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Book Reviews

J. Shi, C.-T. Ho and F. Shahidi, editors. Asian Functional Foods, CRC Press/Taylor and Francis Group, Boca Raton, FL, USA, 2005 (xxi+647 pp., £79.99, ISBN 0-8247-5855-2)

Functional foods have clearly emerged as a major food industry buzzword. A significant driving force in the functional foods marketplace is consumer demand, as the consumers want to optimise their health through food. Health and 'healing' foods have a long history in Asian countries. Traditionally, Asian functional foods were produced on a small scale with manual operations, and then consumed locally. In the last few decades, mass production of functional foods with modern techniques has begun to play an increasingly important role in the production of many Asian functional food products. During the past decade the consumption of functional foods has emerged as a major consumer-driven trend and this trend is expected to continue and need for scientific information on all aspects of functional foods is vital to the advancement of this emerging sector.

Asian Functional Foods discusses the biochemistry, nutrition, physiology and food technology for a wide range of traditional Asian foods. The 21 chapters in this book cover a wide range of traditional Asian functional foods, their history, functionality, chemical, physical and physiological properties and health benefits. Separate chapters have been included on the Asian herbal products, antiaging properties of Asian functional foods, functional foods from garlic and onion.

Fermentation plays an important role in the production of Asian foods. The topics of functional foods from fermented vegetable product 'kimchi' and soybean products have been discussed in the book. The operational principals of the conventional and emerging food processing methods are described in the last chapter of the book. Thousands of products with supposed health benefits are now available in the world market and the number of products is soaring. The scientific community must apply modern technologies to ensure the efficacy and safety of the traditional functional foods before developing them into first-class dietary supplements.

In conclusion, the information given in this book will generate opportunities for greater utilization of traditional Asian functional foods and will be useful to a wide spectrum of food scientists and technologists, nutritionists, biochemists and entrepreneurs worldwide.

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C. Wrigley, H. Corke and C. Walker, editors. Encyclopedia of Grain Science (2004, Academic Press, Oxford, UK) (xxvii+1428+1 lxxxvpp., £510.00, ISBN 0-12-765490-9(3 Volume set))

Grains are the stuff of life. They have always been critical to mankind's existence. The cultivation of grains was thus the critical development that changed human from the huntergatherer nomad into the settled agriculturalist, leading in turn to opportunities for cultural activities. With the improvements in all aspects of grain science and technology, grains contribute to the wider range of our foods as well as enter an amazing diversity of non-food applications.

The Encyclopedia of Grain Science is an in-depth and authoritative reference covering all of areas of grain science. Coverage of three volumes includes everything from the genetics of grains to the commercial, economic and social aspects of this important food source. Also covered are the biology and chemistry of grains, the applied aspects of grain production and the processing of grains into various food and beverage products. With the paramount role of cereals as a global food source, this encyclopedia is sure to become the standard reference work in the field.

The aim in compiling this book is to cover everything in complex range of topics that a true encyclopedia of grain science should offer. This diversity is three dimensional:

- 1. One axis covers the wide range of grain species, especially those of economic value to mankind and his general environment. These include the cereal grains, the oilseeds, the pulses (grain legumes), the soybean (which is both a pulse and an oilseed), as well as amaranth and quinoa.
- 2. The second dimension covers the sequence of events that is common to all grains, namely, breeding and selection, the production of seed for sowing and the grain for harvest, harvesting, storage, transport and marketing of the grain, and finally processing of the grain to produce food and feed products.
- 3. A third axis also considered involves the diversity of scientific disciplines used to investigate the questions arising