

## Foreword

Welcome to the Second Issue of 2019 for the Journal of Tropical Agricultural Science (JTAS)!

JTAS 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 32 articles; 3 are review articles, 5 are short communications and the rest are regular articles. The authors of these articles come from different countries namely Algeria, Egypt, India, Indonesia, Japan, Malaysia, Nepal, Nigeria and Phillipines.

Articles submitted in this issue cover various scopes of Tropical Agricultural Science crop and pasture production, food and nutrition development, veterinary sciences, genetics and molecular biology, biotechnology, microbiology, soil and water sciences, animal production, botany, ecology, fisheries sciences, plant physiology and zoology.

Selected from the scope of crop and pasture production is a regular article entitled “Phosphorus Nutrition Provoked Improvement on the Growth and Yield of ‘MD-2’ Pineapple” by *Vences Cuyno Valleser* from College of Agriculture, Central Mindanao University, Philippines. The study focussed on response of fruit crops to phosphorus application. Hence, this study was conceptualized to evaluate the growth, yield and fruit quality of ‘MD-2’ pineapple in response to varying rates of P under Adtuyon clay soil in Bukidnon, Philippines. The experiment was laid out in a randomized complete block design (RCBD) with five amounts (0, 84, 127, 169 and 211 kg ha<sup>-1</sup>, respectively) of P as treatments with three replications. Results revealed that ‘MD-2’ pineapple growth was significantly influenced by P application. Although higher dose showed negative influence, it was undeniable that higher doses of P ( $\geq 169$  kg ha<sup>-1</sup>) improved the fruit mass ( $\geq 1.42$  kg) as well as yield ( $\geq 96.92$  tons ha<sup>-1</sup>) of ‘MD-2’ pineapple. In general, 169 kg P ha<sup>-1</sup> was found as the optimal amount of P for ‘MD-2’ pineapple production in Adtuyon clay soil. The study suggested that these results could be used as guidance by commercial pineapple growers on optimum phosphorus fertilizer application. Details of the study is available on page 467.

Selected from the scope of biotechnology is an article entitled “Bioconversion of Solid Waste into Nutritional Rich Product for Plants by using *Eudrilus eugeniae*” by *Arun Karnwal* and *Ravi Kumar*, fellow researchers from Lovely Professional University and Bhojia Institute of Life Sciences, India. The study discussed on the use of fusion of eco-friendly efficient techniques for solid waste disposal. The tested the efficacy of *Eudrilus eugeniae* on food, medical and paper waste decomposition. They found out that vermicompost of food waste (VFW) resulted with organic carbon 21.67%, 1.98% nitrogen content, and phosphate 0.59 mg/ml. Vermicompost of medical waste (VMW) analysis resulted with organic carbon 15.3%, 1.17% nitrogen, and 0.54 mg/

ml phosphate. Whereas physico-chemical results of vermicompost of paper waste (VPW) showed 18.67% organic carbon, 1.39% nitrogen, and 0.79 mg/ml phosphate. When tested for nutritional values, all three were better than the normal soil. Hence they suggested that the decomposition of waste materials by earthworms was the preeminent concept of nutrient renewal from green waste. Details for the study is available on page 681.

Selected from the scope of genetics and molecular biology is a regular article entitled “Partial Purification and Model Structure of BPSL2774, a Hypothetical Protein from *Burkholderia pseudomallei* Predicted to be a Glycosyltransferase” by Siti Marhamah Drahaman, Hanisah Ujang, Nor Azurah Mat Akhir, Noraslinda Muhamad Bunnori and Aisyah Mohamed Rehan, fellow researchers from International Islamic University Malaysia and Malaysia Genome Institute, Malaysia. The study discussed on the identification of essential genes and drug targets in antimicrobial therapy of a disease named Melioidosis. The researchers selected a hypothetical genes predicted to be essential for *B. pseudomallei* by transposon-directed insertion site sequencing (TraDIS) technique. One target gene (*BPSL2774*) was successfully amplified and cloned from genomic DNA of *B. pseudomallei* and the target protein (BPSL2774 protein) was successfully expressed in soluble form. BPSL2774 protein have considerable homology to glycosyltransferase GTB type superfamily and RfaB superfamily. The study recommended functional annotation of BPSL2774 protein as a glycosyltransferase, though future validation from biochemical experiments are warranted. Details of the study is available on page 609.

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 JTAS, who have made this issue possible.

JTAS 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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