

Abstract

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In Africa, more than 70% of the people use ethnomedicine for their healthcare. With the emergence of new diseases and drug resistance to infections, traditional medicine should be given more attention in modern research and development. The aim of the study was to carry out an Ethnobotanical survey on the antimycobacterial plants used by the communities living around the Lake Victoria Basin of Kenya, and to screen their crude extracts against various mycobacteria strains. From the survey, 17 medicinal plants were collected. They were identified at the Department of Pharmacy and Complimentary Alternative Medicine, Kenyatta University, Nairobi, Kenya, in whose herbarium voucher specimens were deposited. Methanolic extracts from the plants were tested against four strains of Mycobacteria (*Mycobacteria tuberculosis*, *M. kansasii*, *M. fortuitum*, and *M. smegmatis*), which were obtained from Kenya Medical Research Institute (KEMRI), Nairobi, Kenya. A BACTEC MGIT 960 system was used to bioassay the extracts. All the plant extracts inhibited mycobacterial growth at 2.0 mg/mL. *Aloe secundiflora* gave strong antimycobacterial activity (zero GUs) against *M. kansasii*, at all concentrations used. *Entada abyssinnica* was active (zero GUs at all concentrations used) against *M. tuberculosis*. *Carissa edulis* and *Vernonia amygdalina* were the most potent against *M. smegmatis* and *M. fortuitum*, completely inhibiting their growth (Zero GUs) at all concentrations used. Similarly, *Toddalia asiatica* had high inhibitory activity (Zero GUs) against *M. tuberculosis* and *M. kansasii* at all concentrations used. The results provide an indication that some of the tested plants may contain compounds that could be used against tuberculosis.