



UPM
UNIVERSITI PUTRA MALAYSIA
BERILMU BERBAKTI

IKP NEWSLETTER

IN THIS ISSUE

*PUTRA PLANTATION FORUM SERIES 12
(PPF12)*

ABOUT US

INSTITUTE OF PLANTATION STUDIES (IKP)

The establishment of the Institute of Plantation Studies (IKP) was approved by the Department of Higher Education, Malaysia in 2004 to become a Centre of Excellence for the advancement of plantation and agricultural agrotechnology and problem solving to commodity crops issues. Currently, IKP has three research laboratories; Laboratory of Sustainable Agronomy and Crop Protection (SACP), Laboratory of Plantation System Technology and Mechanization (PSTM) and Laboratory of Processing and Product Development (PPD) to cover the upstream, midstream and downstream activities of plantation crops.

To date, IKP is actively involved in research and consultancy projects covering plantation crops such as palm oil, rubber, cocoa, tea, pepper, coconut, pineapple, and durian. IKP activities mainly support the National Agricommodity Policy 2021-2030 (DAKN2030) to tackle issues and challenges faced by the plantation industry such as sustainability demand (to meet global export demand), stagnant productivity (soil infertility, pest and diseases, and overdependence on foreign labour), and lack of value-creation (limited value added products and limited development of downstream product/technology). With various backgrounds of researchers in IKP and strong collaborations with government agencies, plantation companies and technology providers, IKP would dedicate its experience and expertise to agricultural and plantation research areas.

FOREWORD FROM THE DIRECTOR PROF. DR. SHAUFIQUE FAHMI AHMAD SIDDIQUE



This year is a challenging year for the agriculture sector in Malaysia. While still reeling to recover from the effects of COVID-19 pandemic, global and domestic agriculture is now facing a new shock from the Russia-Ukraine war. This war, which may perpetuate longer than what was initially anticipated, has resulted in global supply shortages of major agricultural commodities that are mainly produced by the two countries, ranging from wheat, maize to fertilizers. The global supply shocks have resulted in steep increases in prices of these commodities causing significant food inflation all around the world.

The effects of the current development on Malaysian agriculture are twofold. Prices of food commodities, just like in other countries, have gone up and the government is actively instituting various measures to mitigate food inflation. On the other hand, the commodities sector, particularly palm oil, is set to benefit from windfall profits from record high prices and weakening Malaysian ringgit. However, the benefits are not fully capitalized. On the plantation side, the oil palm industry is still very much labour dependent and is facing issues of labour shortages, hampering harvesting efficiency. The industry also utilizes a tremendous amount of fertilizer, which is not only environmentally unsustainable but also costly at times of escalating fertilizer prices.

There is much work and research that needs to be conducted to improve production efficiency of the palm oil industry. In fact, there are also rooms for efficiency improvements in other industrial and food crops in this country. The Institute of Plantation Studies is actively conducting research at different levels of agriculture activities that include plant agronomy, pest and disease management, mechanization and automation, smart agriculture, IoT and biomass utilization to improve the productivity and efficiency of this sector. Apart from research, the institute also recognizes the importance of knowledge dissemination and transfer. Series of short courses on soil identification and classification are being offered to planters and researchers to help improve the knowledge on optimal soil management. The institute also offers training on drone application in agriculture, which covers basic flight programming, mapping and data management.

We strongly believe in the importance of knowledge sharing, and this e-newsletter serves as a platform to update our stakeholders on the current development and activities of our institute. Happy reading.

For more information on IKP,
please visit us at:



ikp.upm.edu.my



Institut Kajian Perladangan,
Universiti Putra Malaysia



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MAIN HIGHLIGHT | MEMBERS FOR LABORATORY OF SUSTAINABLE AGRONOMY AND CROP PROTECTION (SACP)

GET TO KNOW ABOUT SACP

SACP is established to support research and development program that aimed at increasing the productivity and competitiveness of the national plantation sector for the purpose of strengthening and expending the existing market up to international level, making UPM as one of the centre of excellence in research and development of plantation management technology and finally further developing plantation sector in a sustainable manners which in-line with government policies such as National Agro-Food Policy and National Commodity Policy.

Head of Laboratory



Assoc. Prof. Dr. Nollila Mohd Nawi is a lecturer in Agribusiness Marketing. She received her Bachelor of Science from Universiti Putra Malaysia and PhD in Agribusiness from Curtin University Western Australia. Her research areas include Agribusiness Marketing, Relationship Marketing and Supply Chain Management.

Research Associates



Prof. Datin Dr. Siti Nor Akmar Abdullah is a professor in Plant Molecular Biology. She received her Bachelor of Science from La Trobe University, Australia and PhD in Plant Molecular Biology from University of East Anglia/John Innes Centre, United Kingdom. Her research focuses on yield and quality improvement, enhancing nutrient uptake and disease tolerance in palms focusing on oil palm and coconut.



Assoc. Prof. Dr. Ganesan Vadmalai is a lecturer in Plant Pathology (Virology). He received his Bachelor of Science from Universiti Pertanian Malaysia and PhD in Plant Virology from The University of Adelaide, Australia. His research areas include plant diseases caused by viruses and phytoplasma, Epidemiology and Diagnosis of plant virus.



Assoc. Prof. Dr. Nur Ain Izzati Mohd Zainudin is a lecturer in Mycology and Plant Pathology. She received her Bachelor of Science from Universiti Putra Malaysia. She earned a PhD in Plant Pathology from Universiti Sains Malaysia and completed her postdoctoral in Cornell University. Her research areas include fungus-plant interactions, fungal biodiversity, and biocontrol of plant disease.



Assoc. Prof. Dr. Norsida Man is affiliated to Department of Agribusiness and Bioresources Economics, Universiti Putra Malaysia. Her expertise is in Agricultural Economic, Management and Extension.



Assoc. Prof. Dr. Noor Baity Saidi is a lecturer in Plant Molecular Pathology. She received her Bachelor of Science in Biotechnology from Universiti Putra Malaysia and PhD in Molecular Plant Science from Edinburgh University, UK. Her research interests include molecular and biotechnological approaches for crop improvement, host-pathogen interactions, and biological control of plant diseases using microbes and plant extracts.

Research Interims



Prof Dato' Dr. Abdul Shukor Juraimi, Ph.D, D.P.M.S., S.M.S is a lecturer in Agronomy. He received his Bachelor of Science Agriculture from Universiti Pertanian Malaysia and PhD in Agronomy from University of Reading, England. His research areas include agronomy, weed science and turf grass management.



Assoc. Prof. Dr. Nur Azura Adam is a lecturer in Entomology. She received her Bachelor of Science in Zoology and PhD in Entomology from Universiti Kebangsaan Malaysia. Her research area includes insect taxonomy and systematics, pest management and insect ecology.



Assoc. Prof. Dr. Khairulmazmi Ahmad is a lecturer in Plant Pathology. He received his Bachelor of Science in Bioindustry and PhD in Plant Pathology from Universiti Putra Malaysia. His research areas include plant disease epidemiology, innovative disease control technology and disease etiology.



Assoc. Prof. Dr. Noor Azmi Shaharuddin is a lecturer in Plant Biochemistry and Biotechnology. He received his Bachelor of Science from Universiti Kebangsaan Malaysia and PhD in Plant Science from University of Nottingham, Nottingham. His research areas include plant biochemistry, plant science and plant biotechnology.



Assoc. Prof. Dr. Zulkefly Sulaiman is a lecturer in Agronomy. He received his Bachelor of Science from Universiti Pertanian Malaysia and PhD in Agroforestry/Agronomy from Massey University, New Zealand. His research areas include agronomy, plantation crops and agroforestry and bio-fertiliser.



Ts. Dr. Norhayu Asib is a lecturer in Pesticide Science and Pesticide Application Technique. She received her Bachelor of Agricultural Science and PhD in Entomology from Universiti Putra Malaysia. Her research areas include pesticide residual analysis, development of pesticide formulation, and determination of unknown compounds using high-end instrumentations.

Research Officers



Dr. Kong Lih Ling is a Research Officer of Molecular Biology and Virology. She received her BSc. (Honour) in Microbiology and PhD in Molecular Biology from Universiti Putra Malaysia. Her research areas include molecular and biotechnological approaches for plant viruses detection and diagnosis



Dr. Erneeza Mohd Hata is a Research Officer of Plant Pathology. She received her BSc. (Honour) in Chemical Technology from Universiti Kebangsaan Malaysia and PhD in Plant Pathology from Universiti Putra Malaysia. Her research areas include plant disease epidemiology, plant disease etiology and biocontrol of plant disease.

THE ORGANIZING OF THE PUTRA PLANTATION FORUM SERIES 12

PUTRA PLANTATION FORUM SERIES 12
NATIONAL AGRICOMMODITY POLICY (DAKN2030):
ADVANCING AGRICOMMODITY FOR
SUSTAINABILITY AND SHARED PROSPERITY
 Organized by Institute of Plantation Studies in collaboration with Faculty of Agriculture

Date
7th June 2022
(Tuesday)

Time
9.00 am - 1.00 pm

Venue
Dewan Pertanian,
Faculty of Agriculture, UPM

Speaker
YBhg. Datuk
Ravi Muthayah

Scan to register

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7th June 2022 - Institute of Plantation Studies in collaboration with the Faculty of Agriculture, UPM has successfully organized the Putra Plantation Forum Series 12 (PPF12) in Agriculture Hall, Faculty of Agriculture. The Secretary-General of Ministry of Plantation Industries and Commodities (MPIC), YBhg. Datuk Ravi Muthayah, was invited as the special guest speaker and presented a paper entitled "National Agricommodity Policy (DAKN2030): Advancing Agricommodity for Sustainability and Shared Prosperity".

He highlighted the status, current issues in the Malaysian agricommodity sector, and the newly launched National Agricommodity Policy (DAKN2030). The aspiration of DAKN2030 is to expand the global market and increase the exports not only on raw commodities but also on value-added products. He also highlighted that the area of research especially on mechanization and automation should be expanded in which the technology is in demand to be transferred to the commodity sector in solving the labour issues.

He also elaborated that the National Agricommodity Policy (DAKN2030) is based on five core thrusts: sustainability, productivity, value generation, market development, and inclusivity for eight important commodities (oil palm, rubber, timber, cocoa, pepper, kenaf, biomass, and biofuel). Meanwhile, the forum session was moderated by Prof. Dr. Shaufique Fahmi Ahmad Sidique (Director, Institute of Plantation Studies). The forum session was fully utilized by audiences who come from various backgrounds (researchers and industrial players) to share their concerns, suggestions, and experiences. YAM Tengku Syarif Laksamana Perlis Dato' Seri Diraja Syed Razlan Putra Jamalullail (Chairman, UPM Board of Directors) and Prof. Dr. B.T. Hang Tuah Baharudin (UPM Deputy Vice Chancellor-Industry and Community Relation), together with other 60 participants (physical and online participation) attended this event.



RECOGNITIONS

WORLD'S TOP 2% SCIENTISTS



Our research associates and research interims, Prof. Dato' Dr. Mohd Ali Hassan, Prof. Dr. Tan Chin Ping, Prof. Ir. Dr. Robiah Yunus and Prof. Ir. Dr. Wan Azlina Wan Ab Ghani, were recognized as the World's Top 2% Scientists (Single Year Achievement).

Prof. Dato' Dr. Mohd Ali Hassan and Prof. Dr. Tan Chin Ping were also listed as the World's Top 2% Scientists (The Career Achievement). The World's Top 2% Scientists list was created by researchers from Stanford University, where worldwide top scientists were selected based on standardized citation indicators.

SEARCA REGIONAL PROFESSORIAL CHAIR GRANT AWARD

22nd April 2022 - Assoc. Prof. Dr. Siti Khairunniza Bejo (IKP research associate) has been awarded for the international grant SEARCA Regional Professorial Chair for Academic Year 2022-2023 with an amount of USD5,000 grant in the imaging technology and remote sensing field.



MALAYSIA TECHNOLOGY EXPO 2022 (MTE 2022)

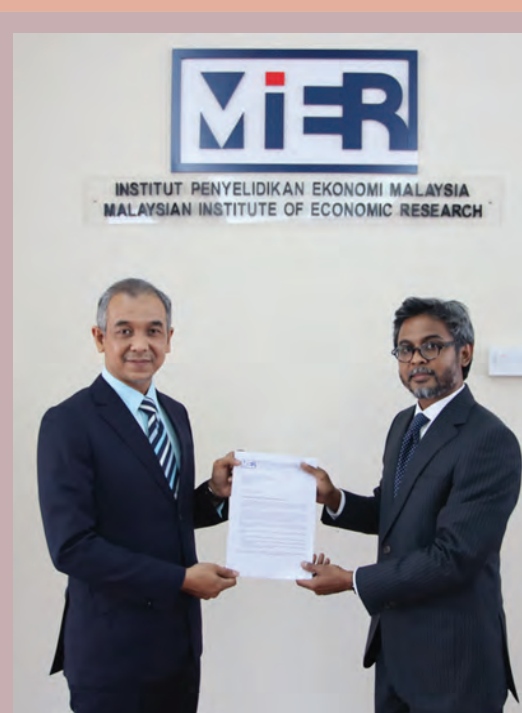
21st – 25th May 2022 - Researchers from the Laboratory of Sustainable Agronomy and Crop Protection, IKP, Prof. Dr. Wong Mui Yun and Assoc. Prof. Dr. Ganesan Vadamalai won a silver award in the international innovation exposition, Malaysia Technology Expo 2022 (MTE 2022) with the innovation entitled "A Novel Protoplast Transformation Technology for Ganoderma boninense". The expo was held virtually from 21 to 25 May 2022.

This innovation resulted from a collaborative project with researchers from the Malaysian Palm Oil Board (MPOB), Mr. Lim Fook Hwa, Dr. Omar Abd. Rasid, Dr. Idris Abu Seman and Datuk Dr. Ahmad Parveez Ghulam Kadir. In addition, Dr. Mohd As'wad Abdul Wahab, a researcher from the Faculty of Agriculture, UPM, was also involved in this innovative project.



APPOINTMENT: MIER NON-RESIDENT SENIOR FELLOW

8th June 2020- Professor Dr Shaufique Fahmi Ahmad Sidique, Director of Institute of Plantation Studies (IKP) has been appointed as Non-Resident Senior Fellow in Malaysian Institute of Economic Research (MIER).



RECOGNITIONS

ACADEMY OF SCIENCES MALAYSIA (ASM) FELLOW 2022

28th May 2022 – Prof. Datin Dr. Siti Nor Akmar Abdullah, FASc, (Research Associate from Laboratory of Sustainable Agronomy and Crop Protection, Institute of Plantation Studies) has been appointed as a fellow by Academy of Sciences Malaysia (ASM), 2022 in biological, agricultural and environmental sciences discipline.



WORKSHOP ON HOW TO REVIEW A MANUSCRIPT

24th February 2022 – The head of the Laboratory of Plantation System Technology and Mechanization (PSTM), Assoc. Prof. Dr. Nazmi Mat Nawi was invited as a guest speaker to handle a workshop on “How to review a manuscript” by the Malaysian Cocoa Board (MCB). This two-day workshop was held from February 23 to 24, 2022 in the Seminar Room, Cocoa Innovation and Technology Centre, Malaysian Cocoa Board, Nilai, Negeri Sembilan. The workshop was officially officiated by the Director General of MCB, YBhgia Dr. Ramle Hj. Kasin. A total of 20 research officers (ROs) from MCB attended the workshop. The purpose of the workshop was to train the research officers on how to effectively review scientific manuscripts and provide constructive comments to authors. The participants of the workshop are expected to apply their knowledge in reviewing manuscripts that are submitted to the Malaysian Cocoa Journal (MCJ) to increase the quality and prestige of the journal.

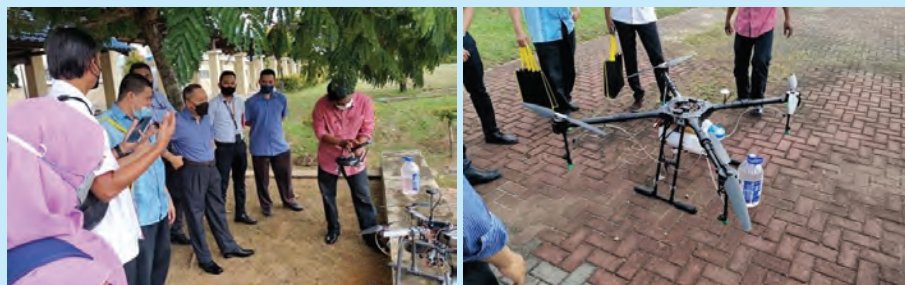
IOI SUSTAINABILITY CONSULTATION FORUM

13th May 2022 – Prof. Dr. Wong Mui Yun was invited as a guest speaker and forum panel in IOI Sustainability Consultation Forum: Regenerative Agriculture, which was held at IOI Tower 2, Putrajaya. The forum was participated by selected experts related to climate change and sustainability including Dato' Lee Yeow Chor (IOI Group Managing Director and Chief Executive).



INDUSTRIAL AND COMMUNITY ENGAGEMENT

VISITATION TO JELI POLYTECHNIC



16th January 2022 – A courtesy visit was held by the researchers of Laboratory of Plantation System Technology and Mechanization (PSTM) to Jeli Polytechnic, Kelantan. The visit was joined by four members of the PSTM laboratory led by Assoc. Prof. Dr. Nazmi Mat Nawi together with Dr. Zailani Khuzaimah, Puan Siti Nooradzah Adam dan En. Faiz Mokhtar. The delegation was welcomed by the management of the Polytechnic, led by the Deputy Director (Academic), Tuan Haji Saupi Mohamed Nor. The discussion was focused on the potential collaboration especially in knowledge and expertise sharing including training and community service targeting academic staff of the Polytechnic and residents as well. The delegation was also given a chance to watch a demonstration of a spraying drone which was developed by one of the academic staff of the Polytechnic.

VISITATION TO NEXT GENERATION OIL SDN. BHD.



20th January 2022 – UPM delegates, led by the Director of the University Community Transformation Center, (UCTC) Prof. Dr. Loh Teck Chwen, along with Assoc. Prof. Dr. Mohd Rafein Zakaria (IKP), Assoc. Prof. Dr. Mohd Razif Harun (Faculty of Engineering), and other UPM officers visited Next Generation Oil (NGO) Sdn. Bhd. UPM and NGO had signed a Memorandum of Agreement (MoA) to valorize the post-extracted algae residue (PEAR) through the production of useful chemicals, animal feeds, and other biomaterials using appropriate technologies available in UPM. The project aims to benefit the people (new job creations), industry (new profit stream gains from sustainable and green processes and new business ecosystems), and the planet (CO₂ reduction, alternative fuels, and chemicals) by supporting the government's net-zero carbon aspirations.

JICA MALAYSIA REPRESENTATIVE VISITATION TO KEMAMAN PALM OIL MILL (KPOM)

24th January 2022 – Validation of composting technology was performed by Japan International Cooperation Agency (JICA) representatives at the Biocompost Commercial Plant, Kemaman Palm Oil Mill (KPOM). The visit was attended by a JICA representative (Ms Chong), Chief Executive Officer-Plantation (Mr. Hamdan), and officers from KPOM. The composting technology was developed during collaborative research works between UPM and Kyushu Institute of Technology, Japan under a special fund Science and Technology for Research Partnership (SATREPS) whereby JICA and other funding agencies were the major sponsors (2013-2017). After the SATREPS project is over, a consultation project led by Assoc. Prof. Dr. Mohd Rafein Zakaria (Head, Laboratory of Processing and Product Development), regarding valorization of the biomass especially oil palm empty fruit bunch to compost was conducted at KPOM. The project was conducted for 6 months from 2017 to 2018. The composting technology has been used by KPOM since then and can produce 20-30 tons of matured compost daily.



INDUSTRIAL AND COMMUNITY ENGAGEMENT

VISITATION TO UPM-FARM FRESH

1st March 2022 – Eight researchers from IKP participated in a working visit to the Industry Centre of Excellence (ICoE) UPM-Farm Fresh. This visit was led by the Director of IKP, Prof. Dr. Shaufique Fahmi Ahmad Sidique, and accompanied by all IKP's head of the laboratory and four research officers. The delegation received a warm welcome from the Chief Operating Officer of Farm Fresh Milk Sdn. Bhd., Mr. Azmi Zainal.

UPM and Farm Fresh Milk Sdn. Bhd. started a collaboration in 2017 to establish an Industry of Excellence (ICoE) for Dairy Farm at Farm 16, Putra Agriculture Centre, UPM. Therefore, the main agenda of the visit was to discuss the potential research collaboration between IKP and Farm Fresh Milk Sdn. Bhd., focusing on the application of the latest digital technologies to improve the productivity of the dairy industry. The IKP delegation was given an opportunity for a short tour within the dairy area which is being developed to be an agritourism park.



VISITATION TO THE MINISTRY OF PLANTATION INDUSTRIES AND COMMODITIES (MPIC)

18th March 2022– IKP paid a courtesy visit to the Ministry of Plantation Industries and Commodities (MPIC) in Putrajaya. This visit was led by the Director of IKP, Prof. Dr. Shaufique Fahmi Ahmad Sidique and accompanied by Prof. Dr. Wong Mui Yun (Deputy Director), Assoc. Prof. Dr. Nazmi Mat Nawi (Head, Laboratory of Plantation System Technology and Mechanization) and Assoc. Prof. Dr. Noliila Mohd Nawi (Head, Laboratory of Sustainable Agronomy and Crop Protection). The delegation was well received by the top management of the ministry, led by the Secretary General of MPIC, YBhg. Datuk Ravi Muthayah.

This visit was one of the IKP roadshow programs to promote the institute and build collaboration with the relevant government agencies and key players in the plantation industry. During the visit, Prof. Dr. Shaufique shared the mission and vision of the Institute and highlighted the niche research areas and expertise in IKP. This visit identified common grounds for collaboration that will bring mutual benefit to both parties and set out the way forward for potential collaborations.



VISITATION BY INDUSTRIAL PARTNER, MYEDU GROUP SDN. BHD.

6th April 2022 – MyEdu team consisting of Ms. Pesly Chua, the Chairperson of MyEdu Group Sdn. Bhd. and three officers visited IKP for a discussion on potential research projects. The IKP team was represented by Prof. Dr. Wong Mui Yun, the Deputy Director and Prof. Dr. Mohamed Hanafi Musa, a former research associate of IKP. MyEdu delegates also visited IKP's Transgenic Greenhouse.



VISITATION TO INTERNATIONAL RUBBER RESEARCH AND DEVELOPMENT BOARD (IRRDB)

11th April 2022 – Courtesy visit by the top management members of IKP to meet the Secretary General of International Rubber Research and Development Board (IRRDB), YBhg. Datuk Dr. Abdul Aziz S.A. Kadir was conducted in the Building of Negeri Sembilan Council of Islamic Religion. IKP delegation team led by the Director of IKP and accompanied by all IKP's head of the laboratory. The meeting was also attended by Tn Haji Tajuddin Ismail, Director of Agro Hive Technologies and Consultancy.

This visit is one of the IKP roadshow programs to promote the institute and to discuss potential research collaboration in various disciplines related to the rubber industry. From the meeting, the secretary general agreed to promote IKP to his national and international connections. In fact, he also shared some important names in the rubber industry all over the world along with his contact information. Members of IKP have also been invited by the secretary general of IRRDB to participate in his next visit to Indonesia.



WORKSHOP AND TRAINING

FRGS GRANT PROPOSAL WRITING



25th January 2022 – IKP successfully organized the FRGS Grant Proposal Writing Workshop 2022 on 14th January 2022. The workshop served as a platform for IKP researchers in preparing research proposals for FRGS grant applications in 2022. This workshop was attended by research associates and research interims from the Laboratories of Plantation System Technology and Mechanization (PSTM) and the Laboratories of Processing and Product Development (PPD). Researchers had an opportunity to discuss and share opinions in preparing a good proposal. At the end of the workshop, several research proposals were finalized and ready for submission.

WORKSHOP AND TRAINING

TRAINING ON DRONE APPLICATION IN THE PLANTATION INDUSTRY

16th and 23rd March 2022 – IKP in collaboration with FWF World Solutions successfully organized two drone operation trainings for DJI Phantom 4 Pro v2.0 and DJI 300 Matrice RTK. The training was delivered by Dr. Zailani Khuzaimah and Mr. Mohd Faizal Taib. Twelve IKP staffs including research officers, science officer and assistant science officers attended the training. These two-days training covered the basic introduction to drone types and functions, basic drone flight, drone flight for mapping, and image processing and data analysis.

Both drones belong to the Laboratory of Plantation System Technology and Mechanization (PSTM), IKP. By having these drones, in-depth research related to plant health monitoring, plantation mapping, soil profiling, treatment validation, forest-scale phenotyping, and many more applications are possible to be explored.



IKP RESEARCH SEMINAR SERIES 1 – SERIES 6 (2022)

INSTITUTE OF PLANTATION STUDIES
RESEARCH SEMINAR SERIES 1/2022

LATEX TIMBER CLONE PLANTATION (Hevea brasiliensis) IN MALAYSIA

AHMAD FAIZ MOKHTAR
19 JANUARY 2022 10.00 - 11.00 AM

SCAN TO JOIN

Meeting ID: 929 5420 3372
Passcode: 510451

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INSTITUTE OF PLANTATION STUDIES
Research Seminar Series 2/2022

Streptomyces: Potential for Sustainable Crop Health and Protection

Dr. Erneeza Mohd Hata
28 February 2022 10.00 - 11.00 am

SCAN TO JOIN

Meeting ID: 929 5420 3372
Passcode: 510451

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INSTITUTE OF PLANTATION STUDIES
Research Seminar Series 3/2022

Microwave Applied Technology: Waste to Value Added Products

Assoc. Prof. Dr. Rozita Omar
14 March 2022 3.00 - 4.00 pm

SCAN TO JOIN

Meeting ID: 995 5638 5187
Passcode: IKPSeminar

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INSTITUTE OF PLANTATION STUDIES
Research Seminar Series 4/2022

Agricultural Transformation in Malaysia

Prof. Dr. Shaufique Fahmi Ahmad Sidique
21 April 2022 10.00 - 11.00 am

SCAN TO JOIN

Meeting ID: 989 6242 4451
Passcode: IKPSeminar

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INSTITUTE OF PLANTATION STUDIES
Research Seminar Series 5/2022

Transformation of Agricultural Products into Value-Added Products: Perspective of Process Engineering

Assoc. Prof. Ir. Ts. Dr.-Ing. Mohd Noriznan Mokhtar
26 May 2022 10.00 - 11.00 am

SCAN TO JOIN

Meeting ID: 952 0894 5491
Passcode: IKPSeminar

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INSTITUTE OF PLANTATION STUDIES
Research Seminar Series 6/2022

Competitive Edge for Plantation Crops through CRISPR Technology

Prof. Datin Dr. Siti Nor Akmar Abdullah
23 June 2022 10.00 - 11.00 am

SCAN TO JOIN

Meeting ID: 981 5738 4171
Passcode: IKPSeminar

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LIST OF PUBLICATIONS FROM IKP IN CIJ FOR JANUARY - JUNE 2022

NO	ARTICLE TITLE	AUTHORS	JOURNAL
1	Modeling of water management for cotton production in Uzbekistan	Abduraupov Rustam, Akhmadjanova Gulmira, Ibragimov Abdulla, Bala B.K., Sidique, Shaufique F., Makhmudov, Miraziz, Angelina, Kim.	Agricultural Water Management (Q1)
2	Fusarium Wilt of Banana: Current Update and Sustainable Disease Control Using Classical and Essential Oils Approaches	Abubakar Abu bakar Ismail, Khairulmazmi Ahmad, Yasmeen Siddiquee, Muhammad Aswad AbdulWahab, Abdul Aziz Bashir, Kutawa, Adamu Abdullahi, Syazwan Afif Mohd Zobira, Arifin Abduf, Siti Nor Akmar Abdullah	Horticultural Plant Journal (Q1)
3	Remediation of Pesticides by Microalgae as Feasible Approach in Agriculture	Verasoundarapandian G., Lim Z.S., Radziff S.B.M., Taufik S.H., Puasa N.A., Shahrudin N.A., Merican F., Wong C.-Y., Lalung J., Ahmad S.A.	Bibliometric Strategies Agronomy (Q1)
4	Oil Palm's Empty Fruit Bunch as a Sorbent Material in Filter System for Oil-Spill Clean Up	Nurul Aini Puasa, Siti Aqlima Ahmad, Nur Nadhirah Zakaria, Khalilah Abdul Khalil, Siti Hajar Taufik, Azham Zulkharnain, Alyza Azzura Azmi, Claudio Gomez-Fuentes, Chiew-Yen Wong, Noor Azmi Shahrudin	Plants (Q1)
5	Utilisation of Oil Palm's Empty Fruit Bunch Spikelets for Oil-Spill Removal	Puasa N.A., Ahmad S.A., Zakaria N.N., Shahrudin N.A., Khalil K.A., Azmi A.A., Gomez-Fuentes C., Merican F., Zulkharnain A.ain A., Kok Y-Y, Wong C.-Y.	Agronomy (Q1)
6	First Report of <i>Fusarium equiseti</i> Causing Fruit Rot Disease of Watermelon in Malaysia	Rahman M.Z., Ahmad K., Siddiqui Y., Saad N., Hun T.G., Hata E.M., Rashed O., Hossain I.	Plant Disease (Q1)
7	Characterization of endophytic <i>Streptomyces</i> strains from roots of cocoyam (<i>Xanthosoma sagittifolium</i> L. Schott) in the South West Region of Cameroon, their <i>in vitro</i> plant growth promoting abilities and biocontrol efficacy against <i>Pythium myriotylum</i>	P.F. Kouomou Djuidje, W.Asultan, C. Beaulieu, M.Y. Wong, and T.Boud jeko.	South African Journal of Botany (Q2)
8	Comparative evaluation on calcium silicate and rice husk ash amendment for silicon-based fertilization of Malaysian rice (<i>Oryza sativa</i> L.) varieties	Ainu-Shahirah Mahmad-Toher, Nisha Govender, Deivaseeno Dorairaj and Wong Mui-Yun	Journal of Plant Nutrition (Q3)
9	Molecular and biological characterization of citrus bent leaf viroid from Malaysia	Iftikhar Y., Khoo Y.W., Murugan T., Roslin N.A., Adawiyah R., Kong L.L., Vadamalai G.	Molecular biology reports (Q4)
10	Trust and communication influence on farm performance for paddy farmers: A study in Bangladesh	Iris F., Nawi N. M., Man N., Ramli N.N., Uddin M. T.	Asian Journal of Agriculture and Rural Development (Q4)

NO	ARTICLE TITLE	AUTHORS	JOURNAL
11	Chapter 17 - Plant biomolecule antimicrobials: An Alternative Control Measures for Food Security and Safety	A.Abdullahi, A.Tijjani, A.I.Abubakar, A.Khairulmazmi, M.R.Ismail	Herbal Biomolecules in Healthcare Applications *Chapter in Book
12	Draft Genome Sequence of <i>Bacillus tropicus</i> strain UPM-CREST01, isolated from the bulk paddy soil at Kampung Gajah, Perak	N.A. Mohd Azim Khan, S. Jaya Jothi, E. Mohd Hata, S. Parimannan, G. Vadamalai, H. Rajandas	Microbiology Resource Announcements (Q4)
12	In-situ a Ex-Situ Study on Light Hydrocarbon-Like-Diesel and Catalyst Deactivation Kinetic and Mechanism Study During Deoxygenation of Sludge Oil	G.Abdulkareem-Alsultan, N.Asikin-Mijan, Laith K.Obeas, RobiahYunus, Siti Zulaika Razali, Aminul Islam, YunHin Taufiq-Yap	Chemical Engineering Journal (Q1)
13	Prospects of Plant-Based Trimethylolpropane Esters in the Biolubricant Formulation for Various Applications: A Review	Raof Nurliyana A, Hamid Hamidah Abd, Mohamad Aziz Nur Atiqah, Robuah Yunus	Frontiers in mechanical Engineering (Q2)
14	Production of Biochar from Microwave Pyrolysis of Empty Fruit Bunch in An Alumina Susceptor	Mohamad Syazarudin, Md Saida Atiyyah Ameenah Aznia, Wan Azlina Wan Ab Karim Ghani, Aznildrisa Mohamad Fakri Zaky Ja'afar, Mohamad Amran Mohd Salleh	Energy (Q1)
15	Removal of Free Fatty Acid (FFA) in Crude Palm Oil (CPO) Using Potassium Oxide/Dolomite as An Adsorbent: Optimization by Taguchi Method	Nor Shafizah, R. Irmawati, Hishamuddin Omar, M. Yahaya, A. Alia Aina	Food Chemistry (Q1)
16	Enhancement of Agro-Industrial Waste Composting Process via the Microbial Inoculation: A Brief Review	Mohd Huzairi Mohd Zainudin, Aisyah Zulkarnain, Ain Sahira Azmi, Shalini Muniandy, Kenji Sakai, Yoshihito Shirai, Mohd Ali Hassan	Agronomy (Q1)
17	Indigenous Cellulolytic Aerobic and Facultative Anaerobic Bacterial Community Enhanced the Composting of Rice Straw and Chicken Manure with Biochar Addition	Mohd Huzairi Mohd Zainudin, Jamuna Thurai Singam, Awis Qurni Sazili, Yoshihito Shirai, Mohd Ali Hassan	Scientific Reports (Q1)
18	Multi-Temporal Analysis of Terrestrial Laser Scanning Data to Detect Basal Stem Rot In Oil Palm Trees	Nur A. Husin, Siti Khairunniza-Bejo, Ahmad F. Abdullah, Muhamad S. M. Kassim and Desa Ahmad	Precision Agriculture (Q1)
19	Identification of Bagworm (<i>Metisa Plana</i>) Instar Stages Using Hyperspectral Imaging and Machine Learning Techniques	Nurul Afiah Mohd Johari S., Khairunniza-Bejo S., Rashid Mohamed Shariff A., Azuan Husin N., Mazmira Mohd Basri M., and Kamarudin N.	Computers and Electronics in Agriculture (Q1)
20	Rhamnolipid Biosurfactants: Production and Application in Agriculture	Syazwani Mohamad, ShobanahMenon Baskaran, Izzah Nurfarahiyah Md. Isa, Mohd Rafein Zakaria, Mohd Ali Hassan	Biosurfactant-CRC Press. *Chapter in Book

INCOMING EVENTS



PENGENALAN DAN APLIKASI DRON UNTUK PERTANIAN (MODUL 1)



16-17 Ogos 2022

OBJEKTIF KURSUS

- Pengenalan kepada penggunaan dron dalam sektor pertanian, sejarah dron, undang-undang dan peraturan keselamatan di Malaysia
- Memberi pendedahan kepada peserta tentang pengendalian dron, pengambilan data dan pemrosesan imej
- Memberi ilmu pengetahuan kepada peserta melibatkan aspek pengendalian, amali penggunaan dron untuk pemetaan, pemrosesan data dan penyelenggaraan dron
- Melahirkan peserta yang mampu mengendalikan dron dengan baik

Tentatif program

16 Ogos 2022 (Selasa, 9.00 pagi - 4.30 petang)

- Pengenalan asas, jenis dan fungsi kepada UAV/Dron
- Tetapan utama sistem penerbangan dalam aplikasi dron
- Latihan penerbangan dron I: **Penerbangan asas dron** (Take-off, landing & pattern flight (hands-on))

17 Ogos 2022 (Rabu, 9.00 pagi - 4.30 petang)

- Latihan penerbangan dron II: **Penerbangan dron untuk pemetaan** (Mapping & flight mission (hands-on))
- Pengenalan asas kepada Agisoft Metashape Processing Software dan pemrosesan imej
- Output pemrosesan imej dan analisis

Yuran penyertaan

Agensi Luar: RM600.00
Peserta UPM: RM400.00

*Yuran adalah termasuk nota dan makan minum

Anjuran

Laboratori Teknologi Sistem Perladangan dan Mekanisasi, Institut Kajian Perladangan, UPM

Maklumat lanjut

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Sila imbas kod untuk mendaftar
atau <https://tinyurl.com/ikpdron2022>

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13-14 September 2022
Institute of Plantation Studies
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- Introduction to soil elementary geology & weathering
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- Profile description & classification
- Field determination
- Soil texture & structure

Registration Fee

-Nonstudent: RM800
-Student: RM500

Fees per participant will covers lecture notes, soil identification guidelines and refreshments

Important Deadlines

Registration due: 31 July 2022
Payment due: 31 August 2022



FACILITATOR:
Dr. Khairul Hafiz Mohd Yusoff
Dept. of Land Management
Faculty of Agriculture, UPM



FACILITATOR:
Dr. Mohd Shafar Jefri Mokhtar,
Dept. of Crop Science,
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STAFF DEPARTURE, NEW MEMBERS AND APC 2021 RECIPIENTS



The institute would like to express appreciation and gratitude to Mrs. Norazlina Zulkefli for her excellent contribution during her service as the Assistant Registrar, IKP. She was transferred to Kolej Pendeta Za'ba, effective on 20th April 2022.



We welcome Prof. Dr. Shaufigue Fahmi Ahmad Sidique as the new Director of IKP, effective from 3rd January 2022.



IKP also received two new members on board, Mr. Wan Mohd Radzi Hj. Wan Ismail as Senior Assistant Registrar and YM Ms. Raja Izzah Raja Othman as Assistant Science Officer.

IKP would also like to congratulate Dr. Fariz Adzmi and En. Izamri Md Nor as the recipient of UPM Excellent Service Award (Anugerah Pekerja Cemerlang - APC) 2021.



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