

Efficacy of Phytochemicals Present in Leaves of *Punica granatum* against *Malassezia* Species

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ABSTRACT

Punica granatum is a valuable medicinal plant traditionally used to cure skin infections. This study was aimed to determine the antifungal activity of *P. granatum* leaves against *Malassezia* species which commonly causes superficial skin infections in humans.

Agar well diffusion method was performed using aqueous and methanol extracts of *P. granatum* leaves against three species of *Malassezia*. The chosen methanol crude extract was fractionated and the fractions were tested for antifungal activity. TLC was performed on the chosen ethyl acetate fraction followed by contact bioautography.

Methanol crude extract and the ethyl acetate fraction of methanol crude extract exhibited the highest antifungal activity against the tested *Malassezia* species. Phytochemical analysis using TLC revealed the presence many bio-active compounds in the ethyl acetate fraction. Contact bioautography of the detected spots of TLC indicated growth inhibitory activities in *Malassezia* species. Results reveal that many phytochemicals present in *P. granatum* are effective against *Malassezia* species.

Keywords: Leaves, *Punica granatum*, *Malassezia*, Medicinal plant.