

ABSTRACT

Silver nanoparticles have attained special place in area of Nano science due to their antimicrobial activities. Synthesis of silver nanoparticles by using chemical reduction method and physical methods involves hazardous materials and reactions but green synthesis of silver nanoparticles is growing and ecofriendly preparation method. In green synthesis chemicals present in leaf extract ensure the reduction of aqueous silver ions. Here green synthesis of silver nanoparticles is presented in which *Polyalthia Longifolia* leaf extract ensured bio reduction of silver ions of aqueous silver nitrate to silver nanoparticles. Synthesis and stability of silver nanoparticles analyzed by UV-Visible spectrophotometer. Particle analyzer (PA-BT-90) also used to find out the particle size of synthesized silver nanoparticles which was found to be 5.12nm.