

ANTIMICROBIAL ACTIVITY OF ESSENTIAL OILS AGAINST ORAL PATHOGENES – INFORMATIVE ARTICLE

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Periodontal disease and Dental caries associated with dental plaque are the most common bacterial diseases, but also, significant oral health problem is Candidiasis. *Candida albicans*, is an opportunistic pathogen that can, under certain conditions proliferate and cause infections. The need for prevention and alternative forms of treatment and products for oral diseases comes from the rise in disease incidence, increased resistance by pathogenic bacteria to currently used chemotherapeutics. The products derived from medicinal plants have proven to be a source of biologically active substances, and thanks to their active principles, products based on medical herbs are more prevalent in modern phytotherapy. Essential oils are complex natural mixtures of volatile secondary metabolites – aliphatic and aromatic, terpinen and phenyl-propane compounds isolated from plants. The main constituents of essential oils are terpenes and sesquiterpenes including carbohydrates, alcohols, ethers, aldehydes and ketones, which are responsible for the fragrant and biological properties of plants. Different oils produce various pharmacological effects such as anti-inflammatory, antioxidant and anticancerogenic properties, but also oils are biocides. There are numerous *in vitro* studies that dealt with the research activities of natural herbal substances against oral bacteria that are known to be etiological factors in the development of oral and dental diseases. The phenolic major compounds of essential oils have been suggested to have a potential antifungal activity. There is ample of evidence that plant extracts and essential oils have the potential to be developed into agents that can be used as preventative or treatment therapies of oral diseases.

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