

## Traceability of the Propolis Produced by *Scaptotrigona Aff postica* Bee from Brazil using NAA Technique

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In the Northeast, meliponiculture presents itself as one of the zootechnical activities that has grown the most in recent years, due to its low implementation and maintenance cost, as well as a quick financial return. Meliponiculture is the creation of stingless bees (Meliponines) for the production and commercialization of beehives, honey, propolis, pollen and resins, in addition to these bees being the main agents of pollination and conservation of local biodiversity. The propolis produced by the *Scaptotrigona Aff Postica* bee (popularly known as the tubi bee) have several medical applications (bactericidal, fungicidal and virucidal), in addition to its use in the nutritional field. This species is found in the mainly in the Barra do Corda County (Maranhão) and it is the major source of income in the northeast region. Nowadays, food authentication has been a concern of producers and consumers around the world. For this reason, there is a growing need for reliable analytical techniques to provide an answer about food authenticity. With the goal for determining chemical descriptors for geographic origin (standardization), nuclear techniques are useful analytical tools with a highlight for Neutron Activation Analysis (NAA). The NAA measurement was performed in the nuclear reactor (IEA-R1, 3-4 MW, at IPEN). Propolis samples were collected monthly during a one year, directly from beehives of *Scaptotrigona Aff Postica* in a meliponary of Barra do Corda city (5° 30' 21" S and 45° 14' 6" W). The results were compared with two other species from south region. The database will aid in fraud detection of the propolis from the northeast region in Brazil.