

**VOLUME 13**

**Application of New Technologies in Water Resources Management**

**CONTENTS**

**Introduction**

*M. Abu-Zeid and A. Hamdy*

**Decision Support Tools in Environmentally Based Water Resources Planning and Management: an Overview**

*A. Hamdy and M. Todorovic*

**Data Base Issues and New Technologies for Data Acquisition.**

*A. Hamdy and C. Lacirignola*

**Modern Technology Tools for Water Management**

*Khaled M. Abu-Zeid*

**Introduction to GIS and Spatial Modeling**

*A. Hamdy and C. Lacirignola*

**The Role of GIS in the Decision Support System ODESSEI (Open Architecture Decision Support System for Environmental Impact Assessment)**

*E. Todini*

**Expert Systems: a Step-up from Decision Support to Decision Making Systems**

*Khaled M. Abu-Zeid*

**Information Systems for Water Resources Planning and Management: Application to Irrigation**

*L. S. Pereira*

**Modeling for Crop Response to Water physiological Aspects**

*P. Steduto*

**Bio-Economic Models for integrating agronomic, environmental and economic Issues with Agricultural Use of Water**

*G. Flichman*

**Role of Decision Support Systems and New Technologies in Water Saving**

*M. Tawfik and. H. Fahmy*



**A Proposal for integrating environmental Impact Assessment, Cost Benefit Analysis and Multicriteria Analysis in Decision Making**

*A. Nardini*

**Information and Communication Technology**

*L. Sisto*

**Prospects of Irrigation Modernization in the Mediterranean**

*A. Hamdy, N. Lamaddalena and G. Trisorio-Liuzzi*

**Modeling and New Technologies: Tools to be combined for improving Irrigation Systems Management**

*N. Lamaddalena*