THE ANTHELMINTIC EFFECTIVENESS TEST OF BITTER MELON FRUIT (Momordica charantia Linn.) ETHANOL EXTRACT AGAINST Mecistocirrus digitatus IN VITRO

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ABSTRACT

This research was conducted to determine the anthelmintics effect of bitter melon fruit ethanol extract against M. digitatus worm in vitro. In this research, using 240 samples of M. digitatus with length 3-4.5cm without differenting their sex. The concentration of bitter melon fruit ethanol extract for immersing the M. digitatus were 2%, 4%, 6%, 8% concentration. Positive control was used levamisole hydrochloride solution (10 mg/ml) and NaCl solution as the negative control. Each petri dish was given 25 ml of solution, contained 10 adult worms, and were incubated at 37°C. Observation death M. digitatus worm and analysis of the data at the 2 hour, 4 hour, 6 hour, 8 hour, 10 hour, and 12 hour. The procedure then being replicated four times. The data are obtained from the number of dead worms for each treatment. Those data then being analyzed using ANOVA test, followed by Duncan test, by SPSS 20 for Windows program with a significance level of p<0.05. The result of this research showed the most effective concentration of Momordica charantia ethanol extract was P5 (Momordica charantia ethanol extract 8%) within the time of experiment and showed the interaction between concentration Momordica charantia ethanol extract and soaking time Mecistocirrus digitatus.

Key Words: Anthelmintic, M. digitatus, Bitter melon fruit extract