

AGRIVITA

JOURNAL OF AGRICULTURAL SCIENCE
ACCREDITED BY DIRECTORATE GENERAL OF HIGHER EDUCATION
THE MINISTRY OF EDUCATION AND CULTURE, REPUBLIC OF INDONESIA
No. 81/DIKTI/Kep/2011

VOLUME 37

FEBRUARI-2015

NUMBER: 1

ISSN NO. 0126- 0537

TABLE OF CONTENTS

Isolation and Characteristic of Nitrogen-Fixing Bacteria and Phosphate-Solubilizing Bacteria from Soil High in Mercury in Tailings and Compost Areas of Artisanal Gold Mine <i>Yulia Nuraini, Novi Arfarita, Bambang Siswanto</i>	1
Progress from Selection of Some Maize Cultivars' Response to Drought in the Derived Savanna of Nigeria <i>O. J. Olawuyi, Bello O.B., C. V. Ntube, A. O. Akanmu</i>	8
An Effective Method for DNA Extraction of Mature Leaf of Sapodilla (<i>Manilkara zapota</i> (L.) van Royen) <i>Vega Kartika Sari, Rudi Hari Murti</i>	18
The Growth and Yield of Paddy Ciherang Planted in Dry and Rainy Season and Fertilized With Organic and Inorganic Fertilizers <i>Mudji Santosa, Agus Suryanto</i>	24
An Interaction Model Between Environmental Factors and Black Rice Growth in Irrigated Organic Paddy Field <i>Budiman, Endang Arisoesilansih</i>	30
Exogenous Application of Tryptophan and Indole Acetic Acid (IAA) to Induce Root Nodule Formation and Increase Soybean Yield in Acid, Neutral and Alkaline Soil <i>Sudadi, Suryono</i>	37
Estimates of Genetic Variance Component of an Equilibrium Population of Corn <i>Hamirul Hadini, Nasrullah, Panjisakti Basunanda, Taryono</i>	45
In Vitro Shoot Regeneration of Indonesian Bananas (<i>Musa</i> Spp.) cv. Ambon Kuning and Raja Bulu, Plantlet Acclimatization and Field Performance <i>Yusnita, Ekawati Daniah, Dwi Hapsoro</i>	51
The Relationship Between Altitudes and the Contents of Protein, Carbohydrates, Lipids of Pumpkin (<i>Cucurbita moschata</i>) <i>Suranto Tjiptowibisono, Tedianto, Edi Purwanto, Prabang Sety</i>	59
Hypovirulent Isolates of <i>Fusarium</i> Collected from Chili Crops in Boyolali Regency, Central Java, Indonesia <i>Supyani, Sri Widadi</i>	67
Pod Number and Photosynthesis as Physiological Selection Criteria in Soybean (<i>Glycine max</i> L. Merrill) Breeding for High Yield <i>S.M. Sitompul, Dian Indra Sari, Erna Krisnawati, Rachmad Harri Mulia, M. Taufiq</i>	75
Study of Wood Sawdust with Addition of Plantation Wastes as a Growth Medium on Yields and Quality of White Oyster Mushroom <i>Imam Mudakir, Utami Sri Hastuti</i>	89

ISSN: 0126-0537 (Printed)
E-ISSN: 2302-6766 (Electronic)

AGRIVITA

**Accredited by Decree of The Directorate General of Higher Education
The Ministry of Education and Culture, Republic of Indonesia No: 81/DIKTI/Kep/2011
Indexed in Elsevier Product (Scopus), Proquest, International Scientific Indexing (ISI), Directory of
Open Access Journal (DOAJ) and Google Scholar**

Agrivita is Journal of Agricultural Science (AJAS) publishes articles in plant science such as agronomy, horticulture, plant breeding, soil-plant sciences and pest or disease-plant sciences and has been not published at least five years old. Published by Faculty of Agriculture University of Brawijaya Indonesia in collaboration with Indonesian Agronomy Association (PERAGI).

Editor in Chief

Kuswanto

Editorial Board

Moch. Dawam Maghfoer

Budi Prasetya

Hagus Tarno

Technical Editor

Silvia Santi Wahyuni

Administrator

Endah Apriliani

Aini Nur Laila

Banking

Andik Yudianto, Bank Negara Indonesia (BNI Bank) Branch of Malang, Acc No.0254013689
Swift Code : BNINIDJA

EDITORIAL ADDRESS

Faculty of Agriculture University of Brawijaya
5th Floor Agriculture Building

Jl. Veteran Malang 65145 East Java Indonesia Phone/Fax: +62-341-575743

E-mail : agrivita@ub.ac.id, agrivitafaperta@yahoo.com, agrivitafaperta@gmail.com

Website: <http://www.agrivita.ub.ac.id>

Publication Schedule

AGRIVITA, journal of agricultural science publish three times in a year (February, June and October)

Manuscript Submission

Manuscript should be written in MS words format or other software program. Figure, illustration and picture included in the manuscript file. Send the manuscript directly to <http://www.agrivita.ub.ac.id>

Manuscript Publishing

Feasible manuscript was determined by Editorial Board after obtaining recommendations from peer reviewer. Manuscript revision is author responsibility and manuscripts that are not feasible will be returned to the author.

**Editorial Board would like to thank to peer reviewer who has been invited
by Agrivita Journal of Agricultural Science Volume 37 number 1, 2015**

Prof. Xinbin Feng
(Institute of Geochemistry - Chinese Academy of Sciences (IGCAS))

Prof. Pablo Tittone
(Farming Systems Ecology - Wageningen UR Plant Sciences)

Dennis B. Egli, PhD
(Plant and Soil Sciences - University of Kentucky, Pennsylvania State)

Wang Pu
(College of Agriculture and Biotechnology - China Agricultural University)

Dr. Buang Abdullah
(Genetics Plant Breeding - Indonesian Rice Research Institute)

Dr. Sujin Patarapuwadol
(Department of Plant Pathology - Kasetsart University Thailand)

Dr. Ragapadmi Purnamaningsih
(Agricultural Biotechnology - Indonesian Biotechnology and Genetic Resources Research Institute)

B. Mohan Kumar, PhD
(Agronomy, Agroforestry and Climate Change - Indian Council of Agricultural Research (ICAR))

Dr. Dawam Maghfoer
(Horticulture - University of Brawijaya Indonesia)

Dr. Budi Prasetya
(Soil Science - University of Brawijaya Indonesia)

Dr. Ali Jamil
(Biology and Soil Fertility - Indonesian Rice Research Institute)

Dr. Darmawan Saptadi
(Plant Breeding - University of Brawijaya Indonesia)

Panca Jarot Santoso, M.Sc.
(Plant Breeding - Indonesian Tropical Fruits Research Institute)

Prof. Kuswanto
(Plant Breeding - University of Brawijaya Indonesia)

Dr. Bambang Tri Rahardjo
(Plant Protection - University of Brawijaya Indonesia)

Prof. Estri Laras Arumingtyas
(Department of Biology - University of Brawijaya Indonesia)

Hagus Tarno, PhD
(Plant Protection - University of Brawijaya Indonesia)

Farzane Porianejad
(Ministry of Jihad e-Agriculture - Islamic Republic of Iran)

Dr. Noer Rahmi Ardiarini
(Plant Breeding - University of Brawijaya Indonesia)