

1 5 DEC 2023

#### CONFERENCE ATTENDANCE REPORT

: Dr. Mohd Akmal bin Mohd Raffi

Name GRA: Nur Haziah binti Musa

Faculty/Institute/Centre : Faculty of Resource Science and Technology

Conference Title : 9th Malaysia International Biology Symposium (i-

SIMBIOMAS 2023)

: Paper 1: Challenges to Pandan Diversity and Conservation in Sarawak Borneo: Field Notes

Title of Paper/Presentation

Paper 2: Notes on *Pandanus* Parkinson from Sarawak:

a member of undervalued Pandanaceae family

Conference Venue & Date

Ballroom Mesmera 1, The Everly Putrajaya / 28

November 2023 until 29 November 2023

Conference Organised by

Department of Biology, Faculty of Science, Universiti

Putra Malaysia (UPM)

Participation Sponsored by

Fundamental Research Grant Scheme by Ministry of Figure 1: EDGC(14WAR14H) HMAC(22)

Education: FRGS/1/WAB11/UNIMAS/03/2

1. Explain the new knowledge (e.g. theories/ concepts/ issues/ research methods/ techniques) gained from the conference.

New insights on the taxonomical significance of the leaves anatomy in some members of the Pandanaceae family (related to leaves stiffness).

2. Explain the feedback received on your presentation (Please indicate duration, Q&A and other relevant discussion).

The presentations was conducted for 15 minutes (including the 5 minutes Q&A session). The feedbacks received from both presentations were:

- a. Morphological characteristics of the *Pandanus* species in Sarawak need to ve compared with the vouchers specimens deposited (by the *Pandanaceae* botanist, Benjamin Stone) in the Herbarium of Universiti Malaya (KLU).
- b. Characteristics such as leaf spines and apex shape should be included in the construction of dendrogram to increase its validity.
- c. The species diversity of Pandan in Sarawak should be compared to species from other part of Malaysia such as in Sabah and Peninsular Malaysia.
- d. Species with new locality records must be published to show the current knowledge on the Pandanaceae species of Sarawak.

Organized by





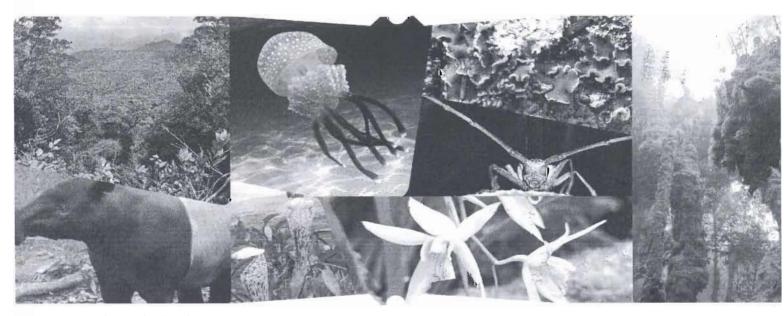
## ABSTRACT BOOK

H MALAYSIA INTERNATIONAL **BIOLOGY SYMPOSIUM** 

> -SIMBIOMAS 2023

28<sup>th</sup> - 29<sup>th</sup> NOVEMBER 2023 THE EVERLY PUTRAJAYA MALAYSIA

> **BIODIVERSITY IN THE ANTHROPOCENE ERA:** THE WAY FORWARD







(a) biologydepartmentupm

Department of Biology UPM









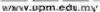












# MALAYSIA INTERNATIONAL BIOLOGICAL SYMPOSIUM

"Biodiversity in the Anthropocene Era: The Way Forward"

#### **PROGRAM & ABSTRACTS**

28<sup>th</sup> – 29<sup>th</sup> NOVEMBER 2023 | THE EVERLY PUTRAJAYA, MALAYSIA

Edited by: Meenakshi Mallapan Christina Seok Yien Yong Muskhazli Mustafa Yap Chee Kong

Organised:

UPM UNIVERSITI PUTRA MALAYSIA

Department of Biology Faculty of Science Universiti Putra Malaysia



#### **OB12**

#### Notes on the *Pandanus* Parkinson from Sarawak: a member of the undervalued Pandanaceae family

Haziah <u>Musa</u><sup>1</sup>, Akmal <u>Raffi</u><sup>1\*</sup>, Zinnirah <u>Shabdin</u><sup>1</sup>, Meekiong <u>Kalu</u><sup>1</sup>, Nur Safinas <u>Jelani</u><sup>2</sup>, Mohd <u>Effendi Wasli</u><sup>1</sup>

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#### **Abstract**

This study represents an essential endeavour to present the current state of knowledge on the *Pandanus* of Sarawak after three decades of its enumeration. 13 *Pandanus* species have been documented as a consequence of examination on the herbarium specimens and a series of field observations, including the reinstatement of one species that was previously believed to be endemic to Peninsular Malaysia. More details on the morphological characteristics, habitat preferences and ethnobotanical uses of selected species are also provided. It is anticipated that the data from this study will assist in the management of the species conservation in Sarawak.

Keywords: Biodiversity; Ethnobotany; Herbarium specimen; Malaysia; Pandan



#### **OB13**

### Challenges to Pandan Diversity and Conservation in Sarawak, Borneo: Field Notes

Akmal Raffi<sup>1\*</sup>, Haziah Musa<sup>1</sup>, Zinnirah Shabdin<sup>1</sup>, Meekiong Kalu<sup>1</sup>, Nur Safinas Jelani<sup>2</sup>

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#### **Abstract**

The botanical revisions of the pandan family (Pandanaceae) in Sarawak are now underway, although in many cases the work is hampered by a lack of information because it heavily relies on the state's herbarium vouchers as a source of data and proof. This is a result of the incomplete documentation of the field observations - as it is ideal to describe some botanical characteristics in situ, such as leaves stiffness, odour of the staminate inflorescence, cephalia shape and colour, insect visitation incidences and others. The quest to comprehend the diversity within the Pandanaceae will come to a halt as field notes grow harder to come by, and related conservation issues are likely to remain unresolved. Consequently, this study aims to present the current state of knowledge on the Pandanaceae species in Sarawak through years-worth of field observations in various habitats across the region - with a focus on the notes on its diversity (of selected species) and conservation challenges of the plant family. It is hoped that the data will shed fresh light on this little-known plant species, revealing some of its botanical characteristics. Additionally, this research will highlight the necessity of preserving the local pandans, which includes preserving living collections and archiving local names from various ethnic groups.

**Keywords**: Biodiversity; Malaysia; Pandanaceae; Preservation







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