

## **WAAVP Dublin 2021 Ireland conference report**

### **Special sections: Parasites of farmed animals**

A presentation by Prof. Rosina C. Krecek demonstrated the WAAVP African Foundation has received 211 applications from next-generation veterinary parasitologists in 25 African countries, and 80 have been awarded. I am privileged to have benefited as an awardee at the recent concluded WAAVP Dublin 2021 conference. During the conference a scholarship promoting the participation of scientists globally was announced by Dr. Emilie Bouhsira and subsequently helped me make contact with Vetoquinol® who support research on ectoparasites. I have shared this information with my workmates and many are interested to work with Emilie to discuss furthering collaborations.

### **What I have learned from the conference**

For effective disease control, it is important to develop guidelines that can easily be adopted by the farmers. For example, a study by Debora Smits in the Netherlands has developed a model framework to help farmers reduce chemotherapeutical dependence for the control of fascioliasis. This is important since the overuse is associated with an increased risk of drug residues in livestock products, and this could be a major public health problem, in addition to the risk of drug resistance developing in the herd. In my local setting in Uganda, I found the protocol and approach taken by Smits and her Team novel could easily be adopted here and in several developing countries, provided policy changes are made for the prioritization of animal and human health. A presentation on anthelmintic resistance in 3 Welsh dairy farms helped me appreciate the importance of evidence-based disease control strategies since little is done in developing countries in this regard. In the same presentation, Eurion Thomas showed that changing the attitude of some farmers from using more anthelmintics was difficult despite findings from his survey. This highlights greater complications common in developing countries where farmers buy anthelmintics without consulting with their local veterinarians.

The most interesting part of the presentations was the work being done in Argentina on anthelmintics. This is something I propose to replicate and has led to writing the first review paper on anthelmintics in Ugandan poultry products. This is important since we have local anthelmintic resistance burdens in all livestock species which has resulted in farmers doubling and tripling the normal dosages to gain a therapeutical advantage over the parasites. Two oral presentations were made by Candela Canton on monepantel, abamectin plus, and oxfendazole. In the first study, I was delighted to learn that monepantel alone was effective against

ivermectin resistance in *Haemonchus* spp, something which I thought was impossible due to my clinical background. In the second study using abamectin plus and oxfendazole combination therapy, differential results were obtained i.e., farm A performed better than farm B demonstrating host factors influencing drug efficacy (although not investigated by Canton and her Team). I realized that what may work in one clinical trial in one community may not work in another demonstrating the need for several countries to conduct multiple clinical trials to evaluate the efficacy of several pharmaceutical agents before dispensing them to the public. This work relates to my Ph.D. research since it involved clinical trials and pharmacology aspects that I will investigate for my research.

Above all, I would like to thank the WAAVP Dublin 2021 Team, sponsors and WAAVP African Foundation who supported the conference and funded my participation. Thank you very much for enabling this learning opportunity.



In this photo, I was offering advice to a piggery farmer on how to improve on the health status of the sow since she had lost 8 pigs in 3 weeks following farmer treatment failures. Ivermectin resistance had been reported by the farmer and I was troubleshooting for practical solutions. This demonstrates the technical advantage acquired from the WAAVP Dublin conference which has opened my mind to novel approaches to effectively address drug resistance in farm animals.

Dr. Keneth Iceland Kasozi (Ph.D. Candidate, University of Edinburgh, UK)

Web: <https://www.ed.ac.uk/infection-medicine/our-staff/phd-students/kasozi>