



Prevalence of Coccidial Infection in Domesticated Pigeon (*Columba livia domestica*) in Maiduguri Metropolis Borno State, Nigeria

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ABSTRACT : The prevalence of *Eimeria species* of coccidian among domesticated pigeons (*Columba livia domestica*) was conducted for a period of one year from July 2016 to August 2017 in Maiduguri Metropolis to determine the prevalence of coccidian. Floatation method was used to concentrate the coccidian oocysts using saturated sucrose solution as per standard procedure (Soulsby, 1982) and Sporulation technique was used to determine the size and morphological characteristics of the oocysts. A total of 101 faecal sample were investigated with floatation method and prevalence rate was found to be (56.2%) has the highest prevalence, positive samples sporulated by 2.5 per cent potassium dichromate solution. Four coccidian under genus *Eimeria* were positively isolated viz., *E. columbae* (30.56) *E. tropicalis* (26.63) *E. columbarum* (22.00) and *E. labeana* (16.50) all found among the age and sex. The highest oocyst mean bodern is 30.56 that of *Eimeria columbea* and the least is 1.00 in *E. tropicalis*. Among the pigeon study the young pigeons were significantly more infected with p. value (< 0.05) (56.2 %) as compared to the adults with (44.70%) ($p \leq 0.05$) *E. tropicalis* presented the largest oocyst size of 21.5*20.5 μm while *E. columbarum* 14.5*12.5 which is the least size. *E. columbae* posses the longest sporulation time of 96 hours while *E. columbarum* has the shortest sporulation time of 25 hours. This study provides information on the prevalence and veterinary significance of *Eimeria oocysts* of pigeons in Maiduguri Metropolis.

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