PHARMACOGNOSY RESEARCH
DOI: | pp. 143-147 | May-Jun 2009
Published by Phcog.Net

Toxicity study of the aqueous extract of Tithonia diversifolia leaves using selected biochemical parameters in rats

J.O. Adebayo, E.A. Balogun, S.A. Oyeleke
Department of Biochemistry, University of Ilorin, Ilorin, Kwara State, Nigeria.

ABSTRACT

Tithonia diversifolia has manifold ethnomedicinal uses in traditional settings without much consideration about the possible adverse effects of the consumption of its crude extracts. In this study, effects of repeated oral administration of aqueous extract of Tithonia diversifolia leaves (100 and 200 mg/Kg body weight) for seven days on concentrations of serum electrolytes and biomolecules and the activities of alkaline phosphatase, alanine aminotransferase and aspartate aminotransferase in serum, heart, liver and kidney of rats were investigated. The extract significantly increased concentrations of serum calcium ion, potasium ion and HDL-cholesterol but reduced serum albumin concentration at both doses administered compared to controls. At 200 mg/Kg body weight, the extract significantly increased alkaline phosphatase activities in the liver and heart. The results of this study suggest that the extract may exert adverse effects on the functions of the liver, heart and kidney.

KEYWORDS

Extract . Heart . Kidney . Liver . Tithonia diversifolia . Toxicity

REFERENCES