

# **ASPFA 2005**

## **“Advances in Soil, Plant and Fertilizer Analysis Seminar 2005”**

**3-5 August 2005  
ParkCity Everly Hotel  
Miri, Sarawak**

### **Modernization of Agriculture Through Good Laboratory Practices (GLP)**

*Jointly organized by*



**Committee on Standardization of  
Soil, Plant and Fertilizer Analysis  
&  
Department of Agriculture Sarawak**





# ASPFA 2005

## ADVANCES IN SOIL, PLANT AND FERTILIZER ANALYSIS

3<sup>rd</sup>-5<sup>th</sup> August 2005

Venue: Tinjar Room, ParkCity Everly Hotel

### SEMINAR PROGRAMME

#### Wednesday, 3<sup>rd</sup> August 2005

08.00	-	09.00	a.m.	Registration of participants
09.00	-	10.00	a.m.	Keynote address by Dr. S.Paramananthan Soils of Sarawak and the use of Chemical Analysis in Soil Interpretation
10.00	-	10.45	a.m.	Kudapan
10.45	-	11.00	a.m.	Arrival of invited guests
11.00	-	11.15	a.m.	Arrival of Yang Berhormat Tan Sri Datuk Amar Dr. George Chan Hong Nam, Sarawak Deputy Chief Minister (1) cum Minister of Modernization of Agriculture and Minister of Industrial Development
11.15	-	11.30	a.m.	Welcoming address by Chairman, Organizing Committee
11.30	-	11.45	a.m.	Speech by Datuk Haji Mohd Sepuan Haji Anu, Director of Agriculture Sarawak
11.45	-	12.15	noon	Opening speech by Yang Berhormat Tan Sri Datuk Amar Dr. George Chan Hong Nam, Sarawak Deputy Chief Minister (1) cum Minister of Modernization of Agriculture and Minister of Industrial Development
12.15	-	12.30	p.m.	Exhibition tour/press conference
12.30	-	02.00	p.m.	Merarau



**SESSION 1**  
**CROP PRODUCTION AND SOIL SUITABILITY**

Chairman : Dr. Aminuddin Hussin – Universiti Putra Malaysia

02.00 - 02.20 p.m. *Paper 1*

Utilization of Peat for Food Production

***En. Jaman Haji Osman, Department of Agriculture Sarawak***

02.20 - 02.40 p.m. *Paper 2*

Geostatistical Analysis of Selected Chemical Properties in a Cultivated Tropical Peat

***Dr. Siva K. Balasundram, Universiti Putra Malaysia***

02.40 - 03.00 p.m. *Paper 3*

A Computer Programme to Determine the Soil Texture Class for Any Classification Scheme

***Dr. Christopher Teh, Universiti Putra Malaysia***

03.00 - 03.20 p.m. *Paper 4*

Improving Soil Applied Urea Use Efficiency Via Mixing Zeolite, Triple Super phosphate and Urea Mixture

***Ahmed O.H., Universiti Putra Malaysia***

03.20 - 03.40 p.m. *Paper 5*

The Results of Nutrient Analysis of EFB-POME Compost : Golden Hope's Experiences

***U.T.Pupathy, Golden Hope Research Sdn. Bhd.***

03.40 - 04.00 p.m. Discussion

04.00 - 04.20 p.m. Kudapan

04.20 - p.m. End of first day

08.00 - p.m. Official dinner



# A COMPUTER PROGRAM TO DETERMINE THE SOIL TEXTURE CLASS FOR ANY CLASSIFICATION SCHEME

Dr. Christopher Teh  
Department of Land Management  
Universiti Putra Malaysia,

## ABSTRACT

Texture Autolookup (TAL) is an object-oriented C++ computer program developed to lookup soil texture classes based on any soil classification scheme. TAL describes each soil texture class in a given scheme as a polygon located in a biaxial ( $x, y$ ) or (%sand, %clay) coordinate system. The principle to determine the texture class is to determine if, in the texture chart, the point of intersection between any two primary particles lies within a texture class polygon. The *polygon inside test* method is used to test if a point lies inside or outside a polygon. TAL also supports Range Lookup which is the lookup of the range of soil texture classes based on a given range of particle size distributions. The texture class is determined by testing if the source polygon enclosing the given range of particle size distributions could clip the target polygon of a particular texture class. A successful clipping between these two polygons indicates that the target texture class belongs within the given range of particle size distributions. The polygon clipping method used is the algorithm adapted from Vatti's algorithm (1). TAL is supported by a graphical user interface program and has been developed for the intended use for everyone including non-programmers.