Research Paper

In-vitro Antihelmentic Evaluation of Leaf Extract of *Bersama Abyssinica* (Mellanthaceae) on *Haemonchus Contortus*.

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Abstract

\textit{In-vitro} trial was conducted from November 2017 to April 2018 to determine anthelmintic effects of crude methanolic and ethanolic extracts of the leaf \textit{Bersama abyssinica}. There was no significant (\(P > 0.05\)) variation between consecutive doses (50\%, 90\% and 95\%) of methanolic plant extracts on egg hatch activity, whereas ethanolic extracts showed significant variation (\(P < 0.05\)).

Methanolic extractions of \textit{B. Abyssinia} were 0.15, 0.308 and 0.326mg/ml, while ethanolic extractions were 0.16, 0.352 and 0.385mg/ml respectively.

Current findings, methanolic leaf extracts of the plant were more efficacious than ethanolic leaf extracts. The higher concentration methanolic extract caused significant egg hatching inhibition rate with 95.67\%, which showed slightly lower effect as compared with that of Albendazole exposed control group (99.33\%). Similarly, higher adult \textit{H. contortus} mortality (76.6\%) was observed for methanol extract at 8mg / ml concentrations while for ethanol, it was 60\% at the same concentration. Therefore, the present study indicated that the leaf of \textit{B. abyssinica} showed an effect on egg hatch activity and adult mortality. Hence, it can be concluded that leaf can be used as a potential alternative in the discovery of guide compounds that substitute commercially available anthelmintic effects. However, further \textit{in-vivo} trial should be conducted.

\textbf{Keywords}: Anthelmintic, Bersama Abyssinica, Ethanolic Extract, Haemonchus Contortus, Methanol Extract

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