

# Foreword

Welcome to the second 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 12 articles; a short communication and the rest are regular articles. The authors of these articles come from different countries namely Indonesia, Malaysia, and Thailand.

A selected article entitled “Zebrafish Embryotoxicity and Teratogenic Effects of *Christia vespertilionis* Leaf Extract” tested the toxic and teratogenic effects of the plant on the embryonic development of zebrafish (*Danio rerio*) as the animal model. The results showed that the methanolic leaf extract of *C. vespertilionis* is toxic to zebrafish embryos at concentrations of 200 µg/mL and above, which cause the multiple signs of developmental abnormalities. Hence, the extreme caution is advised in using the plant for healthcare purposes at uncontrolled concentrations. The further details of this study are found on 351.

Nur Azura Adam and her teammates from Universiti Putra Malaysia investigated the best artificial propagation technique for stingless bee *Heterotrigona itama*. Three different artificial propagation techniques, namely splitting, bridging, and splitting bridging, were studied for eight consecutive weeks. Honey pot quantity, colony division, and pollen pot quantity were observed and recorded weekly. It concluded that the splitting technique is the only successful artificial technique that obtained new brood cells and queen of *Heterotrigona itama*. Full information of this study is presented on 367.

A regular article entitled “Effect of Streptomyces Inoculation on *Ipomoea aquatica* and *Pachyrhizus erosus* Grown under Salinity and Low Water Irrigation Conditions” revealed that the salinity affected the success of plant growth-promoting bacteria used in *Ipomoea aquatica* and *Pachyrhizus erosus* cropping more than the water-limited effect. In other words, salinity was the most effective factor, and irrigation was the least influential factor on both plants’ growth. The detailed information of this article is available on 411.

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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