Research Paper

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

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Abstract

*In-vitro* trial was conducted from November 2017 to April 2018 to determine anthelmintic effects of crude methanolic and ethanolic extracts of the leaf *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 *B. Abyssinia* were $0.15$, $0.308$ and $0.326\text{mg/ml}$, while ethanolic extractions were $0.16$, $0.352$ and $0.385\text{mg/ml}$ 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 *H. contortus* mortality ($76.6\%$) was observed for methanol extract at $8\text{mg/ml}$ concentrations while for ethanol, it was $60\%$ at the same concentration. Therefore, the present study indicated that the leaf of *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 *in-vivo* trial should be conducted.

**Keywords:** Anthelmintic, Bersama Abyssinica, Ethanolic Extract, Haemonchus Contortus, Methanol Extract

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