

## **Microbiological analysis of oral microbiota of nonpoisonous serpents on Acre, Amazon.**

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**Introduction:** Amazon has the highest frequency of snakebites per resident. Usually it causes a secondary bacterial infection. Considering these effects, the aim of this study was to trace antimicrobial susceptibility from bacterias most frequently isolated from the oral microbiota of wild serpents. **Material and methods:** In a pilot study, were collected samples of three species of serpents from the ZooBotanical Park at the Federal University of Acre. A sterile swab was introduced and rubbed on mouth's serpent for about 10 seconds. Then samples were plated on a petri dish with agar blood and petri dishes containing MacConkey agar, incubated under aerobic conditions at 37°C / 24h. The bacteriological characterization was carried out according to the macroscopic characteristics of the bacterial culture and conventional biochemical tests in presumptive media (Pessoa & Rugai and Kligler agar). The bacteria most frequently found in each sample were subjected to a susceptibility test with antimicrobials through a diffusion disk on Mueller Hinton agar, according to the Kirby-Bauer method. **Results and discussion:** On the *Atractus* sp. serpent, *Enterobacter* sp. was the most frequently isolate. This isolate was sensitive to polymyxin B, chloramphenicol, ampicillin + sulbactam, tetracycline, enrofloxacin and resistant to amoxicillin, rifampicin, bacitracin, penicillin and azithromycin. On the *Chironius* sp. serpent, *Klebsiella* sp. was the most frequently isolate, been sensitive to polymyxin B, chloramphenicol, enrofloxacin and rifampicin and resistant to ampicillin + sulbactam, tetracycline, amoxicillin and azithromycin. The sample collected from *Coralus hortulanus* serpent only produced one bacterial isolate, gram-negative non-fermenting bacteria, which was not identified by biochemical tests in this study. **Conclusion** Preliminary results of the study can effectively contribute in the characterization of secondary bacterial infections to snakebites and on the future creation of protocols to assist victims.

**Key words:** Microbiota, antimicrobial susceptibility, nonpoisonous serpents.