

Antibacterial activity of several medicinal plants against microorganisms isolated meat (Pseudomonas, Salmonella and Acinetobacter) and identification of chemical compounds of essential oils

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Introduction: Medicinal plants are herbs with one or some of their organs containing active ingredient. This substance, which forms less than 1% of the dry weight of the plant, has medicinal properties that affect living organisms. In this study, the antibacterial activity of several medicinal herbs against microorganisms isolated meat (Pseudomonas, Salmonella and Acinetobacter) and identification of chemical compounds of essential oils were investigated. **Methods:** Essential oil extraction plants was performed using the Klevenger method. Antimicrobial effects were evaluated using wells, minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC). **Results:** The results of this study showed that the diameter of the inhibition zone for thyme essential oil was 32.13 and 38 mm, respectively, for Salmonella, Pseudomonas and Acinetobacter bacteria, respectively. The highest non-growth halo was observed for Acinetobacter. Also, the minimum inhibitory concentration (MIC) of bacteria in the presence of thyme essential oils was measured 25.25 and 6 and 25 mg / ml, respectively, and the minimum concentration of bactericide (MBC) was 50.5 / 12 and 50 mg / ml Liters were measured. Also, the diameter of the growth hole for the essential oil of cinnamon for Salmonella, Pseudomonas and Acinetobacter was 25.25 and 30 mm, respectively, with the highest amount of azithobacter inhibition. Minimum inhibitory excretion (MIC) of bacteria in the presence of essential oil of cinnamon was measured 25, 12.5, 25 mg / ml, and the minimum concentration of bactericidal (MBC) was 50, 25 and 50 mg / ml Measured. The diameter of the inhibition zone for the essential oil of Laurel Salmonella,

Pseudomonas and Acinetobacter was 36, 25 and 30 mm, respectively, with the highest salmonella incidence. The minimum inhibitory concentration (MIC) of the bacteria in the presence of essential oil of the Laurel was measured at 25, 12.3 and 12.5 mg / ml, respectively, and the minimum bactericidal concentration (MBC) was 50, 25/6 and 25 Mg / ml was measured. Conclusion: According to the antibacterial effects of essential oils of thyme, Laurel and cinnamon plants, in terms of their side effects in vivo, the essential oils of these herbs can be used as a herbal remedy.

Keywords : Essential oil, Thyme, Cinnamon, Laurel , Salmonella, Pseudomonas, Acinetobacter, Antimicrobial

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