TITLE: DETERMINATION OF THE MINIMAL INHIBITORY CONCENTRATION OF STRYPHNODENDRON ADSTRINGENS ALCOHOLIC EXTRACT

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ABSTRACT:

Barbatimão Stryphnodendron adstringens, is a legum from the Brazilian cerrado, it can be found in many places around Brazil. This plant has been used in popular medicine and has healing, anti-inflammatory, hemostatic, anti-edematogenic, antiseptic and antidiarrheic properties. There is a great diversity of oral diseases that are caused in a direct or indirect way by microorganisms, such as periodontal disease, gingivitis, periodontitis, caries, bacterial plaque, thrushes, halitosis, among others. Nonetheless, there is still a shortage of products with antibacterial potential on oral care and effectiveness against oral bacteria. Therefore, this study has as its objective to evaluate the antibacterial properties on different concentrations (0,4 - 50 mg/mL) of the alcoholic extract (70:30) of Stryphnodendron adstringens, against Candida albicans. To evaluate the antimicrobial activity, the microdilution technique in broth was used and to measure the cell viability, 2,3,5 -triphenyltetrazolium chloride (TTC) was added to the solution with subsequent scanning in spectrophotometry in 540 nm. It was noted that the barbatimão extract, in concentrations of 50 and 25mg/mL reduced the viability in around 75% of the leaven strains. The lower tested concentration that showed antimicrobial activity was 0,78 mg/mL, with an action of approximately 15% of viability reduction. Based on the obtained results, que barbatimão extract showed a significant antifungal activity that motivate the realization of new tests to evaluate its utilization in products with dental purposes.

Keywords: Barbatimão, Candida albicans, Stryphnodendron adstringens, MIC.

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