

Anti-ulcerogenic and in vitro antioxidant activities of *Lagenaria breviflora* (LB) whole fruit ethanolic extract in laboratory animals

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ABSTRACT

Background The present study was undertaken to evaluate the anti-ulcer and antioxidant activities of the ethanol extract of *Lagenaria breviflora* (EELB) whole fruit in laboratory rats. **Methods** The anti-ulcer property of the ethanolic extract of the whole fruit of *Lagenaria breviflora* (LB) was assessed using the cold-restraint stress-induced (CRU) gastric ulcer, pyloric ligation-induced (PL) gastric ulcer, aspirin-induced (ASP) gastric ulcer and alcohol-induced (AL) gastric ulcer models. The scavenging activity of the LB extract was examined with 1, 1-diphenyl-2-picryl-hydrazyl (DPPH), Nitric oxide, Hydroxyl radical and Superoxide anion scavenging models. **Results** EELB (50, 100, 150 and 200 mg/kg, b.w.) protected against the CRU gastric ulcer dose dependently. Similarly, 150 mg/kg b.w. of the LB extract protected against the PL gastric ulcer, ASP gastric ulcer and AL gastric ulcer and was comparable to omeprazole (10 mg/kg b.w.) or Sucralfate (500 mg/kg b.w.), respectively. The in vitro antioxidant activity of LB was demonstrated by its ability to quench free radicals generated by nitric oxide and superoxide anion with a concomitant scavenging potential against DPPH-induced radical formation. **Conclusion** Taken together, the study showed that the whole fruit extract possess potent anti-ulcer and antioxidant activities.

KEYWORDS

Anti-ulcer . antioxidant . free radical scavenger

REFERENCES

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