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Effects of fractionated methanolic leaf extract of *Gongronema latifoliumon* CCl4-induced wistar albino Rats

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The general aim of this study is to assess the effects of fractionated methanolic leaf extract of *Gongronema latifoliumon* CCl4-induced wistar albino rats. Fifty-four wistar albino rats were divided into seven treatment groups. Group A was given feed and water, Group B was injected with olive oil intraperitoneally, while the rest of the groups (C, D, E, F and G) were injected intraperitoneally with a single dose of CCl4 (148 mg/kg). After 36 hours of induction, group E, F and G were given 100 mg/kg, 150 mg/kg and 200 mg/kg body weight of n-butanol fraction of methanol leaf extract of *Gongronema latifolium* by oral gavage. Group D was given 100 mg/kg of silymarin (standard drug) where as group C served as CCl4-induced group. At the end of 28 days of treatment, there were significant ($P<0.05$) reduction in PCV, Hb concentration and serum protein levels as well as a significant ($P<0.05$) increase in percentage change in liver weights of CCl4-induced control rats when compared with the induced treated groups. Liver marker enzymes studies showed that there was significant ($P<0.05$) increase in the serum activities of ALT, AST, ALP and bilirubin concentrations in CCl4-induced control group when compared with the induced treated groups. Antioxidant assay on the liver homogenate showed that there was significant ($P<0.05$) decrease in SOD, CAT, GPx and a significant increase ($P<0.05$) in MDA of CCl4-induced control rats when compared to the induced treated and normal control groups. These findings suggested that n-butanol fraction of methanol leaf extract of G. *latifolium* may have anti-hepatotoxic and antioxidative effects against CCl4-induced liver damage rats.

Biography

Okpala, Jude Chinedu is currently a PhD student at the Department of Biochemistry, Ahmadu Bello University where he also did his Masters Degree programme. He also attended Ebonyi State University, Abakaliki where he bagged his Bachelor of Science Degree. He is currently an independent researcher and has published several papers in reputed journals. He has also served as an editorial board member of several journals.

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