Potential Antibacterial Activity of the Extract from the Leaves and Stems of Papait
(Mollugo oppositifolia, Family Molluginaceae) Formulated as an Ointment

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Abstract

The skin serves as the first line of defense against infections. When compromised, may lead to a serious disease or a systemic infection. This study was aimed to test for the potential antibacterial property of formulated ointment from fresh leaves and stems of Papait (Mollugo oppositifolia, Family Molluginaceae). The formulated ointment was tested against the microorganisms, Staphylococcus aureus and Bacillus subtilis, using Agar Well Diffusion method. The results revealed that the formulated Papait ointment possesses antibacterial activity as indicated by a mean zone of inhibition of 23.33mm and 10.33mm, respectively. Thus, the formulated ointment is more effective against B. subtilis. Also, the formulated ointment has comparable activity with the positive control, mupirocin ointment, against S. aureus. It is therefore recommended that other solvents be utilized for extraction of the active principles of the Papait plant, the active constituents responsible for the antibacterial activity of the Papait be isolated and purified, other microorganisms that causes skin diseases may also be utilized and, the formulated ointment be subjected to toxicity testing.

Keywords: Papait extract, antibacterial, Staphylococcus aureus, Bacillus subtilis, zone of inhibition, ointment