

INVESTIGATION OF INORGANIC ELEMENTS IN SALIVA FROM *AMBL YOMMA* *CAJANNENSE* SPECIES FROM BRAZIL BY THE EDXRF TECHNIQUE

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The *Amablyomma Cajennense* tick is one of the most widespread species in Brazil. This tick is subject of studies related to antihemostatic properties and antitumor agents as well as a vector of diseases. Recently, the NAA technique has been applied to its chemical characterization. Now, this investigation is intended to be continued using the EDXRF technique. The biological material was obtained from Butantan Institute (São Paulo city, Brazil). For the saliva samples, it was necessary to maintain a colony of ticks with 30 females and 15 males, during approximately 7 months. This work was developed in collaboration with the Laboratory of Parasitology at Institute Butantan, where the colony was kept in an incubator with controlled temperature, humidity and oxygenation conditions. The saliva was collected into microcapillary tubes attached to the female hypostome and transferred to filter paper (Whatman – No. 42) in aliquots of 50 µL and 100 µL. The reference values were determined for Ca, Cl, Cu, K, Mg, Na, P, S and Zn and a comparative study of EDXRF and NAA results were carried out. These data contribute to the understanding of saliva composition, complementing its characterization as well as for the understanding of the many physiological processes related to salivary secretion. This study, also, adds expertise in several research areas, such as the formulation of vaccines and other therapeutic targets.

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