



The effect of Silver Bio-Nanoparticles Synthesized by *Curcuma longa L.* on pathogenic fungi

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Abstract : Silver has reported as inhibitor agent on medical and industrial fungi. The first light implementation of silver and silver nanoparticles(AgNPs) involves in medical industrialization such as ointments to get rid of the infection of open wounds and burns, over and above these biologically synthesized nanoparticles are highly toxic against human pathogens that showed resistance to different medications. This research encompassed the test of *Curcuma longa L* extract and Biosynthesis of silver nanoparticles by *Curcuma longa L* against four pathogenic fungi *Aspergillus niger* ,*P. nigricans*, *P. iticalum* and *Penicillum sp*, *Curcuma longa* extract has no influence on *A.niger* growth rate in comparison with the other three fungi where the radial growth rate averged (7.6, 8.3 , 2.8)cm for the three fungi abovementioned sequentially .The synthesis of silver nanoparticles examined by the alteration of color (color changed to yellow) and for the confirmation of AgNPs synthesis,UV-Vis spectroscopy was exploited for this destination at absorption between (291.5-663.5) nm and its antifungal action was evaluated .AgNPs has been the greatest inhibition ability,where the growth rate of penicillum .sp was tremendously inhibited (0.4)cm . The uttermost radial growth of *P.nigricans* and *P.iticalum* reached (6. 3 , 5. 4)cm,while *A.niger* was less susceptible compared to control.The result of this study proves that silver nanoparticles may be serve as effective inhibition factors versus pathogenic fungi.

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