

ANTIBACTERIAL AND ANTI-VIRAL ACTIVITY OF PROTEINS FROM *LICHTI CHINNESES*, *APEIBA TIBOURBOU* AND *BIXA ORELLANA* SEEDS.

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L. Chinnesis, *A. tibourbou* and *B. Orellana* seeds have been used by the Brazilian popular medicine as antibiotic and anti-viral agents on the treatment against several diseases. Some plants possess proteins which presents inhibitory activity against microbe and virus. For this reason, we decide to investigate the presence of this proteins on the three plants mentioned above. Thus, crude extracts from seeds were prepared and precipitated with ammonium sulphate (0-70% and 0-90%). These fractions, after dialyse, were used in bacterial and anti-viral biological assays. The cells used to bacterial assays were: *E. coli*, *S. aureus* and *R. equi*. All fractions were able to inhibit the growth in bacteria Gram (+), but in contrast Gram negative bacteria was inhibited only when *A. tibourbou* was used. On the anti-viral assay were used the *Herpes simplex virus*. *L. Chinnesis* and *A. tibourbou* protein fraction were able to inhibit the attack from this virus to bovine cells. Proteins with molecular mass between 20 kDa and 70 kDa were visualized by SDS-PAGE. In intention of protein purification, ionic exchange and gel filtration chromatography were done by using CM-cellulose and Superdex 75. After complete purification, we intents to characterize these proteins for future tests in animals.