

SYMPOSIUM PROGRAM

Perdana Ballroom, Palm Garden Hotel IOI Resort, Putrajaya

24th June 2018 Sunday

1400 – 2000 Registration at the Hotel Lobby

25th June 2018 Monday

0700-0830	Registration
0830-0850	Arrival of Guest of Honour
0850-	Arrival of Prof. Datin Paduka Dato' Dr. Aini Ideris, Vice Chancellor of UPM
0900-0930	Do'a recitation Welcoming remarks by Assoc. Prof Dr. Radziah Othman, Chairman of 10 th PSILPH2018 Opening address by Prof. Datin Paduka Dato' Dr. Aini Ideris, Vice Chancellor of UPM) Montage Presentation Photo Session
0930-1015	Plenary 1- Crop adaptation to acid soils: Common features between aluminum resistance and tolerance to phosphorous deficiency Leon V. Kochian Chairman: Ghizan Saleh, UPM
1015-1045	Refreshment/Poster
1045-1230	Session 1: Genetics and breeding of crops for agriculture on low pH soils Chairman: Toru Fujiwara, The University of Tokyo, Japan
1045-1115	Keynote 1 – Regulation of aluminum tolerance in barley <i>Jian Feng Ma, Miho Fujii-Kashino, Naoki Yamaji, Miki Yamane, Daisuke Saisho and Kazuhiro Sato</i>
1115-1145	Keynote 2 – A magnesium dechelataase gene is involved in low magnesium-induced leaf chlorosis and magnesium remobilization in rice <i>ZhiChang Chen, Yu Yang Peng and Jian Li</i>
1145-1200	Q&A
1200-1215	Oral 1- Cell wall pectin and its methyl-esterification in transition zone determine Al resistance in cultivars of pea (<i>Pisum sativum</i>) <i>Xuewen Li, Xiao Hongdong and Min Yu</i>
1215-1230	Q&A
1230-1400	Lunch/Poster (MSSS AGM)
1400-1445	Plenary 2-

Plant-microbe interactions in low pH soils: Options for maximizing soil biological fertility

Lynette K. Abbott

Chairman: Zulkifli Hj. Shamsuddin, MSSS

1445-1600

Session 2: Soil-microbe-plant interactions at low pH

Chairman: Halimi Mohd Saud, UPM

1445-1515

Keynote presentation 3-

Unravelling the organic anion exudation from different root types of aluminium-resistant wheat and its effect on the root colonizing microbiome

Akitomo Kawasaki, Paul G. Dennis, Emmanuel Delhaize, Alan E. Richardson, Ulrike Mathesius, Matthew Gilliam, Michelle Watt and Peter R. Ryan

1515-1530

Oral 2-

Growth promoting characteristics of salt-tolerant rhizobacteria isolated from paddy field in northern coastal saline areas of Malaysia

Rakiba Shultana, Radziah Othman, Ali Tan Kee Zuan and Mohd Rafii Yusop

1530-1545

Oral 3-

Effect of organic amendments and microbial inoculant on the nutrient balance and productivity of sugarcane grown in an acid Typic Hapludand

Ryan T. Sarimong, Pearl B. Sanchez, Erlinda S. Paterno, Rodrigo B. Badayos, and Pompe C. Sta. Cruz

1545-1600

Q&A

1600-1615

Refreshment/Poster

1615-1730

Session 3: Physical and chemical properties of low pH soil

Chairman: Mohammad H. Golabi, UOG Guam

1615-1630

Oral 4-

Interaction between oppositely charged soil particles and its effect on soil natural acidification in variable charge soils

Jiuyu Li, Xu, R.K. and Deng K.Y.

1630-1645

Oral 5 -

Physico-chemical characteristics, suitability assessment, and constraints analysis of major soil series grown to sugarcane in Negros Occidental, Philippines

Clea Anne V. Corsiga, Rodrigo B. Badayos, Pearl B. Sanchez and Erlinda S. Paterno

1645-1700

Oral 6-

Mechanisms for increasing soil pH buffering capacity by application of organic amendments

Renkou Xu, Shi, R. Y. and Pan, X. Y.

1700-1715 Oral 7-
Response of soil clay minerals to soil acidification: Field study of long-term fertilization during 1990 to 2013
Liang Tao, Li, F.B., Feng, X.H., Gu, L.L., Wang, B.R., Wen, S.L. and Xu, M.G.

1715-1730 Q&A
1730- Refreshment/Poster
2000 Symposium Dinner

26th June 2018 Tuesday

0830-0915 **Plenary 3-**
Managing phosphorus under acid soils environment
Mohamed Hanafi Musa
Chairman: Mohd Khanif Yusop, UPM

0915-1015 **Session 4: Soil fertility, chemistry, amelioration and remediation of low pH soils**
Chairman: Mohd Khanif Yusop, UPM

0915-0930 Oral 8-
Variation in yield and phosphorus efficiency traits in tropical maize hybrids grown in low P acid soils of western Kenya.
Ouma, E.O, Samuel Gudu and Ligeyo, D.O

0930-0945 Oral 9 –
An overview of mitigation of aluminium toxicity in acid soils by biochar application
Prakash Nagabovanalli and Rajpal Shetty

0945-1000 Oral 10-
Application of palm oil mill effluent sludges and soil properties improvement of Entisol
Mohd Nizar Khairuddin, Isharudin, M.I. and Abd Jamil, Z

1000-1015 Q&A
1015-1045 Refreshments/Poster

1045-1145 **Session 4: Soil fertility, chemistry, amelioration and remediation of low pH soils (cont.)**
Chairman: Shamshuddin Jusop, UPM

1045-1100 Oral 11-
Increasing subsoil pH through addition of lucerne (*Medicago sativa* L.) pellets in the surface layer of an acidic soil
Hoang Han Nguyen, J. Sergio Moroni, Jason Condon, Alek Zander and Guangdi Li

1100-1115 Oral 12-

		Reducing Zinc availability in tropical acid soil by using humic acids, crude fulvic acids and humin <i>Maliana, W.A., <u>Susilawati Kasim</u> and E.M. Shuib</i>
	1115-1130	Oral 13- Management of acid soils by liming for diversified cropping systems in Bangladesh <i><u>Jahiruddin, M.</u>, Bodruzzaman, M., Rahman, G.K.M.M. and Rahman, M.M.</i>
	1130-1145	Q&A
1200-1245	Poster Session	
1245-1400	Lunch	
1400-1545	Session 5: Physiological and molecular mechanisms of plant adaptation to low pH soils Chairman: Jian Feng Ma, Okayama University, Japan	
	1400-1430	Keynote 4: The mechanism underlying regulation of internal P reutilization by different nitrogen forms in rice in acid soils <i><u>Ren Fang Shen</u>, Xiao Fang Zhu and Chun Quan Zhu</i>
	1430-1445	Oral 14- Transporters involved in preferential distribution of boron in rice <i><u>Ji Feng Shao</u>, Naoki Yamaji, Ren Fang Shen and Jian Feng Ma</i>
	1445-1500	Oral 15- Plant water status and root system response of NILs lines under combined aluminium toxicity and drought stress <i><u>Joanna Siecińska</u> and Nosalewicz, A.</i>
	1500-1515	Oral 16- Growth inhibition of rice (<i>Oryza sativa</i> L.) and wheat (<i>Triticum aestivum</i> L.) seedlings in Ga- and In-contaminated acidic soils is caused by Al toxicity <i><u>Dar-Yuan Lee</u>, Syu, C.H., Su, J.Y. and Chen, L.Y.</i>
	1515-1530	Oral 17- Enzymatic responses of <i>Phaseolus vulgaris</i> genotypes to Al-stress <i><u>Brigitta Tóth</u>, Győri, Z., Sipos, P. and Grusak, M.A.</i>
	1530-1545	Q&A
1545-1715	Session 6: Sustainable management of plantation and other crops on low pH soils Chairman: Kazuyuki Inubushi, Chiba University, Japan	
	1545-1615	Keynote 5: Weathered soils in Southeast Asia can sustain oil palm production in the long run <i><u>Shamshuddin Jusop</u>, Fauziah, C.I. and Radziah, O.</i>

1615-1630	Oral 18- Managing and achieving high oil palm yields on low pH soils of acid sulfate and peat in Malaysia <i><u>Pupathy Uthrapathy Thandapani and Andrew Cheng, M. F</u></i>
1630-1645	Oral 19- Using liquid lime to improve growth of palm oil seedlings on a tropical peat soil <i><u>Osumanu Haruna Ahmed, Ali, M., and Audrey, A.</u></i>
1645-1700	Oral 20- Effect of soil pH on basal stem rot disease incidence in <i>Ganoderma</i> inoculated oil palm seedlings <i>Abdulla Rahman Khunaw, <u>Radziah Othman</u>, Nusaibah Syed Ali and Mohamed Hanafi Musa</i>
1700-1715	Q&A
1715-	Refreshment/Poster

27th June 2018 Wednesday – Mid Symposium Tour

0730-	Depart for Ladang Kempas Jasin, Melaka from Palm Garden Hotel IOI Resort lobby
0930-1030	Soil profile observation
1030-1300	Melaka Historical Site Tour <ul style="list-style-type: none"> ✓ Stadthuys Complex (Queen Victoria Fountain, Christ Church & Clock Tower) ✓ St. Paul Church ✓ Porta de Santiago (A Famosa) ✓ Proclamation of Independence Memorial (Melaka) ✓ Fredrick Hendrick Bastion Archaeological Excavation Site ✓ Cheng Hoon Teng Temple
1300-1400	Lunch
1400-1500	Taming Sari Tower (aerial view of Bandar Hilir, Melaka)
1500-1600	Visit to the Samudera & Melaka Sultanate museums
1600-1800	Melaka River Cruise
1800-	Depart for Palm Garden Hotel IOI Resort

28th June 2018 Thursday

0845-0930 **Plenary presentation 4-**
Regulation and modeling of essential nutrient transport required for tolerance to acid soil
Toru Fujiwara
Chairman: Leon V. Kochian, University of Saskatchewan, Canada

0930-1015 **Session 7: Physiological and molecular mechanisms of plant adaptation to low pH soils**
Chairman: Samuel Gudu, Rongo University, Kenya

0930-0945 Oral 21-
An Al-inducible transcription factor, ART2 is involved in Al tolerance in rice
Jing Che, Tomokazu Tsutsui, Kengo Yokosho, Naoki Yamaji and Jian Feng Ma

0945-1000 Oral 22-
Mechanisms of B in alleviating Al toxicity in promoting apoplast alkalization in root transition zone
Xuwen Li X. W., Li, Y.L., Mai, J. W., Qu, M., Liu, J.Y., Feng, Y.M., Xiao, H. D. and Min Yu

1000-1015 Q&A
1015-1030 Refreshment/Poster

1030-1130 **Session 8: Genetics and breeding of crops for agriculture on low pH soils**
Chairman: ZhiChang Chen, Fujian Agriculture and Forestry University of China

1030-1100 **Keynote 6-**
Regulation of STOP1-mediated aluminum tolerance mechanisms in *Arabidopsis* roots
Hiroyuki Koyama and Yuriko Kobayashi

1100 – 1115 Oral 23-
STOP1 transcription factor regulates the early aluminum-inducible expression of its primary target genes via the unfolded protein response-like pathway
Mutsutomo Tokizawa, Takuo Enomoto, Hiroki Ito, Yoshiharu Y. Yamamoto, Yuriko Kobayashi, Leon Kochian and Hiroyuki Koyama

1115-1130 Q&A

1130-1230 **Session 9: Soil fertility, chemistry, amelioration and remediation of low pH soils**
Chairman: Dian Fiantis, Andalas University, Indonesia

1130-1200 **Keynote 7-**
Mitigating soil acidity for agricultural sustainability in the humid tropics of Micronesia
Mohammad H. Golabi, Ferdinand Galsim, Clancy Iyekar, and Chieriel S. Desamito

1200-1215	Oral 24- Detecting land cover changes with satellite images after prolonged eruptions of Mt. Sinabung in North Sumatra, Indonesia <i>Frisa Irawan Ginting, Yasir, A., Fanani, A., Gusnidar, Yulnafatmawita, Nelson, M., Fiantis and Minasny, B.</i>
1215-1230	Q&A
1230-1400	Lunch/Poster
1400-1500	Session 10: Soil fertility, chemistry, amelioration and remediation of low pH soils Chairman: Samsuri Abd Wahid, UPM
1400-1415	Oral 25- Chemical changes in acid sulphate soil of Sungai Raya Negeri Sembilan <i>Som, A., Yahya, A.A., Bachmann, R.T. and Padmini Karananidi</i>
1415-1430	Oral 26- Organic fertilizer tithonia plus to control iron toxicity and increasing rice yield of new paddy field on Ultisol <i>Nurhajati Hakim, Rozen, N., and Mala, Y.</i>
1430-1445	Oral 27- Agronomic biofortification of upland rice with zinc <i>Milton Ferreira de Moraes, Alves, S.J.F., Alves, L.V.F.V., Batista, M.E.P., Pascoalino, J.A.L. and Carvalho, J.L.V.</i>
1445-1500	Q&A
1500-1645	Session 11: Environmental monitoring of low pH soil Chairman: Wan Rasidah W.A. Kadir, FRIM
1500-1515	Oral 28- Monitoring a Soil Adjusted Vegetation Index (SAVI) from 2010 to 2017 in area affected by volcanic eruptions of Mt. Sinabung, Indonesia <i>Ahmad Yasir, Frisa Irawan Ginting, Gusnidar, Yulnafatmawita, Malik Nelson, Dian Fiantis and Budiman Minasny</i>
1515-1530	Oral 29- Spatial distribution of soil and root carbon storage in the Pasoh 50 ha forest dynamics plot <i>Jeyanny Vijayanathan, Turner B.L., Davies, S.J., Mohamad Fakhri I., Yao T.L., Suhaimi W.C. and Fletcher C.S.</i>
1530-1545	Oral 30- Concentration of natural stable Cs in each organ of blueberry bushes grown in three types of soils treated with acidification and/or fertilization <i>Kaori Matsuoka, Moritsuka N., Kusaba S. and Hiraoka K.</i>
1545-1600	Oral 31- Effect of fertilizer on greenhouse gas emission in oil palm plantation in acid soil

Nino Sakata, Hiroshi Aoki, Atsushi Sakamoto, Lulie Melling and Kazuyuki Inubushi

- 1600-1615 Oral 32-
Effect of slag fertilizer on methane emission and rice growth from paddy soil
Qian Li, Zanyang Wang, Takashi Nagasawa and Kazuyuki Inubushi
- 1615-1630 Oral 33-
Potential of cyanobacteria isolated from different fresh water bodies of Sri Lanka as a food supplement
Shyama Malika Malwalagee, Bowanage, T., Sumanasinghe, A. and Ratnayake, R. R.
- 1630-1645 Q&A
1645-1700 Poster awards
1700-1730 Closing ceremony by Chairman of PSILPH International Steering Committee
1730- Refreshment

29 June 2018 Friday

Departure

POSTER PRESENTATION

P1- Physical and chemical properties of low pH soil

- P1-1 Higher cation exchange capacity determined lower critical soil pH and higher Al concentration for soybean
Baquy, M. A. A. and Xu, R. K.
- P1-2 Does the rising pH of growth medium increase the tolerance or sensitivity of organisms to aluminum?
Xue Qiang Zhao, Xiao Ying Dong, and Ren Fang Shen
- P1-3 Mechanisms for increasing soil resistance to acidification by long-term manure application
Shi, R. Y. and Xu, R. K.
- P1-4 Assessing soil properties of different landuse in Bintulu, Sarawak using soil fertility indices
Aiza Shaliha Jamaluddin, Arifin Abdu, Daljit Singh Karam, Shamshuddin Jusop and Aizul Azfar Zulkeefli
- P1-5 Variations in chemical structure of tropical peat soil organic matter and its sensitivity to biodegradation
Faustina Sangok, Yuki Sugiura, Nagamitsu Maie, Lulie Melling and Akira Watanabe

- P1-6 The effect of biochars application on agricultural soil properties in Cameron Highlands
Khasifah, M.
- P1-7 Influence of afforestation on soil pH in an ex-tin mine
Ho, W.M., Sik, H.S., Mohd Ghazali, H. and Ang L.H.
- P1-8 Effect of soil compaction on soil CO₂ flux from tropical peatland
Nur Azima Busman, Ishak, C.F., Sulaiman, M.F., Maie, N. and Melling, L.
- P1-9 Soil chemical properties in a high quality-tea production area of Thai Nguyen Province, Vietnam
Chien, H.H., Tokuda, M., Minh, D.V., Kang, Y., Iwasaki, K. and Tanaka, S.
- P1-10 Innovative mudflat corer system for bulk density sampling in mangrove mudflats
Jeyanny, V., Fakhri, M.I., Norhisyam, I. and Wan Rasidah, K.

P2- Physiological, molecular mechanism and plant adaptation to acid soil condition

- P2-1 Properties of mineral accumulation of solfatara plants in western Japan
Wasaki, J., Yamamoto, A., Saito, T., Tsubota, H., Watanabe, T. and Nakatsubo, T.
- P2-2 Dissecting the genetic architectures of aluminum tolerance in *Arabidopsis thaliana* accessions
Yuki Nakano, Kazutaka Kusunoki, Satoshi Iuchi, Masatomo Kobayashi, Hiroyuki Koyama and Yuriko Kobayashi
- P2-3 The distribution pattern of pectin in transition zone of different Al-resistance pea (*Pisum Sativum*) cultivars
Xiao Hongdong, Li Xuewen and Yu Min
- P2-4 Impact of aluminum induced malate excretion on primary metabolism of Arabidopsis root
Takuo Enomoto, Akira Oikawa, Yuriko Kobayashi and Hiroyuki Koyama
- P2-5 Functional analysis of a magnesium transporter gene OsMGT2 in rice
Zhang, L.D., Li J. and Chen, Z. C.
- P2-6 Genotypic variation of manganese tolerance in rice
Sheng Huang, Walter Johannes Horst, Jian Feng Ma
- P2-7 An alternative splicing transcript of *FeALS1.1* is implicated in Al detoxification in buckwheat
Lei, G.J., Yokosho, K., Yamaji, N., Fujii-Kashino, M. and Ma, J.F.
- P2-8 Functional characterization of OsBBPI3, a putative ART1-interactive protein in rice
Kengo Yokosho, Zhi Chang Chen, Naoki Yamaji and Jian Feng Ma

- P2-9 *GmINS1*, a candidate gene for a nodulation QTL, is a key contributor to nodule development in soybean
J. K. Zheng, Y. Q. Yang, X. X. Li and H. Liao
- P2-10 Genetic localization of root hair traits in soybean
H. Y. Lv, Y. Q. Yang and H. Liao
- P2-11 Adaptability of the acid soil stress in tea plants
Hiroto Yamashita, Akio Morita and Takashi Ikka
- P2-12 Effect of nitrogen fertilization on root physiological activity in upland rice
Adibah M.A., Zaharah, A.R., Mohamed, H.M. and Siti, N.A.A.

P3- Soil-microbe-plant interactions at low pH

- P3-1 Plant-dependent soil bacterial responses following amendment with mineral and chemical fertilisers are driven by soil pH
Mickan, B., Alsharmani, A., Solaiman, Z. M. and Abbott, L.K.
- P3-2 Soil acidification induced by inorganic N fertilization affects soil diazotrophic population in a farmland ecosystem
Chao Wang, Man Man Zheng, and Ren Fang Shen
- P3-3 Rice husk biochar influences on arbuscular mycorrhizal fungi and growth of maize
Akhir Rudin, A.M. and Jaafar, N.M.
- P3-4 Characterization of silicate solubilizing bacteria from rubber plantation for growth promotion and antagonistic properties against *Rigidoporus microporus* pathogen
Imran Shabbir, Radziah Othman, Zulkefly bin Sulaiman, Mohd Yusoff bin Abd Samad, Mui Yun Wong and Noraini bt Md Jaafar
- P3-5 Effect of soil pH on phosphorus and mycorrhizal availability in cocoa orchard
Izzah, A.H., Daylon, J.H., Wan Asrina, W.Y. and Chubo, J.K.
- P3-6 Microbial population in soils amended with various green manures
Nur Liyana, I., Norziana, Z.Z., Illani Zuraihah, I., and Zurin Aida, J
- P3-7 Effect of different media on growth of orange spike *Medinilla* (*Medinilla scortechinii*)
Mohamed Hafeifi, B., Zulhazmi, S., Hanim, A., Sakinah, I., Intan Nadhirah, M., Mohd Seth, S. and Zulkifli, M. S.
- P3-8 Effect of arbuscular mycorrhiza fungion the early establishment of *Juniperus procera* Hochst. Ex. Endl. In Saudi Arabia
Amal A.M. AL-Ghamdi and Hasnah M. Jais

P4- Soil fertility and chemistry and amelioration and remediation of low pH soils.

- P4-1 A combined effect of nitrogen and phosphorus on the N uptake and yield of Bambara groundnut (*Vigna subterranea*)
Md Mahmudul Hasan, Md Kamal Uddin, Mahmud Tengku Muda Mohamed and Ali Tan Kee Zuan
- P4-2 Effects of vegetation and flooding on nitrogen cycling in Ozegahara Mire, Central Japan
Shigeta, H., Inubushi, K. and Sakamoto, M.
- P4-3 Changes in red soil pH and crop yield under different fertilization regimes
Wen, S., Wang, B. and Cai, Z.
- P4-4 Quantification of manure required to prevent red soil acidification in an 8-year maize field experiment
Cai Z., Wang, B. and Wen, S.
- P4-5 Use of different source of amendments for amelioration of acidic soils and rice production
Hari Mohan Meena and Prakash, H. C.
- P4-6 Bioavailability of selected micronutrients in tropical peat soils
Zulhilmy, M. A., Hanafi, M.M., Roslan, I., Hasmah, M. and Lulie, M.
- P4-7 Effect of acidity on phosphorus availability in matured black pepper farms
Izzah, A.H. and Wan Asrina, W.Y.
- P4-8 Effect of biofertilizer on soil nutrient status of matured cocoa (*Theobroma cacao* L.) trees in low soil pH in Jengka, Pahang
Nurfadzilah, M., Helmi, S., Boney, M., Nurafiza, A., Rozita, O. and Haya, R.
- P4-9 Fractionation of aluminium in acidified soil-plant systems
Matúš, P., Bujdoš, M., Matulová, M. and Farkas, B.
- P4-10 Extractability utilization for soil-plant element transfer predictions in acidified land
Hagarová, I., Matúš, P., Medved', J., Šebesta, M. and Polák, F.
- P4-11 Effects of soil nutrient status on main metabolites of Oolong Tea
Liu, Y., Sun, L. L. and Liao, H.
- P4-12 Effects of tea intercropping with soybean on Wuyi Rock Tea
Zhi Zhou and Hong Liao
- P4-13 Evaluation of two different compost materials as organic fertilizer on soil fertility status
Illani Zuraihah, I., Z.Z. Norziana and M. Theeba
- P4-14 Evaluation of macroelement and physical analysis of different soil types at five natural populations of *Chromolaena odorata*

Farah Fazwa, M.A., Norhayati, S., Syafiqah Nabilah, S.B., Jeyanny, V., Mohd Zaki, A. & Masitah, M.T. and Mohd Asri. L

- P4-15 Production of total phenolic contents in *Labisia pumila* var. *alata* (clone KfeFRIM1) planted at four different locations
Farah Fazwa, M.A., Syafiqah Nabilah, S.B., Norhayati, S. and Masitah, M.T.
- P4-16 Effect of compost (CompAcc) on early growth of *Labisia pumila* produced from cutting and tissue culture at nursery stage
Syafiqah Nabilah S.B., Farah Azwa, M.A., Norhayati, S and Masitah, M.T.

P5- Sustainable management of plantation and other crops on acid soils

- P5-1 Soil physico-chemicals properties of smallholder cocoa plantations in Konawe Selatan
Hasbullah Syaf
- P5-2 Evaluation of different types of phosphate rocks for oil palm (*Elais guineensis*) production
Siti Nasuha Suboh, Tan Ngai Paing, Zaharah Abdul Rahman, Siti Nor Akmar Abdullah and Adibah Mohd Amin
- P5-3 Evaluation of different rates of moroccon phosphate rocks for oil palm (*Elaeis guineensis*) seedlings
Norakmal Khairuanuar, Tan Ngai Paing, Mohamed Hanafi Musa, Adibah Amin and Zaharah Abdul Rahman
- P5-4 Effect of different types of organic materials on low soil pH in cocoa (*Theobroma Cacao* l.) yield production at Madai, Kunak, Sabah
Boney, M., Dandan, M. and Rozita, O.
- P5-5 Growth performance and biomass production of Tongkat Ali (*Eurycoma longifolia*) on low acid soil
Wan Rasidah, K., Ho, W.M. and Mohamad Fakhri, I.
- P5-6 Biomass production and essential oil yield of *Cymbopogon nardus* applied with different levels of nitrogen fertilizer on two contrasting acid soils
Wan Rasidah, K., Nor Azah, M. A., Rosazlin, A. and Rozita, A.
- P5-7 Effects of site improvement techniques on survival and growth of four selected tree species grown on an ex-landfill in Ara Damansara environmental park
Tang, L.K., Ang, L.H. and Ho, W.M.
- P5-8 Survival of ten endemic, endangered and threatened tree species grown on slime tailings at six months after planting
Ang, L.H., Ho, W.M. and Tang, L.K.

- P5-9 Assessment of two selected biofertilizers on soil pH, organic carbon and nitrogen of a paddy field
Norziana, Z.Z., Emmyrafedziawati Aida, K.R., Illani Zuraihah, I and Theeba, M.
- P5-10 Adsorption-desorption of aminomethylphosphonic acid (AMPA) in Alfisols amended with cow dung and rice husk ash
Garba, J., Samsuri Abd Wahid, Radziah, O. and Hamdani M.S.A.
- P5-11 Effect of vermicompost on the growth performance and yield of *Kaempferia galanga* L.
Halijah, I., Rosazlin, A., Noor, Z.M. and Norsyuhada, J.

P6- Agroforestry/ Environment/ Marginal Acidic Soil/ Soil Evaluation/ Method Development

- P6-1 Amending Bris Soil using rare earth by-product: effect on soil properties and environment
Faridah, M., Wan Abdullah, W.Y., Illani, Z.I., Theeba, M., Noorsuhaila, A.B., Sahibin, A.R., Wan Razi, I. and Aznan, F.I
- P6-2 Nutrient recovery of solid waste from spent bleaching earth and biosolids in ASEAN countries
Kamarulzaman, M.I., Sukor, A. and Zaharah, S.S.
- P6-3 Flat optical scanner technique to measure oil palm roots production on peat
Rumpang, E., Ohashi, M., Kume, T. and Kho, L.K.
- P6-4 The influence of pH and soil biota on Cu contamination under different soil type
Haryati M., Surya M., Yves D. and Intan Nadhirah M.
- P6-5 Effects of water management practices on yield and nutrient composition of rice cultivars
Hossain, M., Norton, G.J., Travis, A., Price, A., Mahmud, A.A. and Islam, M.R.
- P6-6 A rapid method to generate tea cuttings
Liu, X. M., Sun, L. L., and Liao, H.
- P6-7 Earthworm population as an indicator for soil health management under organic farming system
Intan Nadhirah, M., Noor Haslizawati, A. B., Mohamed Hafeifi, B., Norziana, Z. Z., Illani Zuraihah, I., Mohamad Fakhri, M. and Azriza, I A. R.
- P6-8 Assessment of agricultural land-use on water quality at Berembun Valley, Cameron Highlands
Noor Haslizawati, A. B., Mohd Shahid, S., Intan Nadhirah, M., Mohamad Fakhri, M., Mustafa Kama, I H., Azrizal, A. R. and Nor Azhar, A.
- P6-9 Paddy soil nutrient classification using geospatial interpolation

Muhammad Zamir, A. R., Illani Zuraihah, I., Theeba, M., Nor Ziana, Z. Z., Noorsuhaila A. B., Mohd Naim F. R., Mohd Najib M. Y., Hishamuddin A., Asnita, A. H., Masni, M. and Noranizam, M. S.

P6-10

The effect of landfill leachate on surface water quality at Air Hitam Sanitary Landfill, Puchong, Selangor, Malaysia

Nurul Atiqah Ahmad, D.S. Karam and Keeren S. Rajoo