

# Foreword

Welcome to the third 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 28 articles in which all are regular articles. The authors of these articles come from different countries namely Brunei Darussalam, India, Indonesia, Japan, Malaysia and Vietnam.

The regular article entitled “Identification and Quantification of Cucurbitacins B and E in Different Parts of Bitter Gourd Plants Derived from Different Planting Methods” determined the different levels of cucurbitacins B and E in the plants from two different planting methods, conventional and fertigation. Fruits, leaves, stems, and roots of bitter gourd plants from the two different planting methods were harvested for extraction using the sonication extraction method. The extract’s cucurbitacins B and E content were identified and quantified using high-performance liquid chromatography. The outcomes concluded that plant parts and type of planting method can affect the cucurbitacin content in bitter gourd. Full information of this study is presented on page 843.

Suzan Benedick and her teammates from Universiti Malaysia Sabah examined better pollination techniques to achieve acceptable fruit quality for red-fleshed pitaya production under local climatic conditions. For this purpose, stingless bees (*Tetragonula laeviceps*), self-pollination, natural pollination, and hand pollination were used. Forty flowers were observed to obtain data on flowering phenology and fruit quality. They found out that the pollination by *T. laeviceps* generally resulted in better fruit quality than natural pollination and hand pollination of the non-native plant of red-fleshed pitaya, which indicates the integration of pitaya cultivation and stingless bees is likely to improve the yield and quality of the fruits on the farm. The detailed information of this article is available on page 955.

A selected article entitled “Identification of Phytochemicals and Mineral Nutrients of Selected Malaysian Plant Extracts and Its Effects on Seed Priming of Maize” identified the phytochemical compounds and quantify nutrients present in three plant extracts, namely *Euphorbia hirta*, *Polygonum minus*, and *Eleusine indica*, as well as to explore the effect on the growth of maize seedlings (*Zea mays* L.). Five concentrations of plant extracts, i.e., 5, 15, 25, 50, and 100%, were designed to evaluate seed germination and priming. The results showed that *E. hirta* and *E. indica* extracts exhibited inhibitory effects at higher concentrations, while *P. minus* extract maintained a higher germination rate, indicating lower toxicity. Further details of this study are found on page 1003.

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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