

ISSN 2621-2528 (Online)
ISSN 2621-4709 (Print)

Vol. 7 No. 1 February 2023

JAAST

Journal of Applied Agricultural Science and Technology



Published by:

Green Engineering Society



All publications is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Journal of Applied Agricultural Science and Technology (JAAST)

Journal of Applied Agricultural Science and Technology (JAAST) is an international journal, focuses on applied agricultural science and applied agricultural technology in particular: agricultural mechanization, food sciences, food technology, agricultural information technology, agricultural economics, agricultural statistics, bioinformatics, farm structure, farm power, agricultural machinery, irrigation and drainage, land and water resources engineering, renewable energy, environment, crop production, and crop protection.

JAAST has been ACCREDITED by the Ministry of Research, Technology and Higher Education (RistekDikti) of The Republic of Indonesia as an achievement for the peer-reviewed journal. Started from Volume 4 Number 2 2020, the accreditation of JAAST is promoted to Sinta 2 rank as stated on the decree of Director of Resources of Ministry of Education, Culture, Research and Technology Number [5162/E4/AK.04/2021](#).

This journal provides immediate open access to its content on the principle that making research freely available to the public supports a greater global exchange of knowledge. The journal can be accessed at www.jaast.org

Benefits of open access for the author, include:

- Free access for all users worldwide
- Increased visibility and readership
- Rapid publication

The works/articles in the Journal of Applied Agricultural Science and Technology are bound to Creative Commons Attribution License (CC BY-SA 4.0)

Journal of Applied Agricultural Science and Technology, with registered number ISSN: 2621-2528 (online), ISSN: 2621-4709 (print) has been indexed on:



The journal has been listed in:



EDITORIAL TEAM

Editor in Chief

Dr. Edi Syafri, ST, M.Si. Scopus ID: [57196348984](#)

Politeknik Pertanian Negeri Payakumbuh, Indonesia

Editorial Board Members:

1. **Dr. Mavinkere Rangappa Sanjay.** Scopus ID: [57042636700](#)
King Mongkut's University of Technology North Bangkok, Thailand
2. **Assoc. Prof. Samsuzana Abd Aziz.** Scopus ID: [57192693512](#)
Putra Malaysia University, Malaysia
3. **Ahmad Fadholi, S.Si, M.Sc, Ph.D.** Scopus ID: [57195432490](#)
Universiti Kebangsaan Malaysia (UKM), Malaysia
4. **Dr. Claudio Burgos.** Scopus ID: [56397843100](#)
Universidad de O'Higgins, Chile
5. **Dr. Eng. Muhammad Makky.** Scopus ID: [55630259900](#)
Andalas University, Indonesia
6. **Dr. Arridina Susan Silitonga, ST, M.Eng.** Scopus ID: [39262559400](#)
Medan State Polytechnic, Indonesia
7. **Ika Noer Syamsiana, ST, PhD.** Scopus ID: [53265202500](#)
Malang State Polytechnic, Indonesia
8. **Dharma Aryani, S.T, M.T, Phd.** Scopus ID: [35182491300](#)
Ujung Pandang State Polytechnic, Indonesia
9. **Prof. Dr. Nasmi Herlina Sari, ST, MT.** ScopusID: [57192905081](#)
Mataram University, Indonesia
10. **Dr. Farah Fahma, STP, MT.** Scopus ID: [36536701900](#)
Bogor Agricultural University, Indonesia
11. **Dr. Mochamad Asrofi, ST.** Scopus ID: [57193698037](#),
Jember University, Indonesia
12. **Prof. Dr. Ravindra Chandra Joshi.** Scopus ID: [7202085232](#)
Central Bicol State University of Agriculture, Philippines
13. **Dr. R.A. Ilyas,** Scopus ID: [57196328367](#)
Universiti Teknologi Malaysia, Malaysia
14. **Prof. Anish Khan.** Scopus ID: [7404910403](#)
King Abdulaziz University, Saudi Arabia
15. **Prof. Taufik.** Scopus ID: [23670809800](#)
Cal Poly State University, United States
16. **Prof. Dr. Rahadian Zainul, S.Pd., M.Si,** Scopus ID [56737195700](#)
Universitas Negeri Padang, Indonesia
17. **Dr. Rilma Novita, S.TP, MP,** Scopus ID: [57189370464](#)
Politeknik Pertanian Negeri Payakumbuh, Indonesia

Language Editor:

Widya Febrina, M. TESOL, Politeknik Pertanian Negeri Payakumbuh, Indonesia

Editorial Assistant:

Ihsani Amaliah Putri, A.Md.T, Green Engineering Society, Indonesia

Rani Anggraini Zalukhu, A. Md. P, Green Engineering Society, Indonesia

Editorial Office

Green Engineering Society

Jl. Raya Negara Km.7 Tanjung Pati 26271 Kec. Harau Kab Limapuluh Kota Sumatera Barat

www.jaast.org

e-mail: journaljaast@gmail.com

This issue has been available online since **February 28, 2023** for the regular issue of February 2023. All articles in this issue (**6 original research articles**) were authored/co-authored by **28 authors** from **2 countries** (Malaysia and Indonesia).

TABLE OF CONTENT

Volume 7, Number 1, Page 1-63

February 2023

Articles

- [Biology of *Tetrastichus brontispae* \(Ferriere\) \(Hymenoptera: Eulophidae\),
The Coconut Leaf Beetle Parasitoid](#)
Zahlul Ikhsan, Hidrayani Hidrayani, Yaherwandi Yaherwandi, Aulia Oktavia 1
- [Environmental-Economic Analysis of Portable Mixed-Mode Greenhouse Dryer
for Fig Leaves](#)
*Wan Nurlaila Mat Desa, Surya Dailiati, Hernimawati Hernimawati,
Hasna Rifdah Khairunnisa, Faisal Mahfud, Haznan Abimanyu, Ahmad Fudholi,
Mulianti Mulianti* 13
- [Soil Tillage Affected Weed Community and The Growth and Yield of Soybean
for Edamame Production](#)
Irawati Chaniago, Aswaldi Anwar, Rahmi Azhari 26
- [Development of High-Calcium Chicken Nuggets Fortified with Various Citric
Acid - Extracted Chicken Eggshells Powder](#)
Suryono Suryono, Hutwan Syarifuddin, Jesayas Jesayas, Musyid Musyid, Addion Nizori 36
- [Relationship of Tree Architecture on Canopy Throughfall and Stem Flow
in The Upstream of Batang Mahat River Basin Lima Puluh Kota Regency Indonesia](#)
*Reni Ekawaty, Yonariza Yonariza, Eri Gas Ekaputra, Ardinis Arbain,
Rusnam Rusnam* 45
- [The Importance of Stem Borer, *Apomecyna saltator* Fabricius \(Coleoptera: Cerambycidae\)
in Honey Pumpkin Plants \(*Cucurbita moschata* Dusch\)](#)
Fheny Rama Shen Thaury, Wilyus Wilyus, Noalina Noalina 53