**ABSTRACT**

The recent development and implementation of new technologies have led to new era, the nano-revolution which unfolds role of plants in bio and green synthesis of nanoparticles which seem to have drawn quite an unequivocal attention with a view of synthesizing stable nanoparticles. The biosynthesis of nanoparticles has been proposed as a cost effective and environmental friendly alternative to chemical and physical methods. Plant mediated synthesis of nanoparticles is a green chemistry approach that interconnects nanotechnology and plant biotechnology. In the present study, synthesis of silver nanoparticles (AgNPs) has been demonstrated using extracts of *Chrysophyllumoliviforme* reducing aqueous silver nitrate. The synthesized nanosilver was characterized by IR, UV, XRD and SEMEDS. The synthesized nano silver have been screened for antioxidant and anticancer activities.