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## Assessment of the liver, kidney function parameters and enzyme activities in male Wistar rats administered with aqueous extract of *Massularia acuminata* root

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The aqueous extract of *Massularia acuminata* root a plant with androgenic potentials at the doses of 50, 100 and 200 mg/kg body weight was investigated for its toxicological implication on selected enzyme activities, liver function and kidney function parameters in vivo and *In vitro* in male Wistar rats. Phytochemical screening reveals the presence of alkaloids, anthraquinones, saponins, phenolics, flavonoids and tannins in the extract. It caused labilization in some organs whereas it induced the synthesis of enzymes in some others by the increase and decrease ( $p < 0.05$ ) in the activities of alkaline phosphatase, acid phosphatase and gamma-glutamyl transferase. There was increase ( $p < 0.05$ ) in serum total and conjugated bilirubin, increase ( $p < 0.05$ ) in serum globulin and serum albumin at the highest dose of 200 mg/kg body weight. A significant increase ( $p < 0.05$ ) in sodium and potassium ions at various doses following the administration of the extract was revealed. Also an increase ( $p < 0.05$ ) in potassium and calcium ions occurred after day 7 following the administration of the extract at the doses of 100 and 200 mg/kg body weight. The serum urea and creatinine increased at all doses. Therefore, such alterations in the normal levels of the liver and kidney function indices, and tissue enzymes might adversely affect the normal functioning of the biomolecules and by extension, the organs.

### Biography

O S Awotunde has completed his MSc from University of Ilorin and is presently doing his PhD at Ladoké Akintola University of Technology, Ogbomoso Nigeria. He is presently a Lecturer at Habib Medical School, IUIU Kampala Uganda. He has presented papers at many conferences in Nigeria, Uganda and India. He is co-author of a published paper in reputed journal and has a published paper and 2 published abstract papers. He teaches Biochemistry and serves as Departmental Tutorial Head.

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