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Review: African medicinal plants with wound healing properties

Christian Agyare^{1*}, Yaw Duah Boakye¹, Emelia Oppong Bekoe², Andreas Hensel³, Susana Oteng Dapaah¹, Theresa Appiah¹

¹ Department of Pharmaceutics, Faculty of Pharmacy and Pharmaceutical Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

² Department of Pharmaceutics and Microbiology, School of Pharmacy, College of Health Sciences, University of Ghana, Legon, Accra, Ghana.

³ Institute for Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstraße 48, D-48149 Münster, Germany

* Corresponding author: Dr. C. Agyare, Tel: +233246369803; Email: cagyare.pharm@knust.edu.gh; chrisagyare@yahoo.com

Abstract

Ethnopharmacological relevance: Wounds of various types including injuries, cuts, pressure, burns, diabetic, gastric and duodenal ulcers continue to have severe socio-economic impact on the cost of health care to patients, family and health care institutions in both developing and developed countries. However, most people in the developing countries, especially Africa, depend on herbal remedies for effective treatment of wounds. Various *in vitro* and *in vivo* parameters are used for the evaluation of the functional activity of medicinal plants by using extracts, fractions and isolated compounds. The aim of the review is to identify African medicinal plants with wound healing properties within the last two decades.

Materials and methods: Electronic databases such as PubMed, Scifinder® and Google Scholar were used to search and filter for African medicinal plants with wound healing activity. The methods employed in the evaluation of wound healing activity of these African medicinal plants comprise both *in vivo* and *in vitro* models. *In vivo* wound models such as excision, incision, dead space and burn wound model are commonly employed in assessing the rate of wound closure (contraction), tensile strength or breaking strength determination, antioxidant and antimicrobial activities, hydroxyproline content assay and histological investigations including epithelialisation, collagen synthesis, and granulation tissue formation. In *in vitro* studies, single

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