Title: Casearia sylvestris Swartz: EVALUATION in vitro of the POTENTIAL ANTIFUNGAL AGAINST Candida spp.

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Abstract:

The use of natural products in the conventional therapy has been important in the recent years due to the high rate of toxic effects and excessive growth of multidrug-resistant strains to antibiotics used in clinical practice. Between the new trials therapeutic front of fungal diseases, deserves special attention to those acquired by species of the genus Candida, being classified as fungal infections that can cause damage to human body. The plant species Casearia sylvestres Swartz has been shown interest in the scientific community, with important therapeutic properties like anti-inflammatory, antiulcerogenic, healing, cytotoxic strains in tumor cells and snakebite. In this context the present study was to evaluate the potential antifungal in vitro of the ethanolic extract of the Casearia sylvestris leaves against the standard ATCC strains of the species Candida albicans, Candida tropicalis, Candida glabrata, Candida krusei and Candida parapsilosis. The study was carried out using the dilution method in microplates (microdilution), in which the plant extract was evaluated at concentrations of 1000 to 7.81 μg / mL. As positive controls employed were the drugs fluconazole (256 ug / mL) and amphotericin B (32 ug / mL). The microplates were incubated for 48 hours at 37°C and after the incubation period were performed using the readings 2,3,5 - triphenyltetrazolium chloride (TTC). The results showed the potential of the plant extract on the selectivity of action against non-albicans strains used in the study since they did not show activity against C. albicans (MIC > 1000 mg / mL). Highlight the promising activity of strains resistant to conventional drugs, C. krusei (MIC = 125μg / mL) and C. glabrata (MIC = 62.5 mg / mL). The data reported importance for the therapy of fungal diseases, since drug therapy in infectious cases by non-albicans species is low and it is often does not exist because of multidrug resistance to antifungal agents available.

Keywords: Casearia sylvestris; antifungal activity; Candida spp; microdilution.

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