males and female catfish (p > 0.05). Branchial cavity infection prevalence was 3.7% while that of the abdominal cavity was 55.6%. Farmed catfish mean load was 3.5 worms per fish, wild 185.1; female catfish had a mean load of 77.4 while males had 167.8, whereas adult catfish had a mean count of 161.2 while for the young fish was 69.7. The infection varied from mild to severe. There was significant differences in the mean worm load between the farmed and wild, the sexes and the age groups (P < 0.05). Gross lesions of peritoneal adhesions with at a mean prevalence of 58.3% with microscopic lesions of severe infiltration of mononuclear and polymorphonuclear cells as well as fibroblasts into the mesenteries, gastro intestinal tract were also observed. This study reports the occurrence of Contracaecum spp. and associated pathology in catfish in Kenya for the first time.

(Key words: Clarias gariepinus, Contracaecum spp., prevalence, intensity, pathology)

O30. Prevalence and pathology of echinophaga gallinacea in free-range local ducks

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Abstracts

A study was carried out in November 2008 and March 2009 to investigate the pathology, prevalence and intensity associated with Echinophaga gallinacea infestations of free range local ducks. The ducks were categorized into ducklings (<2 months), growers (2 to 6 months) and adult ducks (>6 months). A total of 47 adults, 50 growers and 48 ducklings comprising 77 females and 68 males were sampled. Each duck was subjected to a thorough clinical examination with emphasis on the cutaneous system and observations recorded. Body, head and leg skins were examined and identified parasites quantified. Parts of the skin were collected for histopathology processing, examined and the severity of the lesions determined. The data obtained was entered in Microsoft Excel and analyzed using Chi square (χ2), t-test and one-way analysis of variance. Echinophaga gallinacea (the stick-tight flea of poultry) was the only ectoparasite observed in 51/145 ducks (35.17%). Grower ducks had a 47.06% prevalence which was higher than ducklings (31.37%) and adult birds (21.57%). Female ducks had a higher prevalence (58.82%) than male ducks (41.18%). Thika Central District had the highest prevalence of Echinophaga gallinacea infestation of 45.09%, Embakasi (25.49%), Kasarani (15.69%) and Westlands (13.73%). The study documents Echinophaga gallinacea species in different age and sex of ducks for the first time in Kenya. Their control strategy and impact on productivity of ducks need to be investigated.

ONE HEALTH

O31. A temperature resistant needle free vaccine against tetanus

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Abstracts

All human beings and most animal species require vaccination against tetanus. The current tetanus vaccine is injectable and requires cold storage significantly reducing coverage in developing countries. The development of mucosally administered heat-stable vaccines with long shelf life would considerably enhance immunization programs in developing countries by avoiding the need for a cold chain or injections. One of the promising approaches relies on live recombinant vaccine carriers. Engineering Bacillus subtilis for use as a non-invasive, heat and environmentally-resistant
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and  
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