

modulate the morphogenesis. Growth and biofilm formation by *Candida albicans* and *Candida dubliniensis* were performed in RPMI 1640. After 24, 48, 72 and 96h, biofilm supernatants were recovered and used to grow fresh *Candida albicans* and *Candida dubliniensis* cells. After overnight growth, the cells were inspected for alterations in morphology under contrast light microscopy. Cells grown in RPMI 1640 were used as a control. It was interesting to observe that *Candida albicans* cells grown in RPMI 1640 presented hyphal forms, while *Candida dubliniensis* presented pseudo-hyphal forms. The first result observed was the alteration of cell morphology of both *Candida albicans* and *Candida dubliniensis* grown on supernatants of biofilms of both species. It was observed a time dependent effect of supernatants collected from biofilms on cell morphology. The supernatants of both species had different effects on morphology switching. So, the main conclusion of this work is that there are some metabolites excreted by *Candida* cells that induce changes in its morphology and on the morphology of the other species and that these metabolites are released from biofilms. The results clearly demonstrate that *Candida dubliniensis* also undergoes morphological alterations triggered by quorum sensing molecules, which are already described and confirmed here, for *Candida albicans*.

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EFFECT OF BIOFILM EXTRACELLULAR METABOLITES ON *CANDIDA ALBICANS* AND *CANDIDA DUBLINIENSIS* MORPHOGENESIS

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Candida dubliniensis has been recovered from the oral cavity of immunosuppressed patients and is an opportunistic yeast responsible for severe Candidiasis. One of its phenotypic characteristics is the capacity to switch from yeast to hyphal (pseudohyphal) morphology. This behaviour, characteristic of both this species and *Candida albicans*, made the mismatch of these two species for years. The capacity of switching morphology has been related with virulence and several factors are responsible for it. Quorum sensing molecules are responsible for community genetic regulation mechanisms, controlling microbiological functions and are considered one of such factors. These molecules are metabolites released by planktonic and biofilm cells acting as cell-cell signaling molecules. Bacterial quorum sensing has been largely studied, but concerning yeasts, namely, *Candida* species, little is known. Regarding *Candida albicans*, only few studies have been done in this field mostly reporting the presence of farnesol as a quorum sensing molecule, able to