INTERNATIONAL CONFERENCE ON NATURAL PRODUCTS 2010

"From Nature to Medicine through Sustainable Education, R&D and Practice"

10-12 December 2010
Bayview Beach Resort, Penang, Malaysia
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Assalamu'alaikum and Greetings of Peace,

On behalf of Universiti Sains Malaysia (USM), I would like to welcome all delegates to the International Conference On Natural Products 2010 (ICNP 2010) & the Asia Pacific Pharmacy Education Workshop (APPEW). Allow me to take this opportunity in wishing Selamat Datang especially to all foreign delegates to this conference held on the island destination of Penang, a UNESCO world heritage site.

This conference is a collaborative effort by the School of Pharmaceutical Sciences, USM, Malaysian Natural Products Society (MNPS), Management & Science University (MSU), Malaysian Society of Pharmaceutical Technology, Malaysian Pharmaceutical Society and United Nations University – International Institute for Global Health (UNU-IIGH). This inaugural event brings together experts from all over the world geared towards trans-disciplinary participation covering areas concerning natural products as sustainable resources through education, research & development and pharmacy practice. This conference hopes to provide an opportunity to expose delegates to current trends in research and advancements made in the related areas through unique sustainable approaches involving natural product resources.

For this purpose, USM being one of the pioneering United Nations University Regional Centres (RCEs) on Education for Sustainable Development since 2005 is now initiating a concept of Sustainable Health with other RCEs globally.

USM’s focus of new, exciting niche areas for knowledge enabled through sustainability-driven education, health an, research is supportive of the them of this conference. It not only serves as a platform in facilitating networking and collaboration among delegates which allows local and international experts to share their research findings and experiences, but hopefully with also develop strategic alliances with industry and regulatory bodies to spin-off commercial production of globally accepted natural medicines of guaranteed potency.

In this regard, we must be mindful of the Millennium Development Goals that will come to a conclusion by 2015, and that the achievements to date is still far from satisfactory! This means that conferences like this must double its effort in the most optimally way as suggested by the MDG #8.

To all our delegates, I would like to wish you a successful and enriching conference.

Thank you.

Dzulkifli Abdul Razak, Prof. Tan Sri Dato’
Vice-Chancellor, Universiti Sains Malaysia
Congratulations to the organizing committee and to all involved for their hard work and dedication in making this conference a success.

In the spirit of global competitiveness, this conference is an excellent platform for presenting research and innovative (R & I) ideas, on how to utilise natural products and to bridge academia, practice and industry with an emphasis on sustainability.

The conference will run concurrent transdisciplinary workshops related to natural products, which include ethno pharmacology, sourcing for raw materials and information database, photochemistry, quality control or standardisation and good manufacturing practices, as well as preclinical biological activities and toxicological studies, formulations, pharmacokinetics and clinical studies as well as commercialisation and marketing strategies. Ultimately, this convening of global experts will bring about innovative strategies to move forward towards a sustainable education, research & development (R&D) and practice of natural products in line with the aspirations of UNESCO in achieving the global visions of sustainable development.

It is with great pleasure and honour, we welcome you to Penang and I wish you a productive conference.

With best wishes,
Asma Ismail, Prof. (Dr.)
Deputy Vice-Chancellor
Research and Innovations
Universiti Sains Malaysia
On behalf of the Malaysian Natural Products Society, I would like to welcome all participants to our 26th Annual Seminar. I would also like to record the Society's appreciation and a very big thank you to the School of Pharmaceutical Sciences, Universiti Sains Malaysia (USM) for their willingness to cohost this meaningful event, which is part of a prestigious International Conference on Natural Products 2010 (ICNP 2010). The theme, *From Natural Products to Medicine through Sustainable education, R&D and Practice Leads from Nature*, reflects the current trends on the issues and is in very much in line with one of the Society's objectives. In addition, I would like to congratulate the organizing committee for their commitment in making this event a success.

The seminar this year is a meaningful one for the Society and USM since it has been quite some time when USM hosted our annual meeting (Nov. 1999). The ICNP 2010 has attracted much attention with programmes filled with presentations by plenary and invited speakers both local and international. We have a number of invited speakers who are familiar with the status of natural products research in Malaysia, with a special note of appreciation to Prof. Dr. Kurt Hostettmann from Switzerland who will be delivering the 10th Jack Cannon Lecture. I believe that this event will be very beneficial and will substantially contribute to the enhancement of knowledge among local and international scientists, young and experienced. The sharing of knowledge among scientists from different regions of the world is seen as a positive step as this can be developed into lifelong relationships and commitment towards the advancement of science and technology.

Malaysia, being one of the countries in the world with a rich diversity in flora and fauna, together with the presence of numerous indigenous groups whose traditional medicinal knowledge contributes a massive impact on the progress of natural products research in the country. It is very timely that their knowledge be converted to beneficial use with the appropriate innovation and scientific backing.

I sincerely hope that this seminar will be utilized fully to everyone's advantage.

On behalf of the Society, I would like to welcome everyone to the seminar and hope that this year's event is very informative and unforgettable to every participant. Have a successful and fruitful discussion.

Professor Dato' Dr. Ikram M. Said
President
Malaysian Natural Products Society
Natural products have been used for many centuries to cure varieties of conditions. Herbal and other natural remedies have traditionally been used to treat both adults and children. Herbal remedies may offer a milder alternative to some conventional medicines, although the Suitability of a herbal remedy needs to be considered with respect to quality, safety and efficacy. Herbal remedies should be used with caution in children and medical advice should be sought if in doubt. Based on such situation, it is timely to gather all practitioners, researchers, Scientists, Educators and students to share and present the new findings. International Conference of Natural Product is an important event to formularies any resolution based on the latest evidence based therapy, research findings and education aspects. I would like to welcome all the participants from all over the world to be in this part of the world where natural products are highly consumed and research is extensively being conducted. The focus on variety of issues in this conference may create interest among the community regarding the safety aspect of natural products. Analytical aspects and education programs should be strengthen in order to achieve evidence based therapy to improve quality of life. School of Pharmaceutical Sciences Universiti Sains Malaysia seriously looking at this matter and having this conference will develop new findings and collaboration among countries around the world. With outstanding keynotes and plenary speakers from varieties fields of natural products will definitely be benefited by many of us in the area of natural products. It is important to note that, sustainability should be attaining in order to create better environment for the next generation in health care. Proper cultivation of the herbs and wisely used other natural products will ensure that the quality of life based on evidence for the therapy using natural product should be practiced.

I would like to congratulate all the organizing committee for such a superb effort to come up with this successful conference. With this collaborating and teamwork, such a big conference will not be here today.

Once again to all delegates from various part of the world, I would like to wish Selamat Datang and welcome to this beautiful Island of Penang. Enjoy your conference and build the linkages among you as to create better collaborating effort in varieties of issues related to natural product.

Associate Professor Syed Azhar Syed Sulaiman
Dean
School of Pharmaceutical Sciences
Universiti Sains Malaysia
Committee Members

Patron: Y. Bhg. Professor Tan Sri Dato' Dzulkifli Abd Razak
Advisor: Y. Brs. Professor Asma Ismail
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Co-chairman: Y. Brs. Professor Zhari Ismail
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Professor Munavvar Zubaid Abdul Sattar
Professor Yuen Kah Hay
Associate Professor Dr. Mohd. Baidi Bahari
Associate Professor Dr. Zuraidah Mohd. Yusoff
Dr. Amin Malik Shah Abdul Majid

Scientific
Professor Mohd Zaini Asmawi
Associate Professor Dr. Ab. Fatah Ab. Rahman
Prof. Chan Kit Lam
Professor Peh Kok Khiang
Professor Zhari Ismail
Associate Professor Dr. Surash Ramanathan
Dr. Farha Naomi Omar Farouk
Dr. Mohd. Nizam Mordi
Dr. Roziahanim Mahmud
Mr. Rosman Ahmad
Ms. Tengku Nor Maharan Tengku Ab Kadir

Protocol
Associate Professor Dr. Pazilah Ibrahim
Dr. Roziahanim Mahmud
Associate Professor Dr. Gam Lay Harn
Dr. Farha Naomi Omar Farouk
Ms. Hadzilana Zainal
Mrs. Nor Risah Othman
Mrs. Salida Ibrahim
Mrs. Siti Maisharah Sheikh Ghadzi
Mrs. Sopiah Nor Mohamad
Ms. Sabariah Noor Harun

Hospitality
Associate Professor Dr. Norishah Mohamed
Associate Professor Mariam Ahmad
Mrs. Masuryani Mat Taha
Mrs. Zaidah Aziz

Transportation and Logistic
Tn. Hj. Abd. Hadi Ahmad
Mr. Amiruddin Mat Jalil
Mr. Azman Che Hussain
Mr. Mohd Jasmin Ikram Ab. Rahman
Mr. Mohd. Shahrul Ridzuan Ismail
Mr. Nadzri Othman
Mr. Shamsul Mad
Mr. Sved Mohammed Md. Abdul Kadir
### Day 1 [December 11, 2010] Room 1

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<th>Abstract No</th>
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<td></td>
<td>Ahmad Tasir Lope Pihie</td>
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<tr>
<td>1215-1230</td>
<td>A1-45</td>
<td>Yi Peng</td>
<td>Screening of selected fungi for biological control agent potential towards wood-degrading fungi of Malaysia</td>
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<td>1245-1300</td>
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<td>Hamid Akbari Javar</td>
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<td>1015-1045</td>
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<td>Shantini Thevendran</td>
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<td>Noor Hafizah Saidan</td>
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<td>1200-1215</td>
<td>A3-202</td>
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### Raw Material & Post-Harvesting + Chemistry of Natural Products including QC, Standardization and GMP

### Day 1 [December 11, 2010] Room 2

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<tr>
<td>1145-1215</td>
<td></td>
<td>Yoshinori Asakawa</td>
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<td>1545-1600</td>
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### Commercialization, Marketing & Regulatory Affairs + Chemistry of Natural Products including QC, Standardization and GMP
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<td>A4-191 Khaled Saleh</td>
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<td>1245-1300</td>
<td>A4-108 Muhammad Yani Musdja</td>
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<td>Shaiful Bahari Ismail</td>
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<td>1545-1600</td>
<td>A4-168 Ng Kwok Wen</td>
<td>Synergistic activity of lignans from Phyllanthus amarus with vincristine on HepG2</td>
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<td>A4-200 Nurul Maizan Manshor</td>
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### Day 2 [December 12, 2010] Room 4

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<td>A4-69 Nabilh Mohd Zin</td>
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<td>A4-61 Vagner Rodrigues Santos</td>
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<td>A4-78 Mani Maran Marimuthu</td>
<td>Antimicrobial activity of methanolic extracts of various parts of iroa coccinea</td>
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<td>1200-1215</td>
<td>A4-198 Hassan Pyar</td>
<td>Antimicrobial activity of Lactobacillus acidophilus grown in substrates derived from natural products</td>
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<td>1215-1230</td>
<td>A4-215 Juma Mabubu</td>
<td>Evaluation of antimalarial activity of Sesquiterpene lactones of wild Sudanese basil (Ocimum basilicum) through their in vitro inhibition of Dihydrofolate reductase (DHFR)</td>
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### Monograph & Documentation

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Pre-Clinical/Clinical Trials

A4-108 Test of the Immunomodulatory Effect and Measurement of Changing Acid Phosphatase Enzyme of a Water Extract Mixture of Piper Betle L, Uncaria Gambir Roxb and Calcium Hydroxide on Mice Macrophage Cells

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Introduction: The main components of betel quid chewing which are betel leaf (Piper Betle L.), gambir (Uncaria gambir Roxb) and slaked lime (calcium hydroxide) have been studied extensively but separately, thus studies on these components in combination particularly as immunomodulatory agents is scarce.

Objectives: To ascertain the efficacy of the quid chewing components as immunomodulatory agents.

Materials and Methods: A water extraction was carried out consisting a mixture of betel leaves, gambir and slaked lime. The extract was given to 7 groups of mice for 14 days with doses of 100, 200 and 400 mg/kg body weight. Two kinds of immunomodulatory drugs in syrup form commonly used in the treatment of infections was used as positive controls. Then the peritoneal fluid of mice containing macrophage cells was isolated by performing surgery. This study calculated the number of activity and capacity of macrophage cells of mice after swallowing Staphylococcus epidermidis and also calculated changes to acid phosphatase enzyme in macrophage cells, on each group of mice.

Results: The quid chewing component mixture group compared with negative controls showed an increase of phagocytic activity of 86.6%, 94.2% and 88.3% for doses of 100, 200 and 400 mg/kg body weight, respectively. Meanwhile the phagocytic capacity obtained for an average of 50 macrophage cells was 626.1, 806.4 and 754.5 bacteria for dose of 100, 200 and 400 mg/kg body weight, respectively.

Conclusion: For the 3 doses administered, the 200 mg/kg dose showed the most efficacy where both the phagocytic activity and capacity calculated was statistically significant (p ≤ 0.05), and changes for acid phosphatase enzyme was found statistically significant (p ≤ 0.05) as well.
Certificate of Attendance

Muhammad Yanis Musdja

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