

1. Record Nr.	UNINA9910674038703321
Autore	Gwiazdowska Daniela
Titolo	Antimicrobial Substances in Plants: Discovery of New Compounds, Properties, Food and Agriculture Applications, and Sustainable Recovery
Pubbl/distr/stampa	Basel, : MDPI Books, 2022
Descrizione fisica	1 electronic resource (128 p.)
Soggetti	Technology: general issues Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Microbial contamination of agriculture and food commodities may cause significant losses, with economic, social and environmental consequences. Therefore, the search for new, promising substances that demonstrate antagonism towards different microorganisms has been observed in recent years. Different plants, as well as differentiated methods of obtaining of biological compounds, are the research subject. Moreover, current trends focus on the sustainable recovery of antimicrobial substances from waste materials. The contributed articles present original research with a focus on: The biological activity of plant-derived extracts and oils: the research is concentrated on the discovery of new sufficient antimicrobial substances, characterized by broad biological properties including antibacterial, antifungal, antimycotoxigenic and cytotoxic activity. Novel extraction techniques to obtain plant-derived extracts such as supercritical fluid extraction (SFE), which has gained acceptance for the extraction of valuable substances due to its environmentally friendly character, or ultrasound-assisted extraction (UAE). The extraction techniques of the plant-derived bioactive compounds have a significant impact on the quality of the extracts and their chemical composition