Synthesis and characterization of silver nanoparticles by "Rhizopus stolonifer" and its activity against multidrug resistant "Escherichia coli" and "Staphylococcus aureus"

By Afreen Banu

GRIN Verlag Jun 2012, 2012. Taschenbuch. Book Condition: Neu. 210x148x2 mm. This item is printed on demand - Print on Demand Neuware - Research paper from the year 2011 in the subject Chemistry - Other, Gulbarga University (Microbiology Dept), course: Ph.D, language: English, abstract: This study reports the extracellular synthesis of silver nanoparticles by Rhizopus stolonifer and its efficacy against multidrug resistant (MDR) E.coli and S.aureus isolated from Khwaja Bande Nawas Hospital, Gulbarga, Karnataka. Synthesis of silver nanoparticles (AgNPs) was carried out by using fungal filtrate of R.stolonifer and an aqueous solution of AgNO3. The characterization of AgNPs was made by UV-Visible absorption Spectroscope, Scanning Electron Microscope and Energy Dispersed Spectroscope (SEM-EDS), Transmission Electron Microscope (TEM), Fourier Transform Infrared (FTIR) spectroscopy and Atomic Force Microscope (AFM). TEM micrograph revealed the formation of spherical nanoparticles with size ranging between 3 to 20 nm. Atomic force microscopy gives the three dimensional structure of the particles. The presence of proteins was detected by FTIR spectroscopy. Three dimensional structure of AgNPs was studied by AFM. AgNPs produced by R.stolonifer gave good antibacterial activity against clinical isolates which were multidrug resistant. Here we report the efficacy of mycogenic metal nanosilver against

Reviews

This ebook is definitely not simple to begin on reading but really enjoyable to read through. This really is for all who statte that there had not been a worth reading. You may like how the author publish this ebook.

-- ***Demetrius Buckridge***

This book may be really worth a read through, and a lot better than other. It is really basic but excitement inside the 50 % in the pdf. I realized this pdf from my dad and i encouraged this publication to learn.

-- ***Curtis Bartell***