

Republic of Iraq
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AL-Muthanna University
College of Science
Department of Biology



Effect of some species of Bacteria on *Candida albicans* biofilm formation by using(Sap5 and Ece1) gene expression

A Thesis Submitted to the Council of College of Science / Al-Muthanna University as Partial Fulfillment of the Requirements for the Degree of Master of Science in Biology

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Abstract

, its biofilm formation ability was lower than that of gram positive bacteria(*Candida. albicans* and *Staphylococcus.aureus*,*Candida albicans* and *Streptococcus. pyogenes*)

The optical density (OD) were $OD_{620}=0.08$ and 0.06 for *C. albicans* culture alone and co-cultured *C.albicans* with *Pseudomonas aeruginosa* for 24 hours, respectively.

The study performed quantitative reverse transcriptase PCR to assess the expression of hyphae-specific genes during the biofilm development of *C. albicans*. Over time, the expression of hyphae-specific genes (*Sap5* and *Ecel*) was strongly enhanced