Abstract

The present investigation was to evaluate the potential trypanocidal activity of crude ethanolic extract of the fruits of Solanum palinacanthum, Solanum lycocarpum and the glycoalcaloid, solamargine. S. palinacanthum and S. lycocarpum fruit powders were submitted to exhaustively extraction with 96% ethanol and solamargine were isolated from the extract of S. palinacanthum. Both extracts and solamargine were analysed for trypanocidal activity by using MTT colorimetric assay. Extracts of S. palinacanthum showed to be more active (IC50 = 175.9 g.ml-1) than S. lycocarpum (IC50 = 194.7 g.ml-1). Solamargine presented a strong activity (IC50 = 15.3 g.ml-1), which can explain the better activity of the both extracts. Benznidazol (IC50 = 9.0 g.ml-1) is the only drug used to treat Chagas' disease. These findings demonstrate for the first time that ethanol extracts obtained from both fruits of S. palinacanthum and S. lycocarpum and also solamargine have a potential anti-trypanosomal activity.

Keywords

Solanum palinacanthum, Solanum lycocarpum, solamargine, epimastigote, antitrypanosomal activity, Trypanosoma cruzi.