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ED091

Therapeutic Effects of β-ionone against *T. congolense*-Induced Oxidative Stress

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ABSTRACT

Oxidative stress as a prominent feature of *T. congolense* infections results to the damage of vital organs and subsequent death of the host if not treated. In this study, the therapeutic potentials of β-ionone against *T. congolense*-induced oxidative damage in the liver, kidney as well as spleen of infected rats were investigated. Increased in TBARS in infected animals were significantly ($P<0.05$) ameliorated following treatment with 15 mg/kg and 30 mg/kg BW β-ionone, respectively across all the organs. Additionally, GSH level significantly ($P<0.05$) increased in the organs (except in the liver) of infected animals treated with the compound. In conclusion, β-ionone could ameliorate oxidative damage induced by the parasite.

Keywords: β-ionone; Oxidative damage; *T. congolense*

ED092

✓ Antibacterial and Antifungal Activities of Ethanol Extract of *Garcinia kola* (Seed)

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ABSTRACT

*Garcinia kola*is a medicinal tree belonging to the family *Guttiferae*. Several studies have reported the pharmacological uses of the seed in treating coughs, throat infections, bronchitis, hepatitis, and liver disorders. In this study, the antibacterial and antifungal activities of ethanol extract of *Garcinia kola* (seed) were determined using agar well diffusion method against some selected pathogenic micro-organisms(*Salmonella typhmuriumi, Pseudomonas aeruginosa, Escherichia coli, Aspergillus flavus, Aspergillus niger and Candida albicans*). Qualitative phytochemical screening, antibacterial, and antifungal activities of the extract were determined using standard methods. Phytochemical screening revealed the presence of alkaloids, saponins, cardiac glycosides, reducing sugars, steroids, terpenes, tannins, flavonoids, and phenols. The extract at concentrations of 100 mg/ml, 200 mg/ml and 300 mg/ml gave the following zones of inhibitions; *S. typhi* (18, 22.50, 28mm), *P. aeruginosa* (14.50, 16, 22 mm), and *E. coli* (25, 29, 35 mm), respectively. The result showed a significant difference ($P<0.05$) between the extract and the standard control (ampiclox) used. However, the extract at the above concentrations showed no inhibitory activity on the fungal isolates used. Minimum inhibitory concentration (MIC) of the extract at a serial dilutions of 40mg/ml, 8mg/ml, 1.6mg/ml, 0.32mg/ml, 0.064 mg/ml, 0.0128mg/ml and 0.00256mg/ml, showed *E. coli* been the most sensitive at a concentration of 0.0128mg/ml compared to the other test micro-organisms. The effectiveness of the extract on the bacterial isolates holds a promising potential as antibacterial agent if well exploited.

Keywords: *Garcinia kola*seed, Ethanol extract, Antibacterial activity, Antifungal activity, Pathogenic microorganisms.

ED093

Antioxidant Activity and Effect of Aqueous extract of *Cynodon dactylon* on Haematological Parameters of Wistar Rats

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ABSTRACT

Cynodon dactylon is one of the acclaimed safe medicinal plants used in traditional medicine. The antioxidant activity using DPPH and FRAP; and effects of aqueous extract of *Cynodon dactylon*on haematological parameters of Wistar rats was investigated. Sixteen male Wistar rats were randomly divided into four groups