

## **SYNERGISTIC ANTI-BIOFILM EFFECT OF NATURAL EXTRACTS FOR *CANDIDA ALBICANS* INHIBITION**

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**C***andida albicans* is the most common fungal pathogen that easily infects immunodeficient or antibiotics-treated patient. *C. albicans* forms biofilm on implanted medical devices as well as human body. Recently, *C. albicans* biofilm formation deals with an important matter because it has strong resistance to antibiotics. We discovered the novel inhibitor of *C. albicans* biofilms using combination of piceatannol extracted from red wine and zerumbone extracted from ginger. The present study shows that the combination of compounds of natural extracts have a synergistic effect more than traditional antibiotics. We confirmed the reduced *C. albicans* biofilms through crystal-violet

biofilm assay and confocal laser scanning microscopy (CLSM). Also, we revealed that a combination of compounds have anti-fungal effect. We suggest that combination of natural extracts could be useful agents for *C. albicans* biofilm related diseases.

### **Biography**

Da-Seul Shin has completed her Bachelor's Degree in Biomedical Laboratory Science from Soonchunhyang University, Korea. She is pursuing her Masters in Medical Science and is doing a research at the Soonchunhyang University, Laboratory of Microbial Forensics.

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