

Achieving sustainable cultivation of potatoes

Volume 1: Breeding, nutritional and sensory quality

Edited by Professor Gefu Wang-Pruski
Dalhousie University, Canada



 burleigh dodds
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Achieving sustainable cultivation of potatoes Volume 1

Breeding, nutritional and sensory quality

Edited by: Prof. Gefu Wang-Pruski, Dalhousie University, Canada

Endorsement:

"Sustainable potato cultivation means simultaneously addressing and resolving a complex set of varied and interlinked context-specific constraints. These books promise to rise to the occasion with a talented cast of authors who span the disciplinary spectrum from genetics, pests and diseases, cropping systems all the way through to nutrition and consumer perspectives."

Graham Thiele, Director - CGIAR Research Program on Roots Tubers and Bananas, led by the International Potato Center (CIP), Lima, Peru

Description:

Potatoes are one of the world's key food crops. Their nutritional value, and the fact that they can be grown with relatively few inputs in a wide range of environments, makes them an important food security crop. However, yields in developing countries are held back by factors such as poor cultivation practices and the impact of pests and diseases, whilst more intensive systems need to become more 'climate smart' to minimise environmental impact and adapt to climate change.

This volume reviews developments in breeding, sensory and nutritional quality as well as the challenges facing potato cultivation in particular regions. Part 1 assesses recent research on plant physiology and genetic diversity and their implications for conventional, hybrid and marker-assisted breeding, as well as breeding varieties with desirable traits such as stress resistance. The book also looks at ways of enhancing nutritional properties before concluding with ways of supporting smallholders in regions such as Africa and Latin America.

With its distinguished editor and international team of expert authors, this will be a standard reference for potato scientists, growers, government and non-government agencies supporting potato cultivation. Volume 2 looks at production and storage, diseases and sustainability.

Key features:

- Reviews latest research on understanding potato plant physiology and genetic variety
- Discusses major advances in conventional, hybrid and marker-assisted breeding as well as their application in improved varieties
- Focuses on ways of supporting smallholders in regions such as Africa and Latin America

Audience:

Academic researchers in potato science; potato growers; government and non-governmental agencies supporting potato cultivation

Editor details:

Dr Gefu Wang-Pruski is Professor of Molecular Genomics in the Faculty of Agriculture at Dalhousie University, Canada. Her research focuses on potato genetics and its implications for tuber quality and resistance to abiotic and biotic stresses, areas in which she has published widely.

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