Record Nr.	UNINA9910746084103321
Autore	Chen Jen-Tsung
Titolo	Ethnopharmacology and Drug Discovery for COVID-19: Anti-SARS- CoV-2 Agents from Herbal Medicines and Natural Products / / edited by Jen-Tsung Chen
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023
ISBN	981-9936-64-0
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (591 pages)
Disciplina	614.5924144
Soggetti	Pharmacology Natural products Nanobiotechnology Bioinformatics Diseases - Causes and theories of causation Molecular biology Natural Products Pathogenesis Molecular Biology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. COVID-19: An overview of virology, mutations, pathology, epidemiology, diagnosis, preventions and treatments 2. The recent development of therapeutic strategies against COVID-19 3. Plant immunoenhancers: Promising ethnopharmacological candidates for anti-SARS-CoV-2 activity 4. Herbal formulations in fighting against the SARS-CoV-2 infection 5. Rejuvenation of traditional medicine in the 21st century against SARS-CoV-2 6. Traditional herbal medicines and their active constituents in combating SARS-CoV-2 infection 7. Antiviral phytocompounds against animal-to-human transmittable SARS-CoV-2 8. Plants-derived bioactive compounds as potential ACE-2 inhibitors against SARS-CoV-2 infection 9. Insights into in silico methods to explore plant bioactive substances in combating SARS-CoV-2 10. Dietary plants, spices and fruits in curbing SARS-CoV-2 virulence 11. Therapeutic potential of selected

1.

medicinal plants for neurological disorders after the infection of COVID-19 -- 12. Glycyrrhizae Radix et Rhizoma (Gan Cao) for the management of COVID-19 -- 13. COVID-19-induced kidney disease: Ethnopharmacological intervention to ameliorate kidney damage and improve kidney function -- 14. Phytochemicals and nutraceuticals targeting SARS-CoV-2: An in silico analysis -- 15. Therapeutic and prophylactic effects of plant derivatives against SARS-CoV-2 -- 16. Therapeutic potential of essential oils against SARS-CoV-2 infection --17. Antiviral properties of South Indian plants against SARS-CoV-2 --18. Immune-boosting plants used in Turkish folk medicine and their potential against COVID-19 -- 19. A comparison study of medicinal plants used against SARS-CoV-2 and those recommended against malaria in Africa -- 20. Exploring the potential antiviral properties of Nigella sativa L. against SARS-CoV-2: Mechanisms and prospects -- . This book presents a complete overview of COVID-19 and provides a series of in-depth analyses of the literature and a comprehensive discussion and perspectives on promising anti-SARS-CoV-2 agents based on the system of ethnopharmacology, which covers Chinese medicine, traditional medicines of India and Africa, Turkish folk medicine, essential oils, and some well-known medicinal plants. In this book, the current status of therapeutic strategies against COVID-19 was summarized and a perspective of potential options for the future was proposed. Based on ethnopharmacology, some well-established traditional herbal formulations and bioactive compounds with antivirus activity were repurposed for managing COVID-19 and postillness, including neurological disorders and kidney illness. Using drug discovery tools, promising immune enhancers were explored from phytochemicals against SARS-CoV-2. Nutraceuticals from dietary plants, spices, and fruits with anti-virus and antioxidant activities were recommended to prevent infection or severe illness caused by emerging variants. With the aid of systems pharmacology, researchers have gained insights into possible molecular mechanisms of anti-SARS-CoV-2 activity and have predicted a range of candidate compounds from medicinal plants to combat COVID-19. This book explores the current knowledge of drug discovery and ethnopharmacology for managing coronavirus diseases. The content proved the anti-SARS-CoV-2 activity from natural products and traditional herbal medicines. It contributes to the management of global public health and fits the goal of establishing "Good Health and Well-Being," which is one of "The Sustainable Development Goals (SDGs) 2030".

Sommario/riassunto