

Amomum subulatum Fruit Extract Mediated Green Synthesis of Silver and Copper Oxide Nanoparticles: Synthesis, Characterization, Antibacterial and Anticancer Activities		
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<p>Abstract: This research introduces an eco-friendly method for synthesizing silver nanoparticles (AgNPs) and copper oxide nanoparticles (CuONPs) using <i>Amomum subulatum</i> fruit as a reducing and stabilizing agent. AgNPs and CuONPs showed surface plasmon resonance at 440 nm and 245 nm, respectively, and were confirmed as spherical with average sizes of 20.6 nm (AgNPs) and 24.7 nm (CuONPs). Crystalline nature and elemental composition were verified by X-ray diffraction, SAED, and EDS analysis. AgNPs demonstrated stronger antibacterial and cytotoxic activities against <i>E. coli</i>, <i>S. aureus</i>, and cancer cells compared to CuONPs, suggesting their potential in treating microbial infections and cancer.</p>		