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Evaluation of Antibacterial Efficacy of *Mangifera Indica* Leaf Extract Against Biofilm Forming Bacteria from Dental Plaque

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Dental infection is being considered as one of the six most widespread non- communicable diseases throughout the world. The present study aimed to isolate biofilm forming organisms from teeth and buccal cavity and to determine their capability for biofilm formation and to evaluate the antibiofilm activity of ethanolic extract of *Mangifera indica* (Mango). The ability of organisms to form biofilm play an important role in developing dental caries which may further lead to serious condition of infective endocarditis. It is therefore necessary to search for new agents that are better, cheaper and without side effects for treating infectious diseases. In this study, the collected oral samples were cultured on Congo Red Agar medium, which identifies the biofilm formers. The isolates were preliminarily identified by growth on Mueller Hinton Agar, Nutrient Agar and Mannitol Salt Agar medium. The species were further subjected to morphological and biochemical identification. The leaf ethanolic extracts of *Mangifera indica* were tested against the fifteen isolates for the antimicrobial efficacy using agar well diffusion method followed by their Phytochemical analysis. Phytochemical assays showed the presence of active pharmacological components such as tannins, phenols, saponins, glycosides, flavonoids and alkaloids. The extract also showed good antioxidant and low cytotoxicity activity. Thus, the study concluded that *Mangifera indica* extract is useful and has potential to be formulated for the control and prevention of oral diseases.

Keywords: Biofilm**,** Congo Red Agar, Cytotoxicity, *Mangifera indica*, Phytochemical analysis

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