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Extracellular Synthesis of Metal Nanoparticles by *Claviceps paspali*: Promising Antimicrobial, Anti-Inflammatory, Antiproliferative and Anti-Angiogenic Agents

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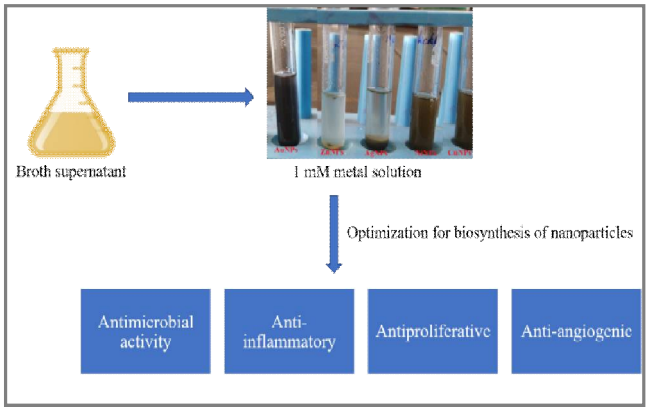
ABSTRACT

Extracellular copper, gold, nickel, silver and zinc nanoparticles were biosynthesis from Claviceps paspali. The characterization of metal nanoparticles was carried out by using UV-Visible, FT-IR, XRD and SEM spectral analysis. These biosynthesized nanoparticles were showed antimicrobial activity. Few nanoparticles showed significant anti-inflammatory activity. All the nanoparticles exhibited effective antiproliferative and anti-angiogenic activity.

Graphical Abstract



Biosynthesis of nanoparticles and their biological activity.

Keywords: *Claviceps paspali*, Antimicrobial activity, Anti-inflammatory, Antiproliferative, Anti-angiogenic.