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Antimicrobial, phytochemical and haemolytic evaluation of Kamue local concoction in vitro

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A queous extracts of the barks of Azadirachta indica, Parkia biglobosa, Anogeissus leiocarpus, Vitellaria paradoxa, Kaya senegalensis, red potash and their combination, (a Kamue antityphoid traditional medicine), were investigated for antimicrobial activities on Salmonella typhi, Eschericia coli and Pseudomonas species using the disk diffusion method. E. coli, Pseudomonas spp. and S. typhi showed strong vulnerability to A. leiocarpus and A. indica extracts. The highest activity was with A. leiocarpus in E. coli, Pseudomonas spp. and S. typhi with comparable activity to the standard antibiotics. Phytochemical analysis showed the presence tannins, saponins and anthraquinones among others. Elemental analysis of the red potash showed the presence K and Na in concentrations of 0.424 and 0.163 ppm, respectively. The haemolytic analysis conducted with rat's whole blood, showed agglutination of RBC with V. paradoxa, A. leiocarpus, K.senegalensis and the concoction at concentrations of 63 and 125 mg. This study showed that, "Kamue antityphoid concoction" is an effective antibiotic.

Biography

Comfort Vandu is a chief medical laboratory scientist in charge of the laboratory unit, medical centre, Federal Polytechnic Mubi, in Adamawa state, Nigeria. She had her degree (AlMLT) in 1994 and post graduate studies in 2007 (FMLSCN). She obtained a higher diploma in business administration and management studies in 2004, was awarded the "Fellow Business Specialist and Entrepreneur" in 2011 because of her contributions to business and entrepreneurship in her community; in this regard she is the co-ordinator of the ENACTUS Federal Polytechnic Mubi Team. Her interest, commitment and determination to clinical research are deterred by financial/gender constraints and administrative bottle necks, she has one publication and two papers presented nationally.

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