

Abstract:

This study was carried out to investigate the toxic effects of methanolic extract of *Ximenia americana* leaves on albino rats. Twenty rats were evenly divided into four groups A, B, C and D. Group A served as control. Groups B, C and D were orally administered with methanolic extract of *X. americana* leaves at doses of 12.5, 25 and 50 mg/kg body weight (bwt), respectively, for 21 days. Clinical signs and mortality were recorded. The rats were weighed at the beginning and end of the experiment. Haematological examination and serum activity, including total protein, albumin, alanine transferase and alkaline phosphatase, were investigated at the end of experiment. Specimens from liver, kidney, heart and brain were taken for histopathology. The rats receiving 50 mg/kg bwt showed depression and paresis. Mortality occurred in the groups receiving 25 and 50 mg/kg (bwt). Significant reduction in the body weight occurred in the group given 50 mg/kg bwt. Haematological examination did not show significant changes in all the treated groups. The rats receiving 12.5 mg/kg bwt of the extract showed no obvious changes. There was a significant decrease in total protein and albumin in the group dosed with 50 mg/ kg bwt in the third week. However, a significant increase occurred in ALT in the groups receiving 25 and 50 m/ kg bwt and ALP in the group given 50 mg/kg bwt. Haematology examination did not show any significant change. It is concluded that this study generated a base line for the safe use of *Ximenia americana* leaves in folk medicine