



Mitigation of bromate-induced nephrotoxicity in rats with seed extract of *Aframomum angustifolium*

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Abstract

This study evaluated the ability of ethanol extract of *Aframomum angustifolium* seeds to ameliorate the nephrotoxic effect of potassium bromate (KBrO₃) in rats. Biochemical alterations following co-administration of extract with 30 mg/kgbw KBrO₃ were monitored in four animal groups (3 rats/group). Oral administration lasted for 28 days. Biomarkers were monitored using standard spectrophotometric methods. Kidney SOD and CAT activities, as well as serum HCO₃⁻ and creatinine levels were significantly lower (p<0.05) in the treated groups than in the positive control group. Photomicrographs of kidney tissue support the biochemical observations. These findings suggest that the extract mitigated bromate-induced kidney lesions in the treated rats.

Biography

Ebhohimen, Israel Ehizuelen is a postgraduate student of the University of Benin, Nigeria and an Assistant Lecturer in the Department of Chemical Sciences (Biochemistry), Samuel Adegboyega University, Ogwa, Edo State, Nigeria. He is a Member of the Institute of Public Analysts of Nigeria and serves as a reviewer in the Tropical Journal of Natural Product Research.