

American Journal of Plant Sciences



Journal Editorial Board

ISSN: 2158-2742 (Print) ISSN: 2158-2750 (Online)

<http://www.scirp.org/journal/ajps>

Editor-in-Chief

Dr. Sukumar Saha	US Department of Agriculture, USA
-------------------------	-----------------------------------

Editorial Board

Prof. Ibrokhim Y. Abdurakhmonov	Academy of Sciences of Uzbekistan, Uzbekistan
Prof. Ashok Ahuja	Indian Institute of Integrative Medicine, India
Dr. Rishi Aryal	North Carolina State University, USA
Prof. Mehmet Emin Aydin	Selcuk University, Turkey
Prof. Ramesh Buuyarapu	Dow AgroSciences, USA
Dr. Salah El-Sayed El-Hendawy	Suez Canal University, Egypt
Prof. Kunshan Gao	Xiamen University, China
Prof. Li-Zhi Gao	Chinese Academy of Sciences, China
Prof. Melaku A. Gedil	International Institute of Tropical Agriculture, Ethiopia
Dr. Jiahuai Hu	University of Florida, USA
Dr. S. Ahmed John	Jamal Mohamed College (Autonomous), India
Dr. Nirmal Joshee	Fort Valley State University, USA
Dr. Chandra Prakash Kala	Indian Institute of Forest Management, India
Dr. Mehmet Karaca	Akdeniz University, Turkey
Prof. Kyoung-Woong Kim	Gwangju Institute of Science and Technology, South Korea
Prof. Stanislav Kopriva	John Innes Institute, UK
Dr. Süleyman Korkut	Duzce University, Turkey
Dr. Vikas Kumar	Banaras Hindu University, India
Dr. Siva Prasad Kumpatla	Dow AgroSciences LLC, USA
Prof. Din-Pow Ma	Mississippi State University, USA
Dr. Asim Masood	Aligarh Muslim University, India
Prof. Amitava Mitra	University of Nebraska, USA
Dr. Adele Maria Muscolo	University Mediterranea di Reggio Calabria, Italy
Prof. P. K. Nagar	Institute of Himalayan Bioresource Technology, India
Dr. Aung Htay Naing	Kyungpook National University, South Korea
Dr. Lakshmi Narayanan	Mississippi State University, USA
Prof. Maria Papafotiou	Agricultural University of Athens, Greece
Prof. Antonios Philippoussis	National Agricultural Research Foundation, Greece
Dr. Oscar J. Rocha	Kent State University, USA
Dr. Hamidou F. Sakhanokho	USDA-ARS, Thad Cochran Southern Horticultural Laboratory, USA
Prof. R. R. Sharma	Indian Agricultural Research Institute, India
Prof. Toshiyuki Shibata	Mie University, Japan
Prof. Gopal Shankar Singh	Banaras Hindu University, India
Prof. Rajbir Singh	Directorate of Water Management, India
Dr. Daryush Talei	Medicinal Plants Research Center, Shahed University, Iran
Dr. Te-Ming (Paul) Tseng	Mississippi State University, USA
Dr. Sylvia Urban	RMIT University, Australia
Prof. Guodong Wang	Shaanxi Normal University, China
Dr. Kailas Wasewar	Visvesvaraya National Institute of Technology, India
Prof. John Z. Yu	US Department of Agriculture, USA
Prof. Tianzhen Zhang	Nanjing Agricultural University, China
Prof. Wenjun Zhang	Sun Yat-sen University, China
Prof. Zhiqiang Zhou	China Agricultural University, China
Prof. Munir Hussain Zia	US Department of Agriculture, USA

Table of Contents

Volume 9 Number 11

October 2018

Succinic Acid Production across Candidate Lignocellulosic Biorefinery Feedstocks

- Y. F. Xu, J. L. Foster, J. P. Muir, B. L. Burson, R. W. Jessup.....2141

Phenotyping of Hybrid Maize (*Zea mays* L.) at Seedling Stage under Drought Condition

- S. Aktar, N. Hossain, M. G. Azam, M. Billah, P. L. Biswas, M. A. Latif, M. Rohman, S. A. Bagum,
M. S. Uddin.....2154

Development of Hydropriming Techniques for Sowing Seeds of Upland Rice in Uganda

- Y. Nakao, G. Asea, Y. Minoru, K. Nobuki, H. Hiroyuki, M. Kisho, S. Yabuta, K. Rieko, S. Jun-Ichi.....2170

A Phenotyping Protocol for Detailed Evaluation of Apple Root Resistance Responses Utilizing Tissue Culture Micropaginated Apple Plants

- Y. M. Zhu, M. Saltzgiver, J. X. Zhao.....2183

Markers for Rapid Evaluation of Virus Resistance for TYLCV in Tomato, ZYMV and PRSV-W in Zucchini and LMV in Lettuce and Hybrid Seeds in Pumpkin

- H. E. Sawazaki, V. A. Yuki, M. R. A. Ortiz, W. H. Banja, J. M. Marubayashi, K. S. Fonseca, G. A. Luchini,
R. G. Perroni, W. M. O. Andrade.....2205

Evaluation of Pear Varieties for Physiochemical Traits Grown under Climatic Conditions of Soon Valley, Pakistan

- M. M. Abbas, H. Faiz, M. M. Aziz, S. Rashid, H. Ullah, R. Qadri, M. Azam.....2217

Effects of Fermented Nori (*Pyropia yezoensis*) Seaweed Liquid Fertilizers on Growth Characteristics, Nutrient Uptake, and Iodine Content of Komatsuna (*Brassica rapa* L.) Cultivated in Soil

- S. M. Moh, K. Moe, Y. Obo, S. Obo, A. Z. Htwe, T. Yamakawa.....2227

Cloning and Expression Analysis of RrG-Beta1 Gene Related to Signal Transduction in *Rosa rugosa*

- Y. N. Wang, M. Y. Zhao, X. Han, L. Y. Zhao, Z. D. Xu.....2244

Expression of a Rice Chitinase Gene Enhances Antifungal Response in Transgenic Litchi (cv. Bedana)

- D. K. Das, A. Rahman.....2256

Forecast of Maize Production in Henan Province

- B. J. Li, X. X. Zhu.....2276

Effect of Varied Irrigation Scheduling with Levels and Times of Nitrogen Application on Yield and Water Use Efficiency of Aerobic Rice

M. M. Keerthi, R. Babu, N. S. Venkataraman, E. Subramanian, K. Kumutha.....2287

Influence of Irrigation Scheduling with Levels and Times of Nitrogen Application on Root Growth of Aerobic Rice

M. M. Keerthi, R. Babu, N. S. Venkataraman, P. P. Mahendran.....2297

Interaction of the Bioherbicide *Myrothecium verrucaria* with Technical-Grade Glyphosate on Glyphosate-Susceptible and -Resistant Palmer Amaranth

R. E. Hoagland, C. D. Boyette, R. H. Jordan, K. C. Stetina.....2306

Interaction of Glufosinate and *Colletotrichum truncatum* on Ammonia Levels and Glutamine Synthetase Activity in Hemp Sesbania

R. E. Hoagland, C. D. Boyette, R. H. Jordan, K. C. Stetina.....2320

American Journal of Plant Sciences (AJPS)

Journal Information

SUBSCRIPTIONS

The *American Journal of Plant Sciences* (Online at Scientific Research Publishing, www.SciRP.org) is published monthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$79 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright and reuse rights for the front matter of the journal:

Copyright © 2018 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY).

<http://creativecommons.org/licenses/by/4.0/>

Copyright for individual papers of the journal:

Copyright © 2018 by author(s) and Scientific Research Publishing Inc.

Reuse rights for individual papers:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

Disclaimer of liability

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: ajps@scirp.org



Call for Papers

American Journal of Plant Sciences

ISSN: 2158-2742 (Print) ISSN: 2158-2750 (Online)

<http://www.scirp.org/journal/ajps>

American Journal of Plant Sciences (AJPS) is a peer reviewed international journal dedicated to the latest advancement in related areas. The goal of this journal is to keep a record of the state-of-the-art research and to promote study, research and improvement within its various specialties.

Editor-in-Chief

Dr. Sukumar Saha

US Department of Agriculture, USA

Subject Coverage

This journal invites original research and review papers that address the following issues. Topics of interest include, but are not limited to:

- Agricultural Botany
- Agronomy
- Bryology
- Dendrochronology
- Economic Botany
- Ethnobotany
- Forestry
- Horticulture
- Integrated Pest Management and Integrated Resistant Management
- Lichenology
- Medicinal Plants
- Paleobotany
- Palynology
- Phycology
- Phylogenetics and Evolution
- Phytochemistry
- Phytopathology
- Plant Anatomy
- Plant Based Biofuels and Bioenergy
- Plant Biotechnology and Tissue Culture
- Plant Breeding
- Plant Cytogenetics and Cytology
- Plant Ecology
- Plant Genetic Resources and Databases
- Plant Genetics
- Plant Genomes, Bioinformatics and Genomics
- Plant Host-Pathogen Interactions
- Plant Molecular Biology and Evolution
- Plant Morphology
- Plant Nutrition
- Plant Physiology
- Plant Polyploidy
- Plant Protection
- Plant Proteomics and Metabolomics
- Plant Systematics
- Transgenic Crops and Their Products

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of **AJPS**.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-Mail

<http://www.scirp.org/journal/ajps>

E-mail: ajps@scirp.org