

**PRELIMINARY SCREENING ON THE EFFECT OF  
*Persicaria minor* (KESUM) AGAINST *Haemonchus contortus***

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This Final Year Project Report entitled “**Preliminary Screening on the Effect of *Persicaria minor* (Kesum) Against *Haemonchus contortus***” was submitted by Nik Noor Haszwani binti Yahya, in partial fulfilment of the requirements for the Degree of Bachelor of Science (Hons.) Biology, in the Faculty of Applied Sciences, and was approved by

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## ABSTRACT

### PRELIMINARY SCREENING ON THE EFFECT OF *Persicaria minor* (KESUM) AGAINST *Haemonchus contortus*

*Haemonchus contortus* is a type of nematode that is commonly infecting the sheep which causes hemorrhagic anemia or even death towards sheep. This gastrointestinal parasite could also develop resistance towards synthetic anthelmintics, leads to the study in finding the alternative anthelmintics. So, the anthelmintic activity of Kesum against *H. contortus* was investigated. Kesum plant was dried and soaked in ethanol to obtain the ethanolic Kesum extract. The phytochemical assays (tannins, steroids, flavonoids, alkaloids and saponins) were done towards the extract. Preliminary screening by using egg hatch assays (EHA) and larval development assays (LDA) were done in triplicate form with different extracts concentrations (50, 25, 12.5, 6.25, 3.125 mg/mL) to study the efficacy inhibition percentage of the egg and larval development of *H. contortus* by Kesum ethanolic extract. 0.125 mg/mL of Albendazole used as positive control and 1% DMSO and 95% ethanol as negative control. Kesum ethanolic extracts shows presence of all the phytochemical contents. During the experiment low number of eggs and larvae obtained, which does not fall in the range of 100 eggs/0.2 mL egg suspensions. In spite of that, Kesum extracts were clearly identified to exhibit larvicidal properties against *H. contortus* as observed in LDA. Thus, it can be stated that Kesum has the possibility to inhibiting the development of *H. contortus*. Further study towards the anthelmintic activity of Kesum against *H. contortus* should be done and followed by the identification of phytochemicals in Kesum that affects the development of *H. contortus*.