Research of *Salmonella* spp. in cloacal microbiota of yellow-footed tortoise (*Geochelone denticulata*) belonging to the Environmental Park Chico Mendes zoo – Rio Branco, Acre, Brasil

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Introduction: The yellow-footed tortoise (*Geochelone denticulata*) has in its physiological microbiota microorganisms that may become pathogenic in situations of changing pre-established ecological relationships. Due to these factors, zoo animals of the Environmental Park Chico Mendes (PACM) represent an imminent risk to handlers and animals in association, because of the conditions of the captivity. The intention was to identify the presence of *Salmonella* spp. in cloacal microbiota of animals given its zoonotic importance. **Material and methods**: We evaluated all individuals of the specie, belonging to the zoo PACM - Rio Branco/AC, totaling 29 animals. Stool samples were collected using swabs introduced via the cloacal opening. The first, being conditioned in phosphate buffered saline (PBS), sterile, the second in a tetrathionate broth. The swabs conditioned in PBS were transported to the laboratory and seeded directly in MacConkey agar and in blood agar (5%). The tetrathionate broth samples were stored in an oven for 24 hours, at 37ºC, for pre-enrichment and then seeded in *Salmonella-Shigella* agar (SS). The samples were incubated aerobically, at 37°C, being read in 24 and 48 hours. After that, the morphological characterization was performed according to the macroscopic characteristics of the colony. All colonies morphologically suggestive of *Salmonella* spp. were submitted to biochemical characterization in presumptive media (Pessoa & Rugai and Kligler agar). **Results and discussion**: No samples were identified with biochemical and/or morphological characteristics set for the gender Salmon*ella* spp.. This result can be explained by the physiological characteristics of this bacterial species as intermittent elimination of such by the host, and variations in the degree of contamination due changes in the physiology of these animals, such as hibernation and alternation of seasons. **Conclusion**: Despite the absence of *Salmonella* spp. isolates in the samples collected, the tracking of possible pathogens in this specie is necessary due the unknown origin of many of these specimens. Additionally there is the imminent risk of disease transmission for other species, zoo workers and visitors.

Key words: *Salmonella* spp, Cloacal microbiota, yellow-footed tortoise