

ISSN 2549-6980

VOLUME 3 NUMBER 1 - FEBRUARY 2019



ADVANCES IN TROPICAL BIODIVERSITY AND ENVIRONMENTAL SCIENCES



PUBLISHED BY

INSTITUTE FOR RESEARCH AND COMMUNITY SERVICES,
UDAYANA UNIVERSITY, BALI, INDONESIA

Advances in Tropical Biodiversity and Environmental Sciences

ISSN 2549-6980

EDITOR IN CHIEF

Ni Luh Watiniasih (*Udayana University, Indonesia*)

CO-EDITORS IN CHIEF

Pande Gde Sasmita Julyantoro (*Udayana University, Indonesia*)

Iriani Setyawati (*Udayana University, Indonesia*)

I Made Merdana (*Udayana University, Indonesia*)

I Komang Ari Mogi (*Udayana University, Indonesia*)

EDITORIAL BOARDS

I G N Kade Mahardika
(*Udayana University, Indonesia*)
Randall W. Robinson
(*Victori University, Melbourne, Australia*)
I Wayan Kasa
(*Udayana University, Indonesia*)

Kalidas Shetty
(*North Dakota State University, Fargo, ND, USA*)
Made Pharmawati
(*Udayana University, Indonesia*)
Chartchai Khanongnuch
(*Chiang Mai University, Thailand*)

Paul Bailey
(*Emiretus of Monash University, Melbourne, Australia*)

PUBLISHER

Research Center and Community Service Board, Udayana University
Campus of Bukit Jimbaran, Badung, Bali.

SCOPE OF JOURNAL

Advances in Tropical Biodiversity and Environmental Sciences (ATBES) is a peer-reviewed journal which devoted to the advancement and dissemination of scientific knowledge concerning tropical biodiversity and environmental sciences throughout the world for researchers and professionals. The scope of journal is wide and multidisciplinary that publishes original research papers, review articles, as well as conceptual, technical and methodological papers on all aspects includes research findings, experimental design, analysis and recent application in tropical biodiversity and environmental science studies. This journal published in English and being distributed worldwide. It covers scientific and technological aspects from all fields that have general relevance to tropical biodiversity and environmental sciences including investigations on tropical biodiversity, systematics and taxonomy, terrestrial and aquatic ecology, wildlife management and control, ethnobotany and ethnozoology, tropical plant and animals cultivation, natural product chemistry, ecotourism, environmental remediation and management, and geographic information system (GIS), remote sensing and other modeling application for environmental studies.

ABOUT JOURNAL

Advances in Tropical Biodiversity and Environmental Sciences (ATBES) is a scientific journal published since 2017. The journal consistently publishes twice a year (February and August). The journal is registered in DOAJ. ATBES is employing a Cross Check Ref. to prevent any suspected plagiarism in the manuscripts.

SECRETARIAT OF ATBES

Kampus Bukit Jimbaran, Badung, Bali. 80361
Phone / Fax: +62-361-703367
e-mail: atbes@unud.ac.id
website: <https://ojs.unud.ac.id/index.php/ATBES>

Advances in Tropical Biodiversity and Environmental Sciences

Vol. 3, No. 1, February 2019

TABLE OF CONTENTS

HISTOLOGY OF RAT PANCREAS TREATED WITH *Calliandra calothyrsus* LEAF IN THE DIETS DURING PREGNANCY AND LACTATION

Pages 1-4

Iriani Setyawati

ANALYSIS OF PHENOLIC AND TANNIN CONTENTS IN THE METHANOL EXTRACT OF SWEET AND SOUR STAR FRUIT PLANTS (*Averrhoa carambola* L) LEAVES COMMONLY USED AS RAW MATERIALS OF LAWAR (A BALINESE TRADITIONAL FOOD)

Pages 5-7

Ni Putu Adriani Astiti, Sang Ketut Sudirga, Yan Ramona

COMPARISON OF DNA YIELD FROM DIFFERENT PLANT MATERIALS OF *Plumeria* sp. (APOCYNACEAE)

Pages 8-11

Vanesa Martida and Made Pharmawati

FIRST MOLECULAR IDENTIFICATION OF SUNFISH IN NORTH BALI WATER

Pages 12-16

I Made Oka Riawan, Gede Iwan Setiabudi, I Made Merdana, I Putu Mangku Mariasa, Kadek Teguh Wirasatra

SEAGRASS (*Enhalus acoroides*) AS AN HEAVY METAL BIOINDICATOR ON BIOMONITORING WATER QUALITY IN SANUR BEACH BALI

Pages 17-20

Ni Putu Putri Wijayanti and I Nyoman Giri Putra

WRITING GUIDANCE

1. *Advances in Tropical Biodiversity and Environmental Sciences* is issued twice a year, each February and September.
2. Technical paper is an original work none published yet or would be published to other journal.
3. Technical papers could be result from research formatted science or technology, research result, literature review study, methodology study, critical original idea, review of important issue in recent development.
4. Technical paper is written in English. The organization of the paper includes Abstract, Introduction, Research Method, Results and Analysis, Conclusion, Thanks Giving (if any) and Reference. The paper length is maximum 8 pages including tables and figures.
5. Abstract should briefly summarize the essence of the paper and address objective, technology or method, results, conclusions, and clinical impact.
6. Technical paper submitted for publication must advance the state of knowledge and must cite relevant prior work.
7. The paper is written according to the template of IRCS UNUD Journals.
8. All accepted papers should complete and sign the copyright form and publishing agreement form, and sent to atbes@unud.ac.id.
9. Technical paper can be submitted to the site <http://ojs.unud.ac.id/index.php/atbes> or sent to atbes@unud.ac.id.
10. The IRCS UNUD Journal address:
Gedung LPPM Universitas Udayana Lantai 4
Jl. Kampus Bukit Jimbaran, Badung, Bali
Telp./fax.: (0361)704622/703367



9 772549 698000