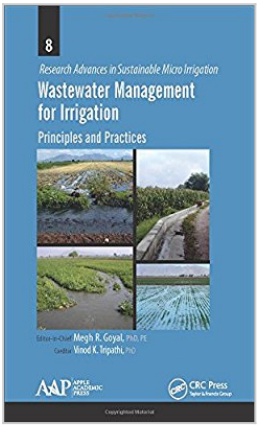

Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation)

From Apple Academic Press

Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation) From Apple Academic Press

The reuse of wastewater in irrigation is being practiced only recently to solve water scarcity problems in agriculture. Management of water, soil, crop, and operational procedures, including precautions to protect farm workers, play an important role in the successful use of sewage effluent for irrigation. Appropriate water management practices must be followed to prevent salinization. If salt is not flushed out of the root zone by leaching and removed from the soil by effective drainage, salinity problems can build up rapidly. Leaching and drainage are, thus, two important water management practices to avoid salinization of soils. One of the options that may be available to farmers is the blending of treated sewage with conventional sources of water to obtain a blended water of acceptable salinity level.

This important book focuses on the use of wastewater as a valuable resource for agricultural micro irrigation purposes. It covers effective wastewater management practices in a variety of climates, including semi-arid regions and others; how to perform effective evaluations to gauge the quality of the water on plants, including potatoes, maize, and eggplant; and the cost–benefit of using wastewater. It addresses the sources of wastewater for irrigation and the problems along with challenges, including water quality, clogging, soil quality, and more.

The mission of this compendium is to serve as a reference manual for professionals in biological and civil engineering, horticulture, soil and crop science, and agronomy, as well as for graduate and undergraduate students in related fields. It will be a valuable reference for professionals who work with micro irrigation/wastewater and water management, for technical agricultural centers, irrigation centers, agricultural extension services, and other agencies that work with micro irrigation programs.

Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation)

From Apple Academic Press

Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation) From Apple Academic Press

The reuse of wastewater in irrigation is being practiced only recently to solve water scarcity problems in agriculture. Management of water, soil, crop, and operational procedures, including precautions to protect farm workers, play an important role in the successful use of sewage effluent for irrigation. Appropriate water management practices must be followed to prevent salinization. If salt is not flushed out of the root zone by leaching and removed from the soil by effective drainage, salinity problems can build up rapidly. Leaching and drainage are, thus, two important water management practices to avoid salinization of soils. One of the options that may be available to farmers is the blending of treated sewage with conventional sources of water to obtain a blended water of acceptable salinity level.

This important book focuses on the use of wastewater as a valuable resource for agricultural micro irrigation purposes. It covers effective wastewater management practices in a variety of climates, including semi-arid regions and others; how to perform effective evaluations to gauge the quality of the water on plants, including potatoes, maize, and eggplant; and the cost–benefit of using wastewater. It addresses the sources of wastewater for irrigation and the problems along with challenges, including water quality, clogging, soil quality, and more.

The mission of this compendium is to serve as a reference manual for professionals in biological and civil engineering, horticulture, soil and crop science, and agronomy, as well as for graduate and undergraduate students in related fields. It will be a valuable reference for professionals who work with micro irrigation/wastewater and water management, for technical agricultural centers, irrigation centers, agricultural extension services, and other agencies that work with micro irrigation programs.

Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation) From Apple Academic Press Bibliography

- Sales Rank: #5663209 in Books
- Published on: 2015-10-06
- Original language: English
- Number of items: 1
- Dimensions: 1.20" h x 6.10" w x 9.10" l, 1.75 pounds
- Binding: Hardcover
- 474 pages

Editorial Review

About the Author

Megh R. Goyal, PhD, PE, is a retired professor in agricultural and biomedical engineering from the General Engineering Department in the College of Engineering at University of Puerto Rico–Mayaguez Campus; and senior acquisitions editor and senior technical editor-in-chief in agriculture and biomedical engineering for Apple Academic Press Inc. He received his BSc in engineering in 1971 from Punjab Agricultural University, Ludhiana, India; his MSc in 1977 and PhD in 1979 from the Ohio State University, Columbus; and his master of divinity in 2001 from Puerto Rico Evangelical Seminary, Hato Rey, Puerto Rico, USA. He spent one-year sabbatical leave in 2002–2003 at the Biomedical Engineering Department at Florida International University in Miami, Florida, USA. Since 1971, he has worked as soil conservation inspector (1971); research assistant at Haryana Agricultural University (1972–75) and Ohio State University (1975–79); research agricultural engineer/professor at the Department of Agricultural Engineering of UPRM (1979–1997); and professor in agricultural and biomedical engineering in the General Engineering Department of UPRM (1997–2012).

He was the first agricultural engineer to receive a professional license in agricultural engineering in 1986 from the College of Engineers and Surveyors of Puerto Rico. On September 16, 2005, he was proclaimed "Father of Irrigation Engineering in Puerto Rico for the twentieth century" by the ASABE, Puerto Rico Section, for his pioneering work on micro irrigation, evapotranspiration, agroclimatology, and soil and water engineering. During his professional career of 45 years, he has received awards such as Scientist of the Year, Blue Ribbon Extension Award, Research Paper Award, Nolan Mitchell Young Extension Worker Award, Agricultural Engineer of the Year, Citations by Mayors of Juana Diaz and Ponce, Membership Grand Prize for ASAE Campaign, Felix Castro Rodriguez Academic Excellence, Rashtrya Ratan Award and Bharat Excellence Award and Gold Medal, Domingo Marrero Navarro Prize, Adopted Son of Moca, Irrigation Protagonist of UPRM, and Man of Drip Irrigation by Mayor of Municipalities of Mayaguez/Caguas/Ponce and Senate/Secretary of Agriculture of ELA, Puerto Rico.

He has authored more than 200 journal articles and textbooks, including *Elements of Agroclimatology* (Spanish) by UNISARC, Colombia, and two *Bibliographies on Drip Irrigation.* Apple Academic Press Inc. (AAP) has published his books, namely *Biofluid Dynamics of Human Body, Management of Drip/Trickle or Micro Irrigation, Evapotranspiration: Principles and Applications for Water Management, Sustainable Micro Irrigation Design Systems for Agricultural Crops: Practices and Theory, Biomechanics of Artificial Organs and Prostheses*, and *Scientific and Technical Terms in Bioengineering and Biotechnology.* During 2014–15, AAP is publishing his ten-volume set, Research Advances in Sustainable Micro Irrigation.

Users Review

From reader reviews:

John Bullen:

Have you spare time to get a day? What do you do when you have more or little spare time? Yeah, you can

choose the suitable activity regarding spend your time. Any person spent their very own spare time to take a stroll, shopping, or went to the actual Mall. How about open or perhaps read a book entitled Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation)? Maybe it is to become best activity for you. You recognize beside you can spend your time together with your favorite's book, you can wiser than before. Do you agree with it is opinion or you have different opinion?

John Enriquez:

Book will be written, printed, or highlighted for everything. You can recognize everything you want by a book. Book has a different type. To be sure that book is important matter to bring us around the world. Next to that you can your reading ability was fluently. A reserve Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation) will make you to possibly be smarter. You can feel a lot more confidence if you can know about every little thing. But some of you think which open or reading the book make you bored. It is not make you fun. Why they might be thought like that? Have you trying to find best book or ideal book with you?

Lois Maestas:

Often the book Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation) will bring you to definitely the new experience of reading a book. The author style to elucidate the idea is very unique. When you try to find new book to see, this book very appropriate to you. The book Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation) is much recommended to you to see. You can also get the e-book from your official web site, so you can easier to read the book.

Ella Nebel:

Is it you actually who having spare time after that spend it whole day simply by watching television programs or just telling lies on the bed? Do you need something totally new? This Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation) can be the answer, oh how comes? A fresh book you know. You are and so out of date, spending your extra time by reading in this fresh era is common not a geek activity. So what these textbooks have than the others?

Read Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation) From Apple Academic Press for online ebook

Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation) From Apple Academic Press Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation) From Apple Academic Press books to read online.

Online Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation) From Apple Academic Press ebook PDF download

Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation) From Apple Academic Press Doc

Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation) From Apple Academic Press Mobipocket

Wastewater Management for Irrigation: Principles and Practices (Research Advances in Sustainable Micro Irrigation) From Apple Academic Press EPub