

TRYPANOCIDAL ACTIVITY OF CRUDE EXTRACT OF *PIPER* SPECIES BY
USING COLORIMETRIC METHOD AND MICROSCOPY

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The hemoflagellate protozoan *Trypanosoma cruzi* that can be transmitted by triatominae bugs, congenital route or through blood transfusion causes American trypanosomiasis. This is a serious parasitic disease that occurs in Latin America, with considerable social and economic impacts. Two drugs, nifurtimox and benznidazole, are available for the treatment of infected people, but are poorly tolerated in the acute phase and inefficient in the chronic phase of the disease. Because of these considerations, it is important to search for new efficient chemopreventive and chemotherapeutic agents. The objective of this work was to investigate of the trypanocidal activity of crude extracts of *Piper aduncum*, *Piper arboreum*, *Piper crassinervium*, *Piper gaudichaudianum* and *Piper tuberculatum* (PIPERACEAE). The crude extracts were evaluated against *Trypanosoma cruzi* epimastigote forms (Y strain) and their activity was monitored by microscopy. In each well, was used a prompt dilution of the extracts. The efficacy of these drugs was also measured using the reduction of MTT [3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide] to formazan. Phenazine methosulfate has been used as an intermediate electron carrier for enhancement of the formazan yield and, hence, reduction of the period of incubation. Strong morphologic modifications were observed in the parasites after incubation of the extracts.