
010A - Salinity gradient as a selective pressure in bacteria diversity from *Laguncularia racemosa* phylloplane

Marta Alves Moitinho*¹, Josiane Barros Chiaramonte², Juanita Hernandez Solano², Laura Bonini², Itamar Soares de Melo³, Rodrigo Gouvêa Taketani²

¹São Paulo University - "Luiz de Queiroz" College of Agriculture, Brazil, ²College of Agriculture Luiz de Queiroz, University of São Paulo, Brazil, ³EMBRAPA Environment, SP 340. Highway—Km 127.5, Brazil

Mangroves are dynamic and unique ecosystems which provide important ecological services to coastal areas. The phylloplane is one of the greatest microbial hosts and most of their microorganisms are uncultivated, thus having the potential to house novel bacteria species. Bacterial community structure of *L. racemosa* phylloplane, a well-adapted mangrove species with salt exudation at foliar levels, was accessed through 16S rRNA amplicon sequencing. Sampling was performed at Cananéia mangrove in São Paulo state, Brazil in three different sites across a transect from the upland to the seashore. There was significant effect of the sites in the bacterial microbial community along the transect. Higher diversity was observed in intermediary locations between the upland to the seashore, indicating that the intermediary salinity had a strong effect in bacteria diversity favoring the occurrence of k-strategist groups and increasing the rates of uncultivated bacteria. Thus, salinity had a positive effect in bacteria diversity but further studies on the ecology of these salinity-tolerant, uncultivated organisms can be explored to elucidate the structuring mechanisms of these communities in this habitat.
