

Therapeutic effects of *Enantia chlorantha* (Annonaceae) Stem Bark extracts in *salmonella* Typhi-induced rats

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The aim of this study was to investigate the *in vivo* antisalmonellal properties of medicinal plant called *Enantia chlorantha*. During this study, Salmonella typhi-infected rats daily received orally the various doses of 95% ethanolic extract of *E.chlorantha* stem bark (9.16, 36.5 and 73 mg/kg bw) or oxytetracyclin (20 mg/kg) for 9 days. The parameters toxicity such as, hematology, transaminase (ALAT, ASAT), lipids profile, urea, creatinin, total proteins, body and organs weight were assessed. The results showed that the healing effect was marked by the absence of salmonella in animal's blood cultured on ss agar. And this was observed after 6 days of treatment. Females and males rats recovered after 8 and 9 days of treatment respectively. The infection has induced a significant reduction ($p < 0.05$) of the relative weight of male's kidney and spleen and that of female's heart; of urinary creatinin and urea, of the hepatic and kidney proteins. Significant increase ($p < 0.05$) of the white blood cells, granulocytes (in both sexes), blood platelet, transaminase and PAL activities, serum levels of protein, creatinin, total cholesterol, Triglycerides and LDL cholesterol was observed. The administration of the extract has corrected the dysfunction and lesions caused by the infection. The doses 36.5 and 73 mg/bw corrected damages with best protection. The overall results showed that *Enantia chlorantha* have therapeutic virtues against *salmonella* Typhi and then the potentials as future medicines and could act as potent prototypes for the development of plant-based natural antibiotics.

Biography

Djimeli Namekong Merline has her expertise in Biochemistry, Pharmacology. She is a PhD holder from the University of Dschang, Cameroon where she is a member of Microbiology and Antimicrobial Substances research team. She has built her expertise by investigating the antioxidant and antimicrobial properties of some medicinal plants used in Cameroon against diseases like typhoid fever and others. In this field, she is author or co-author of seven publications in peer reviewer journals.

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