MICROBIOLOGICAL QUALITY OF HONEY PRODUCED BY AFRICANIZED BEES (APIS MELLIFERA L.) AT THE EAST REGION OF RIO GRANDE DO NORTE, BRAZIL


Honey is the result of the dehydration and transformation that bees perform on the flowers’ nectar. Due to its susceptibility to environmental contaminations, honey presents a potential risk to human health and has been a constant concern for regulatory agencies. The aim of this study was to analyze the honey’s microbiological quality observing the presence of Salmonella sp., total and thermotolerant coliforms, as well as quantifying the molds and yeasts. For such purpose, 90 samples of honey (Apis mellifera L.) were collected for analysis. The average count for molds and yeasts was 1.7x10⁴ cfu g⁻¹, only 25 samples (41.7%) stood below the standard demanded by Mercosul legislation which states a maximum of 10² cfu g⁻¹ of these fungi. The same regulation requires a coliform count lower than 3 MPN g⁻¹, yet one sample presented a value greater than 1,100 MPN g⁻¹ for total and thermotolerant coliforms, and seven had values between 15 and 3.6 MPN g⁻¹. Two of the samples were positive for Salmonella sp. These results reveal that the microbiological quality of the products analyzed was not acceptable, the microorganisms found are indicators of sanitary conditions, therefore their presence is probably associated to the lack of good practices during the honey production, indicating environmental contamination. Thus, is evident the need to implement a quality control system to assure the production of a healthy innocuous honey.