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ANTITRYPANOSOMAL POTENTIAL OF *BUCHHOLZIA CORIACEA* SEED EXTRACTS IN MICE

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Graphical Abstract

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Abstract.
Buchholzia coriacea seed extracts were screened for possible anti-trypanosomal activity in mice. Whole *Buchholzia coriacea* seed was successively extracted with 80% ethanol (EtOH) and partitioned in petroleum ether and ethyl acetate to obtained crude extracts. The flavonoid was extracted from crude ethanol extract using column chromatography. The crude extracts and flavonoids obtained were screened for *in vivo* antitrypanosomal activity. In the *in vivo* study, both the crudes and flavonoids extracts were separately orally administered to *Trypanosomal brucei brucei* infected mice after the establishment of parasitaemia. The animals were grouped into 9 groups of 4 mice each and were treated with respective dose levels as follows: Group 1 (Crude 1000mg/kg), Group 2 (Residue 1000mg/kg), Group 3 (Petroleum ether 1000mg/kg), Group 4 (Ethyl acetate 1000mg/kg), Group 5 (Flavonoid 500mg/kg), Group 6 (Flavonoid 1000mg/kg), Group 7 (Positive control, uninfected, untreated), Group 8 (Negative control, infected untreated) and Group 9 (Infected and treated with Berenil®. The body weights of all the animals were determined at pre and post treatment. Both qualitative and quantitative phytochemical analysis of the crude plant extract was also carried out. The *in vivo* results showed that the flavonoid extract gave the highest prolongation of life by 9 days when compared to its crude counterparts by 6 days at 1000 mg/kg body weight ($P<0.05$). All the treated animals suffered less weight lost as compared to the infected untreated control. Phytochemical screening of the extract revealed the presence of flavonoid,

	alkaloid, tannins, glycosides, terpenes, and phenols with Tannins quantitatively being the highest followed by flavonoids. Consequently, flavonoid from *B. coriacea* is an antitrypanosomal potential and could further be exploited for drug development in the management of African trypanosomiasis.

Introduction *(optional)*

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Materials and Methods *(optional)*

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Results and Discussion *(optional)*

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Conclusions *(optional)*

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References *(mandatory)*

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