Foreword

Welcome to the 4th issue of 2022 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 18 articles; two review articles and the rest are regular articles. The authors of these articles come from different countries namely Australia, Bangladesh, Hungary, Indonesia, Malaysia, Nigeria, Pakistan, Singapore, Sri Lanka, and Thailand.

A regular article entitled "Isolation, Characterization, and Optimization of Keratinase from *Bacillus cereus* BRAW_KM" aimed to isolate, characterize, and optimize keratinase from *Bacillus cereus* BRAW_KM. The properties of keratinase were investigated using native polyacrylamide gel electrophoresis (PAGE) and sodium dodecyl sulfate (SDS)-PAGE. In addition, the ideal conditions of keratinase were adjusted by temperature, pH, and incubation time on enzyme activity. It resulted in the molecular weights of keratinase being 130 kDa and 95 kDa. Besides that, the best conditions were 29 °C, pH 9, and 90 minutes of incubation. The detailed information of this article is available on page 961

Ameera Abdul Reeza and her teammate from Universiti Teknologi MARA investigated the effect of organic waste fertilizers on growth and development of okra (*Abelmoschus esculentus*). The experiment was carried out in a randomized complete block design (RCBD) with 4 replications consisting of 5 treatments in duration of 6 weeks. The plant height, number of leaves, chlorophyll content, number of fruits, fresh and dry weight, and soil pH were the assessed parameters. The y found out that the NPK 12:12:17:2 (10 g) + chicken manure (25 g) might be the most suitable fertilizer combination to promote the higher growth of okra while reducing the dependency on inorganic compound fertilizers. Full information of this study is presented on page 1021.

A selected article entitled "A Review: Hormone Application for Artificial Breeding towards Sustainable Aquaculture" discussed the current research on artificial breeding in various fish species as well as new approaches or techniques to be applied to regulate the reproductive process in captive fish for sustainable aquaculture. The results show that the artificial hormones could offer a promising technique to breed fish in captivity, ensuring seed availability, improving genetic loss, and reducing the dependency on wild-caught fingerlings. The further details of this study are found on page 1035.

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.

In the last 12 months, of all the manuscripts processed, 39% were accepted. This seems to be the trend in PJTAS.

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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