Histomoniasis in the french epidemiological surveillance network in poultry

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Technical meeting on histomoniasis in turkeys
Parma, 22 january 2013
French epidemiological surveillance network in poultry

- **Historical**
  - Established in 1987
  - At the request of veterinarians specializing on avian pathology

- **Objectives**
  - Follow epidemiological trends of avian diseases in France
  - Detect and investigate emerging diseases
  - Alert against major diseases
  - Hierarchical classification of diseases
  - Exchange of information between members and the scientists of the ANSES
French epidemiological surveillance network in poultry

Transmission of observations is based on voluntary participation. Regular anonymous and confidential diffusion.
French epidemiological surveillance network in poultry

Brittany: 46%

Pays de la Loire: 19%

>10% poultry productions

>3 to 10% poultry productions
All diseases and all poultry production

Average 20,000 reports collected annually

For each production:
Annual disease observed
A history since 1987
Histomoniasis cases observed between 2000 to 2011 – All productions

- **Dimétridazole**
- **Niflursol**

### Laboratories
![Diagram showing the number of cases reported by laboratories for each year from 2000 to 2011.]

### Veterinarians
Histomoniasis and seasonality between 2000 and 2011—All productions

Histomoniasis reported to the network
Histomoniasis reported to the network

Distribution of histomoniasis between 2000 to 2011 in poultry productions

- Turkeys: 67.2%
- Guinea fowls: 10.5%
- Broilers: 10.5%
- Partridges: 6.7%
- Laying hens: 3.6%
- Duck: 0.5%
- Pheasant: 0.3%
- Wild birds: 0.3%
- Goose: 0.2%
- Pigeon: 0.1%
- Wild birds: 0.3%
Histomoniasis cases in turkeys between 2000 to 2011

- Nb of Cases
- Million heads

- Laboratories
- Veterinarians
- In place

Histomoniasis cases reported to the network
Evolution of Histomoniasis cases in turkeys during the first 8 months in 2011 and 2012

<table>
<thead>
<tr>
<th>Year</th>
<th>Laboratories</th>
<th>Veterinarians</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>41</td>
<td>24</td>
</tr>
<tr>
<td>2012</td>
<td>54</td>
<td>22</td>
</tr>
</tbody>
</table>
Survey to assess the severity of Histomoniasis

Questionnaire to the members of the network:
Histomoniasis cases reported in 2011 and 2012

- Sex affected
- Ages of turkeys
- Mortality rate
- Slaughtering

17 veterinarians, 16 poultry organizations:

52 histomoniasis cases from Meat turkey flocks
8 histomoniasis cases from Breeders turkey flocks
Results – Meat turkey flocks

Sexes of turkeys affected by histomoniasis

- **Males (n=24):** 58.6%
- **Females (n=7):** 17.0%
- **The both sexes (n=10):** 24.4%
Ages of turkeys affected by histomoniasis

- Females (n=5 cases): Min = 45 days, Median = 55 days
- Males (n=24 cases): Mean = 55 days
Mortality rate of flocks affected by histomoniasis

Flock (n=36 cases)

Mortality in %

Min
Median
Max
Mean

28.2
12.9

Results – Meat turkey flocks
Results – Meat turkey flocks

Slaughtering of the turkey flocks affected by histomoniasis (n=35 cases)

- Normal slaughter: 34%
- Early slaughter: 29%
- Slaughter with condemnation: 8%
- Partial euthanasia: 20%
- Total euthanasia: 9%
### Results – Breeders turkey flocks

- **8 breeders flocks**

<table>
<thead>
<tr>
<th>N°</th>
<th>Sexes affected</th>
<th>Ages (days)</th>
<th>Mortality rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Females</td>
<td>140</td>
<td>17.5%</td>
</tr>
<tr>
<td>2</td>
<td>Females</td>
<td>105</td>
<td>83.8%</td>
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<tr>
<td>3</td>
<td>Females</td>
<td>91</td>
<td>11.3%</td>
</tr>
<tr>
<td>4</td>
<td>Females</td>
<td>55</td>
<td>14%</td>
</tr>
<tr>
<td>5</td>
<td>Females</td>
<td>35</td>
<td>69.5%</td>
</tr>
<tr>
<td>6</td>
<td>Males</td>
<td>28</td>
<td>87%</td>
</tr>
<tr>
<td>7</td>
<td>Males</td>
<td>56</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Both sexes</td>
<td>56</td>
<td>-</td>
</tr>
</tbody>
</table>

**Mean age**: 70 days  
**Mean mortality**: 47.4%
• Survey of the National Agency for Veterinary Medecinal products (ANMV) for animal diseases in lack of therapeutics

• 17 veterinarians in poultry were contacted

  • **Histomoniasis**

    becomes as the first avian disease concern by the absence of effective drugs

    An extreme welfare problem for poultry

    And a suffering for people living close to infected animals.
THANK YOU FOR YOUR ATTENTION

THANKS TO THE MEMBERS OF THE NETWORK