

## Seaweed and microalgae as alternative sources of protein

Edited by Professor Xingen Lei, Cornell University, USA



**burleigh dodds**  
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## New title information

# Seaweed and microalgae as alternative sources of protein

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### Endorsement:

"One of the greatest challenges we face in the 21st century is to provide an affordable, nutritionally balanced, safe and sustainable food supply for a growing global population. To meet this challenge, we must develop novel food and nutrient sources to complement traditional foods. Seaweed and microalgae have great untapped potential as sources of high quality protein and other nutrients. This book provides a comprehensive review of this potential written by leading authorities in the field."

Professor Dennis D. Miller, Cornell University, USA

### Description:

With traditional sources of protein considered as major contributors to climate change, there is growing interest in alternative, more 'climate-smart' sources of protein. This collection assesses the viability of using seaweed as a protein source.

*Seaweed and microalgae as alternative sources of protein* summarises current advances in utilising macroalgae and microalgae as alternative sources of proteins. The collection assesses the role of seaweed in energy production and carbon capture and discusses developments in macroalgae and macroalgal farming, such as propagation/seeding, growing, harvesting, disease management and prevention. Chapters discuss the practical application of using seaweed as an alternative protein in human, ruminant, pig, poultry and marine diets.

Edited by **Professor Xingen Lei**, Cornell University, USA *Seaweed and microalgae as alternative sources of protein* will be a standard reference framework for researchers from universities or other research centres interested in livestock nutrition, companies involved in the manufacture or supply of animal feed or livestock nutrition services, government and other agencies regulating the animal feed sector, as well as farmers interested in furthering their knowledge on recent developments in the animal feed/livestock nutrition sector.

### Key features:

- Summarises current advances in the use of seaweed and microalgae as alternative sources of protein primarily in the livestock sector
- Provides an authoritative assessment on the need for alternative protein/energy sources in the agricultural market
- Highlights the adaptability of seaweed/macroalgae for use across different diets (e.g. human, ruminant, swine, poultry, marine)

### Audience:

Researchers from universities or other research centres interested in livestock nutrition, companies involved in the manufacture or supply of animal feed or livestock nutrition services, government and other agencies regulating the animal feed sector, farmers interested in furthering their knowledge on recent developments in the animal feed sector.

### Editor details:

**Dr Xingen Lei** is Professor of Molecular Nutrition in the Department of Animal Science at Cornell University, USA. Professor Lei has an international reputation for his wide-ranging research in nutrition as well as biofuels and algal biomass research. Amongst his many achievements, Professor Lei developed a new phytase enzyme that is now used in 71 countries to improve feed phosphorus bioavailability to animals and reduce their phosphorus excretion. He has won a number of awards from The American Society for Nutrition and the American Society of Animal Science. He is Associate Editor of the Journal of Nutrition as well as President of TEMA (Trace Elements in Man and Animals).

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