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The Thesis Submitted for the Degree of M.Sc
(in the field of Fisheries Science)

Antimicrobial Effects of Extracts of Tea, Eucalyptus and Wind Cheese on Aeromonas Hydophila, Yersinia Rockeri and Streptococcus Inia

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Abstract:

Humans are part of nature and the closer they get to it, the healthier it is and the longer it lives. Therefore, human beings are not only treated with chemical drugs. All natural agents have the role of cure and ultimately have the role of prevention against diseases. The presence of medicinal plants in nature is one of the great divine blessings. The aim of this study was to investigate the antimicrobial effects of the extracts of Eucalyptus, Eucalyptus and Cheese on Aeromonas hydrophila, Yersinia rockeri and Streptococcus india. The herbs, eucalyptus, wind cheese, were collected from Kohkiluyeh and Boyer Ahmad and Zabol districts and approved by Zabul National University Botanical Experts. The leaves of the plants were washed with water after collection, then shredded for microbial testing and extraction. The bacterial strains studied were prepared from vial lyophilized from Arian Mehr center of Tehran. Then the microorganisms of Yersinia rockery, Aeromonas hydrophila, Initial strythococcus were activated and proliferated at appropriate temperature. Concentrations of 10 and 20 mg / ml for Aeromonas hydrophila and 5 and 10 mg / ml for Yersinia rockery and Streptococcus ini were determined as MIC and MBC values of the tea extract on 3 bacteria, respectively. Concentrations of 2.5 and 5 mg / ml for Aeromonas hydrophila and 5 and 10 mg / ml for Yersinia rockeri and 2.5 and 5 mg / ml for Streptococcus Inyani as MIC and MBC values of zinc cheeses, respectively. Three bacteria were identified. Concentrations of 5 and 10 mg / ml for Aeromonas hydrophila and 1.25 and 2.5 mg / ml for Yersinia rockeri and 5 and 10 mg / ml for Streptococcus Inyani as MIC and MBC values of Zinc ect. Bacteria were determined. The lowest MIC was 1.25 mg / ml for the euphoric extract against Yersinia rockeri. The highest amount of MIC was related to Aeromonas hydrophila, and MBC of this extract was 20 mg / ml. Due to the antibacterial effects of the extracts studied, they can be used as a suitable alternative to antibiotics by purifying the active substances and studying them. The possibility of using these extracts orally requires further research on the antibacterial effects of these extracts on oral administration. Use of these extracts, both orally and in baths in fish, is justified provided that the efficacy and safety of the extracts in fish are proven.

Key words: Antimicrobial Effects of Plant Extract, Mountain Tea, Eucalyptus, Wind Cheese, Aeromonas Hydophila, Yersinia Rockeri and Streptococcus Inia