

Multielemental characterization of the pollen produced by *Scaptotrigona Aff postica* bee from Brazil using EDXRF Technique

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The objective of this investigation was to perform a multielemental characterization of the pollen produced by *Scaptotrigona aff Postiça* Bee (popularly known as “tubi”). In recent years, the demand for natural and healthy products has grown significantly and products from Meliponiculture (creation of stingless bees) have started to be consumed on a larger scale in Brazil. Specifically, pollen has gained prominence in the nutritional field for being a protein source and rich in carbohydrates, lipids, mineral trace elements, fibers, hormones and vitamins, but scientific research is still scarce, especially regarding studies of its specific composition. The aim of this investigation was to evaluate the content of inorganic elements (multielemental analysis) in pollen from “tubi” bees. Pollen samples were collected during a one year, in a meliponary of Barra do Corda city, in the state of Maranhão. The EDXRF analyzes were carried out using an X-Ray Fluorescence spectrometer (X-123SDD, Amptek), constituted by a Silicon detector coupled a mini X-ray tube (Ag). These data are the first estimates of mineral trace elements in this natural product and provide benefits to beekeepers regarding their characteristic specifications. In addition contributes with relevant data in the nutritional field.