TITLE:*IN VIVO ANTISEPTIC* ACTIVITY OF ETHANOLIC EXTRACT OF *HYMENAEA MARTIANA* HAYNE IN GOATS

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ABSTRACT: Pre-dipping is an important tool to control the pathogens that cause mastitis in dairy herds, and thus be fundamental in the prevention of environmental diseases and infectious origins. This study aimed to evaluate the antimicrobial and antiseptic action of the crude ethanolic extract of *Hymenaea martiana* leaves in mammary glands of Saanen goats. This study was conducted at the Laboratory of Microbiology and Immunology of UNIVASF, city of Petrolina, state of Pernambuco. The extracts were prepared using distilled water in a concentration of 5%. Ten Saanen female goatswere used, with ages varying between 2 and 5 years, between second and third lactation, and the disinfection was performed in 20 mammary glands. The animals were submitted to pre-dipping for 30 seconds of immersion, and skin swabs were collected after one minute, thirty minutes and one hour, in addition to a control sample. The collection of clinical specimens for the isolation and quantification of CFU / $cm^2$was performed in four crossed movements over an area of $2cm^2$ in the median region of the ceiling, avoiding the proximal region of the mammary sphincter. The extract diluted in autoclaved distilled water demonstrated antimicrobial activity, suggesting that occurred the extraction of bioactive substances. Regarding the antiseptic potential*H. martiana* had the same action of chlorine,although, this acted immediately, while the chlorine action happened properly an hour after the application ($P<0.05$). The activity of the extract used as sanitizing agent is important, since it reinforces the capacity of the natural products to be used by the population; some authors justify this potential, stating that there is a complexity of compounds present in a plant extract, favoring its use in animal production. Both results pointed out that the crude ethanolic extract of *H. martiana* leaves has potential to combat the proliferation of environmental and infectious bacteria, emerging as a way to prevent mastitis.

Keywords: bacterial, resistance, Staphylococcus spp., prevention