



Research article

Evaluation of antifungal activity of essential oils against different *Candida* spp. clinical isolates

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Abstract

Candida spp. infections, also called candidiasis or candidosis, vary from mild to invasive and even can be fatal, being oral candidiasis one of the most common fungal infections in humans. Several systemic and local factors can stimulate the development of infections in the oral mucosa. The main treatment for oral candidiasis is the use of antifungals and the nystatin has been the first choice overall. However, with the increase in resistance of *Candida* species by the antifungals used in clinical practice, including the risk of toxicity associated with their use, there is an increase to the interest in researching antifungal activity in natural components. The aim of this study is to evaluate the antifungal activity of essential oils of *Citrus limonum*, *Eucalyptus globulus*, *Eucalyptus citriodora*, *Mentha Piperita* and *Rosmarinus officinalis* in isolated *Candida* spp. of the patient's oral cavity by disk diffusion test and minimum inhibitory concentration (MIC) determination. The essential oil of *E. globulus* showed the best result in the disc diffusion method, with inhibition zone ranging from 33mm to 65mm. The essential oils of *E. globulus* and *M. piperita* showed antifungal activity, the MIC values obtained with the essential oil of *E. globulus* ranged from 125 µg/mL to >1000 µg/mL and the MIC values obtained with the essential oil of *M. piperita* ranged 250 µg/mL to >1000 µg/mL.