



STUDY OF THE MORPHOMETRY OF THE URUÇU-AMARELA BEE (MELIPONA MONDURY)

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ABSTRACT

To maximize quality in bee production and conservation, it is essential to use identification techniques such as measuring morphometry. This process involves the detailed measurement of the bees' body structures, allowing for accurate identification and the application of appropriate management practices. This work aims to expose the anatomical and morphometric characteristics of [*Melipona mondury*], known as yellow Uruçu or bugia, and to highlight its importance in conservation and production. By understanding morphometry, it is possible to accurately identify this species and apply specific management techniques that promote its preservation and productive efficiency. The methodology used included the collection of 6 worker bee specimens of the species Uruçu amarela or bugia from each box, the dismemberment of these samples totaled 12 specimens analyzed, and the measurement of their structures using an electron microscope, a computer and a measurement application called ImageView. These tools allowed a detailed analysis of the morphometric characteristics of the bees.: The analysis revealed species-specific anatomical and morphometric details, such as the structure of the wings, head, antennae, legs, thorax, and abdomen. This data is critical for the accurate identification of the species and the implementation of conservation and production methods tailored to its needs. For example, knowing the exact size of the structures of the yellow Uruçu allows the creation of environments that meet its specific needs for food, habitat, seasonality and survival. In addition, it helps to optimize the collection of products produced by these bees, promoting more effective and sustainable management. The morphometry of *Melipona mondury* is essential for the accurate identification and effective conservation of this species. Understanding their anatomical and morphometric characteristics allows the application of specific management methods, ensuring the preservation and increased productivity of yellow Uruçu bees.

Keywords: Native bees. Meliponas. Taxonomy. Morphometry. Yellow uruçu. Bugia and melipona mondury.

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