

Antileishmanial and Antitrypanosomal Activity of Triterpene Derivatives from Latex of Two *Euphorbia* Species

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The *in vitro* activity on *Leishmania infantum* promastigotes and *Trypanosoma cruzi* epimastigotes of 25 semisynthetic terpenoid derivatives has been evaluated. These compounds were obtained through chemical modifications of the major components of *Euphorbia resinifera* (-euphol and -euphorbol) and *Euphorbia officinarum* (obtusifoliol and 31-norlanosterol). Leishmaniasis and Chagas' disease are major worldwide health problems. The drugs of choice for their treatment are still problematic in both cases, and therefore there is an urgent need to discover new drugs with high activity and low side effects. Natural products have become a key source of new drugs in the last years. The genus *Euphorbia* has been the subject of abundant phytochemical and pharmacological research because of its potential medical applications, but the antiparasitic effects of derivatives from plants of this genus are still unknown. Our results showed that 76% and 64% of the test compounds had antiparasitic effects on *L. infantum* and *T. cruzi*, respectively. The different activities on both parasites, especially their moderate effects on mammalian cells, indicate an interesting selective toxicity.

Key words: Triterpenes, Antileishmanial, Antitrypanosomal