

Anti- diarrhoeal activity of chloroform-ethanol extracts of Cashew (*Anacardium occidentale*) kernel

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ABSTRACT

The anti-diarrhoeal activity of ethanol-chloroform extracts of *Anacardium occidentale* kernel at the dose of 21mg/kg and 84mg/kg body weight were studied using rat models of diarrhoea, enteropooling and gastro-intestinal motility induced by castor oil. Acute toxicity and lethality (LD50) and phytochemical constituents of the extracts were also evaluated. The results showed that the extracts significantly ($P<0.05$) reduced the watery texture and number of fecal droppings over 5 hours compared with the untreated group. It also significantly ($P<0.05$) reduced the volume and weight of intestinal content compared to the control animals. On gastro-intestinal motility, the extracts significantly ($P<0.05$) reduced the small intestinal transit of charcoal meal in rats induced with castor oil. The results of the qualitative phytochemical analysis showed that the ethanol-chloroform extract (ethanol, chloroform and middle layers) tested positively to flavonoids, alkaloids saponin, reducing sugars, glycosides and steroids while, chloroform layer and middle layer tested positive to fat and oil. Acute toxicity and lethality studies on ethanolchloroform extracts revealed an oral LD50 equal or more than 5000mg/kg body weight in mice. These results showed that kernels of *A. occidentale* possess anti-diarrhoeal properties through inhibition of hyper-secretion, enteropooling and gastro-intestinal motility which can substantiate its use in the treatment of diarrhoea in traditional medicine.

Keywords: Diarrhoea; Gastro-intestinal; Enteropooling; Phytochemical; LD50