

PP-315 [Beekeeping Technology and Quality] Microbiological quality of honey bee in Panama

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Honey bee as any product of natural origin, has its own microbial flora with a characteristic microbiological behaviour. It is a food whose main competitive advantage in the market, beyond its intrinsic properties, lies in the image that consumers have regarding its purity. Although the microbial load of honey is considered low, despite its high concentration of sugars and low water activity, the presence and proliferation of certain microorganisms that could act to the detriment of the quality of the product, or could cause significant harm to the consumer, cannot be ruled out. In this study, a total of 76 honey samples were analysed, divided into two groups: 59 samples with a health registration and 17 samples without a health registration, with the aim of checking whether they complied with the microbiological limits established in the national honey quality regulations. The microbiological analyses for each sample were carried out in duplicate. The results obtained were analyzed, observing that some samples corresponding to both group exceeded the established microbiological limits. In five samples (7%), "the bacteria *Escherichia coli* was detected". The microbiological quality was not met by 18% of samples without sanitary registration because they exceeded the permitted number of yeasts and molds. Microorganisms were found within the acceptable limits, but 5% of samples with sanitary registration exceeded the permitted number of Enterobacteriaceae. The mesophilic aerobic bacteria were quantified below the detection limit. "Furthermore, *Salmonella* and *Shigella* were not isolated in all samples".