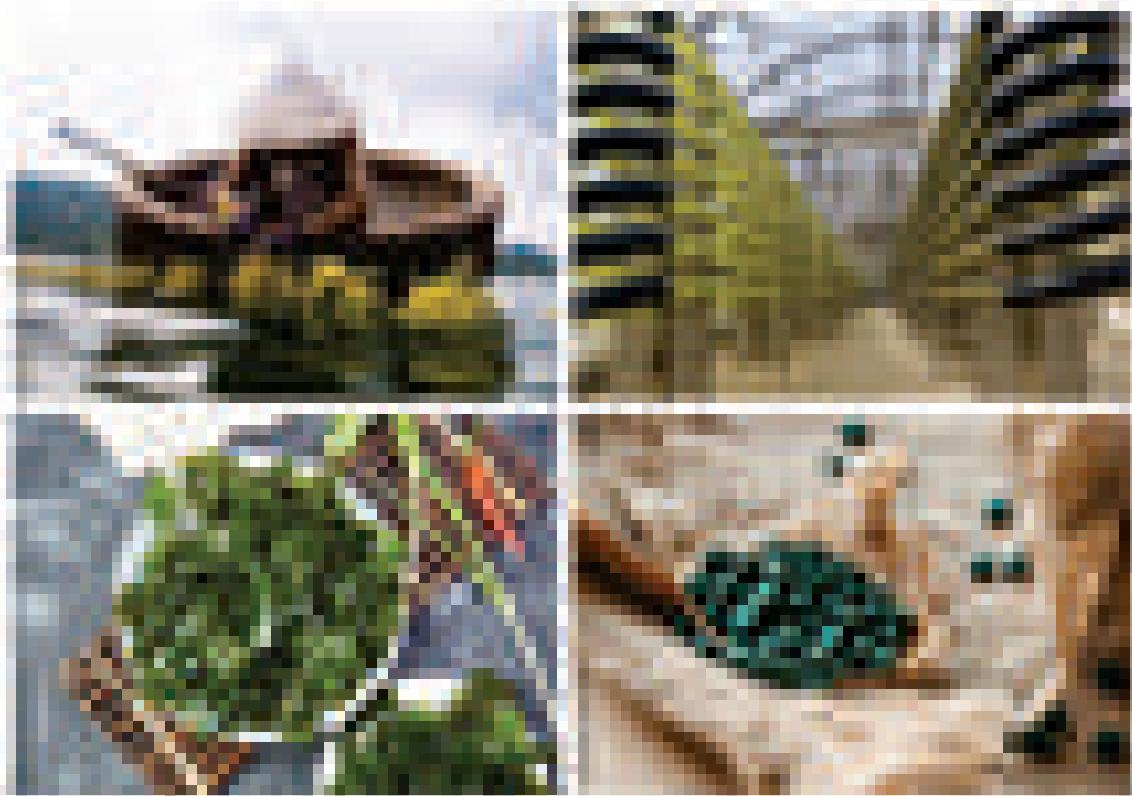


Algal Farming Systems From Production to Application for a Sustainable Future



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Chapter

Algae-Based Cosmeceutical Products in the Market – Present Scenario and Future Perspectives

By *Afroz Jahan, Iffat Zareen Ahmad*

Book [Algal Farming Systems](#)

Edition	1st Edition
First Published	2024
Imprint	Apple Academic Press
Pages	16
eBook ISBN	9781032700359

ABSTRACT

In the world cosmetics are staggeringly in use by citizens to defend the skin from external stimuli. Marine algae have increment enormous attention in cosmeceuticals. As the synthetic cosmetic products caused unfavorable side effects and consequence in low absorption rate due to the chemicals' bigger molecular size the consumer predilection towards natural cosmetic commodity has enhanced. Algae an oxygenic photosynthetic organism that are mainly recovered in marine milleus and marshes. In the tract of

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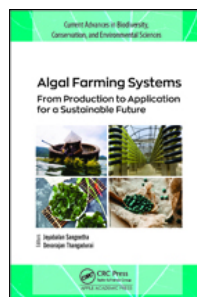
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Algal Farming Systems From Production to Application for a Sustainable Future

Editors: Jeyabalan Sangeetha, PhD
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Published. Available now.

Pub Date: April 2024

Hardback Price: see ordering info

Hard ISBN: 9781774916520

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Pages: 432pp w index

Binding Type: hardback / ebook

Series: [Current Advances in Biodiversity, Conservation and Environmental Sciences](#)

Notes: 13 color and 15 b/w illustrations

The farming and cultivation of algae can provide sustainable solutions for issues like food security-related problems, costly health-related products, sustainable fuels, and more. However, the use of algae is currently restricted to high-value, low-volume markets, mainly due to the high investment and production costs involved. In recent years, algaculture for food and fuel purposes has begun a transition from R&D and pilot-scale operations to commercial-scale systems. This new book, *Algal Farming Systems: From Production to Application for a Sustainable Future*, presents the latest technological innovations in algae production, market status, and prospects for algal applications.

The book provides informative overviews of different perspectives on the commercial production of algae-based food, health, and high-value cosmeceutical products, providing an institutional framework to support and promote the development and commercialization of algal farming. The book has been divided into four parts. Part I discusses phycotechnology and highlights the current trends and future scope of algal technology. Part II presents new information on algal culture conditions and cultivation strategies, including a look at geographic position and local climate as key factors in the implementation of microalgae-based processes. Algal production, marketing strategies, and their commercialization are discussed in Part III. A case study on the microalgae market from Allmicroalgae, a biotechnology company in Portugal, is also presented. In Part IV, chapters extensively cover the industrial applications of algae, focusing mainly on nutraceutical, pharmaceutical, and cosmeceutical applications of microalgae and macroalgae. The green synthesis of nanoparticles from algae for various commercial applications is also highlighted in the book.

This book consolidates the latest research on algae in the field, together with market potential and policy considerations. It will be of immense benefit to researchers, academicians, entrepreneurs, policymakers, and those interested in the current status and future possibilities of algae commercialization.

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