Evapotranspiration: Principles and Applications for Water Management

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Evapotranspiration: Principles and Applications for Water Management covers topics on basic models, assessments, and techniques to calculate evapotranspiration (ET) for practical applications in agriculture, forestry, and urban science. This is simple and thorough guide that provides the information and techniques necessary to develop, manage, interpret, and apply evapotranspiration [ET] data to practical applications. The simplicity of the contents facilitates a technician to develop ET data for effective water management. This book complements other ET books on the market and covers many topics that are not covered in other books. It is unique in that it includes an historical review, basic principles and applications, how to generate missing climate data, research results using remotely sensed climatic data, and research results from around the world.

ENTHUSIASTIC REVIEWS FOR THE BOOK
"The publication of this book is an indication that things are beginning to change, that we are beginning to realize the importance of water conservation to minimize hunger. Contributors as well as the Apple Academic Press Inc. are rendering an important service to the entire world, and above all to the poor. Contributors have done an unselfish job in the presentation of this compendium that is simple, thorough, complete, and useful during world economic and water crisis."
—Gajendra Singh, PhD, Former Deputy Director General (Engineering), Indian Council of Agricultural Research, New Delhi; Former Vice President/Dean/Professor and Chairman at Asian Institute of Technology, Thailand

"I am enthusiastic to know that Apple Academic Press Inc., has put together this compendium. The book describes how evapotranspiration plays an important role in the hydrologic cycle and our daily life. Authors have applied mechanics of evapotranspiration for water management in agriculture and forest sciences. I invite the water scientists to answer a simple question: Will there be enough potable water in the future?"
—Miguel A. Muñoz, PhD, President, University of Puerto Rico, USA

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ABOUT THE EDITORS

Megh R. Goyal, PhD, PE, was born in India. He received his BSc degree in agricultural engineering in 1971 from Punjabi Agricultural University, Ludhiana - India; his MSc degree in 1977 and PhD degree in 1979 from the Ohio State University, Columbus; and his master of divinity degree in 2001 from Puerto Rico Evangelical Seminary, Hato Rey – Puerto Rico.

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He was the first agricultural engineer to receive the professional license in agricultural engineering in 1986 from the College of Engineers & Surveyors of Puerto Rico. On September 16, 2005, he was proclaimed as “Father of Irrigation Engineering in Puerto Rico for the 20th 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 42 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 ASABE Campaign, Felix Castro Rodrigueza Academy Excellence, Rashtriyta Ratan Award and Bharat Excellence Award and Gold Medal, Domingo Marrero Navarro Prize, Adopted son of Moca, Irrigation Protagonist of UPRM, Men 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 Biofluid Dynamics of Human Body Systems and Management of Drip/Trickle or Micro Irrigation by Apple Academic Press Inc.

Dr. Eric W Harmsen received his BSc and MSc degrees in agricultural engineering from Michigan State University and PhD degree from the University of Wisconsin. He holds a professional engineer license. Currently he is currently a professor in the Department of Agricultural and Biosystems Engineering, University of Puerto Rico-Mayaguez Campus. He teaches courses in agricultural hydrology, agroclimatology and irrigation. He was previously Associate Research Editor of the Journal of Soil and Water Conservation (2001-2005) as well as a reviewer for many professional journals. He is a member of the American Society of Agricultural and Biological Engineers (U.S. and Puerto Rico Chapters), the Caribbean Food Crop Society, the Puerto Rico Society of Agricultural Scientists, and Gamma Sigma Delta (Agricultural Honor Society).

His research interests include measurement and modeling of all components of the hydrologic cycle and remote sensing of water and energy balance in the tropics; and agroclimatology. Some of Dr. Harmsen’s water management related publications and presentation can be found at the following link: http://pragwater.com/selected-publications-and-presentations

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