# **Summary Report**

## Training Workshop on the Taxonomy and Basic Mycology of Large Fungi 01-03 March 2017

### Research Center for Biology, LIPI, Bogor, Indonesia

Outline of the workshop

Date: 01-03 March 2017

Venue: Indonesian Institute of Science (LIPI)

Trainee: 20 persons from the 9 ASEAN Member States

Resource Persons:

\*Dr. Atik Retnowati, Fungal Taxonomist, Herbarium Bogoriense, R.C. Biology-LIPI

\*Dr. Mien Rifai, Indonesia, Herbarium Bogoriense, R.C. Biology-LIPI

\*Dr. Kentaro Hosaka, National Museum of Nature and Science, Japan

\*Dr. Tsutomu Hattori, Forestry and Forest Products Institute, Japan

Organizers:

\*Biodiversity Center of Japan, MOE-J (ESABII Secretariat)

\*RC-Biologi, LIPI

\*ASEAN Centre for Biodiversity

#### Introduction / Background

Large fungi represent only a tiny part of the kingdom of fungi. The clear majority of species either do not produce visible fruitbodies or produce fruitbodies, which are so small that they are rarely seen except by fungal scientists (mycologists). Hence, large fungi are selected as study subjects for this taxonomic capacity building activity since they are easily studied and could attract novice taxonomists to specialize in related research.

Many experts around the world have difficulty in identifying these organisms, either because a specimen is immature, misleading, or so old that key identifying features are not visible. Other reasons may be that the experts do not have enough knowledge or information about that special fungus. Therefore, this workshop is proposed to at least partially fill in that gap. We also know that of all the taxonomic groups in the biological kingdom, it is the micro-organisms and fungi groups that lag behind in terms of available information.

The databases of ESABII and the ASEAN Centre for Biodiversity have minimal information for these groups of organisms. Conducting this workshop and capacitating the participants would increase the interest of these future young scientists and researchers and hopefully they could address the gap of lack of information on this group of organisms. Furthermore, capacitated as they are, they could then be tapped to contribute to the growing databases of ESABII and ACB.

Large fungi and its taxonomy have been expressed to be one of the topics for taxonomy training by the Biodiversity Center of Japan and several ASEAN Member States while implementing other Japan-supported taxonomic workshops. Hence, organizing this training workshop is the response to that demand.

## Day 1. RC Biologi, LIPI, Cibinong, Bogor

The Opening Programme was held in the first part of the morning. The representative from the Ministry of the Environment and Forestry, Mr. Bambang Dahono Adji, provided the inspirational message to the group. Other resource persons who gave their welcome remarks are Dr. Hajime Hirosawa of MOE-J, Dr. Joeni S. Rahajoe of LIPI, and Dr. Filiberto Pollisco, Jr. representing the Executive Director. A group photo was also taken after the welcoming programme.

The technical and theoretical part of the training workshop started with the introduction of ESABII and its updates, delivered by Ms. Misumi Hirano of MOE-J. The Global Biodiversity Information Facility (GBIF) was also introduced to the participants via a video presentation of Dr. Tsuyoshi Hosoya, GBIF Node Manager of Japan.

Lectures started with Dr. Mien S. Rifai presenting the importance of mycology and how it is practiced in Indonesia and Southeast Asia, as a whole, as compared to the western countries' implementation. A tour of the RC Biologi facilities was done with the participants being oriented with the herbarium and laboratory facilities, after the lecture of Dr. Rifai.

The lectures were delivered by Dr. Tsutomu Hattori for Polyporales and Dr. Atik Retnowati for the Agaricales in the afernoon. In addition, Dr. Atik lectured on the methods of collection and preservation of specimens. In the late afternoon, Dr. Hosaka presented some advanced methods in fungi taxonomy and some researches.

An announcement of the field exercise for the following day was done after the lectures before the group departure to the hotel.

#### Day 2. Bogor Botanic Garden and RC-Biologi, LIPI

The whole morning was spent in the Bogor Botanic Garden gathering specimens for the laboratory exercise. Participants were divided into two groups, one group going clockwise from the starting point in the Botanic Garden, while the other group going counter-clockwise. Both groups met up on the other side of the Botanic Garden where the transportation met the participants to take them back to LIPI.

While in the Botanic Garden, some lectures were done whenever a specimen of interest is found.

Methods in photography were also shared with the participants to get good photos of their specimens. In the afternoon, the participants were broken down to 5 groups and they processed their specimens in LIPI using compound and dissecting microscopes. They were also taught techniques in mounting the specimens in slides. In between, slide presentations were shown particularly on the microscopic features of fungi. This made the participants know what to look out for while they do their identification. Spores and hyphae were shown and their importance to identification.

#### Day 3. RC-Biologi and Closing Programme

The first half of the morning was spent in preparing for the group presentations of their laboratory exercise and finalizing the identification of their specimens. In the latter half, the 5 groups conducted the group presentations. After each group, the resource persons – Dr. Hattori, Dr. Hosaka, and Dr. Atik, gave their comments on the presentations, not only on the way they presented but also the technical aspects of identification and whether they made the correct identification. The resource persons shared many insights. The presentations were done up to the lunch break. The resource persons, Dr. Hosaka, Dr. Hattori, and Dr. Atik, provided their feedback about the training and the participants. The Closing Programme commenced after lunch. Representing the LIPI, Dr. Enny Sodarmonowati, Asst. Director of LIPI, emphasized the need for networking among taxonomists as her main topic in giving the closing message. Dr. Dedy Darnaedi, as a member of ESABII, also gave the importance of networking, and staying in touch with one another. Dr. Pollisco gave two messages: one is the importance of expanding the circle of friendship as it relates to taxonomy and the other message is one need to practice and practice the skills learned in the training to become adept to it.

After the closing speeches, certificates were handed out to the participants. After snacks, the group all left for Jakarta to stay overnight before departure to their respective countries.

