

Risk assessment of dissemination of *Salmonella* spp. by pacaranas (*Dynomis branickii*) belonging to the Environmental Park Chico Mendes zoo – Rio Branco, Acre, Brasil

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Introduction: The specie, *Dynomis branickii*, commonly known as pacarana, ranked as the second largest rodent in the planet, is described by his dark coat with white lines on the dorsal area of the body. Due to deforestation and consumption of meat and products of this animal for many Amazonian communities, this specie is threatened with extinction. Considering that and the risk of extinction of this rodent, rodents may be reservoirs of many microbial pathogens, it is important to conduct basic studies of potential pathogens that could affect this specie and its ecosystem. In this sense, it was aimed to investigate the presence of *Salmonella* spp. in pacaranas' stool samples in order to evaluate the epidemiological importance of the specie in the maintenance and spread of the etiological agent. **Material and methods:** Samples were evaluated in all zoo animals of the Enviromental Park Chico Mendes – Rio Branco, Acre, Brasil, totaling 6 animals of the specie. Stool samples were collected introducing 2 swabs in the rectum of the animal, the first being conditioned in phosphate buffered saline (PBS), sterile, and 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 37°C, 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. **Results and discussion:** Among the animals analyzed, were not found any sample presenting morphological and/or biochemical characteristics similar to those specified for *Salmonella* spp.. This result can be explained by the physiological characteristics of this bacterial specie that leads to intermittent elimination of these by the host. **Conclusion:** Despite the absence of isolations of *Salmonella* spp. 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: Pacarana; Zoonosis; *Salmonella* spp.