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ANTIBACTERIAL POTENTIAL OF FLY AGARIC (*AMANITA MUSCARIA*) SYNTHESIZED WITH SILVER NANOPARTICLES (AGNP) AGAINST *SALMONELLA TYPHIMURIUM*

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Abstract

Fly agaric is proven to be a toxic mushroom for humans and animals. This mushroom and silver nanoparticles (AgNP) are already proven to possess antimicrobial properties. The mushroom has a distinct appearance, its bright red and white spotted color makes it stand out. To give purpose to this plant, the researchers found a method of using these properties as an antibacterial against *Salmonella typhimurium* (*S. typhimurium*). The primary objective of this study was to minimize the harmful effects of *S. typhimurium* by adding AgNP. To do this, fly agaric liquid extract was first synthesized with AgNP. The solutions were then concocted to *S. typhimurium* in concentrations of 50%, 75%, and 100%. Agar Disk Diffusion and Minimum Inhibitory Concentration (MIC) tests were conducted. The results show that the solution did have a significant effect on the *S. typhimurium*, although the addition of AgNP did not impact its inhibitory effect.

Keywords: Antibacterial Effect, Fly Agaric, Antimicrobial Properties, Salmonella Typhimurium, Silver Nanoparticles, Agnp, Inhibitory Effect.
