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Autore	Tiwari Brijesh K.
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Nota di contenuto	Cover; Title Page; Copyright Page; Contents; List of Contributors; Chapter 1 - Seaweed sustainability - food and nonfood applications; 1 - Introduction; 1.1 - History of seaweeds; 1.2 - Relevance of seaweeds; 2 - Book objective; 3 - Book structure and content; References; Chapter 2 - World seaweed utilization; 1 - Introduction; 2 - Which species and where from?; 2.1 - Current production; 2.2 - Trends in production; 2.3 - Trends in consumption; 3 - Economic relevance of seaweeds; References; Chapter 3 - Farming of seaweeds; 1 - Introduction; 2 - Seaweed production and use in perspective 3 - Primary production: the need and means to increase it 4 - Seaweed farming principles; 5 - Seaweed cultivation techniques; 5.1 - Propagule (seedling) production; 5.2 - Farming; 6 - Wild harvesting; 7 - Harvesting of cultivated seaweeds; 8 - Basic postharvest handling; 9 - Ecological and environmental impacts of seaweed farming; 10 - Economic and social considerations of seaweed farming; 10.1 - Economic considerations for carrageenan farming in tropical conditions; 11 - Opportunities and challenges; 12 - Conclusions: an idea whose time has come; References; Chapter 4 - Processing of seaweeds 1 - Introduction 2 - Harvesting of seaweeds; 2.1 - Manual harvesting; 2.2 - Mechanical harvesting; 3 - Storage of seaweeds; 4 - Drying of seaweeds; 5 - Processing of seaweeds for bioactives; 5.1 -

Pretreatment; 5.2 - Methods of extraction; 6 - Processing of seaweeds for feed; 7 - Processing for biofuels; 8 - Conclusions; References; Chapter 5 - Chemical composition of seaweeds; 1 - Introduction; 2 - Nutrients of seaweeds; 2.1 - Proteins; 2.2 - Minerals; 2.3 - Lipids; 2.4 - Vitamins; 3 - Various secondary metabolites; 3.1 - Monoterpenes; 3.1.1 - Monoterpenes from red algae
3.1.1.1 - Linear skeleton 3.1.1.2 - Cyclic skeleton; 3.1.1.3 - Monoterpenes from brown algae; 3.1.1.4 - Monoterpenes from green algae; 3.2 - Sesquiterpenes; 3.2.1 - Sesquiterpenes from red algae; 3.2.1.1 - Chamigrane skeleton; 3.2.1.2 - Laurene skeleton; 3.2.1.3 - Cuparane skeleton; 3.2.1.4 - Brasilane skeleton; 3.2.1.5 - Bisabolene skeleton; 3.2.1.6 - Other skeletons; 3.2.2 - Sesquiterpenes from brown algae; 3.2.3 - Sesquiterpenes from green algae; 3.3 - Diterpenes; 3.3.1 - Diterpenes from brown algae; 3.3.1.1 - Xenicane skeleton; 3.3.1.2 - Dolabellane and dolastane skeletons
3.3.1.3 - Extended sesquiterpenes (hydroazulenoids) 3.3.1.4 - Other skeletons; 3.3.1.4.1 - Diterpenes from red algae; 3.3.1.4.2 - Diterpenes from green algae; 3.4 - Meroterpenoids; 3.5 - C15-acetogenins; 3.6 - Phlorotannins; 3.7 - Steroids; 4 - Conclusions; References; Chapter 6 - Seaweed proteins, peptides, and amino acids; 1 - Introduction; 2 - Seaweed protein profile; 3 - Seaweed amino acid profile; 4 - Seaweed peptide profile; 5 - Purification technique; 6 - Functional properties of seaweed protein, peptides, and amino acids; 6.1 - Antihypertensive activity; 6.2 - Antioxidant properties
6.3 - Other activities

Sommario/riassunto

Seaweed Sustainability: Food and Non-Food Applications is the only evidence-based resource that offers an abundance of information on the applications of seaweed as a solution to meet an increasing global demand for sustainable food source. The book uncovers seaweed potential and describes the various sources of seaweed, the role of seaweeds as a sustainable source for human food and animal feeds, and the role of seaweed farming for sustainability. In addition to harvesting and processing information, the book discusses the benefits of seaweed in human nutrition and its nutraceutical prope
