## Proceedings of the

## 2013 International Conference on Agriculture and Crops Science (ICACS 2013)

7-9 June 2013 / Xianning, Hubei, China



## **Preface**

The 2013 International Conference on Agriculture and Crops Science (ICACS 2013) was successfully held in Xianning, Hubei, China, during June 7-9, 2013. ICACS 2013 provide a major interdisciplinary forum for presenting new approaches from relevant areas of Agriculture and Crops Science to scholars, professionals, academics and graduate students, to foster integration of the latest developments in scientific research and to facilitate technology in environmental research and technology applications.

As a leading authority of these fields, your participation and support are essential to the success of the conference. Thank you very much to take part in this conference.

This conference proceedings assembles research scholars' endeavor, based on usual research and academic study, these papers have acquired high-level endorsement from experts of this field. Through two-round careful examining and verifying, all accepted articles are original, they have technical quality and good presentation. Articles of this book are divided into agricultural history, agricultural basic subjects, agronomy, horticulture, pedology, plant protection, crops science and other areas related to Agriculture and Crops Science.

The success of ICACS 2013 is based on all authors' wonderful and professional oral presentation, poster presentation and intense discussions. ICACS 2013 would like to express our sincere appreciations to all authors for their contributions to this conference. In addition to this, we would like to extend our thanks to the organizing committee for their hard work, we would like to express our gratitude to the external reviews for providing extra helps in the review process and making valuable comments to help the authors to improve their work.

We look forward to seeing all of you next year at ICACS 2014.

Dr. Tracy Hu School of Management Huazhong University of Science and Technology China

## **Table of Contents**

Development of Modern Agricultural Park in Hebei Province
Lu Pengfei and Lu Jian
Determination of Heavy Metal Residues in Reclaimed Water Farming Fish
Liu Ying, Ma Tingjun and Chen Jie4
Physiological Responses of Peanut Seedlings to Salt Stress
Feng Suping, Chen You, Hou Benjun, Tao Yunyue, Liu Ning and Wu Yaoting
Development of Four SCAR Markers for Tea Plant Identification
Wu Yongsheng, Xi Chunyi, Tang Qian and Chen Hui12
Study of Water Utilization Efficiency of Wheat Border Reform in HeTao Irrigation District
Zheng Hexiang, Li Heping and Guo Kezhen10
Optimized Utilization of Water Resources for Rice Irrigation District Based of Combination of Well and Canal Irrigation  Li Chenyang and Zhu Shijiang
El Chenyang and Zhu Shijiang
The Research on the Effect of Polyethylene Mulch Film Powder on Soil Fertility and Vigna Radiate Growth
Yu Zhang and Jing He
Effects of Calcium on Root Respiratory Metabolism of Malus Baccata Borkh. Roots under Violently Changing Temperature
Su Hong, Sun Jing, Ma Huaiyu and Lyu Deguo
Analysis of Anti-coagulative Active Component of Hypomesus Olidus
Liu Xuejun, Wang Dongjiao, Gao Qianqian and Cheng Jing34
Research on Cell Characteristics of Weedy Rice
Li Li, Wang Che, Ma Dianrong, Liang Qian, Sun Jian, Tang Liang and Chen Wenfu3
Evaluation of Duckweed Cover Associated Ammonia Volatilization Using Digital Image Analysis Method  Liang Xingiang Zhu Sirui He Miaomiao Li Hua Huang Yao and Tian Guangming 41

Dynamic Characteristics of Soil Temperature for Compound Planting Soybean with
Drip Irrigation in Northern Xinjiang
Jiang Guojun, Wang Zhenhua and Zheng Xurong4
Probabilistic Functional Gene Network for Differentially Expressed Genes in Rice
Responsive to Ion Implantation Based on a Web Service: RiceNet
Chen Wanguang, Feng Weisen and Ya Huiyuan4
Assessment of Fertilizer-N Losses in Rice Fields by Three Different Hydrological Pathways: Surface Runoff, Subsurface Flow, and Vertical Leaching
Liang Xinqiang, Zhang Yixiang, He Miaomiao, Huang Xiaoyang and Li Hua5
Isolation and Identification of Penicillium Species by Bioinformatics and Phylogenetic Analysis
Li Qian, Qi Ting, Liu Jing, Chen Yuanlei, Wang Jinlong, Yuan Yongze, Geng Hui, Xiong L and Liu Deli
Effects of Environment and Investment on Winter Wheat Production on the Loess Plateau of China
Wang Xuechun, Hao Mingde, Tao Shishun, Muhammad Naveed Tahir and Li Wei6
Study of Almond Cake Deterioration Identification Based on Electronic Nos
Ren Yating, Luo Dehan and Chen Yimin6
Based on the Branch Stage Medicago sativaScreening Open Pit Mine Overburden Substitute Material Amendment
Wei Beilei, Hu Zhenqi, Lin Shan, Yang Jie, Zhang Ruiya and Chen Chao7
Phosphorus Loss Potential and Soil Neutral Phosphatase Activities under Different Fertilizers
Liang X.Q, Wang S.X, Zhao Y, He M.M, Huang X.Y, Gu J.T, and Tian G.M7
Analysis on Polyploid Induction Invitro and Karyotype of Wild Cymbidium iridioides D. Don
Wang Yuying, Li Zhilin and Su Jun7
U V 07