

Green Synthesis of Silver Nanoparticles from *Sarcopharyngia ventricosa*

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Abstract:

Green syntheses of metallic nanoparticles using plant extracts as effective sources of reductants and stabilisers have acquired some momentum due to their non-toxicity, environmental friendliness, and rapidity. The current study demonstrates how to harvest aerial parts of *Anthemis pseudocotula* Boiss to create silver nanoparticles (AP-AgNPs) quickly, affordably, and sustainably. The AP aerial parts extract in this instance worked as a stabilising and reducing agent. The green AP-AgNPs that were synthesised were examined using a number of techniques, including XRD, UV-Vis, FT-IR, TEM, SEM, and EDX. The antimicrobial and antibiofilm activity of as-prepared AP-AgNPs against a variety of Gram-positive and Gram-negative bacterial strains as well as fungi, including *Escherichia coli*, *Staphylococcus aureus*, multidrug-resistant *Pseudomonas aeruginosa*, and *Acinetobacter baumannii*, was tested using a standard two-fold microbroth dilution method and tissue culture plate. The antimicrobial activity data unmistakably shown that the Gram-negative bacterium MDR-PA was more negatively influenced by AgNPs when compared to other