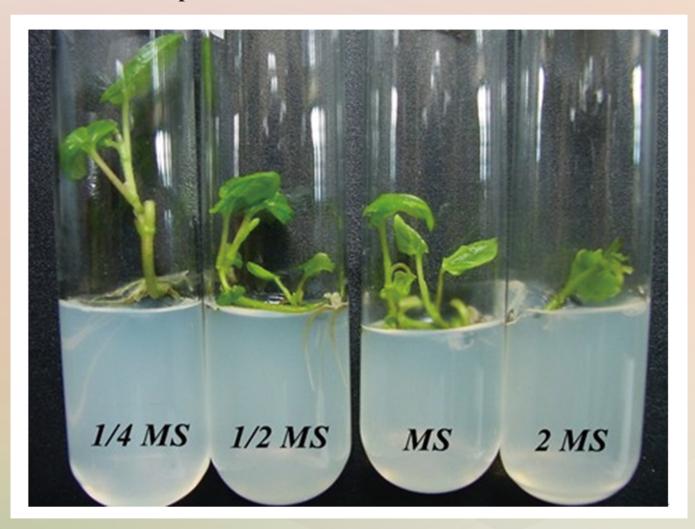




# American Journal of Plant Sciences

Special Issue on Medicinal Plants





# **Journal Editorial Board**

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

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

#### Editor-in-Chief

Prof. Sukumar Saha US Department of Agriculture, USA

#### **Editorial Board**

Dr. Stanislav Kopriva

Prof. Ibrokhim AbdurakhmonovAcademy of Sciences of Uzbekistan, UzbekistanProf. Ashok AhujaIndian Institute of Integrative Medicine, India

**Prof. Mehmet Emin Aydin** Selcuk University, Turkey

Dr. Efrem Bechere US Department of Agriculture, USA

Dr. Ramesh BuyyarapuDow AgroSciences, USADr. Salah El-Sayed El-HendawySuez Canal University, EgyptProf. Kunshan GaoXiamen University, China

Prof. Lizhi Gao Chinese Academy of Sciences, China

Dr. Melaku A. Gedil International Institute of Tropical Agriculture, Ethiopia

Dr. Samuli HelamaUniversity of Lapland, FinlandDr. Jiahuai HuUniversity of Florida, 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

John Innes Institute, UK

Dr. Süleyman KorkutDuzce University, TurkeyDr. Vikas KumarBanaras Hindu University, IndiaProf. Din-Pow MaMississippi State University, USAProf. Amit MitraUniversity of Nebraska, USA

Dr. Adele Maria MuscoloUniversity Mediterranea di Reggio Calabria, ItalyDr. P. K. NagarInstitute of Himalayan Bioresource Technology, India

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. R. R. Sharma Indian Agricultural Research Institute, India

Dr. Toshiyuki Shibata Mie University, Japan

Dr. Rajbir Singh Directorate of Water Management, India

Dr. Sylvia Urban RMIT University, Australia

Dr. Kailas Wasewar Visvesvaraya National Institute of Technology, India

Dr. John Z. YuUS Department of Agriculture, USAProf. Tianzhen ZhangNanjing Agricultural University, China

**Prof. Wenjun Zhang** Sun Yat-sen University, China

Prof. Zhiqiang ZhouChina Agricultural University, ChinaDr. Munir Hussain ZiaUS Department of Agriculture, USA

#### **Guest Reviewers**

Hamed K. Abbas Patrick Covello Sylvia Fernandez-Pavia Hiroshi Fukumoto Rosatto Hector Gustavo Yaobo Hu Mark Jackson M. Krishnamurthi Ogita Shinjiro Robert D. Stipanivic Juan Vazquez Lingxiao Zhang

# Published Online November 2014 in SciRes. <a href="http://www.scirp.org/journal/ajps">http://www.scirp.org/journal/ajps</a>



# **Table of Contents**

Volume 5	Number 23	November 2014
Derivation Me	ethod for Determining Sorbitol in Fruit Trees	
R. C. F. S. Can	nesin, W. D. Isique, S. Buzetti, J. A. de Souza	3457
Effects of Copa	aiba Oil on Cyclophosphamide-Induced Teratogenesis in Mice	
	tos Lourenço, J. E. Baroneza, S. de Paula Ramos, L. K. Miguel, L. C. Juli M. J. S. Salles	
Optimization of	of the Protocol for the <i>in Vitro</i> Cultivation of <i>Piper aduncum</i> L	
S. T. Silva, F. \	V. Pacheco, I. C. A. Alvarenga, J. E. B. P. Pinto, S. K. V. Bertolucci, C. P.	. Ferreira3474
•	onservation Status of Threatened Orchid <i>Dactylorhiza hatagi</i> ervation Area, Central Nepal	rea (D. Don) Soo in
P. Bhattarai, E	B. Pandey, R. K. Gautam, R. Chhetri	3483
Antioxidant, A Psidium guaja	Antibacterial and Antitumor Activity of Ethanolic Extract of the Leaves	e
•	. G. R. das Dores, C. S. Ramos, F. C. G. Evangelista, L. M. da Silva Tinoc rotti, M. das Graças Carvalho, A. de Paula Sabino	·

#### **American Journal of Plant Sciences (AJPS)**

#### **Journal Information**

#### SUBSCRIPTIONS

The American Journal of Plant Sciences (Online at Scientific Research Publishing, <a href="www.SciRP.org">www.SciRP.org</a>) is published monthly by Scientific Research Publishing, Inc., USA.

#### **Subscription rates:**

Print: \$79 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: <a href="mailto:sub@scirp.org">sub@scirp.org</a>

#### **SERVICES**

#### Advertisements

Advertisement Sales Department, E-mail: <a href="mailto:service@scirp.org">service@scirp.org</a>

#### 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 © 2014 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  $\ensuremath{\mathbb{O}}$  2014 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



# 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**

Prof. 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.

E-mail: ajps@scirp.org

## Website and E-Mail

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