Introduction

The concept of effective microorganisms (EM) was developed by Professor Teruo Higa, University of the Ryukyus, Okinawa, Japan. EM consists of mixed cultures of beneficial and naturally-occurring microorganisms that can be applied as inoculants to increase the microbial diversity of soils and plant. Research has shown that the inoculation of EM cultures to the soil/plant ecosystem can improve soil quality, soil health, and the growth, yield, and quality of crops. EM contains selected species of microorganisms including predominant populations of lactic acid bacteria and yeasts and smaller numbers of photosynthetic bacteria, actinomycetes and other types of organisms. All of these are mutually compatible with one another and can coexist in liquid culture. This concept also promotes the trend of organic farming to produce wholesome food. Approximately 2% of the U.S. food supply is grown using organic methods. In 2005, retail sales of organic food and beverages were approximately $12.8 billion.

CEPP Bio-Organic Fertilizer SBU focuses on the application of EM on plant, soil, environment and animal. Bio-Organic Fertilizer SBU provides expertise in research and development in EM technology and utilizes the by-product from the agriculture industry.

Objectives:

» Provide information on preparation and technical aspects to produce bio-organic fertilizer
» Provide the latest information on Bio-organic fertilizer formulations
» Hands-on practical training in formulating and preparation of bio-organic fertilizer
» Provide information on Malaysian Standard (MS1784:2005) – Crop Commodities -Good Agricultural Practice (GAP)

Course Contents

» Introduction to Effective Microorganism – Concept and Philosophy
» Preparation of EMAS, EMFPE and EM Bokashi
» Application of EM in Crop and Fruit
» Application of EM in Animal Husbandary
» Application of EM in Environment
» Demonstration and Hands-on Session

Who should attend

» Individual involve in home gardening
» Commercialized and small scale farmers
» Foreign and local entrepreneurs
» Scientist, Chemist and engineers involve in the fertilizer and agricultural industry
» Government staff in agricultural sector
» Environmental activist
Staff from more than 300 companies have attended our life-long learning programmes.
CEPP has assisted more than 65 herbal companies in their process and product development.

We can offer courses in-house

**SCHEDULE PROGRAMMES**

**Day 1 (0830 - 0500)**
- Introduction & Application of EM Technology
- Preparation of EMAS, EMFPE and EM Bokashi
- Practical Session (Part I)
  - Hand-on Preparation of EMAS, EMFPE and EM Bokashi

**Day 2 (0900 - 0500)**
- Application of EM Technology on Animal Husbandary
- Application of EM Technology on Crop and Fruit
- Application of EM Technology on Environment
- Practical Session (Part II)
  - Hand-on Application of EMAS, EMFPE and EM Bokashi

---

**REPLY FORM**

**BIO-ORGANIC FERTILIZER PREPARATION USING EFFECTIVE MICROORGANISM TECHNOLOGY**

Please tick (✓) where appropriate

| 26-27 June 2007 | CEPP Rumah Semarak, UTM City Campus Kuala Lumpur |
| 7-8 August 2007 | CEPP Rumah Semarak, UTM City Campus Kuala Lumpur |

YES ! I would like to register the following participants

<table>
<thead>
<tr>
<th>Name 1</th>
<th>Job Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Name 2</td>
<td>Job Title</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Name 3</td>
<td>Job Title</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**COMPANY INFORMATION**

<table>
<thead>
<tr>
<th>Company</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Tel</td>
<td>Fax</td>
</tr>
</tbody>
</table>

**Method of payment**

Please kindly complete and return the reply form together with

By cheque / Bank draft which are made payable to

**PHYTO BIZNET SDN. BHD.** (CIMB Bank Berhad)

**Course fee**

<table>
<thead>
<tr>
<th>Company/Individual</th>
<th>RM890.00 per participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>RM800.00 per participant for 2 or more for the same company</td>
</tr>
<tr>
<td></td>
<td>RM650.00 per participant</td>
</tr>
</tbody>
</table>

(Fee is inclusive of lunch, refreshments and course materials. Accommodation is not included)

**Cancellation & substitutions**

A full refund will be promptly made for all written cancellations 2 weeks before the meeting. 50% refund will be made for written cancellations received 7 days before the meeting. A substitute may be made at any time.

Note

a) The organiser has the right to make any amendments that they deem to be in the best interest of the course and to cancel the course if insufficient registrations are received a week before course commencements date;

b) CERTIFICATE OF ATTENDANCE will be awarded at the end of the course.

For more information please contact us at:

CHEMICAL ENGINEERING PILOT PLANT
UNIVERSITI TEKNOLOGI MALAYSIA
81310 UTM Skudai, Johor
Tel : +607- 5531559 Fax : +607 - 5569706
Attn : Mrs. Zulia Email : zulia@cepp.utm.my

Jalan Semarak, 54100 Kuala Lumpur
Tel : +603 - 2615 4358 Fax : +603 - 26937921
Attn : Mrs. Yatie Email : mkyati@citycampus.utm.my

**REPLY FORM**

Attn : Mrs. Yatie Email : nikyati@citycampus.utm.my
Tel : +603 - 2615 4358 Fax : +603 - 26937921
Jalan Semarak, 54100 Kuala Lumpur
Attn : Mrs. Zulia Email : zulia@cepp.utm.my
Tel : +607- 5531559 Fax : +607 - 5569706
Jalan Semarak, 54100 Kuala Lumpur