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Arabian Peninsula plants as anti-bacterial agents

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Despite the harsh conditions and limited water resources of the Arabian Peninsula, the plants that live in this environment contain a variety of bioactive compounds and have been used for thousands of years in traditional medicines. Our investigation of the methanol extracts of *Tamarix arabica* and *Salvadora persica* on Gram-negative and Gram-positive bacteria showed high inhibitory effects at a 1:1 volume combination, as reflected in the minimum inhibitory concentrations and minimum bactericidal concentrations. Further, the detection of phosphate indicates a loss of energy in the compound of *Escherichia coli* and *Campylobacter jejuni*. Confocal laser scanning microscopy also showed a loss in optional permeability of the cytoplasmic membrane. The bioactive compounds in the methanol extracts of *T. arabica* and *S. persica* may offer a less expensive and natural alternative to pharmaceuticals.

Biography

Awatif Aljudaibi is presently working as an Assistant Professor of Microbiology at King Abdul-Aziz University, Saudi Arabia. She has 13 publications, 5 citations and 2.70 impact factor in her credit.

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