EFFECTIVENESS OF *Ocimum sanctum* Linn. LEAVES ETHANOL EXTRACT ON MORTALITY OF *Raillietina echinobothrida* in vitro

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ABSTRACT

The aims of the research are to prove the anthelmintic effects of *Ocimum sanctum* Linn. leaves ethanol extract on *Raillietina echinobothrida* in vitro and to know the value of LC$_{50}$ and LC$_{90}$ of *Ocimum sanctum* Linn. leaves ethanol extract. The research used completely randomized design. The research had five treatments and each treatment was done in four replications. The research used 5 *Raillietina echinobothrida* adult worms for each treatment and all replications. The observation and the recording were done at the first hour until the sixth hour of the research. The *Raillietina echinobothrida* adult worms were noted dead if there was no movement when they were disturbed by anatomic tweezer, the death of *Raillietina echinobothrida* were confirmed when they dipped mildly in warm water (50°C) and they showed no movements. The acquired data was analyzed using ANOVA and continued with LSD. The results were *Ocimum sanctum* Linn. ethanol extract has the anthelmintic activity in 1.25%, 2.5%, 5% and 10% concentrations. The LC$_{50}$ and LC$_{90}$ was analyzed using probit analysis. The results of LC$_{50}$ calculation were 7.8% at the third hour, 6% at the forth hour, 3.2% at the fifth hour, 2.5% at the sixth hour and the results of LC$_{90}$ were 6.5% at the fifth hour, 5.2% at the sixth hour. The higher concentration of the extract, the higher anthelmintic activity worked.

**Keywords:** *Ocimum sanctum* Linn. leaves, ethanol extract, *Raillietina echinobothrida*, in vitro