

International Conference on

## ENVIRONMENTAL MICROBIOLOGY AND MICROBIAL ECOLOGY

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**Antimicrobial activity of *Zataria multiflora* extract on *Candida* species isolated from environment**Nasrin Amir Rajab<sup>1</sup>, Sadegh Tehrani<sup>1</sup>, Yusef Yalaly<sup>1</sup>, Ehsan Ahmadi<sup>1</sup>, Sedigheh Yusef Naanaie<sup>2</sup> and Batool Sadeghi-Nejad<sup>3</sup><sup>1</sup>University of Medical Sciences, Iran<sup>2</sup>The Agricultural and Natural of Resources center, Iran<sup>3</sup>Abadan School of Medical Sciences, Iran

**Background & Purpose:** Yeasts including *Candida* species are isolated from the infected environment of hospital in southeastern of Iran. Exposure to fungi has been reported to cause several types of human health problems, primarily irritations, infections, allergies, and toxic effects, and it has been suggested that toxigenic fungi are the cause of additional adverse health effects. On the other hand, the most of synthetic antimicrobial products have some side effects, which make them less popular. Hence, the aim of this study was to evaluate the antifungal properties of *Zataria multiflora* extract against *Candida* species isolated from the infected environment of hospital in southeastern of Iran.

**Materials & Methods:** In this study, we assessed the activities of *Zataria Multiflora* leaf extracts against *Candida* species, including *C. albicans*, *C. glabrata*, *C. tropicalis*, using the agar-well diffusion method.

**Results:** The minimal inhibitory concentrations (MICs) values of fruit and leaf extracts from *Zataria Multiflora* leaf extract ranged 1.56-12.5 mg/ml against the tested *Candida*.

**Conclusion:** Based on the results, the ethanolic extracts of the selected plants exhibited antifungal potency against the tested fungi and could be used as alternative natural antimicrobial agent and recommended to be used in formulation of herbal disinfect for the inhibition of growth of microbial environment in future researches.

**Biography**

Nasrin Amir Rajab is a Ph.D student at the University of Medical Sciences, Iran. She received a Master of Science degree from the Division of Graduate Studies. Her experience includes various programs, contributions and participation in different countries for diverse fields of study.

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