

Foreword

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

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 25 articles: four review articles; one short communication; one case study; and the rest are regular articles. The authors of these articles come from different countries namely Bangladesh, Indonesia, Malaysia, Nigeria and Vietnam.

Ratih Hardiyanti and her teammates from Universitas Gadjah Mada have assessed the extraction methods of the noni fruit (*Morinda citrifolia* L.) and ensured appropriate method selection for the isolation of optimal bioactive ingredients. They found out that noni fruit contains phytochemical components that have multiple health benefits, which include polyphenols and flavonoids. In addition, there are several extraction techniques available that can generate optimally bioactive extracts. The separation technique for noni fruit was solid-liquid extraction or leaching. The detailed information of this article is available on page 1139.

The regular article entitled “*In-vivo* Toxicity Assessment of the Garlic Juice Extract (*Allium sativum*) in Juvenile Hybrid Grouper (*Epinephelus fuscoguttatus* × *Epinephelus lanceolatus*)” evaluated the toxicity of garlic juice extract in juvenile hybrid grouper via bath and oral administration. A total of 280 fish, each with an average weight of 20 ± 5 g, were evenly distributed among 28 glass aquaria. The fish were immersed in freshly prepared garlic juice extracts at 0, 500, 600, 700, 800, 900, and 1,000 ppm concentrations. Meanwhile, pellets containing 0, 20, 40, 60, 80, and 100% garlic juice extract were administered for oral exposure. The median lethal concentration of garlic juice extract following bath immersion was recorded at 993.11 ppm after 96 hr. Besides, there was no mortality in all groups exposed to garlic juice extract orally, indicating that the extract has a shallow effect on juvenile hybrid groupers when ingested. Further details of this study are found on page 1379.

A selected article entitled “The Effect of Biofertilizer Dose on Growth and Yield of Four Maize Varieties in Indonesia” determined the effect of biofertilizer application in liquid and granule form with several doses on the growth and yield of four maize varieties. The study was carried out using nested randomized complete block design with two factors, i.e., 7 biofertilizers (two formulas, i.e., liquid and granule with 3 levels of dosage) and 4 maize varieties. The results showed that the application of biofertilizers affects the growth and yield of several maize varieties. Granular

biofertilizer at a dose of 150 g/plant showed the best growth and yield observed variables, and Bisi 99 showed the best performance compared with other maize varieties. Full information of this study is presented on page 1391.

In the last 12 months, of all the manuscripts peer-reviewed, 40% were accepted. This seems to be the trend in PJTAS.

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.

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