

# **PRESENCE OF *Salmonella sp.* IN WATER SAMPLES OF THE GRANDE STREAM AND THE BRANCO RIVER IN BOA VISTA/RR.**

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## **ABSTRACT:**

It is of great importance for the health of the population to investigate and to determine the pathogenic microorganisms in superficial waters. Among these, the presence of *Salmonella sp.*, bacteria that it is responsible for serious food poisoning, can demonstrate the water bodies contamination, mainly by sewage effluent and the sewage treatment inefficiency. The present study aimed to evaluate the occurrence of *Salmonella sp.* in water samples of the Branco River and the Grande stream in the municipality of Boa Vista, Roraima. The water samples were collected in six spots considered strategic, three of these spots were located in the Grande stream water course and the other three in the Branco River. The sample were collected in 2019 February and the processing occurred in the Microbiology Laboratory of the Postgraduate Program in Natural Resources (PRONAT/UFRR), following the stages: (i) enrichment of the sample using Lauryl Tryptose Broth, and (ii) selective seeding using *Salmonella Shigella* agar (ASS) then incubated at 35°C for 18 hours. Among the six evaluated samples, four of them presented contamination, with higher counting in the samples collected in Grande stream, 100 and 120 CFU/mL, in the spots 2 and 3, respectively, and two samples with 10 CFU/mL in the Branco river, before the affluent exit and after the exit, spots 4 and 5. It was concluded that the affluent of the treatment system of stabilization ponds of the municipality of Boa Vista, contributed in a negative way the conservation of the water bodies that were studied, which presented a punctual contamination by *Salmonella sp.*, which represents a risk to the health of people who practice the recreation or consume the fishes that came from this place.

**Keywords:** microbiological quality, effluent, pathogenic bacteria, water resources.

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