

6th Clinical Microbiology Conference

October 20-22, 2016 Rome, Italy

Antibacterial effect of extracts from (leaf, root, seed and seed coat) of *Moringa oleifera* on bacterial agents of infantile diarrhea

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The aim of this study is to determine the antibacterial effect of ethanolic extract from leaf, root and seed coat of *Moringa oleifera* on bacterial agents of infantile diarrhea. This was determined using disc diffusion and well-in-agar antimicrobial screening methods. A total of sixty nine suspected infants (0-5 years) were screened using standard microbiological methods. Bacterial agents isolated and identified were *E. coli* and *Salmonella* sp. While *E. coli* was isolated from 17 (60.71%) subjects, *Salmonella* sp. was isolated from 11 (39.29%) subjects. Results show that more infants of three years old had diarrhea while those at the age of five years were the least. Male infants were infected more than female infants. Well-in-agar antimicrobial screening method showed appreciable inhibitory effect on both *E. coli* and *Salmonella* sp. than disc diffusion. Furthermore, ethanolic extract from leaf exhibited more antimicrobial action on the two isolates followed by extract from seed, then extract from the root while extract from seed coat that showed antimicrobial effect at a very high concentration was the least. Phytochemical analysis showed that alkaloid and anthraquinone were present in the four parts of the plant analyzed. Glycoside, steroid and terpenoid were present in the seed coat, flavonoid was absent in the leaf and root, saponin was absent in the seed, tannin was only present in the leaf. Above results indicate that extract from most parts of *Moringa oleifera* have curative effect hence can be used for curing diseases such as diarrhea.

Biography

Nwachukwu Michael Ikechukwu is a Senior Lecturer and the Head of the Department of Microbiology and Industrial Microbiology, Imo State University, Nigeria. He holds a PhD degree from Rivers State University of Science and Technology, Port Harcourt, Nigeria. He is a Member and the Institutional Coordinator of Nigeria Society for Microbiology (NSM). He has published more than 40 papers in reputed journals and his research interests are in the areas of environmental microbiology, ecology and public health.

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