

ANTIBACTERIAL EVALUATION OF AZADIRACHTA INDICA ETHANOLIC LEAF EXTRACT AGAINST SELECTED ACIDOGENIC ORAL BACTERIA CAUSING DENTAL PLAQUE IN FIXED ORTHODONTIC APPLIANCE PATIENTS – AN INVITRO STUDY

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ABSTRACT

The objective of our study is to evaluate the antibacterial activity of ethanolic leaf extract of *Azadirachta Indica* against selected acidogenic oral bacteria that causes dental plaque in fixed orthodontic appliance patients. *Azadirachta Indica* is used as a traditional medicine from antiquity. Various parts of the plant possess medicinal value for curing diseases. the ethanolic extract of *Azadirachta Indica* leaf were used to find out the antibacterial property against *streptococcus mutans*, *streptococcus mitis* *streptococcus sanguis* ,*streptococcus salivarius* and *Lactobacillus acidophilus* by using the Broth culture method. The extract exhibited significant antibacterial activity against *streptococcus mitis*, *streptococcus mutans* ,*streptococcus sanguis* & *streptococcus salivarius* with minimum bactericidal concentration of 250 µg/ml, 500 µg/ml , 1mg/ml & 5mg/ml whereas, the extract does not show antibacterial activity against *Lactobacillus acidophilus*.

KEYWORDS : *Azadirachta indica*, anti bacterial evaluation, MBC, oral bacteria ,orthodontic fixed appliance, dental plaque.