**Abstract**

 Synthesis of nanomaterials by eco-friendly method is being exploited by chemists because of several advantages over other conventional techniques. The current investigation reports the green approach for Diospyros Montana(DM) silver nanosized particles which has high antimicrobial and antioxidant activities. The synthesized nanosized particles were investigated by several techniques such as IR, Ultra violet, X-Ray Diffraction, Transmission Electron Microscope and AFM studies. Crystalline size of the silver nanoparticle is in the range of 47.05 nm which was clear from the powder X-rd studies. The silver nanoparticls prepared were tested for their antimicrobial potential against E.coli, B.subtilis, C.albicans and A.flavus species and was found to reveal excellent activity because of its volume ratio and high surface.The DPPH assy was used to find scavenging activity of free radicals. In this work we report the silver nanoparticles by aqueous Diospyros Montana leaf extract and its potential for free radical scavenging.