Planned activities on antiparasitic resistance

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(on behalf of the Electronic Expert Group)

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Develop a document which can form the basis of a
guideline on responsible and prudent use of
antiparasitic agents

• Aim is to preserve efficacy of antiparasitic agents for use in animals
• Outline the status of resistance to antiparasitics
• Communicate factors that lead to resistance
• Communicate ways of slowing the development of resistance through management
• Identify roles and responsibilities of various players including pharmacovigilance and falsification/substandard
• Identify knowledge and skills gaps
Parasites displaying resistance
Steps

1. OIE has formed a Panel with representatives from all regions
2. Draft a paper on anthelmintic resistance
3. Consider this paper as a template for all parasiticide resistances
4. Emphasis on food-producing animals
5. Provide consolidated paper for OIE to judge if Guidelines are required
Parasites displaying resistance
Questionnaire

• Thank you for completing the questionnaire - 13 responses so far.
• We are happy to receive more.
• Your opinions are to guide the writers on regional trends and variations especially for anthelmintic resistance.
• The information from Asia/Oceania will act as a sample of the global position
Questionnaire summary

• Rank of economically important animals:
  • Chickens, cattle, pigs, aquaculture
• Status of Anthelmintic Resistance – known for some species
• It will include parasite management and the importance of AHR
• It will list challenges such as pharmacovigilance and product tampering that accelerate development of resistance
• It will identify gaps in knowledge and skills in regions and what is required to fill the gaps.
<table>
<thead>
<tr>
<th>Question</th>
<th>Response summary</th>
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<tbody>
<tr>
<td>Rank economically important animals</td>
<td>Chickens, cattle, pigs, aquaculture</td>
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<tr>
<td>Status of Anthelmintic Resistance</td>
<td>known for some species 7/13</td>
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<tr>
<td>Use of diagnosis (egg count reduction)</td>
<td>Research or occasional commercial farms 9/13</td>
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<td>Availability of information</td>
<td>Little awareness or information</td>
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<td></td>
<td>Some scientific expertise available</td>
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<td>Rating of regulatory environment</td>
<td>Confidence in regulatory practices 11/15</td>
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<td>Farmers have access to information e.g. label 9/13</td>
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<td>Quality of anthelmintics for sale</td>
<td>Good if from known providers/highly reliable 11/13</td>
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<td>What information would assist control or resistance</td>
<td>Methods for prudent use 13/13</td>
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<td>List of available preparations and their indications for use 9/13</td>
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<td>Methods of breaking parasite life cycles 8/13</td>
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<td>Biggest knowledge gaps</td>
<td>Diagnosis of resistance 9/13</td>
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<td>Parasite epidemiology/use in control 9/13</td>
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Antiparasitic resistance (vs. AMR)

• Vet Medical Products are registered
• Antiparasitics used to control major economic *animal* diseases
• Means of control are: antiparasitic drugs, breaking the life cycle, parasite-tolerant hosts
• Diagnosis is mainly field-based (lack of *in vitro* resistance tests)
• Farmers, not vets, control use of antiparasitics
• Distribution less controlled, rarely by prescription
• Large volumes of liquids and large numbers of doses used
• Transfer of R parasites/genes to humans is rare