

EVAPORATIVE COOLERS FOR THE POSTHARVEST MANAGEMENT OF FRUITS AND VEGETABLES

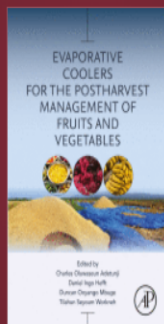


Edited by
Charles Oluwasanmi Adetunji
Daniel Ingo Hoff
Duncan Oryango Mbugu
Tilahun Seyoum Workneh



Evaporative Coolers for the Postharvest Management of Fruits and Vegetables

Book • 2023



Edited by:
Charles Oluwaseun Adetunji, Daniel Ingo Hefft,
... Tilahun Seyoum Workneh

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About the book

Description

Evaporative Coolers for the Postharvest Management of Fruits and Vegetables covers world demand for food of high quality without chemical preservatives and with extended shelf life. The book provides the practical application of evaporative coolers, with a strong focus on postharvest management and fruit/vegetable science as high moisture foods are highly perishable. Special emphasis is laid on the impact of the evaporative coolant structure on the nutritional and food safety content of fresh produce. Moreover, the book covers the effect of evaporative coolant structure towards the reduction of spoilage microorganisms responsible for the spoilage of post-harvest losses of various fruits and vegetables.

Edited by a team of specialists, this title also helps people dealing with microbiology understand how this simple technology can help improve product quality for communities that currently lack access to cooling or have unreliable power supplies.

Key Features

- Thoroughly explores shelf-life extensions that can be achieved when applying evaporative cooling
- Covers postharvest management through evaporative cooling
- Brings food and consumer science aspects from evaporative cooled fruits and vegetables
- Presents information on the interaction of edible coatings towards the extension of climacteric and non-climacteric fruits

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Editors

Charles Oluwaseun Adetunji

Applied Microbiology, Biotechnology and Nanotechnology Laboratory, Department of Microbiology, Edo University Iyamho, Auchi, Edo State, Nigeria

Applied Microbiology, Biotechnology and Nanotechnology Laboratory, Department of Microbiology, Edo State University Uzairue, Iyamho, Edo State, Nigeria

Daniel Ingo Hefft

Campden BRI, Chipping Campden, United Kingdom

School of Chemical Engineering, University of Birmingham, Birmingham, United Kingdom

Duncan Onyango Mbuge

Department of Environmental and Biosystems Engineering, University of Nairobi, Nairobi, Kenya

Tilahun Seyoum Workneh

Bioresources Engineering, School of Engineering, University of KwaZulu-Natal, Pietermaritzburg, Scottsville, South Africa



Chapter Twenty-Six - Patenting protocols, toxicity, risk assessments, and policy issues of nanomaterials with diverse applications in food, biomedical, and other relevant sectors

Charles Oluwaseun Adetunji^a, Frank Abimbola Ogundolie^b, John Tsado Mathew^c,
Abel Inobeme^d, Olotu Titilayo^e, Juliana Bunmi Adetunji^f, Wadzani Palnam Dauda^g,
Abdullahi Tunde Aborode^h, Olulope Olufemi Ajayiⁱ, Shakira Ghazanfar^j, Abdulmalik Aliyu^k,
Simon Ejokema Imoisi^l, Roseline O. Moses-Oke^l, Chukwuebuka Egbuna^{m n},
Emokhai James Uzualu^l, Shakirat Oloruntoyin Ajenifujah-Solebo^o, Olalekan Akinbo^p,
Babatunde Oluwafemi Adetuyi^q, Oaihimire Idemudia Edetalehn^r

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- ^a Applied Microbiology, Biotechnology and Nanotechnology Laboratory, Department of Microbiology, Edo State University Uzairue, Iyamho, Edo State, Nigeria
- ^b Department of Biotechnology, Baze University Abuja, Abuja, Nigeria
- ^c Department of Chemistry, Ibrahim Badamasi Babangida University Lapai, Niger State, Nigeria
- ^d Department of Chemistry, Edo State University Uzairue, Iyamho, Edo State, Nigeria
- ^e Department of Microbiology, Adeleke University, Ede, Osun State, Nigeria
- ^f Department of Biochemistry, Osun State University, Osogbo, Nigeria
- ^g Crop Science Unit, Department of Agronomy, Federal University, Gashua, Yobe State, Nigeria
- ^h Department of Biotechnology and Food Science, Durban University of Technology, Durban, South Africa
- ⁱ Department of Biochemistry, Edo University Iyamho, Edo State, Nigeria
- ^j Functional Genomics and Bioinformatics, National Agricultural Research Centre, Islamabad, Pakistan
- ^k Department of Pharmaceutical Microbiology and Biotechnology, University of Ilorin, Ilorin, Nigeria
- ^l Faculty of Law, Edo State University Uzairue, Iyamho, Edo State, Nigeria
- ^m Department of Biochemistry, Faculty of Natural Sciences, Chukwuemeka Odumegwu Ojukwu University, Anambra State, Nigeria
- ⁿ Nutritional Biochemistry and Toxicology Unit, World Bank Africa Centre of Excellence, Centre for Public Health and Toxicological Research (PUTOR), University of Port-Harcourt, Rivers State, Nigeria
- ^o National Biotechnology Development Agency, Umar Musa Yardua Way, Lugbe, Abuja, Nigeria

Abstract

Nanotechnology has become a capable device within cutting-edge science. This has generated serious concern, especially regarding its potential to cause harm. Human well-being and the environment are susceptible to the unfavorable impacts of Nanobiotechnology. This is often compounded by the lack of data on the conceivable interpretation of toxicological information produced in research facility models to people. Thus, a balance must be maintained between the possible benefits and risks of nanomaterials. Therefore, multiple alternative testing techniques could provide adequate information on the toxicity of nanoparticles, which could predict risks to humans and the environment. This chapter provides information on toxicity, risk assessments, and policy issues regarding nanoparticles related to humans and the environment, steps to patent fabricated nanoparticles, a list of patented nano drugs, and the way forward.

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