Tropical Fruits Crop Production Science In Horticulture

While products such as bananas, pineapples, kiwifruit and citrus have long been available to consumers in temperate zones, new fruits such as lychee, longan, carambola, and mangosteen are now also entering the market. Confirmation of the health benefits of tropical and subtropical fruit may also promote consumption further. Tropical and subtropical fruits are particularly vulnerable to postharvest losses, and are also transported long distances for sale. Therefore maximising their quality postharvest is essential and there have been many recent advances in this area. Many tropical fruits are processed further into purees, juices and other value-added products, so quality optimization of processed products is also important. The books cover current state-of-the-art and emerging post-harvest and processing technologies. Volume 1 contains chapters on particular production stages and issues, whereas Volumes 2, 3 and 4 contain chapters focused on particular fruit. Chapters in Volume 3 of this important collection review factors affecting the quality of different tropical and subtropical fruits, concentrating on postharvest biology and technology. Important issues relevant to each specific product are discussed, such as postharvest physiology, preharvest factors affecting postharvest quality, quality maintenance postharvest, pests and diseases and value-added processed products, among other topics. Along with the other volumes in the collection, Volume 3 is an essential reference for professionals involved in the postharvest handling and processing of tropical and subtropical fruits and for academics and researchers working in the area Covers current state-of-the-art and emerging post-harvest and processing technologies Important issues relevant to each particular fruit are discussed, such as postharvest physiology, preharvest factors affecting postharvest quality and pests and diseases "Global papaya production has grown significantly over the last few years, mainly as a result of increased production in India. This is the first comprehensive book authored by an international team of experts at the forefront of research and covers botany, biotechnology, production, postharvest physiology and processing"-- The world population has been increasing day by day, and demand for food is rising. Despite that, the natural resources are decreasing, and production of food is getting difficult. At the same time, about one-quarter of what is produced never reaches the consumers due to the postharvest losses. Therefore, it is of utmost importance to efficiently handle, store, and utilize produce to be able to feed the world, reduce the use of natural resources, and help to ensure sustainability. At this point, postharvest handling is becoming more important, which is the main determinant of the postharvest losses. Hence, the present book is intended to provide useful and scientific information about postharvest handling of different produce. This volume, Temperate Fruits: Production, Processing, and Marketing, presents the latest pomological research on the production, postharvest handling, processing and storage, and information on marketing for a selection of temperate fruits. These include apple, pear, quince, peach, plum, sweet cherry, kiwifruit, strawberry, mulberry, and chestnut. With chapters from fruit experts from different countries of the world, the book provides the latest information on the effect of climate change on fruit production, organic fruit growing and advanced fruit breeding, the nutraceutical value and bioactive compounds in fruits and their role in human health, and new and advanced methods of fruit production. Topics include microirrigation, sustainable nutrient management, crop protection and plant health management, and farm mechanization. Principles of Tropical Horticulture
Tropical Fruits and Other Edible Plants of the World
Fruits
A Systems Approach
An Illustrated Guide
The Encyclopedia of Fruit and Nuts
The book is a comprehensive and need-oriented volume encompassing the latest and balanced information about various aspects of fruit culture (tropical & subtropical). Following is a sampling of topics covered. Introductory on Fruit Industry deals briefly with production statistics, social, nutritive and industrial relevance and importance of fruit production. Second provides a complete overview of all principles and practices associated with Orchard planning, Layout and Management in a very abridged manner. The third on Classification of fruit crops includes botanical, horticultural and environmental grouping in a very precise but meaningful manner. Following s give a detailed account on different aspects including origin, distribution, botany & varieties, classification, climate & soil requirements, propagation, cultivation methods, flowering, harvesting, post harvest methods and crop protection of different fruit crops coming under each group such as tropical, subtropical and arid & semi-arid fruits. IV is on tropical fruits - Banana, Guava, Mangosteen, Papaya, Pineapple and Sapota. V is on ten major subtropical fruits - Avocado, Citrus, Grapes, Litchi, Loquat, Mango, Olive, Passion fruit, Persimmon and Pomegranate. VI contains details of eight major arid & semi-arid fruit crops namely Aonla, Ber, Custard apple, Date, Fig, Jack, Jamun and Phalsa. A part from these major fruit crops, VII gives a brief but comprehensive account on a large number of under and un-exploited fruit crops of tropical and subtropical parts of the world. This gives details of well-known minor fruits and a list of other very less known fruit species, which can be made the subject of detailed study for further utilization and information generation. Information provided in this compilation will be of use to students, teachers, scientists, extension workers, orchardists and others interested in fruit culture.

A major reference work on exotic and underutilised fruits and nuts of the New World. While many of these are well known in the local markets and in Spanish-language literature, they have rarely been brought to the attention of the wider English-speaking audience, and as such this book will offer an entirely new resource to those interested in exotic crops. Insects and other pests cause major economic damage on fruit crops in the tropics. However, some insects are beneficial and have a role in pollinating flowers and thus enabling a fruit set. This book, written by leading authors from around the world, reviews the injurious and beneficial organisms and how they might be controlled to enhance fruit production and quality.

Science and Technology of Fruit Wine Production includes introductory chapters on the production of wine from fruits other than grapes, including their composition, chemistry, role, quality of raw material, medicinal values, quality factors, bioreactor technology, production, optimization, standardization, preservation, and evaluation of different wines, specialty wines, and
brandies. Wine and its related products have been consumed since ancient times, not only for stimulatory and healthful properties, but also as an important adjunct to the human diet by increasing satisfaction and contributing to the relaxation necessary for proper digestion and absorption of food. Most wines are produced from grapes throughout the world, however, fruits other than grapes, including apple, plum, peach, pear, berries, cherries, currants, apricot, and many others can also be profitably utilized in the production of wines. The major problems in wine production, however, arise from the difficulty in extracting the sugar from the pulp of some of the fruits, or finding that the juices obtained lack in the requisite sugar contents, have higher acidity, more anthocyanins, or have poor fermentability. The book demonstrates that the application of enzymes in juice extraction, bioreactor technology, and biological de-acidification (MLF bacteria, or de-acidifying yeast like schizosaccharomyces pombe, and others) in wine production from non-grape fruits needs serious consideration. Focuses on producing non-grape wines, highlighting their flavor, taste, and other quality attributes, including their antioxidant properties. Provides a single-volume resource that consolidates the research findings and developed technology employed to make wines from non-grape fruits. Explores options for reducing post-harvest losses, which are especially high in developing countries. Stimulates research and development efforts in non-grape wines.

Cocona to Mango
Ecophysiology of Tropical Crops
Botany, Production and Uses
Temperate Fruits
The Papaya
Cherries


Completely updated with new content and full-colour figures throughout, the second edition of this successful book continues to provide a comprehensive coverage of pineapple breeding, production and yield. Pineapple is an increasingly important crop and demand for fresh pineapple is steadily growing; stakeholders in the value chain are worldwide. The Pineapple: Botany, Production and Uses provides essential coverage from botany through to postharvest handling and provides the technical information required by all those working with the crop. The second edition: - Contains new chapters on organic production and production for other uses (fibre and ornamentals). - Includes major updates to content on taxonomy, biotechnology, cultural systems, nutrition, varieties and genetic improvement. - Explores physiological changes associated with the year-round growing of pineapple in addition to the associated cultural practices and mineral nutrition. -
Considers the impacts of climate change and environmental issues on pineapple crops, and relevant mitigation strategies. - Looks at the effects of new cultivars and technologies on cultural practices and plant nutrition. Written by an international team of experts, this book is an essential resource for researchers, growers and all those involved in the pineapple industry. While products such as bananas, pineapples, kiwifruit and citrus have long been available to consumers in temperate zones, new fruits such as lychee, longan, carambola, and mangosteen are now also entering the market. Confirmation of the health benefits of tropical and subtropical fruit may also promote consumption further. Tropical and subtropical fruits are particularly vulnerable to postharvest losses, and are also transported long distances for sale. Therefore maximising their quality postharvest is essential and there have been many recent advances in this area. Many tropical fruits are processed further into purees, juices and other value-added products, so quality optimisation of processed products is also important. The books cover current state-of-the-art and emerging post-harvest and processing technologies. Volume 1 contains chapters on particular production stages and issues, whereas Volumes 2, 3 and 4 contain chapters focused on particular fruit. Chapters in Volume 4 review the factors affecting the quality of different tropical and subtropical fruits from mangosteen to white sapote. Important issues relevant to each product are discussed, including means of maintaining quality and minimising losses postharvest, recommended storage and transport conditions and processing methods, among other topics. With its distinguished editor and international team of contributors, Volume 4 of Postharvest biology and technology of tropical and subtropical fruits, along with the other volumes in the collection, are essential references both for professionals involved in the postharvest handling and processing of tropical and subtropical fruits and for academics and researchers working in the area. Along with the other volumes in the collection, Volume 4 is an essential reference for professionals involved in the postharvest handling and processing of tropical and subtropical fruits and for academics and researchers working in the area. Reviews factors affecting the quality of different tropical and subtropical fruits, concentrating on postharvest biology and technology. Important issues relevant to each particular fruit are discussed, such as postharvest physiology, preharvest factors affecting postharvest quality and pests and diseases.

As global warming and species migration become more prevalent issues, there is an urgent need for a text that provides comprehensive taxonomic details and geographic distributions of Dacinae fruit flies within south-east Asia. In particular, some of the major pest species of this region are being introduced on a regular basis to new geographical areas, causing widespread food security issues and economic hardship. Quarantine and horticultural organizations require detailed information on these fruit fly species in order to detect and eradicate any new incursions. This major new reference work details the taxonomic research into the subfamily Dacinae, which contains the tropical fruit flies of south-east Asia, as well as many other regions of the world. While focusing on south-east Asian fauna, all known species are included, through a study of the type material available in museums around the world. Specimens collected in major surveys conducted across Asia from 1983 to present have also been used to ensure a complete, in-depth review of this subfamily. Providing complete descriptions and artwork of all species of Dacinae recorded from the south-east Asian region for the first time, this book is written and illustrated by experts with over 80 years' combined research experience. Areas covered include: India, Bhutan, Nepal, Sri Lanka, Myanmar, China, Taiwan, Japan, the Philippines, Palau, Vietnam, Thailand, Singapore, Malaysia and Indonesia. It is an essential reference for departments of agriculture, researchers and students of entomology and quarantine, horticultural and chemical industry personnel worldwide. Key features: - 120 recently discovered species - 500 detailed drawings - Revision of all known species - Updated geographical distributions and host records - Accurate list and detailed information of all known pest species. This book will be followed by Keys to Fruit Flies of South-
East Asia.
Tropical Fruits
Handbook of Fruit Science and Technology
Mangosteen to White Sapote
Tropical Fruits, Volume 2 - Crop Production Science in Horticulture
Guava
Crop Production Science in Horticulture 24

This most comprehensive text discusses the present state and economic importance of tropical fruit growing. This edition not only includes more recent information on the major export fruits, citrus, banana and pineapple, but also a much extended section on minor fruit crops which are becoming of greater importance in export markets.

Farmers have developed a range of agricultural practices to sustainably use and maintain a wide diversity of crop species in many parts of the world. This book documents good practices innovated by farmers and collects key reviews on good practices from global experts, not only from the case study countries but also from Brazil, China and other parts of Asia and Latin America. A good practice for diversity is defined as a system, organization or process that, over time and space, maintains, enhances and creates crop genetic diversity, and ensures its availability to and from farmers and other users. Drawing on experiences from a UNEP-GEF project on "Conservation and Sustainable Use of Wild and Cultivated Tropical Fruit Tree Diversity for Promoting Livelihoods, Food Security and Ecosystem Services", with case studies from India, Indonesia, Malaysia and Thailand, the authors show how methods for identifying good practices are still evolving and challenges in scaling-up remain. They identify key principles effective as a strategy for mainstreaming good practice into development efforts. Few books draw principles and lessons learned from good practices. This book fills this gap by combining good practices from the research project on tropical fruit trees with chapters from external experts to broaden its scope and relevance.

Ecophysiology of Tropical Crops covers the knowledge and opinion on ecophysiology of the major tropical crop plants. The book discusses the fundamental ideas about the numerical description of plant development and considers effects of climatic factors (e.g., temperature, light, and water) on physiological processes in plants. The text also presents an overview of the physical and chemical characteristics of tropical soils. The ecophysiology of the major crop plants, particularly those suitable for the wet tropics, including rice, sugarcane, pineapple, grasslands, root crops, sweet potato, coffee, cacao, rubber, banana, tea, oil palm, coconut palm, citrus, cashew, and mango, is also considered. Plant ecologists, plant physiologists, biochemists, horticulturists, agronomists, meteorologists, soil scientists, food technologists, plant breeders, and people interested in the production of tropical crops will find the book invaluable.

Bananas and plantains are major fruit crops in the tropics and subtropics, making a vital contribution to the economies of many countries. In the last 15 years, substantial changes have occurred in banana production, among them the increased importance of fungal and viral diseases and their serious impact on Cavendish export cultivars, smallholder plantains and cooking bananas. Changes in production systems such as protected greenhouse cultivation, organic, fair-trade and integrated cultivation and their respective certification schemes have also become prominent. This book provides an accessi.

Horticulture: Plants for People and Places, Volume 1
Fruit Crops
Fruit Science: Culture And Technology
Tropical and Subtropical
Postharvest Biology and Technology of Tropical and Subtropical Fruits
Temperate and Subtropical Fruit Production

Sweet and sour cherries (Prunus avium and Prunus cerasus) are important fruit crops for which demand is high and growing. A significant number of new varieties, rootstocks and training systems have been released or developed in recent years in order to improve the efficiency and profitability of cherry orchards. Cherries: Botany, Production and Uses covers the genetics, ecophysiology, production, protection and uses of cherries. Presenting up-to-date scientific data and applied information, this book is invaluable for researchers, teachers and all professionals working in the cherries value chain.

Tropical fruits such as banana, mango, papaya, and pineapple are familiar and treasured staples of our diets, and consequently of great commercial importance, but there are many other interesting species that are little known to inhabitants of temperate regions. What delicacies are best known only by locals? The tropical regions are home to a vast variety of edible fruits, tubers, and spices. Of the more than two thousand species that are commonly used as food in the tropics, only about forty to fifty species are well known internationally. Illustrated with high-quality photographs taken on location in the plants' natural environment, this field guide describes more than three hundred species of tropical and subtropical species of fruits, tubers, and spices. In Tropical Fruits and Other Edible Plants of the World, Rolf Blancke includes all the common species and features many lesser known species, including mangosteen and maca, as well as many rare species such as engkala, sundrop, and the mango plum. Some of these rare species will always remain of little importance because they need an acquired taste to enjoy them, they have too little pulp and too many seeds, or they are difficult to package and ship. Blancke highlights some fruits—the araza (Eugenia stipitata) and the nutritious peach palm (Bactris gasipaes) from the Amazon lowlands, the Brunei olive (Canarium odontophyllum) from Indonesia, and the remarkably tasty soursop (Annona muricata) from Central America—that deserve much more attention and have the potential to become commercially important in the near future. Tropical Fruits and Other Edible Plants of the World also features tropical plants used to produce spices, and many tropical tubers, including cassava, yam, and oca. These tubers play a vital role in human nutrition and are often foundational to the foodways of their local cultures, but they sometimes require complex preparation and are often overlooked or poorly understood distant from their home context.

Food or medicine? That is the question related to our everyday lives.. Fruits are an important part of daily nutritional habits and can be recognized as a supplier of vitamins, minerals, fibers, antioxidants, etc. On the other hand, however, they can influence our GUT microflora and can have a direct and indirect impact on our health. Our ancestors had no knowledge of plant taxonomy, enzymes, antioxidants, or microbiology; they even knew nothing about the existence of the microbes and all these molecules. However, they had one very powerful piece of knowledge, and that was knowledge of traditional know-how. Based on personal experience and the knowledge transferred from parents to children throughout the centuries, they knew about the beneficial properties of fruits,
vegetables, and medical plants. The longest part of this history was based on empirical knowledge gained by experience without
former knowledge of either mechanisms or scientific basis. If we look back in history, we can find the use of various fruits, vegetables
and medical plants in the treatment of numerous diseases; they appreciated for their nutritional value or used in everyday domestic
processes. Based on empirical experience, a high number of fruits have been used in traditional medicine. Empirical knowledge,
frequently transferred from one generation to the next, was the only basis for preparation and application of these products in the past.
Mangos (Mangifera indica L.) and guavas (Psidium guajava) have been widely acknowledged as nutritionally valuable fruits that act
excellent sources of vitamins and minerals. They have been cultivated in tropical and subtropical parts of the world. Many research
investigations reveal that both plants exhibit numerous medicinal properties. They have been used to treat many ailments by acting as
antioxidants, antidiabetics, anti-inflammatory agents, anti-diarrhea supplements, aiding with hypolipidaemia, and anti-cancer
promoters. Mangos have been found to be widely used in food, cosmetic and pharmaceutical industries, while guavas are processed
mainly into food products. However, their physical, chemical, and sensory attributes of undergo changes upon the ripening process.
Thus, different methods of storage and packaging are developed to prolong the shelf life and maintain the quality of these fruits. From
the viewpoint of the twenty-first century scientist, we have sufficient knowledge to address various beneficial properties to mangos
and guavas. Nowadays, the application of different parts of the mango and guava plants could be seen in the preparation of numerous
bioactive molecules. These molecules include enzymes, antibacterial proteins, antioxidants, and various extracts applicable in modern
medicine, food industry, etc. In this book, we have tried to collect materials covering some aspects from characterization and origin of
the mango and guava plants into the taxonomical position of the plants to summarize information about the application of the fruits and
other parts of their plants.

Annotation. Comprehensive information on diseases of the most important tropical fruit crops
Chapters are devoted to a single or, in
some cases, a related group of host plants
The history, distribution, importance, symptoms, aetiology, epidemiology and management
of diseases of each crop are described in detail
This book offers a comprehensive review of diseases of important tropical and some
subtropical fruit crops. The history, distribution, importance, etiology, epidemiology and control of diseases of each host crop are
covered, along with brief summaries on the taxonomy, origins and characteristics of each host. Additional information is given on the
biology and pathology of the causal agents and on new advances that change or otherwise enhance our understanding of the nature
and cause of these diseases. Plant pathologists, plantation and nursery managers, lecturers and those who are involved in tropical
agriculture and horticulture will find this an essential reference.
The Pineapple, 2nd Edition

Cultivation of Neglected Tropical Fruits with Promise
Exotic Fruits and Nuts of the New World
Biology, Economic Importance, Natural Enemies, and Control

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Ever wanted to know the genus name for a coconut? Intended for all your research needs, this encyclopedia is a comprehensive collection of information on temperate and tropical fruit and nut crops. Entries are grouped alphabetically by family and then by species, making it easy to find the information you need. Coverage includes palms and cacti as well as vegetable fruits of Solanaceae and Curcurbitaceae. This book not only deals with the horticulture of the fruit and nut crops but also discusses the botany, making it a useful tool for anyone from scientists to gardeners and fruit hobbyists. This book is a comprehensive and up-to-date resource covering the botany, production and uses of limes. The lime is an important fruit crop throughout citrus producing regions of the world, with its own specific benefits, culture and marketplace, but producers face issues affecting successful cultivation and production. Authored by an international team of experts and presented in full colour throughout, this book is an essential resource for academic researchers and specialist extension workers, in addition to growers and producers involved in the citrus industry.

Postharvest Handling: A Systems Approach introduces a new concept in the handling of fresh fruits and vegetable. Traditional treatments have been either physiologically based with an emphasis on biological tissue or technologically based with an emphasis on storage and handling. This book integrates all processes from production practices through consumer consumption with an emphasis on understanding market forces and providing fresh product that meets consumer expectations. Postharvest physiologists and technologists across the disciplines of agricultural economics, agricultural engineering, food science and horticulture along with handlers of minially-processed products within the fresh produce fruit and vegetable processing industries will find this to be an invaluable source of information. Uses a systems approach that provides a unique perspective on the handling of fresh fruits and vegetables Designed with the applied perspective to complement the more basic perspectives provided in other treatments Provides the integrated, interdisciplinary perspective needed in research to improve the quality of fresh and minimally processed products Emphasizes that the design of handling systems should be market-driven rather than concentrating on narrow specifics

This book examines economically important horticultural crops selected from the major production systems in temperate, subtropical and tropical climatic areas. The general aspects of the tropical climate, fruit production techniques, tree management and postharvest handling and the principal
tropical fruit crops that are common in temperate city markets are discussed. The taxonomy, cultivars, propagation and orchard management, biotic and abiotic problems and cultivar development of these fruit crops are also highlighted.

Vol. 03: Sub Tropical Fruits
Guava and Mango
Fundamental Issues
Diseases of Tropical Fruit Crops
Production, Composition, Storage, and Processing
Tropical Fruit Flies (Tephritidae Dacinae) of South-East Asia

**Fruit Crops: Diagnosis and Management of Nutrient Constraints** is the first and only resource to holistically relate fruits as a nutritional source for human health to the state-of-the-art methodologies currently used to diagnose and manage nutritional constraints placed on those fruits. This book explores a variety of advanced management techniques, including open field hydroponic, fertigation/bio-fertigation, the use of nano-fertilizers, sensors-based nutrient management, climate-smart integrated soil fertility management, inoculation with microbial consortium, and endophytes backed up by ecophysiology of fruit crops. These intricate issues are effectively presented, including real-world applications and future insights. Presents the latest research, including issues with commercial application Details comprehensive insights into the diagnosis and management of nutrient constraints Includes contributions by world renowned researchers, providing global perspectives and experience

**Tropical Fruits CABI**

**Exotic Fruits Reference Guide** is the ultimate, most complete reference work on exotic fruits from around the world. The book focuses on exotic fruit origin, botanical aspects, cultivation and harvest, physiology and biochemistry, chemical composition and nutritional value, including phenolics and antioxidant compounds. This guide is in four-color and contains images of the fruits, in addition to their regional names and geographical locations. Harvest and post-harvest conservation, as well as the potential for industrialization, are also presented as a way of stimulating interest in consumption and large scale production. Covers exotic fruits found all over the world, described by a team of global contributors Provides quick and easy access to botanical information, biochemistry, fruit processing and nutritional value Features four-color images throughout for each fruit, along with its regional
name and geographical location Serves as a useful reference for researchers, industrial practitioners and students
This Trilogy explains “What is Horticulture?”. Volume one of Horticulture: Plants for People and Places describes in considerable depth the science, management and technology which underpins the continuous production of fresh and processed horticultural produce. Firstly, there is a consideration of technological innovation derived from basic scientific discoveries which has given rise to entirely new industries, markets, novel crops and changed social habits. Then follows accounts of the modern production of: Field Vegetables, Temperate Fruit, Tropical Fruit, Citrus, Plantation Crops, Berry Crops, Viticulture, Protected Crops, Flower Crops, New Crops, Post-harvest Handling, Supply Chain Management and the Environmental Impact of Production. Each chapter is written by acknowledged world experts. Never before has such an array of plentiful, high quality fresh fruit, vegetables and ornamentals been available year-round in the World’s retail markets. Horticulture gives consumers this gift of nutritious, high quality, safe and diverse fresh foods. This is achieved by manipulating plant growth, reproduction and postharvest husbandry. The multi-billion dollar international industry achieving this is Production Horticulture the subject of this informative book.
Good practices for in situ and on-farm conservation
Tropical Fruits-- from Cultivation to Consumption and Health Benefits
Tropical and Subtropical Fruits
Principles and Practice
Crop Post-Harvest: Science and Technology, Volume 1
Production, Processing, and Marketing

Uitgebreide teelt- en verzorgingsgids voor steen-, pit- en citrusvruchten, noten, zacht fruit en andere fruitsoorten voor het klimaat van Nieuw-Zeeland
This work offers comprehensive, current coverage of preharvest and postharvest handling and production of fruits grown in tropical, subtropical and temperate regions throughout the world. It discusses over 60 major and minor crops, and details developments in fruit handling and disease control, storage practices, packaging for fruit protection, size
Guava (Psidium guajava L.) is an exquisite, nutritionally and economically valuable crop of tropical and subtropical regions of the world. It outshines other tropical fruits in productivity, hardiness, adaptability, nutritional value, and ensures higher economic returns to growers. Guava is commercially grown in over 70 countries, and is gaining in popularity as a
'super fruit' due to its nutritional and health benefits. With contributions from international experts, this is a valuable resource for researchers and students in horticulture, and guava-industry support personnel.

Tropical and subtropical fruits are popular products, but are often highly perishable and need to be transported long distances for sale. The four volumes of Postharvest biology and technology of tropical fruits review essential aspects of postharvest biology, postharvest technologies, handling and processing technologies for both well-known and lesser-known fruits. Volume 1 contains chapters on general topics and issues, while Volumes 2, 3 and 4 contain chapters focused on individual fruits, organised alphabetically. Volume 1 provides an overview of key factors associated with the postharvest quality of tropical and subtropical fruits. Two introductory chapters cover the economic importance of these crops and their nutritional benefits. Chapters reviewing the postharvest biology of tropical and subtropical fruits and the impact of preharvest conditions, harvest circumstances and postharvest technologies on quality follow. Further authors review microbiological safety, the control of decay and quarantine pests and the role of biotechnology in the improvement of produce of this type. Two chapters on the processing of tropical and subtropical fruit complete the volume. With its distinguished editor and international team of contributors, Volume 1 of Postharvest biology and technology of tropical and subtropical fruits, along with the other volumes in the collection, will be an essential reference both for professionals involved in the postharvest handling and processing of tropical and subtropical fruits and for academics and researchers working in the area. Along with the other volumes in the collection, Volume 1 is an essential reference for professionals involved in the postharvest handling and processing of tropical and subtropical fruits and for academics and researchers working in the area. Focuses on fundamental issues of fruit physiology, quality, safety and handling relevant to all those in the tropical and subtropical fruits supply chain. Chapters include nutritional and health benefits, preharvest factors, food safety, and biotechnology and molecular biology.

Tropical Fruit Pests and Pollinators
The Pejibaye
Exotic Fruits Reference Guide
Science and Technology of Fruit Wine Production
Diagnosis and Management of Nutrient Constraints
**Tropical Fruit Tree Diversity**

Volume 2 of this revised edition of "Tropical Fruits" examines the more specialist tropical fruits such as guava, durian, mangosteen, passion fruits and palm fruits. With growing interest in the cultivation, production, study, sales and marketability of these specialist fruits, this is a timely and informative book. Topics like botany, soil and climate requirements, cultivar development, world production and harvesting and postharvest handling are covered in-depth for each crop. This practical and accessible book is an ideal text for horticulture academics, researchers, extension workers, students... The various aspects of fruit cultivation mainly covered are nutritive and cultural significance; origin, history, and distribution; taxonomical and botanical description; climatic and soil adaptability; propagation technology and rootstocks; plant and fruit physiology; recommended and popular cultivars; planning and planting; soil cultural practices technology - water need, nutritional need, weed control, inter culture; plant cultural practices technology - training and pruning, fruit thinning, fruit quality improvement, use of plant growth regulators; special problems; harvesting and production of fruits; post-harvest fruit technology; insect-pests and diseases management; marketing and export potential. Section-1 covers 2 leading sub-tropical fruits of the country. Similarly, section- 2 covers 4 and section-3 covers 6 sub-tropical fruits in order of their importance. Scientists working in different Universities /Institutions and Research Stations have contributed chapter on fruit crops in their respective areas of specialization. The book will be highly beneficial to the graduate and post-graduate students in Fruit Science, fruit growers, scientists and extension workers.

World-wide losses of crops, post-harvest, through microbial action, pests, diseases and other types of spoilage amount to millions of tons every year. This essential handbook is the first in a three-volume series which covers all factors affecting post-harvest quality of all major fruits, vegetables, cereals and other crops. Compiled by members of the world-renowned Natural Resources Institute at the University of Greenwich, Chatham, UK, the comprehensive contents of this landmark publication encourage interactions between each sector of the agricultural community in order to improve food security, food safety and food quality in today's global atmosphere. Through the carefully compiled and edited chapters, internationally respected authors discuss ways to improve harvest yield and quality, drawing on their many years' practical experience and the latest research findings, applications and methodologies. Subjects covered include: an introduction to the systems used in post-harvest agricultural processes, physical and biological factors affecting post-harvest commodities, storage issues, pest management, food processing and preservation, food systems, the latest research and assimilation of this work, and current trade and international agreements. An invaluable glossary showing important pests, pathogens and plants is also included. Crop Post-Harvest: Science and Technology Volume 1: Principles and Practice is a must-have reference book which offers the reader an overview of the globalisation of post-harvest science, technology, economics, and the development of the storage and handling of perishable and durable products. Volumes 2 and 3 will go on to explore durables and perishables individually in more detail, with many case studies taken from around the globe. This 3-volume work is the standard handbook and reference for all professionals involved in the harvesting, shipping, storage and processing of crops, including agricultural and plant scientists, food scientists and technologists, microbiologists, plant pathologists, entomologists and all post harvest, shipping and storage consultants. Libraries in all universities and research establishments where these subjects are studied and taught should have multiple copies on their shelves.

Tropical and sub-tropical fruits have gained significant importance in global commerce. This book examines recent developments in the area of fruit technology including: postharvest physiology and storage; novel processing technologies applied to fruits; and in-depth coverage on processing, packaging, and nutritional quality of tropical and sub-tropical fruits. This contemporary handbook uniquely presents current knowledge and practices in the value chain of tropical and subtropical fruits world-wide, covering production and post-harvest practices, innovative processing technologies, packaging, and quality management. Chapters are devoted to each major and minor tropical fruit (mango, pineapple, banana, papaya, date, guava,
passion fruit, lychee, coconut, logan, carombola) and each citrus and non-citrus sub-tropical fruit (orange, grapefruit, lemon/lime, mandarin/tangerine, melons, avocado, kiwifruit, pomegranate, olive, fig, cherimoya, jackfruit, mangosteen). Topical coverage for each fruit is extensive, including: current storage and shipping practices; shelf life extension and quality; microbial issues and food safety aspects of fresh-cut products; processing operations such as grading, cleaning, size-reduction, blanching, filling, canning, freezing, and drying; and effects of processing on nutrients and bioavailability. With chapters compiled from experts worldwide, this book is an essential reference for all professionals in the fruit industry.

Postharvest Physiology, Processing and Packaging

Indomalaya to North-West Australasia
Production Horticulture

The Mango

The Lime

Bananas and Plantains

Principles of Tropical Horticulture leads the reader through a background of environmental influences and plant physiology to an understanding of production and post-harvest systems, environmental adaptation techniques and marketing strategies. Focusing on the principles behind production practices and their scientific basis, rather than detailed biological traits of each crop, this text outlines successes and failures in practices to date and sets out how the quantity and quality of horticultural produce can improve in the future. Case studies are frequently used and chapters cover the production of vegetables, fruit and ornamental crops, including temperate zone crops adapted to grow in the tropics.