ANTIBACTERIAL ACTIVITY OF RESVERATROL AGAINST ORAL FACULTATIVE ANAEROBIC BACTERIA ISOLATED FROM ROOT CANAL PATIENTS

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ABSTRACT

Resveratrol (*trans*-3,4′,-5-trihydroxystilebene) phytoalexin polyphenolic compound belonging to a group of compounds known as stilbenes commonly found in plants such as grapes, berries and peanuts. With the advancement of Science, Resveratrol has proved to have various pharmacological effects to the body and even inhibiting the growth of various microbes. This study aimed to determine the antibacterial activity of Resveratrol against oral facultative anaerobic bacteria isolated from root canal patients. Resveratrol which was bought from a pharmaceutical company (RevGenetics ®) was diluted in 3.3% Dimethyl Sulfoxide (DMSO) coming up with a final concentration of 342 µg / mL. This comprised the experimental set – up while pure DMSO was used for a control set – up. The isolated oral facultative anaerobic bacterial isolates were identified within the Level II identification and possible identities of the isolates were Actinomyces gerensceriae, Bacteroides fragilis, Bifidobacterium sp., Porphyromonas gingivalis and Prevotella sp. For the sensitivity testing, the Kirby - Bauer method was utilized and results showed that all of the isolates had no presence of inhibition in the experimental set – up while zones of inhibition were present in Bifidobacterium sp. (intermediate in nature), Porphyromonas gingivalis (resistant in nature) and *Prevotella* sp. (resistant in nature).

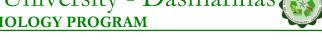


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