

《作物模拟与决策支持国际研讨会论文集》

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内容概要

Crop models and decision tools are increasingly affecting agriculture. Various forms of information technology are being adopted in agriculture as modern technology advances. To review research achievements and identify new directions in crop modeling and decision support, an international symposium on crop modeling and decision support was held in Nanjing, China in April, 2008. The main purposes of this symposium were to exchange the state-of-the art of current modeling and simulation approaches, as well as recent progress on crop models and decision support systems leading to on-farm applications; to explore future directions needed for advancement and potential opportunities for team collaboration. The symposium was successfully held with a grand gathering of about 120 scientists and researchers from more than 20 countries. Over 100 abstracts and 40 papers were presented at the meeting, and selected papers were combined into this book as the symposium proceeding, in addition to some papers submitted for journal publication. Thus, the present book is a main output of the symposium, and should be useful for the scientists, graduate students and management specialists in the areas of crop modeling and decision support. This proceeding book covers cutting-edge results on crop growth modeling, decision support system and model-based information technologies for crop growth prediction and production management. It covers the subjects of crop and soil process modeling, plant architectural modeling, climate change modeling, crop productivity modeling, simulation model development, model-based decision support systems (DSS), applications of crop models and DSS, integration of crop models with other information technologies.

We would like to express our gratitude to all the participants for their participations and presentations at the symposium. Great thanks go to the Academic Committee of the symposium for their great efforts and hard work, to Drs Qi Jing and Liang Tang as the secretaries of the symposium, and to Drs Yan Zhu, Yongchao Tian, XiaJun Liu and Xia Yao for their hard work during the symposium. We also thank the sponsors for their generous supports making the symposium successful.

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书籍目录

- Modeling Eco-Physiological Processes¹ Modeling Time of Seedling Emergence of Spring Wheat
H. Wang, H. Cutforth, T. McCaig, G. McLeod, K. Brandt, R. Lemke, T. Goddard, C. Sprout² Complete
Parameterization of Photosynthesis Models-An Example for Barley
J. Müller, H. Braune, and W. Diepenbrock³ Studies on Photosynthesis Model of Mini-Cucumber Leaf in
Greenhouse
Ping-Pin Li, Ji-zhang Wang, Xin Chen, Wei-Hong Liu⁴ Finding a Suitable CO₂ Response Algorithm for Crop
Growth Simulation in Germany
C. Nendel, K.C. Kersebaum, W. Mirsche, R. Manderscheid, H.J. Weigel and K.O. Wenkel⁵ Bringing Genetics
and Genomics to Crop Simulations: Experiences with Wheat, Sorghum and Common Bean in Solving the
GEM-to-P Problem
J. W. White⁶ Establishment of Dynamic Model for the Nutrient Uptake and Development about Tomato in
Greenhouse
54 Jin-Xiang Chu, Zhong-Fu Sun, Ke-Ming Du, Qian Jia, Shuang Liu⁷ CANON: A Canonical Composition for
Building Plant Shoots From the Bottom Up
J. N. G. Hargreaves, G. S. McMaster⁸ A Quantitative Analysis on Leaf Curvature Characteristics in Rice
Liang Tang, Chun-Lin Shi, Yan Zhu, Qi Jing, Wei-Xing Cao⁹ The Response of Canopy Direction Reflectance
Spectrum for the Wheat Vertical Leaf Distributing
Chun-Hu Xiao, Shao-Kun Li, Ke-Ru Wang, Yan-Li Lu, Jun-Hua Bai, Rui-Zhi Xie, Shi-Ju Gao, Xiao-Jun Li, and
Hai-Zhen Tan¹⁰ Modeling Leaf Sheath and Internode Growth Dynamics in Wheat
Yan Zhu, Liang Tang, Zi-Hui Tan, Guo-Qing Chen, Wei-Xing Cao¹¹ Modeling Fruit Morphological
Formation on Muskmelon
Li-Ying Chang, Ming-Han Chi, Dan-Feng Huang¹² Shape Modeling of Organs and Structures Generating for
Crops
Sheng-Lian Lu, Xin-Yu Guo, Chun-Jiang Zhao, Chang-Feng Li¹³ Modeling Shoot and Root Biomass of
Lucerne Crops-New Insights on the Seasonality of Dry Matter Partitioning and Root Maintenance Respiration
Edmar I. Teixeira, Derrick J. Moot, Hamish E. Brown, David P. Monks¹⁴ A Morphogenetic Crop Model for
Sugar-Beet (*Beta vulgaris* L.)
S. Lemaire, F. Maupas, P.H. Cournè de, P. de Reffye¹⁵ Coupling Process-Based Models and Plant Architectural
Models: A Key Issue for Simulating Crop Production
P. de Reffye, E. Heuvelink, Yan Guo, Bao-Gang Hu and Bao-Gui Zhang¹⁶ A Functional-Structural Plant
Model-Theories and Its Applications in Agronomy
Meng-Zhen Kang, Paul-Henry Cournè de, Amélie Mathieu, Véronique Letort, Rui Qi, Zhi-Gang Zhan¹⁷
New Approach for the Study of Source-Sink Dynamics on Maize
Rui Qi, Yun-Tao Ma, Bao-Gang Hu, P. de Reffye, Paul-Henry Cournè de¹⁸ A Review of Research on the
Virtual Plants
Lin Hu, Guo-Min Zhou, Yun Qiu, Jing-Chao Fan, Jian Wang^{Whole Model Development and Applications}¹⁹
Concepts and Applications of AquaCrop: The FAO Crop Water Productivity Model
P. Steduto, Dirk Raes, Theodore C. Hsiao, Elias Fereres, Lee K. Heng, Terry A. Howell, Steven R. Evett, Basilio A.
Rojas-Lara, Hamid J. Farahani, Gabriella Izzi, Theib Y. Oweis, Suhas P. Wani, Jippe Hoogeveen, Sam Geerts²⁰
Simulating Biomass and Grain Yields of Barley and Oat Crops with the Sirius Wheat Model
A.L. Fletcher, R.J. Martin, J.M. de Ruiter, P.D. Jamieson, R.F. Zyskowski²¹ Application of the CERES-Wheat
Model to Winter Wheat Yield Forecast in Beijing
Xian Wang, Cun-Jun Li, Liang-Yun Liu, Wen-Jiang Huang, Peng-Xin Wang²² Improving the Calibration
Process of GreenLab Model on the Cotton Plant
Dong Li, Zhi-Gang Zhan, Yan Guo²³ Dry Matter Production and Partitioning in Tomato: Evaluation of a
General Crop Growth Model
Ling-Zhi Li, P.H.B. de Visser, Ya-Ling Li, Hai-Ping Li²⁴ Spatial and Seasonal Simulations of Irrigated Processing

Tomato

M. Rinaldi, R. Ubaldo, S. Ruggieri²⁵ Development of Feeding Strategies for Cows in Small Scale Dairy Farming Systems in the Highlands of Central Mexico by a Simulation Model and On-Farm Experiments. Phase 1: Development of a Novel Framework

241 Virgilio Ambriz-Vilchis, Julieta G. Estrada-Flores, Martha Hernández-Ortega, María A. Rojas-Garduño, Ernesto Sánchez-Vera, Angélica Espinoza-Ortega, Octavio A. Castellán-Ortega²⁶ Development of Feeding Strategies for Cows in Small Scale Dairy Farming Systems in the Highlands of Central Mexico by a Simulation Model and On-Farm Experiments. Phase 2: On-farm Experiments and Validation of a Simulation Model

Virgilio Ambriz-Vilchis, Julieta G. Estrada-Flores, Martha Hernández-Ortega, María de los Angeles Rojas-Garduño, Octavio A. Castellán-Ortega²⁷ The Dynamic Model of Crop Growth System under the Multi-Environment External Force Action and Result Simulation

Tao Chi, Dan-Feng Huang²⁸ APSIM-Lucerne Validation in the Temperate Climate of New Zealand

D. P. Monks, D. J. Moot, H. E. Brown, E. I. Teixeira²⁹ Decision Support System for Greenhouse Environment Control Based on Model

Ji-Zhang Wang, Ping-Ping Li, Yong-Guang Hu, Han-Ping Mao³⁰ A Simulation Analysis on Climate Change -Threats or Opportunities for Agriculture

S. Asseng, F. Ludwig, S. Milroy, M. I. Travasso³¹ Spatial Analysis of Soil Water Balance in an Agricultural District of Southern Italy

D. Ventrella, E. D. Giacomo, L. Giglio, M. Castellini, D. Palumbo³² Uncertainty in Multi-Criteria Evaluation Techniques When Used for Land Suitability Analysis

K. K. Benke, C. Pelizaro, K. E. Lowell³³ Simulation of Spatial Variability of Organic Matter on the Vineyard Area Using the Model of Artificial Neural Networks

M. R. Karaman, M. Dursun, O. Karkacier, S. Şahin³⁴ Integration of a Crop Simulation Model and Remote Sensing Information

M. Acutis, M. Rinaldi, F. Mattia, A. Perego³⁵ Research of Maize Leaf Disease Identifying Models Based Image Recognition

Yu-Xia Zhao, Ke-Ru Wang, Zhong-Ying Bai, Shao-Kun Li, Rui-Zhi Xie, Shi-Ju Gao³⁶ Spectral Characteristics of Cotton Infected with Verticillium Wilt and Severity Level of Disease Estimated Models

Bing Chen, Ke-Ru Wang, Shao-Kun Li, Xue-Yan Sui, Fang-Yong Wang, Jun-Hua Bai

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