



چکیده مقالات ABSTRACTS



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IN VITRO COMPARISON OF ANTIBACTERIAL ACTIVITY OF SALVIA LERIIIFOLIA BENTH ESSENTIAL OILS ON STREPTOCOCCUS PYOGENES, WITH CETYLPRIDINIUM AND TETRACYCLINE

*Hoshyar Sarjami R^{*1}, Abrishamchi P², Khagekaramodini M³, Asili J⁴, Ghazyini K⁵, Porsa H⁶, Zarif R⁷*

1. Faculty of Science, Ferdowsi University, Mashhad, Iran

2. Faculty of Science, Ferdowsi University, Mashhad, Iran

3. Department of Medical Microbiology, University of Medical Science, Mashhad, Iran

4. Faculty of Pharmacy, Mashhad University of Medical Science

5. Department of Medical Microbiology, University of Medical Science, Mashhad, Iran

6. Contribution from Research Center for Plant Sciences, Ferdowsi University, Mashhad, Iran

7. University of Medical Science, Mashhad, Iran

Background and Objectives: There has been an increasing interest in plant essential oils during recent years because of the need of new therapies against microbes. Bacterial resistance is spreading throughout the world primarily due to excessive use of antibiotics and poor infection control practices in hospitals, making it one of our times biggest issues. On the other hand, artificial drugs such as mouthwashes, have unpleasant side effects and the number of drug resistant microorganisms is increasing. Finding plants that have antimicrobial effects and using them as mouthwashes, will be decrease the side effects and also they'll be more economical. In the present study, the antimicrobial property of essential oils of *Salvia leriifolia* Benth, (Lamiaceae), a native and pharmaceutical plant species of Khorasan province, against bacterial infection causes pharyngitis, was investigated.

Materials and Methods: Leaves of *S. leriifolia* were collected at full flowering stage and essential oils were obtained by steam distillation method. Effects of different concentrations of essential oils (50,25,12.5,6.25 mg/ml) against *Streptococcus pyogenes* (PTCC:1447) were evaluated with agar disk diffusion and hole-plate diffusion methods. Cetylpridinium and tetracycline were used as positive controls while distilled water plus tween 80 was used as negative one. After 48h, the diameters of halos indicative of lack of growth were measured. Results were compared with cetylpridinium and tetracycline using JMP and MSTATC analyses.

Results: Results showed that there wasn't any significant difference ($p < 0.01$) between two tested methods. Antibacterial effects of essential oils in all concentrations were significantly higher than cetylpridinium while, tetracycline was more efficient than essential oils and cetylpridinium.

Conclusion: Therefore, the essential oils from *S. leriifolia* is a potent antimicrobial compound with appropriate effects on the bacterial infection causes pharyngitis. More studies are suggested for production of herbal mouthwashes.

Keywords: Antibacterial effects, Cetylpridinium, Disk diffusion method, Essential oils, Hole-plate diffusion method, Pharyngitis, *Salvia Leriifolia* Benth

دانشگاه علوم پزشکی و خدمات بهداشتی درمانی تبریز



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گواهی آرایه مقاله

گواهی می‌شود

سرکار خانم ریحانه هوشیار سرجامی

در اولین کنگره بین‌المللی باکتری‌شناسی پزشکی ایران (کد: ۱۱۰۰۴۸۷) که در تاریخ ۱۷-۱۴ شهریور ماه ۱۳۹۰ در دانشگاه علوم پزشکی تبریز و خدمات بهداشتی درمانی تبریز (کد: ۱۵۱۱۱) برگزار گردید، شرکت و مقاله آرایه نموده و با توجه به مجوز شماره: ۱۰۳۹۳۶ مورخ: ۹۰/۶/۷ اداره کل آموزش مداوم جامعه پزشکی برابر با ۳/۲ امتیاز از فعالیت‌های آموزشی و پژوهشی را کسب کرده‌اند.
این گواهی منحصر به دلیل شرکت در کنگره مذکور صادر شده و جایگزین مدارک آموزشی و تخصصی نمی‌باشد.
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ارایه شده است.

سایر نویسندگان مقاله:

Parvaneh Abrishamchi, Mehrangiz Khagekaramodini, Javad Asili, Kiarash Ghazvini, Hassan Porsa, Reza Zarif

دکتر عزیز خایعقویی
قائم‌مقام وزیر در استان
و رئیس دانشگاه علوم پزشکی تبریز
دانشگاه علوم پزشکی و خدمات بهداشتی درمانی تبریز
و رئیس کنفرانس
Tabriz University of Medical Sciences

دکتر عبدالعزیز رستگار لاری

دبیر کنگره
ریحانه هوشیار سرجامی

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