EFFECTIVENESS OF PUMPKIN SEED (Cucurbita moschata) ETHANOL EXTRACT ON MORTALITY OF Ascaridia galli IN VITRO

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ABSTRACT

The aim of the research are to determine the effectiveness of pumpkin seed ethanol extract on increasing mortality of Ascaridia galli in vitro, to determine the value of EC₅₀ and LT₅₀. Research design that has been used for this research was post test only groups design. This research used 100 Ascaridia galli regardless of sex with length 7-10 cm. This research used five treatments and four replication. The concentration of ethanol extract of pumpkin seed suspension were 5%, 10% and 20%. 1% CMC-Na suspension and piperazine citrate 10 mg/ml suspension was being used as control. The obervation time was done at 2, 4, 6, 8, 10, and 12 hours. Ascaridia galli declared died if there was no movement after being distrubed with anatomy tweezers and being dipped in 50°C water. The data was then used for statistical data analysis using ANOVA factorial and continued with Duncan Multiple Range Test by SPSS. The result was the 10% concentration of pumpkin seed ethanol extract was the most effective on increasing motality of Ascaridia galli. Probit analysis showed that the 13.45% ethanol extract of pumpkin seed suspension the most effective to kill 50% of Ascaridia galli population. The LT₅₀ of piperazine citrate 10 mg/ml suspension was at 12.87 hours, and LT₅₀ of ethanol extract of pumpkin seed suspension on various treatment are 5% concentration is at 12.45 hours, 10% concentration is at 8.47 hours, 20% is at 5.76 hours.

Keywords: Ascaridia galli, anthelmintic, Cucurbita moschata seed, ethanol extract, piperazine citrate.