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## In vitro Antimicrobial Activity of *Salvadora persica* (Miswak) and of *Syzigium aromaticum* (Clove) Extracts against Dental Plaque Pathogens

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### Abstract

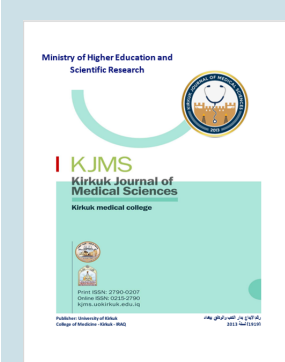
**Objective:** Some periodontal bacteria on tooth plaque were shown to be sensitive to extracts from *Syzigium aromaticum* and *Salvadora persica*. Our study was an assessment of the antimicrobial effect of *Syzigium aromaticum* and *Salvadora persica* extracts against dental plague pathogens. **Materials and Methods:** Thirty-five 35 oral swabs were taken from the patients who had the dental plaque and isolated microorganisms were identified by standard bacteriological methods. *Syzigium aromaticum* and *Salvadora persica* extracts were tested against dental plaque microorganisms on Muller Hinton agar, antimicrobial activity of the two extracts was done by paper disks-diffusion technique at 50% concentration and characterized by inhibition zones. **Results:** Forty-six (46) microorganisms were isolated from 35 dental plaque samples,18 isolates were *Staphylococcus aureus*, 3 isolates were *Staphylococcus epidermidis*, 6 isolates were *Streptococcus mutans*, 12 isolates were *Streptococcus viridans*, 1 isolate each of *Pseudomonas aeruginosa*., *Proteus spp.*, *Bacillus spp.*, 2 isolates were *Actinobacillus actinomycetemcomitans* and 2 isolates were *Candida albicans*. The zones of inhibition for two different extracts were measured. According to the findings, *Syzigium aromaticum* and *Salvadora persica* have antibacterial and antifungal effects against gram-positive and gram-negative bacteria, as well as fungi. **Conclusion:** Our study has shown that *Syzigium aromaticum* and *Salvadora persica* extracts have antimicrobial efficacy and concluded that the extracts have shown a greater effect on oral microorganisms and are recommended to be used for treatment and prevention against oral hygiene.

### Keywords

Antimicrobial activity,,   ,,,:dental plaque,,   ,,,:*Candida albicans*,,   ,,,:*Syzigium aromaticum*,,   ,,,:*Salvadora persica*

### Main Subjects

Microbiology



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