

## **ABSTRACT**

### **BACKGROUND:**

The potential for rabbit production in Kenya is high. However, high morbidity and mortality of domestic rabbits were reported.

### **OBJECTIVE:**

The aim of the study was to determine the pathology, prevalence and the predisposing factors to coccidiosis in domestic rabbits in selected regions in Kenya.

### **ANIMALS AND METHODS:**

A total of 61 farms keeping rabbits in six different counties were visited in the survey. A total of 2680 live rabbits were examined and 61 rabbits and 302 fecal samples were randomly collected from the farms and examined for coccidian oocysts by ante-mortem and post-mortem methods. The predisposing factors to coccidiosis were assessed through questionnaires and direct observation. Chi square (  $\chi^2$  ) statistics was used with P values  $< 0.05$  considered statistically significant.

### **RESULTS:**

Of the 302 fecal samples, 85% (  $P < 0.001$  ) contained coccidian oocysts and 2% harbored nematode eggs (*Passalurus ambiguus*). The overall prevalence of *Eimeria* spp. infestation was 85.1% in the study area and 90.2% in the individual rabbits, while prevalence of intestinal coccidiosis and hepatic coccidiosis was 29.5% and 11.5%, respectively. Higher counts of coccidian oocysts per gram of feces were recovered in weaners than in growers and adults rabbits (  $P < 0.001$  ), rabbits that were kept in high density group housing (  $P < 0.05$  ) and housing with more than two tiers.

### **CONCLUSION:**

This study identified group housing of rabbits of different ages and inadequate control of concurrent infections as the major risk factors associated with coccidiosis in domestic rabbits in Kenya.