

Abstract

Numerous studies have shown an association between increased prevalence of HIV infection and the occurrence of opportunistic fungal infections [1,2]. Among the different HIV-associated fungal infections, oral mucosal lesions caused by *Candida* species are by far the most frequent manifestation [3]. Up to 90% of HIV-infected individuals suffer at least one episode during the course of their disease [3], and the incidence and severity of the episodes increase with decreasing immunity, especially when CD4⁺ cell counts fall to levels below 200 cells/mm³ [4]. *Candida albicans* is the most causative agent, accounting for more than 90% of cases [5]. However, other *Candida* species such as *C. glabrata*, *C. parapsilosis*, *C. tropicalis*, and *C. krusei* may also cause symptomatic oral candidiasis in HIV-positive individuals [6]. Other fungal infections seen in HIV-infected individuals include, cryptococcosis due to *Cryptococcus neoformans* and aspergillosis due to *Aspergillus flavus*, *A. fumigatus* and *A. niger* [7,8]. In sub-Saharan Africa, where 70% of the world cases of HIV/AIDS are found [9], oral candidiasis, including oropharyngeal and oesophageal candidiasis, are very common, causing significant morbidity among patients. Oral candidiasis is usually treated by topical antifungal agents, which include nystatin, miconazole, fluconazole, itraconazole and amphotericin B. However, the management of *Candida* infections faces a number of problems including; limited number of effective antifungal agents [10], toxicity of the available antifungal agents [10-12], resistance of *Candida* to commonly used antifungals [13-16], relapse of *Candida* infections [17], and the high cost of antifungal agents [10-12]. When relapses occur, the infections tend to be increasingly refractory to treatment. The difficulties associated with the management of *Candida* infections necessitate the discovery of new antifungal agents, in order to widen the spectrum of activity against *Candida* and combat strains expressing resistance to the available antifungal agents. Plant-derived natural products may offer potential lead to new compounds, which could act on these fungi [18]. This paper reports on the screening of 63 aqueous methanol plant extracts for activity against *Candida albicans*. The extracts were obtained from 56 plant species, belonging to 29 plant families, collected from four regions of Tanzania including Coast, Dar es Salaam, Morogoro and Tanga. Screening was achieved by using the bioautography agar overlay method, which is very convenient, simple and efficient [19]. The method can also be employed in the target-directed isolation of the active constituents.