

TITLE: ANALYSIS OF THE PROFILE OF SUSCETIBILITY AND ANTIFUNGAL ACTION OF α -TERPINEOL ON CANVAS OF YEAST *CANDIDA* GENDER

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ABSTRACT:

The α -Terpineol is a pleasant odor monoterpene found in a wide variety of essential oils, represented a new class of chemical agents with high therapeutic potential and with wide industrial application used in the pharmaceutical industries like antifungal and antiseptic. The definition of α -terpineol as a therapeutic form for the treatment of candidiasis is of great value when it comes to public health, since *Candida* is the fungus that most often causes opportunistic mycoses in man. This is a research of the explanatory type, experimental method and qualitative approach, performed at the Laboratory of Microbiology and Immunology of Faculdade Integral Diferencial - FACID / DeVry Brasil. α -terpineol showed antifungal activity against *Candida albicans*, at concentrations of 260 and 390 mg; *Candida lusitaniae*, 130 and 65 mg; *Candida dubliniensis*, 130 mg; *Candida krusei*, 260 and 390 mg; *Candida tropicalis*, 130 mg; *Candida parapsilosis*, 260 and 390 mg and *Candida glabrata* 130 mg. Regarding the susceptibility profiles of *C. albicans*, *C. krusei* and *C. parapsilosis* species, in relation to 260 mg and 390 mg concentrations. The strains showed susceptibility to the drug with inhibition halo for *C. albicans* 10 mm and 20 mm; *C. krusei* 21 mm and 36 mm and *C. parapsilosis* 21 mm and 17 mm, respectively. These results are significant due to the low concentration of α -terpineol used. In view of the resistance of the *Candida* species to the synthetic antifungals, the use of natural products in the attempt to obtain a better performance on these microorganisms is observed. The use of essential oils of vegetal origin against *Candida spp.* Is reported in some laboratory research aimed at knowing the antifungal potential of the substances. It should be noted that the drug was very efficient on *C.krusei* presenting a high sensitivity. Therefore, it is emphasized that α -terpineol has antifungal activity against *Candida* species and may in the future be a therapeutic option in the treatment of infections caused by these yeasts. However, further research on the efficacy of α -terpineol for the treatment of infections caused by *Candida* is required.

Keywords: *Candida*, medicinal plants, infection, susceptibility