

Abstract

The antileishmanial activity of extracts of *Warburgia ugandensis* (family Canellaceae), a known traditional therapy and one of the commonly used medicinal plants in Kenya was evaluated. Extracts of this plant were tested for possible antileishmanial activity *in vitro*. Different doses of hexane, dichloro-methane, ethyl acetate and methanol extracts of *W. ugandensis* were tested against *Leishmania major* and *Leishmania donovani* promastigotes and amastigotes. The hexane extract had the best activity against *L. major* promastigotes and amastigotes with IC_{50} value of 9.95 for promastigotes and 8.65 for amastigotes and minimum inhibition concentrations of 62.5 $\mu\text{g/ml}$. The activity of the hexane extract on amastigotes was comparable ($P>0.05$) to that of pentostam and amphotericin B. Similar results were obtained for *L. donovani* with IC_{50} values of 8.67 for promastigotes and 100-fold reduction of amastigotes in macrophage cultures. *Warburgia ugandensis* had lower levels of toxicities compared to pentostam and amphotericin B. This study scientifically demonstrates the potential of *W. ugandensis* in the treatment of leishmaniasis.