

TITLE: QUALITY OF HONEY FROM NATIVE AND AFRICANIZED BEES OF RORAIMA

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ABSTRACT: Honey is a nutrient-rich product which can be applied to multiple areas. For instance, it can be used as a food resource or as a pharmaceutical compound. Its composition is linked to different factors, such as the bee species and environmental conditions, which can directly influence the natural product's microbiota. The presence of microorganisms is intrinsic to honey, however, in high amounts, they can change its properties and compromise the consumer's health. Among the aggravating factors, there are inadequate handling practices and substandard processings of honey that allow the proliferation of different types of pathogens. The main goal of this research was to characterize, under microbiological parameters, the honey of two native species (*Melipona lateralis* and *Scaptotrigona* sp.) and the africanized bee (*Apis mellifera*), from the city of Mucajaí and Boa Vista - RR. The assessed parameters were: bacteria of the group coliforms, *Salmonella* sp., molds and yeasts, using the following techniques: fermentation in multiple tubes for the coliform group and the surface plating for the others groups. The culture medium used for molds and yeasts was BDA plus clorafenicol, with incubation period of 7 days at 25°C, followed by counting of colony forming units - CFU/ml. For *Salmonella* sp., the selective medium ASS was used and the presence/absence reading was done after 24h at 35°C. Despite discussions about the forage habit of native species and its correlation with honey contamination, all samples were free of thermotolerant coliforms and *Salmonella* sp. Therefore, this result is consistent with the recommended legislation, indicating the efficiency of good practices, since these microorganisms are commonly derived from anthropic contamination. The honey sample of *M. lateralis* resulted in 1.3×10^3 CFU/ml; *Scaptotrigona* sp. in 1.0×10^3 CFU/ml; and *A. mellifera* the mean value of 8.6×10^1 CFU/ml, relative to molds and yeasts. For this parameter, the law establishes values of up to 10^4 CFU/ml for native bee honey and 10^2 CFU/ml for Africanized. Thus, all the honeys presented values consistent with the normalized for molds and yeasts. Researchs of this nature may add value to the product, ensure the safe consumption of honey and also subsidize the creation of a database of Roraima honeys.

Keywords: microbiological quality, meliponiculture, apiculture, good practices

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