ANTHELMINTIC ACTIVITY OF BASIL LEAVES (*Ocimum sanctum* Linn.) INFUSION AGAINST *Ascaris suum* IN VITRO

Ogen Sea

ABSTRACT

*Ascaris suum* is a parasite nematode that causes infection in swines with high prevalence rates in host populations and usually associated with liver damages called “milk spots” caused by larvae migration, resulting in organ condemnation. Basil leaves (*Ocimum sanctum*) phytochemical constituents contains flavonoid, phenol and tannin. Tannins and phenolics are known to interfere with the energy generation in helminth parasites by uncoupling oxidative phosphorylation and also bind to free proteins in the gastrointestinal tract of host animal or glycoprotein on the cuticle of the parasite and leading to death. This study was aimed to determine the activity of basil leaves (*Ocimum sanctum*) infusion in several concentrations against *A. suum* in vitro. This research used six treatments and four replications. This research used 10 *A. suum* in each treatment with four replication. The observations were done at 12, 18, 24, 30 and 36 hours in an incubator at 37°C. Based on the data analysis, basil leaves (*Ocimum sanctum*) infusion has anthelmintic activity against *A. suum* in vitro. The greater of the concentration and the longer of time of immersion, will make the death percentage of *A. suum* become higher. Concentration of basil leaves (*Ocimum sanctum*) infusion 15% is the effective concentration that can kill 100% of the *A. suum* during 36 hours of immersion.

**Key word:** basil leaves, infusion, *Ascaris suum*, in vitro