Nano Gold and Silver for Control of Mosquitoes Manipulating Nanogeometries

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Abstract : The synthesis of metallic nanoparticles is an active area of academic and more significantly, applied research in nanotechnology. Currently, nanoparticle research is an area of intense scientific interest. Silver (Ag) and Gold (Au) nanoparticles (NPs) have been the focus of fungi and plant based syntheses. Silver and gold nanoparticles are nanoparticles of silver and gold. These particles are of between 1 nm and 100 nm in size. Silver and gold have been use in the wide variety of potential applications in biomedical, optical, electronic field, treatment of burns, wounds, and several bacterial infections. There is a crucial need to produce new insecticides due to resistance and high-cost of organic insecticides which are more environmentally-friendly, safe, and target-specific. Synthesizing nanoparticles using plants and microorganisms can eliminate this problem by making the nanoparticles more biocompatible. Here we reviewed the mosquitocidal and antimicrobials activity of silver and gold nanoparticles using fungi, plants as well as bacteria.

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Keywords : nano gold, nano silver, Malaria, Chikengunia, dengue control

Conference Title : ICNN 2015 : International Conference on Nanoscience and Nanotechnology

Conference Location : London, United Kingdom

Conference Dates : March 14-15, 2015