

Synthesis of Silver Nanoparticle from *Annona squamosa* (L.) Leaf Extract and Assessment of it's Antimicrobial Activity

Vanitha Varadharaj*, Jedidaya Synnah, Usha, Malathi kuppan

Department of Biochemistry, School Life Sciences, Vels University, Pallavaram, Chennai-600 117, India.

Corresponding author email: vrr.vanitha@gmail.com

From National Conference on Natural Products as therapeutics, Medical Microbiology, Nanobiology and System biology: Current Scenario & Emerging Trends, 'NATCON-2014'.

Post Graduate & Research Departments of Biochemistry, Microbiology, Biotechnology and Bioinformatics, Mohamed Sathak College of Arts & Science, Sholinganallur, Chennai-600119, India.

18-19 September 2014.

American J of Bio-pharm Biochem and Life Sci 2014 September, Vol. 4 (Suppl 1): P 43

ABSTRACT

Green synthesis of silver nanoparticle (AgNPs) has gained a drastic importance in the field of nanotechnology, biotechnology, cancer biology and medicine. The synthesis of nanoparticles has shot into limelight because of its efficiency and minimal health and environmental hazards as compared to conventional chemical synthesis. The present study reports the green synthesis of silver nanoparticles from *Annona squamosa* leaf extract rapidly within 20 min. The synthesized AgNPs using *Annona squamosa* leaf extract was determined by UV-visible spectroscopy and was further characterized by FT-IR. Antibacterial efficacy of silver nanoparticles was also investigated by disc diffusion method and it was found that the antibacterial activity of silver nanoparticles is impressive in hampering the growth of *E. coli*.