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ANTIBACTERIAL ACTIVITY OF ETHANOLIC EXTRACTS OF SYZYGIUM AROMATICUM AGAINST SOME FOOD PATHOGENIC BACTERIA

Z. Sobhkhiz-Foumani¹, M. Rahati Noveir^{2*}

¹⁾ Islamic Azad University of Guilan, Science and Research Branch, Dept of Biology - Microbiology, Rasht, Iran
²⁾ Islamic Azad University, Rasht Branch, Faculty of Agriculture, Rasht, Iran

The antibacterial properties of "Syzygium aromaticum" commonly known as "Clove" tested against three food borne pathogens such as Staphylococcus aureus, Salmonella typhi and Escherichia coli. Agar well diffusion susceptibility test revealed inhibition zone of clove sample. The minimum inhibitory concentration (MIC) value was determined by using broth dilution methods. Ethanolic extract of clove was subjected to get the MIC values against test organisms and it was found to be 6.25 mg/ml for E. coli and Staphylococcus aureus and 12.5 mg/mL for Salmonella typhi. The zone of inhibition in clove ethanolic extract against three cultures was in the range of 20 mm to 24 mm in 200 mg/mL and the value of minimum bactericidal concentration was found the range of 25-200 mg/mL. Based on obtained finding, it may be suggested that this extract may be used as natural antimicrobial additives to reclaim the shelf-life of foods.

Keywords: Antibacterial activity, cloves extracts, food borne pathogens

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^{*} Corresponding author: mrahati87@gmail.com