Screening of Actinomycetes for Anti-Candida Activity

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ABSTRACT: Opportunistic human fungal pathogens like Candida spp. are emerging as a major problem across the globe, especially in immune-compromised people causing sharp increase in mortality rate. Less susceptible fungal strains like C. krusei are resistant even to the broad spectrum antifungal agents currently available. The present study highlights the potential of actinomycetes, previously isolated from diverse geographical sites within India, for producing anti-Candida compounds. The laboratory isolates of actinomycetes were screened by using well-diffusion method for anti-candida activities against the pathogens, which included Candida albicans, Candida glabrata and Candida krusei. Out of the 12 isolates screened, 3 were found to be potential candidates against Candida albicans, 2 against Candida krusei and 1 was potent against Candida glabrata. The results reported in this communication clearly demonstrate actinomycetes as an excellent source to discover and develop antifungal drugs. The positive strains were further characterized for the production of various industrially important enzymes. © 2014 iGlobal Research and Publishing Foundation. All rights reserved.