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Antibacterial Evaluation of Ethnolic Extracts of *Hymenaea Clebaril* L. Cases Front *Escherichia Coli*

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ABSTRACT

Introduction:The growing microbial resistance of the various drugs circulating in the market, stimulated by the indiscriminate and irrational use of drugs, demand the development of new therapeutic options that could derail this situation. Thus, the investigation of new bioactive compounds in medicinal plants with antimicrobial action in folk medicine, presents itself as an expressive source for the discovery of new substances that contribute to the minimization of this reality, considering the range of contributions of medicinal plants in the treatment of several inflammatory and infectious diseases in traditional medicine throughout the generations in the communities that hold this knowledge. Among the plant species for medicinal use, *Hymenaea courbaril*, popularly known as jatobá, stands out for a variety of therapeutic uses, such as in the treatment of diarrhea, intestinal cramps, cystitis, cough, bronchitis and asthma. **Objetives:** Based on the above, the objective of this work was to evaluate the antibacterial activity of ethanolic extracts of *Hymenaea courbaril* poop on *Escherichia coli* isolates. To prepare the extracts, the shells of the species were immersed in ethanol solution to extract their active and rotavaporated principles. The antibacterial activity was determined by the disc diffusion method in Muller Hinton agar, evaluating the antibacterial potential by measuring in millimeters (mm) the bacterial inhibition halos formed in Petri dishes. The assays were performed in triplicate, using two concentrations of ethanolic extracts, 25 mg and 50 mg. **Results and discussion:** The mean inhibition halo at the concentrations evaluated were, respectively, 8 mm and 9.7 mm. The medicinal species showed good potential of antibacterial application against the species of microorganism researched, proving to be a promising candidate in the treatment of infectious diseases caused by this microorganism, being necessary, however, to carry out tests with a more expressive number of concentrations for deepening of the microorganism study.

Keywords:

Antibacterial; *Hymenaea courbaril*; Microbial resistance.

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