

The increasing prevalence of antibiotic-resistant bacteria has intensified the search for alternative antimicrobial agents, including plant-derived compounds. This study aims to evaluate the antibacterial activity of selected herbal tea extracts using the disc diffusion (Kirby–Bauer) method. The bacterial species tested will include *Escherichia coli*, *Staphylococcus aureus*, and *Pseudomonas aeruginosa*, representing both Gram-positive and Gram-negative clinically relevant pathogens. Herbal treatments will consist of Brigham Tea Powder containing Ephedra, Mormon Tea (Brigham Tea) without Ephedra, Milk Thistle, and Green Tea. Extracts will be prepared using standardized aqueous extraction methods and applied to sterile filter paper discs and assayed using the Kirby-Bauer method. It is hypothesized that green tea will exhibit the strongest antimicrobial effect due to its catechin content, and that the Ephedra-containing preparation will demonstrate greater inhibition than the Ephedra-free formulation. Additionally, the Gram-positive organism is expected to show greater susceptibility compared to Gram-negative species. Findings from this study will contribute to the understanding of the antimicrobial potential of commonly consumed herbal products and their possible role in addressing antibiotic resistance.