



# antibiotics

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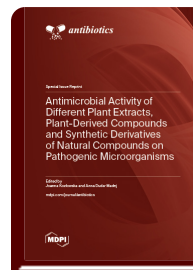
*Special Issue Reprint*

## **Antimicrobial Activity of Different Plant Extracts, Plant-Derived Compounds and Synthetic Derivatives of Natural Compounds on Pathogenic Microorganisms**

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The growing resistance of microorganisms, especially among clinical strains, to popular antibiotics used in the treatment of infectious diseases is a huge global problem. The problem with MDR (multidrug-resistant) strains is associated with significant mortality caused by these pathogenic microorganisms, especially in hospital environments. The search for new compounds of natural origin is crucial in solving this problem. Extraction is a simple method to isolate various compounds from raw plant material. Furthermore, different plant extracts have high biological activity, comparable to that of known drugs. However, in search of novel plant-derived compounds characterized with stronger biological activity than plant extracts, chemical modifications of natural compounds are helpful. Additionally, articles that present alternative methods of obtaining natural compounds with antimicrobial activity, e.g., as a result of biotransformation using whole cells of microorganisms or pure enzymes, are also welcome. It will be interesting to compare the antimicrobial activity of natural compounds and their synthetic derivatives but also different plant extracts with pure compounds, which are dominant in plants. Plant extracts and compounds obtained by chemical modifications or biotransformations may be the future of effective treatment of infectious diseases.



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