

Planned activities on antiparastic resistance

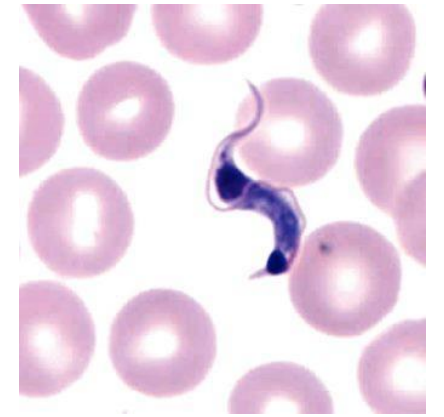
Nick Sangster *

(on behalf of the Electronic Expert Group)

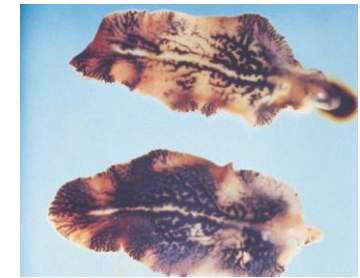
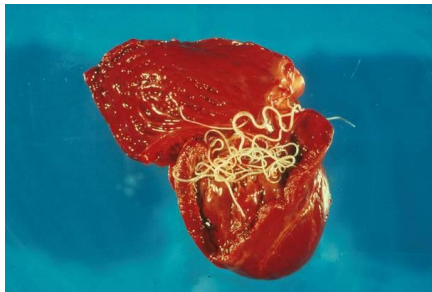
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Develop a document which can form the basis of a guideline on responsible and prudent use of antiparasitic agents

- 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

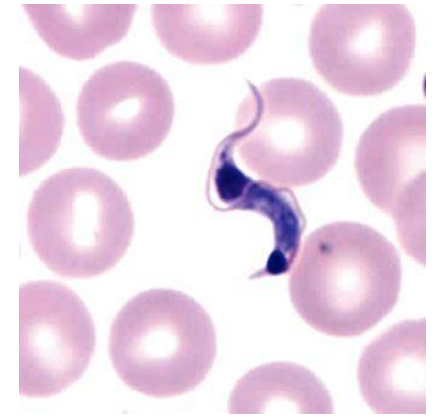


Parasites displaying resistance

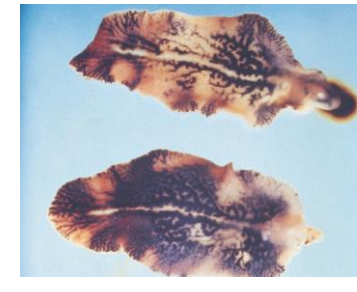
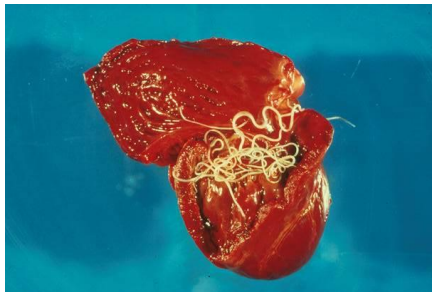
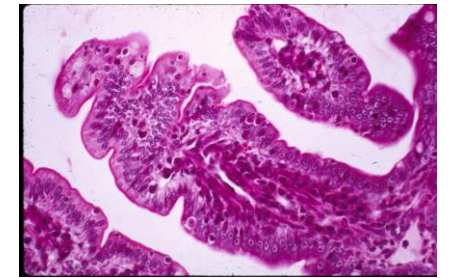


Steps

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.

Question	Response summary
Rank economically important animals	Chickens, cattle, pigs, aquaculture
Status of Anthelmintic Resistance	known for some species 7/13
Use of diagnosis (egg count reduction)	Research or occasional commercial farms 9/13
Availability of information	Little awareness or information Some scientific expertise available
Rating of regulatory environment	Confidence in regulatory practices 11/15 Farmers have access to information e.g. label 9/13
Quality of anthelmintics for sale	Good if from known providers/highly reliable 11/13
What information would assist control or resistance	Methods for prudent use 13/13 List of available preparations and their indications for use 9/13 Methods of breaking parasite life cycles 8/13
Biggest knowledge gaps	Diagnosis of resistance 9/13 Parasite epidemiology/use in control 9/13

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