

## Achieving sustainable cultivation of tree nuts

Edited by Professor Ümit Serdar, Ondokuz Mayıs University, Turkey  
Emeritus Professor Dennis Fulbright, Michigan State University, USA



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# Achieving sustainable cultivation of tree nuts

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### Endorsement:

"The contributions from the international experts authoring this reference represent much of our knowledge on the subject. Similarly, the editors have a well-deserved reputation for excellence in condensing and cross-referencing such diverse information. Thus, I believe this volume will become an important reference not just for tree crops but other horticultural and forestry crops as well."

*Professor Tom Gradziel, University of California-Davis, USA*

### Description:

Tree nuts such as almonds, walnuts and pistachio have long been grown for consumption and as a food ingredient. It is estimated that 4 million metric tons of tree nuts are produced each year in over 40 countries. Demand is rising, in part because of research on the nutraceutical benefits of tree nuts. At the same time, these crops face particular challenges such as safety in the face of allergens and mycotoxin contamination. There is a need to increase production but in a more sustainable way in the face of climate change.

This collection reviews the wealth of research addressing these challenges. Part 1 discusses the growing number of studies on the health benefits of tree nuts. Part 2 addresses safety issues. The remaining two parts assess advances in genetics and breeding of tree nuts, as well as advances in cultivation and the management of pests and diseases of tree nuts.

With its distinguished editors and international team of expert authors, this collection will be a standard reference for horticultural scientists and those working in forestry and agroforestry science, as well as government and other research centres involved in supporting cultivation of tree nuts.

### Key features:

- Reviews current research on the nutraceutical properties as well as allergen and other safety issues relating to tree nuts
- Assesses advances in breeding, cultivation, integrated disease and pest management to improve yields and sustainability
- Summaries key research on the main tree nuts, from walnuts and almonds to hazelnuts, chestnuts and pistachios

### Audience:

Academic researchers in horticultural science; international and national agencies supporting tree nut cultivation; companies supplying the horticultural sector (e.g. fertiliser and pesticide manufacturers)

### Editors' details:

Dr Ümit Serdar is Professor in the Faculty of Agriculture at Ondokuz Mayıs University, Turkey. He is Chair of the International Society for Horticultural Science (ISHS) Workgroup on Chestnuts and a member of other ISHS Workgroups such as those working on hazelnuts and walnuts.

Dr Dennis Fulbright is Emeritus Professor in the Department of Plant, Soil and Microbial Sciences at Michigan State University, USA. Like Professor Serdar, he is internationally known for his research on chestnut cultivation and disease management.

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