

SYNERGISM BETWEEN ESSENTIAL OIL FROM *Cinnamomus zeylanicum* AND FLUCONAZOL AGAINST *Candida albicans* AND *Candida tropicalis*.

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Studies around the essential oils from plants have been gaining great perspective and aims to obtain active principles for a possible practical application in the treatment of infections as well as the prospect of isolating substances with significant efficacy and lower side effects Index and resistance of microorganisms. *Cinamomun zeylanicum*, popularly known as Shin of India. It belongs to Lauraceae family and its essential oil has eugenol as major chemical. Eugenol, in turn, has biological activities described in the literature as anti-inflammatory, anesthetic and antimicrobial. This study aimed to carry out the extraction of essential oil from the peel of *Cinamomum zeylanicum* and search of their synergistic activity with fluconazole for *Candida sp*. Obtaining the essential oil was carried out by hydrodistillation in Clevenger apparatus. For evaluation of synergistic activity in the oil associated with fluconazole, we used concentrations of 1%, 2%, 4% and 8% of oil, with the MIC of fluconazole, which is 4- μ g/L. The species of yeast used were *Candida albicans* and *Candida tropicalis*, which are, you prepare RPMI 1640 broth at a concentration equivalent to 0.5 McFarland scale. The mycological tests were incubated in stove at 35 ° C for 48h. Readings were taken in spectrophotometer on wave 520nm range. From the values obtained it can be said that concentrations of 2, 4 and 8% showed potential fluconazole, and there was an increase in death of yeast in the control of fluconazole. Emphasize the need for further studies around toxicity, mechanism of action and determination of fungicidal and fungistatic concentration of the oil so it can be used as an alternative to the improvement of the potential antifungal drugs already available on the market in view of the advent of multidrug-resistant microorganisms to existing treatments.

Key-words: Essential oil, *Cinamomun zeylanicum*, *Candida sp*, synergism