

# TABLE OF CONTENTS

1	Vision & Mission ●	
2	Sarawak Biodiversity Council ●	
4	R&D Biodiscovery Programme ●	
	Natural Product Library	
	Sample Extraction	
	Analytical Chemistry	● Highlight Events 21
	Product Development	
	Plant Tissue Culture	● SBC Audit Committee 31
	Molecular Biology	● SBC Establishment Committee 32
	Microbiology	
	Bioinformatics	● SBC Finance & Investment Committee 33
	R&D Collaboration	
	Integrated Biodiversity Research	● Financial Statements for the Year Ended 2014 34
	Building	
12	Traditional Knowledge ●	
	Documentation Programme	● Appendices 53
	TK Headhouse & Propagation Facility	
	Biodiversity Garden Programme	
18	Biodiversity-Biotechnology Awareness & Appreciation Programme ●	



01

## Vision

Attaining Biodiversity Research Excellence

## Mission

To Discover and Harness the Benefits of Biodiversity

## Tagline

Biodiversity for a Better Tomorrow





**YB Tan Sri Datuk Amar  
Haji Mohamad Morshidi  
bin Abdul Ghani**

State Secretary of Sarawak  
*Chairman,*  
*Sarawak Biodiversity Council*



**YBhg Datu Sudarsono Osman**

Permanent Secretary,  
Ministry of Resource Planning  
and Environment  
*Deputy Chairman,*  
*Sarawak Biodiversity Council*



**Dr Yeo Tiong Chia**

Acting Chief Executive Officer,  
Sarawak Biodiversity Centre,  
*Secretary,*  
*Sarawak Biodiversity Council*



**YA Tuan Haji Abdul Razak Tready**

State Attorney General  
*Council Member,*  
*Sarawak Biodiversity Council*



**YBhg Dato Sri Ahmad Tarmizi  
bin Haji Sulaiman**

State Financial Secretary  
*Council Member,*  
*Sarawak Biodiversity Council*



**YBhg Datu Haji Misnu bin Haji Taha**

Deputy State Secretary,  
(Administration, Security  
and Corporate Affairs)  
*Council Member,*  
*Sarawak Biodiversity Council*



**YBhg Datu Lai Kui Fong**

Director, Department of  
Agriculture, Sarawak  
*Council Member,*  
*Sarawak Biodiversity Council*



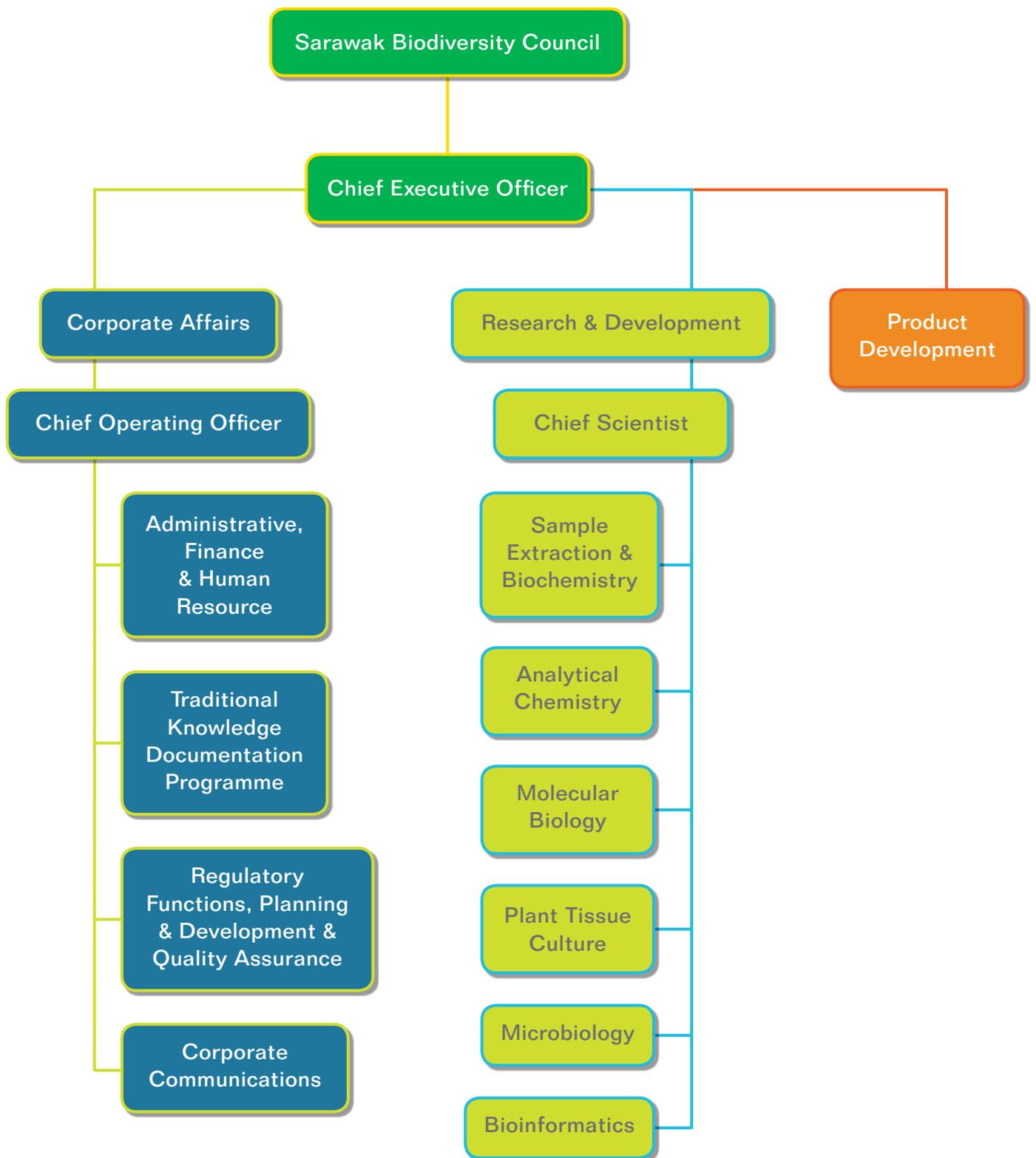
**Tuan Haji Sapuan Ahmad**

Director, Forest Department,  
Sarawak  
*Council Member,*  
*Sarawak Biodiversity Council*



**Mr Peter Sawal**

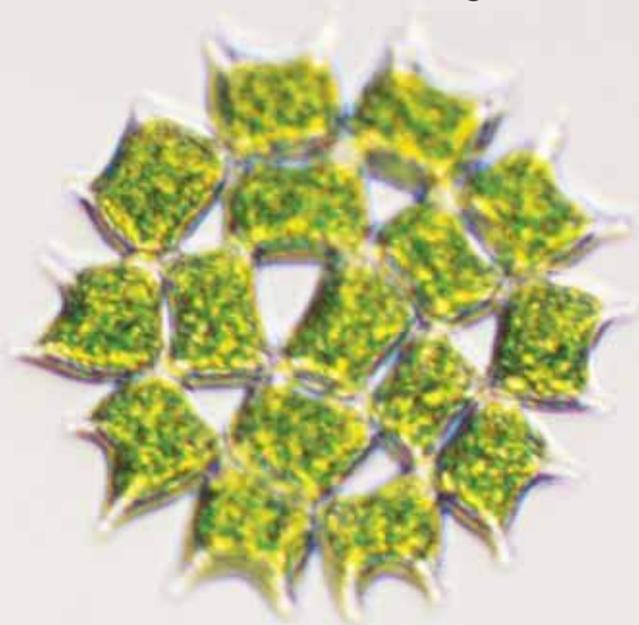
Controller, Natural Resources &  
Environment Board (NREB)  
*Council Member,*  
*Sarawak Biodiversity Council*



SBC's R&D Programme focuses on making discoveries from biological resources that would lead to the development of herbal therapies, nutraceuticals, cosmaceuticals for health-care and pharmaceutical drugs for countering diseases such as cancer and infectious agents. The programme also aims to discover chemicals and enzymes from Sarawak's biological resources that would be useful over a broad range of applications.

The R&D Programme is supported by seven well-equipped and specialized laboratories (extraction, biochemistry, microbiology, molecular biology, plant tissue culture, analytical chemistry and bioinformatics), staffed with trained scientists who work in a conducive environment intended for innovative research focusing on the biodiversity.

With its R&D facilities, an extensive collaboration and a systematic approach to research on biodiversity in Sarawak, SBC is able to provide the State with the platform to bioprospect its biodiversity and share the benefits made from the discoveries with the people. The discoveries will consequently be developed and generate a pipeline of bio-products for the bioindustry to jump-start and generate future economical returns and revenues for the State.



### Programme Objectives

- to establish a unique library of natural products from Sarawak's biological resources
- to establish a pipeline of products and innovations for commercialisation
- to train and develop the State's human resources in the field of biotechnology, chemistry and microbiology.

## Natural Product Library

The Natural Product Library (NPL) serves as a scientific platform for SBC's R&D Programme and research collaborations. The library consists of extracts from plants and microbes which are systematically collected and screened in-house or provided to collaborators to screen for various bioactivities including cytotoxicity activity, anti microbial properties and chemical ingredients that are useful for cosmetic and nutritional products.

SBC's collaborators consist of academicians, research institutions, biotech, pharmaceutical, as well as food and flavour companies.



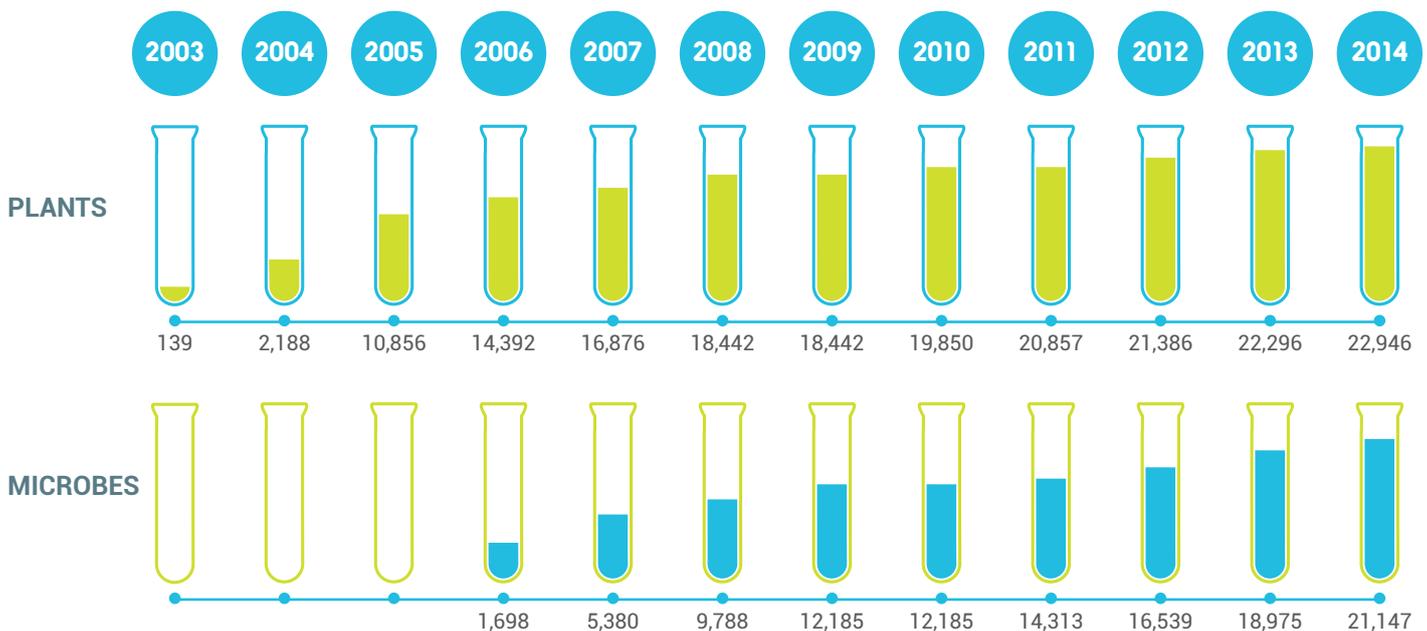
## Sample Extraction

The annual target for extraction laboratory to produce 2,000 plant extracts per year was achieved in year 2014 where a total of 2,362 plant extracts were deposited in the Natural Products Library (NPL).

The total cumulative number of extracts from year 2003 until 2014 is 22,946. In year 2014, a total 250 of extracts were sent out for screening under various collaboration agreements aiming at various targets and applicants.



### YEAR



## Analytical Chemistry



The analytical chemistry laboratory work focuses on profiling, isolation, fractionation and elucidation of targeted bioactive compounds. The highlighted projects under the analytical chemistry laboratory in year 2014 are:

### Aglaia Project

- Large scale extraction of silvestrol from *Aglaia stellatopilosa*.
- Isolation, fractionation and elucidation of bioactive compounds from *Aglaia stellatopilosa*.

### Isolation of potential bioactive compounds under collaboration projects

- Singapore Immunology Network (SigN) collaboration: Identified active fractions from Sarawak's biological resources that have potential for anti-malarial and anti-chikungunya. Fractionation work is still in progress to obtain substantial amount of the bioactive compound for assay and structural elucidation work.

### Chemical profiling for collaboration projects

- PepsiCo collaboration: Profiled 250 extracts of flavouring plants.

## Product Development



The highlighted projects under Product Development in year 2014 are:

### Collection and extraction of essential oil from medicinal and aromatic plants

- Aromatic plants are the main focus under the Product Development Programme. Up to year 2014, 244 essential oils were extracted from aromatic plants collected throughout Sarawak and deposited in the NPL. Extraction was carried out using clewenger hydro distillation (laboratory scale) and hydro/steam distillation (bulk scale).

### Scent Project: Development of the State flower of Sarawak scent accord

- The state flower of Sarawak has a sweet, vanilla-like, jasmine fragrance when in full bloom. The fragrance of the flower is one of the potential scents that has been successfully developed into a scent accord. It has been used as fragrance in prototypes products.

### Herbal Tea Project

- Established a Standard Operation Procedure (SOP) for development and preparation of herbal tea.

## Plant Tissue Culture



In year 2014, the Plant Tissue Culture (PTC) team continued to improve the propagation of target plants namely *Aglaia* sp., *Litsea cubeba* (Pahkak), *Adenosma nelsonioides* (Bunga Ta'ang) and *Torenia* sp. Initial trials on the propagation of these plants have been successful.

The PTC team is taking it up a notch by producing cuttings of planting materials for larger scale propagation. Improvement of the propagation methods are also carried out to achieve better survival rate.

This will in turn enable the propagation of selected high quality materials for product development and promote sustainability. The propagated materials also contributes to the conservation of the species.

## Molecular Biology

The molecular biology team is responsible for anti-cancer screening and study on potential projects through molecular approach. The achievements for molecular laboratory in year 2014 are indicated under the *Aglaia* project.

### Aglaia project

- Three RNA samples of *Aglaia stellatopilosa* and one from *Aglaia glabriflora* had been analysed and investigated.
- A few potential enzymes were identified for involvement in silvestrol biosynthesis pathway. Flavonol synthase (FLS), one of the potential

enzymes, was successfully cloned and expressed. The FLS assays showed that the purified enzyme was functionally active.

### Anti-cancer screening for bioassay guided fractionation.

- Extracts which have anti-cancer activity against lung cancer cells (NCI-H460) and breast cancer cells (MCF-7) were identified.



Bioactive compounds in *Aglaia stellatopilosa* and *Xylaria* sp. (F0121) extracts were discovered through bioassay guided fractionation.

## Microbiology



The Microbiology team's annual target to produce 2,000 microbial extracts a year has been achieved for the year 2014.

A total of 11,610 actinomycetes and 1,084 fungal extracts have been deposited into SBC Microbial Library. The number of extracts for actinomycetes and fungi accumulated from year 2006 to year

2014 are 13,538 and 7,615 respectively. The total cumulative numbers of actinomycetes and fungi strains in the library from year 2006 to year 2014 have reached 11,672 and 6,715 respectively.

Actinomycetes strains were isolated from Sarawak pepper farms at Payang Village, Padawan (52) and Semadang Village, Padawan (62). Other locations include Miri-Sibuti, (26) and Loagan Bunut (61).

Fungi strains were also isolated from the pepper farms at Payang Village (176) and Semadang Village, Padawan (165). Other locations are Sibuti (110) and Long Kerabangan, Miri (35).

A total of 1,094 actinomycetes extracts and 1,084 fungal extracts were screened. 242 and 443 hits were detected through primary screening of actinomycetes and fungal extracts respectively against one or more microbe standard strains.

#### **Collaboration with Novartis Pharma AG**

SBC and Novartis signed a Material Transfer Agreement on 28 November 2013. Under the agreement, SBC sent strains to Novartis for whole genome sequencing (WGS) and microbial extracts for screening. SBC selected 3 strains for WGS and these were sent to Novartis in May 2013. Results were provided to SBC on 6 March 2015.

#### **Anti-Myco**ba**cterium tuberculosis (TB) Project with Texas A&M University**

A manuscript entitled "Identification of anti-tubercular lipophilic natural products from Malaysian *Streptomyces* spp." was submitted to Journal of Natural Products India and is currently being reviewed.

## Bioinformatics

In year 2014, the Bioinformatics programme embarked on a major project to unify informatics between all laboratories and Traditional Knowledge (TK). The project aimed to deploy a Laboratory Information Management System (LIMS), specifically STARLIMS, in TK Documentation Programme and five laboratories: extraction, analytical chemistry, molecular biology, microbiology and plant tissue culture.

STARLIMS is an entirely web-based solution, leveraging XML, the .NET framework and other advanced internet technologies. The web-based interface makes it accessible through a standard browser with no need for client-side downloads, anywhere within SBC. It is also possible to extend the access to SBC's partners, providing outreach capabilities to third parties.

### Biorespository and Flexible Workflow Management Tools

STARLIMS includes configurable tools to manage complex testing workflows; maintain regulatory compliance; store, track, and distribute bio-specimen inventories.

Information related to sample collection until production of natural products can be stored and traced in STARLIMS. This enables genealogy of a product to be traced up to the starting point of its collection including all the tests or experiments which were performed on the product or its intermediate products. It greatly enhances sample management of SBC's Natural Product Library, maximise its value, and promote scientific collaboration between SBC and its partners.

### Ensuring Regulatory Compliance

STARLIMS facilitates compliance with a wide range of regulatory standards including 21 CFR Part 11, GxP and ISO 17250 with features including:

- Comprehensive audit trail
- Chain of custody and e-signatures
- Lab audit manager
- Instrument and reagent management

Regulatory compliance will enable SBC to meet stringent regulatory and legal requirements relating to natural product research and development leading to pharmaceutical research.

### SDMS (Scientific Data Management System)

STARLIMS comes with SDMS integrated module which provide a centralized management of documents, automatic document routing and indexing, and unique parsing technology that transforms any document (instrument files, reports, etc) into structured information that can be conveniently queried.

### Project Progress

The implementation of STARLIMS is expected to be completed and ready for production use in the first quarter of 2015.



## R&D Collaboration



### Swinburne University of Technology Sarawak (SUTS) on *Muscodor* sp. for research on its activity on its effectiveness as biocontrol agent of Ganoderma disease

SBC is collaborating with Swinburne University of Technology Sarawak for the development of suitable medium and delivery method for two strains of *Muscodor* sp to disseminate into the soil. The project will also examine the effectiveness of the two strains as biocontrol agents against basal stem rot-pathogens in oil palm plantation.



### Monash Australia

The bioactive compound isolation work of a plant called *Costus speciosus* was initially carried out by Nuraqilah Othman, research officer with SBC's Analytical Chemistry team. This methanolic extracts of the *C. speciosus* showed cytotoxicity in *in-vitro* test against lung and breast cancers. SBC's research officer, Su Nguok Ngie is working on effectiveness of these compounds in treating urological disorders as her PhD project at Monash University Australia.



### Natural products for therapeutic research in neurological diseases with Monash University Malaysia

SBC is collaborating with Monash University, Malaysia to look for natural compounds from the Sarawaks biodiversity which can address neurological diseases disorders particularly on sleep disorder, depression and neurodegeneration, addiction and reproductive aging.



### Biomass wastes conversion to renewable chemicals – with GlucanBio Renewables LLC

On 20 Oct 2014 SBC entered into a research collaboration with Glucan Biorenewables LLC, based in St. Louis, Missouri USA to further Malaysia's vision of creating a more sustainable economy by using biological resources and industrial biomass waste for various industrial applications such as biofuels and natural chemicals.



### Development of personal care product with Tidy Non-Woven Sdn Bhd (TNW)

SBC is collaborating with Tidy Non-Woven Sdn Bhd to develop Sarawak's essential oils into personal care products. This project aims to derive prototype wet tissues with specific function such as mosquito repellent. The market acceptance on the prototypes wipes will be tested under the project

## Integrated Biodiversity Research Building



The Integrated Biodiversity Research Building (IBRB) aims to meet the increasing requirement on development of bio-products through chemical analysis, tissue culture and testing the product itself. The objective of IBRB is to serve as a place to conduct experimental of target or marketable plant and by-products (essential oil) as well as compounds from useful plants and microbes.

The construction of the building began on 24 February 2014 and is scheduled for completion by September 2015. IBRB consists of three laboratories; Analytical Chemistry, Product Development and Plant Tissue Culture to support SBC's R&D programme.

The analytical chemistry lab will be equipped with analytical instruments such as high performance liquid chromatography (HPLC), liquid chromatography mass spectrometry (LCMS), gas chromatography mass spectrometry (GCMS), fourier transform infrared spectroscopy (FTIR) and UV-visible spectroscopy.

These instruments support SBC's R&D programme in generating potential bioactive compounds from plants, actinomycetes and fungi.

The Product Development Lab is designed specifically for product and formulation purposes. This is where the product development team will formulate prototype products incorporated with essential oils that have potential to be marketed.

The Plant Tissue Culture Lab is designed to suit the growth of plant tissue culture condition.

Beside laboratories, IBRB is also equipped with researchers' offices which can accommodate up to 32 researchers. IBRB also has a gallery that will showcase SBC's development as well as a seminar room that can be used to hold meetings, seminars and workshops.



# Traditional Knowledge Documentation Programme

12



The Sarawak Biodiversity Centre (Amendment) Ordinance 2003 entrusts SBC to facilitate Traditional Knowledge (TK) Documentation of knowledge and practices relating to the uses and management of biodiversity among the many indigenous communities in the State. This is carried out through its TK Documentation Programme and implemented through increasing awareness, capacity building and documentation activities facilitated by SBC.



SBC carried out seven Consultative Meetings at the following Districts/areas in year 2014:

- Maludam Area
- Nanga Merit Area
- Sebuyau Sub-District
- Igan Sub-District
- Sundar Sub-District
- Beluru Sub-District
- Bung Bratak, Bau

SBC also conducted seven inaugural “Traditional Knowledge Documentation Workshop” at the following areas:

- Long Maling, Murum
- Long Tuyo, Lawas
- Kampung Paloh, Belawai, Daro
- Rh Misoon, Sibuti, Miri
- Kampung Sungai Rama, Sebuyau, Simunjan
- Sundar, Lawas
- Uma Bawang, Long Lama, Baram

As of December 2014, SBC has implemented the Traditional Knowledge Documentation programme in 82 villages/areas in Sarawak (15 ethnic communities). The list of villages is included in Appendix A.

Of these, a total of 55 villages have initiated documentation and collection of useful plants. The total number of plants documented and collected from these villages was 5,114 plants from 1,261 species with identification is still on-going. Table 1 shows the number of plants documented and collected from each site.

SBC has also carried out the following field work under the various projects:

### **Sweetener and taste modifying natural products**

- Rh Ado, Tatau
- Kg Simuti, Padawan
- Long Ubau, Bakalalan
- Nanga Sumpa
- Kampung Chupak, Padawan
- Pa'Lungan, Bario
- Kampung Pantray
- Sundar, Lawas
- Long Ikgang, Marudi

### **TK Doc Follow-Up to;**

- Long Iman, Mulu
- Jemoreng, Mukah
- Bung Jagoi, Bau

**UNDP/GEF Project** - “Creating a value chain leading to the development of products for the healthcare, personal care and cosmeceutical industries from Traditional Knowledge Associated with Genetic Resources and Benefit Sharing in Sarawak”



- Introduction to UNDP ABS Project during TK Doc Seminar on 22 May 2014 at SBC
- Inception Workshop on UNDP ABS Project on 17 June 2014 at SBC
- 1<sup>st</sup> consultation meeting and capacity building at Kpg Kiding (9-11 July 2014), Pa Ukat & Pa Lungan (Bario) (14-19 July 2014) and Long Kerebangan & Long Telingan (Lawas) (21-25 July 2014)
- Introduction to PIC Protocol at Kpg Kiding (17-19 July 2014), Pa Ukat & PaLungan (Bario) (14-19 July 2014) and Long Kerebangan & Long Telingan (Lawas) (21-25 July 2014)
- 2<sup>nd</sup> Field Work: 17-19 Sep 2014 (Kpg Kiding); 22-26 Sept 2014 (Long Kerebangan & Lg Telingan); 13-17 Oct 2014 (Pa Ukat & Pa Lungan)
- Handmade soap workshop at SBC on 11 December 2014
- ABS workshop with various government agencies at Riverside Majestic Hotel on 20 December 2014

Table 1: Number of Plants Documented and Collected

COMMUNITY	Total Plants Collected	
<b>Bidayuh</b>		
1. Bung Jagoi, Bau	46	1,136
2. Kampung Kiding	530	
3. Kampung Semadang	311	
4. Kampung Semban	124	
5. Kampung Serin	17	
6. Kampung Lanchang, Serin	44	
7. Kampung Simuti	50	
8. Kpg Chupak & Skuduk, Siburan	14	
<b>Iban</b>		
9. Rh Skatap, Betong	276	1,054
10. Rh Nyambong, Selangau	89	
11. Rh Emak, Kapit	89	
12. Rh Changgai, Song	86	
13. Rh Simon Buei, Lubok Antu	86	
14. Rh Bana, Sebauh	70	
15. Rh Lulut, Kapit	55	
16. Rh Rapak Tepus, Sri Aman	33	
17. Rh Bajau, Julau	71	
18. Nanga Sumpa, Batang Ai	23	
19. Kampung Sual, Simunjan	29	
20. Ulu Mentawai expedition, Miri	51	
21. Rh Entakong, Nanga Sumpa	54	
22. Rh Masoon, Sibuti	20	
23. Kpg Sungai Rama, Sebuyau	22	
<b>Kayan</b>		
24. Rh Lesong, Sungai Asap, Belaga	81	185
25. Long Bedian, Baram	75	
26. Uma Bawang, Long Lama, Baram	29	
<b>Kelabit</b>		
27. Pa' Derung, Bario	12	467
28. Pa' Lungan, Bario	299	
29. Pa' Ukat, Bario	156	
<b>Kenyah</b>		
30. Long Pelutan, Baram	127	245
31. Long Ikgang, Marudi	58	
32. Long Palai, Baram	13	
33. Long Amo, Belaga	47	

<b>COMMUNITY</b>	<b>Total Plants Collected</b>	
<b>Lun Bawang</b>		
34. Ba' Kelalan, Lawas	48	564
35. Long Kerabangan, Lawas	183	
36. Long Telingan, Lawas	119	
37. Sebangang Asal, Lawas	49	
38. Long Tuyo/Paya Maga Expedition, Lawas	137	
39. Long Tuyo/Long Sukang, Lawas	28	
<b>Melanau</b>		
40. Kampung Jebungan, Mukah	79	162
41. Kampung Pangtray, Mukah	44	
42. Kampung Jemoreng, MTukah	19	
43. Kampung Paloh, Belawai, Daro	20	
<b>Penan</b>		
44. Long Iman, Mulu	528	1,044
45. Batu Bungan, Mulu	452	
46. Long Latei, Baram	6	
47. Long Wat, Murum	31	
48. Long Seridan, Baram	9	
49. Long Malin, Murum	18	
<b>Punan</b>		
50. Rumah Ado, Tatau	39	39
<b>Salako</b>		
51. Kampung Pueh, Sematan	80	80
<b>Kedayan (together with Iban &amp; Lun Bawang communities)</b>		
52. Rumah Ajan, Merapok	62	62
<b>Tabun</b>		
53. Kpg Kuala Medalam, Nanga Mendamit	30	30
<b>Bisaya</b>		
54. Kampung Bidang, Limbangt	30	30
<b>Melayu (with Lun Bawang &amp; Chinese)</b>		
55. Sundar, Lawas	16	16
<b>Total Plants Collected</b>		<b>5,114</b>

## Traditional Knowledge (TK) Headhouse and Propagation Facility

The Traditional Knowledge Headhouse and Propagation facility began its operation on 13 February 2014. The facility is equipped with three specialised rooms which are, the fog room, mist room and propagation room. Research on plant propagation such as experimental propagation of certain species are carried out in the facility with the aim of increasing the number of propagated plants and enhancing their viability.

The fog room serves to enable recalcitrant and hard to propagate plants with different needs to be given proper attention while the mist room is the best for propagation of common species and acclimatization of plants before the transfer for the next phase.



The plant samples that are collected from the communities as living specimens are also sent to the fog room for “intensive care” before these plants are brought to propagation room and finally out for planting at the ethnogarden or the field plot.

As at 31 December 2014 more than 2,800 plants have been propagated and recorded. The summary of the plants propagated is as follows:

Room	Number of Plants
Fog Room	182 cuttings 72 plants 116 plantlets
Mist Room	200 seedlings
Propagation Room	Aromatic plants - 58 Fruit trees - 53 Plants associated to Traditional Knowledge - 435
<b>Total Plants</b>	<b>&gt;2800 plants</b>

With this facility and the work carried out here, the propagation of plants and their survival rate has effectively increased by 20-30%.

The different functions of the rooms aid in the propagation and acclimatisation of the species so that species which are harder to propagate may stand a better chance of survival.

Propagation of these plants are imperative to the work carried out by SBC particularly in ensuring adequate supply of raw materials from plants of interest for research and development, and also for awareness on how plants play significant roles in the lives of the indigenous communities in Sarawak.



In Year 2014, a total of 458 plants in SBC's Laila Taib Ethnobotanical Garden were featured. These plants were made up of 91 families with 302 species of plants.

The plants were planted according to different local communities and villages in Sarawak from which they were documented and collected - Bidayuh, Penan, Iban, Melanau, Tabun, Kelabit, Kayan, Kenyah and Lun Bawang.

These are communities that are participating in SBC's Traditional Knowledge Documentation programme.

The Laila Taib Ethnobotanical Garden features the plants with different uses to highlight their importance to the indigenous communities.

Some plants share the same uses across different ethnicities while others are unique in their own right. An example would be an aroid used by the Penan community to excite their dogs into hunting.

With the availability of these plants, visitors to SBC are able to experience a complete learning experience complemented through touch, smell and sight of these useful plants.

A visit to the ethnobotanical garden also increases awareness on the need to conserve such natural resources which can be hard to be obtain, but yet useful in so many ways.

## Biodiversity Garden Programme

### Communities featured in the Laila Taib Ethnobotanical Garden

#### Bidayuh

- Kampung Kiding
- Kampung Semadang
- Kampung Semban

#### Penan

- Long Iman, Mulu
- Batu Bungan, Mulu

#### Lun Bawang

- Long Kerebangan, Lawas
- Long Telingan, Lawas
- Ba'Kelalan, Lawas



#### Melanau

- Kampung Jemoreng, Daro
- Kampung Jebungan, Mukah

#### Tabun

- Kampung Kuala Mendalam, Limbang

#### Kelabit

- Pa' Ukat, Bario
- Pa' Lungan, Bario

#### Iban

- Rh Skatap, Betong
- Rh Nyambong, Selangau
- Rh Simon, Lubok Antu
- Rh Emak, Kapit
- Rh Changgai, Song
- Rh Bana, Sebauh
- Kpg Sual, Simunjan
- Kampung Entakong, Limbang

#### Kayan

- Long Bedian, Baram

#### Kenyah

- Long Pelutan, Baram
- Long Ikang, Baram

# Biodiversity-Biotechnology Awareness & Appreciation Programme

18

SBC's Biodiversity-Biotechnology Public Outreach Programme targets creating awareness and appreciation towards the State's rich biodiversity and biotechnology initiatives among the general public of Sarawak.

This is carried out through activities which include organising Awareness and Appreciation Visits to SBC for various interest groups including schools, NGOs and government departments and agencies; organising public talks; participating in exhibitions; carrying out activities with schools and through our annual flagship event, the Biodiversity Day celebrations held at SBC's premises.



In Year 2014, SBC carried out/organised and participated in the following activities under this programme:

	Activity	Targeted KPI for 2014	Number of Activities Achieved in 2014
1	Awareness & Appreciation Visits 2014 (schools/institutions/organizations)	12 Visits	21 Visits
2	Public Awareness Visits to Schools/Divisional Awareness Talks	6 Visits	7 Visits
3	Public Awareness Talks/Workshops	10 Public Talks	14 Public Talks 1 Workshop
4	Seminars/Forums/Dialogue Sessions	1 Seminar/Conference/Forum	1 Conference
5	Participation in School Programme	2 Programmes	4 Programmes
6	Participation at Exhibitions	4 Exhibitions (2 National, 2 Local)	7 Exhibition
7	VIP and Corporate Visits	-	53 Visits
8	Press releases/Articles/Features	12 Articles	73 Press Releases/Articles published
9	SBC Publication/Promo Materials	1 New Corp Video, Brochure Kit	Misc Brochures (General – schools, Traditional Knowledge, LitSara and Natural Product Library) Misc Design of SBC Posters Button Badges SBC LitSara Corporate Gift Set & LitSara soaps labels Labels for assorted handmade soaps
10	SBC Open Day	1 Event	Carried out in May 2014

## Plans for 2015

For Year 2015, SBC targets the following:

	Activity	KPI
1	Awareness & Appreciation Visits	12 Visits
2	Public Awareness Talks/Workshops	10 Public Talks
3	Participation in Exhibitions	4 exhibitions (2 national and 2 local)
4	Press Releases/Articles/Features	12 articles
5	SBC Publications/Promo Materials	1 New Corp Video, Brochure Kit
6	Participation in School Programmes	2 programmes
7	SBC Open Day	1 event
8	Seminar/Conference/Forums	1 Seminar





Tree planting by YB Tan Sri Datuk Amar Haji Mohamad Morshidi Bin Abdul Ghani to commemorate Biodiversity Day 2014

## BioBorneo 2014 Conference and Exhibition 5-6 May @ DeTAR UNIMAS



BioBorneo is a MOSTI funded initiative, held annually to provide a platform for sharing high-impact innovation and technology that can drive the bioeconomy industry in Borneo.

The event is hosted alternately between Sarawak and Sabah and the inaugural BioBorneo was hosted by Sarawak in year 2012. In year 2013, the event was held in Kota Kinabalu, Sabah.

The BioBorneo 2014 Conference and Exhibition 2014 was held at DeTAR Putra UNIMAS on 5&6 May. The event was jointly organised by MOSTI, BiotechCorp, UNIMAS and SBC, and supported by the Ministry of Modernisation of Agriculture and Department of Agriculture, Sarawak.

### Event Summary

Conference Theme	Sustaining the Bioeconomy Community
Objectives	<ul style="list-style-type: none"> <li>To provide a platform for disseminating information on R&amp;D and potential business and investment in the bioeconomy;</li> <li>To share bioeconomy transformation programme and its implementation in Malaysia;</li> <li>To create networks and collaborations between industry players in the bioeconomy through business matching, and;</li> <li>To increase awareness about the bioeconomic potential of Borneo and its bioeconomic growth</li> </ul>
Opening Ceremony on 5 May 2014	<p>Officiated by YB Datuk Patinggi Tan Sri (Dr) Alfred Jabu anak Numpang, DCM, Minister of Modernisation of Agriculture and Minister of Rural Development representing the Rt Honourable Chief Minister of Sarawak Minister of Science, Technology and Innovation Malaysia was represented by Deputy Minister, Datuk Dr Abu Bakar Mohd Diah</p>
Exchange of MOU Documents	<ul style="list-style-type: none"> <li>between Malaysian Biotechnology Corporation (BiotechCorp) and Korporasi Pembangunan Desa on ginger technology</li> <li>between Universiti Malaysia Sarawak (UNIMAS) and Intellectual Property Corporation of Malaysia (MyIPO) for diffusion of knowledge</li> </ul>

Conference Theme	Sustaining the Bioeconomy Community
Side Events	<ul style="list-style-type: none"> <li>• BioEdu Camp for 60 science teachers from schools in Samarahan and Kuching on 5 &amp; 6 May @ DeTAR UNIMAS organised by Malaysian Biotechnology Information Centre (MABIC)</li> <li>• BioGrad Sessions for 60 final year students of biotechnology, UNIMAS on 5 &amp; 6 May @ DeTAR UNIMAS organised by Malaysian Biotechnology Information Centre (MABIC)</li> <li>• Technical Visit on 7 May to Kampung Terbat, Serian (Tangang System), Semengoh Wildlife Rehabilitation Centre and Sarawak Biodiversity Centre for delegates and speakers, coordinated by ARC, DOA</li> </ul>
Number of Registered Participants	Total: 155 pax
Number of Booths Taken Up	30 booths

### Panel Discussion

The Panel was made up of the following:

Chairperson	Members
Prof Dr Mohd Tajuddin Abdullah, UMT	Dato' Prof Dr Mohd Jamil Maah, MOSTI Dr Paul Quek, Bioersivity International Mr K. Nagulendran, University of Nottingham, Malaysia Mdm Teo Gien Kheng, MOMA, Sarawak Assoc. Prof Dr Peter Morin Nissom, SUTS

During the wrap up of the discussion, the panel agreed that the following are crucial factors in ensuring the success of a bioeconomy:

- Community Participation
- Intellectual Property
- Conservation and sustainable management of natural resources
- Viable and practical technology

## Amendment to the Sarawak Biodiversity Centre Ordinance, 6 May 2014

---

The date, 6 May 2014 is significant to the Sarawak Biodiversity Centre as being the day that the Sarawak State Legislative Assembly passed an amendment to the Sarawak Biodiversity Centre Ordinance.

The amendment provides for the requirement to obtain Prior and Informed Consent (PIC) by anyone who wishes to access traditional knowledge (TK) on biological resources, as well as the resources themselves from the indigenous communities in Sarawak.

The amendment also includes the need for equitable sharing of benefits based on mutually agreed terms if the traditional knowledge and resources lead to commercialization.

The provision which is also termed as Access and Benefit Sharing (ABS) is a requirement under the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity.

Malaysia, is a party to the Convention of Biological Diversity and Sarawak has streamlined its laws on biodiversity with this international agreement.

ABS refers to how TK genetic or biological resources can be accessed in a legal and transparent manner, and how benefits that arise from their use are channeled back to the people and countries that provide them.





This is based on PIC or permission being granted by the owners of the knowledge and resources, followed by negotiations between the parties involved, to develop mutually agreed terms (MAT) to ensure fair and equitable sharing of benefits.

Since the passing of the amendment to the Ordinance, SBC has held consultative meetings the communities, relevant agencies and departments, research institutions, as well as institutions of higher learning to inform them of the ABS provisions.

SBC has also carried out consultation workshops with the indigenous communities to develop a PIC protocol that is currently being implemented under its TK Documentation programme.

## SBC Biodiversity Day 2014, 24 – 25 May 2014



Body combat session by Level Up Fitness, involving visitors and SBC staff



YB Tan Sri Datuk Amar Haji Mohamad Morshidi Bin Abdul Ghani trying out a hand crafted violin at the communities' booth



Visitors posing in the My Ambition booth



School students participate in cell mapping



Gutsy children trying their hands at the Fear Factor activity

On 24<sup>th</sup> – 25<sup>th</sup> May 2014, the Sarawak Biodiversity Centre organized SBC Biodiversity Day 2014, themed “Island Biodiversity”. This event was held in conjunction with the International Day of Biological Diversity which is observed on 22 May annually.

The main objective of this event was to promote awareness of, and appreciation for, Sarawak’s local biodiversity among all sectors of society and create awareness among the general public on SBC’s role in sustainable research and development on Sarawak biodiversity.

The official launching ceremony which was held on the first day of the event by YB Tan Sri Datuk Amar Haji Mohamad Morshidi Bin Abdul Ghani, the State Secretary of Sarawak and Chairman of Sarawak Biodiversity Council.

Various activities were carried out throughout the two days event. These activities were the children’s colouring & pottery contest, eco snakes and ladders, clown appearance, R&D lab display and demonstration, mini-exhibition on Traditional knowledge (TK) zoological and herbarium specimens, demonstration by the TK communities, Public Awareness talks, and exhibition by invited agencies.

The event had attracted approximately **2,099 visitors** which include invited guests, invited judges, contestants of children colouring and pottery contest, general public, students, parents and teachers.

### Photos of the Event:



School children participating in the Biodiversity Pottery Painting Contest



## SBC Teambuilding, Fitness and Health Camp, 9-11 October 2014

SBC has organised its Teambuilding event annually since 2008 to inculcate team spirit and leadership among its staff.

The elements of health and fitness were introduced into SBC's teambuilding to encourage SBC staff to embrace wellness and fitness in life as we believe that a healthy lifestyle pays off in numerous ways, including developing individuals who are less likely to get sick, who have more energy, happier, and to alleviate stress and inspire self-confidence.

In relation to instilling team spirit and leadership, this year's teambuilding event focused on strategic thinking and planning. The trainer, Dr Arivalan carried out an intensive one-day programme on strategic thinking and planning within a team through various problem solving and scenario based activities.

The following two days of the teambuilding programme featured a health screening and health talk carried out by medical personnel from Normah Medical Specialist Centre, and a fitness bootcamp, nutrition talk and outdoor team games conducted by trainers from GymBox.





## Integrity and Motivation Day & Annual Dinner, 5 December 2014

SBC organizes its Motivation Day in conjunction with its Annual Dinner to value add to an event which celebrates the efforts and achievements of its team. In 2014, SBC renamed the event as Integrity and Motivation Day.

During the event, SBC invites speakers of various backgrounds to speak to its staff about a diverse range of topics which will enhance their knowledge and understanding of work life and the civil service.

Two speakers were invited for 2014. En Zulhairi bin Zaidel, Assistant Commissioner with the Malaysian Anti Corruption Commission (MACC), Sarawak spoke on Reinforcing Integrity (Pengukuhan Integriti), while En Mohamad Norjayadi bin Tamam, Director of the Malaysia Productivity Corporation (MPC) spoke on Staff Motivation in the Workplace.

This year's Annual Dinner which followed Integrity and Motivation Day talks later in the evening was themed "Traditional" and saw SBC's staff and invited guests decked out in their finest traditional attires which represented the various ethnic groups in Sarawak.

SBC staff were also presented with certificates for outstanding work performance (Anugerah Perkhidmatan Cemerlang), for publication in peer-reviewed journals, as well as those have achieved "Sick Leave Free" days over the years.



### Certificate of Achievement for three consecutive years without sick leave at SBC from 2011 to 2013

- |   |                                       |
|---|---------------------------------------|
| 1. Ainley anak Tumis (KP11)               | 11. Gilbert Lau Sei Kung (Q44)        |
| 2. Alan anak Ringah (KP11)                | 12. Harny anak Chapi (Q41)            |
| 3. Aloysius Sim Kwang Peng (Q41)          | 13. Joeng anak Melos (KP11)           |
| 4. Aziman Ahmad (Q17)                     | 14. Margarita Naming (Q48)            |
| 5. Bee David anak Lamada (KP11)           | 15. Romney anak Dawur (KP11)          |
| 6. Bernardine Ida anak Joseph Jinam (N41) | 16. Rosy anak Tian Lin (N17)          |
| 7. Dr Yeo Tiong Chia. (VU7)               | 17. Sabda Bin Safiee (Q41)            |
| 8. Elaine Remi anak Douglas Telajan (Q41) | 18. Sunarjo Bin Suip (KP11)           |
| 9. Fesmuela anak Kagong. (Q17)            | 19. Sylvia Jenniffer anak James (N22) |
| 10. Frankie anak Kumbak (Q17)             |                                       |

### Sijil Penghargaan Perkhidmatan Cemerlang Tahun 2013

- |   |                                       |
|---|---------------------------------------|
| 1. Anna Ng Mei Na (N17)                     | 13. Hii Mei Mei (Q44)                 |
| 2. Asma' Saiyidatina Aishah (Q27)           | 14. Holed anak Juboi (Q41)            |
| 3. Aziman Ahmad (Q17)                       | 15. Hugh anak Doyos (R3)              |
| 4. Belinda Ng Ling Nah (Q44)                | 16. Jong Wan Wui (Q44)                |
| 5. Chew Leh King (W22)                      | 17. Margarita Naming (Q48)            |
| 6. Clare Heinzie anak Juhin (N41)           | 18. Michele Mejin (Q44)               |
| 7. Dr Yeo Tiong Chia (VU7)                  | 19. Mohamad Nasar Bin Pawi (Q17)      |
| 8. Elizabeth Alice anak Gabriel Nasib (N17) | 20. Rigep Anak Anyain (Q17)           |
| 9. Frankie anak Kumbak (Q17)                | 21. Rosy anak Tian Lin (N17)          |
| 10. Gabriel Chang.(R3)                      | 22. Sylvia Jenniffer anak James (N22) |
| 11. Gilbert Lau Sei Kung (Q44)              | 23. Tora anak Ranggon (R3)            |
| 12. Harny anak Chapi (Q41)                  |                                       |

### Anugerah Perkhidmatan Cemerlang 2013

- |                                  |                              |
|----------------------------------|------------------------------|
| 1. Aziman Ahmad (Q17)            | 5. Rosy Tian Lin (N17)       |
| 2. Elizabeth Alice Gabriel (N17) | 6. Gabriel Chang (R3)        |
| 3. Harni Chapi (Q41)             | 7. Clare Heinzie Juhin (N41) |
| 4. Holed Juboi (Q41)             |                              |

## Journal Contribution

Publication of “Building a Discovery Partnership with Sarawak Biodiversity Centre: A Gateway to Access Natural Products from the Rainforests” in *Combinatorial Chemistry and High Throughput Screening (CCHTS) Special Issue*, March 2014

- Dr Yeo Tiong Chia (VU7)
- Margarita Naming (Q48)

Publication of “Comparative Antimicrobial Activity of South East Asian Plants Used in Bornean Folkloric Medicine” in *Journal of Herbal Medicine*, Volume 4, Issue 2, June 2014

- Dr Yeo Tiong Chia (VU7)
- Tu Chu Lee (Q44)
- Diana Lim Siok Ley (Q41)

Publication of “Enhancing a search for Traditional Medicinal Plants with Anthelmintic Action by using Wild Type and Stress Reporter *Caenorhabditis elegans* Strains as Screening Tools” in *International Journal of Parasitology*, Volume 44, Issue 5, 26 February 2014

- Dr Yeo Tiong Chia (VU7)
- Tu Chu Lee (Q44)
- Diana Lim Siok Ley (Q41)

Publication of “Maximizing Biodiversity Potential through Traditional Knowledge Documentation: A Study Case” in *The Journal of Intellectual Property Law & Practice*, Volume 9 No. 5, May 2014

- Margarita Naming (Q48)

Publication of “A Nucleotide Signature for Identification of *Aglaia stellatopilosa*” in *Molecular Biotechnology* Volume 56, Issue 7, July 2014

- Dr Yeo Tiong Chia (VU7)
- Gilbert Lau Sei Kung (Q44)
- Belinda Ng Ling Nah (Q44)
- Mariani Binti Omarzuki@Marzuki (Q41)

---

**YBhg Datu Laura Lee Ngien Hion**

Chairman, Audit Committee  
Deputy State Financial Secretary



---

**YBhg Datu Lai Kui Fong**

Member, Audit Committee  
Director of Agriculture



---

**Mr Peter Sawal**

Member, Audit Committee Controller,  
Natural Resources & Environment Board (NREB)



---

**Mr John Kennedy Janang**

Member, Audit Committee  
Principal Assistant Secretary, State Financial Secretary



---

**Christina Wong Hie Ping**

Accountant, Sarawak Biodiversity Centre





## **YBhg Datu Haji Misnu Bin Haji Taha**

---

Deputy State secretary  
(Administrative, security & Corporate Affairs)



## **YBhg Datu Haji Sudarsono Osman**

---

Deputy Chairman,  
SBC Establishment Committee Permanent Secretary,  
Ministry of resource Planning and Environment



## **YBhg Datu Lai Kui Fong**

---

Member, SBC Establishment Committee  
(w.e.f 13 September 2014)  
Director of Agriculture



## **Dr Razali bin Abon**

---

Member, SBC Establishment Committee  
Director, Chief Minister's Department  
(Human resource Management)



## **Dr Yeo Tiong Chia**

---

Secretary, SBC Establishment Committee  
Acting Chief Executive Officer, Sarawak Biodiversity Centre

# SBC Finance & Investment Committee

---

## **YBhg Dato Sri Ahmad Tarmizi Bin Haji Sulaiman**

Chairman, Finance & Investment Committee  
State Financial Secretary



---

## **YBhg Dato Haji Sudarsono Osman**

Member, Finance & Investment Committee  
Permanent Secretary,  
Ministry of Planning and Resources Environment



---

## **YBhg Dato Lai Kui Fong**

Member, Finance & Investment Committee (w.e.f 13 September  
2014)  
Director of Agriculture Department



---

## **Tuan Haji Sapuan Ahmad**

Member, Finance & Investment Committee  
Director of Forests/Controller of Wildlife/Controller of National  
Parks and Nature Reserves



---

## **Dr Yeo Tiong Chia**

Secretary, Finance & Investment Committee (w.e.f. 12 January 2014)  
Acting Chief Executive Officer, Sarawak Biodiversity Centre



Financial Statements for  
the year ended 2014

## Balance Sheet as at 31 December 2014

	Note	2014 RM	2013 RM	Variance RM	%
<b>NON-CURRENT ASSETS</b>					
Property, plant & equipment	4	13,169,574	7,814,012	5,355,562	69%
<b>CURRENT ASSETS</b>					
Cash and bank balances	5	2,259,806	2,619,496	(359,690)	-14%
Fixed Deposits	5	40,385,448	41,821,018	(1,435,570)	-3%
Other receivables	6	691,203	722,790	(31,588)	-4%
		43,336,457	45,163,304	(1,826,847)	-4%
<b>CURRENT LIABILITIES</b>					
Other payables and accruals	7	706,032	789,543	(83,511)	-11%
Provision for taxation	8	16,979	4,918	12,062	245%
		723,011	794,461	(71,450)	-9%
<b>NET CURRENT ASSETS</b>		42,613,446	44,368,843	(1,755,398)	-4%
		<b>55,783,020</b>	<b>52,182,855</b>	3,600,166	7%
<b>FINANCED BY:</b>					
General reserve	9	33,684,627	38,359,911	(4,675,284)	-12%
Development grants	10	16,480,932	8,441,727	8,039,205	95%
		50,165,559	46,801,638	3,363,922	7%
<b>NON-CURRENT LIABILITIES</b>					
Deferred income	11	5,617,461	5,381,217	236,245	4%
		<b>55,783,020</b>	<b>52,182,855</b>	3,600,165	7%

## Income Statement for the year ended 2014

	<b>2014</b>	<b>2013</b>	<b>Variance</b>
	<b>RM</b>	<b>RM</b>	<b>RM</b>
Revenue	1,472,848	1,408,937	63,911
Government Grant	2,000,000	5,000,000	(3,000,000)
Transferred from Deferred Income	904,543	881,856	22,687
	4,377,391	7,290,793	(2,913,403)
Staff Cost	(5,694,750)	(5,577,711)	117,039
Depreciation of Property, Plant & Equipment	(1,161,611)	(1,111,159)	50,452
Other Operating Expenses	(1,883,486)	(2,091,183)	(207,697)
Deficit before taxation	(4,362,456)	(1,489,260)	2,873,197
Taxation	(312,828)	(295,849)	16,980
Net deficit after taxation	(4,675,284)	(1,785,109)	2,890,175

## Statement of Changes in Equity for the year ended 31 December 2014

	<b>Development Grants RM</b>	<b>General Reserve RM</b>	<b>Total RM</b>
Balance as at 1 January 2013	4,510,348	40,145,020	44,655,368
Received during the year	6,063,184	-	6,063,184
Expended during the year	(2,131,805)	-	(2,131,805)
Deficit for the year	-	(1,785,109)	(1,785,109)
Balance as at 31 December 2013	<b>8,441,727</b>	<b>38,359,911</b>	<b>46,801,638</b>
Received during the year	10,834,613	-	10,834,613
Expended during the year	(2,795,408)	-	(2,795,408)
Deficit for the year	-	(4,675,284)	(4,675,284)
Balance as at 31 December 2014	<b>16,480,932</b>	<b>33,684,627</b>	<b>50,165,559</b>

## Cash Flow Statement for the year ended 31 December 2015

	Note	2014 RM	2013 RM
<b><u>CASH FLOW FROM OPERATING ACTIVITIES</u></b>			
Deficit before tax		(4,362,456)	(1,489,260)
Adjustments for the items not involving the movements of cash and cash equivalents			
Depreciation of Property, Plant & Equipment	4	1,161,611	1,111,159
Interest income		(1,251,313)	(1,183,395)
Loss on disposal of Property, Plant & Equipment		1,894	-
Transfer from deferred income		(904,543)	(881,856)
Operating deficit before working capital changes		(5,354,807)	(2,443,352)
Decrease in other receivables		31,587	302,252
(Decrease)/Increase in other payables		(83,511)	173,644
Cash used in operation		(5,406,731)	(1,967,456)
Income tax paid		(300,767)	(352,089)
<b>Net cash used in operating activities</b>		<b>(5,707,498)</b>	<b>(2,319,545)</b>
<b><u>CASH FLOW FROM INVESTING ACTIVITIES</u></b>			
Purchase of Property, Plant & Equipment		(5,378,280)	(886,703)
Development grant received		10,834,613	6,063,184
Development expenditure		(2,795,408)	(2,131,805)
Other income		1,251,313	1,183,395
<b>Net cash generated from investing activities</b>		<b>3,912,238</b>	<b>4,228,071</b>
<b>Net increase in cash and cash equivalents</b>		<b>(1,795,260)</b>	<b>1,908,526</b>
Cash and cash equivalents at beginning of the year		44,440,514	42,531,988
<b>Cash and cash equivalents at end of the year</b>	5	<b>42,645,254</b>	<b>44,440,514</b>

## Notes to the Financial Statements

### 1. Corporate Information And Principal Activities

The Sarawak Biodiversity Council (formerly known as Sarawak Biodiversity Centre), a body incorporated in accordance with the Sarawak Biodiversity Centre Ordinance, 1997, is a Sarawak State Government – owned statutory body and its vision is “To be the centre of excellence for biodiversity research and sustainable utilization”.

On 8 December 2003, the State Legislative Assembly passed the Sarawak Biodiversity Centre (Amendment) Ordinance 2003 which came into force on 1 April 2004. With the amendments, SBC is entrusted with the following statutory functions:

- **conduct Bioprospecting/R&D Programme** on the biodiversity of the State;
- **implement the Traditional Knowledge Documentation Programme** among the traditional communities in the State;
- **establish a database** on information related to the biological resources of the State; and
- **play a role in raising public awareness** on the potential usage and value of the State’s biodiversity.

On 6 May 2014, the State Legislative Assembly passed the Sarawak Biodiversity Centre (Amendment) Ordinance 2014 which came into force on 10 June 2014. This amendment provided for the requirement of prior-informed consent and benefit sharing based on mutually agreed terms.

The financial statements of the Sarawak Biodiversity Council (Council) were authorized for issue by the Council Members during its 41st Council Meeting held on 17 April 2015.

### 2. Financial Risk Management Policies

The Council's financial risk management policy seeks to ensure that adequate financial resources are available for the development of the Centre's activities whilst managing its risk.

The main risk arising from the Council's financial instruments are interest rate risk, credit risk, liquidity risk and foreign currency risk. The Council's reviews and agreed policies for managing each of these risks are summarized as below:

#### (a) Interest Rate Risk

The Council has no borrowings. Surplus funds are placed with reputable banks.

#### (b) Credit Risk

Credit risk is managed through the application of credit approvals and monitoring procedures.

#### (c) Liquidity Risk

The Council monitors and maintains a level of cash and cash equivalent deemed adequate by management to finance the Council's operations and mitigate the effects of fluctuations in cash flows.

The Council relies heavily on Government Grant and as such liquidity and cash flow risk is very much dependent on availability of government assistance.

## 2. Financial Risk Management Policies (cont'd)

### (d) Fair Value

Fair value is defined as the amount at which the financial instrument could be exchanged in a current transaction between knowledgeable willing parties in an arm's length transaction, other than in forced or liquidation sale.

The fair values of the financial assets and liabilities approximate their carrying values.

## 3. Significant Accounting Policies

### (a) Basis of Accounting

The financial statements of the Council are prepared under the historical cost convention and in compliance with applicable Private Entities Reporting Standards issued or adopted by Malaysian Accounting Standards Board (MASB), Statutory Bodies (Financial and Accounting Procedure) Ordinance 1995 and Treasury Instruction.

### (b) Property, Plant and Equipment

Property, plant and equipment are stated at cost less accumulated depreciation and impairment loss. Depreciation is computed monthly, principally by the straight-line method based on the estimated useful life of the related assets. The rates of depreciation are as follows: -

Research lab building	5% p.a.
Office equipment	15% p.a.
Furniture and fittings	10% p.a.
Computers and accessories	20% p.a.
Office renovation	10% p.a.
Temporary office	10% p.a.
Specialised equipment (equipment)	15% p.a.
Specialised equipment (computer)	20% p.a.
Specialised equipment (software)	20% p.a.
Lab equipment	15% p.a.
Lab furniture & fittings	10% p.a.
Motor vehicles	20% p.a.
Nursery sheds	10% p.a.

### (c) Operating Grant

Grant received from the State Government for the operation or maintenance of the Council's activities and is credited to Income Statements.

Grants that compensate the Council for operating expenses incurred are recognised as income over the periods necessary to match the grant on a systematic basis to the costs that it is intended to compensate.

### (d) Development Grants

The Council receives development grants from the State Government in order to finance activities and projects related to biodiversity research and development protection. This is in line with the functions and powers of the Council, as provided by the Sarawak Biodiversity Centre Ordinance, 1997. The grants so received are credited to the Development Grants and offset against future costs when incurred.

### 3. Significant Accounting Policies (cont'd)

Government grants are recognised initially at their fair value in the balance sheet as deferred income where there is reasonable assurance that the grant will be received and all attaching conditions will be complied with. Grants that compensate the Council for the cost of the projects are recognised as income when the research and development projects are completed.

#### (e) Impairment Of Assets

Property, plant and equipment are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. Whenever the carrying amount of an asset exceeds its recoverable amount, an impairment loss is recognized as income for items property, plant and equipment carried at cost. The recoverable amount is the higher of an asset's net selling price and value in use. The net selling price is the amount obtainable from the sale of an asset in an arm's length transaction.

Value in use is the present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its useful life. Recoverable amounts are estimated for individual assets or, if it is not possible, for the cash-generating unit.

Reversal of an impairment loss recognized in prior years is recorded when there is an indication that the impairment loss recognized for an asset no longer exists or has decreased. The reversal is recorded in income or as a revaluation increase.

#### (f) Deferred Income

Government grants in respect of the acquisition of property, plant and equipment are credited to the deferred income and released to the Income Statements on straight line basis over the expected useful lives of the assets.

#### (g) Employee Benefits

##### (i) Short-Term Benefits

Wages, salaries, bonuses and social security contributions are recognized as expenses in the year in which employees of the Council render the associated services. Short-term accumulating compensated, such as paid annual leave are recognized when services rendered by employees that increases their entitlement to future compensated absences; and short-term non-accumulating compensated absences; such as sick leave are recognized when the absences occur.

##### (ii) Defined Contribution Plan

As required by law, the Council makes contributions to the Employee Provident Fund. Such contributions are recognized as an expense in the income statement as incurred.

#### (h) Financial instrument

Financial instruments are recognized in the balance sheet when the Council has become a party to the contractual provisions of the instrument. The particular recognition methods are dissolved below:-

##### (i) Other Receivable

Other receivables are carried at anticipated realizable value. Bad debts are written off when identified. An estimate is made for doubtful debts based on review of all outstanding accounts as at the balance sheet date.

### 3. Significant Accounting Policies (cont'd)

#### (ii) Other payables

Other payable are stated at cost, which is fair value of the consideration paid in the future for good and services received.

#### (i) Revenue recognition

Revenue is recognized when it is probable that the economic benefits associated with transaction will flow to the Council and the amount of the revenue can be measured reliably.

- (i) Interest income are recognized on a time proportion basis that reflects the effective yield on the asset.
- (ii) Other income are recognized at the point of receipt or sales by the Council.

#### (j) Research and development

Research and development expenditure comprised deferred direct project costs and related overheads incurred for projects ranging from 2 to 30 years. These research and development expenditures are recognised as expenses when the research and development are completed.



## 4. Property, plant and equipment (cont'd)

2013	Furniture													Total			
	Buildings	Office Equipment	Office Fixtures & fittings	Computers	Office Renovations	Motor Vehicle	Specialised Equipment	Temporary Office	Nursery Sheds	Lab Specialised Equipment	Lab Furniture & Fittings	RM					
<b>Cost</b>																	
Beginning of year	6,783,319	514,440	431,614	773,000	502,649	715,581	110,830	378,473	94,068	7,806,700	628,580						18,739,254
Additions	-	4,450	4,992	22,212	39,360	108,500	-	-	-	721,949	-						901,463
End of Year	6,783,319	518,890	436,606	795,212	542,009	824,081	110,830	378,473	94,068	8,528,649	628,580						19,640,717
<b>Accumulated Depreciation</b>																	
Beginning of year	2,001,375	387,057	192,504	533,261	259,881	582,853	110,792	378,472	28,520	6,470,107	477,913						11,422,735
Additions	339,166	36,727	35,505	95,294	50,239	35,695	-	-	8,407	463,210	46,916						1,111,159
End of Year	2,340,541	423,784	228,009	628,555	310,120	618,548	110,792	378,472	36,927	6,933,317	524,829						12,533,894
<b>Net Book Value at end of year</b>	<b>4,442,778</b>	<b>95,106</b>	<b>208,597</b>	<b>166,657</b>	<b>231,889</b>	<b>205,533</b>	<b>38</b>	<b>1</b>	<b>57,141</b>	<b>1,595,332</b>	<b>103,751</b>						<b>7,106,823</b>
<b>Add:</b>																	
Work-in-progress																	707,189
																	<b>7,814,012</b>

## 5. Cash and cash equivalents

	<b>2014</b>	<b>2013</b>
	<b>RM</b>	<b>RM</b>
Cash and bank balances	2,259,806	2,619,496
Deposit with licensed banks	12,859,954	15,156,578
Deposit with licensed finance companies	27,525,494	26,664,440
	<u>42,645,254</u>	<u>44,440,514</u>

## 6. Other receivables

	<b>2014</b>	<b>2013</b>
	<b>RM</b>	<b>RM</b>
Other Receivables	37,446	13,860
Interest Receivables	653,757	708,930
	<u>691,203</u>	<u>722,790</u>

## 7. Other payables and accruals

	<b>2014</b>	<b>2013</b>
	<b>RM</b>	<b>RM</b>
Other Payables	21,859	134,584
Accruals	686,531	654,959
	<u>708,390</u>	<u>789,543</u>

## 8. Provision for Taxation/Taxation

- In exercising the powers under Section 127(3)(b) of Income Tax Act 1967, YB Menteri Kewangan Malaysia had made a new order: Income Tax (Exemption) (No.22) Order 2006 [P.U. (A) 207 @ 01 June 2006]. This order is applicable to Sarawak Biodiversity Council where the Minister had exempted:
- any person from the payment of income tax in respect of income relating to the allocations given by the Federal or State Government in the form of grant or subsidy;
- a statutory body from the payment of income tax in respect of income derived from
- the income received in respect of an amount chargeable and collectible from any person in accordance with the provisions of the Act regulating the statutory authority: or any donations or contribution received.

## 8. Provision for Taxation/Taxation (cont'd)

This Order shall have effect from the Year of Assessment 2006. Income Tax (Exemption) (No.17) Order 1995 [P.U. (A) 213/1995] and Income Tax (Exemption) (No.4) Order 2003 [P.U. (A) 33/2003] are revoked from the Year of Assessment 2006.

The provision for taxation is made based on the fixed deposit interest income only.

	<b>2014</b>	<b>2013</b>
	<b>RM</b>	<b>RM</b>
Balance at 1 January	4,918	61,158
Current Year Provision	312,828	295,849
Tax Paid	(300,767)	(352,089)
Balance at 31 December	<u>16,979</u>	<u>4,918</u>

### Taxation

	<b>2014</b>	<b>2013</b>
	<b>RM</b>	<b>RM</b>
Current year tax expense	312,828	295,849
Tax paid for current year	(295,849)	-
	<u>16,979</u>	<u>295,849</u>

## 9. General Reserve

	<b>2014</b>	<b>2013</b>
	<b>RM</b>	<b>RM</b>
Balance as at 1 January	38,359,911	40,145,020
Net Defit for the year	(4,677,642)	(1,785,109)
Balance as at 31 December	<u>33,682,269</u>	<u>38,359,911</u>

## 10. Development Grant

	<b>2014</b>	<b>2013</b>
	<b>RM</b>	<b>RM</b>
Balance as at 1 January	8,441,727	4,510,348
Received during the year	10,834,613	6,063,184
Expended during the year	(2,795,408)	(2,131,805)
Balance as at 31 December	<u>16,480,932</u>	<u>8,441,727</u>

## 11. Deferred Income

	<b>2014</b>	<b>2013</b>
	<b>RM</b>	<b>RM</b>
Balance as at 1 January	5,381,217	5,541,124
Received during the year	1,140,787	721,949
Released to Income Statement	(904,543)	(881,856)
Balance as at 31 December	<u>5,617,461</u>	<u>5,381,217</u>

## 12. Revenue

	<b>2014</b>	<b>2013</b>
	<b>RM</b>	<b>RM</b>
Fixed Deposit Interest Income	1,251,313	1,183,395
Tender Document Fees	12,300	11,000
Other Income	209,235	214,542
	<u>1,472,848</u>	<u>1,408,937</u>

## 13. Government Grant

	<b>2014</b>	<b>2013</b>
	<b>RM</b>	<b>RM</b>
Operating Grant	<u>2,000,000</u>	<u>5,000,000</u>

## 14. Staff Cost

	<b>2014</b>	<b>2013</b>
	<b>RM</b>	<b>RM</b>
Personnel Emolument	4,646,280	4,629,666
Staff incentives (e.g. excellence award)	64,906	52,699
EPF	658,129	560,359
SOCSO	66,943	52,550
Overtime	49,304	44,412
Transport and Travelling	100,267	142,456
Medical expenses	93,082	79,122
Staff Uniform	18,197	16,447
	<u>5,697,108</u>	<u>5,577,711</u>
Number of staff	96	101

## 15. Other Operating Expenses

	<b>2014</b>	<b>2013</b>
	<b>RM</b>	<b>RM</b>
Advertisement	6,906	4,366
Audit Fees	8,000	6,870
Bank charges	12	3
Computer & Accessories	124,957	67,074
Consultancy fees	117,370	129,643
Conference and Seminar Fees	700	19,774
Council Members' Allowance & Sitting Fees	80,200	32,200
Electricity charges	272,438	250,236
Entertainment	39,680	40,355
Fuel and Lubricant	21,805	20,483
Human Resource Development Expenses	45,087	132,562
Lab Consumables	314,143	503,903
Lab Maintenance	165,634	108,944
Insurance	17,430	35,690
Market testing & research	218,797	278,475
Motor Vehicles Road Tax	1,803	1,602
Newspapers	17,289	14,139
Office Expenses (other office supplies)	102,103	100,994
Office Maintenance	171,338	204,349
Postage and courier	26,507	14,063
Printing and Stationery	30,144	27,757
Repairs and maintenance - motor vehicles	13,380	27,910
Telephone/fax/internet charges	71,978	59,837
Water charges	15,785	9,954
	<u>1,883,486</u>	<u>2,091,183</u>

## 16. Capital Commitment

Approved capital expenditure and contracted for in the financial statement as at 31 December 2014 is RM7,447,479. (Year 2013: RM6,380,000).

## 17. Currency

All amounts are stated in Ringgit Malaysia (RM).

## 18. Subsequent Event

The entity changed its name from Sarawak Biodiversity Centre to Sarawak Biodiversity Council on 27 August 2014.

**SARAWAK BIODIVERSITY COUNCIL**  
**(Formerly known as Sarawak Biodiversity Centre)**  
**(Incorporated under The Sarawak Biodiversity Centre Ordinance 1997)**

**PENYATA PENERUSI DAN TIMBALAN PENERUSI**

Kami, **TAN SRI DATUK AMAR HAJI MOHAMAD MORSHIDI BIN ABDUL GHANI** dan **DATU HAJI SUDARSONO BIN OSMAN** yang merupakan Pengerusi dan Timbalan Pengerusi **MAJLIS KEPELBAGAIAN BIOLOGI SARAWAK** (dahulu dikenali sebagai Pusat Kepelebagaian Biologi Sarawak) dengan ini menyatakan bahawa, pada pendapat Ahli - Ahli Majlis, Penyata Kewangan yang mengandungi Lembaran Imbangan, Penyata Pendapatan, Penyata Perubahan Ekuiti dan Penyata Aliran Tunai yang berikut ini berserta dengan nota-nota kepada Penyata Kewangan di dalamnya, adalah disediakan untuk menunjukkan pandangan yang benar dan saksama berkenaan kedudukan **MAJLIS KEPELBAGAIAN BIOLOGI SARAWAK** (dahulu dikenali sebagai Pusat Kepelebagaian Biologi Sarawak) pada **31 DISEMBER 2014** dan hasil kendaliannya serta perubahan kedudukan kewangannya bagi tahun yang berakhir pada tarikh tersebut.

Bagi pihak Majlis,



.....  
**TAN SRI DATUK AMAR HAJI MOHAMAD  
 MORSHIDI BIN ABDUL GHANI**

Bagi pihak Majlis,



.....  
**DATU HAJI SUDARSONO  
 BIN OSMAN**

Tarikh: 24.4.2015  
 Kuching

Tarikh: 24.4.2015  
 Kuching

**SARAWAK BIODIVERSITY COUNCIL**  
 (Formerly known as Sarawak Biodiversity Centre)  
 (Incorporated under The Sarawak Biodiversity Centre Ordinance 1997)

**PENGAKUAN OLEH PEGAWAI UTAMA YANG BERTANGGUNGJAWAB  
 KE ATAS PENGURUSAN KEWANGAN  
 MAJLIS KEPELBAGAIAN BIOLOGI SARAWAK**

Saya, **DR YEO TIONG CHIA**, pegawai utama yang bertanggungjawab ke atas pengurusan kewangan dan rekod-rekod perakaunan **MAJLIS KEPELBAGAIAN BIOLOGI SARAWAK** (dahulu dikenali sebagai Pusat Kepelebagaian Biologi Sarawak) , dengan ikhlasnya mengakui bahawa Lembaran Imbangan, Penyata Pendapatan, Penyata Perubahan Ekuiti dan Penyata Aliran Tunai dalam kedudukan kewangan yang berikut ini berserta dengan nota-nota kepada Penyata Kewangan di dalamnya, mengikut sebaik-baik pengetahuan dan kepercayaan saya, adalah betul dan saya membuat ikrar ini dengan sebenarnya mempercayai bahawa ianya adalah benar dan atas kehendak-kehendak Akta Akuan Berkanun, 1960.

Sebenar dan sesungguhnya )  
 diakui oleh penama di atas )  
 di KUCHING, SARAWAK )  
 pada 22 haribulan 04 / 2015 .)



Di hadapan saya

**JULIUS SCOTT AK SAPONG**  
 SECOND CLASS MAGISTRATE  
 DISTRICT OFFICE, KUCHING



**PESURUHJAYA SUMPAH/  
 MAGISTRATE**



**LAPORAN KETUA AUDIT NEGARA  
MENGENAI PENYATA KEWANGAN  
MAJLIS KEPELBAGAIAN BIOLOGI SARAWAK  
BAGI TAHUN BERAKHIR 31 DISEMBER 2014**

**Laporan Mengenai Penyata Kewangan**

Penyata Kewangan Majlis Kepelebagaian Biologi Sarawak bagi tahun berakhir 31 Disember 2014 telah diaudit oleh wakil saya yang merangkumi Lembaran Imbangan Pada 31 Disember 2014 dan Penyata Pendapatan, Penyata Perubahan Dalam Ekuiti serta Penyata Aliran Tunai bagi tahun berakhir pada tarikh tersebut, ringkasan polisi perakaunan yang signifikan dan nota penjelasan lain.

*Tanggungjawab Lembaga Pengarah Terhadap Penyata Kewangan*

Lembaga Pengarah bertanggungjawab terhadap penyediaan dan persembahan penyata kewangan tersebut yang saksama selaras dengan piawaian pelaporan kewangan yang diluluskan di Malaysia dan Ordinan Badan Berkanun (Prosedur Kewangan Dan Perakaunan), 1995 (Pindaan 2004). Lembaga Pengarah juga bertanggungjawab terhadap kawalan dalaman yang ditetapkan perlu oleh pengurusan bagi membolehkan penyediaan penyata kewangan yang bebas daripada salah nyata yang ketara sama ada disebabkan oleh fraud atau kesilapan.

*Tanggungjawab Juruaudit*

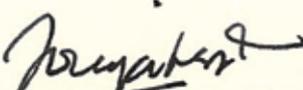
Tanggungjawab saya adalah memberi pendapat terhadap penyata kewangan tersebut berdasarkan pengauditan yang dijalankan. Pengauditan telah dilaksanakan mengikut Akta Audit 1957 dan piawaian pengauditan yang diluluskan di Malaysia. Piawaian tersebut menghendaki saya mematuhi keperluan etika serta merancang dan melaksanakan pengauditan untuk memperoleh jaminan yang munasabah sama ada penyata kewangan tersebut bebas daripada salah nyata yang ketara.

Pengauditan meliputi pelaksanaan prosedur untuk memperoleh bukti audit mengenai amaun dan pendedahan dalam penyata kewangan. Prosedur yang dipilih bergantung kepada pertimbangan juruaudit, termasuk penilaian risiko salah nyata yang ketara pada penyata kewangan sama ada disebabkan oleh fraud atau kesilapan. Dalam membuat penilaian risiko tersebut, juruaudit mempertimbangkan kawalan dalaman yang bersesuaian dengan entiti dalam penyediaan dan persembahan penyata kewangan yang memberi gambaran yang benar dan saksama bagi tujuan merangka prosedur pengauditan yang bersesuaian tetapi bukan untuk menyatakan pendapat mengenai keberkesanan kawalan dalaman entiti tersebut. Pengauditan juga termasuk menilai kesesuaian polisi perakaunan yang diguna pakai dan kemunasabahan anggaran perakaunan yang dibuat oleh pengurusan serta persembahan penyata kewangan secara menyeluruh.

Saya percaya bahawa bukti audit yang saya peroleh adalah mencukupi dan bersesuaian untuk dijadikan asas bagi pendapat audit saya.

#### *Pendapat*

Pada pendapat saya, penyata kewangan ini memberikan gambaran yang benar dan saksama mengenai kedudukan kewangan Majlis Keperbagaian Biologi Sarawak pada 31 Disember 2014 dan prestasi kewangan serta aliran tunai bagi tahun berakhir pada tarikh tersebut selaras dengan piawaian pelaporan kewangan yang diluluskan di Malaysia.

  
(TOIEYAH BINTI HAJI TIOH)  
b.p. KETUA AUDIT NEGARA  
MALAYSIA

KUCHING  
TARIKH: 4/6/2015



- Appendix A** | On-going Traditional Knowledge documentation Programme in villages/areas of Sarawak
- Appendix B** | Biodiversity-Biotechnology Awareness & Appreciation Programme activities

## Appendix A

### Bidayuh Communities (10 locations)

- Kampung Semadang, Penrissen
- Kampung Kiding, Padawan
- Serin Area, Kuching
- Bung Jagoi, Bau
- Kampung Semban
- Kampung Lanchang
- Bau District
- Serian District
- Kpg Chupak & Kpg Skuduk
- Kpg Simuti

### Iban Community (23 locations)

- Rh Lulut, Kapit
- Rh Skatap, Betong
- Rh Nyambong, Selangau
- Rh Emak, Kapit
- Rh Changgai, Song
- Rh Simon, Lubok Antu
- Rh Baia Panjai, Batang Ai
- Rh Bana, Sebauh Sub District
- Rh Rapak Tepus, Sri Aman
- Rh Masoon, Sibuti
- Kpg Sungai Rama, Sebuyau
- Kpg Sual, Simunjan
- Tatau District
- Pakan Sub District
- Marudi District
- Kanowit Subdistrict
- Kpg Sual (mixed with Malay community)
- Rh Bajau, Julau
- Nanga Sumpa, Batang Ai
- Julau District
- Rh Entakong, Nanga Medamit
- Beluru District
- Nanga Merit District

### Kayan Community (4 locations)

- Long Bedian, Baram
- Sg Asap, Belaga
- Belaga Subdistrict
- Uma Bawang, Long Lama, Baram

### Tabun Community (1 location)

- Kpg Kuala Medalam, Nanga Medamit

### Kenyah Communities (4 locations)

- Long Pelutan/Julan, Baram
- Long Palai, Baram
- Long Ilang, Baram
- Long Amo, Belaga

### Kedayan Community (with Iban and Lun Bawang Communities) (1 location)

- Merapok Area (Rh Ajan)

### Lun Bawang Communities (6 locations)

- Long Semado, Lawas
- Long Telingan, Lawas
- Long Kerebangan, Lawas
- Ba'Kelalan, Lawas
- Long Sebangan Asal
- Long Sukang/ Long Tuyu

### Punan Community (1 location)

- Rh Ado, Tatau

### Kelabit Communities (5 locations)

- Bario
- Pa' Ukat, Bario
- Pa' Lungan, Bario
- Pa'Derung, Bario
- Long Seridan

### Bisaya Community (3 locations)

- Batu Danau, Limbang
- Limbang Area
- Kpg Bidang, Limbang

### Berawan Community (1 location)

- Long Terawan, Mulu

### Salako Community (2 locations)

- Kampung Pueh, Lundu
- Lundu/Sematan Area

### Penan Communities (6 locations)

- Long Iman, Mulu
- Batu Bungan, Mulu
- Long Latei
- Pa'Barei
- Long Wat, Murum
- Long Malim, Murum

### Malay Community (6 locations)

- Kampung Moyan Laut, Asajaya
- Kampung Salak, Santubong
- Sundar (with Lun Bawang & Chinese)
- Buntal-Santubong Area
- Maludam District
- Sundar District

### Melanau Community (9 locations)

- Kpg Jebungan, Mukah
- Kpg Jemoring, Matu
- Kpg Paloh, Belawai
- Daro District
- Belawai SubDistrict
- Dalat District
- Matu District
- Kpg Pangtray, Daro
- Igan District

## Awareness &amp; Appreciation Visits to SBC 2014

No	School/Organisation	Date	No. of Participants
1	UCSI University	14 Feb	15 pax
2	Masterskill Global College	11 Mar	25 pax
3	Raffles Girl School, Singapore	12 Mar	76 pax
4	Sembawang Primary School and Admiralty Primary School, Singapore	14 Mar	60 pax
5	SM Sains Kuching Utara	23 Apr	35 pax
6	Cantonment Primary School, Singapore	15 May	40 pax
7	SK Serian	25 May	18 pax
8	SMK Kuching High	25 May	15 pax
9	SK Gedong	25 May	15 pax
10	SMK Pending	25 May	20 pax
11	Methodist Girl School, Singapore	25 May	300 pax
12	Swinburne University	25 May	20 pax
13	SMK Sungai Maong	20 Jun	35 pax
14	Teck Whye Primary School, Singapore	8 Sept	48 pax
15	SMK Kedai Buloh, Kelantan	15 Sept	49 pax
16	Tadika Methodist Batu 10	27 Oct	65 pax
17	SK St. Augustine Mambong	28 Oct	86 pax
18	SJK Chung Hua Serian	7 Nov	90 pax
19	SMK Laksamana, Kuching	12 Nov	40 pax
20	Meridian Primary School, Singapore	12 Nov	30 pax
21	Riang Ria Tuition Centre	27 Nov	25 pax

## Public Awareness Visits to School 2014

No	School/Organisation	Date	No. of Participants
1	SMK Lake	27 Feb	80 pax
2	SM Sains Kuching Utara	19 Mar	400 pax
3	SK Tebakang	19 Jun	130 pax
4	SK Stungkor	26 Jun	95 pax
5	SK Sri Aman	17 Jul	365 pax
6	SMK Bario	24 Jul	50 pax
7	SK Bario	25 Jul	50 pax

## School Programme 2014

No	School/Organisation	Date	No. of Participants
1	My Garden Birdwatch at SMK Padawan (with Dr Ronald Orenstein & Vincent Wong of MNS)	26 Feb	12 pax
2	Follow-up Activity on My Garden Birdwatch at SMK Padawan	3 Apr	12 pax
3	3 <sup>rd</sup> Activity on MyGarden Birdwatch at SMK Padawan	7 May	5 pax
4	Lodge International School Conservation Day : Talk on Traditional Knowledge and SBC's Role in TK and ABS	23 July	150 pax

## Public Awareness Workshops & Public Lectures 2014

No	Event	Venue	Date	No. of Participants	Target Participants
1	'Ivory, Horn and Blood' by Dr Ronald Orenstein	UCSI University, Sarawak Campus	21 Feb	85 pax	MNS members, students, media & General Public
2	'Biodiversity Malaysia' by Prof. Emeritus Yong Hoi Sen	UCSI University, Sarawak Campus	9 Apr	45 pax	MNS members, students, media & General Public
3	Exploitation of Interesting Microbial Strains for Natural Products by Jean-Jacques Sanglier	Lecture Theatre, SBC	16 May	50 pax	SBC Staff, Research Officers & Lecturers from relevant agencies and Universities, Hospitals & Health Dept., & General Public
4	Snakes of Borneo by Robert B. Stuebing	UCSI University, Sarawak Campus	15 Sept	113 pax	MNS members, students, media & General Public
5	Dolphins of Sarawak by Cindy Peter	Lecture Theatre, SBC	3 Oct	62 pax	SBC Staff, Research Officers & Lecturers from relevant agencies and Universities, Tourist & Guides Association, MNS members & General Public
6	Schmidt Ocean Institute by Victor Zykof	Lecture Theatre, SBC	31 Oct	45 pax	SBC Staff, Research Officers & Lecturers from relevant agencies and Universities & General Public

### In Conjunction with SBC Biodiversity Day 2014

7	Music of Nature by Marc Anderson	Lecture Theatre, SBC	24 May	30 pax	General Public & School/College/Uni Students
	My BioD: My Life, My Heritage, My Future by Mr K. Nagulendran	Lecture Theatre, SBC	24 May	30 pax	General Public & School/College/Uni Students
	Augury Birds and Local Beliefs by Mr Victor Luna Amin	Lecture Theatre, SBC	24 May	30 pax	General Public & School/College/Uni Students

No	Event	Venue	Date	No. of Participants	Target Participants
	Marine Turtles Conservation in Sarawak by Mr Tony Ganyai	Lecture Theatre, SBC	25 May	65 pax	General Public & School/College/Uni Students
	Marines Protected Areas in Sarawak by Mr James Bali	Lecture Theatre, SBC	25 May	65 pax	General Public & School/College/Uni Students
	Seeing the Nests for the Trees – Progress of Orang-utan Conservation in Sarawak by Dr Melvin Gumal	Lecture Theatre, SBC	25 May	65 pax	General Public & School/College/Uni Students
	The Music of Nature by Marc Anderson	Lecture Theatre, SBC	25 May	65 pax	General Public & School/College/Uni Students
	The Realm of Darkness – Sarawak's Underground World by Mr Rambli Ahmad	Lecture Theatre, SBC	25 May	65 pax	General Public & School/College/Uni Students

### Seminars, Forums & Dialogue Sessions 2014

No	Event	Venue	Date	No. of Participants	Target Participants
1	BioBorneo 2014: Conference and Exhibition 'Sustaining the Bioeconomy Community'	DeTAR UNIMAS	5-6 May 2014	85 pax	Universities, Industry Players, Government Officials

### Participation at Exhibitions 2014

No	Event	Date
1	Majlis Agenda DBKU 2014	24-25 Jan
2	BioBorneo 2014, DeTAR UNIMAS	5-6 May 2014
3	Lodge International School Conservation Day	23 July 2014
4	Bario Food Festival (Pesta Nukenen & Kebudayaan Kelabit Bario)	24-27 July 2014
5	Pameran sempena Pertandingan Reka Cipta dan Inovasi Sains, Institut Pendidikan Guru Kampus Batu Lintang	25 Sept
6	5 <sup>th</sup> International Greentech & Eco Products Exhibition & Conference Malaysia (IGEM) 2014, KLCC	16-19 Oct 2014
7	Touch the Future Career Fair at UPM Bintulu Campus	29-30 Nov 2014

## VIP & Corporate Visits 2014

No	Event	Date
1	Dennis B. Batangan, Institute of Philippine Culture	2 Jan
2	Prof. Dr. Mohd. Rais Mustafa (University of Malaya), Assoc. Prof. Peter Morin Nissom (Swinburne University, Sarawak), Dr. Heselynn Hussein (Hospital Putrajaya)	7 Jan
3	Datu Sri Robert Jacob Ridu & Datin Sri Garnete Jalla Ridu	8 Jan
4	Dr. Hwang Siaw San & Tan Xian Wen, Swinburnne University of Technology Sarawak	10 Jan
5	Unit Audit Dalam, Jabatan Ketua Menteri Sarawak	15 Jan
6	Yang Berhormat Pehin Orang Kaya Seri Utama Dato Seri Setia Awang Haji Yahya Bin Begawan Mudim Dato Paduka Haji Bakar, Minister of Industry and Primary Resourced Negara Brunei Darussalam	21 Jan
7	Unit Perancang Ekonomi Negeri Selangor (UPEN)	22 Jan
8	Mitsubishi Corporation	23 Jan
9	Konsortium Malaysia	24 Jan
10	Norvatis AG	27 Jan
11	United States Ambassador to Malaysia (Ambassador Joseph Y. Yun) and entourage	4 Feb
12	Ministry of Resource Planning and Environment Sarawak	11 Feb
13	Universiti Putra Malaysia, Serdang	13 Feb
14	Prof. Dr. Ahmad Hata Rasit, UNIMAS	25 Feb
15	MARDI Kuala Lumpur Courtesy Call	3 Mar
16	NAIM Holdings Berhad (Discussion on CSR)	6 Mar
17	Datu Vasco S. Singkang, CEO/GM SALCRA	4 Apr
18	Institute of Economic Affairs London (Keith Boyfield, Keith Newman) accompanied by Mr Henry Daris (SALCRA)	17 Apr
19	IFLA 2014 Asia Pacific Congress Participants	30 Apr
20	BioBorneo 2014 Conference Participants	7 May 2014
21	Mitsubishi, Kuala Lumpur	20 May 2014
22	InoPharm, Kuala Lumpur	22 May 2014
23	John Cumbers, CEO SynBioBeta (LLC), Dan Widmaer Refactored materials/Miko Ferro, Teselagen/Jeffrey Dietrich, Lygos/Elizabeth Ratc/Iffe, Loughborough University	13 June 2014
24	Kenyalang Bioextracts	30 May 2014
25	Malaysian Institute of Pharmaceuticals & Nutraceuticals, IPharm/ National Institute of Biotechnology, NIBM	9 June 2014
26	Ehime University, Japan/ National Institute for Environmental Studies, Japan	11 June 2014

No	Event	Date
27	International Institute of Plantation Management (IIPM)	11 June 2014
28	International Islamic University, Malaysia	16 June 2014
29	PPES Works/ Cahya Mata Sarawak	1 July 2014
30	Mr Barthelemy & Family, France	7 July 2014
31	Department of Environment & Audit Department	11 July 2014
32	Datuk Peter Minos, Bung Bratak Heritage Association	22 July 2014
33	Chee Chin Fei, Bhavesh Chouldhary of Aurigene, Kuala Lumpur	3 Sept 2014
34	The Honourable Mrs. Bess Nungarrayi Price, Minister for Community Services and Minister for Parks and Wildlife, NT, Australia and delegates	8 Sept 2014
35	Ministry of Land Development (Wilfred Jolly, Thadeus Ling Allu)	8 Sept 2014
36	Malaysian Genomics Resource Centre (Alan, Fahmie)	9 Sept 2014
37	Universiti Putra Malaysia Kampus Bintulu (Nur Ashikin Psyquay bt Abdullah, Yiu Pang Hung)	15 Sept 2014
38	Heather Bryant, UNDP	16 Sept 2014
39	Sonali Derani, SOAS, University of London	
40	Agrobiodiversity and Agroenvironment Symposium (A-BES 2014)	18 Sept 2014
41	Fridtsof Sansen Institute, Norway	26 Sept 2014
42	United Nations University, Institute for the Advanced Study of Sustainability	26 Sept 2014
43	CEBLAW & Faculty of Economic and Administration, Universiti Malaya	26 Sept 2014
44	Mr Rohit Sukla of Carta Institute, L.A	3 Oct 2014
45	Dato Teo Tien Hiong, SAINS	8 Oct 2014
46	Borneo Batikraft	8 Oct 2014
47	Lawatan Muhibbah Peserta Kursus Induksi Wisma Bintara Siri 02/2014, Pangkalan Udara Kuching	20 Oct 2014
48	Lee Kam Yit, Centre for Herbal Standardization, USM	3 Nov 2014
49	Rachel Schwallier, Laiden, The Netherlands	6 Nov 2014
50	Pusat Pemulihan Dalam Komuniti (PDK) Bestari Siburan	14 Nov 2014
51	Mitsubishi Corporation	14 Nov 2014
52	Juhee, RHEE & Dr Paul Quek, Bioversity International - APO	17 Nov 2014
53	Richard China, Bioversity International, Rome	17 Nov 2014

## Publications/Broadcasts/News Articles

No	Event	Published
1	*on visit by US Ambassador, Chinese paper version	See Hua Daily News, 5 Feb 2014
2	*on visit by US Ambassador, Chinese paper version	Sin Chew Daily, 5 Feb 2014
3	*on visit by US Ambassador, Chinese paper version	United Daily News, 5 Feb 2014
4	Album Hari Ini: Duta AS lawat taman botani (pictorial)	Utusan Malaysia, 5 Feb 2014
5	Yun terpukau kepelbagaian spesies tumbuhan di SBC	Utusan Borneo, 5 Feb 2014
6	US Ambassador on two-day visit to Sarawak	The Star, Sarawak, 5 Feb 2014
7	Duta Amerika Syarikat lawat Pusat Biodiversiti	Utusan Sarawak, 5 Februari 2014
8	US Ambassador and wife visit Biodiversity Centre	New Sarawak Tribune, 5 Feb 2014
9	US ambassador and wife visit SBC	The Borneo Post, 5 Feb 2014
10	Wildlife conservationist to give talk on poaching	New Sarawak Tribune, 14 Feb 2014
11	Illegal ivory trade flourishes because of high demand	The Sunday Post, 23 Feb 2014
12	Talk on 'Ivory, Horn and Blood' held	The Sunday Tribune, 23 Feb 2014
13	85 pelajar IPT hadiri ceramah hidupan liar	Mingguan Sarawak, 23 Feb 2014
14	Annual Bio Borneo back in Sarawak	The Borneo Post, 22 Mar 2014
15	Bio Borneo 2014 Conference and Exhibition from 5-7 May	New Sarawak Tribune, 22 Mar 2014
16	Bio Borneo 2014 Conference and Exhibition from 5-7 May	New Sarawak Tribune, 22 Mar 2014
17	Public Awareness Talk "Biodiversity Malaysia" on 9 April 2014	Sarawaknet, 25 Mar 2014
18	BioBorneo Conference & Exhibition 2014 "Sustaining the Bioeconomy Community"	Sarawaknet, 25 Mar 2014
19	SBC and MNS to host biodiversity talk	New Sarawak Tribune, 26 Mar 2014
20	Renown biologist to talk on Biodiversity Malaysia	The Star, Sarawak, 28 Mar 2014
21	Bio Borneo 2014 to highlight community involvement in bioeconomy	The Borneo Post, 19 Apr 2014
22	Bio Borneo 2014 to highlight community involvement in bioeconomy	New Sarawak Tribune, 19 Apr 2014
23	Everyday bird-watching	The Sunday Post, 27 Apr 2014
24	State to develop bioeconomy through SBC	The Borneo Post, 6 May 2014
25	Important to preserve traditional knowledge	New Sarawak Tribune, 6 May 2014
26	Step up efforts to care for environment, says Jamilah	The Star, 7 May 2014
27	Govt committed to preserving state's biodiversity - Jamilah	The Borneo Post, 9 May 2014
28	SABATI pledges to support DBKU ( <i>Jamilah on Sarawak Biodiversity Bill</i> )	New Sarawak Tribune, 9 May 2014

No	Event	Published
29	SBC to celebrate Biodiversity Day	New Sarawak Tribune, 15 May 2014
30	RTM TV1 Interview on SBC Biodiversity Day with Asha Kaushal	TV1 Local News, 22 May 2014
31	Game for biodiversity talk at Sarawak Biodiversity Centre	The Borneo Post, 24 May 2014
32	RM1.2mil knowledge headhouse and propagation facility opens at biodiversity centre	Sunday Star, 25 May 2014
33	Music at dusk in a magical place	The Star, Sarawak, 27 May 2014
34	'SBC plant to propagate S'wak flora'	The Sunday Post, 25 May 2014
35	*On SBC Biodiversity Day	Sin Chew Daily, 25 May 2014
36	SS: SBC documents, researches on useful plants	New Sunday Tribune, 25 May 2014
37	RTM Red FM Interview with Asha Kaushal and Marc Anderson on Music of Nature and SBC Biodiversity Day	12noon-1.00pm 22 May 2014, Thursday
38	When the buying stops, the killing can to (on talk entitled 'Ivory, Horn and Blood' by Dr Ronald Orenstein, co-organised by SBC and MNS)	The Sunday Post, 27 July 2014
39	Researcher to give 'Snakes of Borneo' talk next month	The Borneo Post, 27 Aug 2014
40	Public Talk on rare snakes of Borneo	New Sarawak Tribune, 27 Aug 2014
41	SBC-MNS Public Awareness Talk on Snakes of Borneo	Sarawaknet, 28 Aug 2014
42	IKM holds carnival to demonstrate innovative nature of chemistry (on SBC participation)	The Borneo Post, 11 Sept 2014
43	Aussie delegation views ethnobotanical garden at SBC	The Borneo Post, 9 Sept 2014
44	Talk on snakes at UCSI Sarawak Campus	The Borneo Post, 10 Sept 2014
45	A talk on snakes of Borneo for the public	New Sarawak Tribune, 10 Sept 2014
46	'Snakes of Borneo' captivates sizeable crowd	The Borneo Post, 17 Sept 2014
47	SBC to hold 'Dolphins of Sarawak' talk	The Borneo Post Seeds, 23 Sept 2014
48	Ceramah ikan lumba lumba 3 Okt	Utusan Sarawak, 23 Sept 2014
49	Learn about dolphins along Sarawak's coastlines	New Sarawak Tribune, 1 Oct 2014
50	Public talk on ocean research, exploration	New Sarawak Tribune, 9 Oct 2014
51	SBC to hold talk on oceanographic research on Oct 31	The Borneo Post, 9 Oct 2014
52	Public Invited to talk at Biodiversity Centre (on Schmidt Ocean Institute)	New Sarawak Tribune, 24 Oct 2014
53	SBC to host public talk by Schmidt Ocean Institute	The Borneo Post, 25 Oct 2014
54	SOI invites scientists, technology developers for oceanographic research	The Borneo Post, 1 Nov 2014
55	The jungle is a pharmacy (by Sidi Munan)	The Sunday Post, 3 Nov 2014

## News Articles from DUN Sitting, 5-15 May 2014

No	Title	Author
1	2 bills to be tabled at state assembly	The Borneo Post, 5 May 2014
2	Two Bills to be tabled at DUN Sitting	New Sarawak Tribune, 5 May 2014
3	Bill to amend Sarawak Biodiversity Centre Ordinance to be tabled today	The Star, 5 May 2014
4	Dua rang undang-undang dibentang	Utusan Sarawak, 5 May 2014
5	'Better safeguards for biological resources in amended Bill'	The Borneo Post, 7 May 2014
6	'Sarawak Biodiversity Centre (Amendment) Bill 2014 timely'	The Borneo Post, 7 May 2014
7	Baru Bian: Section 6 of Sarawak Biodiversity Centre (Amendment) Bill 2014 too vague	The Borneo Post, 7 May 2014
8	Lots of discoveries waiting	New Sarawak Tribune, 7 May 2014
9	SBC (Amendment) Bill 2014 moves for second reading	The Star, 7 May 2014
10	Hollywood movies may lure flora hunters to Sarawak, warns assemblyman	The Star, 7 May 2014
11	Baru: Get timber, plantation groups to comply with conservation policies	Utusan Sarawak, 7 May 2014
12	Buah sekiu baik untuk jantung	Utusan Sarawak, 7 May 2014
13	Hutan Sarawak miliki sumber perubatan	Utusan Sarawak, 7 May 2014
14	DUN Sarawak luluskan Pindaan Rang Undang-Undang Pusat Biodiversity 2014	New Sarawak Tribune, 7 May 2014
15	Safeguarding Bill – SBC (Amendment) Bill 2014 passed to safeguard biological resources	New Sarawak Tribune, 7 May 2014
16	*article on SBC (Amendment) Bill 2014 table at DUN Sitting	Sin Chew Daily, 7 May 2014
17	Sumber biologi dilindungi, program R&D diperluas	Utusan Sarawak, 8 May 2014
18	S'wak enacted biodiversity law in 1997, first in country to do so (Perspective by Anak Sarawak column)	New Sarawak Tribune, 9 May 2014

## Studies & Journal Articles

No	Title	Date
1	Outcome-Impact Study on SBC's Awareness and Appreciation and Traditional Knowledge Documentation Programmes by UiTM Samarahan	February 2014
2	"Enhancing a search for traditional medicinal plants with anthelmintic action by using wild type and stress reporter <i>Caenorhabditis elegans</i> strains as screening tools" published in International Journal of Parasitology	26 February 2014 in Volume 44, Issue 5
3	"Building a Discovery Partnership with Sarawak Biodiversity Centre: A Gateway to Access Natural Products from the Rainforests" published in Combinatorial Chemistry and High Throughput Screening (CCHTS) Special Issue	March 2014

No	Title	Date
4	Maximizing biodiversity potential through traditional knowledge documentation: a case study (Jern Ern Chuah, Rita Manurung, and Margarita Naming) published in the Journal of Intellectual Property Law & Practice	Volume 9 Number 5, May 2014
5	A Nucleotide Signature for Identification of <i>Aglaia stellatopilosa</i> by Pannell. Ng BLN, Omarzuki M, Lau GSK, Pannell CM and Yeo TC (2014).	Molecular Biotechnology Vol 56(7): 671-679
6	Comparative antimicrobial activity of South East Asian plants used in Bornean folkloric medicine by Galappathie G, Palombo EA, Yeo TC, Diana Lim Siok Ley, Tu CL, Malherbe FM, and Mahon PJ (2014).	J. Herb Med. 4: 96-105
7	Medicinal plants around us by Tom McLaughlin (article by Malaysian Nature Society, adapted from 'Comparative antimicrobial activity of South East Asian plants used in Bornean folkloric medicine' by Galappathie G, Palombo EA, Yeo TC, Diana Lim Siok Ley, Tu CL, Malherbe FM, and Mahon PJ (2014); J. Herb Med. 4: 96-105	The Sunday Post, 24 Aug 2014
8	Medicinal plants around us: adapted from 'Comparative antimicrobial activity of South East Asian plants used in Bornean folkloric medicine' by Galappathie G, Palombo EA, Yeo TC, Diana Lim Siok Ley, Tu CL, Malherbe FM, and Mahon PJ (2014); J. Herb Med. 4: 96-105	theborneopost.com, 27 Aug 2014

## Other Activities

No	Event	Date
1	HPV Talk	3 March 2014
2	Research Officers Progress Meeting (ROPM)	8 Jan 2014
3	Purple Walk	5 April 2014
4	SBC Photography Workshop facilitated by Prof Emeritus Yong Hoi Sen	7-9 April 2014
5	NREB-MAKSAK Run	12 April 2014
6	SBC Biodiversity Day 2014 'Island Biodiversity'	24-25 May
7	Biodiversity Day Promotions at Plaza Merdeka (weekends in April and May)	19,20,26,27 April 2014 3,4,10,11,17,18 May 2014
8	Indigenous Intellectual Properties Dialogue at SBC	11 June 2014
9	Visit to Rumah Kanak-Kanak Kuching	21 June 2014
10	SBC ERT Fire Drill	3 July 2014
11	SBC Majlis Berbuka Puasa	11 July 2014
12	Padawan Raft Safari	3 Aug 2014
13	Perarakan Rapat Raksasa Sempena Harijadi ke-78 TYT Negeri Sarawak	13 Sept 2014
14	SBC Teambuilding & Health Camp	9-11 Oct 2014
15	SBC Integrity & Motivation Day / Annual Dinner	12 Dec 2014