

Report on a continuing Education workshop on ‘ Trends in Veterinary Parasitology’, held at the Department of Veterinary Pathology, Microbiology and Parasitology of the Faculty of Veterinary Medicine, University of Nairobi on August 10th and 11th, 2011

A two-day workshop on Trends in Veterinary Parasitology was held at the College of Agriculture and Veterinary Sciences on Wednesday 10th and Thursday 11th August, 2011. It was organised by the Department of Veterinary Pathology, Microbiology and Parasitology of the Faculty of Veterinary Medicine, University of Nairobi in conjunction with the Kenya Veterinary Board. The workshop took place in the departments lecture theatres and laboratories at upper Kabete campus.

The aim of the workshop was to provide Continuing Professional Development (CPD) in Veterinary Parasitology necessitated by the continuing growth of this field of Veterinary Medicine with new information gathered through research and field and laboratory experiences. Parasitic infections in animals are important as they often lead to ill health, growth retardation, lowered productivity and death. Some of the infections are also zoonotic affecting both humans and animals imposing a dual burden on livestock producers and consumers of livestock products. Proper diagnosis, management and control of these infections are therefore important for a vibrant and productive animal industry. Professionals working in the animal industry therefore need to be continuously updated with information in order to provide up to date services. In the recent past, the livestock industry in Kenya has also witnessed an increased growth in the rearing of species of animals previously not given the same emphasis as the mainstream livestock. The rearing of these “Emerging Livestock” which include rabbits, bees, ostriches and crocodiles has a number of challenges, the most important being diseases. Professionals working in the animal industry require information on these diseases in order to assist farmers and other stakeholders.

The workshop was conducted through expert presentations, lectures, practicals and demonstrations. The course covered infections in domestic and wild animals including poultry, pigs, fish, bees, rabbits, ostriches and crocodiles. Current and emerging issues in Parasitology such as anthelmintic and acaricide resistance and parasitic zoonoses were also covered.

The attendants (39) were members of the veterinary profession and a good number of students and technologists (**Picture 1**).



Picture 1: Workshop participants outside the Pathology building, Faculty of Veterinary Medicine, University of Nairobi

The opening session was chaired by Professor P.K. Gathumbi, Chairman, Department of Veterinary Pathology, Microbiology and Parasitology, who introduced to the audience Prof. Njenga Munene, Dean Faculty of Veterinary Medicine, University of Nairobi. Prof. Munene welcomed the participants and outlined the important role of the livestock industry in food security in the country. He further stressed the important role played by veterinarians in ensuring that livestock not only remain healthy and productive but also free of pathogens that may be transmitted to humans. Prof. Munene then introduced the Acting Principal, CAVS Prof. Solomon Shibairo who welcomed the participants to Kabete Campus and highlighted the importance of such workshops to the veterinary profession. He confirmed that the workshop had the full support of the College Principal and declared it officially open.

The morning session lectures were chaired by Prof. P.W. Kanyari and started with a presentation by Dr. Edward Kariuki from the Kenya Wildlife Service (KWS). His topic

of presentation was Parasites of Wildlife in Kenya, which covered both endo and ecto-parasites. He further presented ten (10) cases of parasitic infections in wildlife encountered by KWS staff in their operations and explained how these cases were managed. Dr. Kariuki then presented a detailed account of hard ticks he has encountered in wildlife including their identification.

This was followed, after a coffee/tea break, by a presentation by Dr. J.M. Ayuya on insects of medical and veterinary importance, followed by Dr. R.W. Waruiru on ticks and mites of medical and veterinary importance. The two presenters outlined the importance of these parasites especially disease transmission and lesions caused and described their diagnosis including the important features for identification. Dr. J.N Chege then presented a lecture on parasites of the honey bee (*Apis mellifera*). He discussed the types of honey bees, their life cycle and factors limiting production. He then presented a detailed account of the parasites of the bees. The morning session was concluded by Prof. W.K. Munyua lecture on vector control and pesticides resistance. He outlined the importance of vector control, the methods available and ticks resistance to acaricides including methods for detection.

The afternoon session was chaired by Dr. S.M. Githigia and it started with a presentation by Prof. P.W. Kanyari on protozoa of veterinary and medical importance. There followed a lively discussion session on all the topics presented during the day.

The session following the afternoon coffee/tea break was devoted to practical work consisting of gross and microscopic specimen demonstrations for both arthropods and protozoa. The demonstrations were carried out by the presenters for the day, and technical staff from the department (**Picture 2**).



Picture 2: *A practical session during the trends in Veterinary Parasitology workshop*

The morning session on day two was chaired by Prof. N. Maingi with three presentations (1) Roundworms of Veterinary and Medical importance by Dr. J.N. Chege, (2) Parasites of pigs by Dr. F.O. Obonyo and (3) Tapeworms of Veterinary and Medical by Dr. S.M. Githigia (**Picture 3**). The emphasis in these presentations was on the importance of the parasites and diagnosis including the important features for identification. A lively discussion session on the three topics then followed.

After a coffee/tea break Dr. R. M. Waruiru chaired a session with five presentations (1) Worm control in grazing livestock and anthelmintic resistance by Prof. N. Maingi (2) Parasites of rabbits by Prof. P.K. Gathumbi, (3) Parasites of the ostrich by Prof. T.A. Ngatia (4) Parasitic zoonoses by Dr. J.N. Chege and (5) Parasites of fish and crocodiles by Dr. P.G. Mbuthia. This was followed a lively discussion session on all the five topics.



Picture 3: Some of the participants keenly listening to one of the presentations

The practical session on the second day started after a lunch break. The first part was a practical demonstration of the use of a computer program for calculation of percent faecal egg count reduction (FECR %) by Prof. N. Maingi. The FECR% is a measure of the efficacy of anthelmintics which is commonly used in the detection of anthelmintic resistance. The second part of the practical session consisted of demonstrations of specimens of helminths parasites and their identification.

The two-day workshop ended with a formal Summing-up and Closing Ceremony chaired by Professor P.K. Gathumbi. Some of the points that came up during the workshop which required immediate follow up were collaboration with (1) KWS in research and training of MSc and PhD students and (2) VILs in the training of personnel on anthelmintic resistance testing. It was also suggested that the department needs to organise such CPD workshops outside Kabete to get to more Veterinary Officers in the field. The participants were presented with signed certificates and a booklet containing notes on all the presentations.