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**ANTIMICROBIAL AND CYTOTOXIC POTENTIAL OF DIFFERENT EXTRACTS FROM BRAZILIAN PLANT HYPTIS LACUSTRIS**

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The use of plants in folk medicine is an ancient practice that can lead to the discovery of new molecules that could be used in modern medicine. The plant *Hyptis lacustris* (HI), from the Lamiaceae family, occurs in all regions of Brazil, and contains many species with pharmacological potential in treatments against infections, although there are still few studies on its active principles and mechanisms of action. The aim of this study is to assess the antimicrobial potential of extracts from HI obtained by different methods as well as its cytotoxicity against mammalian cells. Extracts from the leaves of HI were obtained by water at room temperature (HI-W), hot water at 95°C (HI-HW), ethanol (HI-Et) and methanol (HI-Met). The solvents of the extracts were removed by lyophilisation and rota-evaporation for the aqueous and alcoholic extracts, respectively. The resuspension was made with water (HI-W; HI-HW) and water with 5% DMSO (HI-Et; HI-Met). The antimicrobial potential was evaluated by liquid growth inhibition assay with the extracts at concentrations of 1000 µg.mL<sup>-1</sup>, 100 µg.mL<sup>-1</sup>, 50 µg.mL<sup>-1</sup> and 25 µg.mL<sup>-1</sup> in culture medium. The HI extracts were tested against the Gram-positive bacterium *Staphylococcus aureus* (Sa), the Gram-negative bacterium *Pseudomonas aeruginosa* (Pa) and the yeast *Candida tropicalis* (Ct). The cytotoxicity of HI extracts was evaluated by MTT test against mammalian Vero cells with the extracts at the same concentrations used for of the antimicrobial assays. The results showed that the HI-HW inhibit the growth of Pa at concentrations equal or superior than 50 µg.mL<sup>-1</sup> and of Sa at all concentrations, while HI-W and HI-Met inhibited the growth of both bacteria at 1000 µg.mL<sup>-1</sup>. None of the extracts inhibited C. tropicalis growth. Furthermore, the only extracts that presented cytotoxic potential were the HI-HW and HI-Met both at 1000 µg.mL<sup>-1</sup>, with cell viability being recorded near 70% (low cytotoxicity) and 0% (high cytotoxicity) respectively. In conclusion, the extract of HI-HW has potential to be further studied for antibacterial activities and medical applications at concentrations ? 100 µg.mL<sup>-1</sup>.