

Chege H.W, Kemboi D.C, **Bebora L.C**, Maingi N, Mbuthia P.G, Nyaga P.N, Njagi L.W. and Githinji J. (2012). Ecto and Endo parasites in free range chickens in rainy season in Mbeere District in Kenya. Paper presented at 3<sup>rd</sup> RUFORUM biennial conference, held in Entebbe, Uganda, September 2012. Conference program page 6 – (titled as “*Determination of seasonal parasite carriage of village chicken in Mbeere, antiparasite treatments used and effectiveness of selected anthelmintics*”)

### **Abstract**

The prevalence of ecto- and endo-parasites in free range chickens from Mbeere District, Kenya was determined in the rainy month of November 2011. Twenty four birds of all ages (7 chicks, 8 growers and 9 adults) were randomly selected. The birds were obtained from individual farmers using purposive sampling where each homestead was to have at least 10 birds managed by free range system. All birds had mixed infections of ecto-parasites and endo-parasites and 79.1% were infected with haemoparasites; total of 8 different ectoparasites were identified at various prevalence rates in chicks, growers, adult birds, respectively. These were *Menacanthus stramineus* (100,100,89%), *Menopon gallinae* (71,100,100%), *Lipeurus caponis* (0,25,22%) and *Gonoides gigas* (0,25,67%), *Dermanyssus gallinae* (71,63,44%) and *Cnemidocoptes mutans* (0,0,44%). This study documents *Menacanthus stramineus* for the first time in Kenya. The most prevalent nematodes identified were (with reference to chicks, growers and adults) *Heterakis isolonche* (86,50,89%), *Subulura brumpti* (71,63,78%), *Tetramere* species (29,63,78%) and *Heterakis gallinarum* (14,0,44%). The adults had higher prevalences of nematodes compared to chicks and grower birds. *Raillietina echnobothrida* (71,75,89%), *R.tetragona* (57,38,68%), *Choanotaenia infundibulum* (14,0,11%) and *Hymenolepis cantaniana* (0,13,0%) were the cestodes observed in these birds. The coccidial oocysts were only observed in adult birds only (21%).

The prevalence of haemoparasites (in % in chicks growers and adults) were: *Plasmodium gallinacea* (57,88,89%), *Leucocytozoon schoutedeni* (14,38,22%), *Aegyptinella pullorum* (0,13,0%) and *Eperythrozoon* species (14,40,11%). This study showed that endo and ectoparasites are a common health problem in the village chicken in Mbeere District, Kenya during the rainy season.