Green Synthesis And Characterization Of Gold Nanoparticles Using Mucuna monosperma.

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ABSTRACT

The utility of plant-based phytochemicals in general synthesis and engineering of nano-phytomedicine is the association between plant science and nanotechnology that gives intrinsically green approach to nanotechnology referred as green nanotechnology. The present work aims at green synthesis of gold nanoparticles from different concentrations of Mucuna monosperma seed extract and its characterization by methods like scanning electron microscopy (SEM), UV-Visible spectrophotometer and Fourier transform infra red (FTIR) spectroscopy. The gold nanoparticles using 4% seed extract showed good stability over other concentrations. Analytical tools like FTIR, UV-Visible spectrophotometer and SEM helped understand the surface properties of the gold nanoparticles. The synthesized gold nanoparticles show spherical shape and also possibilities of L-DOPA from plant coating on it. This opens door to a lot of applications such as a major application in novel drug delivery system (NDDS).

https://www.researchgate.net/publication/343817761_Green_Synthesis_and_Characterization_of_Gold_Nanoparticles_using_Mucuna_monosperma