

### **Buitenzorg: Journal of Tropical Science**

Buitenzorg: Journal of Tropical Science is a peer-reviewed journal that aims to provide a platform for researchers and scholars to publish their original research in all fields of tropical science in both Indonesian and English. The scope of the journal covers a broad range of topics, including, but not limited to, tropical biodiversity, agriculture, biology, ecology, environmental science, forestry, climate, and health sciences. Our goal is to facilitate the dissemination of high-quality research that contributes to the advancement of knowledge and the sustainable development of tropical regions around the world. We welcome submissions from scholars, scientists, and researchers from all over the world. Our rigorous peer-review process ensures that all articles published in Buitenzorg: Journal of Tropical Science meet high standards of quality and scientific integrity. The journal is published TWICE a year, in June and December, starting in 2024 by the Innovation Centre for Tropical Sciences Foundation.

### **Editorial Office**

Buitenzorg: Journal of Tropical Science

Innovation Centre for Tropical Sciences, Bogor Raya Permai FC IV/24, Curug, Kec. Bogor Barat, Kota Bogor, Jawa Barat 16113

email: admin\_bjts@icts.or.id

#### **Editorial Team**

#### **Chief Editor**

• Dr. Toto Hadarto

Research Center for Genetic Engineering, National Research and Innovation Agency, Bogor, Indonesia.

#### **Associate Editor**

• Dr. Agwin Polosoro, M.Sc.

Research Center for Genetic Engineering, National Research and Innovation Agency, Bogor, Indonesia.

#### **Section Editors**

• Dr. Ira Erdiandini, M.Si.

Faculty of Agriculture, Tanjungpura University, Pontianak, West Kalimantan, Indonesia.

• Dhadhang Wahyu Kurniawan, Ph.D

Department of Pharmacy, Faculty of Health Sciences, Universitas Jenderal Soedirman, Purwokerto, Indonesia.

• Yayu Romdhonah, Ph.D

Department of Agro-ecotechnology, Faculty of Agriculture, Universitas Sultan Ageng Tirtayasa, Banten, Indonesia.

• Agus Bahar Rachman, Ph.D.

Faculty of Agriculture, Gorontalo State University, Gorontalo, Indonesia.

• Dr. Achmad Gus Fahmi

Department of Cosmetics Engineering, Faculty of Technology Production and Industrial, Sumatera Institute of Technology, Bandar Lampung, Indonesia.

#### **Copy Editors**

• Dr. Kusumawaty Kusumanegara

Research Center for Horticulture, National Research and Innovation Agency, Bogor, Indonesia.

• Siti Hodijah, S.Si.

Innovation Centre for Tropical Sciences, Bogor, West Java, Indonesia.

#### **Production Editor**

• Anisa Nurfadilah, S.Si.

Innovation Centre for Tropical Sciences, Bogor, West Java, Indonesia.

#### **Technical Editor**

• Ilham Hanafi, S.Hut

Innovation Centre for Tropical Sciences, Bogor, West Java, Indonesia.

#### Reviewer

- Dr. Surono, M.Agr.
  - Research Center for Applied Microbiology, National Research and Innovation Agency, Bogor, Indonesia.
- Dr. Zulhan Arif, M.Si
  - Department of Chemistry, Faculty of Matematics and Science, IPB University, Bogor, Indonesia
- Dr. Mahat Magandhi, M.Si.
  - Research Center for Applied Botany, National Research and Innovation Agency, Bogor, Indonesia
- Dr. Usep Suhendar, M.Si.
  - Departemen of Farmasi, Faculty of Matematics and Science, Pakuan University, Bogor, Indonesia
- Dr. Yudianto, M.Si.
  - Biology Education Study Program, Faculty of Education and Teacher Training, State Islamic Institute of Metro, Lampung, Indonesia
- Zulham Apandy Harahap, S.Kel., M.Si.
  - Department of Aquatic Resources Management, Universitas Sumatera Utara, Indonesia
- Diyah Martanti, M.Si.
  - Research Center for Applied Botany, National Research and Innovation Agency, Bogor, Indonesia

#### **Table of Contents**

# In Silico Study of *NONEXPRESSOR OF PATHOGENESIS-RELATED GENES 1* (*NPR1*) Sequence in Citrus Associated with Huanglongbing Resistance

Kristianto Nugroho, Tri Joko Santoso\*, Mia Kosmiatin, Dewi Sukma, Agus Purwito

1-14

### A Baseline Study of *Nepenthes* spp. in Bukit Tangkiling Nature Tourism Park, Palangka Raya, Central Kalimantan, Indonesia

Muhammad Rizki\*, Helen Oktafiani, Desimaria Panjaitan

15-25

# In-Vitro Antibacterial Activity and Preliminary Cytotoxicity of White Turmeric (Curcuma zedoaria) Kombucha

Tobias Hezkel Siregar, Mafrikhul Muttaqin, Syaefudin\*

26-37

### Community Structure and Association of Crinoidea (Echinodermata) with Coral Reef Lifeforms on the Reef Slopes of Pramuka Island, Seribu Islands

Muhammad Emir Rasyid\*, Mufti Patria

38-45

### CO<sub>2</sub> Supplementation Unlocks Biomass, Lipid, and Carotenoid Potentials in Microalgae Coelastrella sp. strain Saripa

Akhmad Ikhsan Maulana, Nyoman Semadi Antara, I Wayan Arnata, Ni Wayan Sri Agustini, Hani Susanti\*

46-56