

1. Record Nr.	UNINA9910556887603321
Titolo	Sustainable Global Resources Of Seaweeds Volume 1 : Bioresources , cultivation, trade and multifarious applications / / edited by Ambati Ranga Rao, Gokare A. Ravishankar
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2022
ISBN	9783030919559 3030919552
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (661 pages) : illustrations (some colour)
Disciplina	333.9538
Soggetti	Food science Sustainability Green chemistry Chemistry, Organic Marine engineering Botany Algues (Aliment) Nutrició Conreus Food Science Green Chemistry Organic Chemistry Marine Engineering Plant Science Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	I. SEAWEEDS BIORESOURCES, ECOLOGY, BIOLOGY, COMPOSITION , CULTIVATION AND QUALITY CERTIFICATION FOR TRADE -- The ecology and physiology of seaweeds: an overview -- Potential Products from Seaweeds: An Overview -- Palmaria species : Ecology, cultivation , food & Health benefits -- A road to the sustainable seaweed aquaculture --

Seaweed cultivation technologies in Indonesia: Current trends and Future Prospects -- Collection, Biodiversity and Utilization of Seaweeds in Thailand: An Overview -- Seaweeds of Vietnam: Current status and future potentials -- Seaweeds in Mauritius: Current trends and future prospects -- Seaweed resources and their cultivation in Iran -- Seaweed Producers in Korea and their potential applications -- Biodiversity of Seaweeds in Japan and their utilization., Seaweed Producing Industries in Philippines and their utilization -- Seaweed Production companies in Korea: An Overview -- Seaweed Production companies in Australia: An Overview., Seaweeds in Ireland: main compounds, applications and industry prospects -- The Economic and Social potential of Seaweed Farming in Brazil -- A Review of Farming System, Economic Analysis and Risk Management of *Kappaphycus* Seaweed Farming in Semporna, Sabah, Malaysia., Seaweeds: potential multi-use resource -- Seaweeds: the ecological roles, the economic benefits and the threats for changing Carbon Cycle -- II USAGE OF EXTRACTS OF SEAWEEDS FOR FEED INDUSTRY AND FOR IMPROVED HEALTH -- Seaweed utilization, trade and targeted markets: An Overview., The use of seaweeds, extracts and ingredients from seaweeds to improve health of livestock -- A critical overview of current understanding of the role of seaweed microbiomes in a commercial context -- Seaweeds in animal feeds, current situation, challenges, and solutions., Seaweeds in Aquaculture: An Overview -- Antimicrobial potential of seaweeds- Critical review -- Can Seaweeds be used as immunity boosters? -- Industrial opportunities and challenges of high value compounds from seaweeds -- WASTE WATER TREATMENT, BIOREMEDIATION , ,BIOFUEL, BIOFERTILIZER AND MISCELLANEOUS APPLICATIONS OF SEAWEEDS -- Waste water cultivated macroalgae as a bio-resource in agriculture -- Elaboration and evaluation of seaweed extract as growth media for crop plants -- Leveraging seaweeds as a potential biostimulant for agriculture sustainability -- Effect of liquid biofertilizers from Seaweeds: A critical Review -- Social and Economic of Seaweed farming in globally : an overview -- Global Seaweed Products Trade: An overview -- Economic considerations of energy generation from seaweed resources -- Gracilaria cultivation and the potential role of its associated bacteria for promoting blue carbon sequestration -- Biosorption of heavy metals by seaweed biomass -- Biosynthesis of metal and metal oxide nanoparticles from seaweeds: An Overview -- Nanopesticidal potential of silver nanocomposites from seaweeds: An overview -- Seaweed-based polymers from sustainable aquaculture to "greener" plastic products -- Sustainable and biodegradable active films based on seaweed compounds to improve shelf life of food products -- Recent advances in biotechnology of seaweeds: an overview -- Valorisation of Macroalgal Biomass for Sustainable Biorefinerie -- Utilization of macroalgae (*Saccharina japonica*) as a novel substrate for production of enzymes and organic pigments by *Talaromycesamestolkiae*.

Sommario/riassunto

Marine plant life is an abundant source of nutrients that enhance the daily diet. In recent years, consuming diets rich in seaweeds or their extracts have been shown to provide health benefits due to being rich in macronutrients, micronutrients and nutraceuticals. The commercial value of seaweeds for human consumption is increasing annually, and some countries harvest several million tons annually. The seaweeds industry is valued at around \$12 billion in 2017, and supports millions of families worldwide. Seaweeds production grew globally by 30 million tons in 2016. Seaweeds have seen increasing usage in the food industry due to their abundance of beneficial nutrients, vitamins and -3 fatty acids. To date there have been no books that

comprehensively cover up-to-date information on seaweeds cultivation, processing, extraction and nutritional properties. This text lays out the properties and effects of seaweeds from their use as bioresources to their use in the feedindustry to their applications in wastewater management and biofuels. Sustainable Global Resources Of Seaweeds Volume 1: Industrial Perspectives offers a complete overview of seaweeds from their cultivation and processing steps to their bioactive compounds and Industrial applications, while also providing the foundational information needed to understand these plants holistically. Chapters in this volume focus on seaweeds bioresources, ecology and biology, composition and cultivation, plus usage of seaweeds extracts for the feed industry. An entire section is dedicated to waste water treatment, bioremediation, biofuel and biofertilizer application of seaweeds. For any researcher in need of a comprehensive and up-to-date single source on seaweeds cultivation, this volume provides all the information necessary to gain a thorough understanding of this ever-important product. .
