DETECTION OF TOXOPLASMOSIS IN WILD RATS SURABAYA CITY 
BY POLYMERASE CHAIN REACTION (PCR) METHOD

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ABSTRACT

Toxoplasmosis is caused by *Toxoplasma gondii*. This disease is zoonotic that caused many problems for human and animals. Cat as definitive hospes, whereas the intermediate host are all mammals including wild rats (*Rattus norvegicus*). Wild rats prefer dirty environments such as landfills, this living habits allow them infected with *T. gondii* while eating food in landfills that have contaminated with cat feces containing infective oocysts. This is possible because of the nature of cats defecate in any place. This study aimed to determine the detection of toxoplasmosis in wild rats in Surabaya city with the PCR method. This study used 25 wild rats sample from five areas in Surabaya city. The process of PCR using primers SAG-1, as a comparison of the PCR method conducted biological test. The results of study showed that rats not infected with *T. gondii* (negative).

**Key words**: Toxoplasmosis, wild rats, PCR