooled sample digestion is used for official analysis and for private use.
• The trichinoscopic examination is allowed only if meat is for owner purposes and there is no possibilities to do examination with a digestive method (on farm slaughter)
• According to our knowledge less than 0,1% of samples examined with trichinoscopic method

Results of examination 2011

<table>
<thead>
<tr>
<th>Species</th>
<th>Examined animals</th>
<th>Trichinella</th>
<th>Trichinella Positive</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pigs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>76 386</td>
<td>8</td>
<td>0,000039</td>
<td></td>
</tr>
<tr>
<td>Official</td>
<td>20 394 971</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>20 473 357</td>
<td></td>
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<tr>
<td>Wild boars</td>
<td></td>
<td>436</td>
<td>0,3</td>
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</tr>
<tr>
<td>Private</td>
<td>86 940</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Official</td>
<td>56 189</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>145 129</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horses</td>
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<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>Private</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Official</td>
<td>43 231</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>43 231</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmed wild boars</td>
<td></td>
<td>1</td>
<td>0,8</td>
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</tr>
<tr>
<td>Private</td>
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<td></td>
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</tr>
<tr>
<td>Official</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>119</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Trichinella in population of wildboars in Poland

• Obtained meat samples – 325
• Trichinella positive – 300
• Trichinella spiralis – 212 / 71%
• Trichinella britovi – 88 / 29 %
• T.spiralis/T.britovi – 3
• 25 – no larvae
• Wildboars sera
• Obtained samples - 1179
• Trichinella positive - 44
Epidemiological status of Trichinella in population of red foxes in Poland

- From 973 samples 32 were Trichinella positive prevalence of infection - 3.2%.
- 23 samples (71.8%) were identified as *T. britovi*.
- 5 samples (15.6%) as *T. spiralis*
- 1 sample (3.2%) as *T. nativa*.
- 1 case coinfection *T. spiralis*: *T. britovi* (3.2%)
- The results of the study show that the prevalence of *T. britovi* is the most common in red foxes. The investigations shows that new species of Trichinella has occurred (*T. nativa*) in (East – north part) Poland.

Geographical distribution of trichinella in wildboars, red foxes and trichnella positive sera from wildboars

Poland is divided in:
- 16 Voivodships
- County – 379
- Land county - 314
Wildboars +

Wildboars sera +

Red foxes +

Under investigation

PIGS trichinella positive - 7

Under investigation

Trichinella in pigs occurred in county which were
Trichinella negative for red foxes and wild boars

Some other activities
• Training for technicians – 384 person
• Proficiency testing – 738 lab.
• Pepsine testing – 5
• New methods testing – 2
• Guideline for trichinella labs with collection
  of artefacts.
Proficiency testing

• 738 – lab.
• Four samples:
  • Three positive
  • One negative
• Total number of prepared samples - 2952
• Samples stable for 5 days
• Transmition and evaluation of results
  www.piwet.pulawy.pl/pt_wlosnie2011/
• Evaluation quantitive and qualitative

Results of proficiency testing

• Number of participants - 738
• Positive results – 639 lab. / 86.59 %
• Uncertain results - 62 lab./ 8.40 %
• Negative results – 37 lab. / 5.01 %

Three years comparison

% of labs reporting positive results in 2009 - 2011

% of labs reporting doubtful results in 2009 - 2011

% of labs reporting negative results in 2009 - 2011

Thank You for your attention