**Antitrypanosoma activity and effect of *Abrus Precatorius* leave extract on haematological parameters and antioxidants enzymes in** *Trypanosoma brucei -* infected mice

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**Abstract**

This study investigated the effect of methanol extract of *Abrus precatorius* on some biomarker enzymes and haematological parameters in *Trypanosoma brucei brucei -* infected mice. Twenty albino rats were intraperitoneally infected with *Trypanosoma brucei brucei* and were grouped into five (5) groups of four (4) rats each. Group 1 and 2 were given 0.2ml normal saline/kg body weight), and diaminazene aceturate respectively, group 3 to 5 were treated with methanol extract of *Abrus precatorius* at daily doses of 200, 400 and 600 mg/kg for 21 days respectively. Results shows significant (p<0.05) dose dependent antitrypanosomal activities with prolong survival days of extract treated mice compared with the untreated control. Mice treated with 600 mg/kg bw exhibited complete parasite clearance on day 15 and survived for more than 2 months. The extract at all dose tested (200, 400 and 600 mg/kg bw) significantly (P<0.05) increase the RBC, PCV, MCH, MCHC and WBC when compared with the untreated control. The extract significantly (p<0.05) reduced the elevated serum GST and increased serum SOD activities when compared with the untreated control. The extract also increased the liver total proteins and catalase activities but increase the liver SOD activities when compared with the untreated control. In conclusion, methanol extract of *Abrus precatorius* exhibited antitrypanosoma activities and ameliorative effect on T. brucei-induced antioxidants, and haematological alterations in mice

**Key words:** *abrus precatorious*, Haematology, Trypanosomiasis, Antioxidants

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