

TECHNICAL VISIT TO SMART Greenhouse MARDI: A Micro-Climate Simulation System for Temperate Crop Production on Lowland Tropics"

(Organized by Agricultural and Food Engineering Technical Division, IEM)
BEM Approved CPD/PDP Hours: 3.5 Ref. No.: IEM18/HQ/084/V

Date : 15th March 2018 (Thursday)
Time : 9.00 a.m -1.00 p.m
Venue : Engineering Research Center, MARDI Headquarters, 43400 Serdang, Selangor.
Transport : Self Arranged. Participants are required to assemble at the venue for registration by 9.00a.m.

Commitment fees (inclusive GST)
(Non refundable & non transferable)
IEM Member : RM 50.00
Non IEM Member : RM 80.00

SYNOPSIS

MARDI has carried out research on the development of a fully controlled environment greenhouse for the cultivation of temperate crops in lowland tropics. The objective is to generate effective and suitable environment for growing temperate crops under tropical climate and to undertake studies to fulfill the crop requirements. The innovation comprised of design techniques of a controlled environment greenhouse (CEGH) to generate effective environmental conditions that satisfies the temperate crop requirements. Specific environmental parameters are set-up, controlled within the comfort zones and stabilized which subjected to external environment variation. The environment is generated by mechanized environmental control system (ECS) including tailored design air-condition, roof-top ventilator, humidifier, CO2 enrichment, photo-periodic lighting and fertigation. The lower limit temperature is induced by air cooling system, distributed through conduits. The upper limit temperature is controlled by the automatic ventilation fans fixed on-top of the double layer roofs, while RH is controlled by humidifier and all are automatically controlled by a computer. The designed of control mechanism is based on the principle of "Stratified air-space" in a controlled volume. This control plane moves up/down as influenced by the external environment. The temperate crops selected were those with high commercial value including broccoli, Brussels sprouts, cauliflower, iceberg lettuce, coral shallots, chrysanthemum and strawberry.

ITINERARY OF THE VISIT

TIME	ITINERARY
9.00 a.m.	Arrival at MARDI Headquarters
9.15 a.m.	Introduction to SMART Greenhouse MARDI
10.30 a.m.	Q & A session
11.00 a.m.	Technical visit to SMART Greenhouse MARDI
12.30 p.m.	Refreshment
1.00 p.m.	Dismiss

- ✓ The visit is strictly limited to **30 participants** registered on a first-come, first-served basis.
- ✓ Interested participants are to register and pay online at www.myiem.org.my or register by returning the appended registration form **before 12 March 2018** together with the payment.
- ✓ Cheques are to be made payable to **The Institution of Engineers, Malaysia**.
- ✓ Please note that the commitment fee must be settled prior to the visit. Payment on the day of the visit is not acceptable.
- ✓ After this closing date, IEM reserves the right to allocate seats on first come first pay basis.
- ✓ Members are also reminded that if a place is reserved, IEM may cancel the reservation if payment is not received.

Ir. Vasan Mariappan
Chairman Session 2017/2018
Agricultural and Food Engineering Technical Division, IEM

PERSONAL DATA PROTECTION ACT

I have read and understood the IEM's Personal Data Protection Notice published on IEM's website at <http://www.myiem.org.my> and I agree to IEM's use and processing of my personal data as set out in the said notice.

REPLY SLIP (Fax to : 03-7957 7678) (Email: sitiamalina@iem.com.my)

Chairman, Agricultural and Food Engineering Technical Division, IEM
The Institution of Engineers, Malaysia

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I wish to participate in the above visit on **15 March 2018** I enclosed herewith a cheque No for the amount of as my commitment fee for the visit.

Name of Member :
Company's Name :
Position :
Address :

M'Ship No :
NRIC :
Email :
Tel :
Mobile :
Fax :

I will be participating in the visit at my own risk and hereby indemnify fully the IEM from all claims arising from any injury, damage or loss that may be sustained by me.

.....
(Date)

.....
(Signature)

Please bring along this flyer for confirmation of attendance
(Photostat copies are acceptable)