

عنوان مقاله:

.The Chemical Composition and Antimicrobial Activity of Essential Oils of Vaccinium Arctostaphylos L

محل انتشار:

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خلاصه مقاله:

Objective: The growing resistance of different bacteria to antibiotic chemical drugs have become the global issue. This investigation is the first study of the antimicrobial activity of the essential oil of flowering aerial parts of Vaccinium arctostaphylos. The current research was conducted to evaluate the antibacterial effects of essential oils and hydroalcoholic extract extracted from aerial parts of Vaccinium arctostaphylos, nativespecies. Methods: The chemical composition of the essential oils extracted byhydrodistillation from the flowering aerial parts of Vaccinium arctostaphylos L. wasassessed by the GC and GC/MS analysis. Twentynine different compounds, constituting 86.61% of the oil, were recorded, among which the major compounds were á-Pinene (15.5%), Linalool (11.7%), Sandaracopimaradiene (5.9%) and Safranal (8.8%). The invitro antibacterial activity of the extracted essential oil was evaluated against someGram positive and negative bacteria. Results: According to the obtained results from the current research, the essential oil of Vaccinium arctostaphylos showed the antibacterial activities against most of the bacteria tested, including Escherichia coli, Klebsiella pneumoniae, Enterococcus faecalis and Streptococcus pneumonia, contrasted to Staphylococcus aureus. In contrast to the essential oil, the hydroalcoholic extract of Vaccinium arctostaphylos did not display the antibacterial effects against the mentioned microorganisms

کلمات کلیدی:

، Antimicrobial ، Antibacterial ، Essential oil ، Secondary metabolites

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