

# Experimental infection of *Leishmania (L.) chagasi* in a cell line derived from *Lutzomyia longipalpis* (Diptera:Psychodidae)

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The present work describes the in vitro infection of a cell line Lulo, derived from *Lutzomyia longipalpis* embryonic tissue, by *Leishmania chagasi* promastigotes. This infection process is compared with a parallel one developed using the J774 cell line. The *L. chagasi* MH/CO/84/CI-044B strain was used for experimental infection in two cell lines. The cells were seeded on glass coverslips in 24-well plates to reach a final number of  $2 \times 10^5$  cells/well. Parasites were added to the adhered Lulo and J774 cells in a 10:1 ratio and were incubated at 28 and 37°C respectively. After 2, 4, 6, 8, and 10 days post-infection, the cells were extensively washed with PBS, fixed with methanol, and stained with Giemsa. The number of internalized parasites was determined by counting at least 400 cultured cells on each coverslip. The results showed continuous interaction between *L. chagasi* promastigotes with the cell lines. Some ultrastructural characteristics of the amastigote forms were observed using trans