



THE *IN VITRO* ANTIMALARIAL ACTIVITY OF THE EXTRACTS OF *Cymbopogon citratus* COMMONLY USED IN TRADITIONAL MEDICINE IN NIGERIA.

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ABSTRACT

Plasmodium falciparum resistance to almost all anti-malarial drugs has to a large extent necessitated the search for new antimalarial compounds. In this study, the *in vitro* anti-malarial activities of the crude aqueous and ethanol extracts of *Cymbopogon citratus*, was evaluated against 14 fresh isolates of *P. falciparum* from Damboa, Borno State, Nigeria. Acute toxicity test and anti-inflammatory activity of the extracts were also determined. There was a significant inhibition in schizont maturation relative to control ($P = 0.05$). Water extract exhibited higher antimalarial activity of 69.42%, IC_{50} of 23.4 μ g/ml and ethanol extract had an activity of 67.91%, IC_{50} of 29.6 μ g/ml. Both extracts showed moderate antimalarial activity. The extracts were found to be non-toxic in rats and showed a good measure of anti-inflammatory activity. This result justifies the traditional use of the plant in malaria treatment. Further work is suggested to isolate, identify and characterize the active principles from the plant.

Keywords: Antimalarial activity, *Plasmodium falciparum*, plant extract, malaria

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