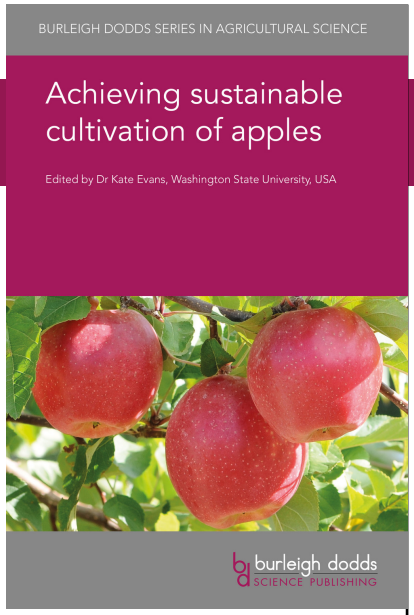

New book advance information

Achieving sustainable cultivation of apples

Edited by: Kate Evans, Washington State University, USA

Endorsement:

"No other publication has this international range of expertise. In linking physiology, breeding, husbandry, plant health, nutrition and sustainability, it promises to be a benchmark reference for crop and food scientists, practitioners and students. A signal achievement by any measure." *Emeritus Professor Silviero Sansavini, University of Bologna, Italy*

Description:

Originating in Central Asia, apples are one of the most important fruits globally and are grown in over 100 countries. Apple cultivation faces a number of challenges. Increasing global competition has put the focus on lowering costs whilst further improving sensory quality and shelf-life. There is a need to reduce inputs such as water, fertiliser and labour, both to save costs and reduce environmentally-damaging emissions and pollution. There is a continual battle with fungal, viral and bacterial diseases as well as insect pests. In the long term there is a need for new varieties able to withstand disease or more extreme conditions associated with climate change. This means preserving genetic variety and exploiting new molecular breeding techniques opened up by the sequencing of the apple genome in 2010.

Drawing on an international range of expertise, this collection focuses on ways of improving the cultivation of apples as a food crop at each step in the value chain, from breeding through to post-harvest storage. The book first reviews research in apple physiology and breeding. The following sections focus on cultivation techniques through to post-harvest storage, followed by a discussion of diseases and pests and their management. Concluding chapters address wider issues such as economics, consumer trends and sustainability.

Achieving sustainable cultivation of apples will be a standard reference for fruit and horticultural scientists in universities, government and other research centres and companies producing apples.

Key features:

- Detailed coverage of the latest research on plant physiology, including flowering and pollination in trees, apple fruit development and ripening;
- Reviews current best practice in tree training, pruning and thinning operations, including the use of growth regulators and new areas such as mechanisation and automation;
- Discusses the range of fungal and viral diseases affecting apples and trends in integrated disease management

Audience:

Academic researchers in horticultural science; Government agencies supporting horticulture; Fruit and vegetable processors

Editor details:

Dr Kate Evans is Professor of Horticulture at the Tree Fruit Research and Extension Center at Washington State University, USA.

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