**To evaluate the possibility of Candida albikans clinical strains in liquid and solid medium by means of Zataria multiflora ,Mentha longifolia and Origanum vulgare**

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**Abstract**

**Introduction:** In recent years, Yeast, especially Candida species, are the most common fungal that are separated from human infections. In this research, the effect of some plants essence on the clinical strains of Candida albicans was examined.

**Material and methods:** 40 strains of clinical Candida from clinical purified samples were taken from Arak medical university microbial research center infectious diseases. The essence of zataria multiflora ,Mentha longifolia and Origanum vulgare were produced with Clevenger machine. Based on CLSI standard method, Kirby Bauer method was done for 3 essence on all the strains and non-fungal growth diameter zone was measured by means of caliper.

**Results:** Disk diffusion results were observed as non-growth halo diameter for 3 essence zataria multiflora ,Mentha longifolia and Origanum vulgare. This essence was also influential on many strains even in a dilution of ./625 and made halo's diameter. This situation was not observed in Origanum vulgare. totally halo's inhibition diameter zone in concentrated essence and the other dilutions in zataria multiflora were more than Mentha longifolia and Origanum vulgare.Micro plate dilution with the help of %10 concentration from 3 essence presented significant results. The lowest growth in 2.5 ,5 dilutions with the frequency 0 , and the highest growth in 0/15625 dilutions with the frequency 40 (%100) ,were observed. This decrease will be increased with time and after 24 hours , will reached to the minimum numbers.

**Conclusion:** Results showed that the antifungal activity of zataria multiflora is higher than Mentha longifolia and Origanum vulgare.

**Key words:** Candida albicans, plant essence, zataria multiflora, Mentha longifolia and Origanum vulgare.