

# Foreword

Welcome to the first issue of 2024 for the *Pertanika Journal of Tropical Agricultural Science (PJTAS)*!

PJTAS is an open-access journal for studies in Tropical Agricultural Science published by Universiti Putra Malaysia Press. It is independently owned and managed by the university for the benefit of the world-wide science community.

This issue contains 20 articles; two review articles, two short communications, one case study and the rest are regular articles. The authors of these articles come from different countries namely Australia, Bangladesh, India, Indonesia, Malaysia, Nigeria and Thailand.

A regular article entitled “*Bengkung (Pachyrhizus erosus)* Extract Has Significant Antidiabetic Activity in Diabetes Mellitus-induced Rats” evaluated the antidiabetic activity of *bengkung* extracts administered via oral gavage into rats at 4 days post-induction of streptozotocin-nicotinamide-induced diabetes mellitus. The results showed that *bengkung* extract has antidiabetic activity, as indicated by a significant decrease in blood sugar levels and recovery of damaged pancreatic cells in treated diabetic rats. The further details of this study are found on page 1.

Bee Lynn Chew and her teammates from Universiti Sains Malaysia assessed the effects of coconut water and banana homogenate in the regeneration of Meyer lemon. The shoots were treated in half-strength Murashige and Skoog media fortified with 2 mg/L 6-benzylaminopurine with varying concentrations of coconut water and banana homogenate without sucrose. This study revealed that the addition of coconut water and banana homogenate has the potential to induce the regeneration of new shoots, indicating that these organic additives exhibited growth-stimulating effects and might be employed as potential carbon sources in the *in vitro* shoot regeneration of Meyer lemon for micropropagation purposes. The detailed information of this article is available on page 147.

A selected article entitled “Survival Rate and Growth Performance of *Holothuria scabra* Towards Different Stocking Densities and Feeding with *Spirulina*” investigated the effects

of stocking densities and *Spirulina* feeding towards the survival of *H. scabra* by divided the juveniles of *H. scabra* into three different stocking densities and fed them with 1 g of dissolved *Spirulina* powder once on alternate days. The outcomes proved that the optimum initial stocking density is between 100 and 200 individuals for a 1-ton fibreglass tank with a 500 L water capacity. In addition, the *Spirulina* can be used as the main protein source as compared to other diets for juvenile *H. scabra*. Full information of this study is presented on page 191.

We anticipate that you will find the evidence presented in this issue to be intriguing, thought-provoking and useful in reaching new milestones in your own research. Please recommend the journal to your colleagues and students to make this endeavour meaningful.

All the papers published in this edition underwent Pertanika's stringent peer-review process involving a minimum of two reviewers comprising internal as well as external referees. This was to ensure that the quality of the papers justified the high ranking of the journal, which is renowned as a heavily-cited journal not only by authors and researchers in Malaysia but by those in other countries around the world as well.

We would also like to express our gratitude to all the contributors, namely the authors, reviewers, Editor-in-Chief and Editorial Board Members of PJTAS, who have made this issue possible.

PJTAS is currently accepting manuscripts for upcoming issues based on original qualitative or quantitative research that opens new areas of inquiry and investigation.

**Chief Executive Editor**

**Prof. Ir. Dr. Mohd Sapuan Salit**

[executive\\_editor.pertanika@upm.edu.my](mailto:executive_editor.pertanika@upm.edu.my)