# Prevalence, intensity and spectrum of helminths of free range pigs in Homabay District, Kenya.

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## Abstract

A cross-sectional study was conducted to determine the prevalence, intensity and spectrum of helminths of free range pigs in Homabay District, Kenya. Faecal samples from 372 pigs were examined using the modified McMaster technique and post-mortem examination of 30 pigs carried out. Out of the 372 pigs examined, 308 (83%) were excreting nematode eggs. The nematode eggs encountered were those of Strongyles (75%), Strongyloides spp (26.6%), Trichuris spp (7.8%), Ascaris spp (5.4%) and Metastrongylus spp (0.3%). Coproculture of Strongyle-type nematode egg positive faecal samples revealed the presence of Oesophagostomum spp (74%), Hyostrongylus rubidus (22%) and Trichostrongylus spp (4%). The post-mortem examination revealed presence of Hyostrongylus rubidus, Physocephalus sexalatus, Trichostrongylus axei, Ascaris suum, Oesophagostomun dentatum, Trichuris suis and Metastrongylus pudendodectus. The highest prevalence of helminth infections was recorded in finishers (88%) and the lowest in adults (79%). The highest mean helminth egg per gram of faeces (epg) was recorded in adults (1,175) and the lowest was in piglets (526). Pigs from Riana division had the highest prevalence (91%) of infection and mean epg (1,109), while those from Asego Division had the lowest prevalence (50%) and mean epg (100). Female pigs recorded a higher mean epg (567) compared to males (416). Age had significant influence on infection with Strongyles ($p = 0.04$) with growers and finishers recording higher levels of infection than adults. Sex had significant effect on the prevalence of infections with Strongyles ($p = 0.028$) and Ascaris suum ($p = 0.012$) with females recording higher levels of infection than males. Division of origin of pigs had significant influence on the prevalence of infection with Ascaris suum ($p = 0.000$) and Strongyles ($p = 0.000$) with the mean epgs for Riana and Ndhiwa divisions being significantly higher than those of Pala Division. This study indicates that helminths are highly prevalent in the study area with low to moderate levels of infections and may be one of the contributing factors to low productivity. Therefore, there is need to formulate appropriate control measures for the parasites in order to increase livestock productivity.