

**TITLE:** SEARCH OF *Salmonella* spp. IN WILD RODENTS FROM THE ATLANTIC FOREST OF SOUTHERN BAHIA.

**AUTHORS:;** ADRIANE ZANQUI AFONSO CARMINATI<sup>1</sup>; AMANDA TEIXEIRA SAMPAIO LOPES<sup>2</sup>; ELIEGE JULIA EUDOXIA DOS SANTOS<sup>2</sup> ; PEDRO ALCÂNTARA BRITO JUNIOR<sup>2</sup>; GEORGE RÊGO ALBUQUERQUE<sup>2,3</sup>; MARTÍN ROBERTO DEL VALLE ALVAREZ<sup>4</sup> BIANCA MENDES MACIEL<sup>2,4</sup>

**INSTITUTION:** <sup>1</sup> Faculty of Veterinary Medicine; <sup>2</sup> Graduate Program in Animal Science, <sup>3</sup> Department of Agrarian and Environmental Sciences; <sup>4</sup> Department of Biological Sciences - UESC – Universidade Estadual de Santa Cruz (Campus Soane Nazaré de Andrade, Rodovia Jorge Amado, Km 16, Bairro Salobrinho, Ilhéus – BA)

### **ABSTRACT**

Salmonellosis is one of the main public health zoonosis, caused by *Salmonella* spp., having as reservoir both humans and animals, which may be symptomatic and asymptomatic carriers of the disease. Asymptomatic wild animals can be vectors and important agents for microorganism permanency in the environment. It is, therefore, of a great zoonotic importance, especially in areas of preserved forest close to the rural properties, whose contact of these animals with humans is often frequent. This work aims to search *Salmonella* spp. in fecal samples from wild rodents from the Atlantic Forest located in southern Bahia. A total of 67 samples of rodent feces were collected from the following genres: *Didelphis* sp. (4), *Hylaemys* sp. (31), *Marmosa* sp. (21), *Monodelphis* sp. (3), *Neocromys* sp. (1), *Oecomys* sp. (2), *Rhipidomys* sp. (2), *Thaptomys* sp. (1), and unidentified species (1). The animals came from Cariri, Faraó, Japonesa, Jueirana, Nova Angélica, and Nasha, all located in the rural area of Una, Southern Bahia. The samples were sent to the microbiology laboratory of UESC Veterinary Hospital. Approximately 1 g of each sample was inoculated in Peptone Water and incubated at 37 ° C / 18 h for bacteria non-selective pre-enrichment and then they were inoculated in Rappaport-Vassiliadis Broth and incubated at 37 ° C / 18 h for *Salmonella* spp. selective enrichment. After this process, samples from Rappaport-Vassiliadis Broth were cultivated on XLD Agar, HE agar and Bismuth Agar plates. Suspect colonies were submitted to real-time quantitative PCR for confirmation of *Salmonella* spp., using specific primers for the genus. All samples were negative for *Salmonella* spp. through this methodology. Despite the negative result, the risk of disease transmission through wild animals (and also synanthropic ones) should be monitored, thus requiring more comprehensive studies on the zoonotic potential of these animals.

**Key words:** salmonellosis, zoonosis, wild animals, qPCR

**Development Agency:** Fundação de Amparo à Pesquisa do Estado da Bahia - FAPESB