

Sesquiterpene lactones and the diterpene 5-epi-icetexone affect the intracellular and extracellular stages of *Trypanosoma cruzi*

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Chagas disease is a major health problem in Latin America and is caused by the parasitic protozoan *Trypanosoma cruzi*. Although many drugs have been used to alleviate the disease, these have been ineffective in the chronic phase and have also presented numerous side effects on patients. In this study we tested the effect of three sesquiterpene lactones (dehydroleucodine, helenalin and mexicanin) and a diterpene (5-epi-icetexone) on parasites (Y-strain) grown in host cells. At 48. h of treatment, the number of amastigotes inside the cells was lower than in the controls. This effect was observable at concentrations of 1.5-3.8. μ M, which are of low cytotoxicity to host cells. In addition, the compounds caused a decrease in the percentage of infected cells. The treatments also reduced the presence of trypomastigotes in the extracellular medium. In all cases, helenalin was the most potent. The number of parasites per cell at 24. h indicates the occurrence of multiple infection, which would a