









# INTERNATIONAL CONFERENCE ON PLANT PHYSIOLOGY 2014

Enhancing Strategic
Plant Physiological
Research and Technologies
for Sustainable Resources



26 - 28 August 2014
Sanur Paradise Plaza Hotel & Suites
BALI - INDONESIA

JOINTLY ORGANIZED BY:



Malaysian Society of Plant Physiology (MSPP)

www.mspp.org.my



Indonesian Coffee & Cocoa Research Institute (ICCRI)

www.iccri.net

#### INTRODUCTION

Plant physiological research plays an important role in providing food and industrial raw materials for the ever-increasing world population. Advances in research and new technologies reduce the gap between potential plant productivity and actual yield and, therefore, must be given great emphasis for the well being of human kind. Plant physiologists must be competent and engaged in multidisciplinary and inter-institutional research for higher efficiency in plant productivity. Research tools in molecular biology and genetic engineering, as well as crop modelling, should be well blended with the many other branches of plant sciences for greater relevance and applicability. Plant physiologists must eventually translate the findings into strategies to alleviate grievances of especially the resource-limited small farmers who may be discriminated by unfavourable socio-economic systems. Besides productivity issues, healthy ecosystems and sustainability of plant production system must not be neglected. Holistic approaches must be put into practice through better collaborative research and commitment.

#### **OBJECTIVES**

- To deliberate and share information on the current research findings and sustainable technology in relation to plant productivity.
- To provide future direction for organized research in the field of plant physiology and promote international inter-disciplinary and inter-agency networking.

#### SCIENTIFIC TOPICS

The scientific programme includes keynote address, plenary papers, oral and poster presentations. Various aspects of plant science will be covered during the conference.

- carbon assimilation, allocation, translocation and partitioning of photoassimilates
- plant nutrition, plant microbe interaction and fertilizer technology
- plant water relation and irrigation technology
- plant growth regulator
- eco-physiology
- stress biology
- pest and disease management
- biotechnology
- seed physiology and technology
- modelling and simulation
- postharvest physiology, technology and quality control
- innovative practices

#### TENTATIVE PROGRAMME

Time	Monday 25 August 2014	Tuesday 26 August 2014	Wednesday 27 August 2014	Thursday 28 August 2014
0730-0830		Registration		
0830-1030		Opening ceremony	Oral session	
			(Concurrent)	
1030-1100		Coffee break & poster viewing	Coffee break	uc
1100-1300	-	Oral session (Concurrent)	Oral session (Concurrent)	excursion
1300-1400		Lunch	Lunch	exc
1400-1600		Oral session (Concurrent)	Oral session (Concurrent)	Field
1600-1630		Coffee break & poster viewing	Closing ceremony & coffee break	
1630-1900				
1900-2100	Pre-registration	Welcome dinner		

#### **LANGUAGE**

The official language of the conference is English.

#### INVITED SPEAKERS



## Prof. Dr. David Ian Guest

Keynote Address: The Yield Gap: Why Farmers Don't Achieve Potential Yields and What We Can Do about It

Prof. Dr. David Ian Guest graduated with Ph.D. in 1983 from the Faculty of Agriculture, University of Sydney, Australia. He has been attached to the School of Botany at The University of Melbourne for 20 years before returning to The University of Sydney as Professor of Horticultural Science, then Plant Pathology, in 2004 - present. Currently, he is the Associate Dean (Development). He has also been an invited professor of University of Paris VI, France, in 1987 and 1990-1992, then Kasetsart University, Thailand, in 2002-2003.

Prof. Dr. David Guest is interested in the way plants defend themselves against pathogens at the cellular, whole plant and ecosystem levels. He has been awarded over \$7 million in research funding. Currently, he is working on plant disease resistance mechanisms, managing Phytophthora dieback in Australian ecosystems and fungi as human allergens. He is the Policy and Regional

Outreach Advisor, Sydney Southeast Asia Centre, and Fellow, Australasian Plant Pathology Society.

Prof. Dr. Guest is also actively involved in management of Phytophthora diseases in tropical countries. He works on plant disease physiology in perennial crops like cocoa, coconuts, oil palm, durian, jackfruit and other high value crops that are the major source of income for many smallholder farmers in Papua New Guinea, Indonesia, Vietnam, the Philippines, Thailand and Colombia. His research partnerships in these countries aim to develop practical integrated crop management strategies that improve the livelihoods of rural communities, and involve multi-disciplinary teams including Public Health specialists and social scientists. Currently, he is the President, Asian Association of Societies of Plant Pathology.

Prof. Dr. Guest has co-edited two monographs, written several book chapters and published over 80 research articles in refereed journals. He has also delivered over 100 keynote addresses, invited talks and presentations to national and international conferences. He is a member of the editorial boards of *Physiological and Molecular Plant Pathology* and the online journal, *Agriculture*. He is also frequently asked to evaluate academic promotion applications, regularly act as an external examiner for Ph.D. and research masters theses from Australian and international universities, and review manuscripts for many scientific journals. He has also formally reviewed and reported on 8 research programs for ARC, ACIAR, HAL, USDA-BARD, QNRF and Biosecurity Australia.



# **Prof. Dr. Melvin Thomas Tyree**Plenary Speech: The Roles of Negative Pressure in Plants for Water Balance in Leaves and Water Transport

Prof. Dr. Melvin Thomas Tyree holds a Ph.D. in plant biophysics from Cambridge University. He was a project leader for the U.S. Forest Service, Northeastern Forest Experiment Station, in Vermont. He retired from a position as a pioneer scientist at the USDA Forest Service. He is now a professor in the field of Biophysical Plant Ecology in Northwest A&F University, China. He is also attached to University of Alberta as an adjunct professor.

Prof. Dr. Mel T. Tyree received the Marcus Wallenberg Prize in 2002, an international award for scientific achievements in fo restry and technology of forest-products industry, in recognition for his pioneering scientific discoveries leading to basic understanding of water relation in trees. He was also the recipient of Humboldt Research Award in 1996 for Senior United States Scientists, Humboldt Foundation, Germany. He is now a Fellow of World Innovation Foundation (UK) and International Academy of Wood Sciences (Germany).

Prof. Dr. Tyree's general research interests lie in enhanced understanding of mass, heat and energy fluxes within plants and between plants and their immediate physical environment through the application of the physical sciences to plant physiology, i.e., in particular the application of thermodynamics of irreversible processes, Newtonian physics and mechanics. Much of his curre nt research focuses on environmental stresses that cause water-transport dysfunction, such as, drought (that increases tension on water columns) and freeze-thaw events (that affects gas solubility in water and embolism formation). Dysfunction in water transport efficiency has an immediate impact on gas exchange at the leaf-level, volume growth of cells and the rate of carbon fixation.

Recently, Prof. Dr. Tyree has developed an interest in sustainable energy systems and houses. He is the designer, builder and owner of a net zero energy home in Ellenburg, NY, that derives all energy for heating/AC, hot water and all other appliances from the sun and wind. His other professional activities include member of the editorial boards of *Physiologia Plantarum* and *Plant Cell & Environment*.

#### WHO SHOULD ATTEND

Researchers, academicians, students, plantation and forest managers, natural resources stakeholders, extension officers, national advisory agency officers, sociologists, economists, funding agency officers, managers involved in agro-industry, environment, science and engineering sectors and policy makers.

#### ABSTRACT AND FULL PAPER SUBMISSION

Papers of relevant topics within the conference theme are invited for oral/poster presentations. Each abstract submitted must not exceed 500 words. Abstracts must be submitted online at **www.mspp.org.my** before or by **15 May 2014**. The scientific committee will make final decisions on acceptance and mode of presentation of the submitted abstracts.

Accepted oral and poster presenters are required to submit the full papers of five to eight pages inclusive of illustrations, tables etc. to *msppconference@gmail.com* before or by 31 July 2014. The full paper should be organised in the following order: title, author(s), introduction, materials and methods, results and discussion, conclusions, acknowledgements and references. Full paper should be A4 sized, typed single-spacing using standard 11 points Times New Roman in Microsoft Word with 2.5 cm margin at top, bottom and both sides. Selected manuscripts will be invited for publication in the JOURNAL OF TROPICAL PLANT PHYSIOLOGY, the official journal of the MSPP.

Laptop and LCD projector will be available to assist the speakers for their oral presentations. Poster allowed for presentation is 50 cm x 80 cm, containing similar contents as oral paper, with font size of at least 28. Poster should be of portrait orientation and must not be laminated.

#### **Important dates:**

Deadline for abstract submission*	15 May 2014
Notification of accepted oral papers/posters	15 June 2014
Deadline for full paper submission	31 July 2014

<sup>\*</sup> Abstracts received after 15 May 2014 will not be printed in the program book of the conference.

#### REGISTRATION FEES

	Before or by 15 May 2014	After 15 May 2014	On-site
MSPP Member 1	MYR 800	MYR 900	MYR 1,000
Local Participant (non-MSPP Member)	MYR 900 '	MYR 1,000 '	MYR 1,100 '
	IDR 1.300.000	IDR 1.600.000	IDR 2.000.000
International Participant 1	USD 350	USD 400	USD 450
Student Participant <sup>2</sup>	MYR 500		
	IDR 750.000	-	-
	USD 180		
Conference Dinner	IDR 250.000	-	-
Field Excursion	IDR 350.000	-	-
Exhibitor <sup>3</sup>	MYR 1,500		
	IDR 5.000.000	-	-
	USD 650		
Sponsor*	MYR 6,000		
	IDR20.000.000	-	-
	USD 2,500		
Advertisement in Program Book <sup>3</sup>	MYR 1,000		
	IDR 3.300.000		
	USD 400		
Accompanying Person °	IDR 700.000	-	-

Registration fee is inclusive of daily two tea breaks, lunches, conference bag, program book and certificate of participation;

<sup>&</sup>lt;sup>1</sup> inclusive of conference dinner and field excursion;

<sup>&</sup>lt;sup>2</sup> scanned copy of relevant document is required;

<sup>&</sup>lt;sup>3</sup> on first come first serve basis, provided with 2 banquet tables (4' x 2'), 2 banquet chairs, power point and some floor space;

<sup>&</sup>lt;sup>4</sup> inclusive of conference dinner for 2 persons, company logo to be included in backdrop, program book cover, banner and conference bag, one page advertisement in the program book (A4 size, full colour), exhibition space, company profile/brochures to be included in the conference bag if any;

<sup>&</sup>lt;sup>5</sup> A4 size, full colour, on first come first serve basis, softcopy in pdf format must be sent to *msppconference@gmail.com*, *iccri@iccri.net* or *listya.1606@gmail.com* before 30 June 2014;

<sup>&</sup>lt;sup>6</sup> conference bag, conference dinner and field excursion.

#### FIELD EXCURSION

A field excursion to Traditional Balinese Village at Panglipuran, coffee smallholders' plantation, Kintamani Coffee Plantation, Ceking Rice Terrace and Ubud Market will be organized on **28 August 2014, 7.00 a.m. – 5.00 p.m.** 

#### **PAYMENT**

Payment must be made before 31 July 2014. The organizing committee reserves the right to refuse admission to conference if payment is not received by 31 July 2014. Abstracts and advertisements, where applicable, will not be printed in the program book of the conference if payment is not received by 31 July 2014. There will be no refund for cancellation but a substitute is allowed.

#### Payment option 1:

Cheque to be made payable to "Persatuan Fisiologi Tumbuhan Malaysia" and sent to Locked Bag No. 282, UPM Post Office, 43409, UPM, Serdang, Selangor, Malaysia.

Payment to be remitted to:

Name of Bank: CIMB Bank Berhad Account No.: 1215-0010126-052

Swift code: CIBBMYKL

Name of Account: Persatuan Fisiologi Tumbuhan Malaysia

Address: CIMB Bank Berhad, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia.

Payment option 2:

Payment to be remitted to: Name of Bank: Bank Mandiri Account No.: 143.00.1090833.1

Swift code: BMRIIDJA

Name of Account: PT RPN PUSLIT KOKA

Address: Bank Mandiri, Kantor Cabang Jember Alun-alun, Jl. Ahmad Yani, Jember, Jawa Timur, Indonesia.

#### **ACCOMMODATION**

At Sanur Paradise Plaza Hotel & Suites, space has been blocked by the organizing committee for conference participants. Please register with secretariat or call +62 818 567 068/+62 361 281 781 (Mr. Jacob Omega Teks; jojo@sanur.pphotels.com) for reservation. Special room rates are offered to participants at:

Superior room IDR 765.000 net /night Premier room IDR 1.100.000 net /night

Room rate inclusive 21 % government tax & service charge, wireless and high speed broadband internet access (available in room and meeting room via cable or hot spot), daily breakfast for maximum of 2 persons, welcome drink on arrival, free use of in house tea & coffee facilities, free use of Sanur Paradise Plaza Hotel's Gym, Sauna and Jacuzzi and free shuttle service to Sanur Shopping and Beach Club Sanur.

Third adult rate, sharing same room, is IDR 300.000 net per night with additional bed and daily breakfast.

Payment should be made directly to the hotel upon check in. Hotel website is http://www.sanurparadise.com. Other hotels are also available at walking distance from the conference venue.

#### PASSPORT AND VISA

All foreigners wishing to enter Indonesia must have a passport valid for at least six months from the date of arrival along with proof (ticket) of onward or return passage. Non-extendable visa-free entry to Indonesia for 30 days is available to passport holders of Brunei, Chile, Hong Kong, Macao, Malaysia, Morocco, Peru, Philippines, Singapore, Thailand and Vietnam. Passport holders of 63 nationalities are entitled to 30-day non-extendable tourist visas upon payment of US\$25, respectively, upon arrival. These are Australia, Austria, Argentina, Bahrain, Brazil, Belgium, Bulgaria, Cambodia, Canada, Cyprus, Denmark, Estonia, Egypt, France, Finland, Germany, Greece, Hungary, Iceland, India, Iran, Ireland, Italy, Japan, Kuwait, Laos, Liechtenstein, Luxemburg, Malta, Maldives, Mexico, Monaco, New Zealand, Norway, Netherlands, Oman, People's Republic of China, Poland, Portugal, Qatar, Russia, Saudi Arabia, Spain, South Africa, South Korea, Suriname, Switzerland, Sweden, Taiwan, United Arab Emirates, United Kingdom, United States of America, Algeria, the Czech Republic, Fiji, Latvia, Libya, Lithuania, Panama, Romania, Slovakia, Slovenia and Tunisia. Passport holders of all other countries and non-tourists of the aforementioned countries must obtain appropriate valid Indonesian visas at Indonesia Embassies or Consulates in their home countries prior to departure to Indonesia. Please contact the Indonesian Embassy/Consulate in your country well before the Conference in order to check if you require any immigration documents necessary to visit Indonesia.

#### AIRPORT DEPARTURE TAX

An airport tax of 150.000 Rupiah is imposed for travellers on international routes and 40.000 Rupiah for those on domestic routes. Airport tax is payable after Check-in at airport.

#### **CURRENCY**

The Indonesian currency is Rupiah (IDR).

#### **ELECTRIC CURRENT**

The electric current in use throughout Indonesia is 220-230 volts at 50Hz.

#### **REGISTRATION & INQUIRY**

Please log on to www.mspp.org.my for online registration and submission of abstract. For further information, please contact:

Dr. Nor Mayati Che Husin

Malaysian Society of Plant Physiology (MSPP)

Locked Bag No. 282, UPM Post Office, 43409 UPM, Serdang, Selangor, Malaysia.

Tel: +603-6145 9584; Fax: +603-6156 5251

e-mail: msppconference@gmail.com

Ms. Sulistyani Pancaningtyas

Indonesian Coffee and Cocoa Research Institute (ICCRI)

JI. P.B. Sudirman No. 90, Jember 68118, Indonesia.

Tel: +62 331 757 130, 487 278; Fax: +62 331 757 131, 487 735

e-mail: iccri@iccri.net, listya.1606@gmail.com

#### MAIN ORGANIZING COMMITTEE

Chairs : Dr. Tsan Fui Ying

Dr. Teguh Wahyudi, M.Eng.

Vice Chairs : Assoc. Prof. Dr. Normaniza Osman

Dr. Misnawi

Secretariat & Registration : Dr. Nor Mayati Che Husin

Ms. Sulistyani Pancaningtyas

Treasurer : Dr. Puteri Edaroyati Megat Wahab

Ms. Devi Ayu Ketut Yanuar Rizki

Scientific & Technical : Mr. Ahmad Nazarudin Mohd Roseli

Assoc. Prof. Dr. Normaniza Osman Assoc. Prof. Dr. Roohaida Othman Assoc. Prof. Dr. Hazandy Abdul Hamid

Dr. Elizabeth Philip Dr. Soetanto Abdoellah Dr. Surip Mawardi Dr. A. Adi Prawoto Dr. John Bako Baon Mr. Mujiyantoro

Social & Publicity : Mr. Fauzi Jumat

Mr. Didiek Harijadi

Sponsorship : Dr. Hj. Zamri Ishak

Ms. Purmiati Astutiningsih

Venue & logistic : Mr. Kristya Widhi Nugroho

Mr. Wowok Harkiyanto

Field Excursion : Mr. Sugiar

### **REGISTRATION FORM ICPP 2014**

ONLINE REGISTRATION AT www.mspp.org.my IS OPEN BY 1 MARCH 2014.

PERSONAL DETAILS:			
Title (Prof/Dr/Mr/Ms/Miss):	Full Name:		
Organization and address:			
Country:			
Designation:			
Tel:	Fax:	E-mail:	
I wish to participate as (Please check	k in appropriate box):		
Oral presenter	Participant		
Poster presenter	Exhibitor		
Title of paper:			
			<u></u>
Scientific topic (Please check in appr	opriate box):		
Plant nutrition, plant microbe in Plant water relation and irrigation Plant growth regulator Eco-physiology Stress biology Pest and disease management Biotechnology Seed physiology and technology Modelling and simulation Postharvest physiology, technology Innovative practices  For student participant:  Title (Prof/Dr/Mr/Ms/Miss) and Full Nation Postharvest physiology, technology Innovative practices	t y logy and quality control me of Supervisor:		
REGISTRATION FEE:	Before or by 15 May 2014	After 15 May 2014	On-site
MSPP Member <sup>1</sup>	MYR 800	MYR 900	MYR 1,000
	MYR 900 <sup>1</sup>		
Local Participant	IDR 1.300.000	MYR 1,000 <sup>1</sup> IDR 1.600.000	MYR 1,100 <sup>1</sup> IDR 2.000.000
International Participant 1	USD 350	USD 400	USD 450
Student Participant <sup>2</sup>	MYR 500 IDR 750.000 USD 180		
CONFERENCE DINNER:	IDR 250.000		
FIELD EXCURSION:	IDR 350.000		

EXHIBITOR <sup>3</sup> :	MYR 1,500 IDR 5.000.000 USD 650
SPONSOR 4:	MYR 6,000 IDR20.000.000 USD 2,500
ADVERTISEMENT IN PROGRAM BOOK °:	MYR 1,000 IDR 3.300.000 USD 400
ACCOMPANYING PERSON *: No. of accompanying persons Payment for accompanying person(s)	IDR 700.000 x
TOTAL:	
Registration fee is inclusive of daily two tea break	ss, lunches, conference bag, program book and certificate of participation;
<sup>1</sup> inclusive of conference dinner and field excursion	on;
<sup>2</sup> scanned copy of relevant document is required;	
<sup>3</sup> on first come first serve basis, provided with 2 k	panquet tables (4' x 2'), 2 banquet chairs, pow er point and some floor space;
<sup>4</sup> inclusive of conference dinner for 2 persons, c	company logo to be included in backdrop, program book cover, banner and conference bag, one full colour), exhibition space, company profile/brochures to be included in the conference bag if
<sup>5</sup> A4 size, full colour, on first come first serve b listya.1606@gmail.com before 30 June 2014;	asis, softcopy in pdf format must be sent to msppconference@gmail.com, iccri@iccri.net or
<sup>6</sup> conference bag, conference dinner and field ex	cursion.
Name of accompanying person (Prof/Dr/Mr/I	Moli
1	
2	
PAYMENT MODE (Please check in appropri	iate box):
Payment by cheque: I enclose cheque for MYR/USD Kindly indicate that the payment is for 'cheque.	"ICPP 2014", state registrant's name and telephone contact number at the back of the
	e sent to msppconference@gmail.com, iccri@iccri.net or listya.1606@gmail.com for that the payment is for "ICPP 2014". Indicate registrant's name and telephone contact
ACCOMODATION:	
Please reserve accommodation at Sanur Pa	aradise Plaza Hotel & Suites:
No. of rooms: Check-in dat	e: Check-out date:
Superior room IDR 765.000 net /nig Premier room IDR 1.100.000 net /nig Participants are required to make payment of	night
Please return registration form to:	
The secretary INTERNATIONAL CONFERENCE ON PLAN Dr. Nor Mayati Che Husin e-mail: msppconference @gmail.com or	T PHYSIOLOGY 2014 (ICPP 2014)

Before or by 15 May 2014

A confirmation of registration will be sent to you within 14 days after online registration or receipt of registration form. The organizer reserves the right to cancel or postpone the conference due to unforseen circumstances.

Ms. Sulistyani Pancaningtyas

e-mail: iccri@iccri.net, listya.1606@gmail.com