

## Foreword

Welcome to the **First Issue 2018** of the Journal of Tropical Agricultural Science (JTAS)!

JTAS is an open-access journal for the Tropical Agricultural Science published by Universiti Putra Malaysia Press. It is independently owned and managed by the university and run on a non-profit basis for the benefit of the world-wide science community.

This issue contains **35 articles**, out of which **four** are review papers, **three** are short communication papers and **28** are regular papers. The authors of these articles come from different countries, namely, **Malaysia, Thailand, Iraq, Nigeria, Bangladesh, China, Vietnam, India, Iran, Ghana, Saudi Arabia** and **Indonesia**.

The first review paper aims to briefly cover the necessity of a herd health management programme for dairy goat farms in Malaysia (*Shahudin, M. S., Ghani, A. A. A., Zamri-Saad, M., Zuki, A. B., Abdullah, F. F. J., Wahid, H. and Hassim, H. A.*). The second review paper focusses on the biological pre-treatment of agricultural biomass (*Obeng Abraham Kusi, Duangporn Premjet and Siripong Premjet*), while the third examines the Kedah water resources enactment 2008 for sustainable agriculture development (*Siti Zuhaili Hasan and Sarah Aziz*). The last review article in this issue reports on sperm DNA impairment in bulls, looking at the causes, influences on reproduction and related evaluation (*Baiee, F. H., Wahid, H., Rosnina, Y., Ariff, O. and Yimer, N.*).

One of the short communication papers discusses the seroprevalence of neospora caninum in sheep and goats of the Gua Musang district in Kelantan, Malaysia (*Than Kyaw, Athirah Mohd Mokhtar, Bee Lee Ong, Chee Hoek Hoe, Abd Rahman Aziz, Erkihun Aklilu and Suratn Kamarudin*). The subsequent two short communication papers look at 24-epibrassinolide mediated changes on germination and early seedling parameters of vigna mungo (L). hepper var. shekhar-2 under salinity stress (*Sombir Singh and Somveer Jakhar*) and light-harvesting complex and how it affects the growth of Arabidopsis thaliana plants (*Nozulaidi, M., Khairi, M., Alamri, S. and Jahan, M. S.*).

The 28 regular papers cover a wide range of topics. In the first research paper, simple net rainfall partitioning equations for nearly full to full-canopy stands is studied (*Chong, S. Y., Teh, C. B. S., Ainuddin, A. N. and Philip, E.*). The next paper discusses the effect of

mevalonic acid (MVA) and linalool as a precursor in enhancement of limonene in citrus grandis Osbeck albedo tissue culture (NikNorulaini, N. A. R, Thamare, K. M., Zarina, Z and Tengku Norsalwani, T. L). The other papers are studies on: characterisation of fungi from palm kernel cake (PKC) and the effect of storage temperature on fungi growth (Razali, S. M., Lee, H. Y., Jinap, S. and Mahyudin, N. A.); biochemical and nutritional composition of the giant African land snail (Archachatina marginata) from Southwest Nigeria (Bamidele, Julius A., Ademolu, Kehinde O., Idowu, Adewumi B., Aladesida, Adeyinka A. and Oladele, Adewumi O.); optimisation of soaking conditions to improve the quality of frozen fillets of Bocourti's catfish (pangasius bocourti sauvage) using response surface methodology (RSM) (Chaluntorn Vichasilp and Sutee Wangtueai); effects of short- and long-term temperature on seed germination, oxidative stress and membrane stability of three rice cultivars (dular, KDML105 and riceberry) (Borriboon, W., Lontom, W., Pongdontri, P., Theerakulpisut, P. and Dongsansuk, A.); kenaf-based composite posts as alternative supports for black pepper (piper nigrum L.) (Khew Choy Yuen, Kevin Muiyang, Chen Yi Shang, Wong Chin Mee, Zehnder Jarroop and Siti Nur Aniza); genetic diversity and relationship of Sabah traditional rice varieties as revealed by RAPD markers (Eric Tzyy Jiann Chong, Lucky Poh Wah Goh, Jovita Jun Wong, Zaleha Abdul Aziz, Noumie @ Loumie Surugau, Mariam Abd. Latip and Ping-Chin Lee); effect of naphthalene acetic acid (NAA) on oil content and quality of the mustard plant (brassica campestris L.) (Ferdousi Begum, Feroza Hossain, Md. Monirul Islam and Md. Rafiqul Islam Mondal); the effects of application of exogenous IAA and GA3 on the physiological activities and quality of abelmoschus esculentus (okra) var. singa 979 (Khandaker, M. M., H. M. Azam, J. Rosnah, D. Tahir and M. Nashriyah); the anatomy and histochemistry of structures producing aroma in the leaves of syzygium aromaticum (L.) merr. and clausena excavata burm. f. (Faridah Qamaruz Zaman, Anisa S. Al-Hakimi, Shamsul Khamis, Fatin F. Ruhaizin and Syuhada. M. Zaidi.); GC-MS analysis of phytochemical compounds in the aqueous leaf extract of abrus precatorius (Wan Suriyani Wan-Ibrahim, Tuan Nadrah Naim Tuan Ismail, Siti Farhanah Mohd-Salleh and Norzila Ismail); plant growth, nutrient content and water use of rubber (hevea brasiliensis) seedlings grown using root trainers and different irrigation systems (Nabayi, A., C. B. S. Teh, M. H. A. Husni and Z. Sulaiman); potential mangrove species in the Porong River estuary as an inhibiting agent of heavy metal (Pb, Cu and Zn) pollution (Sari, S. H. J., Harlyan, L. I. and Yona, D.); patterns of biomass allocation in upland rice cultivars grown on soils along a toposequence (Olagunju, S. O., Nassir, A. L., Adewusi, K. M., Oguntade, O. A., Odusanya, O. A. and Azeez, A. A.); enhancement of the contents of anticancer bioactive compounds in mutant clones of

rodent tuber (typhonium flagelliforme lodd.) based on GC-MS analysis (*Nesti Fronika Sianipar and Ragapadmi Purnamaningsih*); assessment of the genetic variation of Malaysian durian varieties using inter-simple sequence repeat markers and chloroplast DNA sequences (*Ging Yang Siew, Wei Lun Ng, Muhammad Fadzly Salleh, Sheau Wei Tan, Huynh Ky, Noorjahan Banu Mohammed Alitheen, Soon Guan Tan and Swee Keong Yeap*); morphometric sexing of little spiderhunter (*Arachnothera longirostra*) in Peninsular Malaysia (*Chong Leong Puan, Wei Lun Ng, Christina S.Y. Yong and Abdl Jalil Norehan*); the performance of male crossbred (Saanen × local) goats fed a concentrate diet (*Rahman, M. M., Syahmi, M. A. G., Airina, R. I. R. K. and Abdullah, R. B.*); antioxidative activities in coconut cultivar against the infestation of red palm weevil (*rhynchophorus ferrugineus olivier*) (*Norhayati Yusuf, Nur Nassihah Mohd. Nasir, Wahizatul Afzan Azmi and Hazlina Ahamad Zakeri*); the effect of residue management and n and s fertilisation on cane and sugar yield of plant and ratoon cane (*Nurhidayati and Abdul Basit*); partial purification and characterisation of cellulase from sugarcane as affected by postharvest storage of sugarcane (*Saccharum officinarum L*) stem. (*Adetuyi Foluso O., Akintimehin Emmanuel S., Karigidi Kayode O., Okonji Raphael E. and Adeniyi Daniel A.*); on-farm diversity of indigenous rice (*oryza sativa L.*) landraces in the East Himalayan border (*Tonlong Wangpan, Tapi Taka and Sumpam Tangjang*); salinity stress and its impact on the morpho-physiological characteristics of aloe vera (*Robabeh Asghari and Rahim Ahmadvand*); field evaluation of tomato varieties/breeding lines against tomato yellow leaf curl virus disease (TYLCV) (*MM Segbefia, HM Amoatey, JK Ahiakpa, EK Quartey, AS Appiah, J Nunoo and R Kusi-Adjei*); antioxidant activity of natural pigment from the husk of the coconut (*Rodiah, M. H., Nur Asma Fhadhila, Z., Kawasaki, N., Noor Asiah, H. and Aziah, M. Y.*); the effect of treatment methods on the nutritive quality of elephant-ear seeds (*enterolobium cyclocarpum jacq griseb*) as feed for ruminant production (*Ojo, V. O. A., Akinade, G. A., Fasae, O. A. and Akinlolu, A. O.*); and the altitudinal diversity of braconid wasps (Hymenoptera: Braconidae) in Fraser's Hill, Pahang, Malaysia (*Rabibah, R., Muhaimin, A. M. D. and Yaakop, S.*).

I 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.

I would also like to express my gratitude to all the contributors, namely, the authors, reviewers and editors, who have made this issue possible. Last but not least, the editorial assistance of the journal division staff is fully appreciated.

JTAS is currently accepting manuscripts for upcoming issues based on original qualitative or quantitative research that opens new areas of inquiry and investigation.

**Chief Executive Editor**

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