# RECORDS OF THE BIOLOGICAL COLLECTION BIO COL-LLDC/INPA/MCTI, MANAUS, AM

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Biological collections are a set of biological materials stored and organized in specific locations and temperatures, which preserve the collected and studied specimens, providing information on biodiversity, its species, origin and geographic distribution.They are important for scientific research, biodiversity conservation and public decision-making.The Biobank of the Leishmaniasis and Chagas Disease Laboratory (LLCD) of the National Institute for Amazonian Research (INPA) is called Bio COL-LLDC, whose biological collection of trypanosomatids was started around 1975, when the Director of INPA at the time, Dr. Paulo A. Machado, hired entomologist Dr. Jorge Arias to form a group to study leishmaniasis.The main function of Bio COL-LLDC is the acquisition, preservation, identification, cataloging and distribution of species/strains of trypanosomatids, as well as a serum library, a deposit of extracted DNA, among other biological materials kept at ultra-low temperatures (-80ºC) and/or or cryopreserved (-196°C), authenticated to support scientific research, epidemiological studies, as well as the development and production of technological products and processes,in obtaining extracts and molecules bioactives, also acting as specialized service providers. All incoming samples are registered, with a specific nomenclature called Stock Code,with the prefix IM (INPA Manaus), followed by a number and its specificities,such as biological species,country of origin and registration number.Of the total information obtained from isolates,in the period between 1985 and 2020,totaling 35 years of work,with the exception of samples from reference strains, tissues, DNA and serum, a total of 4,115 samples were recorded. At least 2,686 were from patients (mostly isolates identified as *Leishmania guyanensis*) and 1,429 from others (insects, mammals and reptile).Biological collections, in addition to biological data, also integrate climatic and environmental information, essential for understanding life on the planet at different times, projecting future scenarios and understanding patterns of change in biodiversity. The relationship between biological and environmental data makes it possible to model phenomena, predict the emergence and spread of agricultural pests and diseases, and increase effectiveness in combating epidemics.

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