

**PREVALENCE OF PROTOZOA IN GASTROINTESTINAL
TRACT OF PIGEONS (*Columba livia*) MAINTENANCE
EKSTENSIF AND INTENSIF IN SURABAYA**

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ABSTRACT

This research was conducted to determine the prevalence of major gastrointestinal protozoal infections, the kinds of protozoa that infects and maintenance systems influence on pigeons in Surabaya. Pigeon taken from five regions of Surabaya namely North Surabaya, East Surabaya, West Surabaya, South Surabaya and Surabaya Center. Each region is taken as many as 20 pigeons consisted of 10 pigeons with extensive maintenance system and 10 pigeons with intensif maintenance system. So that the total overall sample is 100 pigeons. Laboratory examination (microscopic) was conducted in November 2017 until January 2017. Examination of the upper gastrointestinal tract using throat swabs and stool samples were examined with native methods, sedimentation, and flotation. Identification using a microscope using 40x objective scale and 10x ocular scale to determine gastrointestinal protozoal that was found. Data was analyzed using *Chi Square Test* statistical analysis. Results showed 78% of the positive samples gastrointestinal protozoa infections in pigeons in the city of Surabaya. Results of *Chi Square Test* statistical analysis showed a p value of 0.030 ($p < 0.05$) which means significantly different. Types of protozoa found that *Trichomonas gallinae* (49%) and *Eimeria* sp. (61%). The prevalence of gastrointestinal protozoal pigeons on extensive maintenance system was higher (44%) compared to the intensive care system (34%).

Keywords: Prevalence, protozoa gastrointestinal tract, pigeons, *Trichomonas gallinae*, *Eimeria* sp.