Wound healing properties of leaf fraction of *Spermacoce verticillata* (Linn.)

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Most developing countries, Nigeria inclusive depend on plants as drug for their medicinal needs. With this vast dependence, plants that are known for treating certain diseases like *Spermacoce verticillata* are investigated to ascertain their therapeutic claims. It is commonly called African borreria. The acetone leaf extract was fractionated using Accelerated Gradient Chromatography into two fractions A and B. Antibacteria studies of the fractions on *E. coli*, *B. subtilis*, *S. aureus* and *P. aeruginosa* showed that the fraction B was most potent. Fraction B was then formulated into ointments of 0.1, 0.2, 1.0, 2.0, and 5.0%w/w. The formulated ointment in comparison to a positive control 0.1%w/w gentamycin ointment and a negative blank control ointment were used for wound healing studies. Excision wounds on known diameters were inflicted on female albino rats; the wounds were infected with *P. aeruginosa* and dressed daily with the ointments. The wound diameters (wound contraction) were measured at intervals. The results obtained showed that wounds healed in response to the application of the fraction B ointment at all formulated concentrations. The 2%w/w ointment had the best healing effect on *P. aeruginosa* infected wounds than other concentrations.

Biography

Onwuliri E A holds a BPharm Degree in Pharmacy and an MSc Degree in Applied Microbiology from the University of Jos, Plateau State Nigeria. She just concluded a PhD programme at the University of Nigeria, Nsukka in the Department of Pharmaceutics. She is a lecturer in the Department of Pharmaceutics and Pharmaceutical Technology, Faculty of Pharmaceutical Sciences, University of Jos, Nigeria. She is interested in therapeutic investigations of local plants for their antimicrobial effects and their formulation into suitable dosage forms. She has 11 publications in various journals.

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