

SUMMARY OF THESIS*

BONETTI, Franco Claudio – **Ação da radiação ionizante sobre a morfologia, fisiologia e crescimento da *Leishmania amazonensis*, com avaliação de seu poder imunogênico em modelos experimentais.** São Paulo, 2002. (Dissertação de Mestrado – Instituto de Pesquisas Energéticas e Nucleares – Autarquia associada à Universidade de São Paulo).

THE ACTION OF IONIZING RADIATION ON THE MORPHOLOGY, PHYSIOLOGY AND GROWTH OF *Leishmania amazonensis*, WITH AVALIATION OF THEIR IMMUNOGENIC POWER IN EXPERIMENTAL MODELS

Leishmaniasis is a disease which affects thousands of people in the Tropical regions around the world, is caused by a protozoan of the genus *Leishmania spp.*, with urban and wild mammals acting as reservoirs. In the mammal host, the amastigote form of the parasite infects and multiplies into macrophages. Treatments for leishmaniasis have a high cost and are long lasting, frequently resulting in therapy interruption. This procedure culminates with a selection of resistant parasite strains, inducing tolerance to the therapy. Either the control of vectors or the mammal host are difficult due the social and economic implications. Thus, the search for alternatives treatments against these protozoans have been stimulated. The gamma radiation (^{60}Co) shown to be an efficient tool to kill these parasites maintaining their immunogenicity. Cellular

viability, Electronically microscopy and Multiplex-PCR techniques showed that, after irradiation, the parasites had their growth inhibited by cytoplasmatic and nucleic material disorganization, appointing the gamma radiation as important in terms of immunogens improvement.

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