

3<sup>RD</sup> GLOBAL SUMMIT ON

## HERBALS &amp; TRADITIONAL MEDICINE

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**Induction of fungal biofilm in species known to cause mucormycosis and its application to the antifungal activity of Amphotericin B and Thyme oil****Karaleen Anderson**

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Fungal infections caused by opportunistic pathogens have been growing in clinical importance in the last decade with a significant increase in infections due to the *Zygomycetes*, *Mucor* and *Rhizopus* and *Absidia*. These serious and sometimes fatal infections are often associated with biofilm formation. The formation of biofilms is important clinically because biofilms often show an increase in resistance to antifungal agents when compared to free living colonies. This study aims to investigate both the biofilm formation and the antifungal susceptibility of three species that have been isolated from mucormycosis infections namely: *Rhizopus oryzae*, *Absidia corymbifera* and *Rhizomucor pusillus*. Upon successful biofilm formation, the possible synergistic effects between thyme oil and amphotericin B will be tested. If successful, this combination could allow clinicians to lower the dose of amphotericin B, thus reducing the side effect while maintaining and utilizing the effective antifungal properties of both the oil and the drug.

**Biography**

Karaleen Anderson is a PhD scholar from the Utah Valley University at USA.

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