Potential Use of Basil and Lemongrass Essential Oils Against Human Bacterial Pathogens

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Abstract
The increasing prevalence of multi-drug resistant bacterial infections fuels a continuing need to find effective antimicrobial agents. Basil (Ocimum basilicum) and lemongrass (Cymbopogon citratus) essential oil activity against sixteen true and opportunistic human pathogenic bacterial strains was tested, including: S. aureus, S. epidermidis, B. cereus and E. aerogenes. Inhibition of microbial growth by both essential oils was determined using a Kirby-Bauer disc diffusion assay and results compared to common antibiotics. Results indicated that both essential oils possess antimicrobial compounds against select bacterial strains. Our data support phytomedicine as a plausible option to combat antibiotic resistance.

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Comments
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The increasing prevalence of multi-drug resistant bacterial infections fuels a continuing need to find effective antimicrobial agents. Basil (*Ocimum basilicum*) and lemongrass (*Cymbopogon citratus*) essential oil activity against sixteen true and opportunistic human pathogenic bacterial strains was tested, including: *S. aureus*, *S. epidermidis*, *B. cereus* and *E. aerogenes*. Inhibition of microbial growth by both essential oils was determined using a Kirby-Bauer disc diffusion assay and results compared to common antibiotics. Results indicated that both essential oils possess antimicrobial compounds against select bacterial strains. Our data support phytomedicine as a plausible option to combat antibiotic resistance.