Tropical and subtropical fruits have gained significant importance in the global commerce in recent years. Tropical and Subtropical Fruits serves as a reference book on the production, postharvest physiology and storage, innovative processing, packaging and nutritional aspects by covering the latest developments and advances for these fruits. Tropical and Subtropical Fruits is a unique book that takes a “farm-to-fork” and multi-disciplinary approach involving the fields of horticulture, food processing, food engineering, packaging, and nutrition. The value-chain approach to the topics coverage is the unique feature of this book. Coverage includes chapters on postharvest physiology and storage, enzymes role in processing, phytochemical and bioactive compounds, novel processing technologies, quality management, and current and innovative packaging technologies of tropical and subtropical fruits. In addition, 24 full chapters are devoted to individual tropical fruits, subtropical fruits - citrus and non-citrus types, and some lesser known tropical and subtropical fruits. A team of world renowned editors and authors have contributed to this contemporary collective work that brings together current knowledge and practices across the value-chain of tropical and subtropical fruits.

Special Features
- Unparalleled expertise on important topics contributed by more than 60 experienced contributors
- Complete chapters on more than 25 tropical and subtropical fruits covering topics across the value-chain
- Coverage of bioactive compounds and nutritional aspects of tropical and subtropical fruits
- In-depth coverage of novel processing technologies, packaging, and quality management, ISO, HACCP

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Also available
- Color Atlas of Postharvest Quality of Fruits and Vegetables
- Fruit and Vegetable Phytochemicals: Chemistry, Nutritional Value and Stability
- Handbook of Fruits and Fruit Processing, second edition

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Tropical and Subtropical Fruits

Postharvest Physiology, Processing and Packaging
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Preface

Tropical and subtropical fruits have gained significant importance in global commerce in recent years, as evidenced by significant growth in their production and consumption since the mid-1990s. Two factors have contributed to this continued growth: (1) increased consumption of fruits and vegetables to promote good health and well-being and (2) the growing popularity of tropical and subtropical fruits among North American and European consumers, which has resulted in increased trade. Tropical and subtropical fruits are a good source of a number of vitamins, minerals, and other natural substances, for example, bioactive phytochemicals, making their demand grow further.

This book is a contemporary collective work that brings together current knowledge and practices in the value chain of tropical and subtropical fruits from “farm-to-fork.” This value chain approach to the topic’s coverage is the unique feature of this book. An experienced team of more than 60 contributors from North America, South America, Asia, Africa, and Europe has written 31 chapters, divided into five parts. The contributors come from diverse disciplines, including horticulture, postharvest physiology, food science and technology, food biochemistry, food engineering, and packaging technology.

Part I of the book has seven chapters, covering an introduction and overview, postharvest physiology and storage technologies, role of enzymes in fruit quality and processing, phytochemicals, packaging technologies, innovative and novel fruit processing technologies, and quality management of tropical and subtropical fruits. Part II has 11 chapters on tropical fruits (banana, coconut, dates, guava, longan and carambola, lychee, mango, papaya, passion fruit, and pineapple). Part III has four chapters on citrus-group subtropical fruits (grapefruit, lemon and lime, orange, tangerine, mandarin, and clementine), and Part IV covers six chapters on noncitrus subtropical fruits (avocado, figs, kiwifruit, olives and olive oil, pomegranate, watermelon, cantaloupe, and honeydew). The last part, Part V, has three chapters on eight lesser known tropical and subtropical fruits (acerola, cashew apple, cherrymoya and pitanga, dragon fruit and durian, and jujube and loquat). Each of these 31 chapters provides an in-depth review of topics covering history, production, consumption trends, varieties and field practices, harvesting and postharvest physiology/storage, commercial processing, application of novel processing techniques, composition and nutritional profiles of raw and processed fruit products, and potential health benefits.

Currently there are a very limited number of books on the tropical and subtropical fruits, with none taking a multidisciplinary approach to covering the topics, as we have attempted in this work. This book is intended as a contemporary source book on tropical and subtropical fruits’ postharvest physiology, processing, and packaging for industry, academia, government agencies, libraries, research institutes, laboratories, and other interested professionals.

The editorial team acknowledges many individuals for their support from conception through final development of this book. Foremost is our sincere thanks and gratitude to all authors for their contributions and for bearing with us during the review and finalization process of their chapters. We are grateful to our family members for their understanding and support, enabling us to complete this work.

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