

ANTI-ULCERATION, ANTI-DIARRHEAL AND ANTI-ENTEROPOOLING POTENTIAL OF METHANOL EXTRACT OF ROOT OF *Napoleona imperialis* IN ALBINO RATS

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ABSTRACT

Anti-ulceration, anti-diarrheal and anti-enteropooling potentials of methanol extract of root of *Napoleona imperialis* in albino rats were investigated. 60 albino rats weighing between 100 – 180 g used for the study were divided into five groups (Groups 1 – 5) with twelve animals in each group. Ethanol and indomethacin were used to induce gastric ulceration while castor oil was used to induce diarrhea and enteropooling in respective models which consisted of three animals per model per group. Group 1 served as positive control for each model while animals in Group 2 received standard drug for management of each of the conditions (cimetidine and propranolol for ulcer, loperamide for diarrhea). Group 3, 4 and 5 were administered 200, 400 and 600 mg/kg per body weight of the extract. Administration of the drugs to Group 2 and the extract to Groups 3, 4, and 5 was done one hour before the induction of respective conditions. Thirty minutes after the induction, the models for enteropooling study were sacrificed and intestinal fluid content measured. Diarrhea induced models were observed for consistency of fecal matter and the frequency of defecation for three (3) hours. The ulcer induced models were sacrificed and the stomach excised and observed microscopically for ulcerations. The result shows a dose dependent significant reduction of ulcer index in the indomethacin induced models administered with the extract when compared to control. Dose dependent reductions in consistency of fecal matter, frequency of defecation and intestinal fluid content were observed in diarrhea induced models and enteropooling effect. This result suggests that methanolic root bark extract of *N. imperialis* exhibit antiulcer, anti-enteropooling and antidiarrheal potential.

Keywords: *Napoleona imperialis*, Diarrhea, Ulcer, Enteropooling and Ulcer.