Study effect of Indian *Costus* and sea-qust oil extract on some opportunistic bacteria and yeast

Manal Othman Al-Kattan and Amna Ali Saddiq
King Abdulaziz University, Saudi Arabia

*Klebsiella pneumoniae* (*K. pneumoniae*), *Staphylococcus aureus*, *Candida albicans* and *Candida tropicalis* are opportunistic microbes associated with certain diseases such as diabetes, deep wounds and immunodeficiency. Those microbes have evolved their resistance to antibiotics in recent years. The aim of this study is to prepare oil extracts from the dried roots of Indian *Costus* and sea-Quust and test that oil’s effectiveness on some bacteria and yeast. The results have recorded significantly high antimicrobial activity against *K. pneumoniae* and *C. tropicalis* during treatment with Indian *Costus* oil, the sea-Quost oil was also very effective on *C. albicans* and *S. aureus*. Because the cell wall (SEM) of *C. albicans* was rough and wrinkled. Therefore, the budding of yeast became less with a treatment of Indian *Costus* oil. Thus, this result demonstrates that oil extract of *Costus*-type plants is effective that their oil extract could be considered as a natural alternative to antibiotics.

Biography

Manal Othman Al-Kattan is working as an Associate Professor at Department of Microbiology Faculty of Sciences, AL Faisaliah -King Abdulaziz University Jeddah, Saudi Arabia. She has joined the Girl’s College of Education in Jeddah in 1998 then King Abdulaziz University Jeddah in 2007 until now. She received her PhD in Microbiology at 2007 in King Abdulaziz University. She has a special interest in Mycology, Bacteriology and enjoys choosing study of alternatives to antibiotics as a part of her research. She has 7 published scientific researches.

moalkallan@kau.edu.sa

Notes: