

Antineoplastic potential of *Bryophyllum pinnatum* lam. on chemically induced hepatocarcinogenesis in rats

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ABSTRACT

Background *Bryophyllum pinnatum* Lam. used in folk medicine in tropical Africa, tropical America, India, China and Australia contains a wide range of active compounds, well known for their haemostatic and wound-healing properties. **Objective** The present study was designed to evaluate the effect of *Bryophyllum pinnatum* Lam. on N-diethylnitrosamine (DENa)-induced hepatic injury in rats. **Material and Methods** The aerial part of *B. pinnatum* aqueous and ethanolic extract was prepared in doses of 250 mg/kg and 500 mg/kg. Hepatic injury was induced by DENa. Acute toxicity was also carried out. **Result** Treatment with different doses of ethanolic extract of *B. Pinnatum* (250 mg/kg, p.o.) was not significantly able to treat the liver injury induced by DENa, but 500 mg/kg dose of ethanolic extract of *B. Pinnatum* protects the liver slightly. Treatment with different doses of aqueous extract of *B. Pinnatum* (250 and 500 mg/kg, p.o.) significantly ($P < 0.05$; $P^{**} < 0.01$ and $P^{***} < 0.001$) treated the liver injury induced by DENa. **Conclusion** It may be inferred from the present study that the hepatoprotective activities of the aqueous extract of *B. Pinnatum* leaves in DENa-induced hepatotoxicity may involve its antioxidant or oxidative free radical scavenging activities by alleviating lipid peroxidation through scavenging of free radicals, or by enhancing the activity of antioxidants.

KEYWORDS

Bryophyllum pinnatum . histopathology . N-diethylnitrosamine . rats

REFERENCES