

# SEAMEO BIOTROP

# Annual Report

## FY 2014 - 2015





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Annual Report FY 2014 - 2015

Southeast Asian Regional Centre for Tropical Biology  
Jalan Raya Tajur Km. 6  
Bogor 16134, Indonesia







## **Vision**

A Leading Centre in enriching and promoting the real values  
of tropical biology in Southeast Asia

## **Mission**

To provide scientific knowledge and capacity building  
in conserving and managing tropical biology sustainably  
for the well-being of communities and the environment  
of Southeast Asia



## MESSAGE FROM THE GOVERNING BOARD CHAIR

On behalf of the SEAMEO BIOTROP Governing Board, I would like to congratulate SEAMEO BIOTROP for accomplishing its planned activities as well as surpassing its targets for Fiscal Year 2014/2015. This strongly indicates SEAMEO BIOTROP's unrelenting efforts to extend its reach and increase its visibility and relevance in Southeast Asia.

The Board is greatly impressed with the continuous development in the Centre's research and capacity building programs and activities, especially in intensifying collaboration with other SEAMEO Centres and with relevant institutions in the Governing Board members' countries.

For the first half of the fiscal year in review, we appreciate the leadership of the former director, Prof Bambang Purwantara, as he ended his term in December 2014, for sustaining the implementation of SEAMEO BIOTROP's special initiatives that were launched since 2012 as part of the Centre's 9<sup>th</sup> Five-Year Development Plan (FYDP) 2012-2017. We commend the new director, Dr Irdika Mansur, for ensuring a smooth transition for his term to continue implementing the 9<sup>th</sup> FYDP and also introducing some structural changes and activities to better achieve the Centre's vision, mission and goals.

I would like to thank my colleagues in the SEAMEO BIOTROP Governing Board for their continued support to the Centre.

**Assoc. Prof Dr NGUYEN THI LHAN**  
Vietnam National University of Agriculture







## MESSAGE FROM THE DIRECTOR

It is my pleasure to share with you, on behalf of SEAMEO BIOTROP staff, our accomplishments and contributions in enriching and promoting the real values of tropical biology in Southeast Asia for FY 2014/2015. During the period in review, we continued to capitalize on our inherent strengths in research and development, capacity building and community development, and knowledge management to address critical biological problems confronting the region.

In FY 2014/2015, we intensified our efforts to synergize our two major program thrusts, namely Tropical Biology for Community Welfare and Tropical Biology for Environment Integrity for wider and stronger impacts. We implemented research projects, learning events and special initiatives to enrich the body of knowledge in tropical biology and, at the same time, provide options in helping solve the biological issues and concerns of our stakeholders in Southeast Asia and beyond. The growing number of regional learning events and committed regional and international partners brought new and high-impact projects towards benefiting the region and increasing our Centre's visibility and relevance.

We would like to thank the members of our Governing Board and the respective countries they represent for understanding our challenges and providing guidance to maximize our potentials as an organization in achieving our targets during the period in review. Our heartfelt thanks also go to our partners and clients for their continued trust in us to deliver the products and services expected of us.

We owe our accomplishments to the Government of Indonesia and SEAMEO for the financial support extended to us every year.

**Dr IRDIKA MANSUR, M.For.Sc**  
SEAMEO BIOTROP Director





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## EXECUTIVE SUMMARY

The Centre's vision, mission and goals guide its research and development, capacity building, community development, information exchange and general administration activities and services within its two program thrusts, namely: Tropical Biology for Community Welfare and Tropical Biology for Environmental Integrity. The Centre's accomplishments in FY 2014/2015 are summarized under the following key result areas:

### REGIONAL LEADERSHIP

The Centre completed 23 research projects and one action research/community-based project through SEAMEO BIOTROP Youth Environmental Outreach (YEO) Grants Program during the first half of the fiscal year in review. Fifteen of these completed research projects were conducted by the Centre's researchers and partner agencies, six by PhD Thesis Support Program grantees and two by Joint Research Program grantees. For the second half of the fiscal year in review, the Centre also started implementing 27 more research projects i.e. 19 by the Centre's researchers, four by PhD thesis support grantees, one by Joint Research Program grantees and three YEO Program grantees. The Joint Research Program grantees involved researchers from Indonesia, Malaysia and the Philippines.

The Centre started implementing, as the coordinating institution, a two-year project billed "Establishing a Network of Research Excellence for Mine Reclamation in Southeast Asia". The project is being funded by the Global Innovation Initiative (GII) and the British Council and involves seven universities from Indonesia, United Kingdom and United States of America, and one private mining company in Indonesia. The Centre also continued its commitment to develop sorghum in Indonesia by hosting back-to-back activities related to nuclear application in agriculture with the Joint UN Food and Agriculture Organization and International Atomic Energy Agency (FAO/IAEA) Division for Nuclear Techniques for Food and Agriculture.

The Centre benefited 1,044 individuals from 11 SEAMEO member countries as well as outside the region through conducting 21 national and 4 regional/international learning events including training courses, workshops, seminars and focused group discussion.

### REGIONAL VISIBILITY

SEAMEO BIOTROP entered into 23 national and 6 regional/international Memoranda of Understanding and Agreements (MoU/A) and maintained its collaboration with 14 national institutions. The regional/international MoUs/MoAs are with the Kuala Lumpur-based Human Life Advancement Foundation (HLAF), UN Food and Agriculture Organization Regional Office for Asia and Pacific (FAO RAP), Vietnam National University of Agriculture (VNUA), Bluline Venture, SEAMEO Regional Open Learning Centre (SEAMOLEC), SEAMEO Regional Centre for Vocational and Technical Education and Training (VOCTECH) and Wasan Vocational School of Brunei Darussalam.

The expertise of the Centre's scientists and program staff were sought in several local and international activities in Indonesia as resource persons, consultants, facilitators and coordinators by government and non-governmental institutions.

The Centre facilitated the internship and/or on-the-job training of 177 students and staff from 34 learning institutions in Indonesia, Germany and the Philippines. It also accommodated the visit of 2,598 people

from 37 national and regional/international institutions consisting of 10 universities, 13 high schools and vocational schools, 12 private companies, 2 government agencies and 3 international organizations. To cater to the information needs of its various visitors, the Centre launched its Knowledge and Technology One-Stop Shop on 23 February 2015 as part of its 47<sup>th</sup> anniversary celebration.

The Centre produced 5 books, two issues of its bi-annual journal BIOTROPIA (i.e. Vol. 21 No. 2 and Vol. 22 No.1) and four issues of its quarterly newsletter, BIOTROP Courier. A total of 266 articles have been electronically uploaded in the Centre's online journal website and prospective users are free to access and download them. SEAMEO BIOTROP researchers and program staff also published 16 articles in peer-reviewed journals and two articles in refereed proceedings. Currently, the Centre's library holds and manages 13,213 book collections. In FY 2014/2015, a total of 289 people from 40 national and regional/international institutions consisting of 25 universities, 5 research institutions, 2 private companies, 5 government agencies and 3 international organizations, visited the Centre's library.

During the fiscal year in review, the Centre uploaded 78 articles in its website consisting of 54 articles on the Centre's activities, 8 highlights of research results, 12 articles on events of SEAMEO Secretariat and other SEAMEO Centres and partner institutions and 4 book reviews. The Centre's website ([www.biotrop.org](http://www.biotrop.org)) received 37,880 unique visitors during the period in review or 18.40 percent increase compared to last fiscal year (31,994 visitors). Of this number, 63.1 percent were new visitors.

The Centre also maintained and uploaded 43 relevant articles in its virtual Knowledge Management Centre on Tropical Biology (<http://www.biotrop.org>). This website provides various information on the Centre's two program thrusts.

## SOLID RESOURCE BASE

Seventy-two percent of the Centre staff attended staff development activities such as trainings, conferences, seminars, workshops and symposia in Indonesia and abroad during the period in review. These staff development activities consisted of 65 national, 1 regional and 3 international events.

The Centre completed the renovation of the following facilities: office of the Indonesian Biotechnology Information Center (IndoBIC), Pest and Diseases Laboratory building, and motorpool office and garage.

The Centre increased its bandwidth for internet access from 50 Mbps in 2014 to 80 Mbps (international plus local connections) in 2015 using leased line and fiber optic connection. It also continued to use cloud services to host its information system and websites.

The Centre's Product Development and Services Department produced a total of 298,134 seedlings of Teak (*Tectona grandis*), Banana (*Musa* sp.), Jabon (*Anthocephalus cadamba*), Satoimo (*Colocasia esculenta* var *antiquorum*) through tissue culture technique. The Department also produced 35,390 baglogs of Oyster mushroom (*Pleurotus ostreatus*) and Wood Ear mushroom (*Auricularia auricula*) which were distributed to private companies and individual clients.

SEAMEO BIOTROP's Services Laboratory, which is operating under a Quality System of Laboratory Management in accordance with ISO/IEC 17025: 2005 and accredited by Indonesia's National Accreditation Committee, served 941 customers and analyzed 7,390 water, air, soil, plant, food and feed samples.

The Centre's Other Funds increased by 12.42 percent as a result of the increase in the number of collaborative projects. But in total, the Centre recorded a decrease in grants received and income in cash as of 30 June 2015 due to the decrease in the exchange rate of Indonesian Rupiah to US Dollar.

# **REGIONAL LEADERSHIP**







## RESEARCH AND DEVELOPMENT

SEAMEO BIOTROP's research and development program has always been carried out towards providing science-based information to enable communities and institutions to address critical biological problems and benefit from the real values and sustainable use of the region's tropical biological resources. Thus, the Centre ensures the continuous enrichment of the body of knowledge in tropical biology and, at the same time, provides options in helping solve the biological issue and concerns of its stakeholders in Southeast Asia and beyond.

The Centre completed 24 research projects during the first half of the fiscal year in review and started implementing 27 other more research projects during

the second half. All these research projects focused on the Centre's two program thrusts, namely: Tropical Biology for Community Welfare and Tropical Biology for Environmental Integrity. Specific areas include the following: food and feed security and safety; bio-energy development; tropical pest and disease management; value adding in natural products; biotechnology; biodiversity conservation and management; landscape restoration; management of tropical ecosystem functions and services; and ecosystem health monitoring.

Appendix 1 lists the complete titles and proponents of all the research projects.

### Research Projects by Centre Researchers and Partner-Research Institutions

During the first half of the fiscal year in review and through the funding support from the Government of Indonesia, the Centre completed 15 research projects, i.e. 10 by the Centre's researchers and five by partner-agencies. Of this number, nine research projects addressed concerns on tropical biology for community welfare, while six on tropical biology for environmental integrity.

For the second half of the fiscal year, the Centre started implementing 19 research projects involving 11 Centre researchers and eight partner-institutions. Majority of these projects (i.e. 12) are geared toward addressing issues on tropical biology for community welfare.



## PhD Thesis Grants Program

Launched in 2011 and supported by the Government of Indonesia's DIPA fund, the program aims to increase the number of highly qualified researchers and lecturers working in government research agencies and higher education institutions in Indonesia. The program is also the Centre's way of recognizing the potentials among PhD students to produce relevant research and to help them establish their careers. Since it was launched, the program has benefited 40 PhD students from 22 Indonesian institutions.

In FY 2014/2015, the Centre continued to support six PhD students in completing their research theses in 2014 and awarded four new grants in 2015. The grantees are from 10 universities and research institutions pursuing their PhD degrees at the Institut Pertanian Bogor (IPB).



## Joint Research Grants Program

BIOTROP's Joint Research Grants Program is meant to promote scientific collaborations among government research and academic institutions towards addressing common development concerns in Southeast Asian countries in line with the Centre's program thrusts.

The Centre awarded grants to two Indonesian research projects in March 2014 with research partners from Malaysia and the Philippines. The abstracts of the selected research projects which were completed in December 2014, are as follows:

- 1. The Search for Novel Drugs: Assessing the Biodiversity and Antimicrobial Activities of Fungal Leaf Endophytes Associated with Philippine and Indonesian Mangroves**

"A total of 351 isolates of endophytic fungi from seven different morphospecies were isolated from mangrove leaves collected in Barru, Segeri and Maros, South Sulawesi, Indonesia and in Bolong and Cawit regions

of the Zamboanga Peninsula, Philippines. Seven species of mangrove as host were collected from two countries, namely *Rhizophora stylosa*, *Sonneratia alba*, *Sonneratia caseolaris*, *Avicennia marina*, *Lumnitzera racemosa*, *Excoecaria agallocha* and *Acanthus ebracteatus*. In general, the number of isolates and morphospecies of endophytic fungi were relatively similar, regardless of mangrove types as hosts and sampling sites. Five species of fungi identified were of genus *Guignardia*, *Diaporthe*, *Xylaria*, *Cottony* and *Cladosporium*. The antagonism test conducted against test bacteria (*Staphylococcus aureus*, *Salmonella typhi*, *Pseudomonas aeruginosa* and *Escherichia coli*) showed that ten isolates of endophytic fungi (2.85%) were potential to produce antibacterial compounds with inhibition zone diameter from 5.5 to 18.5 mm. Detection on isolate fraction after being analyzed using thin layer chromatography showed that the class of antibacterial compounds were suspected as saponins, terpenoids and alkaloids."



## 2. Biodiversity and Antiproliferation Activities of Indonesian Java Chilli, *Piper retrofractum* Vahl. against Breast Cancer Cells (MCF-7)

“Piperine is an active component in Java chili fruit (*Piper retrofractum* Vahl.) that serves as an anticancer ingredient. Java chili fruits were extracted and tested *in vitro* against breast cancer cells MCF-7 by means of the MTT-assay. The chili fruits used as samples originated from eleven locations. The analysis of phytochemicals showed that all Java chili extract contained flavonoids and alkaloids in addition to steroids. The highest anticancer

concentration was obtained from the Java chili fruit extracts derived from Air Naningan 2 Lampung with IC<sub>50</sub> value of 4.35 µg/mL. All Java chili fruit extracts can inhibit cancer cells MCF-7 at a concentration of 250 µg/mL.”

In 2015, the Centre granted fund to another joint research project involving researchers from Indonesia and the Philippines. The research project is about “Assessing Ecological Services and Food Security Potentials of Agroforestry Landscapes in Southeast Asia: Case of Makiling Forest Reserve in the Philippines and Way Betung Watershed in Indonesia.”

## Youth Environmental Outreach (YEO) Grants Program

As one of the Centre’s special initiatives under its 9<sup>th</sup> FYDP, the YEO Grants Program aims to heighten the roles of youth in realizing the real values of tropical biology for community welfare and environmental integrity by supporting the implementation of meritorious action research project proposals from deserving youth organizations.

ECOLOGICA, the first recipient of the Centre’s YEO Grants Program for 2014 completed an action research titled “Organic Verticulture Gardening for Community Household Food Security and Environmental Sustainability”. The project benefited 40 households in Cibanteng Village, Ciampea, Bogor, in maximizing the available limited land and space of village households to become productive for vegetable and medicinal plant production, thereby helping them to address their food and nutritional needs.

For the second half of the fiscal year in review, the Centre continued to support three youth organizations to carry out new action research projects until December 2015. These projects are:

1. Urban Farming for Green City Life by Yayasan Muslim Cendekia Bogor;
2. Community-based Agroforestry Enterprises by Indonesian Green Action Forum (IGAF);
3. Non-Formal Education for Kids on Environmental Conservation by Sekolah Rimbawan Kecil (SERINCIL).







## Internationally-Funded Research Projects

The Centre hosted the kick-off meeting with Global Innovation Initiative (GII) and the British Council for the project on “Establishing a Network of Research Excellence for Mine Reclamation in Southeast Asia” and back-to-back with the workshop on “Mine Reclamation and Mine Water Management-Best Practices in the United Kingdom and Indonesia” on 27-29 April 2015. The meeting and workshop were aimed to finalize the strategies and work plans for the two-year collaborative research project involving SEAMEO BIOTROP, Bangor University, UK; Western Carolina University, USA; Institut Pertanian Bogor (IPB), Indonesia; Aberystwyth University, UK; Universitas Diponegoro, Indonesia; Institut Teknologi Bandung (ITB), Indonesia; Universitas Brawijaya, Indonesia supported by PT Bukit Asam, Indonesia. The total budget of the project is USD 638,073.5 consisting of USD 227,938.48 from the British Council while the rest is from the collaborating institutions.

The project aims to further understand and build capacity approaches to remediate and transform landscapes affected by extractive industries in Indonesia such as mining. The project activities include research, seminar and workshop, researchers and students exchange as well as field experiment which will be conducted at PT Bukit Asam site, a state owned coal mining in South Sumatera Province of Indonesia. The research components will focus on:

1. Elucidating the complex processes leading to the generation of acidic and metalliferous coal mine drainage in a tropical climate;
2. Developing knowledge based on evidence for effective long-term mine water remediation strategies and best practices that will benefit Indonesia as well as other extractive industries across Southeast Asia and other humid tropical regions;
3. Generating trial and monitor techniques for the sustainable phyto-remediation of particulate coal mine waste using native plant species.

Starting in May 2015, two Master degree students from Institut Pertanian Bogor (IPB) and another from Institut Teknologi Bandung (ITB), and four undergraduate students from Universitas Brawijaya have been conducting preliminary experiments on acid mine drainage and large scale compost production at PT Bukit Asam.

SEAMEO BIOTROP’s Director Dr Irdika Mansur and Mr Budi Kresno from PT Bukit Asam, on behalf of the Indonesia research partner-institutions, visited the UK to learn more on passive treatments of acid mine drainage techniques, reclamation of ex-mine sites, and industrial scale of compost production from 26 July to 4 August 2015.



# TRAININGS AND OTHER LEARNING EVENTS

## Regular Training Programs, Seminars and Workshops

SEAMEO BIOTROP enhanced the capacities of 1,044 individuals from 11 SEAMEO member countries as well as from other countries through the 21 national and 4 regional/international learning events (i.e. training courses, workshop, seminars and focused group discussion) that it conducted during FY 2014/2015 (See Appendix 3).

Some highlights of the regional/international learning events are as follows:



- **Seminar-Workshop on Application of Nuclear Techniques for Increased Agriculture Production and Regional Coordination Meeting on Integrated Utilization of Cereal Mutant Varieties in Crop/Livestock for Climate Smart Agriculture**

SEAMEO BIOTROP hosted back-to-back activities related to nuclear application in agriculture with the Joint UN Food and Agriculture Organization and International Atomic Energy Agency (FAO/IAEA) Division for Nuclear Techniques for Food and Agriculture. These activities were the Seminar-Workshop on Application of Nuclear Techniques for Increased Agriculture Production on 18-19 August 2014 and the Joint FAO/IAEA Division Second Regional Coordination Meeting (RCM) of its Coordinated Research Project on "Integrated Utilization of Cereal Mutant Varieties in Crop/

Livestock for Climate Smart Agriculture" on 20-21 August 2014 at the Centre's headquarter in Bogor. Both the seminar-workshop and RCM were aimed to share achievements and identify new research and capacity building prospects and collaboration on nuclear application in food and agriculture among the 30 participants from the 10 countries involved in the said FAO/IAEA regional coordinated project. The countries include Austria, China, Kuwait, Macedonia, Malaysia, Mongolia, Nigeria, Peru, United Kingdom and Indonesia.





- **Regional Training Course on Prevention and Control of Mycotoxin Contamination in Food and Feedstuff**

In collaboration with the Vietnam National University of Agriculture (VNUA), SEAMEO BIOTROP trained 29 researchers from Cambodia, Thailand and Vietnam on prevention and control of mycotoxins contamination in food and feedstuff on 25-30 September 2014 at VNUA in Hanoi, Vietnam. The training was the Centre's fourth regional offering since 2004. The training was designed in response to the growing global concern on ensuring food and feed safety against mycotoxins contamination such as aflatoxin, Fusarium toxin and ochratoxin. Mycotoxin contamination is prevalent in tropical and humid environments which generally characterize the Southeast Asian region.

The training was aimed to equip the participants with basic and applied knowledge and skills on the techniques for the analysis, prevention and control of mycotoxins in food and feedstuff and, in the process, establish a network of practitioners within the region. The course was expected to equip the participants to be able to (1) identify the factors affecting fungal growth and mycotoxin contamination in food and feedstuff; (2) isolate, enumerate and identify fungi infecting food and feedstuff; (3) analyze mycotoxins in food and feedstuff; and (4) practice appropriate methods to prevent and control mycotoxin contaminations in food and feedstuff.

- **Seminar on Transforming Ex-Mined Sites into Productive Landscapes**

**B** IOTROP and Kasetsart University (KU) conducted this seminar on 28 November 2014 at KU Faculty of Forestry in Bangkok, Thailand.

Attended by 40 mining managers and environmental officers, lecturers, researchers and graduate students from Thailand and Indonesia, the seminar discussed about best practices, technologies, challenges and opportunities in ex-mined site restoration in the two countries. The seminar also provided the venue to explore possible research and capacity building collaboration on the subject matter among the participating mining companies and academic institutions in Thailand and Indonesia.

The seminar surfaced the following areas for collaboration among mining stakeholders to enhance and sustain efforts in restoring ex-mined sites:

1. Developing guidelines on formulating clear purposes and restoration plan from the onset of mining operation;
2. Considering the variation in the types of mining industries existing in the region as this has implication on the type of reclamation to be done and the technologies needed;
3. Creating awareness among stakeholders on the appropriate closure plan for the mined areas that would be beneficial to all towards ensuring its maintenance once the restored site is turned over to the communities/local government;
4. Documenting, compiling and sharing best practices through publication, seminar, training, public dialogues, cross-visits and other appropriate learning materials and events.

- **Regional Seminar-Workshop on Harmonizing Methods in Risk Assessment and Management of Forest Invasive Alien Plant Species in Southeast Asia**

**S**EAMEO BIOTROP and the UN Food and Agriculture Organization Regional Asia Pacific (FAO RAP Office) co-organized a seminar-workshop on "Harmonizing Methods in Risk Assessment and Management of Forest Invasive Alien Plant Species in Southeast Asia" on 2-5 December 2014 at the Centre's headquarter in Bogor. The seminar-workshop convened 27 participants from Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Thailand and Vietnam to arrive at a consensus in adopting a more harmonized approach in risk analysis of forest invasive alien plant species in the region. The seminar-workshop was also supported by the Convention on Biological Diversity (CBD) Secretariat, Commonwealth Scientific and Industrial Research Organization (CSIRO), CABI, National Institute for Agro-Environmental Sciences (NIAES)-Japan and the FORIS Project of the Ministry of Forestry of Indonesia.

Among the seven recommendations formulated by the seminar-workshop participants was to "Develop

a region-wide long- and short-term capacity building program to improve individual and institutional capabilities to address gaps in implementing risk analysis of forest invasive alien plant species in collaboration with UN agencies and other relevant international and regional organizations." The Centre and FAO RAP Office co-published the Proceedings of this seminar-workshop.





- **National Seminar on Promoting Research on Forest and Land Fire Mitigation, Adaptation and Impact to Human and Biodiversity**

For the first time, SEAMEO BIOTROP ventured on tackling the issue on forest and land fires through a National Seminar on Promoting Research on Forest and Land Fire Mitigation, Adaptation and Impact to Human and Biodiversity on 28 April 2015 at its headquarter in Bogor.



This one-day seminar generally was aimed to provide an overview of past and current research works on forest and land fires towards analyzing the gaps and recommending appropriate research agenda for such gaps. It featured research experiences of experts from the Institut Pertanian Bogor, University of Liverpool in United Kingdom, University of New South Wales in Australia, University of Lund in Sweden and the Ministry of Environment and Forestry of Indonesia. These past and current research works will be from Indonesia, United Kingdom, Australia and Sweden.

Copies of proceedings of the seminar workshop are available at SEAMEO BIOTROP library and also accessible at its website.

## Quarterly Public Seminars

The Centre also continued to organize Quarterly Public Technical Seminar Series featuring speakers from various disciplines in accordance with the Centre's program thrusts. The seminars conducted in FY 2014/2015 were as follows:

1. "From Project Sketch to Journal Publication: Research on Land Cover and Its Consequences for Plant Diversity" by Dr Katja Rembold from Goettingen University, Germany on 25 August 2014;
2. "Documenting Fungal Endophytes from Philippine Mangroves for Drug and Enzyme Discovery" and "Phylogenetic Analysis of Fungal Endophytes from Philippine Mangroves" by Prof Dr Thomas Edison E. Dela Cruz and Mr Carlo Chris S. Apurillo from the University of Santo Tomas (UST), Philippines and Dr Kustiariyah Tarman from Institut Pertanian Bogor (IPB) on 10 September 2014;
3. "Starch Accumulating Palms in Indonesia" by Prof Yoshinori Yamamoto from Kochi University, Japan on 29 September 2014.



# **REGIONAL VISIBILITY**





## RECOGNITION AND BENCHMARKING

### Partnerships and Linkages



As a major function, SEAMEO BIOTROP has continued to establish partnerships and linkages through research and development initiatives, capacity building, consultancy services and technical assistance to communities, private and government institutions in Indonesia and SEAMEO member countries.

In FY 2014/2015, SEAMEO BIOTROP entered into 23 national and 5 regional/international Memoranda of Understanding and Agreements (MoU/A) and maintained its collaboration with 14 national institutions.

At the national level, the Centre sealed collaboration with 3 local government agencies, 1 research centre, 3 academic institutions, 10 private companies and 1 Non-Governmental Organization (See Appendix 6).

The Centre continued its active involvement in sorghum development by signing a Memorandum of Understanding (MoU) with Bluline Venture on 28 April 2015 at the Centre's headquarter in Bogor. The MoU was aimed to support the government's program in reaching food sovereignty based on Food Constitution No. 18 year 2012.

At the international level, the Centre formalized its partnerships with 5 regional and international institutions.

To further support R&D and human resources development, the Centre signed two Memoranda of Understanding (MoU) with the Kuala Lumpur-

based Human Life Advancement Foundation (HLAF) on 12 November 2014. The first MoU is a general collaboration in research and development in areas of concern where HLAF and BIOTROP have common interests. This collaboration is effective until March 2018. The second MoU stipulates HLAF's provision of at most four scholarship grants for Indonesians wanting to pursue PhD and post-doctoral programs that BIOTROP is expected to administer within the next four years starting in 2015.

The Centre also formalized collaborations with the United Nations Food and Agriculture Organization and Vietnam National University of Agriculture in conducting a regional seminar-workshop and a regional training course, respectively.

On the other hand, the Centre extended its inter-centre collaboration with two other SEAMEO Centres, namely: Regional Open Learning Centre (SEAMOLEC) and Regional Centre for Vocational and Technical Education and Training (VOCTECH) to implement a "Human Resource and Institutional Capacity Building Program between Indonesia and Brunei. Thus, the collaboration also involves Brunei's Wasan Vocational School (WVS) and Indonesia's Vocational Education Development Centre for Agriculture (VEDCA). The collaboration covers skills development of staff and students, sharing of information and material resources and facilities, and establishment of functional linkages with other relevant institutions towards exploring mutually beneficial activities.



## Consultancy Services

The Centre is recognized by various government agencies and private institutions in Indonesia to be a source of technical assistance in line with its program thrusts. Among the major technical assistances provided by the Centre's researchers and officers during the period in review were as follows:

1. Capacity Building on Risk Analyst of Invasive Alien Plant in Mount Gede Pangrango National Park on 28-29 October 2014 for officers of Gunung Gede Pangrango National Park, through Dr Soekisman Tjitrosoedirdjo and Dr Sri Sudarmiyati Tjitrosoedirdjo as resource persons;
2. IUMS Outreach Program on Food Safety and International Conference in Mycotoxin held in Yogyakarta, Indonesia, 14-15 November 2014 organized by Faculty of Agricultural Technology, Universitas Gadjah Mada, through Prof Dr Okky Setyawati Dharmaputra as resource person;
3. Capacity Building on the Implementation of Pest Surveillance based on ISPM No. 6 (SPS WTO) on 16 December 2014 for officers of Crop Protection Agency of DKI Jakarta through Dr Idham Sakti Harahap as resource person;
4. International Food Information Council (IFIC) Foundation's EXPO 2015 Communications Summit held in Rome, Italy on 20 May 2015, through Prof Dr Bambang Purwantara as resource person;
5. Capacity Building on Spatial Planning and Monitoring for officers of City Planning Department of Bekasi, West Java on 6 May 2015, through Mr Harry Imantho, M.Sc as resource person;
6. Provision of spatial data and analysis in support of research and other development-related activities of 2 local government agencies, 1 central government agency, 2 research institutions, 4 private institutions, 4 research institutions and 5 non-governmental institutions through the Centre's Knowledge Management Department. The institutions include: (a) Local Government of North Halmahera Regency; (b) Local Government of Kepulauan Riau Province; (c) BBSDLP, Indonesian Center for Agricultural Land Resources; (d) Ministry of Marine Affairs and Fisheries; (e) PT Barn Cita Laksana; (f) PT Riam Kecubung; (g) CV Karisma Scientific; (h) PT Bennatin Surya Citra; (i) WALHI; (j) Forum Orangutan Indonesia; (k) Yayasan CARITAS; (l) The Nature Conservancy; (m) Macaca Nigra Project; and (n) Center for Research and Public Services (LPPM) of Institut Pertanian Bogor (IPB), Hasanuddin University and Syiah Kuala University.





## Students' Internships/On-the-Job Trainings

In FY 2014/2015, the Centre facilitated the internship and/or on-the-job training of 177 students and staff from 34 learning institutions (See Appendix 2). This number is broken down as follows: 60 high school, 26 vocational school/diploma and 88 university students as well as 3 teachers of agricultural vocational schools in Sumbawa and Jakarta.

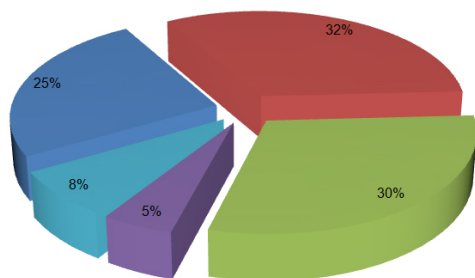
These internships and/or on-the-job trainings were on the following areas: biotechnology, aquaculture, microbiology, tissue culture, waste management, food and feed analysis, mushroom cultivation techniques, information technology and office administration.



## Visitors

In FY 2014/2015, a total of 2,598 people from 37 national and regional/international institutions consisting of 10 universities, 13 high schools and vocational schools, 12 private companies, 2 government agencies and 3 international organizations visited SEAMEO BIOTROP. Among the visitors were scientists and lecturers from Japan, Nepal, Thailand and United Kingdom other than from Indonesia.

The purpose of their visits were primarily to learn about the general programs and activities and technologies being implemented by the Centre in relation to the their school subjects in biology and environment and office responsibilities as well as to seek collaboration with the Centre.



■ University  
■ Private company  
■ International organization  
■ High school/Vocational  
■ Government agency



## INFORMATION EXCHANGE

### Establishment of Knowledge and Technology One-Stop Shop

The Centre's Knowledge and Technology One-Stop Shop was launched on 23 February 2015 as part of its 47<sup>th</sup> anniversary celebration. The shop's inauguration was officiated by SEAMES' Director Dr Witaya Jeradechakul, accompanied by SEAMEO BIOTROP officials namely: Dr Irdika Mansur (Director), Prof Dr Bambang Purwantara (former Director), Dr Jess C. Fernandez (Deputy Director for Program) and Prof Wong Sek Man (Governing Board Member from Singapore).

Located at SEAMEO BIOTROP's campus in Bogor, the shop is among the Centre's 15 special initiatives under its 9<sup>th</sup> FYDP. The shop was conceptualized in response to the information needs about the Centre from its various visitors. The Centre receives an average of 600 visitors yearly consisting of students, teachers, private entrepreneurs, researchers, government officials and community residents.



The shop showcases SEAMEO BIOTROP's technologies and knowledge products for public consumption. It is also expected to promote better understanding and appreciation of the real values of tropical biology among the Centre's clients and partners in accordance with the Centre's vision statement.

The shop features a display area, an orientation room that can accommodate about 25 people and a lounge area where visitors can relax and enjoy some refreshments after going through the displays and/or receiving an orientation on the Centre's products and services. The shop also provides a corner that will specifically feature either a research partner-institution or a private entrepreneur per month to also promote its products and services. Free technical consultations with the Centre's scientists and research staff will also be available to the public at the shop on a scheduled basis.





## Books

During the fiscal year in review, the Centre, through the funding support from the Government of Indonesia (DIPA), produced 5 books as follows (See Appendix 4):

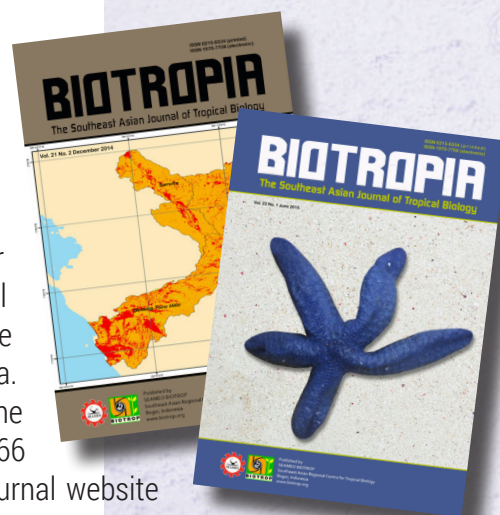
1. Decision Support System on Spatial Planning for Food Security (Case Study in Jawa Barat Province);
2. Rayap Hama Baru di Kebun Kelapa Sawit (Termite, a New Pest in Oil Palm Plantation);
3. Apotek Alam Bumi Dayak Kanayatn (Natural Pharmacies from Dayak Kanayatn Region);
4. Kultur Jaringan Rumput Laut Kotoni (*Kappaphycus alvarezii*) (Tissue Culture on Cottoni Seaweed (*Kappaphycus alvarezii*));
5. Fungi, Mycotoxins and Their Control in Indonesian Food and Feedstuff.



## Journals and Newsletters

### • BIOTROPIA

The Centre published two issues of its bi-annual journal BIOTROPIA (i.e. Vol. 21 No. 2 and Vol. 22 No.1). Currently, BIOTROPIA receives an average of 10 manuscripts per month. Thus, for its first issue for 2015 (Vol. 22 No. 1), BIOTROPIA published eight instead of the usual six articles and also used A4 paper size. BIOTROPIA adopted the A4 paper size to follow the current rule of journal size in Indonesia. BIOTROPIA is also published in online version (e-journal). The online version can be accessed at <http://journal.biotrop.org>. A total of 266 articles have been electronically uploaded in the Centre's online journal website and prospective users are free to access and download them.



### • BIOTROP Courier

Four issues of BIOTROP Courier, the Centre's quarterly newsletter, were published during the fiscal year in review (i.e. July-September 2014, October-December 2014, January-March 2015 and April-June 2015 issues). The issues contain highlights of completed major activities of the Centre for the information of its stakeholders and the general public.

During the fiscal year under review, there had been an increase on request for BIOTROP Courier copies due to exhibitions held or joined by BIOTROP, from visitors, partner institutions, libraries of national and international universities, subscribers from various national and international research institutions, and exchange partners.





- **Articles, Technical Papers in Peer-Reviewed Journals and Proceedings**

In FY 2014/2015, SEAMEO BIOTROP published 16 articles in peer-reviewed journals and 2 articles in refereed proceedings. Most of these journal articles were the results of the scientists' research projects with the Centre that were funded through DIPA. On the other hand, 3 technical papers were published in proceedings of international conferences/congresses/symposia.



## Library Services and Database

Currently, the Centre's library holds and manages 13,213 book collections. A total of 4,023 collections are related to the Centre's program thrust on Tropical Biology for Community Welfare (1,064 books on pest and diseases management; 1,294 books on biosystematics; 142 books on natural products; 1,365 books on biotechnology; 158 books on food and feed security and safety). On the other hand, 1,361 collections are related to the Centre's program thrust on Tropical Biology for Environmental Integrity (240 books on biodiversity conservation and management; 829 books on water, waste and ecosystem management; 121 books on landscape restoration; 119 books on management of tropical ecosystem functions and services; 50

books on ecosystems health monitoring). Catalog of collections can be accessed through <http://lms.biotrop.org/opac>.

During FY 2014/2015, a total of 289 people from 40 national and regional/international institutions consisting of 25 universities, 5 research institutions, 2 private companies, 5 government agencies and 3 international organizations visited the Centre's library.

The Centre's library also received 51 books as gifts from various institutions. The books are on pest and disease management, plant protection, prevention and control of mycotoxin contamination, biotechnology and popular scientific books. The Centre's library also registered 200 serial publications (journals, proceedings, newsletters, annual reports and magazines), consisting of 47 as gifts and 153 as exchanges.

The Centre packaged and published the knowledge and information generated through its Centre's research, workshop, seminar and training activities through DIPA funding. For FY 2014/2015, a total of 160 new publications were added to the database. It covers articles in refereed journals, books, monographs, articles and posters in proceedings, research and training reports, modules, journals and newsletters.





## Website Maintenance and Development of Other Audio-Visual Materials

The Centre shares and advertises its activities, products and publications on its website (<http://www.biotrop.org>). During the fiscal year in review, 78 articles were uploaded in BIOTROP's website consisting of 54 articles on the Centre's activities, 8 highlights of research results, 12 articles on events of SEAMEO Secretariat and other SEAMEO Centres and partner institutions and 4 book reviews. On the other hand, 63 information updates were also uploaded on the new Centre's publications section (e.g. proceedings, books, research reports, training/seminar reports, newsletters, annual report and selected photo gallery).

The Centre's website received 37,880 visitors during the period in review or 18.40 percent increase compared to last fiscal year (31,994 visitors). Of this number, 63.1 percent were new visitors.

## Promotion and Media Exposure

In FY 2014/2015, the Centre's Knowledge Management Department promoted the Centre's products, activities and other special initiatives to 28 local government agencies, research centers and academic institutions in Jakarta, Bogor and Bandung. The promotion visits distributed information on the Centre's Biodiversity Conservation Photo Competition, PhD Thesis Grants Program, Youth Environmental Outreach (YEO) Grants Program, Web-based Knowledge Management Centre on Tropical Biology, Quarterly Public Seminar Series, BIOTROPIA Journal and Second International Conference on Tropical Biology.

The Centre produced and disseminated about 500 leaflets on the Second International Conference on Tropical Biology, 100 leaflets on Call for PhD Grants Program, 100 leaflets on Call for Joint Research Program, 100 leaflets on YEO Grants Program, 100 leaflets on Web-based Knowledge Management Centre on Tropical Biology, 10 posters on Centre Products and Services, 50 posters on Call for Quarterly Public Seminar Series and brochures on Centre products and services and 100 brochures on Spatial Data Provision and Analysis Services.

The Centre also maintained and updated its virtual knowledge management centre on tropical biology (<http://kmtb.biotrop.org>), which provides exhaustive knowledge and information in line with the Centre's two program thrusts. A total of 43 relevant articles were uploaded in the website during the period in review.

A total of 13,923 digital photos were added into BIOTROP's photo database concerning the various activities undertaken by the Centre during the fiscal year in review. This database is accessible at BIOTROP's intranet system.

The Centre also shared and advertised its programs, products and services through its official website (<http://www.biotrop.org>).





## SPECIAL PROGRAM

### Indonesian Biotechnology Information Center (IndoBIC)

IndoBIC implemented one regional workshop, six seminars, two focus group discussions and one visit during the period in review. The number of activities carried out by IndoBIC have increased significantly through the years due to more collaborations and partnerships developed with various government and private institutions in Indonesia. These activities were supported by several partner institutions, namely: The International Service for the Acquisition of Agri-biotech Applications (ISAAA), ABSP II, CropLife Indonesia, CropLife International, Program for Biosafety (PBS), SEAMEO Regional Center for Graduate Study and Research in Agriculture (SEARCA) Biotechnology Information Center, Sugarcane Farmers Association (APTRI), Indonesian

Agency for Agricultural Research and Development (IAARD) of the Ministry of Agriculture of Indonesia, Indonesian Vegetable Research Institute (IVRI), Indonesia Consortium of Agricultural Biotechnology (ICAB), National Outstanding Farmers and Fishermen Association (NOFA), Indonesian Society for Agribusiness and Agroindustry (ISAA), Indonesia Seed Association (ISA) and various Indonesian universities. A total of 422 individuals from government institutions, private sectors, academe, farming communities and media practitioners benefited from IndoBIC's activities.

The notable activities are as follows:

- **Roundtable Discussion for Media Practitioners “A Tribute to the 69<sup>th</sup> Anniversary of the Republic of Indonesia from Biotechnology Community”**



A roundtable discussion that focused on “Seed Technology to Support Food Self-Sufficiency” was convened for media practitioners in Hotel Mulia, Jakarta on 14 August 2014. The event was conducted as a tribute to the 69<sup>th</sup> anniversary of the Republic of Indonesia from the Biotechnology Community.

The roundtable discussion was facilitated by Dr Erna Maria Lokollo of the Indonesian Centre for Agricultural Socio-Economic and Policy Studies of Indonesian Agency for Agricultural Research and Development, Ministry of Agriculture featuring Prof Dr Agus Pakpahan of Ministry of Agriculture, Dr Arief

Daryanto of Management and Business School of Institut Pertanian Bogor (IPB), Ms Nurmalasari of PT Perkebunan Nusantara XI and Mr Winarno Tohir of National Outstanding Farmers and Fishermen Association (NOFA).

The discussion was focused on enhancing media awareness and on the science of agri-biotechnology and its contributions to agricultural development, food security and environmental sustainability in a changing climate. The event was also conducted to enhance media capacities in communicating crop biotechnology, as well as promote science-based, responsible and accurate reporting on biotechnology among media practitioners in Indonesia. A total of 44 tri-media practitioners, government officials, universities and industries participated in this event.





- **Biotechnology Workshop on Issue Management**

Twenty-eight agriculture and biotechnology experts, representatives of prominent organizations from different fields, university professors, government officials, farmers, industry leaders and managers concluded a biotechnology workshop on issue management in Bogor, Indonesia on 15-16 September 2014.

The workshop was aimed to learn the latest risk communication strategies and techniques that would support efforts to promote the objective benefits of agro-biotechnology in Indonesia to a diverse audience; and to provide an interactive platform that will enable participants to share ideas and experiences on how to adopt and deploy the latest risk communications techniques in an Indonesian context. Jay Byrne of V-Fluence Interactive led the sessions of the two-day workshop and Jill Kuehnert of Seed Stories facilitated the workshop sessions and presented the Golden Rice lessons and case study.



- **Seminar on Stewardship of Late Blight Resistant Potato**

This seminar on Stewardship of Late Blight Resistant Potato was held for 32 farmers, agricultural officers and scientists on 18 December 2014 at the Centre's headquarters. The resource persons of this seminar were Prof Dr Bambang Purwantara, SEAMEO BIOTROP's former director; Prof Max J. Pfeffer, Senior Associate Dean, College of Agriculture and Life Sciences, Cornell University, USA; Prof Desiree Hautea, Regional Coordinator SEAsia ABSP II, University of the Philippines at Los Banos; and Prof Dr M. Herman, Indonesia ABSP Coordinator. The event was aimed to inform participants about the advantages of Late Blight Resistant (LBR) potato; highlight the process of variety registration of LBR potato; as well as discuss the standard operational procedures (SOP) of seeds multiplication, cultivation and management of biotech potato.





- Seed Industry Visit



A total of 27 participants from national and local media, farmers and members of the Biosafety Commission participated in a three-day visit to corn and sugarcane research stations and farms. The event was aimed to provide an overview of the corn and sugarcane seed industry in Indonesia. The participants visited Syngenta seed plant in Pasuruan and had interactions with farmers in their corn fields in Probolinggo and Jember.

Participants also discussed with Mr Winarno Tohir, the chairman of NOFA and Mr Arum Sabil, the chairman of Sugarcane Farmers Association (APTRI) in Jember about the challenges of sugar self-sufficiency and the role of technology in agriculture. Furthermore, Prof Agus Pakpahan, the chairman of Indonesia Biosafety Commission discussed the need for the latest technology for farmers in order to attain food sovereignty.

- Seminar on Global Status of Biotech Crops in 2014



Dr Clive James, Founder and Emeritus Chair of the International Service for the Acquisition of Agri-biotech Applications (ISAAA) shared the recent global developments in biotechnology during a seminar on “Global Status of Biotech/GM Crops in 2014” held in Jakarta on 11 February 2015.

Dr James revealed that in 2014, a record of 181.5 million hectares of biotech crops were grown globally, an increase of more than six million hectares since 2013. With Bangladesh as the latest addition, there were 28 countries growing biotech crops in 2014. Dr Clive also highlighted a significant development in biotechnology in Asia. Developing countries such as Vietnam and Indonesia are close to the commercialization of biotech crops, which is expected to begin in 2015. This includes several hybrids of biotech maize for importing and planting

in Vietnam and drought tolerant sugarcane for planting as a food crop in Indonesia.

The seminar was attended by 150 stakeholders consisting of scientists, academe, policy makers, farmers, journalists and entrepreneurs.



# **SOLID RESOURCE BASE**







## STAFF DEVELOPMENT

The Centre provided staff development opportunities to 87 (72%) of its administrative staff, technical staff and scientists by attending trainings, conferences, seminars, workshops and symposia in Indonesia and abroad during the period in review (Appendix 5). These staff development activities consisted of 65 national, 1 regional and 3 international events. Eight of these events were organized through the Centre's capacity development program led by Human Resources Management Department as follows:

1. Trainings and Workshop exclusively for SEAMEO BIOTROP staff
  - a. "Internal Audit ISO 9001:2008" for administrative staff;
  - b. "Proper Weight and pH Measurements Practice" for laboratory technicians and operators;
  - c. "Equipment Maintenance, Inspection and Interpretation for Calibration Equipment in Laboratory" for laboratory technicians and operators;
  - d. "Living Out Our Core Values" for all.
2. Trainings attended also by staff of other SEAMEO Centres in Indonesia as part of SEAMEO Mentoring Program
  - a. "Business Correspondence Writing" for secretaries and administrative staff;
  - b. "Effective Supervisory Leadership" for supervisors and managers;
  - c. "Diplomatic Protocol Procedures" for supervisors, administrative staff, and drivers;
  - d. "e-Book Development" for researchers and IT and technical staff.





## Facility Improvement and New Equipments

During the period in review, SEAMEO BIOTROP completed the renovation of the following facilities: office of the Indonesian Biotechnology Information Center (IndoBIC), Pest and Diseases Laboratory building, and motorpool office and garage.

To support research and laboratory operations, the Centre acquired laboratory and office equipments and furnishings. All these renovations and acquisition of equipments and furnishings are recorded on the database for Accounting Management Information for Government's Properties and reported to the Secretariat General, Ministry of Education and Culture of Indonesia. Laboratory equipments were purchased to strengthen and expand the scope of the Centre's research activities and services.

The Centre also increased its bandwidth for internet access from 50 Mbps in 2014 to 80 Mbps (international plus local connections) in 2015 using leased line and fiber optic connection. In this fiscal year, the Centre also continued to use cloud services to host its information system and websites.





## Product Development and Services

The Centre manages a Product Development and Services Department, which produces high quality commercial biological products, such as forest and fruit tree seedlings, food crops, ornamental plants, mushroom and organic fertilizer. During FY 2014/2015, a total of 298,134 seedlings of Teak (*Tectona grandis*), Banana (*Musa sp.*), Jabon (*Anthocephalus cadamba*), Satoimo (*Colocasia esculenta var antiquorum*) were produced by the laboratory through tissue culture technique.

Since 2000, the Centre distributed 2,627,334 seedlings produced by its tissue culture laboratory to various communities, government institutions and private companies in Indonesia through various collaborative arrangements. The Centre's tissue cultured seedlings of Teak, Bananas, Jabon, Japanese taro and some species of ornamental plants have spread to almost all provinces in Indonesia. The tissue culture laboratory has also supported an internship program which has involved over 60 high school and college students per year and provided training for vocational school teachers and others who wished to acquire skills on tissue culture for plant propagation.

On the other hand, the department also produces Oyster mushroom (*Pleurotus ostreatus*) and Wood Ear mushroom (*Auricularia auricula*). During the period in review, a total of 35,390 mushroom seeds (baglogs) were distributed to private companies and individual clients.

SEAMEO BIOTROP's Services Laboratory is dedicated for testing services both for internal and external customers and are operating under a Quality System of Laboratory Management in accordance with ISO/IEC 17025:2005 and accredited by Indonesia's National Accreditation Committee. The services include analyses for water, air, soil, plant, food and feedstuff. During FY 2014/2015, the Services Laboratory received 7,390 samples and served 941 customers.





## Financial Viability

The proportion and composition of the Centre's Capital and Operational Funds were revised due to the new regulation of the Government of Indonesia, to reduce capital expenditure and expand operating funds to support the Centre's program and activities. Thus, the Operating Funds from the Government of Indonesia increased by 0.32 percent.

This increase was for raising of salary and wages of the staff and for repair and construction works and operational costs. Meanwhile, the Unallocated Funds decreased by 13.25 percent for renovating two of the Centre's dormitory units. The Centre's Other Funds

also increased by 12.42 percent as a result of the increase in the number of collaborative projects. But in total, the Centre recorded a decrease in grants received and income in cash as of 30 June 2015. The amount totaled to USD2,483,869 or 4.56 percent lower than the previous fiscal year (FY 2013/2014). This is attributed to the decrease in the exchange rate of Indonesian Rupiah to US Dollar.

The table below shows the amount of grants and income of the Centre for FY 2014/2015 compared to FY 2013/2014:

No.	Items	Fiscal Year	Fiscal Year	Variance	
		2014/2015*)	2013/2014**)	USD	%
		USD	USD	USD	%
1.	Capital Funds	508,354	600,477	(92,123)	(15.34)
2.	Operating Funds	1,262,013	1,257,935	4,078	0.32
3.	Special Funds	71,000	71,000	-	-
4.	Other Funds	259,168	230,535	28,632	12.42
5.	Unallocated Funds	383,334	442,609	(58,533)	(13.25)
	Total	2,483,869	2,602,556	(118,687)	(4.56)

Sources :

\*) BIOTROP Financial Audit Report FY. 2014/2015 (audited)

\*\*\*) BIOTROP Financial Audit Report FY. 2013/2014 (audited)

# APPENDICES





## Appendix I. SEAMEO BIOTROP's Research Projects in FY 2014/2015

No	Titles of Research Projects	Researcher/s	Objective	Target Beneficiaries	Output and Impacts Produced	Funding Sources	Partners
<b>A. On-Going National Research Projects from In-House Researchers and Partner Agencies</b>							
1.	Postharvest Quality Improvement of Nutmeg ( <i>Myristica fragrans</i> )	Prof Dr Okky Setyawati Dharmaputra, Santi Ambarwati, M.Si, Ir Ina Retnowati, Nijma Nurfadila, S.Si	<ol style="list-style-type: none"> <li>To identify Critical Control Point (CCP) in nutmeg's post harvest process, and prepare nutmeg HACCP (Hazard Analyse Critical Control Point) System.</li> <li>To give a recommendation on GHP (Good Handling Practice) of nutmeg in order to maintain its quality in terms of food safety which is very important for international trade.</li> </ol>	Farmer, collector and exporter	The research results could give a recommendation on Good Handling Practice of nutmeg to farmer, collector and exporter to maintain its good quality in terms of moisture content, percentage of damaged kernels, fungal infection, and aflatoxin contamination during storage.	GOI-DIPA	-
2.	Studies on the Pathway of Important Invasive Alien Plant Species and the Biology of <i>Chimonobambusa quadrangularis</i> and <i>Cestrum aurantiacum</i> at Gunung Gede Pangrango National Park	Dr Sri S. Tjitrosoedirdjo Dr Sukisman Tjitrosoedirdjo Setiabudi S.Hut Drs Imam Mawardi Indah Wahyuni S.Si Saiful Bachri, S.Si	<ol style="list-style-type: none"> <li>Studying the pathways of IAPS</li> <li>Observing the visitors' knowledge on IAPS by distributing a questionnaire</li> <li>Studying the biology of <i>Chimonobambusa quadrangularis</i> and <i>Cestrum aurantiacum</i></li> </ol>		<ol style="list-style-type: none"> <li>Recommendation on the prevention on the IAPS spread and educating people to be aware of problems on IAPS.</li> <li>Knowledge on the biology of <i>Chimonobambusa quadrangularis</i> and <i>Cestrum aurantiacum</i> for developing methods to control them .</li> </ol>	GOI	Gunung Gede National Park
3.	Herbicide Roundup 486 SL and Roundup Powermax Limited Field Efficacy Testing of Genetically Modified Product of Maize NK603	Dr Sri Sudarmiyati Tjitrosoedirdjo Drs Imam Mawardi Saiful Bachri, S.Si	The field testing of herbicide roundup to control weeds in Genetically Modified Product (GEP) Maize crop (NK603) under Confined Field Trial (CFT) condition.		<ol style="list-style-type: none"> <li>Proof of the effectiveness of Glyphosate herbicide, towards various weeds on GEP maize (NK603)</li> <li>Obtain sufficient data for expansion registration of Herbicide Roundup for GMO</li> </ol>	PT Branita Sandhini – Monsanto Indonesia	PT Branita Sandhini – Monsanto Indonesia

4.	RNA Isolation and Construction of cDNA Library of Sengon ( <i>Paraserianthes falcataria</i> ) Resistant to Bektor Pest II: Sequencing and Genomic Analysis	Dr Ir Ulfah J. Siregar, M.Agr Dr Ir Sri Hartati MS.	1. Isolate RNA and construction of cDNA library of sengon as materials for identification of two protease inhibitor genes 2. Further identification of those two protease inhibitor genes by sequencing and sequence analysis	Scientific community, government institutions, private enterprise and local community	1. Clones of cDNA library as material for further investigation of genes encoding protease inhibitor in sengon resistant to boktor pest 2. Sequence of genes encoding protease inhibitor in sengon resistant to boktor pest	GOI-DIPA	Perum Perhutani, Faculty of Forestry, IPB
5.	Development of Heavy Metal and Oil Spill Absorbent from Modified Waste Sludge of Paper Mill Factory	Dr Hilman Affandi Arif Nuryadin, B.Sc Maya Masita Novianti, M.Si	1. To modify cellulosic waste material for Super Absorbent Polymers (SAPs) 2. To determine the optimum concentration of SAP in nursery blocks material that could retain large quantities of water and nutrients when incorporated in the soil	Social community	The nursery block that can be used in arid areas	GOI-DIPA	PT Bukit Muria Jaya
6.	The Impact of Chemical Control of <i>Acacia nilotica</i> to Soil Arthropods and Other Animals in Savanna Baluran National Park, East Java, Indonesia	Dr Soekisman Tjitrosoedirdjo Dr Sri S. Tjitrosoedirdjo Setiabudi S.Hut Drs Imam Mawardi Indah Wahyuni, S.Si Saiful Bachri, S.Si	Triclopyr has been utilized in pasture intensively. In the context of <i>A.nilotica</i> control in Bekol savanna inside Baluran National Park it is important to understand its residual impact upon the environment. In this work, samples of sprayed grasses and weeds and brushed <i>A.nilotica</i> trees will be taken to detect a possible triclopyr residue, also soil sample will be collected to detect its residue chemically and its impact on the population of soil arthropods and others such as worm and other animals.		1. The data obtained in the previous research works has been utilized extensively, and the following results may complement the previous finding to strengthen the application of herbicide in savanna 2. The data may be utilized to suggest a possible utilization of herbicide for the management of invasive species in the National Park to the Minister of Forestry	GOI	Baluran National Park

7.	Spatial Model Design for Competitive Improvement of Small Medium Scales Enterprises (Case study : Bogor City)	Dr Hartrisari. H. Harry Imantho, M.Sc	To produce a spatial mapping model design of SMEs in order to improve the competitiveness of products nationally and internationally to improve the welfare of society.	Ministry of cooperation, BPS, SMEs Bogor, Ministry of Industry and Related Agency	To help decision-makers in the city of Bogor to make policy related to SME development especially for improving the competitiveness of products both nationally and internationally	GOI-DIPA	-
8.	Modeling Primary Productivity in the Java Sea: Climate Change and Anthropogenic Impact	Dr Vincentius Siregar Dr Alan F. Koropitan	To examine the dynamics of the natural ecosystem of the Java Sea, which is characterized by primary productivity and the impact of climate change and human activity through the organic and inorganic waste that goes through the rivers, where the approach used is a hydrodynamic-biogeochemical models developed by Koropitan (2008).	Scientific community	1. To make a contribution as a result of tropical coastal marine science, especially the physical effect (encouragement climate) and anthropogenic in marine trophic levels lower 2. The synthesis of climate change and anthropogenic impacts on the primary productivity of the Java Sea useful in determining the future of the Java Sea ecosystem vulnerability index.	GOI-DIPA	-



9.	Exploration of Essential Oil Potency as Alternative Fumigant and Detection of Insects Resistance Status to Phosphine in Warehouses of Food and Feed	Dr Idham Sakti Harahap Ir Sri Widayanti Trijanti A. Widinni Asnan, M.Si.	<ol style="list-style-type: none"> <li>1. To collect more insect samples that are already resistant to phosphine from food and feed storage facilities in DKI Jakarta, West Java and Banten Province,</li> <li>2. To explore the potential of essential oils from cinnamon, cardamom and nutmeg as fumigant against stored product insects,</li> <li>3. To fractionate and test the active fraction of essential oils from previous research that proved to be effective: clove and mint, against two categories of stored product insects; resistant and non-resistant strains to phosphine.</li> </ol>	Ministry of Agriculture, Plant Farmers, Plant Quarantine, Stakeholders	Information about the active fractions of essential oils that is expected to be more effective against stored product insect compared to their crude phase. Such information is needed to develop formulations of essential oils that can be applied as the alternative fumigant.	GOI-DIPA	-
10.	Plant Growth Promoting Rhizobacteria and Lemongrass-Based Biofungicide Efficacy to Control Ganoderma boninense	Maya Masita Novianti, M.Si Deden Dewantara E, SP Haryo Tejo Prakoso, S.Si Dr Hilman Affandi	<ol style="list-style-type: none"> <li>1. Examine the composition of rhizosphere bacteria in the soil around the root of healthy oil palm trees and oil palm trees attacked by <i>G. boninense</i></li> <li>2. Select the rhizosphere bacteria that could stimulate the growth of plants</li> <li>3. Examine the response from application of biofungicide from lemongrass essential oil and plant growth promoting rhizosphere bacteria around the root of palm oil trees</li> </ol>	Farmer	To find types of beneficial rhizobacteria on oil palm trees which has the potential to inhibit the growth of <i>G. boninense</i> . Application of these bacteria is expected to increase growth response from plant to inhibit the development of <i>G. boninense</i> around them, beside the application of biofungicide from lemongrass essential oil. If the integration method show a good result: integrated pest management technology to control BSR disease since in nursery	GOI-DIPA	PTPN III

11.	Application of HEC-GEO-HMS and SWAT Models in Upriver Flood Control of Ciliwung Watershed Upstream	Dr Ir Latief M. Rachman, MSc, MBA Dr Ir Yayat Hidayat, Msi Dr Ir DPT. Baskoro, MSc	<ol style="list-style-type: none"> <li>1. Obtain an effective vegetative technology by introducing and arranging several kinds of plants in combination with soil conservation techniques for controlling river discharge from Ciliwung Watershed Upstream.</li> <li>2. To prove and verify technical approaches to control flood in the form of dams, big dam (Ciawi Dam and Sukamahi Dam) and mini dams by simulating runoff retention in the form of increased depression water storage on several ways of river flow in Ciliwung Watershed upstream that feasible to be employed with feasible and acceptable cost and eliminate environmental negative impact.</li> <li>3. To compare the-effectiveness of vegetative and mechanic techniques (especially big dam and mini dam methods) for controlling upriver flood in Ciliwung Watershed upstream.</li> <li>4. To establish and set up strategy for implementation of simulation yields from vegetative and mechanic techniques for upriver flood control in Ciliwung Watershed Upstream to control flood in DKI Jakarta area.</li> </ol>	Government official, society and Stakeholder	<ol style="list-style-type: none"> <li>1. Characteristics and dynamics of Ciliwung River stream.</li> <li>2. Effectiveness of vegetative technique and its combination with soil conservation techniques for controlling discharge of Ciliwung River stream to minimize flood in Jakarta.</li> <li>3. Effectiveness of big dam mechanic technique (Ciawi Dam and Sukamahi Dam) for controlling discharge of Ciliwung River stream to minimize flood in Jakarta.</li> <li>4. Effectiveness of mini dam mechanic technique and combination with bio-pore holes techniques for controlling discharge of Ciliwung River stream to minimize flood in Jakarta.</li> <li>5. Location and capacity of mini dams technology for controlling discharge of Ciliwung River stream to minimize flood in Jakarta.</li> </ol>	GOI-DIPA	Department of Soil Science and Land Resources, Faculty of Agriculture, Institut Pertanian Bogor
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12.	Detection of Coral Reefs and Marine Benthic Habitat Mapping Using Hydroacoustics Technology in Seribu Island Waters	Henry M. Manik, Ph.D	To develop a methodology for effective ecosystem monitoring and mapping of tropical marine coral reefs and benthic habitat using underwater acoustic technology in Seribu Island waters. The specific objectives of this research using hydroacoustics technology are mentioned below: <ol style="list-style-type: none"> <li>1. Measuring, identifying, and mapping of coral reefs,</li> <li>2. Scientifically assess the accuracy of benthic habitat maps generated using hydroacoustic method;</li> <li>3. Detection, mapping, and classification of substrate/ sediment and to determine the relation of substrate type and the existence or distribution of coral reef.</li> </ol>	Marine conservation and rehabilitation, marine biodiversity study, ocean policy maker, fisherman, stakeholders	It is expected that the present study could be a basis for future integrated study in assessing the coral reef and marine benthic habitat in Seribu Island waters due for ecosystem monitoring. In addition, the outcome of the present research is important for policy analysis in recovering marine ecosystem and fishery production, and adapting to ocean climate change	GOI-DIPA	Faculty of Fisheries and Marine Sciences IPB
13.	Nanopropolis Soft Candy as an Aid for Dental and Oral Health	Dr Ir Akhmad Endang Zainal Hasan, M.Si Dr DVM. Agus Setiyono, MSc Dr dr Sri Budiarti	<ol style="list-style-type: none"> <li>1. Determining the formula of soft candy with nanopropolis.</li> <li>2. Anticaries testing capabilities of teeth of the soft candy formula selected.</li> <li>3. Test the acute toxicity of selected soft candy.</li> <li>4. Provide references in the use of propolis as the active ingredient of soft candy.</li> </ol>		<ol style="list-style-type: none"> <li>1. A formula obtained for soft candy which is best in inhibiting the growth of <i>S. mutans</i>,</li> <li>2. The existence of the information capabilities of nanopropolis soft candy as a natural ingredient that can inhibit the growth of microbial dental plaque,</li> <li>3. The knowledge of toxic or non-toxic doses of nanopropolis in the form of soft candy</li> </ol>	GOI-DIPA	Department of Biochemistry, IPB.



14.	Technical and Economical Study of Kemenyan ( <i>Styrax</i> sp) from North Sumatera to Support Its Biological Conservation and Market Sustainability	Dr Apri Heri Iswanto, S.Hut., M.Si Dr Ir Supriyanto, DEA Dr Arida Susilowati, S.Hut., M.Si Irawati Azhar, S.Hut., M.Si Riswan, S.Hut., M.Si	<ol style="list-style-type: none"> <li>1. Inventarization and mapping distribution of <i>Styrax</i> sp from Tapanuli Utara</li> <li>2. Genetics diversity of <i>Styrax</i> sp from Tapanuli Utara</li> <li>3. Identification of wood and resin quality of <i>Styrax</i> sp from Tapanuli Utara</li> <li>4. Market analysis of <i>Styrax</i> sp from Tapanuli Utara</li> </ol>		To provide data and information on kemenyan distribution in the biggest kemenyan production centers in Indonesia (Tapanuli Utara), genetic status, its resin and wood characters and market analysis also it opportunities. Based on biodiversity conservation aspect, in this research will support improving genetic material for kemenyan production and tropical tree conservation of genetic resources. Based on the value adding aspects to natural products, results of this study are expected to increase the added value of non productive kemenyan wood	G01-DIPA	Faculty of Agriculture, University of Sumatera Utara
15	Selecting Feather Pecking Behaviours in Layer Line of Indonesian Local Chickens Based on Candidate Gene Related to Serotonergic/Dopaminergic System to Support Food Sovereignty	Maria Ulfah, S.Pt., MscAgr Mawar Subangkit DVM, MSi APVet Dr Rudi Afnan, SPT MScAgr	<ol style="list-style-type: none"> <li>1. To asses the FP of GP of Indonesian laying hens</li> <li>2. To characterize the health and welfare status of Indonesian laying hens</li> <li>3. To obtain genotype FP disorders of Indonesian laying hens based on SNPs markers of DRD4</li> </ol>		<ol style="list-style-type: none"> <li>1. Providing data on FP behaviour and plumage score of Indonesian laying hens,</li> <li>2. Providing a convenient indirect method for measuring health and welfare status in laying hens population,</li> <li>3. Genotyping data of Indonesian laying hens based on candidate gene of DRD4 that could be useful as genetic markers for further creation of the low FP and high FP line</li> </ol>	G01-DIPA	Faculty of Animal Science, IPB

16.	Applied Technology of Pressurized Liquid Extraction for Antioxidant and Anticancer Compounds from Varied Mistletoes and Its Host Plants	Siti Irma Rahmawati, S.Pi., M.Agr., Ph.D Rossy Hutami	<ol style="list-style-type: none"> <li>1. Optimization of PLE condition to prepare mistletoes as resources of bioactive compounds by using several treatments on solvent, time, and temperature</li> <li>2. Investigation of functional properties of resulted extracts especially on antioxidant and anticancer activities</li> <li>3. Comparison of bioactivities of varied mistletoe extract and its relation between mistletoe and their host plant</li> </ol>		Empirical evidence of varied mistletoes as a medicinal plant to treat cancer as part of the process towards standardized herbal medicine using applied technology (PLE) that can be used easily by community. Also, finding the best activities from mistletoes extracts on antioxidant and anticancer by using the optimum condition of PLE	GOI-DIPA	Djuanda University
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17.	Assessment of the Current Diversity, Agronomy, Physiology, and Multi-uses of Sugar Palm ( <i>Arenga pinnata</i> (Wurm.) Merr.) and Its Prospects for Plantation System Cultivation and Community-based Enterprise Development in Indonesia	Dr Ahmad Junaedi, M.Si Prof Dr Muhammad Romli Dr Titi Candra Sunarti Dr Ani Suryani Prof Dr Yoshinori Yamamoto Prof Akira Miyazaki Hafith Furqoni, M.Si	To explore benefit of arenga palm as indigenous plant of tropical area especially in Indonesia for economic view by utilization of <i>Arenga</i> sap for sugar and ethanol, fruit and starch production, and any possible uses of all parts of arenga plant, as well as ethnobotanical studies of its role in culture as local wisdom and sustainable ecology.	<p>1. The results of this research will contribute to economic added value of this "minor crops". By this study, keys information on how the potency of some products of this plant: wood/fibre, sugar, bio-ethanol, starch, etc., will contribute to the economic activity of local community, as well as its potency for commercialization scale agribusiness.</p> <p>2. The result could also be used for making a recommendation to government as well as to the farmer and investor in order to make a planning and strategy for germ plasm conservation, and to expand as potential crops for economy purposes as well as for agroforestry program and/or land reclamation especially for river basin area.</p> <p>3. The important thing that may contribute by the result of this research project is to make harmonization between utilization and sustainable management of this natural resources. Since studies and publication on sugar palm are still very rare, the documentation of this research as a book will give great contribution to international stakeholders that may interest on this prospective plant.</p>	GOI-DIPA	Institut Pertanian Bogor, Research Center for Bioresources and Biotechnology
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18.	Characterization and Development of Indigenous Vegetables to Enhance People's Health and Livelihood in Indonesia	Dr Awang Maharjaya, SP, M.Si Dr Ir Anas D. Susila, MSi	<ol style="list-style-type: none"> <li>1. To inventory, to explore, to characterize and to select the most fitting indigenous vegetables varieties developed by PKHT IPB to be disseminated to farmer and market</li> <li>2. To develop good agricultural practices of selected indigenous vegetables, from the seed technology, field production, integrated pest management, fresh handling, storage, and transportation to market</li> <li>3. To increase consumers' awareness about the importance and the benefits of indigenous vegetables for health</li> <li>4. To increase the livelihood of local farmers by helping them to sell their high quality indigenous vegetable product to modern market</li> </ol>		<ol style="list-style-type: none"> <li>1. More characterized and structured collection of indigenous vegetables as source of breeding toward high yielding and high adaptation variety</li> <li>2. High yielding variety and/or its candidates that can be used by farmers</li> <li>3. Agribusiness initiation for indigenous vegetables from seeds to modern market</li> <li>4. The availability of several indigenous vegetables in modern market with higher price</li> </ol>	GOI-DIPA	Center of Tropical Horticulture Studies, Institut Pertanian Bogor
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19.	Application of Molecular Genetic for Javan & Sumateran Rhino Monitoring and Preparation for Establishment of the Second Population	Dr Dedy Duryadi Solihin, DEA Dr Muhammad Agil Prof Dr Bambang Purwantara Prof Dr Cece Sumantri	<ol style="list-style-type: none"> <li>1. Surveying the individual variation through genetic fingerprint pattern and the sexing of Javan Rhino population in Ujung Kulon National Park, West Java;</li> <li>2. Exploring spacial distribution of individual based on genetic fingerprint data and sexing;</li> <li>3. Establishing paternity of population member based on genetic fingerprint data of mitochondrial control region and sexing;</li> <li>4. Identifying founder for second population based on genetic distance relationship.</li> </ol>		These data, along with additional data from nuclear genes, will provide a genetic foundation that combine with other non-genetic data. Consequently, they will enhance the prospects of recovery of this highly endangered mammal.	G01-DIPA	Faculty of Mathematics and Natural Sciences, IPB
<b>B. On-Going Research Projects from PhD Thesis Support Grantees</b>							
20.	Genetic Diversity of Snail Abalone In Indonesia	Syamsul Bachry, H	To determine the genetic diversity of snails Abalone ( <i>Haliotis</i> spp.) with markers Cytochrome Oxidase I (COI) and Cytochrome b (Cyt b) in Indonesia.		To help clarify the identity and grouping abalone species in Indonesia. With clear identity abalone can provide information about the program management and conservation professionals.	G01-DIPA	Faculty of Mathematics and Natural Sciences, IPB
21.	Diversity Analysis and DNA Barcode for Ensuring the Identification of Mistletoe Parasitizing Teak in Clonal Seed Orchard (CSO) Padangan, East Java Regional Division Of Perum Perhutani	Ir Zainal Muttaqin, MP Prof Dr Ir Siti Wilarso Budi R, MS Dr Ir Basuki Wasis, MS Prof Dr Ir Iskandar Z. Siregar, MForSc Dr Ir Corryanti, MSi	<ol style="list-style-type: none"> <li>1. To find DNA Analysis for parasitic plant (mistletoe) diversity on a stand of teak,</li> <li>2. To ensure identification result (morphological) of parasitic plant (mistletoe) at teak using DNA Barcode method other of traditional taxonomy identification.</li> </ol>		The level of diversity and identification result of parasitic plant (mistletoe) on teak by using DNA Barcode stored in GenBank, BOLD.	G01-DIPA	Forestry Faculty, IPB

22.	Effects of Red Dragon Fruits Powder ( <i>Hylocereus polyrhizus</i> ) and Swimming Exercise to Inflammation Markers, Oxidative Stress, and Physical Fitness on Male Obesity Rats ( <i>Sprague dawley</i> )	Tonny Cortis Maigoda	<ol style="list-style-type: none"> <li>1. To process and formulate local red dragon fruits become functional food and source of antioxidant</li> <li>2. To determine the content of antioxidant and other nutrients on red dragon fruit powder</li> <li>3. To analyze the effect of red dragon fruit powder to inflammation markers, oxidative stress, and physical fitness</li> <li>4. To analyze the effect of swimming exercise to inflammation markers, oxidative stress and physical fitness</li> <li>5. To analyze the effects of red dragon fruit powder and swimming exercise to inflammation markers, oxidative stress and physical fitness</li> <li>6. To observe the effects red dragon fruits powder and swimming exercise in the distribution of plaque artheroma and fat depository in the liver organ of rats</li> </ol>	Government, social community	To develop red dragon fruits powder as an ingredient based on functional food to become mixed-food or any other products that is contained as a source of antioxidant	G01-DIPA	Human Ecology Faculty, IPB
23.	Land Use Planning Model Using Institutional Approach In Ciliwung Watershed	Tri Ratna Saridewi, S.Pi. M.Si	<ol style="list-style-type: none"> <li>1. To define the server and user of environmental services</li> <li>2. To analyze the amount of compensation for environmental services</li> <li>3. To analyze the institutional mechanism to develop payment for environmental services scheme</li> <li>4. To develop land use model of Ciliwung watershed</li> </ol>	Government, social community	<ol style="list-style-type: none"> <li>1. Server and user of environmental services are define</li> <li>2. The amount of environmental services (compensation) of DKI Jakarta or Central Government to the upstream region is define</li> <li>3. Institutional of Payment for environmental services scheme</li> <li>4. Land use model of Ciliwung Watershed using payment for environmental services framework</li> </ol>	G01-DIPA	Faculty of Economic and Management, IPB



C. On-Going Regional Research Projects from In-House Researchers and Partner Agencies					
24.	Assessing Ecological Services and Food Security Potentials of Agroforestry Landscapes in Southeast Asia: Case of Makiling Forest Reserve in the Philippines and Way Betung Watershed in Indonesia	Dr Christine Wulandari Dr Pitojo Budiono Reynaldo A. Comia Leila D. Landicho Rowena Dicolen-Cabahug Catherine C De Luna Romnick S Ballton Susni Herwanti, S.Hut., M.Si Rusita, S.Hut., M.P	To generate empirical evidences about the potentials of agroforestry landscape in ensuring community welfare (via improved socioeconomic conditions), and enhancing ecological stability in the selected agroforestry landscapes in Indonesia and the Philippines	1. Characterize the different agroforestry systems/models that are being practiced by the smallholder farmers within the landscape; 2. Determine the potentials of agroforestry in ensuring food security of the communities within the landscape in terms of stability, availability, accessibility, and utilization; 3. Assess agrobiodiversity of the agroforestry farms within the landscape; 4. Measure the carbon sequestration potentials of the different agroforestry systems	GOI-DIPA  PAPERN-INAFE

D. On-Going YEO Grant Project						
25.	Non-Formal Education for Kids on Environmental Conservation	Zahra Firdausi Anisatul Farikhah Brigita Laura Fatria Tanti Venny P Rahmi Intan M. Fachri Muttaqien	<p>1. To introduce tourism objects, flora, fauna, and environmental services potentials in Mount Halimun Salak National Park</p> <p>2. To increase local people's conservation knowledge, awareness, and participation through conservation education which make use of local resources, local wisdom, and Mount Halimun Salak National Park's resources in developing conservation education learning subjects, media, and methods.</p> <p>3. To develop children's potential through naturalist intelligence, linguistics intelligence, visual-spatial intelligence, music intelligence, kinetics-body intelligence, interpersonal intelligence and intrapersonal intelligence.</p> <p>4. To increase local people's ability in terms of their skills for utilizing and trading natural resources through training</p>	Government, social community	<p>1. SERINCIL as a place for non formal conservation education and model in developing conservation education in conservation areas.</p> <p>2. Establishment of a non formal school that attracts children to nature conservation.</p> <p>3. The increase of children's and other community member's awareness and responsibility toward nature and environment.</p> <p>4. The increase of local people's skill in utilizing natural resources.</p> <p>5. The increase of local people's understanding about their responsibility in the conservation of natural resources.</p>	GOI-DIPA  Sekolah Rimbawan Kecil (SERINCIL)

26.	Urban Farming for Green City Life	Eka Purna Yudha, SP, M.Si Resa Ana Dina, SKM, M.Epid Andi Oktoriana, SP, MM	<ol style="list-style-type: none"> <li>1. To create an environment densely populated urban become more beautiful, healthy and clean;</li> <li>2. Apply the concept of urban farming and the hanging garden in dense urban neighborhoods.</li> <li>3. Provide economic and environmental benefits from the implementation of urban farming and hanging garden to the public in congested urban elected.</li> </ol>	Government, social community	Achieving efficiency of utilization of green space and dense residential housing and economic benefits optimally as urban farming land.	GOI-DIPA	Yayasan Muslim Cendekia Bogor
27.	Community-based Agroforestry Enterprises	Achmad Solikhin Mega Fitria Baskoro Pakusadewo Ummu Ma'rifah Angga Dwi Indrianto Mutia Niken Muhammad Iqbal Firdausi Hany Zuyyinah L Orita Mega Delani	<ol style="list-style-type: none"> <li>1. To help local community in Cihideung Ilir-Bogor to develop Tropical Herbagroculture enterprise;</li> <li>2. To implement eco-schools at SDN Bojong and SDN Cihideung Ilir I,</li> <li>3. To get involved children, youths and local communities to tackle environmental problems and to achieve SDGs.</li> </ol>	Government, farmers, social community	<ol style="list-style-type: none"> <li>1. Establish at least a tropical herbagroculture enterprise and two eco-schools</li> <li>2. Increase local environmental awareness of children, youths and communities in Cihideung Ilir-Bogor.</li> </ol>	GOI-DIPA	Indonesian Green Action Forum (IGAF)



E. Completed National Research Projects by In-house Researchers and Partner Agencies						
1.	Determining Appropriate Postharvest Handling Method to Minimize Fungal Infection and Aflatoxin Contamination in Nutmeg ( <i>Myristica fragrans</i> Houtt.)	Prof Dr Okky Setyawati Dharmaputra Santi Ambarwati, M.Si Iri Ina Retnowati, Nijima Nurfadila, S.Si	1. To investigate the effect of postharvest handling (origin, drying and storage) methods on the quality of nutmeg, in terms of fungal population (including <i>Aspergillus flavus</i> ), and aflatoxin contamination. Moisture content and the percentage of damaged kernels will also be conducted, because they affect fungal infection and aflatoxin contamination. 2. To recommend proper (appropriate) postharvest handling method (Good Handling Practice) to ensure the quality of nutmeg during storage	Farmers, collectors (traders) and exporters	1. Recommendation on the best method of postharvest handling of nutmeg at farmer, collector and exporter levels. 2. Information on critical point of the fungal infection (especially <i>A. flavus</i> ) and aflatoxin contamination, and their control in nutmeg.	GOI-DIPA -

2.	<p>Detection of Phosphine Resistance on <i>Tribolium castaneum</i> and <i>Aracecerus fasciculatus</i> in Cocoa Beans Storage in South Sulawesi and the Use of Essential Oils as Alternative Fumigant</p>	<p>Dr Idham Sakti Harahap Ir Sri Widayanti</p>	<ol style="list-style-type: none"> <li>1. To do a survey on fumigation practices in cocoa bean storage facilities in South Sulawesi</li> <li>2. To detect the status of phosphine resistance on <i>A. fasciculatus</i>, and <i>T. castaneum</i> collected from cocoa bean storages in South Sulawesi,</li> <li>3. To conduct the field efficacy of phosphine to resistant strain in order to validate the results of laboratory resistance test</li> <li>4. To develop a recommendation about phosphine doses for resistant strains</li> <li>5. To develop alternative substance, i.e. essential oils, as the natural and safer fumigants.</li> </ol>	<p>Ministry of Agriculture, Farmers</p>	<ol style="list-style-type: none"> <li>1. Information on insect pests of cocoa beans that already resistant to phosphine in South Sulawesi,</li> <li>2. Recommendation of phosphine dose that effective to control resistant strains. Information on resistant strains and effective dose of phosphine can be use for the implementation of integrated stored product pests management in cocoa bean storages that already resistant to phosphine. Information on resistant insect pests is also important in resistance management program, i.e. preventing the dispersal of resistant strains to other areas in Indonesia or to some other countries, because cocoa beans are export commodity</li> <li>3. Information on the natural and safer fumigants developed from essential oils.</li> </ol>	<p>GOI-DIPA</p>	<p>-</p>
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3.	Identification Pathway of Invasive Alien Plant Species at Gunung Gede Pangrango National Park	Dr Soekisman Tjitrosoedirdjo Setiabudi S.Hut. Drs Imam Mawardi Indah Wahyuni S.Si. Saiful Bachri S.Si.	<ol style="list-style-type: none"> <li>1. Studying the pathway of IAPS in GGNP, where they come from and their expansions</li> <li>2. Observing the movement of IAPS into GGNP, either through intentional introduction or through natural range of expansion</li> <li>3. Selection criteria for inclusion of the invasive taxa</li> </ol>	Scientific community, Gunung Gede Pangrango National Park Management	<ol style="list-style-type: none"> <li>1. Data obtained from the mapping and analysis of vegetation can be predicted where the places which is invested by IAPS and their extend areas</li> <li>2. The existence of local and invasive species can also be detected</li> <li>3. By learning the history of IAPS at GGNP and their pathway of introduction, recommendation could be given on the management action such as preventing the introduction and their spread, promoting early detection and rapid response or which species should be given the priorities to be control or eradicate</li> </ol>	GOI-DIPA	Gunung Gede Pangrango National Park
4.	Comparison of Risk Analysis Methodology for Evaluating Invasive Plant Species at Gunung Gede Pangrango National Park	Dr Soekisman Tjitrosoedirdjo, M.Sc. Dr Sri S. Tjitrosoedirdjo, M.Sc. Drs Imam Mawardi Setiabudi, S.Hut. Indah Wahyuni, S.Si. Saiful Bachri, S.Si.	To carry out risk analysis on the existing invasive species, to provide recommendation of actions for each invasive plant species analyzed. There were 4 methods available for carrying out risk analysis, and one will be selected as the method that is recommended to be utilized in other National Park.	Scientific community, National Parks Indonesia	The results of the Risk Analysis will be recommended actions applied to various Invasive plant species, prior to restoration by planting sapplings of native species in the national parks in Indonesia.	GOI-DIPA	Gunung Gede Pangrango National Park



5.	Utilization of Coal Mine Lake Former PT Tunas Inti Abadi (PT TIA) In Tanah Bumbu Regency, South Kalimantan Province for Fish Farm	Dr Nur Bambang Priyo Utomo Dr Irdika Mansur	To determine the carrying capacity and set the stage for activities to do in the utilization of the former mine pit lakes for fisheries activity. The specific objective of this study was to determine the Standard Operating Procedure (SOP) for the use of the lake ex-pit coal mine for fisheries activity.	Farmers, Feed industries, Government and Scientific community	1. The Standard Operating Procedure (SOP) for the use of ex-pit coal mine lakes for fisheries activity. 2. Technical feasibility and carrying capacity of the former mine pit lake in PT TIA for fisheries activity.	GOI-DIPA	PT Tunas Inti Abadi (PT TIA)
6.	Climate Change and Anthropogenic Impacts to Marine Primary Production of Surabaya Waters	Dr Vincentius Paulus Siregar Dr Alan F. Koropitan	To investigate present status of marine primary production, the trend of climate change and marine ecosystem parameters variability, and the changing of marine primary production in Surabaya waters.	Government, Scientific community	The previous results and present study could be a basis for future integrated study for modeling structure in order to get better prediction of the changing environment.	GOI-DIPA	-

7.	Spatial Model Design for Competitive Improvement of Small Medium Scales Enterprises (Case study: Bogor City)	Dr Hartrisari Harry Imantho, M.Sc Desi Suyamto	To improve the competitiveness of products to improve the welfare of society. The model will be validated for Bogor area. In achieving these objectives stages to be carried out are as follows: 1. Identification of SMEs located in Bogor area 2. Validate the existence of SMEs in Bogor via ground check 3. Survey of selected SMEs condition data after validation stage 4. Selecting potential SMEs to increase the competitiveness of products 5. Development of a conceptual framework of the model 6. SMEs Spatial Mapping Model Validation	Ministry of cooperation, BPS, SMEs Bogor, Ministry of Industry and Related Agency	The establishment of model-based SMEs GIS Spatial Mapping, named GEO-SME version 1.0. The model will be validated for existence and condition of SMEs in the city of Bogor. GEO-SME is expected to provide information on the whereabouts and condition of the city of Bogor SMEs as a basis for policy making and or SME development programs in the city of Bogor, especially in improving the competitiveness of the product.	GOI-DIPA	-
8.	Quality Improvement of Etawah Goat Breed Fed Diet Based on Combination of Silage and Hay of Whole Shorgum or Selected Vegetable Waste	Prof Dr Ir Nahrowi, MSc Dr Ir Supriyanto M. Baihaqi, S.Pt, MSc Wahyu Darsono., S.Pt	To study organic and dry matter digestibility and performance of young dairy (Peranakan Etawah) goat fed combination diets of silage and hay from vegetable waste, shorgum or corn plants.	Etawah Goat Breeder	Information on the advantage of using combination hay and silage from vegetable waste, sorghum or whole corn plant for young dairy goat	GOI-DIPA	Departemen of Nutrition and Feed Science Faculty of Animal Sciences, IPB
9.	RNA Isolation and Construction of cDNA Library of Sengon ( <i>Paraserianthes falcataria</i> ) Resistant to Boktor Pest	Dr Ir Ulfah Juniarti Siregar, M. Agr Dr Ir Sri Hartati MS.	1. Isolate RNA and construction of cDNA library of sengon as materials for identification of two protease inhibitor genes 2. Further identification of those two protease inhibitor genes by sequencing and sequence analysis	Scientific community, government institutions, private entrepreneur and local community	1. Clones of cDNA library as material for further investigation of genes encoding protease inhibitor in sengon resistant to boktor pest 2. Sequence of genes encoding protease inhibitor in sengon resistant to boktor pest. 3. Scientific publication in international journals	GOI-DIPA	-

10.	Enrichment of Nursery Blocks Using Humic Acid and Bio-fertilizer	Dr Hilman Affandi Arif Nuryadin, B.Sc Rojak	<ol style="list-style-type: none"> <li>To create the condition that increase the germination percentage of seed planted in nursery blocks</li> <li>To determine the additional material that could enhance the growth of seedling in nursery blocks</li> </ol>	Farmers, social community	The nursery block that fully reliable that could replace the plastic poly bag in nursery	GOI-DIPA	-
11.	Efficacy of Essential Oil-Based Fungicide on Oil Palm Basal Stem Rot Disease Caused By <i>Ganoderma Boninense</i>	Maya Masita Novianti, M.Si Deden Dewantara Eris, SP Haryo Tejo Prakoso, S.Si Dr Hilman Affandi	<ol style="list-style-type: none"> <li>Select the most effective essential oil which able to inhibit the growth of pathogenic fungi <i>Ganoderma boninense</i>.</li> <li>Creating a fungicide formulation from essential oil with high stability, safe and effective to inhibit BSR disease.</li> <li>Examine the effectiveness of fungicides formulations to inhibit BSR disease.</li> </ol>	Government, Farmers, scientific community	To find a formulation of fungicides from essential oil which effectively inhibits growth of BSR disease caused by <i>Ganoderma boninense</i> , so the use of chemical fungicides can be reduced. If effective, this formula can be recommended to farmers that can be applied as an early protective plant technique.	GOI-DIPA	PTPN III



12.	Progesterone Level and DGAT1 Variation in Correlation to Milk Production in Dairy Buffalo	Dr. Drh Hera Maheshwari, M.Sc Yulhawati Yusrizal, M.Si	<ol style="list-style-type: none"> <li>To obtain information about the status of reproduction in female dairy buffalo through the measurement of progesterone levels in milk</li> <li>To obtain information on the variation of genes DGAT1 expression as milk production regulator,</li> <li>To obtain information on production and the quality of dairy buffalo milk,</li> <li>To obtain information about the incidence of mastitis in dairy buffaloes.</li> </ol>	Government, breeder, scientific community	<ol style="list-style-type: none"> <li>To provide important information for the local government about dairy buffalo maintained in North Sumatera.</li> <li>To improve the management and the breeding of this animal in the future, particularly related to the right time of milking for yielding good milk production and milk quality.</li> <li>To be presented in national or international conference, and also to be published in at least one international or national accredited journal.</li> <li>To observe the type of the fatty acid (saturated or unsaturated fatty acid) component of the dairy buffalo's milk.</li> </ol>	GOI-DIPA	Faculty of Veterinary, IPB
13.	Identification on the Origin of Pangolin ( <i>Manis javanica</i> ) from Illegal Trade in Support the Conservation Strategy through DNA Molecular Technique	Ir Wirdateti, M.Si Prof Dr Gono Semiadi	<ol style="list-style-type: none"> <li>To obtain genetic character of each Indonesian population based on the natural distribution of Java, Sumatera and Kalimantan.</li> <li>To help in identifying any confiscated pangolin of any parts of the body</li> <li>To help in detecting and tracing the origin of the supply chain or population.</li> <li>To get an overview of the status of the population, and diversity in the wild of each population distribution for the purpose of conservation strategy</li> </ol>	Government, scientific community	<ol style="list-style-type: none"> <li>Scientific information and recommendation policy on pangolin conservation strategies in each distribution region.</li> <li>National and international publications.</li> </ol>	GOI-DIPA	Division Zoology, Indonesian Institute of Sciences (LIPI)

14.	Analysis of Ecosystem Health Based on Landcover Changes in Sub Watershed Sumber Brantas, East Java	Dr Ir Rossyda Priyadarshini, MP Dr Ir Bakti Wisnu Wijajani, MP Dr Ir Amir Hamzah, MP Ir Maroeto, MP	<ol style="list-style-type: none"> <li>1. To understand and identify changes in land cover occurring in the study area based on analysis of landuse map on 2002.</li> <li>2. To investigate the impact of land cover changes on biodiversity, and ecosystem health, i.e. ecosystem provided.</li> <li>3. To make some recommendation to policy makers in arranging land cover planning in order to guarantee the ecosystem health sustainability of watershed.</li> </ol>	Government, social community	To provide quantitative data linking about land cover changes, biodiversity, and ecosystem services.	GOI-DIPA	UPN "Veteran" University, East Java
15.	Monitoring and Mapping of Tropical Marine Biota Using Underwater Acoustic Technology in Seribu Islands	Henry M. Manik, Ph.D	To develop a methodology for effective ecosystem monitoring and mapping of tropical marine biota using underwater acoustic technology in Seribu Islands.	Marine conservation and rehabilitation, marine biodiversity study, ocean policy maker, fisherman, stakeholders	A basis for assessing the marine biota in the Seribu Islands for ecosystem monitoring using underwater acoustic technology.	GOI-DIPA	Department of Marine Science and Technology, Faculty of Fisheries and Marine Sciences, IPB

F. Completed Research Projects by In-house PhD Thesis Support Grantees							
16.	Detection of Myxovirus (Mx) Resistance Gene Structure on Indonesia Local Chicken Breeds as a Foundation for Selecting Chicken Resistance to Viral Diseases	Maria Ulfah, S.Pt., MScAgr Dr Ir Achmad Farajallah Prof Dr Muladno, MSA Dr Jakaria, SPT MSI Dr Ir. R R Dyah Perwitasari, MSc	1. To characterize the Mx gene structure of Indonesian local chicken breeds (promoter region, 5'UTR, exons (1st, 13rd and 14th), and 3'UTR) 2. To detect and choose the potential SNPs of Mx gene of Indonesian local chicken breeds that could be useful for candidate genes for chicken selection and breeding program	Government breeder	1. Providing data of Mx gene structure of Indonesian local chicken breeds, mainly promoter region, 5'UTR, exons (1st, 13rd and 14th), and 3'UTR, 2. Finding the SNPs of Mx gene of Indonesian local chicken breeds and proposed the SNPs validation methods that could be useful as genetic markers for chicken breeding program, 3. Publishing the research results on accredited journals or present it on seminar/workshop (if the seminar timetable would be suitable with time schedule of research grants), 4. Proposing recommendations to Indonesian government based on the research findings that would be useful as a fundamental data for selecting chicken resistance to viral diseases and for future sustainable breeding program, and increasing chicken population and gaining food security.	G01-DIPA	Department of Animal Production and Technology, IPB



17.	Improving Catfish ( <i>Clarias</i> sp.) Broodstock Reproduction Quality through Combination with Microalgae Spirulina and Hormone	Armen Nainggolan, M.Sc Dr Nur Bambang Priyo Utomo	<p>1. To accelerate the maturation in and outside the spawning season, and to improve the quality of gonad and larval catfish using Spirulina and hormone Oodev.</p> <p>2. To assess the role and mechanism of Spirulina and Oodev in improving the quality of the gonads and larvae catfish (<i>Clarias</i> sp.).</p> <p>3. To obtain an appropriate feed ration of Spirulina and injection ration of hormones Oodev to catfish broodstock performance, and its relation to the composition of proteins, fats, phospholipids of eggs and larvae.</p>	Government, scientific community	The availability of technology to accelerate maturation and rematuration in and outside the spawning season through the use of Spirulina and hormones Oodev.	G01-DIPA	Aquaculture Science, IPB
18.	Non-Invasive Assessment of Pregnancy and Parturition in Crested Macaques ( <i>Macaca nigra</i> )	Gholib, S.Pt., M.Si. R. Taufiq Purna Nugraha	To validate an accurate method for assessing pregnancy and predict parturition non-invasively through sex skin coloration and behavioral observations, and measuring progesterone, oestrogen and glucocorticoid from feces.	Government, Tangkoko Batuangas Nature Reserve	<p>1. The best technique (valid, simple and applicable) for preservation and extraction of feces for hormone analysis.</p> <p>2. The reliable and suitable hormone assays for measuring faecal progesteron, oestrogen, and glucocorticoid in this species.</p> <p>3. An accurate, simple and applicable technique for determining of pregnancy and parturition based on the sex skin coloration, behavioral observation, and hormone measurements.</p> <p>4. Publication in international or national journals.</p>	G01-DIPA	Reproductive Biology, IPB

19.	Study of Biodiversity and Aphids Identification Key in West Java	Yani Maharani, SP, M.Si Dr Purnama Hidayat	To obtain information on types of aphid species and host ranges in West Java	Government, scientist community	<ol style="list-style-type: none"> <li>1. Information on types of aphid species</li> <li>2. Information on host ranges of the aphids</li> <li>3. Find new species of aphids that have never been reported in Indonesia</li> <li>4. Assessing biological some species aphid that have not been reported in Indonesia</li> <li>5. Providing slide microscope specimens of collected aphids</li> <li>6. Interactive computer based identification key</li> </ol>	G01-DIPA	Department of Plant Protection, Faculty of Agriculture, IPB
20.	Analysis of Genetic Structure and Demographic History of the Rice Brown Planthopper to Reveal Its Dispersal Pattern Across Java	Ruth Martha Winnie, M.Si	<ol style="list-style-type: none"> <li>1. To apply genetic approaches to resolve the dispersal pattern of this insect without much background information</li> <li>2. To reveal the dispersal pattern of the BPH in Java.</li> </ol>	Government, scientific community	This information will provide an ecological foundation for developing a better pest management strategy. Results of this study will be the first molecular data obtained in Indonesia, which is based on the mitochondrial DNA (COI gene) and microsatellites DNA.	G01-DIPA	Department of Plant Protection, Faculty of Agriculture, IPB
21.	Combined Antimicrobial Effect of Ginger ( <i>Zingiber officinale</i> var. <i>Rubrum</i> ) and Galangal ( <i>Alpinia galanga</i> L. Willd.) Essential Oils Against Foodborne Pathogen and Food Spoilage Bacteria in Food Model Media	Tita Rialita, S.Si., M.Si.	<ol style="list-style-type: none"> <li>1. To investigate the effect of ginger and galangal essential oils combination in inhibiting the growth of food pathogen and food spoilage bacteria.</li> <li>2. To assess the impact of carbohydrates, protein and food complex against antimicrobial activity of combined of ginger and galangal essential oils in the food model medium.</li> </ol>	Food stakeholders, government, scientific community, social community	To provide information regarding the effects of a combination of ginger and galangal essential oils in inhibiting the growth of food pathogen and food spoilage bacteria, as well as antimicrobial activity on media models so the potential is known if it will be applied to food preservation.	G01-DIPA	IPB

G. Completed Regional Research Projects by In-house Researchers and Partner Agencies							
22.	The Search for Novel Drugs: Assessing the Biodiversity and Antimicrobial Activities of Fungal Leaf Endophytes Associated with Philippine and Indonesian Mangroves	Dr Kustiariyah Tarman Prof Dr Thomas E. dela Cruz	To assess and compare the biodiversity and antimicrobial activities of mangrove fungal endophytes from the Philippines and Indonesia	Government, scientific community	<p>1. Isolate fungal endophytes from healthy mangroves leaves collected from mangrove forest ecosystems in Zamboanga Peninsula in the Philippines and in Barru, South Sulawesi in Indonesia</p> <p>2. Characterize and identify the isolated mangrove fungal endophytes using conventional morphocultural methods,</p> <p>3. Assess the species diversity and richness of the mangrove fungal endophytes in relation to their geographic location and/or host mangrove species, and</p> <p>4. Evaluate the potential antimicrobial activities of selected mangrove fungal endophytes against test gram-positive and gram-negative bacteria.</p>	G0I-DIPA	Department of Aquatic Product Technology, Faculty of Fisheries and Marine Sciences, IPB University of Santo Tomas, Philippines
23.	Biodiversity and Antiproliferation Activities of Indonesian Java Chili, <i>Piper retrofractum</i> Vahl., Against Breast Cancer Cells (MCF-7)	Dr Ir Akhmad Endang Zainal Hasan, M.Si Agus Setiyono, DVM, MSc, PhD Jupikely James Silip, BSc, MAgriSc, PhD	1. Determine the genetic <i>Piper retrofractum</i> Vahl. ( <i>P. retrofractum</i> ) by AFLP technology, 2. Provides a reference for the selection of <i>P. retrofractum</i> ., 3. To examine the genetic relationship between <i>P. retrofractum</i> at its ability as an anti-proliferation agent against breast cancer cells.	Government, scientific community	<p>1. To obtain genetic relationships among the nine piper samples (<i>P. retrofractum</i>) collected. Information on the effectiveness of <i>P. retrofractum</i> as a natural anti-proliferation of breast cancer cells MCF-7,</p> <p>2. Publication of two articles on research results (BIOTROPIA and Emirate Journal Food and Agriculture).</p>	G0I-DIPA	Department of Biochemistry, IPB. University Malaysia Sabah



<b>H. Completed YEO Grant Project</b>							
24.	Home garden utilization for food security and environmental sustainability "Organic Verticulture in Agriculture"	R. S. Soeroyo Jr., S.P. Vivandra P. Budiman, S.Si. Riza Firmansyah, S.Si. Ali Akbar Hutzi, S.E. Lila Khairani, M. Mu'min F., S.P. Yulizar, S.P. Ari Suharto, S.P.	<ol style="list-style-type: none"> <li>1. Utilization of home garden by households to be productive.</li> <li>2. Realizing a healthy environment and sustainable.</li> <li>3. Making the home garden as a source of support of food security on household.</li> </ol>	Government, farmers, social community	To assist households in utilizing their home gardens to produce food independently, thus they can consume nutritious, healthy, and safe foods. On its implementation, the programs involve the women farmer groups	G01-DIPA	Natural Resources and Environmental Management of IPB

**Appendix 2. List of post and undergraduate students who conducted researches, internships and on-the-job trainings at SEAMEO BIOTROP during FY 2014/2015**

**A. Research**

No.	Name	Institution and Level	Research Title	Unit Affiliated With	Supervisor
1	Indah Darsilawati	Institut Pertanian Bogor (Master degree)	Keanekaragaman Spesies Ordo Coleoptera pada gudang pakan ternak dan Resistensi <i>Tribolium castaneum</i> terhadap Fosfin. <i>Species Diversity of Coleopteran Order in Feed Storages and the Resistance of Tribolium castaneum against phosphine</i>	Entomology Laboratory	Dr Idham S. Harahap
2	Nadia Rehulina Ginting	Institut Pertanian Bogor (undergraduate)	Fumigant Effect of Artemisia Essential Oils ( <i>Artemisia vulgaris</i> ) and Patchouli Essential Oils ( <i>Pogostemon cablin</i> ) on <i>Sitophilus zeamais</i> Motsch and <i>Tribolium castaneum</i> Herbst	Entomology Laboratory	Dr Idham S. Harahap
3	Nur Pratiwi Rasyid	Institut Pertanian Bogor (Master degree)	Pengaruh Aplikasi Oven Gelombang Mikro untuk Disinfestasi Serangga <i>Tribolium castaneum</i> (Herbst) Terhadap Karakteristik Warna dan Amilografi Tepung Terigu <i>Effect of Microwave Oven on Insect Disinfestation of Tribolium castaneum (Herbst) on Color Characteristics and Wheat Flour Amilography</i>	Entomology Laboratory	Ir Sri Widayanti
4	Tri Lestari	Institut Pertanian Bogor Faculty of Agriculture, Department of Agronomy and Horticulture (Doctoral degree)	Mekanisme Fisiologi Toleransi Sorgum terhadap Defisiensi fosfor pada Tanah Masam <i>Physiology Mechanism on Sorghum Tolerance towards Phosphorus Deficiency on Acid Soil</i>	Soil and Plant Laboratory	Arif Nuryadin, B.Sc
5	Herry Bertus	Institut Pertanian Bogor (undergraduate)	Fumigant Effect of Essential Oils Made of Clove ( <i>Syzygium aromaticum</i> ), Lemon Peel ( <i>Citrus limon</i> ), and Mint ( <i>Mentha piperita</i> ) Against Mortality of <i>Cryptolestes</i> sp. Coleoptera: Cucujidae)	Entomology Laboratory	Dr Ir Idham S. Harahap, M.Si
6	Markus C. Situmorang	Institut Pertanian Bogor (undergraduate)	Efek Fumigan Minyak Atsiri Kulit Lemon, Daun Mint dan Serai Wangi terhadap <i>Callosobruchus</i> spp. <i>Fumigant Effect of Essential Oils Made of Lemon Peel, Mint and Lemon Grass Against Callosobruchus spp.</i>	Entomology Laboratory	Dr Ir Idham S. Harahap, M.Si

7	Indah Pratiwi	Universitas Djuanda Faculty of Agriculture (undergraduate)	Daya Insektisidal Ekstrak Daun <i>Lantana camara</i> Linn pada Hama Gudang Kedelai <i>Callosobruchus</i> sp. <i>Insecticidal Activity of Lantana camara Linn Leaf Extract on Soybean Storage Pest Callosobruchus sp.</i>	Entomology Laboratory	Ir Sri Widayanti
8	Rizky Rachardian	Universitas Sultan Ageng Tirtayasa (undergraduate)	Pengaruh Pemberian Beberapa Bahan Repellent pada Penyimpanan Beras untuk menekan Populasi Hama Beras ( <i>Sitophilus oryzae</i> L) <i>Effect of Several Repellent Materials in Rice Storage to Suppress Populations of Rice Pest ( Sitophilus oryzae L )</i>	Entomology Laboratory	Ir Sri Widayanti
9	Marinus Gobai	Universitas Djuanda Faculty of Agriculture (undergraduate)	Daya Guna ekstrak Daun Otikai ( <i>Alphitonia</i> sp.) dan Pinang terhadap Tingkat Kematian <i>Callosobruchus</i> spp. <i>Efficiency of Otikai (Alphitonia sp.) Leaf and Areca Nut Extract against Mortality of Callosobruchus spp.</i>	Entomology Laboratory	Ir Sri Widayanti
10	Euis Marlina	Institut Pertanian Bogor (undergraduate)	Efek Fumigan Minyak Atsiri Pala, Kayu Manis dan Kapulaga terhadap <i>Sitophilus zeamais</i> <i>Fumigants Effects of Essential Oils Made of Nutmeg, Cinnamon and Cardamom against Sitophilus zeamais</i>	Entomology Laboratory	Dr Ir Idham S. Harahap, M.Si
11	Yoga Alfa Marendi	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Pengaruh Zat Pengatur Tumbuh dan Media tanam Terhadap keberhasilan Pertumbuhan Stek Pucuk <i>Duabanga moluccana</i> Blume <i>Effect of Plant Growth Regulator and Growth Media towards Successful Shoot-cuttings Growth of Duabanga moluccana Blume</i>	Silviculture Laboratory	Dr Irdika Mansur
12	Karina Demastiti	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Pengaruh Zat Pengatur Tumbuh (ZPT) dan MSG Terhadap Pertumbuhan Tanaman Stek Pucuk Jenis <i>Octomeles Sumatrana</i> Miq <i>Effect of Plant Growth Regulator and MSG towards Shoot-cuttings Growth of Octomeles sumatrana Miq</i>	Silviculture Laboratory	Dr Irdika Mansur
13	Eauquo Nurul Fitria	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Pengaruh Pemberian ZPT dan Jenis Media Terhadap Pertumbuhan Stek Saninten ( <i>Castanopsis argentea</i> Blume A-DC) <i>Effect of ZPT and Media Types on Saninten Cuttings Growth (Castanopsis argentea Blume A- DC)</i>	Silviculture Laboratory	Dr Irdika Mansur
14	M. Iqbal Maulana	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Penyusunan Genomic Library Pada Gaharu <i>Preparation of Genomic Library On Agarwood</i>	Bioteknology Laboratory	Dr Ir Ulfah. J Siregar, M.Agr



15	Dewa Bagus Widy Kurniawan	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Tingkat Kemampuan Jenis Pohon Terhadap Jerapan Debu dan Timbal serta Serapan Timbal Dalam Penurunan Pencemar Udara di Kawasan Industri Pulo Gadung <i>Absorption Efficiency of Trees towards Dust and Lead to Lower Air Pollution in Pulogadung Industrial Area</i>	Natural Product Laboratory	Dr Hilman Affandi
16	Harum Hafifah Hajar Ratna Nasution	Universitas Pakuan Faculty of Mathematics and Natural Sciences (undergraduate)	Pemanfaatan Limbah Pabrik Kertas (Sludge) Sebagai Bahan Penyerap Logam Berat <i>Utilization of Paper Mill Waste (Sludge) As Heavy Metals Absorbent Material</i>	Natural Product Laboratory	Dr Hilman Affandi
17	Tiara Muhandiyanti	Universitas Pakuan Faculty of Mathematics and Natural Sciences (undergraduate)	Pemanfaatan Limbah Sagu Sebagai Bahan Penyerap Logam Berat <i>Sago Waste Utilization as Heavy Metal Absorbent Material</i>	Natural Product Laboratory	Dr Hilman Affandi
18	Achmad Syuhada	Universitas Pakuan Faculty of Mathematics and Natural Sciences (undergraduate)	Peran Asam Humat Dalam Menahan Pelepasan Unsur Hara Makro pada Blok Media Semai <i>Role of Humic Acid in Restraining Macro Nutrient Release of the Seedling Media Block</i>	Natural Product Laboratory	Dr Hilman Affandi
19	Muhammad Rudy Hami	Universitas Pakuan Faculty of Mathematics and Natural Sciences (undergraduate)	Pemanfaatan Serbuk Gergaji kayu Jati dan kayu Sengon Terhadap Penyerapan Logam Berat <i>Utilization of Sawdust of Teak and Sengon to Absorb Heavy Metals</i>	Natural Product Laboratory	Dr Hilman Affandi
20	Anissa Rizkasari	Universitas Pakuan Faculty of Mathematics and Natural Sciences (undergraduate)	Penyerapan Limbah Sagu Sebagai Penyerap Zat Warna Metilen Blue <i>Utilization of Sago Waste as Absorbent for Methylene Blue Dye</i>	Natural Product Laboratory	Dr Hilman Affandi
21	Fauziah Rahma Titaloka	Universitas Pakuan Faculty of Mathematics and Natural Sciences (undergraduate)	Pengaruh Kapur Sirih Terhadap Aflatoxin Pada Bumbu Pecel <i>Effect of Lime towards Aflatoxin Contained in Seasoned Ground Peanuts</i>	Natural Product Laboratory	Dr Hilman Affandi
22	Maria Magdalena Misnawati	Universitas Pakuan Faculty of Mathematics and Natural Sciences (undergraduate)	Khamir pada buah-buahan dan Sayuran: Pengaruhnya terhadap <i>Colletotrichum capsici</i> , Cendawan penyebab antraknosa pada buah cabai <i>Yeasts on Fruits and Vegetables: its Effect on Colletotrichum capsici, the cause of Anthracnose Fungus on Chili Fruit</i>	Phytopathology Laboratory	Prof Okky S. Dharmaputra

23	Kiki Nurtjahja	Universitas Pakuan Faculty of Mathematics and Natural Sciences (undergraduate)	Efektivitas Iradiasi Gamma terhadap Pertumbuhan dan Produksi Aflatoxin pada Biji Pala ( <i>Myristica fragrans</i> ) selama Penyimpanan <i>Effectiveness of Gamma Irradiation on Aflatoxin Growth and Production on Stored Nutmeg</i> ( <i>Myristica fragrans</i> )	Phytopathology Laboratory	Prof Okky S. Dharmaputra
24	Sunaryo Syam	Institut Pertanian Bogor (Master degree)	Fumigant Effect of Essential Oils Fractination Made of Clove and Mint Against Resistant Strain of <i>Tribolium castaneum</i> and non Resistant Strain of <i>Callosobruchus chinensis</i>	Entomology Laboratory	Dr Ir Idham S. Harahap, M.Si
25	Sri Iita Tarigan	Institut Pertanian Bogor (Master degree)	Toxicological and Physiological Effect: Study of Essential Oils Against <i>Tribolium castaneum</i> and <i>Callosobruchus chinensis</i>	Entomology Laboratory	Dr Ir Idham S. Harahap, M.Si
26	Arie Aqmarina	Institut Pertanian Bogor Faculty of Forestry (Master degree)	Penyusunan Genomic Library Pada Gaharu <i>Preparation of Genomic Library on Agarwood</i>	Biotechnology Laboratory	Dr Ir Ulfah J. Siregar
27	Devi Septriani	Universitas Pakuan Faculty of Economics (undergraduate)	Pengaruh Pelatihan Terhadap Kinerja Pegawai SEAMEO BIOTROP <i>Effect of Training on BIOTROP's Staff Working Performance</i>	HRMD	Bambang Sulistio, S.Si
28	Ahmad Parlaongan	Institut Pertanian Bogor Faculty of Forestry (Master degree)	Efek Iradiasi Sinar Gamma Terhadap Planlet Jati ( <i>Tectona grandis</i> Linn. f.) <i>Effect of Gamma Irradiation on Teak Planlet</i> ( <i>Tectona grandis</i> Linn. f)	Tissue Culture Laboratory	Erina Sulistiani, M.Si.

## B. Internship and On-the-Job Training

No.	Name	Institution and Level	Activity	Unit Affiliated With	Supervisor
1	Titus Muhammad Noor	SMK AK Nusa Bangsa	Waste Management	Air and Water Laboratory	Budi Cahyadi, S.Si.
2	Hafiz Herdiansyah	SMK AK Nusa Bangsa	Waste Management	Air and Water Laboratory	Budi Cahyadi, S.Si.
3	Marie Indah Alfinnur	SMK AK Nusa Bangsa	Waste Management	Air and Water Laboratory	Budi Cahyadi, S.Si.
4	Kenny Jeremia	Universitas Surabaya (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
5	Vincent Prasetya	Universitas Surabaya (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
6	Andreas Lukito Wijoyo	Universitas Surabaya (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
7	Noel Djitro	Universitas Surabaya (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si

8	Ricky Sanjaya	Universitas Surabaya (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
9	Elda Herlistyani	Institut Pertanian Bogor Faculty of Mathematics and Natural Sciences (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
10	Dinar Puspa indah	Institut Pertanian Bogor Faculty of Mathematics and Natural Sciences (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
11	Bella Julyasri	Institut Pertanian Bogor Diploma Programme	Waste Management	Air and Water Laboratory	Budi Cahyadi, S.Si..
12	Diana Agustini Raharja	Institut Pertanian Bogor Diploma Programme	Waste Management	Air and Water Laboratory	Budi Cahyadi, S.Si.
13	Miftahul Huda Fendiyanto	Institut Pertanian Bogor Diploma Programme	Storage Fungi	Phytopathology Laboratory	Ir Ina Retnowati
14	Rizky Dwi Satrio	Institut Pertanian Bogor Diploma Programme	Mushroom Cultivation	Mushroom Laboratory	Samsul A. Yani, S.Si
15	Azizah Nur Islam	Universitas Jenderal Soedirman (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
16	Yogi Prasetyo	Universitas Jenderal Soedirman (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
17	Rosalina Fauziah	Universitas Jenderal Soedirman (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
18	Hanim Rahayu R	Universitas Jenderal Soedirman (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
19	Hasyiyati Marissa N	Universitas Jenderal Soedirman (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
20	Hilyani Rahmat	Universitas Jenderal Soedirman (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
21	Hera Herliyani	SMK Bina Putera Nusantara	Waste Management	Soil and Plant Laboratory	Arif Nuryadin, B.Sc
22	Nandia Nuraini Avisa	SMK Bina Putera Nusantara	Waste Management	Soil and Plant Laboratory	Arif Nuryadin, B.Sc
23	Maulana Zarkasih	SMK Negeri 63 Jakarta	Mushroom Cultivation	Mushroom Laboratory	Samsul A. Yani, S.Si
24	Fadhil Amar S	SMK Negeri 63 Jakarta	Mushroom Cultivation	Mushroom Laboratory	Samsul A. Yani, S.Si
25	Eka Sari Septiawati	SMK Negeri 63 Jakarta	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
26	Fatmah Chairiyah	SMK Negeri 63 Jakarta	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
27	Dini Nur Azila	SMK Negeri 63 Jakarta	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si



28	Diah Ayu Ningtyas	SMK Wikrama	Office Administration	GAPRD	Rima Febriana, SE
29	Reni Anggraeni	SMK Wikrama	Office Administration	PDS	Manik Hasri, SH
30	Tia Mutiara	SMK Wikrama	Office Administration	KMD	Harry Imantho, M.Sc.
31	Tia Rostiani	SMK Wikrama	Office Administration	HRMD	Yunita, SP
32	Taufik Kurmiawan	STMIK ERESHA (undergraduate)	Technique of Computer Network	KMD	Harry Imantho, M.Sc.
33	Nur Fitria D. R. A	Universitas Brawijaya (undergraduate)	Forest Plant Nursery	Silviculture Laboratory	Dr Irdika Mansur
34	Lucky Mulyawan	Universitas Brawijaya (undergraduate)	Forest Plant Nursery	Silviculture Laboratory	Dr Irdika Mansur
35	Kresna Eko P	Universitas Brawijaya (undergraduate)	Forest Plant Nursery	Silviculture Laboratory	Dr Irdika Mansur
36	Ristyan Vidya Reza Utama	Akademi Analisis Kimia (Diploma Programme)	Waste Management	Air and Water Laboratory	Budi Cahyadi, S.Si.
37	Henny Helmy, S.Si.,M.Si	Universitas Bangka Belitung (Lecturer)	Plant Tissue Culture	Bioteknology Laboratory	Dewi Rahmawati, S.Si.
38	Wida Rusmiati	SMK YMA Megamendung	Office Administration	Procurement	Wati Madyawati
39	Siti Sofiah	SMK YMA Megamendung	Office Administration	FAD	Jujum
40	Resti Fauzi	SMK YMA Megamendung	Office Administration	CBD	Yuni Puspita Sari, M.M.
41	Ninda Amelia Putri	SMK YMA Megamendung	Office Administration	PDS	Manik Hasri, SH
42	Herlistin Mooy, S.P, M.Pd	SPP Negeri Kupang (Teacher)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sullistiani, M.Si
43	Ani Fatimah	SMK Negeri 2 Cilaku Cianjur	Waste Management	Service Laboratory	Santi Ambarwati, M.Si
44	Ida Nur	SMK Negeri 2 Cilaku Cianjur	Waste Management	Service Laboratory	Santi Ambarwati, M.Si
45	Nurhaela	SMK Negeri 2 Cilaku Cianjur	Waste Management	Service Laboratory	Santi Ambarwati, M.Si
46	Nurhalimah	SMK Negeri 2 Cilaku Cianjur	Waste Management	Service Laboratory	Santi Ambarwati, M.Si
47	Farhan Adi Rahman	SMKN 4 Bogor	Technique of Computer Network	KMD	Harry Imantho, M.Sc
48	Jihan Rosiyani	SMKN 4 Bogor	Technique of Computer Network	KMD	Harry Imantho, M.Sc
49	Mohamad Fauzan Septian	SMKN 4 Bogor	Technique of Computer Network	KMD	Harry Imantho, M.Sc
50	Mursy Nur Arif	SMKN 4 Bogor	Technique of Computer Network	KMD	Harry Imantho, M.Sc
51	Nasrul Hidayat	SMKN 4 Bogor	Technique of Computer Network	KMD	Harry Imantho, M.Sc
52	Jelita Indianti	SMAK Bogor	Waste Management	Air and Water Laboratory	Budi Cahyadi, S.Si.

53	Dhita Rani Pertiwi	SMAK Bogor	Waste Management	Soil and Plant Laboratory	Arif Nuryadin, B.Sc
54	Nina Karisma Putri	SMAK Bogor	Aflatoxin Testing	Food and Feed Laboratory	Santi Ambarwati, M.Si.
55	Nurul Maulida Riska	SMAK Bogor	Waste Management	Air and Water Laboratory	Budi Cahyadi, S.Si.
56	Estri Rahajeng, S.TP., M.Sc	SMK PP Negeri Sembawa (Teacher)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
57	Ery Suristiono, SP	SPP Pertanian Jakarta (Teacher)	Mushroom Cultivation	Mushroom Laboratory	Samsul A. Yani, S.Si
58	Rukijati Widjiansingih, SP	SPP Pertanian Jakarta (Teacher)	Mushroom Cultivation	Tissue Culture Laboratory	Erina Sulistiani, M.Si
59	Siti Novi Rahmawati	SMK Amaliah 2	Office Administration	FAD	Supriyatno, A.Md
60	Siti Kholifah	SMK Amaliah 2	Office Administration	KMD	Tika Tresnawati, M.Si
61	Anita Aprilianti	SMK Amaliah 2	Office Administration	HRMD	Yunita, SP
62	M. Ilyas Wiarsa	SMK Amaliah 2	Office Administration	Procurement	Wati Madyawati
63	Mutiarini Sapitri	SMK Amaliah 2	Office Administration	GAPRD	Lidia Defita, S.Kom
64	Aina Lucia Maria	SMK Ranti Mula	Office Administration	CBD	Yuni Puspita Sari, M.M.
65	Yolanda Sari	SMK Ranti Mula	Office Administration	FMD	Siti Lastiah
66	Yulia Astuti	SMK Ranti Mula	Office Administration	PDSD	Manik Hasri, S.H.
67	Nurjanah	SMK Ranti Mula	Office Administration	GAPRD	Lidia Defita, S.Kom.
68	Nipal Liansyah	SMK Ranti Mula	Office Administration	CBD	Yuni Puspita Sari, M.M.
69	Handika Karim	SMK Ranti Mula	Office Administration	Procurement	Wati Madyawati
70	Siti Anisa	Universitas Sultan Ageng Tirtayasa (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
71	Dewi Asmanah	Universitas Sultan Ageng Tirtayasa (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
72	Uni Nur Faridha	Universitas Sultan Ageng Tirtayasa (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
73	Harum Hafifah Hajar Ratna Nasution	Universitas Pakuan (undergraduate)	Waste Management	Natural Product Laboratory	Dr Hilman Affandi
74	Tiara Muhandiyanti	Universitas Pakuan (undergraduate)	Waste Management	Natural Product Laboratory	Dr Hilman Affandi
75	Achmad Syuhada	Universitas Pakuan (undergraduate)	Waste Management	Natural Product Laboratory	Dr Hilman Affandi
76	Muhammad Rudy Harni	Universitas Pakuan (undergraduate)	Waste Management	Natural Product Laboratory	Dr Hilman Affandi

77	Anissa Rizkasari	Universitas Pakuan (undergraduate)	Waste Management		Natural Product Laboratory	Dr Hilman Affandi
78	Fauziah Rahma Fitaloka	Universitas Pakuan (undergraduate)	Aflatoxin Testing		Food and Feed Laboratory	Ratnaningsih, S.Si.
79	Rusminah	SMK Negeri 2 Pandeglang	Aflatoxin Testing		Food and Feed Laboratory	Ratnaningsih, S.Si.
80	Ira Rahayu	SMK Negeri 2 Pandeglang	Waste Management		Air and Water Laboratory	Budi Cahyadi, S.Si.
81	Siti Jamilah	SMK Negeri 2 Pandeglang	Waste Management		Soil and Plant Laboratory	Arif Nuryadin, B.Sc
82	Ucu Sulastri	SMK Negeri 2 Pandeglang	Waste Management		Soil and Plant Laboratory	Arif Nuryadin, B.Sc
83	Nina Rachmawati	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Mushroom Cultivation		PDSD	Samsul A. Yani, S.Si,
84	Salma Nurtsaniah	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Mushroom Cultivation		PDSD	Samsul A. Yani, S.Si,
85	Alfanti Safitri	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Mushroom Cultivation		PDSD	Samsul A. Yani, S.Si,
86	Nabila Ibadurrohmah	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Mushroom Cultivation		PDSD	Samsul A. Yani, S.Si,
87	Sheni Setyaningsih	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Mushroom Cultivation		PDSD	Samsul A. Yani, S.Si,
88	Yesi Tri Novian	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Mushroom Cultivation		PDSD	Samsul A. Yani, S.Si,
89	Octaviani	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Mushroom Cultivation		PDSD	Samsul A. Yani, S.Si,
90	Anisa Nur Fatwa	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Mushroom Cultivation		PDSD	Samsul A. Yani, S.Si,

91	Nuri Nursjahbani	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Mushroom Cultivation	PDS	Samsul A. Yani, S.Si,
92	Rianda Sri Rahayu S	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Mushroom Cultivation	PDS	Samsul A. Yani, S.Si,
93	Rahmawanti Octavia Putri	Universitas Brawijaya (SI)	Mushroom Cultivation	Mushroom Laboratory	Samsul A. Yani, S.Si,
94	Yeti Siti Fatmah	Universitas Brawijaya (undergraduate)	Mushroom Cultivation	Mushroom Laboratory	Samsul A. Yani, S.Si,
95	Yulia Mandala Sari	Politeknik Negeri Lampung (Diploma Programme)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
96	Kiki Aprilia	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
97	Elsa Dewi	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
98	Rio Ridho Mahesa	UIN Riau (undergraduate)	Waste Management	Soil and Plant Laboratory	Arif Nuryadin, B.Sc
99	Dian Adriani	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
100	Indriani Kartika	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
101	Hazhar Hanafi	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
102	Roni Rakhmad Siregar	Institut Pertanian Bogor Faculty of Forestry (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
103	Fahri Muhamad Dahlan	Institut Pertanian Bogor Diploma Programme	Waste Management	Soil and Plant Laboratory	Arif Nuryadin, B.Sc



104	Putri Nurjannah Chairun	Institut Pertanian Bogor Diploma Programme	Waste Management	Air and Water Laboratory	Budi Cahyadi, S.Si.
105	Hedi Rizaldi	SMK Amaliah 1 Ciawi	Technique of Computer Network	MIT	Lukman Harris, S.Si
106	Muhamad Basrawi	SMK Amaliah 1 Ciawi	Technique of Computer Network	MIT	Lukman Harris, S.Si
107	Herdiansyah	SMK Amaliah 1 Ciawi	Technique of Computer Network	MIT	Lukman Harris, S.Si
108	Moli Nadri	Institut Pertanian Bogor (Diploma Programme on Computer Technique)	Technique of Computer Network	KMD	Lukman Harris, S.Si
109	Ibnu Aziz	Institut Pertanian Bogor (Diploma Programme on Computer Technique)	Technique of Computer Network	KMD	Lukman Harris, S.Si
110	Muhammad Irfan Fadhilah	Institut Pertanian Bogor (Diploma Programme on Computer Technique)	Technique of Computer Network	KMD	Lukman Harris, S.Si
111	Zacky Giffary	Institut Pertanian Bogor (Diploma Programme on Computer Technique)	Technique of Computer Network	KMD	Lukman Harris, S.Si
112	Devi Nopihananto	Institut Pertanian Bogor (Diploma Programme on Computer Technique)	Technique of Computer Network	KMD	Lukman Harris, S.Si
113	Bayu Nugraha	Institut Pertanian Bogor (Diploma Programme on Computer Technique)	Technique of Computer Network	KMD	Lukman Harris, S.Si
114	Angga Nurdiansyah	SMK Bina Cipta Insani	Office Administration	FAD	Supriyatno, A.Md.
115	Adivya Saputra	SMK Bina Cipta Insani	Office Administration	FAD	Supriyatno, A.Md.
116	Nia Arsita	SMK Bhakti Insani	Office Administration	IndoBIC	Rina Mardiana
117	Destianty Caroline	SMK Bhakti Insani	Office Administration	HRMD	Fitri Junaedy
118	Ayu Listiana	SMK Bhakti Insani	Office Administration	GAPRD	Lidia Defita, S.Kom
119	Muh Ramdani Abidin	SMK Bhakti Insani	Office Administration	Procurement	Wati Madyawati
120	Aneq Aryani Pratiwi	SMK Negeri 2 Cilaku Cianjur	Waste Management	Air and Water Laboratory	Budi Cahyadi, S.Si.
121	Erni Kurniawati	SMK Negeri 2 Cilaku Cianjur	Waste Management	Soil and Plant Laboratory	Arif Nuryadin, B.Sc
122	Pandu Giandisal	SMK Terpadu Yapisa Megamendung	Office Administration	KMD	Woro Kanti
123	Saeput Nurarifin	SMK Terpadu Yapisa Megamendung	Office Administration	KMD	Peri Siantuni
124	Ani Rosita	SMK Terpadu Yapisa Megamendung	Office Administration	FAD	Supriyatno, A.Md

125	Siti Nurholifah Astuti	SMK Terpadu Yapisa Megamendung	Office Administration	FMD	Siti Lastiah
126	Elsa Maharani	LIA (Diploma Programme)	Office Administration	GAPRD	Tenni Wahyuni
127	Inda Aprilla	LIA (Diploma Programme)	Office Administration	IndoBIC	Dewi Suryani
128	Dianisa Rizkika	Institut Teknologi Bandung (undergraduate)	Storage Pest	Entomology Laboratory	Ir Sri Widayanti
129	Hermawan	UKI Atma Jaya (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
130	Maximilian Samuel	UKI Atma Jaya (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
131	Eunice Limantara	UKI Atma Jaya (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
132	Danny Indradjaja	UKI Atma Jaya (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
133	Avian Adi Nugroho	UKI Atma Jaya (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
134	Ignes Nathania	UKI Atma Jaya (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
135	Silvia Puspita Dewi	SMK Bina Putera Nusantara	Waste Management	Air and Water Laboratory	Budi Cahyadi, S.Si.
136	Gustini Arse	SMK Bina Putera Nusantara	Waste Management	Soil and Plant Laboratory	Arif Nuryadin, B.Sc
137	Nurul Walidah Oktaviani	Institut Teknologi Bandung (undergraduate)	Nursery Plants	PDSD	Hoerudin
138	Mulyani	Institut Pertanian Bogor Faculty of Mathematics and Natural Sciences (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
139	Fernanda R.N.Z	Institut Pertanian Bogor Faculty of Mathematics and Natural Sciences (undergraduate)	Plant Tissue Culture	Tissue Culture Laboratory	Erina Sulistiani, M.Si
140	Nurhalimah	Institut Pertanian Bogor Faculty of Mathematics and Natural Sciences (undergraduate)	Aflatoxin Testing	Mikrobiology Laboratory	Maya Masita Novianti, M.Si

141	Giska Setya Priaji	Institut Pertanian Bogor Faculty of Agriculture Technology (undergraduate)	Vegetation, Weed Identification and Analysis of Savanna Ecosystem	Herbarium Laboratory	Dr Sri S. Tjitrosoedirdjo
142	Siti Aisyah	Institut Pertanian Bogor (Diploma Programme, Faculty of Mathematics and Natural Sciences)	Waste Management	Soil and Plant Laboratory	Arif Nuryadin, B.Sc
143	Novia	Institut Pertanian Bogor (Diploma Programme, Faculty of Mathematics and Natural Sciences)	Waste Management	Soil and Plant Laboratory	Arif Nuryadin, B.Sc
144	Muchammad Arif Hidayat	Institut Pertanian Bogor (Diploma Programme, Faculty of Mathematics and Natural Sciences)	Waste Management	Air and Water Laboratory	Budi Cahyadi, S.Si.
145	Achmad Gus Fahmi	Institut Pertanian Bogor (Diploma Programme, Faculty of Mathematics and Natural Sciences)	Waste Management	Air and Water Laboratory	Budi Cahyadi, S.Si.
146	Chyntia Dewi Septiani Y R	Institut Pertanian Bogor Department of Computer Science Faculty of Mathematics and Natural Sciences (undergraduate)	Technique of Computer Network	KMD	Lukman Harris, S.Si
147	Kyulene Bumlya Fallah	Institut Pertanian Bogor Department of Computer Science Faculty of Mathematics and Natural Sciences (undergraduate)	Technique of Computer Network	KMD	Harry Immantho, M.Sc
148	Wieke Aulia Putri	Institut Pertanian Bogor Department of Computer Science Faculty of Mathematics and Natural Sciences (undergraduate)	Technique of Computer Network	Herbarium Laboratory	Dr Sri S. Tjitrosoedirdjo
149	Niko Fajar Juliyanto	Institut Pertanian Bogor Department of Computer Science Faculty of Mathematics and Natural Sciences (undergraduate)	Technique of Computer Network	Herbarium Laboratory	Dr Sri S. Tjitrosoedirdjo

### Appendix 3. Training Courses, Workshops, Group Discussions, Seminars and Meetings Conducted during FY 2014/2015

No.	Titles of activities	Venue and Dates of implementation	Objectives	Types and number of participants			Outputs produced	Funding sources	Partners	Amount/ In-Kind Contribution
				F	M	Total				
<b>A. National Training Courses, Workshops, Group Discussions, Seminars and Meetings</b>										
1	Discussion on Biotechnology Development	Bogor, 23 July 2014	The event was aimed to steer discussion on the development of biotechnology especially in Indonesia	8	27	35	Biotech stakeholders agreed to create a video program which highlight biotech crop development in Indonesia	CropLife	ISAAA, Quadrata	USD1,372
2	Rountable Discussion for Media Practitioners "A Tribute to the 69 <sup>th</sup> Anniversary of the Republic of Indonesia from Biotechnology Community"	Jakarta, 14 August 2014	The event was aimed to enhance the awareness and understanding of the media to the science of agri-biotechnology and its contributions to agricultural development, food security, and environmental sustainability vis-à-vis challenges by changing climate and also to enhance media capacities in communicating crop biotechnology, as well as promote science-based, responsible, and accurate reporting on biotechnology among media practitioners in Indonesia.	15	29	44	Several positive articles on biotechnology were produced	CropLife	Indonesia Consortium of Agricultural Biotechnology (ICAB), National Outstanding Farmers and Fishermen Association (NOFA), Indonesian Society for Agribusiness and Agroindustry (ISAA), and Indonesia Seed Association (ISA) and the International Service for the Acquisition of Agri-bio-tech Applications (ISAAA)	USD9,186



3	Training Course on Managing Stored Product Pests through Good Fumigation Practices	SEAMEO BIOTROP, Bogor, 25-28 August 2014	1) Provide knowledge about some alternative pest control warehouse using various types of fumigants; 2) Provide knowledge about the fumigation technique is good and right; and 3) Make this training as a medium for the exchange of knowledge, ideas, and experiences of participants in overcoming the problems of pests warehouse.	8	27	35	Knowledge and experiences on various stored product insect pests and its control alternatives, types of fumigants and their formulation, and proper fumigation techniques such as phosphine fumigation in form of methal phosphide and liquified phosphine, ethyl formate fumigation, sulphuryl fluoride fumigation and also fumigation practices in silos.	GOI	IDR 64.998.000
4	Quarterly Public Seminar 2: "From project sketch to Journal Publication: Research on Land Cover and Its Consequences for Plant Diversity" (Dr Sri S. Tjitrosoedirdjo)	SEAMEO BIOTROP, Bogor, 25 August 2014	Sharing experience from speaker of the past two years in running the project on "Investigating the consequences of rainforest transform into agricultural system for plant diversity in Sumatera, Indonesia"	38	21	59	With this seminar, participants are expected to get an idea of how to prepare the information about how to set up "field work" for research on aspects of vascular plant diversity, especially in Jambi (Sumatera) were conducted in areas with a regional scale in four transformation system (forests, rubber forests, plantations rubber, oil palm plantations) replicated in two different landscapes (Harapan Rainforest and TNBD)	GOI	Dr Katja Rembold, Goettingen University, Germany

5	Quarterly Public Seminar 3: 1. Documenting Fungal Endophytes from Philippine Mangroves for Drug and Enzyme Discovery 2. Phylogenetic Analysis of Fungal Endophytes from Philippine Mangroves (Dr Jesus C. Fernandez)	IPB, Bogor, 10 September 2014		40	44	73	-	GOI	Prof Dr Thomas Edison E. Dela Cruz and Mr Carlo Chris S. Apurillo, University of Santo Tomas (UST), Philippines and Dr Kustiariyah Tarman, Institut Pertanian Bogor (IPB)	USD 19,028
6	Issue Management Workshop on Bio-technology	Bogor, 15 – 16 September 2014	The workshop was aimed to learn the latest risk communication strategies and techniques that will support efforts to promote the objective benefits of agro-biotechnology in Indonesia to a diverse audience; and to provide an interactive platform that will enable participants to share ideas and experiences as to how to adopt and deploy the latest risk communications techniques in an Indonesian context.	12	16	28	Participants learn about communication strategies and techniques which can be implemented to communicate biotech especially for scientists	CropLife	PBPI and ISAAA	
7	Quarterly Public Seminar 4: Seminar on Starch Accumulating Palms in Indonesia (Dr Irdika Mansur)	SEAMEO BIOTROP, Bogor, 29 September 2014		38	28	66		GOI	Prof Yoshinori Yamamoto, Kochi University, Japan	

8	Training Course on Utilization of Bioinformatics and Molecular Data Analysis (Dr Ulfah J. Siregar)	SEAMEO BIOTROP, Bogor, 11-13 November 2014	<ol style="list-style-type: none"> <li>1. Introducing molecular data in a bioinformatics system</li> <li>2. Provide a way to access and utilize bioinformatics systems</li> <li>3. Introducing molecular data analysis methods with the latest software</li> </ol>	23	8	31	Participants are expected to know the molecular data, how to access and use bioinformatics systems and know the methods of analysis and interpret it using some of the techniques of some of the latest software to help research or daily work	GOI	
9	Seminar-Workshop on "Enhancing the Quality, Safety and Efficacy of Herbal Medicine in Southeast Asia", and "Networking Meeting With Prospective Collaborations Engaged in Renewal Energy" (Dr. Jesus C. Fernandez / HLAF, Malaysia)	SEAMEO BIOTROP, Bogor, 12-13 November 2014	<ol style="list-style-type: none"> <li>1. Sharing information of Institutional and Legal Frameworks in Promotion and Commercialization of Herbal Medicine</li> <li>2. Sharing experience Technology Trends and Best Practices in Quality and Safe Herbal Medicine Production</li> <li>3. Identify Research and Capacity Building Needs to Enhance the Quality and Safety of Herbal Medicine Production</li> </ol>	28	15	42	Participants are expected to get information about commercialization, best practice, utilization and production of herbal medicine		HLAF Malaysia

10	Workshop on Reclamation of Tropical Mining, Indonesia (Dr Dewi Wulandari)	SEAMEO BIOTROP, Bogor, 17-21 November 2014	<ol style="list-style-type: none"> <li>1. To improve the understanding of academic intellectuals about concept and model of reclamation</li> <li>2. To know any applicable package of reclamation technology that can be adopted and developed in post mining area.</li> <li>3. To learn and practice directly the applicable reclamation technology for post mining area.</li> <li>4. To give direct opportunity to have discussion between audience and the mining expert, those providing an opportunity to develop research collaboration in the future.</li> </ol>	11	15	26	<p>By participating in this workshop, it is expected that the audience will have more insight and understanding about applicable reclamation concept and technique in post mining area. Discussion among audience and or mining expert is expected can be a good media in transfer of knowledge, developing idea, and hopefully initiate for future collaboration which finally hopefully would able to support the success of reclamation through the improvement of land productivity and reduction in reclamation cost.</p>	GOI		
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11	2 <sup>nd</sup> Training on Utilization of Low-cost and Locally Available Materials for Good Quality Fish Feed Manufacturing (Dr Nur Bambang Priyo Utomo)	SEAMEO BIOTROP, Bogor, 24-28 November 2014	<p>In general, the training aims to maximize the use of available local materials and enhance the entrepreneurial skills of the participants in manufacturing home-made low-cost fish feeds towards sustaining the growth of small scale aquaculture industry in Indonesia.</p> <p>At the end of the training course, the participants are expected to be able to:</p> <ol style="list-style-type: none"> <li>1. To select and formulate the appropriate mix of raw ingredients for processing a cost-effective and high quality fish-feed;</li> <li>2. Make a design and maintain facility manufacturing of fish feed home-made a low cost</li> <li>3. Make packaging and to marketable the fish feed low-cost home-made of high quality</li> </ol>	17	23	40	<p>The participants are expected to come up with their own design of a low-cost fish feed manufacturing facility and fish feed formulation that is of high quality using locally available raw materials.</p> <p>On applying what they would learn from the training, the participants are also expected to help ensure the consistent supply of high quality feed products with low-cost budget using locally available raw materials, thus improving the livelihood development of stakeholders of small scale aquaculture industry in Indonesia</p>	GOI			
12	Seminar on Biotech Potato as Eco-Friendly Late Blight Disease Control Component	Bogor, 25 November 2014	The event aims to share information on biotech potato	6	25	31	<p>Participants learn about the current status of studies on biotech potato resistance to late blight disease; and on environment and food safety of biotech potato</p>	ABSP	ICABIOGRAD, IVRI, ISAAA	USD 4,000	

13	Seminar on Stewardship of Late Blight Resistant Potato	Bogor, 18 December 2014	The event was aimed to inform and deliver knowledge on the advantages of Late Blight Resistant (LBR) potato; highlight the process of variety registration of LBR potato; and also highlight the standard operational procedures (SOP) of seeds multiplication, cultivation and management of biotech potato.	5	27	32	Participants learn about the standard operational procedures (SOP) of seeds multiplication, cultivation and management of biotech potato	ABSP	ICABIOGRAD, IVRI, ISAAA	USD 9,500
14	Seed Industry Visit	East Java, 22 – 24 December 2014	The event was aimed to provide an overview of the maize and sugarcane seed industry in Indonesia.	10	17	27	Participants were excited to learn more about agri-biotech industry in Indonesia. Total 20 positive articles were produced after the event by major media in Indonesia and the three-day event was also covered by one of the national television in Indonesia	CropLife	National Outstanding Farmers and Fishermen Association (NOFA), Sugarcane Farmers Association (APTRI), PTPN XI and ISAAA	USD 30,000
15	Seminar on Global Status of Biotech Crops in 2014	Jakarta, 11 February 2015	The event was aimed to steer debate and discussion on recent development of agri-biotech in the world	58	91	149	Participants learn about current status of biotechnology adoption and its application in the world during 1996-2014	ISAAA and CropLife	Ministry of Agriculture, National Outstanding Farmers Association (NOFA), Indonesian Society for Agricultural Biotechnology (PBPI)	USD 8,000

16	Training Course on Agarwood Cultivation and Agarwood Oil Distillation for Tamberau Regency Community-West Papua (Jonner Situmorang, M.Si)	SEAMEO BIOTROP, Bogor, 9-12 Maret 2015	The training was aimed to: 1. Provide insight into the potential development of agarwood in Indonesia; 2. Provide knowledge on vegetative and generative propagation of agarwood seedlings, inoculation techniques, harvesting, classification / grading of agarwood; 3. Provide understanding and knowledge of the basic techniques of agarwood oil refining; 4. Make as a medium for the exchange of knowledge, ideas and experience of the participants issue in the cultivation of agarwood	8	23	31	After this training, participants are expected to: 1. Have a basic knowledge for the development of sustainable agarwood can be achieved in the future 2. Having an understanding and insight in potential development of aloes 3. Having the ability in seedling propagation techniques of agarwood through vegetative and generative 4. Have the ability to perform inoculation techniques, harvesting, classification / grading of agarwood 5. Having an understanding and basic technique agarwood oil refining	Local Government of Tamberau, West Papua	
17	Inter-Centre Training on e-Book Development (Harry Imantho, M.Sc)	SEAMEO BIOTROP, Bogor, 20-22 April 2015	After this training, participants are expected to develop Multimedia-Based Digital Book for the purpose of training, learning and dissemination of information by integrating a variety of sources in the form of text, images and video	17	8	25	At the end of the training, participants can generate a digital book that integrate data source text, image, video		GOI

18	Training on Sampling Techniques and Environmental Quality Test Results Interpretation (Santi Ambarwati, M.Si)	SEAMEO BIOTROP, Bogor, 14-16 April 2015	In general to equip the participants with applied knowledge and skills in using proper sampling techniques for testing soil, water, air for quality environment monitoring	2	19	21	At the end of the training, participants are expected to: 1. Understand and practice the techniques of sampling water, air and soil is good and true, representative and in accordance with the relevant standards or regulations 2. Participants are able to plan environmental quality monitoring program in its institutions. 3. Understand and practice how to interpret the test results for testing samples of water, air and soil		
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19	National Seminar on Promoting Research on Forest and Land Fire Mitigation, Adaptation and Impact to Human and Biodiversity (Ellyn K. Damayanti, PhD Agr)	SEAMEO BIOTROP, Bogor, 28 April 2015	To share past and current research works towards analyzing the gaps and formulating future research directions for a more effective adaptation and mitigation of the impacts of forest and land fires to human and biodiversity	18	22	40	Expected output from this one day seminar are: 1. Participants will obtain information and knowledge on the aspects of fires, including the history of fire, the driver, pressure, and impacts to biodiversity and human, and response taken by stakeholders. 2. Participants will obtain information and knowledge on the aspects of biodiversity and human dimension in relation to fire. 3. Research recommendations on integrated monitoring, reporting, and control of fires, biodiversity, and human for Indonesia and Southeast Asian region This seminar also produced Seminar's Proceedings and completion report.	Liverpool University (UK), University of New South Wales (Australia), Lund University (Sweden), Ministry of Environmental & Forestry (MoEF), Jakarta and Faculty of Forestry, IPB, Bogor	US \$ 12,000 (in-kind contribution from UK, Sweden & Australia in the form of airline tickets & accommodation)
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20	FGD on History of Safe Use of Glyphosate-Based Herbicide	SEAMEO BIOTROP, Bogor, 13 May 2015	The event was aimed to provide accurate information on the safety of the herbicide glyphosate	6	12	18	Participants learn that all labeled uses of glyphosate are safe for human health and supported by one of the most extensive worldwide human health databases ever compiled on a pesticide; and glyphosate, a major active ingredient in Roundup® brand herbicides, be interpreted with great care	Monsanto	ISAAA	2,200
21	Training on Archiving (Bambang Sulistio, S.Si)	SEAMEO BIOTROP, Bogor, 19-21 May 2015	1. This training is designed for participants to understand how the manual and digital archive management is good and right (storage systems, borrowing, retrieval system, security, and removal and disposal) 2. Able to overcome the obstacles encountered in the implementation of archive management Manual and Digital	26	3	29	After this training, participants will understand the concept of records management and apply them in the institution/unit respectively, so that the problem of archives is no longer an obstacle to the operations of the company/institution.			

B. Regional/International Training Courses, Workshops, Group Discussions, Seminars and Meetings										
1	2 <sup>nd</sup> Regional Coordination Meeting of IAEA Project and Regional Seminar on Use of Atomic Energy for Crop Improvement (in collaboration with IAEA) (Dr Supriyanto)	SEAMEO BIOTROP, Bogor, 18-22 August 2014	<ol style="list-style-type: none"> <li>1. Share the current research developments on plant breeding using nuclear technology through mutation techniques.</li> <li>2. Evaluate the productivity of some advance mutant lines for increased agriculture production in different countries</li> <li>3. Identify needs and develop network on research and training programs.</li> </ol>	7	13	20	<ol style="list-style-type: none"> <li>1. Compilation of current research on plant breeding using nuclear technology through mutation techniques.</li> <li>2. Data on the productivity of some advance mutant lines for increased agriculture production</li> <li>3. List of research and training needs/programs.</li> </ol>	ISAAA	FAO/IAEA, Vienna, Austria	
2	Asian Regional MOP 7 Preparatory Meeting (IndoBIC in collaboration with ISAAA, the Philippine)	Bogor, 25 – 26 August 2014	The general aim of the regional preparatory meeting is to discuss the topics of MOP7 and how their outcomes can be implemented at the national level in a practical way	15	28	43	Participants can share experience from their countries regarding issues on biotechnology application for MOP 7 Meeting		The Public Research and Regulation Initiative (PRRI).	

3	4 <sup>th</sup> Regional Training Course on Prevention and Control of Mycotoxin Food and Feedstuff (Ms. Santi Ambarwati, M.Si) (in collaboration with HAU, Hanoi, Vietnam)	Hanoi, Vietnam, 25-30 September 2014,	In general, the training course aims to equip the participants with basic and applied knowledge and skills on the techniques for the analysis, prevention, and control of mycotoxins in food and feedstuff and, in the process, establish a network of practitioners among them in Vietnam. Specifically, at the end of the training, the participants must be able to: 1. Identify the factors affecting fungal growth and mycotoxin contamination in food and feedstuff. 2. Isolate, enumerate and identify fungi infecting food and feedstuff. 3. Analyze mycotoxins in food and feedstuff. 4. Practice appropriate methods to prevent and control mycotoxin contaminations in food and feedstuff.	16	12	28	1. Individual action plans on how they will apply the knowledge skills gained from the training 2. Informal mechanism to sustain the exchange of knowledge and information among them on the analysis, prevention and control of mycotoxins in food and feedstuff	Hanoi Agricultural University (HAU), Hanoi, Vietnam	
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4	Regional Seminar Workshop on Harmonizing Methods in Risk Analysis and Management of Forest Invasive Alien Plant Species in Southeast Asia (Dr Sri S. Tjitrosoedirdjo / FAO/IAEA Division, Vienna, Austria)	SEAMEO BIOTROP, Bogor, 2-5 December 2014	<p>The seminar-workshop generally aims to bring about consensus among participants in adopting a more harmonized approach to risk analysis of forest invasive alien plant species (FIAPS) in Southeast Asia.</p> <p>Specifically, the seminar-workshop aims to:</p> <ol style="list-style-type: none"> <li>1. Update the list of FIAPS that are found in the region</li> <li>2. Identify and level off the gaps in regional capacities for risk analysis and management of FIAPS</li> <li>3. Compile good practices in risk analysis and management of FIAPS which aligns with International standards</li> <li>4. Come up with a priority list of areas of concern on risk analysis of FIAPS needing further research and capacity building that could be undertaken collaboratively between and among countries in the region</li> <li>5. Develop a mechanism for effective networking and regular sharing of information and expertise on risk analysis and management of IAPS in the region</li> </ol>	10	26	36	<ol style="list-style-type: none"> <li>1. Updated list of FIAPS by country</li> <li>2. Compilation of good practices and gaps in risk analysis of FIAPS</li> <li>3. Recommendations for a more harmonized approaches to risk analysis of FIAPS</li> <li>4. List of research and capacity building needs on risk analysis of FIAPS</li> <li>5. Draft mechanism for networking and information exchange on risk analysis of FIAPS</li> <li>6. Seminar-workshop Proceedings</li> </ol>	UN FAO	
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## Appendix 4. BIOTROP's Publications

### Articles and Refereed Journals:

- Dwiyanti, F. G.; Harada, K.; Siregar, I. Z.; Kamiya, K. 2014. Population genetics of the critically endangered species *Dipterocarpus littoralis* Blume (Dipterocarpaceae) endemic on Nusakambangan Island, Indonesia. In: BIOTROPIA Vol. 21 (1); p. 1-12. BIOTROP, Bogor.
- Hanudin.; Budiarto, K.; Marwoto, B.; Djatnika, I. 2014. Identification of *Ralstonia solanacearum* isolated from a new host: *Cosmos caudatus* in Indonesia. In: BIOTROPIA Vol. 21 (1); p 25-37. BIOTROP, Bogor.
- Junaedi, D. I.; Dodo. 2014. Exotic plants of Halimun Salak Corridor: Micro-environment, detection and risk analysis of invasive plants. In: BIOTROPIA Vol. 21 (1); p 38-47. BIOTROP, Bogor.
- Nagur, K.S.; Sukarno, N.; Listiyowati, S. 2014. Identification of *Aspergillus flavus* and detection of its aflatoxin genes isolated from peanut and peanut processed products. In: BIOTROPIA Vol. 21 (1); p 59-70. BIOTROP, Bogor.
- Shahabuddin; Hasanah, U.; Eljonnahdi. 2014. Effectiveness of dung beetles as bioindicators of environmental changes in land-use gradient in Sulawesi, Indonesia. In: BIOTROPIA Vol. 21 (1); p 48-58. BIOTROP, Bogor.
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- Argente, F.A.T.; Cesar, S.A.; Danilo, T.D.Y. 2014. High turbidity affects filtration rate and pseudofaeces production of the mud clam *Polymesoda erosa* (Solander 1786) (Bivalvia: Corbiculidae). In: BIOTROPIA Vol. 21 (2); p 71-81 . BIOTROP, Bogor.
- Chanu, L.B.; Mohilal, N. 2014. Two new Aplhelenchoides Fischer, 1894 (Nematoda: Tylenhina) from Manipur, Northeast India. In: BIOTROPIA Vol. 21 (2); p 93-99. BIOTROP, Bogor.
- Handayani, T.; Alimuddin; Widyastuti, U.; Suryati, E.; Parenrengi, A. 2014. Binary vector construction and *Agrobacterium tumefaciens*-mediated transformation of lysozyme gene in seaweed *Kappahycus alvarezii*. In: BIOTROPIA Vol. 21 (2); p 82-92 . BIOTROP, Bogor.
- Perwitasari-Farajallah, D.; Farajallah, A. 2014. Testing reliability of serum samples as a DNA source on captive breeding long-Tailed Macaques (*Macaca fascicularis*). In: BIOTROPIA Vol. 21 (2); p 125-130. BIOTROP, Bogor.
- Samsuri; Jaya, I N.S.; Kusmana, C.; Murtalaksono, K. 2014. Restoration priority index development of degraded tropical forest landscape in Batang Toru Watershed, North Sumatera, Indonesia. In: BIOTROPIA Vol. 21 (2); p 111-124. BIOTROP, Bogor.
- Sudiana, I M.; Kanti, A.; Helbert; Octaviana, S.; Suprapedi. 2014. Lipid accumulation by *Flavodon flavus* ATH using palm oil mill effluent as substrate. In: BIOTROPIA Vol. 21 (2); p 100-110. BIOTROP, Bogor.
- Dharmaputra, O.S.; Halid, H.; Sunjaya. 2014. Serangan *Tribolium castaneum* pada beras di penyimpanan dan pengaruhnya terhadap serangan cendawan dan susut bobot. (*Tribolium castaneum* infestation in stored milled rice and its effect on fungal infection and weight loss). Jurnal Fitopatologi Indonesia 10 (4): 126-132. In Indonesian with abstract in English.
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- Hasan, AEZ; Mangunwidjaja, D; Sunarti, TC; Suparno, O; Setiyono, A. 2014. Investigating the antioxidant and anticytotoxic activities of propolis collected from five regions of Indonesia and their abilities to induce apoptosis. Emirate Journal of Food Agriculture. 26(5): 390-398.
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### Technical Paper

Henry M. Manik. 2014. Underwater Acoustic Detection of Marine Biota. *The ASEAN Conference on Science and Technology*.

Hasan AEZ, D Mangunwidjaja, TC Sunarti, O Suparno, A Setiyono. 2015. Produksi Nanopropolis dengan Cara Inklusi pada  $\beta$ -Siklodekstrin sebagai Bahan Antikanker Payudara. *Inovasi Prospektif 107, Kementerian Ristek dan Teknologi*.

Kustiariyah Tarman, Carlo Chris Apurillo, Thomas Edison dela Cruz. 2015. Fungal Biodiversity for Sustainable Development: Assessing the Diversity and Bioactive Metabolites of Fungal Endophytes Associated with Indonesian and Philippine Mangroves. *Global Young Academy General Assembly, 25-29 May 2015, Canada*.

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Damayanti, E.K. (Ed). 2014. Apotek Alam Bumi Dayak Kanayatn. SEAMEO BIOTROP, Bogor. 145 p.

Sulistiani, E.; Yani, S.A. 2014. Kultur Jaringan Rumput Laut Kotoni (*Kappaphycus alvarezii*). SEAMEO BIOTROP, Bogor. 128 p.

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Affandi, H.; Nuryadin, A.; Rojak. Enrichment of nursery blocks."Research DIPA BIOTROP 2014". BIOTROP, Bogor. 22 p.

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- Maharani, Y.; Hidayat, P. Study of biodiversity and aphids identification key in West Java "Research DIPA BIOTROP 2014". BIOTROP, Bogor. 79 p.
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- Manik, HM. Monitoring and mapping of tropical marine biota using underwater acoustic technology in Seribu Islands. "Research DIPA BIOTROP 2014". BIOTROP, Bogor. 59 p.
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- Novianti, M.M.; Dewantara E, D.; Tejo P, H.; Affandi, H. Efficacy of fungicide from essential oil on oil palm basal stem rot disease caused by *Ganoderma boninense* ."Research DIPA BIOTROP 2014". BIOTROP, Bogor. 34 p.
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- Siregar, U.J.; Hartati, S. RNA isolation and construction of CDNA library of sengon (*Paraserianthes falcataria*) resistant to boktor pest. "Research DIPA BIOTROP 2014". BIOTROP, Bogor. 26 p.
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- Soeroyo Jr., R.S.; Budiman, V.P.; Firmansyah, R.; Hutzi, A.A.; Khairani, L.; Fahimuddin, M.M.; Yulizar; Suharto, A. Homestead landuse for food security and environmental sustainability "Organic Verticulture Farming" ."Research DIPA BIOTROP 2014". BIOTROP, Bogor. 24 p.
- Tarman, K.; Cruz, T.E.d. The search for Novel Drugs: Assessing the biodiversity and antimicrobial activities of fungal leaf endophytes associated with Philippine and Indonesian mangroves . "Research DIPA BIOTROP 2014". BIOTROP, Bogor. 31 p.
- Tjitrosoedirdjo, S.; Tjitrosoedirdjo, S.S.; Mawardi, I.; Setiabudi; Wahyuni, I.; Bachri, S. Metodologi analisis resiko untuk evaluasi jenis-jenis tumbuhan invasif di Taman Nasional Gunung Gede Pangrango "Research DIPA BIOTROP 2014". BIOTROP, Bogor. 59 p.
- Tjitrosoedirdjo, S.; Tjitrosoedirdjo, S.S.; Setiabudi; Mawardi, I.; Bachri, S.; Wahyuni, I. Risk analysis of alien plant species invading Gunung Gede Pangrango National Park and recommendations of containment. "Research DIPA BIOTROP 2014". BIOTROP, Bogor. 17 p.
- Tjitrosoedirdjo, S.; Tjitrosoedirdjo, S.S.; Setiabudi; Mawardi, I.; Wahyuni, I.; Bachri, S. Identification pathway of invasive alien plant species at Gunung Gede Pangrango National Park, West Java, Indonesia ."Research DIPA BIOTROP 2014". BIOTROP, Bogor. 47 p.
- Ulfah, M.; Farajallah, A.; Muladno; Jakaria; Perwitasari, R.R. D. Detection of myxovirus (mx) resistance gene structure on Indonesian local chicken breeds as a foundation for selecting chicken resistance to viral. "Research DIPA BIOTROP 2014". BIOTROP, Bogor. 25 p.
- Utomo, Nur B. P.; Mansur, I. Pemanfaatan danau bekas tambang batu bara PT.Tunas Inti Abadi (PT.TIA) di Kabupaten Tanah Bumbu Propinsi Kalimantan untuk usaha perikanan "Research DIPA BIOTROP 2014". BIOTROP, Bogor. 29 p.
- Winnie, R.M. Analysis of genetic structure and demographic history of the rice brown plantopper to reveal it's dispersal pattern across Java . "Research DIPA BIOTROP 2014". BIOTROP, Bogor. 32 p.
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## Training Course Reports

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Vol. I : Laporan Umum dan Evaluasi. (BIOTROP/TC-PPMPP/2014/1188)  
Vol.II : Kumpulan Materi Kuliah dan Pengantar Praktikum. (BIOTROP/TC-PPMPP/2014/1189)
- SEAMEO BIOTROP. 2014. Pelatihan Pengelolaan Hama Gudang Melalui Fumigasi yang Baik dan Benar, SEAMEO BIOTROP, Bogor, 25-28 Agustus 2014.  
Vol. I : Laporan Umum (BIOTROP/TC-FUMIGASi/2014/1192)  
Vol. II: Kumpulan Materi dan Praktikum. BIOTROP/TC-FUMIGASi/2014/1193)
- SEAMEO BIOTROP. 2014. Fourth Regional Training Course on Prevention and Control of Mycotoxins in Food and Feedstuff, Vietnam National University of Agriculture, Gialam-Vietnam, 25-30 September 2014.  
Vol. I : General Report and Evaluation. (BIOTROP/RTC-MCFF/2015/1206)  
Vol.II: Compilation of Course Materials. (BIOTROP/RTC-MCFF/2015/1207)
- SEAMEO BIOTROP. 2014. Pelatihan Pemanfaatan Bioinformatika dan Analisa Data Molekuler, Bogor, 11 - 13 November 2014.  
Vol.I : Laporan Umum dan Evaluasi. (BIOTROP/TC-PBADM/2014/1196)  
Vol.II: Kompilasi Materi Pelatihan. (BIOTROP/TC-PBADM/2014/1197)
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Vol. I : General Report. (BIOTROP/TC-IAS/2014/1201)  
Vol. II: Lecture Notes, Country Report, Workshop Outputs (BIOTROP/TC-IAS/2014/1201)
- SEAMEO BIOTROP. 2015. Laporan Pendidikan dan Pelatihan Inokulasi Gubal Gaharu untuk Masyarakat Kabupaten Tambrau, Papua Barat, SEAMEO BIOTROP, 9-14 Maret 2015.  
Vol. I. Laporan Umum dan Evaluasi. (BIOTROP/TC-Gaharu/2015/1204)  
Vol. II: Kumpulan Materi Kuliah Paraktikum. (BIOTROP/TC-Gaharu/2015/1205)
- SEAMEO BIOTROP. National Seminar on Promoting Research on Forest and Land Fires Mitigation, Adaption, and Impact to Human and Biodiversity, SEAMEO BIOTROP, 28 April 2015. BIOTROP/FLF/2015/1210

**Appendix 5. Scientific Training Courses, Workshops, Conferences  
and Symposia Attended by SEAMEO BIOTROP Staff Members during  
FY 2014/2015**

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
1	Erina Sulistiani, M.Si.	Diklat Teknis Kultur Jaringan Bagi Aparatur	Bandung, 16 July 2014	
2	Dr Jesus C. Fernandez	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
3	Dr Vincentius P. Siregar	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, Bogor, 14-15 July 2014	
4	Armaiki Yusmur, S.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
5	Eko Purwiyanto	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
6	Herni Widhiastuti, S.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
7	Woro Kanti Darmastuti, M.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
8	Drs Imam Mawardi	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
9	Dr Sri S. Tjitrosoedirdjo	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
10	Lukman Haris, S.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
11	Ine Heryanti, S.Kom.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
12	Dr Soekisman Tjitrosoedirdjo	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
13	Setiabudi, SH.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
14	Tenni Wahyuni, A.Md.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
15	Slamet Widodo, S.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
16	Riza Fadli Assegaf	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
17	Jonner Situmorang, M.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
18	Rima Febriana, SE.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
19	Yuni Puspita Sari, M.M.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
20	Prof Dr Okky Setyawati Dharmaputra	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
21	Santi Ambarwati, M.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
22	Ir Sri Widayanti	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
23	Ir Ina Retnowati	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
24	Wati Madyawati	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
25	Arif Nuryadin, B.Sc.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
26	Saiful Bachri, S.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
27	Suprpto	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
28	Lidia Defita, S.Kom	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
29	Indah Wahyuni, S.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
30	Nijma Nurfadila, S.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
31	Tika Tresnawati, S.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
32	Risa Rosita, S.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
33	Dewanti Pratiwi, S.Hut.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
34	Ryna M. Siahaan, S.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
35	Fitri Junaedy, S.E.I.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
36	Yunita, S.P.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
37	Samsul A. Yani, S.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
38	Ratnaningsih, S.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
39	Siti Lastiah	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
40	Asep Syaefudin, S.E.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
41	Supriyatno, A.Md.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
42	Budiyono	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
43	Rizkia Tirtani	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
44	Dewi Rahmawati, S.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
45	Devi Septrianti	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
46	Drs Arman R. Haryono	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
47	Budi Cahyadi, S.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
48	Agus Sujadi	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
49	Alfi D. Nugroho, A.Md.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
50	Asep Saepudin	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
51	Asep Syarif Hidayat, M.M.Pd.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
52	Anidah, S.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
53	Dani Yudi Trisna, A.Md.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
54	Erina Sulistiani, M.Si.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
55	Aan Darwati, A.Md.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
56	Harry Imantho, M.Sc.	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
57	Peri Siantuni	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
58	Dewi Suryani, M.M	In House Workshop on Living Out Our Core Values (Batch 1)	SEAMEO BIOTROP, Bogor, 14-15 July 2014	
59	Erina Sulistiani, M.Si	Tissue Culture Training Pelatihan Kultur Jaringan	Rumpin Seed Source and Nursery Center, 7 - 8 August 2014	
60	Dr Irdika Mansur, M.For. Sc.	Seminar Nasional Konservasi dan Pemanfaatan Flora Indonesia <i>National Seminar on Conservation and Utilization of Flora Indonesia</i>	Surabaya, 18 August 2014	
61	Risa Rosita, S.Si.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
62	Dewanti Pratiwi, S.Hut.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
63	Dewi Rahmawati, S.Si.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
64	Indah Wahyuni, S.Si.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
65	Kania Dewi Rahayu, S.Si.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	



No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
66	Peri Siantuni	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
67	Jonner Situmorang, M.Si.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
68	Herni Widhiastuti, S.Si.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
69	Rima Febriana, SE	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
70	Tenni Wahyuni, A.Md.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
71	Lidia Defita, S.Kom.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
72	Rizkia Tirtani	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
73	Deki Zulkarnain, S.Sos.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
74	Yunita, S.P.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
75	Fitri Junaedy, S.E.I.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
76	Aan Darwati, A.Md.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
77	Devi Septrianti	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
78	Siti Lastiah	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
79	Drs Arman R. Haryono	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
80	Maya Masita Novianti, M.Si.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
81	Lilys Betty Yuliawati, S.Si.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
82	Ryna M. Siahaan, S.Si.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
83	Ira Mutiara, S.E.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
84	Yuni Puspita Sari, M.M.	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
85	Riza F. Assegaf	In House Training Business Correspondence Writing	SEAMEO BIOTROP, Bogor, 26-27 August 2014	
86	Prof Dr Bambang Purwantara	Seminar Prospektif Ketahanan Pangan Indonesia Terhadap Global Food Security Index 2014	Kementerian Pertanian, Jakarta Selatan, 26 August 2014	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
87	Prof Dr Bambang Purwantara	PERHEPI Pre-Conference Workshop: Socio-Economic Consideration on Agricultural Biotechnology Prospective Indonesian Food Security Seminar Against Global Food Security Index 2014	Bogor, 27 August 2014	
88	Samsul A. Yani, S.Si.	Sarasehan Nasional Astruli Dalam Rangka Pelaksanaan Munas I Astruli <i>Astruli National Meeting in the Context of the Implementation of the National Conference I Astruli</i>	Jakarta, 28 August 2014	
89	Erina Sulistiani, M.Si.	Sarasehan Nasional Astruli Dalam Rangka Pelaksanaan Munas I Astruli <i>Astruli National Meeting in the Context of the Implementation of the National Conference I Astruli</i>	Jakarta, 28 August 2014	
90	Dika Zulkarnaen	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
91	Gita Hanipah	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
92	Irma Indriani, S.Si.	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
93	Maya M. Novianti, M.Si	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
94	Maman Darmanto	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
95	Drs Agung Mustofa	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
96	Hendro	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
97	Abd. Gofur	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
98	Sunardi Ikay	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
99	Soleh Sutisna	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
100	Asim	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
101	M. Sya'Roni	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
102	Bahrudin	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
103	Siti Sulastri Rangkuty	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
104	Risya Ayu Astari, A.Md.	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
105	Lillys Betty Yuliawaty, S.Si.	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
106	Mutiara Hidayat, S.Si.	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
107	Iwan Setiawan	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
108	Dwi Cahyono	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
109	Iwan Kurniawan	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
110	Achmad Syuhada	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
111	Sopian Hadi	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
112	Mulyadi	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
113	M. Yusuf	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
114	Ujang Ahmad	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
115	Dede Amjah	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
116	Hasan Basri	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
117	Ramdani	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
118	Aris Purnajaya	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
119	Sugih Mukti	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
120	Nurwihayat	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
121	Rosadi, S.Pd.	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
122	Sukirman Hidayat	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, 8 September 2014	
123	Zaenal Abiddin	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
124	Taufik Rokayat	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
125	Kodir	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
126	Dimiyati	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
127	Mahpudin	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
128	Ujang Sanusi	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
129	Yadi Supriadi	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
130	Zaenudin	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
131	Didit Trisnadi	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
132	Heriyanto	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
133	Indra Septian	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
134	Hendi	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
135	Ahmad Muhamad	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
136	T. Heriyanto	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
137	Syifa Fauzia	In House Workshop on Living Out Our Core Values (Batch 2)	SEAMEO BIOTROP, Bogor, 8 September 2014	
138	Bambang Sulistio, S.Si.	Workshop Penggunaan Teknologi GIS <i>Workshop on Use of GIS Technology</i>	Magetan, Jawa Timur, 11 - 12 September 2014	
139	Harry Imantho, M.Sc.	Workshop Penggunaan Teknologi GIS <i>Workshop on Use of GIS Technology</i>	Magetan, Jawa Timur, 11 - 12 September 2014	
140	Dr Sri S. Tjitrosoedirdjo	Forum Group Discussion Penguatan Pengawasan Agens Hayati dalam Rangka Peningkatan Produksi bio Industri dan Kualitas Lingkungan serta Kesehatan Manusia <i>Forum Group Discussion : Strengthening Supervision Framework of Enhanced Biological Agents in Bio Industrial Production and Environmental Quality and Human Health</i>	Jakarta, 16 September 2014	
141	Nijma Nurfadila, S.Si	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
142	Eko Purwiyanto	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	



No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
143	Mutiara Hidayat, S.Si	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
144	Risya Ayu Astari, A.Md	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
145	Siti Sulastri Rangkutiy	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
146	Achmad Syuhada	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
147	Aris Purnajaya	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
148	Heriyanto	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
149	Nurwihayat	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
150	Anidah, S.Si	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
151	Iwan Kurniawan	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
152	Rosadi, S.Pd.	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
153	Saiful Bachri, S.Si.	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
154	Lilly Betty Yuliawati, S.Si.	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
155	Maman Darmanto	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
156	Mahpudin	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
157	Ahmad Muhamad	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
158	Muhammad Hamdani	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
159	Gita Hanipah, S.Si.	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
160	Irma Indriani Hermawan, S.Si.	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
161	Syifa Fauzia	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
162	Budi Cahyadi, S.Si.	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
163	Arif Nuryadin, B.Sc.	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
164	Maya Masita Novianti, M.Si	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
165	Santi Ambarwati, M.Si	In House Training Pemeliharaan Peralatan, Pemeriksaan Antara dan Interpretasi Kalibrasi Peralatan Laboratorium <i>In House Training Equipment Maintenance, Interim Inspection and Calibration Interpretation on Laboratory Equipment</i>	SEAMEO BIOTROP, Bogor, 18 September 2014	
166	Erina Sulistiani, M.Si	Workshop Kajian Risiko pada Produk Perikanan <i>Risk Assessment Workshop on Fisheries Products</i>	Jakarta, 25 September 2014	
167	Jonner Situmorang, M.Si.	Produksi Gaharu berbasis Masyarakat <i>Community-based Eaglewood production</i>	Jakarta, 25 September 2014	



No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
168	Ellyn K. Damayanti, Ph.D.Agr.	XXIV IUFRO World Congress	Salt Lake City, USA, 5-11 October 2014	<ol style="list-style-type: none"> <li>1. Conservation of <i>Rafflesia zollingeriana</i>: Integrating conservation policy with local livelihood</li> <li>2. Socio-economic and Cultural Aspects of Forest Transition in Kuningan District, West Java, Indonesia</li> <li>3. Underlying causes of forest transitions in Indonesia</li> <li>4. Small-scale and community forestry: policies behind the tree-planting movement in Kuningan District, West Java, Indonesia</li> <li>5. Sovereignty of Indonesian Biodiversity Conservation and Health through Development of "Kampung Konservasi"</li> <li>6. Triad stimulus NUR (Nature, Use, Religion) pro-conservation for sustainable forest management in Indonesia</li> <li>7. Carrying capacity approach to forest management in developing countries</li> <li>8. Impact of socioeconomic circumstances on forest management and forest cover in Java Island, Indonesia</li> </ol>
169	Ir Sri Widayanti	Plant Protection Event	IPB, Bogor, 11 October 2014	
170	Dr Hilman Affandi	Pelatihan Kantin dan lingkungan Sehat di Sekolah Dasar dan Kecamatan Senen <i>Training on Healthy Canteen and Environment in Primary School and Senen District</i>	Jakarta, 23 October 2014	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
171	Dr Soekisman Tjitrosoedirdjo	Pelatihan Analisis Resiko Tumbuhan Asing Invasif di Gunung Gede Pangrango <i>Training on Risk Analyst on Foreign Invasive Plants in Mount Gede Pangrango</i>	Balai Besar Tanaman Nasional Gunung Gede, 28-29 October 2014	
172	Dr Sri Sudarmiyati Tjitrosoedirdjo	Pelatihan Analisis Resiko Tumbuhan Asing Invasif di Gunung Gede Pangrango <i>Training on Risk Analyst on Foreign Invasive Plants in Mount Gede Pangrango</i>	Balai Besar Tanaman Nasional Gunung Gede, 28-29 October 2014	
173	Setiabudi, S.Hut.	Pelatihan Analisis Resiko Tumbuhan Asing Invasif di Gunung Gede Pangrango <i>Training on Risk Analyst on Foreign Invasive Plants in Mount Gede Pangrango</i>	Balai Besar Tanaman Nasional Gunung Gede, 28-29 October 2014	
174	Drs Imam Mawardi	Pelatihan Analisis Resiko Tumbuhan Asing Invasif di Gunung Gede Pangrango <i>Training on Risk Analyst on Foreign Invasive Plants in Mount Gede Pangrango</i>	Balai Besar Tanaman Nasional Gunung Gede, 28-29 October 2014	
175	Indah Wahyuni, S.Si.	Pelatihan Analisis Resiko Tumbuhan Asing Invasif di Gunung Gede Pangrango <i>Training on Risk Analyst on Foreign Invasive Plants in Mount Gede Pangrango</i>	Balai Besar Tanaman Nasional Gunung Gede, 28-29 October 2014	
176	Saiful Bachri, S.Si.	Pelatihan Analisis Resiko Tumbuhan Asing Invasif di Gunung Gede Pangrango <i>Training on Risk Analyst on Foreign Invasive Plants in Mount Gede Pangrango</i>	Balai Besar Tanaman Nasional Gunung Gede, 28-29 October 2014	
177	Santi Ambarwati, M.Si	Seminar Pengenalan DIS ISO 9001:2015 <i>Introduction Seminar DIS ISO 9001: 2015</i>	Jakarta, 30 October 2014	
178	Maya Masita Novianti, M.Si	Seminar Pengenalan DIS ISO 9001:2015 <i>Introduction Seminar DIS ISO 9001: 2015</i>	Jakarta, 30 October 2014	
179	Ir Sri Widayanti	Seminar on Results of Applied Research	ARIAQ, Bekasi, 2 November 2014	
180	Supriyatno, A.Md.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
181	Ira Mutiara, S.E.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
182	Ujang Sanusi	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
183	Tenni Wahyuni, A.Md.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
184	Deki Zulkarnain, S.Sos.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
185	Yunita, S.P.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
186	Fitri Junaedy, S.E.I.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
187	Rosadi, S.Pd.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
188	Lillys Betty Yuliawati, S.Si.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
189	Maya Masita Novianti, M.Si.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
190	Yuni Puspita Sari, M.M.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
191	Riza Fadli Assegaf	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
192	Riana Hartati, S.Si.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
193	Dr Dewi Wulandari	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
194	Risa Rosita, S.Si.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
195	Ellyn K. Damayanti, Ph.D.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
196	Yadi Supriadi	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
197	Woro Kanti Darmastuti, M.Si.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
198	Tika Tresnawati, M.Si.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
199	Ferdy Pattikayhatu, S.Pi.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
200	Anidah, S.Si.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
201	Nijma Nurfadila, S.Si.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
202	Indah Wahyuni, S.Si.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
203	Saiful Bachri, S.Si.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
204	Siti Sulastrri Rangkutuy	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
205	Gita Hanipah, S.Si.	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
206	Syifa Fauzia	In House Training " Audit Internal ISO 9001:2008"	SEAMEO BIOTROP, Bogor, 4-5 November 2014	
207	Anidah	Pelatihan Pemanfaatan Bioinformatika Dan Analisa Data Molekuler <i>Training on Bioinformatics Utilization and Analysis of Molecular Data</i>	SEAMEO BIOTROP, Bogor, 11-13 November 2014	
208	Prof Dr Okky S. Dharmaputera	IUMS Outreach Program on Food Safety and Conference on Mycotoxin	Yogyakarta, 14-15 November 2014	
209	Santi Ambarwati, M.Si.	IUMS Outreach Program on Food Safety and Conference on Mycotoxin	Yogyakarta, 14-15 November 2014	
210	Ellyn K. Damayanti, Ph.D.Agr.	Workshop on Reclamation of Tropical Mining, Indonesia	SEAMEO BIOTROP, Bogor, Indonesia, 17-21 November 2014	
211	Rima Febriana, S.E.	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	
212	Tenni Wahyuni, A.Md.	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	
213	Lidia Defita, S.Kom.	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	
214	Rizkia Tirtani	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	
215	Fitri Junaedy, S.E.I.	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	
216	Risa Rosita, S.Si.	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	
217	Dewanti Pratiwi, S.Hut.	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	
218	Saiful Bachri, S.Si.	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	



No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
219	Ine Heryanti, S.Kom.	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	
220	Ira Mutiara, S.E.	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	
221	Anidah, S.Si.	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	
222	Ir Sri Widayanti	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	
223	Deki Zulkarnain, S.Sos.	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	
224	Syifa Fauzia	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	
225	Maulana Hasanudin	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	
226	Indra Ardiansyah	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	
227	Zaenal Abidin	In House Training "Tata Cara Protokoler" <i>In House Training on Protocol Procedures</i>	SEAMEO BIOTROP, Bogor, 18-20 November 2014	
228	Ellyn K. Damayanti, Ph.D.Agr	Roundtable Discussion "Persuteraan Alam: Mengangkat Potensi Sukamantri sebagai Silk Innovation Centre" <i>Roundtable Discussion "Natural Silk: Lifting Sukamantri as Silk Innovation Centre"</i>	Bogor, 24 November 2014	
229	Jonner Situmorang, M.Si	Roundtable Discussion "Persuteraan Alam: Mengangkat Potensi Sukamantri sebagai Silk Innovation Centre" <i>Roundtable Discussion "Natural Silk: Lifting Sukamantri as Silk Innovation Centre"</i>	Bogor, 24 November 2014	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
230	Samsul A. Yani, S.Si.	Roundtable Discussion "Persuteraan Alam: Mengangkat Potensi Sukamantri sebagai Silk Innovation Centre" <i>Roundtable Discussion "Natural Silk: Lifting Sukamantri as Silk Innovation Centre"</i>	Bogor, 24 November 2014	
231	Ellyn K.DAmayanti, Ph.D.Agr	The 1 <sup>st</sup> International Symposium LAPAN-IPB Satellite for Food Security and Environmental Monitoring (LISAT-FSEM) 2014	IICC, 25-26 November 2014	
232	Harry Imantho, M.Sc.	The 1 <sup>st</sup> International Symposium LAPAN-IPB Satellite for Food Security and Environmental Monitoring (LISAT-FSEM) 2014	IICC, 25-26 November 2014	
233	M. Tajudin, M.M.	A Short Course on SEAMEO Financial Operation Manual	Thailand, 7-13 December 2014	
234	Ira Mutiara, S.E.	A Short Course on SEAMEO Financial Operation Manual	Thailand, 7-13 December 2014	
235	Erina Sulistiani, M.Si.	FGD " Riset Kebijakan Pengembangan Kawasan Pesisir Berbasis Zonasi (Rumput Laut) di Kabupaten Sumbawa, Nusa Tenggara Barat <i>FGD "Research Policy- Zoning Based Coastal Area Development (Seaweed) in Sumbawa, West Nusa Tenggara"</i>	Jakarta, 10 December 2014	
236	Bambang Sulistio, S.Si.	Lokakarya Revisi Perincian Tugas (Job Description) dan Standard Operating Procedure (SOP) <i>Workshop on Revised Job Description (Job and Standard Operating Procedure (SOP)</i>	SEAMEO QITEP in Language, 11-12 December 2014	
237	Bambang Sulistio, S.Si.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
238	Dr Hartrisari	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
239	Harry Imantho, M.Sc.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
240	Rima Febriana, S.E.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
241	M. Tajudin, M.M.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
242	Asep Syaefudin, S.E.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
243	Samsul A. Yani, S.Si.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
244	Dewi Suryani, M.M.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
245	Slamet Widodo, S.Si.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
246	Jonner Situmorang, M.Si.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
247	Erina Sulistiani, M.Si.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
248	Armaiki Yusmur, S.Si.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
249	Wati Madyawati	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
250	Ir Sri Widayanti	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
251	Alfi Dwi Nugroho, A.Md.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
252	Drs Arman R. Haryono	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
253	Agus Sujadi	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
254	Arief Nuryadin, B.Sc.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
255	Budi Cahyadi, S.Si	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
256	Ratnaningsih, S.Si.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
257	Ellyn Damayanti, Ph.D.Agr.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
258	Dr Dewi Wulandari	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
259	Tenni Wahyuni, A.Md.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
260	Kuswandi	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
261	Maya Masita Novianti, M.Si.	In House Training on Effective Supervisory Leadership	SEAMEO BIOTROP, Bogor, 15-16 December 2014	
262	Nijma Nurfadila, S.Si.	Seminar "Rapid and Reliable Porcine DNA Detection Using LAMP Assay"	Bogor, 7 January 2015	
263	Anidah, S.Si.	Seminar "Rapid and Reliable Porcine DNA Detection Using LAMP Assay"	Bogor, 7 January 2015	
264	Ellyn K. Damayanti, Ph. D.Agr.	National Seminar on Biodiversity Conservation in Southern Sumatera Sub Regional	Palembang, Indonesia, 14-15 January 2015	Forest transition in Sumatra: Driver, Pressure, State, Impact, and Response
265	Anidah, S.Si.	Seminar "Real-Time Solutions for Food, Feed, and Pharma Industries"	Jakarta, 27 January 2015	
266	Nijma Nurfadila, S.Si.	Seminar "Real-Time Solutions for Food, Feed, and Pharma Industries"	Jakarta, 27 January 2015	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
267	Dewi Rahmawati, S.Si.	Seminar "Real-Time Solutions for Food, Feed, and Pharma Industries"	Jakarta, 27 January 2015	
268	Jonner Situmorang, M.Si	Sustainable Agarwood Plantation Management for Gaharu Planter Communities, Malaysia	Malaysia, 29 January - 2 February 2015	
269	Ellyn K. Damayanti, Ph. D.Agr.	International Workshop "Traditional forest knowledge for ecosystem services in ASEAN countries"	Kuala Lumpur, Malaysia, 2-4 February 2015	<p>a. Documenting traditional forest-related knowledge for ecosystem services in ASEAN Countries: Case Study of Sundanese Ethnic in Indonesia</p> <p>b. Documenting traditional forest-related knowledge for ecosystem services in ASEAN Countries: Case Study of Dayak Tobak Ethnic in Indonesia</p>
270	Dewi Rahmawati	Open lecture from Prof Dr Johann Fuller (Full Professor of Innovation and Entrepreneurship, University of Innsbruck) "Crowd-everything: Creating new innovations and companies together with the crowd"	Bogor, 18 February 2015	
271	Prof Dr Bambang Purwantara	Stakeholder Workshop Development of Indonesia Risk Assessment Center	Jakarta, 20 March 2015	
272	Dr Jesus C. Fernandez	International Symposium on Ecological and Socioeconomic Functions of Tropical Lowland Rainforest Transformatin System (Sumatera Indonesia)	Germany, 22-25 March 2015	
273	Anidah, S.Si.	Seminar "Food Safety & Dioxin Testing"	Jakarta, 25 March 2015	
274	Dr Irdika Mansur	Workshop Sinkronisasi dan Sinergi Program Peningkatan Kompetensi Pendidikan dan Tenaga Kependidikan <i>Workshop on Synchronization and Programme Synergy to Elevate Education and Teachers' Competency</i>	25-26 March 2015	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
275	Dr Jesus C. Fernandez	Seminar International Pendidikan Terbuka Jarak Jauh: Kerjasama Implementasi Class-Digital antara SEAMOLEC, ITB dan Pemkot Bandung dalam menghadapi Era Masyarakat Ekonomi ASEAN (MEA) 2015 di Indonesia <i>Seminar on International Education Open Distance: Implementation Class-Digital Cooperation between SEAMOLEC, ITB and Bandung municipal government in the face of Era ASEAN Economic Community (AEC) in 2015 in Indonesia</i>	Bandung, 7 April 2015	
276	Indah Wahyuni, S.Si.	Inter Center Collaboration Training on Development of Multimedia-Based Digital Book (e-Book)	SEAMEO BIOTROP, Bogor, 20-23 April 2015	
277	Saiful Bachri, S.Si.	Inter Center Collaboration Training on Development of Multimedia-Based Digital Book (e-Book)	SEAMEO BIOTROP, Bogor, 20-23 April 2015	
278	Ellyn K. Damayanti, Ph.D.Agr.	Inter Center Collaboration Training on Development of Multimedia-Based Digital Book (e-Book)	SEAMEO BIOTROP, Bogor, 20-23 April 2015	
279	Tika Tresnawati, M.Si	Inter Center Collaboration Training on Development of Multimedia-Based Digital Book (e-Book)	SEAMEO BIOTROP, Bogor, 20-23 April 2015	
280	Kania Dwi Rahayu, S.Si	Inter Center Collaboration Training on Development of Multimedia-Based Digital Book (e-Book)	SEAMEO BIOTROP, Bogor, 20-23 April 2015	
281	Sri I. Soerianegara, M.Sc.	Inter Center Collaboration Training on Development of Multimedia-Based Digital Book (e-Book)	SEAMEO BIOTROP, Bogor, 20-23 April 2015	
282	Anidah, S.Si.	Seminar "Real-Time PCR Method for Detecting Microorganisms and Long-Term Preservation"	Universitas Indonesia, Depok, 21 April 2015	
283	Nijma Nurfadila, S.Si.	Seminar and Workshop on Real-Time PCR Method for Detecting Microorganisms and Long-Term Preservation	Universitas Indonesia, Depok, 21 April and 23-24 April 2015	
284	Ir Ina Retnowati	Training Course on Good Weighing Practice and Good pH Practice	SEAMEO BIOTROP, Bogor, 23 April 2015	
285	Anidah, S.Si.	In House Training "Good Weighing Practice and Good pH Practice"	SEAMEO BIOTROP, Bogor, 23 April 2015	
286	Drs Imam Mawardi	In House Training "Good Weighing Practice and Good pH Practice"	SEAMEO BIOTROP, Bogor, 23 April 2015	
287	Herni Widhiastuti, S.Si.	In House Training "Good Weighing Practice and Good pH Practice"	SEAMEO BIOTROP, Bogor, 23 April 2015	
288	Didi Junaedi, A.Md.	In House Training "Good Weighing Practice and Good pH Practice"	SEAMEO BIOTROP, Bogor, 23 April 2015	
289	Sunardi Ikay	In House Training "Good Weighing Practice and Good pH Practice"	SEAMEO BIOTROP, Bogor, 23 April 2015	



No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
290	Heriyanto	In House Training "Good Weighing Practice and Good pH Practice"	SEAMEO BIOTROP, Bogor, 23 April 2015	
291	Ellyn K. Damayanti, Ph.D.Agr.	National Seminar on Promoting Research on Forest and Land Fires Mitigation, Adaptation and Impact to Human and Biodiversity	SEAMEO BIOTROP, Bogor, 28 April 2015	<p>1. Driver-Pressure-Impact-Response Research Approach for Forest &amp; Peatland Fire in relation to Biodiversity, Human health &amp; Livelihood in Indonesia</p> <p>2. Can we save Indonesian Bornean Rafflesia? Impact analysis on the deforestation and forest/land fires in Kalimantan and responses needed</p>
292	Harry Imantho, M.Sc	Capacity Building Workshop on Spatial Planning and Monitoring for Officer of City Planning Department, Bekasi, West Java.	Pusdiklat Mahkamah Konstitusi RI, Bogor, 6 May 2015	Utilization of Spatial Dynamic Model to Support Spatial Decision Making Process.
293	Ir Sri Widayanti	Workshop on Formulating the Review Manuscript of Fumigation Technical Standards of Sulfuryl Fluoride (SF)	ARIAQ, Bekasi, 6-8 May 2015	
294	Tika Tresnawati, M.Si.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
295	Asep Saepudin	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
296	Harry Imantho, M.Sc.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
297	Didi Junaedi A.Md.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
298	Risa Rosita, S.Si.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
299	Ira Mutiara, S.E.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
300	Ryna Mardiyana Siahaan, S.Si.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
301	Tenni Wahyuni, A.Md.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
302	Rima Febriana, SE	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
303	Siti Lastiah	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
304	Sunardi Ikay	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
305	Riza Fadli Assegaf	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
306	Anidah, S.Si.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
307	Nijma Nurfadila, S.Si.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
308	Ir Ina Retnowati	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
309	Indah Wahyuni, S.Si.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
310	Ferdy Pattikayhatu, S.Pi.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
311	Lillys Betty Yuliawati, S.Si.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
312	Aan Darwati, A.Md.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
313	Herni Widhiastuti, S.Si.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
314	Ratnaningsih, S.Si.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
315	Saiful Bachri, S.Si.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
316	Ir Sri Widayanti	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
317	Riana Hartati, S.Si.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
318	Yunita, S.P.	In House Workshop "Penyusunan Pertanggungjawaban Dana DIPA" <i>In House Workshop on Preparation of the DIPA Fund Accountability</i>	SEAMEO BIOTROP, Bogor, 11 May 2015	
319	Yuni Puspita Sari, M.M.	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
320	Siti Lastiah	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
321	Ira Mutiara, S.E.	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
323	Supriyatno	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
324	Aan Darwati, A.Md.	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
325	Devi Septrianti	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
326	Lidia Defita, S.Kom.	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
327	Rizkia Tirtani	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
328	Tenni Wahyuni, A.md.	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
329	Deki Zulkarnain, S.Sos	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
330	Yunita, S.P.	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
331	Dewanti Pratiwi, S.Hut.	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
332	Peri Siantuni	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
333	Manik Hasri, S.H.	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
334	Lillys Betty Yuliawaty S.Si.	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
335	Riana Hartati, S.Si.	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
336	Saiful Bachri, S.Si.	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	

No.	Name	Title of Activity	Venue and Date	Title of Paper Presented
337	Indah Wahyuni, S.Si.	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
338	Rima Febriana, S.E.	In House Training Manajemen Kearsipan <i>In House Training on Records Management</i>	SEAMEO BIOTROP, Bogor, 19-21 May 2015	
338	Slamet Widodo, S.Si.	Workshop on Development of monitoring and Evaluation (MONEV) Instrument	Depok, 25-28 May 2015	



## Appendix 6. List of Memorandum of Understanding (MoU)/Memorandum of Agreement (MoA) Signed in FY 2014/2015

### On Going – National

No	Organization/Agency	Date signed	Subject of Cooperation	Duration
1	Pupuk Kalimantan Timur, PT	8 July 2014	Research services on agarwood using tissue culture techniques	8 July 2014 – 8 July 2015 (12 months)
2	Koperasi Pegawai Republik Indonesia Wana Mandiri	28 August 2014	Provision of superior seeds of teakwood ( <i>Tektona grandis</i> ) using tissue culture techniques	28 August 2014 - 28 February 2016 (18 Months)
3	Research Institute of Forest Biotechnology and Plant Breeding	28 August 2014	Research, development and publication in biotechnology and forest plant breeding	28 August 2014 - 28 August 2016 (2 Years)
4	Kapahiang Regency Local Government	1 September 2014	Research and development of superior commodity in Kapahiang regency	1 September 2014 - 1 September 2015 (1 year)
5	University of Papua	1 September 2014	Human resources development in research, services	1 September 2014 - 1 September 2017
6	Fajar Surya Swadaya, PT	22 September 2014	Research and development in industrial plants business	22 September 2014 - 22 September 2019 (5 Years)
7	Fajar Surya Swadaya, PT	23 September 2014	Propagation of Acacia Mangium and Eucalyotus Pellita using tissue culture techniques	23 September 2014 - 23 September 2015 (12 Months)
8	Institute for Marine Research and Observation, Research and Development of Marine Fisheries of the Ministry of Maritime Affairs and Fisheries, Jembrana – Bali	14 October 2014	Assistance on preparation of ISO/IEC 17025:2005 reaccreditation, laboratory of the Institute for Marine Research and Observation	14 October 2014 – 14 October 2016 (2 Years)
9	Mitra Super Indah, PT	10 November 2014	Tree planting and establishment of pilot model of Community Development	10 November 2014 - 10 November 2015
10	FORIS Indonesia	11 November 2014	Regional seminar and workshop on harmonizing method in risk analysis and management of forest invasive alien plant species in Southeast Asia	11 November 2014 – 15 December 2014
11	Environmental Agency of Bangka Tengah Regency	5 December 2014	Testing measurement of environmental quality	5 December 2014 - 5 December 2017
12	Monagro Kimia, PT (MONSANTO)	5 January 2015	Research Collaboration Agreement on Herbicide Roundup Limited Field Efficacy Testing of Genetically Modified Product of Maize Nk603	5 January 2015 - 5 January 2016 (1 Year)

No	Organization/Agency	Date signed	Subject of Cooperation	Duration
13	Research Institute for Forest Tree Seed Technology and the Faculty of Forestry of IPB	12 January 2015	Research and development of genetic resources of Jabon to produce quality seeds	12 January 2015 - 12 January 2020 (5 Years)
14	BASF, PT	21 January 2015	Testing of tobacco beetles ( <i>Lasioderma serricorne</i> ) resistance against Piretroid pesticide	21 January 2015 - 21 July 2015 (6 Months)
15	SEAMEO SEAMOLEC, SEAMEO VOCTECH And Wasan Vocational School of Brunei Darussalam	23 February 2015	Human Resource and Institutional Capacity Building Program	23 February 2015 - 23 February 2018 (3 Years)
16	SEAMEO SEAMOLEC	23 February 2015	1. Joint implementation of programs, projects and other related activities whenever and wherever feasible opportunities present themselves; and 2. Staff exchange and consultations on matters relevant to the collaboration	23 February 2015 - 23 February 2018 (3 Years)
17	EDP Media	23 February 2015	Collaboration in marketing of DigitalGlobe Satellite Imagery product	23 February 2015 – 31 December 2015
18	Inhutani II, PT	23 February 2015	Building of industrial forest plants based on local trees species and community development in the forest	23 February 2015 - 23 February 2018 (3 Years)
19	University of Gadjah Mada	1 April 2015	Collaboration : 1. Joint implementation of research, capacity building, and information exchange programs, projects and other related activities at any feasible opportunities present themselves; and 2. Staff and student exchange and consultations on relevant research, training, and other learning event	1 April 2015 - 1 April 2018 (3 Years)
20	SEAMEO QITEP in SCIENCE	15 April 2015	To Jointly implement two regional teacher training courses : 1. Developing Thinking Skills through IBSE for Education for Sustainable Development Countries 2. STELR Renewable Energy	15 April 2015 - 15 October 2015 (6 Months)
21	BLULINE VENTURE 140508, LLP	28 April 2015	1. Uji adaptasi beberapa Varietas Sorgum untuk mendukung agroindustri berbasis Sorgum; 2. Melakukan bimbingan teknis dalam budidaya Sorgum; 3. Aspek lainnya terkait Pengembangan Sorgum di Negara Kesatuan Republik Indonesia	28 April 2015 - 28 April 2017 (2 Years)

No	Organization/Agency	Date signed	Subject of Cooperation	Duration
22	Monsanto- BRANITA SHANDINI, PT	13 May 2015	Event Sponsorship Agreement on Focus Group Discussion on history of safe use of glyphosate-based herbicide	13 May 2015 – 12 June 2015 (30 Days)
23	Monsanto-PT BRANITA SHANDINI	1 June 2015	Event Sponsorship Agreement on Focus Group Discussion on history of safe use of glyphosate-based herbicide	1 June 2015 – 30 June 2015 (30 Days)
24	Yayasan Usaha Mulia (YUM)	20 May 2011	Research, training, information exchange and other relevance Activities in Communities, exchange technical expertise and staff, generate and mobilize resources	20 May 2011 – 20 May 2016 (5 Years)
25	Office of Environment, West Seram Regency	1 November 2011	Collaboration in testing laboratory and environment quality measurement	1 November 2011 – 1 November 2016 (5 Years)
26	Agency of Indonesian Plantation Biotechnology Research	14 May 2013	Laboratory analysis services	14 May 2013 - 13 May 2016
27	Hall of Gede Pangrango National Park	18 July 2013	Management of Invasive Alien Plant in Restoration Framework of Tropical Forest Ecosystem	18 July 2013 – 18 July 2016 (3 Years)
28	Arah Environmental Indonesia, PT	22 August 2013	Waste Management Services	22 August 2013 – 22 August 2015
29	Department of Education of West Java Province and Eduwisata and One Day School Ceria Program	1 October 2013	Education Quality Enhancement, Entrepreneurship and Community Development, based on tropical biology resources and environmental oriented, for students, teachers and community in West Java	1 October 2013 – 1 October 2015 (2 Years)
30	One Day School CERIA	1 October 2013	Planning and Organizing on Educational Visit and Training	1 October 2013 – 30 September 2015
31	Pertamina Foundation	1 October 2013	Development of Save a Tree Program	1 October 2013 – 1 October 2016 (3 Years)
32	Ministry of Forestry Forest Research and Development Agency Center Conservation and Rehabilitation Research and Development	1 November 2013	Conduct training need assesment, develop and implement training on early detection rapid respond and risk analysis	1 November 2013 – 1 December 2015
33	Directorate General of Aquaculture	25 November 2013	Research Capacity Improvement and Seaweed Seedlings Propagation using Tissue Culture Techniques	25 November 2013 – 25 November 2015 (2 Years)
34	Bukit Asam Tbk, PT and Institut Pertanian Bogor (IPB)	12 November 2013	Cooperation in establishing a Research Center for Ex-Mine Site Reclamation for Southeast Asia	12 November 2013 - 12 November 2016 (3 Years)

No	Organization/Agency	Date signed	Subject of Cooperation	Duration
35	Directorat General of Aquaculture	25 November 2013	Enhancement of research capacity and seaweed propagation using tissue culture techniques	25 November 2013 - 25 November 2015 (2 Years)
36	The PGRI of Yogyakarta	28 November 2013	Research, Training and Community Development	
37	Environmental Agency of Bangka Belitung Islands Province	10 February 2014	Cooperation on Laboratory Testing and Environment Quality Measurement	10 February 2014 – 9 February 2017

### On Going – Regional/International

No	Organization/Agency	Date signed	Subject of Cooperation	Duration
1	Vietnam National University of Agriculture-VNUA	28 August 2014	Training Course on Prevention and Control of Mycotoxins in Food and Feedstuff	February 2014 – December 2014
2	FAO	5 November 2014	Regional Seminar and Workshop on Harmonizing Method in Risk Analysis and Management of Forest Invasive Alien Plant Species in Southeast Asia	5 November 2014 - 31 March 2015
3	Human Life Advancement Foudation (HLAF)	12 November 2014	Scholarship	12 November 2014 - 12 November 2019 (5 Years)
4	Wasan Vocational School of Brunei Darussalam, SEAMEO VOCTECH and SEAMEO SEAMOLEC	23 February 2015	Human Resource and Institutional Capacity Building Program	23 February 2015 - 23 February 2018 (3 Years)
5	The Faculty of Agriculture, Yamagata University, Japan	16 March 2015	To Develop and Promote Academic Cooperation	16 March 2015 - 16 March 2020 (5 Years)
6	Eastern Global Agrotech SDN. BHD	23 September 2011	The Transfer of Satoimo (Keladi Jepang) Tissue Culture Technology	23 September 2011 - 23 September 2016

### Completed - National

No	Organization/Agency	Date signed	Subject of Cooperation	Duration
1	PT Samirana Surya Semesta	25 September 2012	Sorghum development for bioethanol	25 September 2012 - 25 September 2014 (2 Years)
2	Pupuk Kalimantan Timur, PT	10 July 2013	Research on Ulin (Eusideroxylon swagerii. et B) Seeds Propagation using Tissue Culture Techniques	10 July 2013 – 10 July 2014

3	Harapan Anang Bakri, PT & Son's, IPB, SEAMOLEC, TROPED RCCN-UI	23 July 2009	Collaboration in Community Development to Enhance Education, Health, Nutrition and Economy of Karawang Regency Community	23 July 2009 - 23 July 2014 (5 years)
4	BATAN (National Agency for Atomic Energy)	3 September 2009	Nuclear Technique Application in Research and Development of Agriculture and Environment (Adaptation test of several Sorghum mutant lines at SEAMEO BIOTROP)	3 September 2009 – 3 September 2014 (5 Years )
5	Agricultural Islamic Foundation, Darul Fallah	23 February 2010	Collaboration in Education, Training and Community Development	23 February 2010 – 23 February 2015 (5 Years)
6	Local Government of Natuna Regency, Riau Islands Province	23 February 2010	Collaboration in Research on Assessment and Development of Agricultural Commodities and Activities in Natuna Regency	23 February 2010 - 23 February 2015 (5 Years)
7	Sinar Puspapersada, PT	28 February 2010	Collaboration in Biodiversity conservation in Telaga Bestari Residential Area, Tengerang	28 February 2010 – 18 February 2015 (5 Years)
8	TRUBUS	28 February 2010	Collaboration in sustainable utilization of biodiversity for community welfare and environmental sustainability through seminar, trainings and publication	28 February 2010 - 28 February 2015 (5 Years)
9	Directorate for Mineral, Coal and Geothermal Environment and Technology and Dean of Forestry, IPB	01 June 2010	Collaboration in Education, Research and Consultancies for Post Mining Land Reclamation, Biodiversity Conservation and Community Development through Sustainable Biological Resources Utilization	1 June 2010 - 1 June 2015 (5 Years)
10	Local Government of Bantaeng Regency, South Sulawesi Province	23 February 2012	Research, assesment, application and agricultural development, including activities and/or developed commodities	23 February 2012 – 23 February 2015 (3 Years)
11	Samirana Surya Semesta, PT	25 September 2012	Sorghum development for Bioethanol	25 September 2012 - 25 September 2014 (2 Years)
12	Research Office of Forestry, Manado	23 October 2012	Conservation of Indonesian tropical forest flora and fauna diversity and fast grow local tree for community forest Konservasi	23 October 2012 - 23 October 2014 (2 Years)
13	Marine Aquaculture Development Centre (BBL) Lombok	9 November 2012	Collaboration in research and capacity building activities towards improving the quality, propagation techniques, and farming practices for seaweed production	9 November 2012 - 9 November 2014 (2 Years)



14	Agency of Environment, Pangkalpinang City	26 December 2012	Collaboration on testing laboratory and environmental quality measurement	26 December 2012 – 26 December 2014 (2 years)
15	Research Office of Forestry, Manado	11 February 2013	Program of artificial insemination on Anoa (Bubalus sp) for Sulawesi endemik fauna conservation	11 February 2013 - 11 February 2015 (2 Years )
16	Multi Rempah, CV, Sulawesi and Angler BioChemLab, PT	7 March 2013	Research on nutmeg postharvest	7 March 2013 – 7 March 2015 (2 Years)
17	Amas Interconsult	8 April 2013	Environmental quality testing, especially for water, air and soil quality parameter	8 April 2013 – 8 April 2015 (2 Years)
18	Tunas Inti Abadi, PT	8 May 2013	Mentoring of the implementation of community development program activity plan year 2012	8 May 2013 – 7 October 2014 (15 Months)
19	Pupuk Kalimantan Timur, PT	10 July 2013	Research on Ulin (Eusideroxylon swagerii. et B) propagation using tissue culture techniques	10 July 2013 – 10 July 2014
20	Halu Oleo University	1 November 2013	Induction and regeneration of selected Kotoni Seaweed (kappaphycus alvarezii) callus by Fisheries and Marine Sciences, University of Halu Oleo	1 November 2013 – 1 September 2014 (10 Months)
21	Local Government of Bengkalis Regency	7 December 2013	Collaboration in research and superior commodity of Bengkalis Regency	7 December 2013 – 7 December 2014
22	Lahai Coal, PT / Maruwai Coal, PT	14 March 2014	Forestry Policy Advisor	14 March 2014 - 14 March 2015
23	Development and Research Agency of Bengkalis	21 April 2014	Collaboration in excellence research based on Bengkalis Regency	21 April 2014 - 21 October 2014 (240 Days )
24	SEAMEO QITEP Science	7 May 2014	Training Courses on Environment Education for Sustainable Development and Earth and Space Science	7 May 2014 - 7 November 2014 (6 Months)
25	Wirakarya Sakti, PT	12 May 2014	Taking and testing of soil and air quality	1 May 2014 - 30 April 2015
26	Job Pertamina Talisman Jambi Merang	9 June 2014	Consultancy Services of ISO/IEC 17025	12 June 2014- 11 June 2015 (1 year)

## Completed - Regional/International

No	Organization/Agency	Date signed	Subject of Cooperation	Duration
1	SEAMEO INNOTECH	6 August 2009	Sharing knowledges, consultation, Identification, Collaboration which are consistent with the Objective of both Organizations	6 August 2009 – 6 August 2014 (5 Years)
2	Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA)	28 January 2010	Second Executive Forum on Leadership Excellence in Academic Program for Southeast Asia (LEAPSEA), SEARCA-BIOTROP Graduate Study Sandwich Program, Staff Exchange Program, Visiting Research Fellows Program	28 January 2010 - 28 January 2015 (5 Years)
3	Laboratory Of Plant Genetics, Graduate School of Agriculture, Kyoto University	21 May 2010	Research Collaboration Entitled "Metagenomics Analysis of Soil Microorganism in Tropical Forests in Southeast Asia"	21 May 2010 – 21 May 2015 (5 Years)
4	The East Timor Coffee Academy, distrito Ermera Timor Leste (ETICA)	15 September 2011	Research, Training and Community Development	15 September 2011- 15 September 2014
5	An Giang University	15 February 2012	Conduct of Research and Development activities, offering of regional training courses and other capacity building activities and exchange of expertise, student and information for research and training purposes	15 February 2012 – 15 February 2015 (3 Years)
6	IAEA (International Atomic Energy Agency)	29 October 2013	Development of Promising Sorghum Mutant Lines for Improved Fodder Yield and Quality Under Different Soil Types, Water Availability and Agro-Ecological Zones	29 October 2013 – 28 October 2014
7	Happold Consulting Limited	11 February 2014	Sub Consultant Services	11 February 2014 – 31 December 2014

## Appendix 7. Number of Accreditation/Certification

No	Accreditation/Certification	Issued by	Date of Issue	Duration
1	ISO/IEC 17025: 2005, Accreditation Number: LP-221-IDN (maintained)	Komite Akreditasi Nasional (National Accreditation Committee of Indonesia)	30 January 2013	4 years (30 January 2013 - 29 January 2017)
2	ISO 9001: 2008, Certification Number: QSC 00720 (renewal)	SUCOFINDO International Certification Services	28 May 2015	3 years (28 May 2015 - 27 May 2018)
3	KNAPPP (Accreditation for Research and Development Organization), Accreditation Number: PLM-026-INA-2010 (maintained)	Komite Nasional Akreditasi Pranata Penelitian dan Pengembangan (National Accreditation Committee for Research and Development of Indonesia)	4 December 2013	3 years (4 December 2013 - 3 December 2016)
4	ISO 9001: 2008 for Education at Master of Science in Information Technology for Natural Resources Management (MIT – NRM), Certification Number: (maintained)	SUCOFINDO International Certification Services	13 June 2014	3 years (13 June 2014 - 12 June 2017)
5	Environmental Laboratory (maintained)	Ministry of Environment, Republic of Indonesia	5 June 2013	4 years (5 June 2013 -29 January 2017)

## SEAMEO BIOTROP Staff for FY 2014 - 2015

### Name

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