

Intestinal absorption, anti diarrheic activity of freeze dried aqueous extract from *Rhizophora mangle* L. Cytoprotective activity of polyphenolic compounds fractions on experimental gastric ulceration.

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ABSTRACT

The effect of the freeze aqueous extract from red mangrove bark on intestinal absorption was studied in vitro e in situ models in rats. Anti diarrheic activity of this extract was evaluated using a model of ricin oil in rats. The polyphenolic fractions were separated from the aqueous extract and its cytoprotective activity were studied on gastric ulceration induced by ethanol plus hydrochloric acid in rats. The freeze - dried aqueous extract from red mangrove bark was used in both models employed to determinate the intestinal absorption. The freeze dried extract of *R. mangle* shown a high absorption. It was superiority at 95% in vitro study and the constant apparent of absorption's rate was $2,03 \pm 0,77$. It was shown a high anti diarrheic effect of *R. mangle* in experimental model with ricin oil. The low molecular weigh polyphenolic fraction showed the highest level of gastric protection. Not additive effect was obtained by comparison between low and high molecular weigh polyphenols in this aqueous extract. The highest gastric protection was obtained by oral treatment with total of freeze aqueous extract at 500 mg/ kg body weight (b.w.). Probably the cytoprotective activity was resulted of other compounds presents in this extract joint at polyphenol substances.

KEYWORDS

Rhizophora mangle L . Red mangrove . Rhizophoraceae . in vitro e in situ intestinal absorption models . cytoprotection . polyphenolic fractions

REFERENCES

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