Seasonality of parasites and effectiveness of antiparasitic treatments in village chicken in Mbeere District, Kenya

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Introduction

- Poultry production is a growing and an economically important industry in Kenya.
- It contributes to the livelihood of approximately 21million people.
- Due to shortage of land for agriculture many people in rural areas have opted for poultry production.
- Poultry population is approx. 32 million birds (Kenya Bureau of Standards):
 - 6 million (19%) are commercial hybrids
 - 26 million (81%) are indigenous

Introduction cont....

Major challenges in poultry production:

- Diseases(e.g. helminthosis, Newcastle and Gumboro)
- Poor management
- Poor nutrition
- Predation
- Theft

Endo and ectoparasites are common in village chickens because they scavenge and forage, picking up infective stages of parasites

Introduction cont...

- Effects of endo-parasites on birds include:
 - competition for nutrients,
 - sucking blood causing anaemia,
 - diarrhoea and/or obstruction of intestines.
- This leads to lowered productivity (reduction in weight gain, decreased egg production) and/or mortality.

 Ecto-parasites are important as blood suckers, vectors or aetiological agents of disease.

Introduction cont....

- Previous studies (Maina 2005 and Sabuni 2009) have established:
 - Prevalence and intensity of endo, ecto and hemoparasites among different age groups and sexes of birds, farm and market birds and ecological zones of origin.
 - Pathological lesions associated with the parasites.
- No studies done on:
 - Seasonality of parasite carriage and intensity.
 - Anti-parasitic treatments being used.
 - Effectiveness of the anti-parasitic treatments.

This study will address the identified gaps with the goal of improving the control of ecto and endoparasites in indigenous poultry.