





Special Issue Reprint

Optimal Water Management and Sustainability in Irrigated Agriculture

www.mdpi.com/books/reprint/9865

Edited by Pantazis E. Georgiou Dimitrios K. Karpouzos

ISBN 978-3-7258-1519-7 (Hardback) ISBN 978-3-7258-1520-3 (PDF)



As the global demand for food continues to rise, it is crucial to ensure that our agricultural practices are sustainable and efficient, especially when it comes to water management in irrigated agriculture. The sustainability of irrigated agriculture requires the efficient management of the available but limited water resources under the existing constraints. Water demand in irrigation is expected to increase in the near future, and it will be seriously impacted by climate change, especially in arid and semi-arid areas. The irrigation water-use efficiency is key to addressing water shortages and reducing environmental problems. In this context, robust and optimal approaches are used to improve irrigation water efficiency, energy use, and crop productivity, and to mitigate economic losses from water scarcity. The SI brings together 14 research papers addressing various water management aspects in irrigated agriculture. The Issue covers a range of topics such as (a) sustainable practices and crop sequencing, (b) irrigation scheduling and deficit water irrigation, (c) the hydrochemical assessment of water, (d) fertigation and irrigation, and (e) forecasting techniques of reference evapotranspiration.





MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG Grosspeteranlage 5 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

