## SOILS 2012 SCIENTIFIC PROGRAMME
### SOIL QUALITY TOWARDS SUSTAINABLE AGRICULTURE PRODUCTION

<table>
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<th>MONDAY</th>
<th>9 April 2012</th>
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<tr>
<td>18.00-20.00</td>
<td>REGISTRATION AND POSTER PLACEMENT</td>
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<th>TUESDAY</th>
<th>10 April 2012</th>
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<td>08.00-09.00</td>
<td>REGISTRATION</td>
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| 09.00       | PLENARY PAPER I  
Biochar as a soil amendment to improve crop yield, soil health and carbon sequestration for climate change mitigation  
Assoc. Prof. Datin Dr. Rosenani Abu Bakar  
Universiti Putra Malaysia |
| 09.30       | Transformation of pineapple stump into biochar under slow pyrolysis  
Cheah P.M, Husni M.H.A., Samsuri A.W and Luqman Chuah A.  
Universiti Putra Malaysia |
| 09.45       | Characterization of rice husk charcoal from local mill and its effect on compost properties  
Theeba M., Robert T.B., Illani Z.I., Zulkefli M., Husni M.H.A. and Samsuri A.W.  
Malaysian Agriculture Research & Development Institute |
| 10.00       | Evaluating charcoal as an amendment for sustainable kenaf (Hibiscus cannabinus) cultivation on sandy BRIS soil in Malaysia  
Malisa M.N., Hamdan J. and Husni M.H.A.  
Universiti Putra Malaysia |
| 10.15       | Effect of biochars amendment on nutrient and metal uptake by sweet corn (Zea mays L.)  
Nor Azlina A.B., Fauziah C.I. and Rosenani A.B.  
Universiti Putra Malaysia |
| 10.30       | Discussion |
| 10.45       | Refreshment and Poster Session |
SESSION 2: Soil Microbiology
Chairman: Assoc. Prof. Dr. Che Fauziah Ishak

11.15 Potential of symbiotic and non-symbiotic legume endophytes as plant growth promoting bacteria (PGPB)
*Nur Hasnidar M.K. and Halimi M.S.*
Universiti Putra Malaysia

11.30 Effect of phosphate-solubilizing bacteria on P uptake from different P fractions using $^{32}$P technique in aerobic rice
Universiti Putra Malaysia

11.45 Exploiting mycorrhizal fungi for sustainable crop production in Malaysia
*Radziah O. and Naher U.A.*
Universiti Putra Malaysia

12.00 Discussion

12.15 MSSS ANNUAL GENERAL MEETING AND LUNCH

OPENING CEREMONY

14.00 Arrival of Guest of Honour

14.30 Recitation of "Doa"

14.35 Welcoming address by the Chair of the Conference Organizing Committee

14.45 Speech by the President of the Malaysian Society of Soil Science (MSSS)

14.55 Opening address by Vice Chancellor UMK

15.15 KEYNOTE PAPER I
Soil quality and sustainable agriculture production
*Dato’ Dr. Mohamad Hashim bin Ahmad Tajudin*
Director (R&D and Agronomy), TH Plantations Berhad

16.00 Presentation of MSSS Education Awards
Presentation of Best Soil Science Student Award

16.05 VISIT EXHIBITION AND POSTER SESSION
Refreshment
SESSION 3: Soil Fertility and Nutrient Management 1  
Chairman: Prof. Dato’ Dr. Nik Muhamad Majid

16.35 Leaching losses of nutrients and performance of oil palm in marine clay soils  
United Plantations, Berhad

16.50 Growth and nutrient status of *Hevea brasiliensis* (RRIM 2001) as affected by different rates of fertilizer grown on an Oxisol: Nursery trial  
Shafar Jefri M., Noordin W.D. and Fauziah C.I.  
Universiti Putra Malaysia

17.05 Effect of different potting media on the growth of rooted cuttings of *Kelempayan* (*Neolamarckia cadamba*)  
Aminah H., Ahmad Fauzi M.S, Mohd Adi Faiz A.F. and Hamzah M.  
Forest Research Institute Malaysia

17.20 Discussion

17.35 Poster Session

WEDNESDAY 11 April 2012

KEYNOTE PAPER II

08.45 Soil Science in Malaysia: Fourty years down the memory lane and future directions  
Prof. Dr. Shamshuddin Jusop  
Department of Land Management, Universiti Putra Malaysia

SESSION 4: Problematic Soils  
Chairman: Assoc. Prof. Dr. Ahmad Husni Mohd Hanif

09.30 Need for a unified classification of acid sulphate soil of Malaysia  
Paramananthan S and Pupathy U.T.  
Param Agricultural Soil Surveys (M) Sdn Bhd

09.45 Increasing rice productivity on an acid sulfate soil under rain-fed condition at Merbok, Kedah, Malaysia using various liming materials  
Elisa A.A., Shamshuddin J. and Fauziah C.I.  
Universiti Putra Malaysia

10.00 Biosorption of heavy metals in leachate derived from bioleaching of gold mine tailings using *Aspergillus fumigatus*  
Seh-Bardan B.J., Radziah O, Samsuri A.W., Aminudin H. and Sadegh-Zadeh F  
Universiti Putra Malaysia
10.15 The impact of solid waste landfills on soil quality in Malaysia: What can we learn?
Sharifah Norkhadijah S.I., Fauziah C.I., Reid B. and Lovett A.
Universiti Putra Malaysia.

10.30 Discussion

10.45 REFRESHMENT

10.45 SESSION 5: Soil Chemistry and Physics
Chairman: Mr. Wan Abdul Halim Wan Ilias

11.15 Physico-chemical properties and aggregate stability of arid soils in Southeastern Iran
Moghimi A.H, Hamdan J., Shamshuddin J. and Samsuri A.W.
Universiti Putra Malaysia

11.30 Comparison of selected chemical properties at different depths in cultivated and non-cultivated peat soils
Nur Qursyina B.K., Adzmi Y., Abdul Rashid A. and Zaini H.
Universiti Teknologi MARA

11.45 Copper availability in Brassica cultivated Oxisols and Inceptisols
Wahida N.H, Anuar A.R, Fauziah C.I and Osumanu H.A.
Universiti Putra Malaysia

12.00 The effectiveness of silt pit as a soil, nutrient and water conservation method in non-terraced oil palm plantations
Bohluli M., Teh C.B.H., Husni M.H.A. and Zaharah A.R.
Universiti Putra Malaysia

12.15 Discussion

12.30 LUNCH

14.15 PLENARY PAPER II
Assessment of anaerobic degradation of EFB related to changing of category of EFB to CDM projects in the third world countries
Prof. Dr. Ognyan Stoyanov Kostov
Nexus Technology Consultancy Sdn. Bhd.

14.45 The development of solid nitrogen rich biofertilizer
Malaysian Agriculture Research and Development Institute
Composting of oil palm empty fruit bunches (OPEFB) with palm oil mill effluent (POME) anaerobic sludge by using in-vessel composter
Universiti Putra Malaysia

Vermicomposting of sago waste (Metroxylan sagu) using earthworm (Eisenia foetida) and its comparison with locally produced vermicompost from different feedstocks
Rosenani A.B., Kadir J., Elton T. & Yeow J.S.
Universiti Putra Malaysia

The effects of organic fertilizer application on the diversity of arthropods in the organic farming area of MARDI
Rosliza J., Nurul Ammar Illani J., Illani Zuraihah I. & Zulkefli M.
Malaysian Agriculture Research and Development Institute

Discussion

SESSION 7 : Soil Fertility and Nutrient Management II
Chairman: Assoc. Prof. Dr. Wan Noordin Wan Daud

Efficiency of different nutrients sources in acidic soil: A short review
Chin W. F.
Yara international (M) Sdn Bhd

Agro-management for oil palms planted on acid sulphate soils
Pupathy U.T. and Paramananthan S.
Sime Darby Plantations Berhad

Rehabilitation of degraded sites within the logged forests with high quality tree crops using improved planting techniques
Raja Barizan R.S. and Farah Shahanim A.M.
Forest Research Institute Malaysia

Production efficiency of chilli under netted rain-shelter using fertigation
Kassim, B. and Aishatul Izzah M.K.
Universiti Malaysia Kelantan

Discussion

CLOSING REMARKS BY MSSS PRESIDENT

REFRESHMENT
THURSDAY 12 April 2012

POST CONFERENCE TOUR
- Depart from hotel to Pasir Putih
- Visit Kemasin-Semerak irrigation project site examining profiles of acid sulphate soil
- Lunch
- Leave for Bachok/Sabak to observe the severity of coastal soil erosion
- Back to the hotel