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Autore	Ju Jian <1963->
Titolo	Cinnamon: A Medicinal Plant and A Functional Food Systems [[electronic resource] /] / by Jian Ju, Mozaniel Santana de Oliveira, Yu Qiao
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-031-33505-8
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (265 pages)
Collana	Food Bioactive Ingredients, , 2661-8966
Disciplina	780
Soggetti	Food science Food—Analysis Chemistry Botany Food Science Food Chemistry Food Studies Plant Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Aspects morphological, molecular, and biochemical of cinnamon -- The main varieties and producing areas of cinnamon -- The quality evaluation of cinnamon -- Bioactive compounds and extraction methods of cinnamon -- The application of cinnamon as a spice in food -- The antioxidant activity of cinnamon extract and its active components -- The inhibitory effect of cinnamon extract and its active components on bacteria -- The inhibitory effect of cinnamon extract and its active components on fungi -- Inhibition of growth and aflatoxin production by cinnamon -- Effective biocontrol weed with cinnamon oil and extract -- The antiviral effect of cinnamon -- The application potential of cinnamon in the treatment of diabetes -- The application potential of cinnamon in neuroprotection -- The anticancer effect of cinnamon -- Hepatoprotective effect of cinnamon extracts -- Safety evaluation of cinnamon or cinnamon extract.
Sommario/riassunto	This work addresses the multiple possibilities for using cinnamon for

applications in food science technology and to help in the complimentary treatment and prevention of diseases, with priority given to secondary metabolites produced by this plant. Issues related to the functions of cinnamon and its applications, as well as the biosynthetic pathways of production by plants, are covered in depth. The link between food science and technology and specific medicinal plants has not been explored enough in the current literature, and this text looks to bridge this gap in its extensive coverage of cinnamon. CINNAMON: A Functional Food and Medicinal Plant provides readers with a broad and diverse overview of the importance of secondary metabolites produced by plants and the possibilities for innovative biotechnological approaches that introduce new potential to a wide range of industrial products. The application of cinnamon in products across food science and its numerous health benefits are outlined, including its use as a complimentary medicine for a number of diseases. This book features the main cinnamon varieties and production areas plus quality evaluation and bioactive compound extraction methods. The multiple applications of spices in foods are covered in depth, plus antioxidant activity and inhibitory effects on bacteria and fungi. Beyond its use in foods, readers will find chapters covering the antiviral effects of cinnamon and its use for the treatment and prevention of diabetes and other disorders. Also important is coverage on the safety aspects of cinnamon and its extracts. To date no book has exclusively covered the many uses of cinnamon and cinnamon extracts in food and pharmaceutical applications. This much-needed work provides a fully up to date and extensive overview for researchers to examine the many uses of cinnamon across multiple products and industries. .
