conferenceseries.com

4th International Congress on

Bacteriology and Infectious Diseases

May 16-18, 2016 San Antonio, USA

Microbiota identification in marine systems and their potential use as antagonists against pathogenic bacteria

Jesus Mario Iracheta Villarreal, Ricardo Sanchez Diaz, Zinnia Judith Molina Garza and Lucio Galaviz Silva Universidad Autónoma de Nuevo León, Mexico

Pathogens diseases have increased over the years due to the emergence of drug resistant strains. The use of antagonistic microorganisms against these resistant organisms is an alternative to combat infectious diseases that cause in human beings. Five microorganisms isolated from algae and clams in marine ecosystems from the state of Sonora were studied with the cross streak method to evaluate the antagonistic activity against ATCC strains of *Escherichia coli, Staphylococcus aureus, Salmonella, Bacillus cereus, Listeria monocytogenes* and *Vibrio parahaemolyticus*. The microorganisms that had antagonistic activity were identified by molecular biology using the 16S rRNA. The strains that showed the best activity were antagonistic microorganisms from algae, numbered 30R and 39, identifying them as bacteria of the genus Bacillus. Strains numbered 35 and 44, showed only antagonistic activity against *Staphylococcus aureus* and *Vibrio parahaemolyticus* respectively and identifying them as *Staphylococcus* bacteria. There has been reported various microorganisms with antagonistic activity in the marine environments and bacteria from the genus *Bacillus, Acinetobacter, Pseudomonas* and *Actinobacteria* being evaluated against pathogens. Various reports show antimicrobial activity of microbiota isolated in Mexican ecosystems. Bacteria isolated from the state of Sonora are an option for alternatives against pathogens for man.

Biography

Jesus Mario Iracheta Villarreal is currently pursuing his Master's degree in Microbiology from Universidad Autónoma de Nuevo León. He has a Químico Bacteriólogo Parasitólogo degree from the same university. His interests are microbiology in general and the microbiota of environments.

jemairvi@gmail.com

Notes: