

**Título: Phenotypic characterization of bacteria present in a wetland in APA Guajuviras Farm in the city of Canoas, RS.**

**Autores** JANKOSKI, P. R.<sup>1</sup>, OLIVEIRA, M. C.;<sup>1</sup>, KOLLER, F. F. C.<sup>1</sup> (orient.).

**Instituição** <sup>1</sup>Centro Universitário La Salle – Unilasalle (Av. Victor Barreto 2288 – Canoas, RS) priscilajankoski@gmail.com; mateuscamboim@bol.com.br; koller@unilasalle.edu.br

**Resumo:**

Wetlands comprehend several ecosystems, among them swamps, which are strategic areas for conservation, due to their high biological diversity and productivity that result from the relations stablished among water, soil, vegetation and fauna. APA Guajuviras Farm reaches 558ha and swamps are observed in the area with their typical species, serving as important refuge for several animals. Swamps are ecosystems rich in life, and one of the most representatives in the production of biomass, generating a great quantity of organic material, what provides a richness of microorganisms. This study aimed to characterize bacterial isolates in a swamp in APA Guajuviras, from the cultivation in selective and differential media. Therefore, water collections were carried out in four quadrants of a wetland present in the area, in March 2015. The samples, properly identified, were taken under refrigeration to the microbiology lab at Unilasalle, where they were immediately processed. In order to obtain the bacterial isolates, a medium BHI was used, which is a non-selective medium, adding up 10 isolates. The isolates were submitted to biochemical testes from the cultivation of medium TSI, Urea and SIM. Among the inoculations with inclined agar, six presented formation of acid: two in the quadrant South and North and one for the quadrant East and West, and the alkali production was found in two isolates in the West, one in the East and one in the North. None of the isolates produced urease. Nine showed motility: 5 in the quadrant East, two in the North, and one in the East and South, and the production of indole was found in all the quadrants, but the quadrant East was the one that most appeared, with six isolates, in the quadrants North, South and East, one isolate was found, in each quadrant. Seven isolates showed sulfidric acid production, and the highest number was found in the quadrant North, evidencing variation in the organic material coming from the swamp. In the quadrant East, a higher number of isolates producers of indole, mobility and alkali was observed, whereas in the quadrant West a smaller number of isolates for all the biochemical tests was observed. The results point to the necessity of the continuation of the works that contribute to the knowledge of the microbial composition present in the swamps, as a way to cooperate to a better understanding of the dynamic of these areas.

Key words: Wetland. Microbiota. APA. Isolates.