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## Effect of aqueous extract of leaf and bark of guava (*Psidium guajava*) on fungi *Microsporum gypseum* and *Trichophyton mentagrophytes* and bacteria *Staphylococcus aureus* and *Staphylococcus epidermidis*

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In this study, we investigated the effects of *P. guajava* on organisms responsible for skin disorders, specifically the fungi: *Microsporum gypseum* and *Trichophyton mentagrophytes*, and bacteria: *Staphylococcus aureus*, and *Staphylococcus epidermidis*. The leaves and bark of the *P. guajava* plant was harvested from Obasa farm Ijero, Ekiti-State, Nigeria, during the beginning of rainy season in March, 2009. Aqueous solutions were obtained by grinding the leaves and the bark. Mueller-Hinton agar was used to grow the bacteria *S. aureus* and *S. epidermidis*. Sabouraud Dextrose broth was used to grow the fungi *Trichophyton mentagrophytes* and *Microsporum gypseum*. Analysis of the antibacterial action of the extracts of guava leaves and bark was carried out at different concentrations, by comparing the mean diameter of the inhibition haloes as a variable. Values were represented as mean  $\pm$  S.E. An ANOVA Tukey's test was performed to determine the mean difference between the control and the two treatments (S1 and S2). In

comparing the tetracycline positive control to both solutions, tetracycline had a significantly ( $p < 0.05$ ) stronger inhibition effect than both solutions. This could be due to the fact that tetracycline is a pure chemical while the *P. guajava* solutions were crude extracts. Both *P. guajava* solutions were effective against inhibiting the growth of bacteria *S. aureus* and *S. epidermidis*, and fungi *M. gypseum* and *T. mentagrophytes*. This supports the reported use of *P. guajava* in many countries as a traditional herbal medicine.

### Biography

A Adeagbo is a BSc (Hon.) student of Gastroenterology Lab, School of Physiology, University of the Witwaterstrand, Johannesburg, South Africa. He studies Physiology from Olabisi Onabanjo University Nigeria. He has worked with Pinnacle Research Centre Nigeria for two years as a Research Assistant. He is currently working on combination of African herbs in management of diabetic type 1 and type 11 in sub-Saharan Africa

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