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Analgesic, antipyretic and antibacterial activities of the ethanolic extract of Stem bark of *Buchholzia coriacea* Engl. *(Capparidaceae)*

Epa C[1*], Elion Itou RDG[2], Etou Ossibi A.W[2], Agbonon Amegnona[3], Attibayeba[4], Ongoka P.R[1], Abena AA[5].

1. Department of Natural Sciences, Ecole Normale Supérieure, Marien Ngouabi University, Congo, Brazzaville.
2. Laboratory of Biochemistry and Pharmacology, Faculty of Health Sciences, Marien Ngouabi University, Congo, Brazzaville.
3. Physiology/Pharmacology Laboratory, Center for Research and Training on Medicinal Plants University of Lomé - Togo
4. Laboratory of physiology and plant production, Faculty of Sciences, Marien Ngouabi University, Congo, Brazzaville.

*Corresponding author: charlesepa17@gmail.com . Department of Natural Sciences, Ecole Normale Supérieure. University Marien Ngouabi Congo. E-mail Address: charlesepa17@gmail.com , Tel: 069335155/069365649.

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1 ABSTRACT

Te objective of this study was to evaluate the analgesics, antipyretic and antibacterial activities of stem barks ethanol extract of *BuchholziacoriaceaThe* Analgesic effect was evaluated by using the acetic acid-induced writhing as well as the pain induced by formaldehyde, while antipyretic activity was evaluated using Brewers' yeast induced pyrexia (*Saccharomyces cerevisia* 20%). The antibacterial activity was determined by the liquid microdilution method. The results obtained show that the ethanolic extract at the doses of 200 and 400 mg/kg inhibits the pain induced by the acetic acid 0.6 % and by the formaldehyde 2.5 % ($p < 0.001$) compared to the control group. The ethanolic extract at all used doses reduces significantly ($p<0.01$) the hyperthermia induced by brewer's yeast ((*Saccharomyces cerevisia* 20 %). Moreover, the ethanolic extract concentrations ranging from 10 to 2000 µg / ml inhibit in vitro the growth of *Pseudomonas aeruginosa* and *Bacillus Subtillus* with Minimum Inhibitory Concentrations (MIC) of 3.25 µg/ml each, *Staphylococcus aureus* and *Escherichia coli* germs with Minimal Inhibitory Concentrations of 6.25 µg/ml. The Minimum Bactericidal Concentrations (MBC) was 3.25 µg/ml for *Pseudomonas aeruginosa* and 6.25 µg/ml for *Bacillus subtillus*. For *Staphylococcus aureus* and *Escherichia coli, the MBC* was 12.5 µg/ml. These results suggest that the ethanolic extract of stem barks of *Buccholzia coriecea* has analgesic, antipyretic and antibacterial effects. These effects could justify the traditional utilization of stem barks of *Buccholzia coriecea* in the pain and fever treatment, but also against bacteria strains.