



Research article

## Biosynthesis of zinc nanoparticles and its effect on enzymes production from *Chaetomium globosum* using different agricultural wastes

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### Abstract

Biosynthesis of zinc nanoparticles is one of the environmental eco-friendly. *Chaetomium globosum* isolated from healthy bean plant and identified by 18 S. Different agricultural wastes were used for production of xylanase, pectinase and chitinase in media containing zinc nitrate as nanoparticles. Olive mill wastes were most promising in zinc nanoparticle produce at different pH values (6.0, 8.0 &10). The mean diameter of zinc nanoparticles at pH 8.0 was 18.06nm. Antifungal activity of zinc nanoparticles were most promising on pathogenic fungi at pH 8.0 followed by pH 6.0 &10.0.