

Anti-trypanosomal effects of some compounds isolated from the extracts of *Warburgia ugandensis*.

Abstract:

The plant kingdom has been used as a source of compounds employed in the treatment of many disease conditions for many years. Even with the new technology in synthetic chemistry, plants are still being used as a source of lead compounds in drug development. In the treatment of trypanosomiasis, the drugs that are currently in the market were developed between 1950-1960's. These drugs are expensive and associated with a number of toxic effects, therefore there is still need to develop newer drugs in the management of trypanosomiasis. The plant *Warburgia ugandensis* is a common plant that has been used traditionally to treat many disease conditions. The crude and pure compounds from this plant were tested against trypanosomes: *T. congolense*, *T. evansi* and *T. brucei*. In vitro tests using tissue culture method and in vivo tests using mice were carried out. The results of the in vitro method indicated that the pure compound was more active than the crude extract. The in vivo method indicated that the total extract was not effective, while one of the pure compounds was too toxic, and the other one showed activity. The two compounds investigated were basically of the same structure type with a slight difference on the functional groups. These preliminary results indicate that there is a possibility of finding active compounds against Trypanosomes in plants.