



Evaluation of Ethanol Extracts of Leaves and Fruit of *Piper sarmentosum* for *In Vivo* Hepatoprotective Activity

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SUMMARY. The present study is aimed to describe hepatoprotective activity of extracts of a medicinal plant, *Piper sarmentosum*, in rats against CCl₄-induced toxicity. Seven groups of *Sprague Dawley* rats each containing six animals were treated as: group I (CCl₄), group II (control), group III and IV (fruit extract 500 and 250 mg/kg, respectively), group V and VI (leaf extract 500 and 250 mg/kg, respectively) and group VII (vitamin-E). The extracts and vitamin-E were administered orally for 14 days whilst equivalent amount of sample vehicle was administered to CCl₄ and control groups. Four hour following the last dose, a single dose of CCl₄ (1.5 mg/kg, 1:1 olive oil) was administered orally to animals of all the groups except control. After 24 h blood was collected for the determination of hepatic function markers, and the animals were sacrificed to get liver for histology. Comparison of hepatic function markers and histology of pre-treated and CCl₄ groups indicated that both the extracts in the two doses had protected liver from CCl₄ toxicity ($P < 0.05$). It is concluded from the present study that use of the plant as a vegetable or in the form of extracts may be valuable to protect liver from oxidative stress in hepatitis and long-term therapy.

KEY WORDS: CCl₄-induced oxidative stress, Hepatoprotective activity, Liver function markers, *Piper sarmentosum*, Piperaceae.

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