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Antimicrobial Activity of *Rhusparviflora*Roxb.: Leaves Extract Mediated SynthesizedZnONanoparticles

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Abstract: Human beings are known to be susceptible to microbial attack and this necessitates the development of antimicrobial agents, to counter the microbial attack. That's why, in recent years, plant mediated synthesis of metallicnanoparticles is an interesting issue of the nanoscience and nanotechnology. Many biochemical methods are used for synthesis of the nanoparticles, in order not to harm the human kind. Therefore, the present work deals with the investigation of antimicrobial activity of Zinc Oxide (ZnO) nanoparticles, synthesized from 0.1M solution of Zinc acetate dihydrate {[Zn(CH₃COO)₂].2H₂O} and aqueous extract of leaves of *Rhusparviflora*Roxb.(*Anacardiaceae*) at controlled temperature and pH range. The resultedZnOnanoparticlesas potentialantibacterial agents have been studied on *Staphylococcus aureus*(Gram positive bacteria) and *Pseudomonas aeruginosa*(Gram negative bacteria) strains. Another study has indicated that these small sized nanoparticles had showed good antifungal activity against *Aspergillusniger* and *Candida albicans* concentration 200μg/ml.

Keywords : Antimicrobial agents, *Rhusparviflora* Roxb., *Anacardiaceae*, Antimicrobial activity.

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